The XXVII World Congress of
THE INTERNATIONAL ASSOCIATION
FOR SUICIDE PREVENTION

Preventing suicidal behaviour on five continents –
Innovative treatments and interventions

SEPTEMBER 24.-28.2013
OSLO/NORWAY

IASP OSLO 2013
FINAL PROGRAMME
AND BOOK OF ABSTRACTS
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The Congress is held under the honorary patronage of

**HRH CROWN PRINCESS METTE-MARIT OF NORWAY**

**CONGRESS PRESIDENT**
Lars Mehlum M.D. Ph.D.

**HOSTS**
The International Association of Suicide Prevention (IASP)

The National Centre for Suicide Research and Prevention (NSSF), University of Oslo, Norway

**CO-SPONSOR**
World Health Organization
WELCOME TO OSLO!

Dear Colleagues and Friends,

Welcome to the XXVII World Congress of the International Association for Suicide Prevention in Oslo! The congress is organized by the National Centre for Suicide Research and Prevention at the University of Oslo and IASP, sponsored by the World Health Organization (WHO), and supported by the Norwegian Directorate of Health and the Research Council of Norway.

On every Continent suicide represents a strong challenge to the safety and well-being of people of all ages. The number of lives lost each year through suicide exceeds the number of deaths due to homicide and war combined. Suicide attempts and suicidal ideation are far more common; the number of suicide attempts may be up to 20 times the number of deaths by suicide. Some risk factors for suicide, such as mental disorder, are supported by a wealth of research data, whereas others, such as financial problems and cultural factors, are less researched, but still of great importance. It is important to be aware of the fact that though risk factors may be complex, suicide is a preventable societal problem. Much effort from researchers, clinicians, volunteers and survivors of suicide bereavement is currently being made on all Continents to create, disseminate and put to use new knowledge on how to prevent suicide. The biennial world congresses of the IASP are an excellent opportunity for sharing of research results, prevention and intervention strategies, knowledge and experiences.

For the Oslo 2013 congress a rich scientific programme has been prepared with 7 plenary sessions, 75 parallel sessions, 6 poster sessions in addition to several preconference workshops. The scientific committee has aimed to highlight the latest developments in suicide research and prevention and a key word to all content has been innovation. The enormity of the problem of suicidal behaviour worldwide calls for creative and courageous efforts to bring new ideas and new knowledge into practical work in effective approaches of treatment and intervention. We hope you will learn something new and useful and that you will become INSPIRED!

The congress takes place in Oslo, the capital city of Norway, the land of Vikings and ancient sagas, but also of modern art and music, science and business in a multicultural mix of new and old. We hope you will eagerly take part in the social programme that has been prepared for you as a delegate and that you will ENJOY!

Lars Mehlum M.D. Ph.D.
Congress President
Professor of Psychiatry and Suicidology
National Centre for Suicide Research and Prevention
University of Oslo, Norway

Lanny Berman Ph.D.
President
International Association for Suicide Prevention
The International Association for Suicide Prevention (IASP)

The International Association for Suicide prevention (IASP) is a non-profit organization for those interested and working in the field of suicide prevention. The organization functions as network for individuals (clinicians, scientists, crisis workers and volunteers, people who have lost family members to suicide, or someone to whom they feel close) and community, national and international organizations. The organization, with members in more than 50 countries, is recognized by and cooperates with the World Health Organization (WHO). IASP along with WHO initiated the World Suicide Prevention Day, which is held every year on the 10th of September.

IASP BOARD, 2011-2013

President Dr Lanny Berman

1st Vice President
   Professor Marco Sarchiapone

2nd Vice President Professor Ella Arensman

3rd Vice President Professor Paul Yip

Treasurer Professor Michael R. Phillips

General Secretary Dr Tony Davis

National Rep. Professor Murad Khan

Organisational Rep. Dr Jerry Reed

National Centre for Suicide Research and Prevention (NSSF)

The National Centre for Suicide Research and Prevention (NSSF) at the Faculty of Medicine, University of Oslo, was established in 1996 by Professor Lars Mehlum. The 30 people employed at NSSF have research, training and dissemination of knowledge and experience as their main tasks. In addition to a wide range of clinical and epidemiological research studies, the centre operates a master’s program in suicide prevention, therapist training in Dialectical Behaviour Therapy, and specialized courses in clinical suicidology. It also maintains several websites and publishes the peer-reviewed journal ‘Suicidologi’. NSSF is the experienced organiser of many national and international conferences and seminars on suicide research and prevention that have been held over the past 15 years. More information about NSSF at www.selvmord.no or http://www.med.uio.no/klinmed/english/research/centres/nssf/index.html.
COMMITTEES

International Scientific Committee
Professor Lars Mehlum, Norway (Chair)
Professor Ella Arensman, Ireland
Dr Lanny Berman, USA
Professor David Brent, USA
Dr Tony Davis, Australia
Professor Keith Hawton, UK
Professor Murad Khan, Pakistan
Dr Eugene Kinyanda, Uganda
Dr Erlend Mork, Norway
Professor Merete Nordentoft, Denmark
Dr Silvia Peláez, Uruguay
Professor Michael Philips, China
Dr Jerry Reed, USA
Professor Ingeborg Rossow, Norway
Professor Marco Sarchiapone, Italy
Professor Barbara Stanley, USA
Professor Gustavo Turecki, Canada
Professor Lakshmi Vijayakumar, India
Professor Paul Yip, China
Professor Ping Qin, Norway

Congress Organising Committee
Lars Mehlum, Norway (Chair)
Vanda Scott, France
[Development Consultant IASP]
Torgeir Stegane, Norway
[Congress-Conference AS]
Ina Bekkevold, Norway
[Congress Coordinator NSSF]
Anita Kjølsrud, Norway (NSSF)
Egil Haga, Norway (NSSF)
Anniken Dønvold, Norway (NSSF)
Wenche Andreassen, Norway (NSSF)
Hanne Holmesland, Norway (NSSF)

SPONSORS

Norwegian Directorate of Health
The Research Council of Norway
Star Alliance
With many thanks to the City of Oslo for the reception
IMPORTANT ADDRESSES

Congress Website
www.iasp2013.org

All communications regarding conference matters should be directed to
iasp2013@congres.no

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Sognsvannsveien 21, Building 12
NO-0372 Oslo, Norway
Tel: +47 22 92 34 73
Fax: +47 22 92 39 58
GENERAL INFORMATION IN ALPHABETICAL ORDER

Airports
We recommend using the Airport Express Train from Oslo Airport (OSL). With departures every 10 minutes, the train brings you comfortably to the city centre in just 19 minutes. Our Congress venue, the Radisson Blu Plaza Hotel, is a brief walk from the Airport Express terminal. The train fare is NOK 170 per person. The central bus station, with coaches serving OSL, Airport Express Bus, is also located near the Congress venue. The ride takes approximately 45 minutes and costs about NOK 200 per person. All trains arrive at Oslo Central Station (often referred to as Oslo S), while buses arrive at Oslo Bus Terminal. Both stations are located in the heart of the city and a brief walk from the IASP Congress venue!

A taxi ride between OSL and the city centre costs approximately NOK 800 to NOK 1000; time of travel and other factors can affect the fare. There is also taxi service operated by several companies. Taxi can be obtained at a fixed price from the information desk in the terminal building. Information on flight schedules is available at OSL webpages.

There are also two more airports in the Oslo region: Moss Airport Rygge (RYG) and Sandefjord Airport Torp (TRF). These both have bus transfers to the city center of Oslo. Due to distance it is not recommended to use taxi services from these airports to the city center of Oslo.

Air travel – official airline network
Star Alliance™ – and Star Alliance™ Member Airlines – have been appointed as the Official Airline Network for the XXVII World Congress of the International Association for Suicide Prevention. Significant travel discounts are offered by Star Alliance™ airlines to each registered Congress participant, plus one accompanying person, for travel to Oslo, Norway.

To obtain the Star Alliance™ Conventions Plus discount, please follow the steps listed below in order to access the Conventions Plus online booking tool:

- Visit staralliance.com
- Under "Delegates login" enter convention code: SK04S13
- The online booking tool opens in a separate window.

STAR ALLIANCE
THE WAY THE EARTH CONNECTS

Banks and credit cards
Banks are open Monday to Friday from 09:00 -16:00. Banks generally are closed on Saturday and Sunday. Banks and other locales have ATMs that accept foreign-issued credit cards and provide cash withdrawals in NOK. Most hotels, restaurants and shops accept major credit cards. The registration desk at the IASP Congress in Oslo accepts American Express, Diners Club, Visa, MasterCard and Eurocard.

Currency
The Norwegian currency is the Norwegian Krone (NOK). Approximate exchange rates as of August 2013 are:

NOK 100 = EUR 12.39
NOK 100 = USD 16.56

Certificate of attendance
A Certificate of Attendance will be issued upon request at the registration desk on the last day of the Congress.
Climate
Thanks to the Gulf Stream bringing temperate water from the Gulf of Mexico, Oslo’s climate is milder than what its latitude would suggest. Many people think of Oslo as a winter capital. However, Oslo is also a vibrant summer city that relishes its long daylight hours. On a summer’s day, small boats crowd the Oslo Fjord and picnickers fill park spaces. Temperatures in late September are somewhat cooler, averaging 15° Celsius. Rain is always a possibility, so a raincoat and some warm clothing for the evenings are advisable. For further details, please continue to the website of the Norwegian Meteorological Institute: www.yr.no

Electricity
Electrical power in Norway: 220 Volts AC, 50 Hz. Plugs have two round pins (European standard). Electrical appliances may need adapters.

Insurance
The organising committee accepts no liability for personal injuries sustained, or for loss of or damage to property belonging to Congress participants either during or as a result of the IASP Congress. Those arriving from abroad should ascertain the validity and coverage of their relevant insurance policies.

Language
The official language of the IASP World Congress is English. In the event that certain symposia or parallel sessions are conducted in another language, such information will be announced in advance.

Meals
Lunches are included in the registration fee. Refreshments are served free of charge at the City Hall reception on conference opening night. Congress Banquet is available to all delegates and accompanying persons against extra charge.

Oslo
Oslo, the capital city of Norway, is situated in the heart of Scandinavia. The city is surrounded by magnificent scenery, from its fjord to forested hills. Oslo has also been the home of landmark cultural figures, such as Edvard Munch, Gustav Vigeland, Thor Heyerdahl and Henrik Ibsen, each of whom is celebrated by a popular museum in the city. Oslo offers a unique combination of natural beauty, culture and history, which makes it a perfect setting for exciting social activities. Besides being the city where the Nobel Peace Prize is awarded each year, Norway’s largest university as well as several renowned research centres are Oslo highlights.

This city is a great destination for those who enjoy outdoor activities. Even in the city centre, the nearest park is never more than a few blocks away. A ten-minute boat ride from the centre takes you to lovely beaches on islands in the Oslo Fjord. In winter, Oslo has hundreds of kilometres of cross-country trails within the city’s boundaries — and eight ski centres. Oslo offers everything you would expect from a capital, it has an abundance of attractions, shopping opportunities, a flourishing cultural life, and choice of restaurants that are almost unparalleled in Scandinavia.

Diversions and discoveries abound in all seasons in a truly safe and friendly environment: a promenade along the harbour, a sumptuous meal at a Michelin-starred restaurant, a tram ride to the heights of Holmenkollen for a brisk walk and a tasty treat at a restaurant with a stunning view. Oslo is also an important port serving cargo, international ferry travel and cruise ships. Large, modern cruise-ferries sail direct routes to Kiel, Fredrikshavn and Copenhagen. Several guest harbours are available for travellers arriving by private boat.
Oslo has an extensive public transportation network comprising subways (Metro), trams, busses, trains and ferries. CityBike, Oslo’s bike-share system, provides another convenient way to sightsee and get around town.

Further information about Oslo and Norway, including activities, public transportation and recommendations that can enrich your visit, are available at visitoslo.com, Oslo’s official tourism and event website, or visitnorway.com

Oslo tourist information
Event, museum, and sightseeing information is provided by knowledgeable staff at the municipal Tourist Centres located at the Central Railway Station, City Hall, and the cruise ship terminal. Visit website: www.visitoslo.com

Pre- and post congress tours
The Norway In a Nutshell trip takes you through some of Norway’s most beautiful fjord scenery. You can experience the scenic Bergen Railway, the breathtaking Flåm Railway, the Aurlandsfjord, the narrow Nærøyfjord and the steep hairpin bends of Stalheimskleiva. Norway In a Nutshell is available as a day trip or with accommodation en route. The tour starts in Oslo Central Station and runs daily all year around. You can customize your own tour by adding hotels and activities. Everything is handled in one booking operation. You can find more information and book your trip in advance on www.fjordtours.com

On this page you also find information on other tours of Norway, including trips on the coastal steamer Hurtigruten. The Norway In a Nutshell trip can also be booked on site during the congress as long as the booking is made the day before departure and that there are tickets available.

Tipping
A service gratuity (tip) is included in the bill presented to customers by staff at bars, restaurants and taxis. That said, small tips are welcome.

Travel to Oslo
With its central location and convenient accessibility, as mentioned before, Oslo is easy to visit whether you arrive by car, ferry, train, bus or plane. The main airport, Oslo Airport (OSL) at Gardermoen, which is located 45 km north of City, is served by numerous international airlines. A 19-minute ride via the Airport Express Train brings you to the city centre and IASP Congress venue. Buses from the airport arrive near the Congress venue as well.

Two additional airports serve Oslo: Sandefjord Airport Torp, located some 110 km southwest of the city and served by rail (a shuttle bus brings you to the airport terminal), and Moss Airport Rygge, located 66 km south-east of Oslo. Low-cost airlines, such as Norwegian and Ryanair, along with major carriers, provide a great deal of air-travel flexibility.
### PROGRAMME GRID

**TUESDAY 24 SEPTEMBER**

| Room / Time | 8:00 - | 8:30 - | 9:00 - | 9:30 - | 10:00 - | 10:30 - | 11:00 - | 11:30 - | 12:00 - | 12:30 - | 13:00 - | 13:30 - | 14:00 - | 14:30 - | 15:00 - | 15:30 - | 16:00 - | 16:30 - | 17:00 - | 17:30 - |
|-------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Munch 1 + 2 |        |        |        |        |         | Pre-Conference 1: Introduction to Complicated Grief Treatment (CGT) |         |         |         |         |         |         |         |         |         |         |         |         |
| Base 1      |        |        |        |        |         |         |         |         |         |         | Pre-Conference 2: Mindfulness Based Cognitive Therapy |         |         |         |         |         |         |         |         |         |         |
| Sonja Heale Ballroom |        |        |        |        | Opening Ceremony |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |

**Track 1: New to Suicideology**

**Track 2: Volunteers**

**Track 3: Postvention**

The congress programme consists of a very high number of parallel sessions and presentations. Since we realize that it may be challenging for many delegates to decide which sessions to attend to make the most out of this extensive programme, we have created three specific optional tracks to follow through the programme of parallel sessions.

Track 1 is for those who are new to suicideology and want to focus on mainstream topics.
Track 2 is for volunteers who want to focus more on societal topics.
Track 3 focuses specifically on postvention.
The track system is entirely optional and no signing up is required.

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Make your own programme with the Personal Programme Planner at iasp2013.org
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**Track 1:** New to Suicideology
- PS3.1 Suicidal behaviour in Diverse Contexts (A)

**Track 2:** Volunteers
- PS3.3 Susceptibility to Suicide Behaviour: Neurobiological Determinants
- PS3.11 GP and Community Based Approaches
- PS3.6: The Language of Suicideology, Workshop

**Track 3:** Postvention
- PS3.10 "Defense Against Suicide" - Worldwide Military Suicide Prevention and Continuum of Care Efforts
- PS3.21 Developing National Suicide Prevention Strategies (B)
- PS3.16 Gender Aspects of Suicidal Behaviour
- PS3.19 Patient Safety and Suicide Prevention

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**Track 2** is for volunteers who want to focus more on societal topics.

**Track 3** focuses specifically on postvention.

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SATURDAY 28 SEPTEMBER

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<th>Room / Time</th>
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<td>Closing</td>
<td>Ceremony</td>
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MAP OF VENUE
RADISSON BLU PLAZA HOTEL

FLOOR 1

FLOOR 2

FLOOR 3

FLOOR 33
SCIENTIFIC PROGRAMME
Make your own programme with the Personal Programme Planner at iasp2013.org
MONDAY, SEPTEMBER 23
08:30 - 17:30  IASP BOARD MEETING

TUESDAY, SEPTEMBER 24
08:00 - 18:30  REGISTRATION

08:30 - 15:45  Munch 1+2
PRE-CONFERENCE 1: INTRODUCTION TO COMPLICATED GRIEF TREATMENT (CGT)
Chair: Katherine Shear, UNITED STATES & Lars Mehlum, NORWAY

08:30  Introduction to Complicated Grief Treatment (CGT)  Pre1-1
K Shear¹; L Mehlum²
¹Center for Complicated Grief, Columbia University, UNITED STATES; ²National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

08:30 - 15:30  Base 1
PRE-CONFERENCE 2: MINDFULNESS BASED COGNITIVE THERAPY
Chair: Catherine Crane, UNITED KINGDOM & Bergljot Gjelsvik, UNITED KINGDOM

09:30  Mindfulness Based Cognitive Therapy (MBCT) in Treatment of Suicidal Depression  Pre2-1
C Crane; B Gjelsvik
Oxford Mindfulness Centre, University of Oxford, UNITED KINGDOM

16:00 - 17:30  Sonja Henie Ballroom
OPENING CEREMONY

16:30  Assessing and Formulating Risk for Death by Suicide: Challenging Clinical Assumptions  OC-01
L Berman
IASP, UNITED STATES

16:40  Suicide and the Drama of Self Consciousness  OC-02
S Hustvedt, UNITED STATES

19:00 - 20:30  Oslo City Hall
MAYOR’S RECEPTION
## WEDNESDAY, SEPTEMBER 25

**08:00 - 18:30**  
**REGISTRATION**

**09:00 - 10:30**  
**PLENARY SESSION 1**  
Sonja Henie Ballroom  
Chair: Bob Goldney, AUSTRALIA & Yueqin Huang, CHINA

**09:00**  
**Impact of the Economic Recession on Suicidal Behaviour**  
D Stuckler  
Oxford University, UNITED KINGDOM

**09:30**  
**Public Health Interventions for Suicide Prevention: Need for Innovative Strategies**  
S Saxena  
World Health Organization (WHO), Department of Mental Health and Substance Abuse, SWITZERLAND

**10:00**  
**Optimizing Suicide Prevention Programmes and their Implementation in Europe (OSPI-Europe): Outcome of a Multilevel Suicide Prevention Programme**  
U Hegert  
Department of Psychiatry and Psychotherapy of the University of Leipzig, GERMANY

**10:30 - 11:00**  
**COFFEE/TEA BREAK**

**10:30 - 16:30**  
**Poster Area**

**DAY 1 - POSTER SESSION (There will be a Chaired Poster Walk at 16:00)**

- **Iku Ya J'esin Lo': Sooner Death than Indignity, Growing Individualism and the Rising Suicide Rate Among the Yorubas of Southwestern Nigeria**  
  AJ Ademowo  
  Afe Babalola University, NIGERIA

- **Use of Psychotropic Medication Last Year Before Suicide**  
  Y Chen; L Hui-Li  
  Kaohsiung Medical University, TAIWAN

- **Can We Differentiate Suicide "hotspots” on Railways From Non-hotspots?**  
  K Krysinska¹; K Debbaut²; K Andriessen³  
  ¹University of Leuven - KU Leuven, BELGIUM; ²Infrabel, Suicide Prevention Unit, BELGIUM; ³Tele Help (Tele-Onthaal) Federation & KU Leuven, University of Leuven, BELGIUM

- **Attempted Suicides in Suriname a Comparative Study of a Rural and Urban Area**  
  LF Lewis  
  Anton de Kom University and ERASMUS University, SURINAME

- **Analysis of Suicide Attempts in Public Emergency’s Sao Paulo City/Brazil.**  
  TSG Araújo; JF Marcolan; MC Mazzaia; FC Marquetti  
  Universidade Federal de São Paulo, BRAZIL
Gender Differences in Suicidal Behaviour in a Population Based Sample of Patients with First-Episode Psychosis
G Austad1; I Joa2; J0 Johannessen2; TK Larsen2
1RVTS Vest/Stavanger University Hospital, NORWAY; 2Stavanger University Hospital, NORWAY

Self-injury Among Adolescents and Young Adults in South Africa
C Bheamadu
University of Johannesburg, SOUTH AFRICA

Profiles of Callers to Flemish Suicide Prevention Hotline
M Bloemen; E Muijzers; K. Pauwels
Centrum ter Preventie van Zelfdoding, BELGIUM

Occupation and Suicide Attempts in Taiwan: 2006-2011
C.M. Chang1; S-C Liao2; M-B Lee3; C.H. Chen4
1Chang Gung Memorial Hospital at Linko & Chang Gung University, TAIWAN; 2National University College of Medicine, TAIWAN; 3National University Hospital and National University College of Medicine, TAIWAN; 4Academia Sinica, TAIWAN

Suicide Risk and Health in University Students - A National Cohort Study
M Dahlin; M Vaez; R Ljung; B Runeson
Karolinska Institutet, SWEDEN

Suicide Mortality in Second Generation Migrants, Australia, 2001-2008
D De Leo; CK Law; K Kolves
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

EUREGENAS: European Regions Enforcing Actions Against Suicide
E Dumon; E De Jaegere; G Portzky; C van Heeringen
Ghent University - Unit for Suicide Research, BELGIUM

The Bereaved by the Large Number of Suicides During the 80s
E Fleischer; SA Fog
NEFOS - The Network for Bereaved and Relatives, DENMARK

The Effectiveness of Community Empowerment, a Community Suicide Prevention Intervention Approach, in Rural Japan.
K Fujita1; Y Kaneko2; R Yong3; Y Motohashi1
1Department of Public Health, Akita University Graduate School of Medicine, JAPAN; 2Akita University Graduate School of Medicine, JAPAN; 3Tokyo University Graduate School of Medicine Mental Health and Nursing Department, MALAYSIA

Family Resilience Following Adolescent Suicide: Tailored Interventions for Different Types of Families
C Genest1; D Malo2; F Gratton1
Montreal University, CRISE, CANADA; 2Montreal University, CANADA

Informing the Ethics of Qualitative Suicide Research: Evidence from an Impact Evaluation
S Gibson1; O Benson1; Z Boden1; G.J. Owen2
1SANE Mental Health Charity, UNITED KINGDOM; 2University of Exeter, UNITED KINGDOM
Illness Beliefs of Depressed Patients in Taiwan
H-C Huang; C-R Huang; S-I Liu
Mackay Memorial Hospital, TAIWAN

Prevention Program on Media Covering Suicide
I Inostroza
STOP SUICIDE, SWITZERLAND

Differences in Suicidal Patient Profiles by Type of Suicidal Behavior: Results From a Multicenter Emergency Sample
L Jimenez-Trevino1; P Saiz2; P Buron3; MP Garcia-Portilla4; ER Chinea5; M Navio-Acosta6; J Bobes7
1University of Oviedo - Department of Psychiatry, SPAIN; 2University of Oviedo - CIBERsAM, SPAIN; 3Hospital Universitario de Canarias, SPAIN; 4Hospital Doce de Octubre, SPAIN

A Randomised Control Trial Using the Internet to Prevent Suicide in Adolescents: A Case Study From England
N Machin; P Almond; T Waller; D Sharpe; R Anghel; P Lane; M Martyn; R Hamilton
Anglia Ruskin University, UNITED KINGDOM

Decrease of Suicide Rate in Region Celje in Slovenia and 10 Years of Activities of Regional Suicide Prevention Group - Is There a Connection?
N Konec Jurièiè1; K. Lekiæ1; M Zorko2; S Roskar2
Public Health Institute Celje, SLOVENIA; 3National Institute for Public Health, SLOVENIA

Toolbox Suicidal and Self-harming Behavior
N Kool1; M. Ferber2; I de Graaf3
1Palier, NETHERLANDS; 2the Hague, NETHERLANDS; 3Utrecht, NETHERLANDS

Descriptive Study of Suicidal Adolescents Referred to a Child and Adolescent Outpatient Psychiatric Unit in Copenhagen, Denmark
TD Kristensen
Child- and adolescent outpatient unit at BUC Region H, DENMARK

Association with Attitude Toward Suicide of Mental Health Nurses Working in Community and Work Performance in Suicide Prevention
SJ Lee1; SA Kim2
1Korea Suicide Prevention Center, KOREA (REP.); 2College of Nursing, Yonsei University, KOREA (REP.)

Profile of the Individual with Suicidal Behavior Taken Care in University Hospital of São Paulo City /Brasil
JF Marcolan1; ACB Bento1; FC Marquetti1; MC Mazzia1; MEO Marcolan2
1Universidade Federal de São Paulo, BRAZIL; 2Prefeituramento Município de São Paulo, BRAZIL

The Experience of the Suicide Survivors Group "The Continuation of Life" Through the Services of the Universidade Federal De Sao Paulo
FC Marquetti; MC Mazzia; JF Marcolan
Universidade Federal de São Paulo, BRAZIL

The Taboo Regarding Suicide and its Consequences in Health Prevention Strategies
FC Marquetti1; C Pleffken1; KT Kawauchi1; JF Marcolan2
1Universidade Federal de São Paulo, BRAZIL; 2Unifesp/SP, BRAZIL
Suicide Prevention in Young Population by Internet: Preliminary Data from The Supreme Project in Catalonia

C Masip1; A Roquer2; P Flores1
1Parc de Salut Mar, SPAIN; 2IMIM, SPAIN

Researchers Who Walk with Communities: How is Innovative Research Theory Turned Into Positive Research Practice?

K McKay; M Maple
CRN for Mental Health and Well-Being in Rural and Regional Communities, AUSTRALIA

Violent Suicide Attempts and First Psychiatric Hospitalization

E Nieto; M Guitart; M Rius; M Gallardo
Althaia Xarxa Assistencial Universitaria de Manresa, SPAIN

Suicidal Ideation and Stress-Coping in Young Japanese Adults

H Ono; E Tsujimoto; R Taketani; M Yano; T Miyoshi
Department of Psychological Science, Kwansei Gakuin University, JAPAN

Longitudinal Associations Between Serum Cholesterol Levels and Suicidal Ideation in an Older Korean Population

S.W Kim; J.S Yoon; J.M Kim; H.J Kang; B.O Jeong; S.Y Kim; K.Y Bae
Department of Psychiatry, Chonnam National University Medical School, KOREA [REP.]

Correlation Between On-line Provision of Positive, Suicide-intervention Information on Hope Click and the Rate of Self-induced Death

S. U. Lee1; JI Park2; Y. Y. Nam1
1Korea Suicide Prevention Center, KOREA [REP.]; 2Kangwon National University College of Medicine, KOREA [REP.]; 3Seoul National Hospital, KOREA [REP.]

Impulsivity and Methodology for Attempted Suicide of Those Visiting Emergency Rooms: A Case Study

EJ Shin1; M Lim2; JI Park3
1Korea Suicide Prevention Center, KOREA [REP.]; 2Seoul National University Bundang Hospital, KOREA [REP.]; 3Korea Suicide Prevention Center, Kangwon National University College of Medicine, KOREA [REP.]

SOUTH SUAS-S: Validation with Clinical Search From Uruguay

S Pelaez1; P. Wels1; G. Moreira1; C. De los Santos1; F. Bentancur1; L. Pérez1; I. Valencia1
1Ultimo Recurso, URUGUAY

Suicide Attempts and Ideation in Type 1 Diabetic Patients

A Roy1; M Roy2
1Department of Veterans Affairs, UNITED STATES; 2UMDNJ-DOC, UNITED STATES

Independent Effects of 5’ and 3’ Functional Variants in the Serotonin Transporter Gene on Suicidal Behavior in the Context of Childhood Trauma

A Roy1; E Gorodetsky2; C Hodgkinson2; D Goldman2; M-A Enoch2
1VA Hospital, UNITED STATES; 2NIH, UNITED STATES

Reaching the Target Population: A Descriptive Analysis of Taiwan’s National Suicide Prevention Hotline and the Taipei Lifeline Database

F Shaw1; K Chu2; W Chiang2; Y Chang1; L Chen1; P Chen1; H Cheng1; C Li1; S Shih1
1National Chi Nan University, TAIWAN; 2Taipei Lifeline Association, TAIWAN
Attempted Suicide: Experiences of Young Men and Teenage Girls
P Skrubis; J Jarmolovičiate; A Jonkaityte
Vilnius University, LITHUANIA

Effective Organisational Suicide Prevention: The Identification of the Elements of an Effective Correctional Suicide Prevention Process
K Slade
Nottingham Trent University, UNITED KINGDOM

Athlete Suicide & Hegemonic Masculinity: Frames of Physical Injury & Occupational/Economic Strain in the Cinema
S Stack1; B Bowman2
1Wayne State University, UNITED STATES; 2Center for Suicide Research, UNITED STATES

Geographical Variations and Contextual Effects on Suicide Mortality in Japan
M Suka1; T Yamauchi2; H Tachimori2; T Takeshima2
1The Jikei University School of Medicine, JAPAN; 2National Center of Neurology and Psychiatry, JAPAN

The Structure and Effect of Socio-psychological Factors on Mental Health Status in Japanese University Students under Economic Recession
T Suzuki1; T Nagatomi1; H Katayama2; M Okada3; A Fujikawa4; Y Tsuji5; N Miyatake6
1Kagawa University, JAPAN; 2Hamamatsu University School of Medicine, JAPAN; 3Kanonnji Daichi Senior High School, JAPAN; 4Takamatsu City Public Health Center, JAPAN; 5Kagawa Prefectural College of Health Sciences, JAPAN

A Comic Book to Promote Mental Health Among Teenagers in Switzerland: A Project to Prevent Youth Suicide and Strengthen the Prevention Network
A-M Trabichet
STOP SUICIDE, SWITZERLAND

The Effects of Media Reports of Suicides by Well-Known Figures Between 1989 and 2010 in Japan
M Ueda1; T Matsubayashi2; K Mori3
1Syracuse University, UNITED STATES; 2University of North Texas, UNITED STATES; 3Yale University, UNITED STATES

The Agreement Between Care Needs and Treatment Recommendations Following Medically Serious and Medically Non-serious Suicide Attempts
N Vancayseele; E De Jaegere; G Portzky; C van Heeringen
Ghent University, BELGIUM

NPY and Suicidal Behaviour
A.G. Wang1; R.R. Thomsen1; P. Koefoed1; A.S. Jacoby1; D. Woldbye1; H.B. Rasmussen1; S. Timm1; H. Dam1; K.D. Jakobsen1; M Nordenfelt1; G. Jürgens1; H.J. Sørensen1; O. Garsdal1; M. Hvid2; T. Werge1
1Copenhagen University Hospital, DENMARK; 2Copenhagen University, DENMARK

Effects of the Anti-stigma-targeted Lecture on Public Recognition and Attitudes Regarding Depression and its Treatments
T Yakushi1; T Kuba1; Y Nakamoto1; H Fukuhara1; S Michishita1; S Travis1; O Tanaka1; T Kondo1
1University of The Ryukyus, JAPAN; 2Hirosaki University, JAPAN
### Self-harm in Early Psychosis: Effects of Duration of Untreated Psychosis

S. Åbergsjord; L. Mellesdal; R. Gjestad; R.A. Kroken; K.J. Ødegaard; E.M. Løberg

Div. of Psychiatry, Haukeland University Hospital, NORWAY; Dep. of Clinical Medicine, University of Bergen, NORWAY; Dep. of Biological and Medical Psychology, University of Bergen, NORWAY

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<th>Time</th>
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| 11:00 - 12:30 | **PLENARY SESSION 2**  
Chair: Annette Beautrais, NEW ZEALAND & Øivind Ekeberg, NORWAY | Sonja Henie Ballroom |
| 11:00      | **Clustering and Contagion of Suicide and Self-Harm:**  
Early Identification and Intervention | PL2-1          |
|            | E Arensman  
National Suicide Research Foundation, IRELAND |               |
| 11:30      | **Preventing Suicide in the Elderly - What Are the Challenges and How Can They Be Met?** | PL2-2          |
|            | M Waern  
University of Gothenburg, SWEDEN |               |
| 12:00      | **Can Neuroimaging Inform Treatment and Prevention of Suicidal Behaviour and Measure Effectiveness of Interventions?** | PL2-3          |
|            | JJ Mann  
New York State Psychiatric Institute, Columbia University, UNITED STATES |               |
| 12:30 - 14:30 | **LUNCH** |               |
| 13:00 - 14:30 | **ORGANIZATIONAL REPRESENTATIVES MEETING** | Room 301      |
| 12:30 - 14:30 | **CRISIS BOARD MEMBERS MEETING** | Room 303      |
| 13:30 - 14:30 | **LUNCH WITH THE EXPERTS**  
Chair: Ella Arensman, IRELAND | Kunst         |
| 14:30 - 16:00 | **PS1.1 ONLINE SEARCH BEHAVIOURS, SEARCH OUTCOMES AND ONLINE SAFETY - THE SOCIAL MEDIA & INTERNET SYMPOSIUM OF THE TASK FORCE MEDIA & SUICIDE**  
Chair: Thomas Niederkrotenthaler, AUSTRIA | Kunst         |
| 14:30      | **The Study of “Suicide Contagion” During Dawning Social Media Era: A Critical Review from a Network Science Perspective** | PS1.01-1      |
|            | Q Cheng; H Li; V Silenzio; E.D. Caine  
1The University of Hong Kong, HONG KONG, CHINA PR;  
2University of Rochester Medical Center, UNITED STATES |               |
| 14:45      | **Best Practices Tool for Online Safety** | PS1.01-2      |
|            | D Reidenberg  
SAVE, UNITED STATES |               |
15:00 How to Engage in 140 Characters or Less (#suicideprevention) PS1.01-3
J Skehan; J Burns; M Blanchard; M Bryant
1Hunter Institute of Mental Health, AUSTRALIA; 2Young and Well, Cooperative Research Centre, AUSTRALIA

15:15 Surfing for Suicide and Prevention: A Content-analytic Comparison of German and US-American Web Content PS1.01-4
T Niederkrotenthaler; G Sonneck; B Till
1Medical University of Vienna, AUSTRIA; 2Crisis Intervention Center Vienna, AUSTRIA

15:30 Accessing Suicide-Related Information on the Internet: A Retrospective Observational Study of Search Behavior PS1.01-5
P.W.C. Wong; KW Fu; R Yau; H Ma; S-s Chang; F Law; P.S.F. Yip
The University of Hong Kong, HONG KONG, CHINA PR

14:30 - 16:00 Film

PS1.2 BEST PRACTICE ELEMENTS OF MULTILEVEL COMMUNITY INTERVENTIONS
Chair: Marco Sarchiapone, ITALY & Mitsuhiko Yamada, JAPAN

14:30 Best Practice Elements of Multilevel Community Interventions for Suicide Prevention: An Update PS1.02-1
M Sarchiapone
University of Molise, ITALY

14:50 Optimizing Depression Treatment and Prevention of Suicidal Behaviour by Community Based 4-level Interventions PS1.02-2
U Hegert
Department of Psychiatry and Psychotherapy of the University of Leipzig, GERMANY

15:10 A Community Intervention Trial of Multimodal Suicide Prevention Program: NOCOMIT-J PS1.02-3
K Otsuka; Y Ono; A Sakai; M Inagaki; N Yonemoto; M Yamada
1Iwate Medical University, Dept. of Disaster and Community Psychiatry, JAPAN; 2National Center of Neurology and Psychiatry, JAPAN

15:30 National Policy Initiatives for Suicide Prevention: A Comparative Study Between New Zealand and Japan PS1.02-4
M Yamada; M Inagaki; Y Kawashima; N Yonemoto
National Center of Neurology and Psychiatry, JAPAN

14:30 - 16:00 Olympia

PS1.3 ECONOMIC RECESSION AND UNEMPLOYMENT AS RISK FACTORS FOR SUICIDE
Chair: Allison Milner, AUSTRALIA & Irene O’Farrell, IRELAND

14:30 The Effect of Economic Recession on Suicide Mortality Among South Korean Working-age Adults: A 7-year Observational Analysis PS1.03-1
C-h Chan; E.D. Caine; S You; KW Fu; S-s Chang; P.S.F. Yip
1The University of Hong Kong, HONG KONG, CHINA PR; 2University of Rochester, UNITED STATES; 3Chungbuk National University, KOREA (REP.)
14:45 Impact of the Economic Recession on Fatal and Non-fatal Suicidal Behaviour in Ireland
P. Corcoran1; E Griffin1; AP Fitzgerald2; E Arensman1; IJ Perry2
1National Suicide Research Foundation, IRELAND; 2University College Cork, IRELAND

15:00 The Role of Under-employment and Unemployment in Recent Birth Cohort Effects in Australian Suicide
A Page1; A Milner2; S. Morrell3; R. Taylor3
1School of Science and Health, University of Western Sydney, AUSTRALIA; 2Melbourne School of Population Health, University of Melbourne, AUSTRALIA; 3School of Public Health and Community Medicine, University of New South Wales, AUSTRALIA

15:15 Ecological Association Between Hospital Treated Self-Harm, Deprivation, Social Fragmentation, Area Type and Travel Time to Hospital: A National Study
I O’Farrell1; P. Corcoran2; IJ Perry1
1University College Cork, IRELAND; 2National Suicide Research Foundation, Cork, IRELAND

15:30 Duration of Unemployment and Suicide in Australia: An Ecological Investigation by Sex and Age During Rising Versus Declining National Unemployment
A Milner1; A Page2; AD LaMontagne1
1University of Melbourne, AUSTRALIA; 2University of Western Sydney, AUSTRALIA

14:30 - 16:00 Room 301

PS1.4 ETHNIC AND CULTURAL FACTORS IN SUICIDOLOGY
Chair: Heidi Hjelmeland, NORWAY & Sayed Sabour Mansouri, MALAYSIA

14:30 Suicidal Ideation and its Associated Risk Factors Among Mental Health Clinic Attenders in Afghanistan
M Sayed Sabour1; T. Maniam2
1Herat Mental Health Clinic, AFGHANISTAN; 2National University of Malaysia, MALAYSIA

14:45 Deliberate Self Poisoning in Hungary: Socio-demographic Differences in the Risk Factors of Multiple Suicide Attempts Between the Roma and Non-Roma Populations
MD Toth1; Sz. Adam1; T. Zonda2; E. Susanszky1; G Purebl1
1Semmelweis University Institute of Behavioral Sciences, HUNGARY; 2Hungarian Association for Suicide-Prevention, HUNGARY

15:00 Suicide and the Dakota Sioux: A Durkheimian Analysis Stretching Across High Risk Populations Worldwide
A. Rendeiro
UC Irvine, Critical Care Nurse, UNITED STATES

15:15 Attitudes Toward Suicidal Behaviour Among Health Professionals in Mental Health in Stavropol, Russia and Oslo, Norway
AB Norheim1; E Loskoutova1; TK Grimholt1; O Ekeberg4
1Diakonhjemmet Hospital/RVTS East, NORWAY; 2Propsky, RUSSIAN FEDERATION; 3Oslo University Hospital /RVTS East, NORWAY; 4Oslo University Hospital, NORWAY

15:30 Punishment or Help? Attitudes Towards the Law Criminalizing Attempted Suicide in Ghana
H Hjelmeland1; J Osafo2; C Akotia2; BL Knizek3
1Norwegian University of Science and Technology, NORWAY; 2University of Ghana, Legon, GHANA; 3Sør-Trendelag University College, NORWAY
### PS1.5 RESEARCH IN POSTVENTION (1)
Chair: Myfanwy Maple, AUSTRALIA

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<tr>
<th>Time</th>
<th>Presentation</th>
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<tr>
<td>14:30</td>
<td>Suicide Bereavement Narratives within Families</td>
<td>D Ratnarajah; V Minichiello&lt;br&gt;University of New England, AUSTRALIA</td>
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<tr>
<td>14:45</td>
<td>Identifying How Parents Bereaved by Suicide are Informed of Their Child’s Death and the Impact This Has on Their Grief Responses</td>
<td>S McDonnell; N Kapur; L Appleby; L Cordingley&lt;br&gt;University of Manchester, UNITED KINGDOM</td>
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<td>15:00</td>
<td>And The Light Shines on: After Death Communication Experiences of People Bereaved by Suicide</td>
<td>S Spencer-Thomas&lt;br&gt;Carson J Spencer Foundation, UNITED STATES</td>
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<td>15:15</td>
<td>Impact and Challenges of a Patient Suicide: Distinguishing Subgroups of Most Distressed Mental Health Carers in Switzerland</td>
<td>D Castelli Dransart; J-L. Heeb; E.M Gutjahr; A Gulfi&lt;br&gt;University of Applied Sciences and Art Western Switzerland, SWITZERLAND</td>
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<tr>
<td>15:30</td>
<td>Supporting Suicide Bereaved People During the Coronial Process. A Practitioner-researcher Partnership</td>
<td>M Maple1; D. Nugus2; S. Pont³&lt;br&gt;1University of New England, AUSTRALIA; 2Newcastle Department of Forensic Medicine, AUSTRALIA</td>
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### PS1.6 THE WHO/START STUDY
Chair: Diego De Leo, AUSTRALIA

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<th>Time</th>
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<tr>
<td>14:30</td>
<td>The WHO START Study: Present Status and Future Developments</td>
<td>D De Leo&lt;br&gt;Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA</td>
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<td>14:45</td>
<td>Data from The WHO/START Study: What Can Be Learned From Them?</td>
<td>K Kolves; D De Leo&lt;br&gt;Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA</td>
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<td>15:00</td>
<td>WHO START Study in French Polynesia: An Example of Implementation of the ‘Start’ Culture in a Pacific Nation</td>
<td>S Amadeo1; M Rereao1; A Malogne2; P Favro3; L Jehel5; NL Nguyen1; A Milner4; K Kolves4; D De Leo4&lt;br&gt;1Centre Hospitalier de Polynésie Française, FRENCH POLYNESIA; 2Centre de Prevention du Suicide, FRENCH POLYNESIA; 3UPF, FRENCH POLYNESIA; 4UAG, MARTINIQUE; 5University of Melbourne, AUSTRALIA; 4AISRP, AUSTRALIA</td>
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<td>15:15</td>
<td>Suicide in Women</td>
<td>L Vijayakumar, Voluntary Health Services, INDIA</td>
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<td>15:30</td>
<td>Suicidal Behaviours in Hong Kong: An Update</td>
<td>P.S.F. Yip, The University of Hong Kong, HONG KONG, CHINA PR</td>
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<td>15:45</td>
<td>A Pilot Study of the Surveillance of Fatal and Non-fatal Suicidal Behaviours in Kunming City, China: Evidence from The START Project</td>
<td>YQ Huang¹; Y. Ruan²; ZR. Liu¹; CQ. Gao²; Q. Huang³; XF. Xu¹; N. Ji¹; J Lu¹; XD. Wang⁴</td>
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¹Institute of Mental Health, Peking University, CHINA; ²Yunnan Mental Health Hospital, CHINA; ³The First Hospital of Kunming Medical University, CHINA; ⁴WHO Regional Office for the Western Pacific, PHILIPPINES

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<th>14:30 - 16:00</th>
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<td>14:30</td>
<td>Suicide and ‘Suicide’ Bombing in Pakistan: Do They Have a Common Pathway?</td>
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<td>14:45</td>
<td>Monthly Suicide Rates in 3 Disaster-Affected Prefectures Temporarily Increased with Anniversary Reaction After the Great East Japan Earthquake</td>
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¹Department of Psychiatry, University of Tsukuba, JAPAN; ²Department of Disaster Psychiatry, University of Tsukuba, JAPAN

| 15:00 | Reduced Suicide Rates in Disaster-stricken and Neighboring Areas Following the Great East Japan Earthquake | M Orui; S Harada; M Hayashi, Sendai City Mental Health and Welfare Center, JAPAN |
| 15:15 | The Epidemic Spread of Charcoal-burning Suicide in East Asia: A Trend Analysis | S-S Chang¹; Y-Y Chen²; P.S.F. Yip³; W. J. Lee³; D. Gunnell⁴ |

¹The University of Hong Kong, HONG KONG, CHINA PR; ²Taipei City Hospital, TAIWAN; ³College of Medicine, Graduate School of Public Health, Korea University, KOREA (REP.); ⁴School of Social and Community Medicine, University of Bristol, UNITED KINGDOM

| 15:30 | Mental Health, Suicide and the Northern Ireland Conflict | C Corry; SM O’Neill; BP Bunting; SD Murphy; Finola Ferry, University of Ulster, UNITED KINGDOM |
### PS1.8 NATIONAL STRATEGIES FOR SUICIDE PREVENTION
Chair: Richard McKeon, UNITED STATES

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<tr>
<td>14:30</td>
<td>Munch 1</td>
<td>United States National Strategy for Suicide Prevention: Innovation, Intervention, And Impact</td>
<td>R McKeon</td>
<td>SAMHSA, UNITED STATES</td>
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<td>14:50</td>
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<td>Norway’s New National Strategy for Suicide Prevention</td>
<td>L Mehlum</td>
<td>National Centre for Suicide Research and Prevention, University of Oslo, NORWAY</td>
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<td>15:10</td>
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<td>Danish National Suicide Prevention Strategy</td>
<td>M Nordentoft</td>
<td>University of Copenhagen, DENMARK</td>
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<td>15:30</td>
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<td>The National Suicide Prevention Strategy in New Zealand: Revision and a New Realism?</td>
<td>A Beautrais</td>
<td>University of Canterbury, NEW ZEALAND</td>
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### PS1.9 LONGITUDINAL STUDIES OF SUICIDAL BEHAVIOUR
Chair: Helen Bergen, UNITED KINGDOM & Karin Beckman, SWEDEN

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<td>14:30</td>
<td>Gamlebyen</td>
<td>Attenuated Psychotic Symptoms are an Important Clinical Marker of Risk for Suicidal Behaviour: Results From a Prospective Cohort Study</td>
<td>I Kelleher; P. Corcoran; H Keeley; JTW Wigman; N Devlin; H Ramsay; C Wasserman; V Carli; M Sarchiapone; C Hoven; D Wasserman; M Cannon</td>
<td>Royal College of Surgeons in Ireland, IRELAND; National Suicide Research Foundation, IRELAND; University of Maastricht, NETHERLANDS; Columbia University, UNITED STATES; Karolinska Institute, SWEDEN; University of Molise, ITALY</td>
<td>IRELAND</td>
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<td>14:45</td>
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<td>Associations of Change in Risk Factor Between the Baseline and Follow-up Assessments with the Incidence of Suicidal Ideation</td>
<td>Y Zhang; P.S.F. Yip; S-s Chang; P.W.C. Wong</td>
<td>The HKJC Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR; Dep. of Social Work and Social Administration, HONG KONG, CHINA PR</td>
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<td>15:00</td>
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<td>Recalibrating Suicide Risk after Index Suicide Attempt: Prevention Must Start Before the First Attempt</td>
<td>J.M. Bostwick; C.P. Pabbati; A.J.S. McKean; L.B. Drozdowicz; N.E. King; M.T. Chang</td>
<td>Mayo Clinic, UNITED STATES; University of California at San Diego, UNITED STATES</td>
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<td>15:15</td>
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<td>Suicide Mortality Following a First Suicide Attempt in Adolescents and Adults: National Controlled Cohort Study in Sweden</td>
<td>K Beckman; D Tidemalm; M Dahlin; B Runeson</td>
<td>Karolinska Institutet, Department of Clinical Neuroscience, Division of Psychiatry, SWEDEN</td>
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</table>
15:30  Premature Death Following Self-harm: A Multicentre Cohort Follow-up Study
H. Bergen1; K Hawton1; K. Waters2; J. Ness2; J. Cooper3; S Steeg3; N Kapur3
1University of Oxford, Centre for Suicide Research, UNITED KINGDOM; 2Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM; 3University of Manchester, Centre for Suicide Prevention, UNITED KINGDOM

15:45  Thyroid Stimulating Hormone Levels and Impact on Self-reported Suicide Risk in Depressed Psychiatric Inpatients
T Lineberry1; A Parsaik1; C Sola1; C Bryan2
1Mayo Clinic, UNITED STATES; 2University of Utah, UNITED STATES

14:30 - 16:00  Oslofjord
PS1.10 WORKSHOP: CHALLENGES FOR IMPLEMENTING PUBLIC HEALTH APPROACHES TO SUICIDE PREVENTION
Chair: Eric Caine, UNITED STATES

14:30  Is a Suicide Attempt a Reportable Event? Public Health and Mental Health Ethics as Complementary and Competing Perspectives
E.D. Caine
Injury Control Research Center for Suicide Prevention, UNITED STATES

14:50  Is it Time to Shift our Approach and Examine Non-suicide Specific Outcomes in Suicide Prevention Efforts?
J Reed1; E.D. Caine2; N Kapur3; D O’Neil4
1Education Development Center - SPRC, UNITED STATES; 2Injury Control Research Center for Suicide Prevention, UNITED STATES; 3University of Manchester, UNITED KINGDOM; 4Dawn O’Neil & Associates, AUSTRALIA

15:10  Implementing Suicide Prevention Initiatives, When There is Governmental and Health System Support
N Kapur
University of Manchester, UNITED KINGDOM

15:30  The Challenges and Opportunities for Implementing Suicide Prevention Initiatives: Does the Collective Impact Approach Offer a Solution?
D O’Neil
Dawn O’Neil & Associates, AUSTRALIA

14:30 - 16:00  Ekeberg
PS1.11 WORKSHOP: UTILIZATION OF DATA FROM ROUTINE REGISTERS FOR SUICIDE RESEARCH
Chair: Ping Qin, NORWAY

14:30  Utilization of Data From Routine Registers for Suicide Research: Concerns and Opportunities
P Qin
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY
### PS1.12 SUICIDE AND THE SOCIAL CONTEXT

**Chair:** Kevin Malone, IRELAND & Joseph Osafo, GHANA

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<td>14:30</td>
<td><strong>Evolution of Suicide Clusters: Suicide Couplets as Mediators from Singleton Deaths to Clusters</strong>&lt;br&gt;K Malone; A McLoughlin; C Kelleher &lt;br&gt;School of Medicine &amp; Medical Science, University College Dublin, IRELAND</td>
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<td>14:45</td>
<td><strong>The Social Context of Suicide in England and Wales</strong>&lt;br&gt;P Turnbull; M Tranmer; I.M. Hunt &lt;br&gt;The University of Manchester, UNITED KINGDOM</td>
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<td>15:00</td>
<td><strong>The Importance of Perceived Lack of Support for Attempted Suicide in Ghanaian Men</strong>&lt;br&gt;C Akotia¹; H Hjelmeland²; BL Knizek³; E Kinyanda⁴; J Osafo⁴ &lt;br&gt;¹University of Ghana, Department of Psychology, GHANA; ²Norwegian University of Science and Technology, NORWAY; ³Faculty of Nursing, Sør-Trøndelag University College, NORWAY; ⁴MRC/UVRI Uganda Research Unit on AIDS, Entebbe, UGANDA</td>
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<td>15:15</td>
<td><strong>Impact of Social Determinants on Suicide In Brazil</strong>&lt;br&gt;D Borges Machado; D. Rasella; D. Neves &lt;br&gt;ISC - Institute of Collective Health, Federal University of Bahia, BRAZIL</td>
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<td>15:30</td>
<td><strong>Self-harm in Ethnic Minorities in The UK: Hospital Management and Risk Factors for Repetition. Where to Next?</strong>&lt;br&gt;J. Cooper¹; S Steeg¹; R Webb¹; E Applegate¹; S Stewart²; E Murphy³; K Hawton⁴; H. Bergen⁴; K. Waters⁵; N Kapur¹ &lt;br&gt;¹University of Manchester, UNITED KINGDOM; ²University of Chester, UNITED KINGDOM; ³Salford Mental Health Services, UNITED KINGDOM; ⁴University of Oxford, UNITED KINGDOM; ⁵Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM</td>
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<td>16:00</td>
<td>COFFEE/TEA BREAK</td>
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### Poster Area

**Chair:** J John Mann, UNITED STATES

**PS1.13 SUICIDAL BEHAVIOUR IN STUDENTS**

**Chair:** Ping Qin, NORWAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>16:30</td>
<td><strong>Suicidal Behaviour and Correlates Among University Students in China</strong>&lt;br&gt;P Qin &lt;br&gt;National Centre for Suicide Research and Prevention, University of Oslo, NORWAY</td>
</tr>
</tbody>
</table>
16:45  Suicide Ideation and Attempt Among High-school Youth Across 23 Countries: A Closer Look at Gender Differences  
MH. Swahn¹; J. B. Palmier²; H. Yao¹  
¹Emory Center for Injury Control, Georgia State University, UNITED STATES; ²Georgia State University, Institute of Public Health, UNITED STATES  
17:00  Suicidal Behaviours, Student Stress in India  
Y Nath  
School of Applied Child Psychology, McGill University, CANADA  
17:15  Use Of Mental Health Services Among Students with Self-harm  
AJ Tørmoen; I Rossow; L Mehlum  
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY  
17:30  Online Suicide Risk Screening and Brief Intervention with College Students  
CA King  
Departments of Psychiatry and Psychology, University of Michigan, UNITED STATES  

16:30 - 18:00 Film  
PS1.14 SUICIDE CLUSTERING AND CONTAGION:  
EARLY IDENTIFICATION, RESPONDING AND POSTVENTION  
Chair: Ella Arensman & Sean McCarthy, IRELAND  
16:30  Identifying Probable Suicide Clusters in Wales Using National Mortality Data  
M. Dennis¹; P. Jones¹; D. Gunnell¹; S. Platt¹; J. Scourfield¹; K. Lloyd¹; P. Huxley¹; A. John¹; B. Kamran¹  
¹Swansea University, UNITED KINGDOM; ²School of Social and Community Medicine, UNITED KINGDOM; ³University of Edinburgh Medical School, UNITED KINGDOM; ⁴Cardiff University, UNITED KINGDOM  
16:45  Epidemiological, Methodological and Clinical Issues Related to Clustering and Contagion of Suicidal Behaviour  
E Arensman  
National Suicide Research Foundation, IRELAND  
17:00  Examining Narratives of Suicide Contagion: Implications for Responding and Postvention  
J Bell¹; N Stanley²; S Mallon³; J Manthorpe⁴  
¹Department of Social Sciences, University of Hull, UNITED KINGDOM; ²University of Central Lancashire, UNITED KINGDOM; ³Northern Ireland Association for Mental Health, UNITED KINGDOM; ⁴Kings College London, UNITED KINGDOM  
17:15  Evaluation of Community Responses to Suicide Clusters  
A Beauvais  
University of Canterbury, NEW ZEALAND  
17:30  Responding to Suicide Clusters: A Guidance Document  
S McCarthy  
Health Service Executive, IRELAND
<table>
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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tr>
<td>16:30 - 18:00</td>
<td>PS1.15 SUICIDAL BEHAVIOUR IN INDIVIDUALS WITH PSYCHOSIS. CURRENT KNOWLEDGE AND SCOPES FOR EARLY INTERVENTION</td>
<td>Chair: Erlend Mork, NORWAY</td>
</tr>
</tbody>
</table>
| 16:30       | Prevention of Suicide Among Patients with Psychosis in Schizophrenia Spectrum | M Nordentoft  
Department of Clinical Medicine, University of Copenhagen, DENMARK                           |
| 16:45       | Suicidality in Psychosis: Relation to Auditory Hallucinations and Persecutory Delusions | E Kjelby¹; R.A. Kroken¹; E.M. Løberg¹; L Mehlum¹; L Mellesdal¹; I Sinkeviciute¹; E. Johnsen²  
¹Haukeland University Hospital, NORWAY; ²University of Bergen and Haukeland University Hospital, NORWAY   |
| 17:00       | Clinical Characteristics in Schizophrenia Spectrum Disorder Patients with Suicide Attempts and Non-suicidal Self-harm | E Mork¹; F.A. Walby¹; J Harkavy-Friedman³; O.A. Andreassen¹; I Melle¹; L Mehlum¹  
¹National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; ³American Foundation for Suicide Prevention, UNITED STATES   |
| 17:15       | A 2-year Follow-up Study of Individuals with Psychotic Disorders: Focus on Suicidal Behaviour | J Harkavy-Friedman  
American Foundation for Suicide Prevention, UNITED STATES                                      |
| 17:30       | Suicidal Behaviours During Treatment for First-episode Psychosis: Towards a Comprehensive Approach to Service-based Prevention | I.E. Fedyszyn¹; M.G. Harris²; J Robinson³; S.J. Paxton¹  
¹School of Psychological Science, La Trobe University, AUSTRALIA; ²School of Population Health, The University of Queensland, AUSTRALIA; ³Orygen Youth Health Research Centre, AUSTRALIA |
| 16:30 - 18:00 | Room 301 THE SUPREME EU CONSORTIUM: THE PREVENTION OF SUICIDE IN ADOLESCENTS AND YOUNG PEOPLE | Chair: Marco Sarchiapone, ITALY & Tim Waller, UNITED KINGDOM  |
| 16:30       | Overview on Websites Related to Mental Health | J Balazs¹; A Keresztenyi¹; A Germanavicius²; R Hamilton³; C Masip⁴;  
M Sarchiapone⁵; A Värnik⁶; M Westerlund⁷; G Hadlaczky⁷; V Carti⁷; D Wasserman⁷  
¹Eötvös Loránd University, HUNGARY; ²Clinic of Psychiatry of Vilnius University, LITHUANIA; ³Middlesex University, UNITED KINGDOM; ⁴Hospital Del Mar, SPAIN; ⁵University of Molise, ITALY; ⁶Estonian-Swedish Mental Health & Suicidology Institute, ESTONIA; ⁷National Swedish Prevention of Mental Ill-Health and Suicide, SWEDEN   |
| 17:00       | Suicide Prevention by Internet and Media Based Mental Health Promotion (Supreme) | V Carti  
Karolinska Institutet, SWEDEN                                                                   |
17:30 **Guidelines for Suicide Prevention Strategies using the Internet**  
P. Machin; T. Waller; D. Sharpe; P. Lane; M. Martyn; R. Anghel; R. Hamilton  
Anglia Ruskin University, UNITED KINGDOM

**16:30 - 18:00**  
**PS1.17 RESEARCH IN SUICIDE POSTVENTION - SYMPOSIUM 2**  
Chair: Sally Spencer-Thomas, UNITED STATES

16:30 **How Parent Suicide Survivors use Healing Aids to Cope with a Child’s Suicide Death: Short-term and Longer-term Adaptations**  
W. Feigelman  
Nassau Community College, UNITED STATES

16:50 **Society’s Response to Suicide and Survivors**  
V. Postivan  
Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA

17:10 **A Critique on Suicide Bereavement Research: Where have we been and where are we Heading?**  
M. Maple  
University of New England, AUSTRALIA

17:30 **Online Memorialization after Suicide: An Analysis of Memorials in Web Cemeteries**  
K. Krysinska¹; K. Andriessen²  
¹KU Leuven - University of Leuven, BELGIUM; ²Tele-Onthaal (Tele-Help) Federation & KU Leuven - University of Leuven, BELGIUM

**16:30 - 18:00**  
**PS1.18 AMBIVALENCE IN SUICIDE**  
Chair: Lisa Firestone, UNITED STATES  
Discussant: Lars Mehlum, NORWAY

16:30 **The Inner Voice in Suicide**  
L. Firestone  
The Glendon Association, UNITED STATES

16:45 **Suicidal Ambivalence and the Nature of the Suicidal Mind**  
D. Jobes  
The Catholic University of America, UNITED STATES

17:00 **Ambivalence in Suicide**  
L. Firestone  
The Glendon Association, UNITED STATES

17:15 **Assessing Ambivalence in Suicidal Psychiatric Inpatients - Lessons Learned from Structured Assessments**  
T. Lineberry  
Mayo Clinic, UNITED STATES
17:30  Brief Interventions for Short-term Reductions in  
Suicide Risk among Suicidal Military Personnel  
C Bryan  
National Center for Veteran Studies, UNITED STATES

17:45  Intention to Die is a Non-static Dimension  
D De Leo  
Griffith University / Australian Institute for Suicide Research and Prevention, AUSTRALIA

16:30 - 18:00  Base 1

PS1.19 REGIONAL SYMPOSIUM NORTH AMERICA  
Chair: Jerry Reed, UNITED STATES & Sylvie Lapierre, CANADA

16:30  Regional Symposium for North America  
J Reed1; B Mishara2; D Reidenberg3; L. Barnaby4  
1Education Development Center - SPRC, UNITED STATES;  
2Université du Québec à Montréal, CANADA; 3Suicide Awareness Voices of Education,  
UNITED STATES; 4University of West Indies - Mona, JAMAICA

16:30 - 18:00  Munch 1

PS1.20 TASK FORCE MEDIA & SUICIDE SYMPOSIUM II: MEDIA MARKET DYNAMICS,  
MEDIA EFFECTS AND PREVENTIVE ACTIVITIES RELATED TO TRADITIONAL MEDIA TYPES  
Chair: Jane Pirkis, AUSTRALIA & Clare Wyllie, UNITED KINGDOM

16:30  The Interaction Between Traditional Media and New Media in  
Suicide News Production and Dissemination in Chinese Societies  
Q Cheng  
The University of Hong Kong, HONG KONG, CHINA PR

16:45  A Study on the Mutual Causation of Suicide Reporting and Suicide Incidences  
P.S.F. Yip1; S Kwok2; F Chen3; X Xu4; Y Chen5  
1The University of Hong Kong, HONG KONG, CHINA PR; 2The University of Sydney, AUSTRALIA;  
3The University of New South Wales, AUSTRALIA; 4Cornell University, UNITED KINGDOM;  
5Taipei City Psychiatric Center, Taipei City Hospital, TAIWAN

17:00  Achieving Sensitive Reporting of Suicide through Understanding  
How the Media Works: Learning from Experience  
S Lalji  
Samaritans, UNITED KINGDOM

17:15  The Impact of Media Reporting on the Emergence  
of Charcoal Burning Suicide in Taiwan  
Y-Y Chen1; F Chen2; D. Gunnell3; P.S.F. Yip4  
1Taipei City Psychiatric Center and National Yang-Ming University, TAIWAN;  
2University of New South Wales, AUSTRALIA; 3University of Bristol, UNITED KINGDOM;  
4University of Hong Kong, HONG KONG, CHINA PR
### PS1.21 SUICIDAL BEHAVIOUR IN YOUTHS AROUND THE WORLD

**Chair:** Urs Hepp, SWITZERLAND, & Øyvind Dåsvatn, NORWAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>16:30</td>
<td>The Methods of Suicide used by Children and Adolescents</td>
<td>U Hepp(^1); N. Stulz(^1); J. Unger-Köppel(^1); V Ajdacic-Gross(^2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(^1)Psychiatric Services Aargau AG, SWITZERLAND; (^2)University of Zurich, SWITZERLAND</td>
</tr>
<tr>
<td>16:45</td>
<td>Child and Adolescent Suicides around the World: Changes in the Last Two Decades</td>
<td>K Kolves(^1); D De Leo(^2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(^1)Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA; (^2)Australian Institute for Suicide Research and Prevention, AUSTRALIA</td>
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<tr>
<td>17:00</td>
<td>“Of Course we Address Suicidal Thoughts when Talking to Children”</td>
<td>Ø Dåsvatn; K Ringereide; M Albæk</td>
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<td>RVTS Sør, NORWAY</td>
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<td>17:15</td>
<td>Perceptions About Suicide and Developing Prevention Programs Among Myanmar Students In Bangkok, Thailand</td>
<td>A Kyi(^1); K Aye(^2)</td>
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<td></td>
<td></td>
<td>(^1)Assumption University, THAILAND; (^2)Sarasas Witead Romklao school, THAILAND</td>
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<tr>
<td>17:30</td>
<td>Deliberate Self-harm and Associated Factors in an Urban Irish Adolescent Cohort</td>
<td>L. Doyle(^1); M.P. Treacy(^2); A. Sheridan(^2)</td>
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<td></td>
<td></td>
<td>(^1)Trinity College Dublin, IRELAND; (^2)University College Dublin, IRELAND</td>
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<tr>
<td>17:45</td>
<td>Normative Misperceptions of Suicidal and Self-harming Behaviours in an Undergraduate Student Population</td>
<td>J Quigley(^1); S Rasmussen(^1); J McAlaney(^2)</td>
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<td></td>
<td></td>
<td>(^1)University of Strathclyde, UNITED KINGDOM; (^2)University of Bradford, UNITED KINGDOM</td>
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### PS1.22 WORKSHOP: ASSIP - ATTEMPTED SUICIDE SHORT INTERVENTION PROGRAM. A NOVEL PATIENT-ORIENTED SHORT-TERM THERAPY; THEORY, PRACTICE, AND ONE-YEAR FOLLOW-UP

**Chair:** Konrad Michel, SWITZERLAND

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<th>Time</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Attempted Suicide Short Intervention Program (ASSIP): Theoretical Background and Introduction to the Four-Session Intervention</td>
<td>K. Michel; A. Gysin-Maillart</td>
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<td>University Hospital of Psychiatry, Bern, SWITZERLAND</td>
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### Wednesday

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tr>
<td>16:00</td>
<td>Attempted Suicide Short Intervention Program (ASSIP): Preliminary Results of One-Year Follow-up</td>
<td>Ekeberg</td>
<td>PS1.22-2 K. Michel; A. Gysin-Maillart; L. Soravia University Hospital of Psychiatry, Bern, SWITZERLAND</td>
</tr>
<tr>
<td>16:30</td>
<td>Introduction to The ASSIP Project Plan in Finland 2013-2017</td>
<td>Ekeberg</td>
<td>PS1.22-3 C Djupsund The Finnish Association for Mental Health, SOS Crisis Centre, FINLAND</td>
</tr>
</tbody>
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### 16:30 - 18:00 Ekeberg

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop: Skills-based Training for Gatekeepers</th>
<th>Location</th>
<th>Details</th>
</tr>
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</table>
| 16:30  | Skills-based Training for Gatekeepers                                    | Ekeberg  | PS1.23-1 G Green; J Robinson  
University of Manchester, UNITED KINGDOM; University of Melbourne, AUSTRALIA |

### 16:30 - 18:00 Gamlebyen

<table>
<thead>
<tr>
<th>Time</th>
<th>Studies of Psychological Factors in Self-harm</th>
<th>Location</th>
<th>Details</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Using Joiner’s Interpersonal Theory of Suicide to Explicate Van Gogh’s Ear Self-Injury and Suicide</td>
<td>Gamlebyen</td>
<td>PS1.24-1 B Walsh The Bridge, UNITED STATES</td>
</tr>
<tr>
<td>16:45</td>
<td>Exploring Avoidant Behaviour in Self-harm using a Novel Behavioural Task</td>
<td>Gamlebyen</td>
<td>PS1.24-2 K. D. Hochard; E. Nielsen; N. Heym; E Townsend University of Nottingham, UNITED KINGDOM</td>
</tr>
</tbody>
</table>
| 17:00  | Insecure Attachment Style Predicts Repetition of Self-harm in Adolescence | Gamlebyen | PS1.24-3 E Townsend; K Glazebrook; K Sayal  
University of Nottingham, UNITED KINGDOM; University of Stirling, UNITED KINGDOM |
| 17:15  | Hurting Inside and Out? The Relationship between Emotional and Physical Pain Reactivity in Self-Harm | Gamlebyen | PS1.24-4 O.J. Kirtley; R.E. O’Carroll; R O'Connor  
University of Glasgow, UNITED KINGDOM; University of Stirling, UNITED KINGDOM |
| 17:30  | Young Self-cutters: Are they Different from other Non-fatal Suicidal Behaviour Patients? | Gamlebyen | PS1.24-5 CB Saraiva; JC Santos; F Alte da Veiga; N Madeira; P Garrido; A Craveiro; J Andrade  
CHUC, PORTUGAL; Coimbra Nursing School, PORTUGAL; Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL |
| 17:45  | Impulsivity in Suicide - How is it Measured?                            | Gamlebyen | PS1.24-6 T. Podlogar; V Postuvan; U. Mars; J Ziberna; D De Leo  
Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA |
### PS1.25 SPECIAL LECTURES
Chair: Barbara Stanley, UNITED STATES & Greg Carter, AUSTRALIA

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<th>Time</th>
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<tr>
<td>16:30</td>
<td>Messages from Manchester: Contact Interventions for Self-harm and Results from a Pilot Randomised Controlled Trial</td>
<td>N Kapur1; D. Gunnell2; K Hawton3; S. Nadeem1; S. Khalil1; D. Longson4; R. Jordan4; I. Donaldson1; R. Emsley1; J. Cooper1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1University of Manchester, UNITED KINGDOM; 2University of Bristol, UNITED KINGDOM; 3University of Oxford, UNITED KINGDOM; 4Manchester Mental Health and Social Care Trust, UNITED KINGDOM</td>
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<tr>
<td>17:00</td>
<td>Quantitative and Qualitative Psychological Autopsy of 70 High School Students: Tragic vs. Regressive Narratives</td>
<td>G Zalsman1; Y Siman-Tov; D Tsuriel</td>
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<td>1Psychiatry Department, Scacler Faculty of Medicine, Tel Aviv University, and Child Psychiatry Division, ISRAEL</td>
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<td>17:30</td>
<td>Suicide Prevention Seen through Systemic Eyeglasses</td>
<td>J Beskow</td>
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<td></td>
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<td>Sahlgrenska Academy and Suicide Prevention in the West, SPIV, Gothenburg, SWEDEN</td>
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### SOCIAL PROGRAMME: CONCERT - CLASSICAL MUSIC, OLD UNIVERSITY AULA

19:00 - 20:00  Old Aula, University of Oslo
THURSDAY, SEPTEMBER 26

08:00 - 18:30  REGISTRATION
08:00 - 08:45  MORNING ACTIVITIES
08:00 - 08:45  THE IASP TASK FORCES AND SPECIAL INTEREST GROUPS MEETINGS

08:00 - 08:45  Room 301

THE IASP TASK FORCE GENETICS AND NEUROBIOLOGY MEETING, PART 1: GENETICS
Chair: Dan Rujescu, GERMANY & Marco Sarchiapone, ITALY

08:00  MicroRNA Profiling of Suicide Brain  TF1-01
A Malafosse
University Medical Center (CMU), SWITZERLAND

08:15  Two HPA Axis Genes, CRHBP and FKBP5, Interact with Childhood Trauma to Increase the Risk of Suicide  TF1-02
A Roy
Department of Veterans Affairs, UNITED STATES

08:30  Gene, Environment and Timing Interactions in Genetics of Suicide  TF1-03
G Zalsman
Geha Mental Health Center & Sackler Faculty of Medicine, ISRAEL

09:00 - 10:30  Sonja Henie Ballroom

PLENARY SESSION 3
Chair: Kees van Heeringen, BELGIUM & Ping Qin, NORWAY

09:00  Clinical Management of Self-harm Patients: Current Evidence and Future Possibilities  PL3-1
K Hawton
University of Oxford, UNITED KINGDOM

09:30  Dialectical Behaviour Therapy for Suicidal and Self Harming Adolescents  PL3-2
L Mehlum
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

10:00  Acceptability and Effectiveness of Web-based Treatment of Depression and Self-harm  PL3-3
P Cuijpers
Department of Clinical Psychology, VU University Amsterdam, NETHERLANDS

10:30 - 11:00  COFFEE/TEA BREAK
Characteristics of Suicide Attempts in Major Psychiatric Disorders - Pilot Study
B Kim¹; HY Yu¹; EJ Joo²; NY Lee³; YS Kim³; YM Ahn⁴
¹Seoul National University College of Medicine, SOUTH KOREA; ²Eulji University School of Medicine, SOUTH KOREA; ³Dongguk University Medical School, SOUTH KOREA; ⁴Seoul National University College, SOUTH KOREA

120,000 Calls Per Year: The Role of Tele-Help (Tele-Onthaal) in Suicide Prevention in Flanders-Belgium
K Andriessen; C De Ketelbutter
Federation Tele-Help (Tele-Onthaal), BELGIUM

The Socio-antropological Aspects which Contribute to Suicide Attempt in the City of Teresina - Northeast of Brazil
C Aragão; FO Barros
Federal University of Piauí, BRAZIL

Youth Suicide Prevention Tools and Workshops: The Exemple of Youth Suicide Prevention by Youth
M Arditi
STOP SUICIDE, SWITZERLAND

Psychoanthropological Analysis of Discourse in a Support Group Comprised of Inhabitants of Rural and Urban Areas in the Maya Region in Yucatan, Mexico
G Baquedano
Hospital Psiquiatrico, MEXICO

Can E-mail Contribute to a Crisis Helpline for Suicide Prevention?
M Bloemen; I. Impens; K. Pauwels
Centrum ter Preventie van Zelfdoding, BELGIUM

Influence of Differentially Expressed Genes from Suicide Post Mortem Study on Personality Traits as Endophenotypes on Controls and Suicide Attempters
R Calati¹; I Giegling²; M Balestri¹; N Antypa¹; M Friedl²; B Konte²; AM Hartmann²; A Serretti¹; D Rujescu²
¹Department of Biomedical and NeuroMotor Sciences, University of Bologna, ITALY; ²Department of Psychiatry, University of Halle, GERMANY

Risk Factors for Suicidal Behavior in HIV Patients
E Chinea Cabello; P Rodríguez-Fortúnez; R Alemán; I Hernández; MM Alonso; R Pelazas; P Cruz; O Vera; MM Salinas; A Jiménez; JL Gómez-Sirvent; D García; R Céjas
Hospital Universitario de Canarias, SPAIN

KEHR Suicide. A New Tool for Systematic and Multidisciplinary Evaluation of Suicide Cases
M de Groot¹; R de Winter²
¹Vrije University Amsterdam, NETHERLANDS; ²Parnassia, The Hague, NETHERLANDS
Decrease in Suicide Rates in Quebec: A Brief Look at Four Strategies  
P Dupuis; B Marchand  
Association québécoise de prévention du suicide, CANADA

From Suicide Prevention Gatekeepers to Happiness Catchers - A New Model for Public Education Based on Eastern Asia Culture  
C-K Fang; Y.C. Chiang; H.W. Hsiao  
1Suicide Prevention Center, Mackay Memorial Hospital, TAIWAN; 2School of Public Health, Chung Shan Medical University, TAIWAN

Pseudobulbar Affect, Hopelessness and Suicidal Ideation in Multiple Sclerosis: A Transversal Study  
F Freitas; A P Gomes Neto; R B Souza; A L R Bicalho; P P Christo  
Santa Casa de Misericórdia de Belo Horizonte, BRAZIL

Increased Suicide Risk among Romanian Adolescents with Psychoactive Substance Use and Abuse  
A Giurgiuca; D Cosman; B Nemes; V Carti; D Wasserman  
1Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, ROMANIA; 2National Swedish Prevention of Mental Ill-Health and Suicide, Karolinska Institutet, Stockholm, SWEDEN

Suicide in Nepal and Major Issues in Prevention  
B Gyawali  
IUHW, JAPAN

Psychosocial Needs and Coping Strategies in Children and Young Adolescents Living with a Family Member with Suicidal Behaviour  
X Halmov  
CRISE (Center for Research on Suicide and Euthanasia), CANADA

Complementary External Regulation: A New Strategy in Inpatient Settings to Reduce Suicidal Behavior  
D Heggdal; A Lillelien; J Hammer; R Fosse  
Vestre Viken Hospital Trust, NORWAY

Relationship between Cancer Stage and Early Suicide Completion after a Cancer Diagnosis  
JP Hong; MH Ahn; RJ Na  
Department of Psychiatry, Asan Medical Center, Ulsan University College of Medicine, KOREA (REP.)

Caring Project for Depression in Elderly Population above Age 65 with Chronic Illness - An Example In Mackay Memorial Hospital, Tamshui Branch, Taiwan  
J-C Hu; Y Lin; C-K Fang  
Mackay Memorial Hospital, TAIWAN

Characteristics of Suicide Attempters of Emergency Department in Osaka, Japan  
K Ichikawa; M Honyashiki; H Hirotune; T Sugimoto; T Nakayama; Y Takahashi  
1Kyoto University School of Public Health, JAPAN; 2Osaka Prefectural Mental Health Center, JAPAN; 3National Hospital Organization Osaka National Hospital, JAPAN; 4Kasnsai Medical University, JAPAN
Cross-sectoral Collaboration for Vulnerable Patient Groups
KJ Larsen1; S Kamionka1; M Sodemann2; P Noehr-Jensen1; B Clausen1; N Buus3
1Centre for Suicide Prevention - Child and Adolescent Psychiatry Odense, DENMARK; 2Odense University Hospital, DENMARK; 3University of Southern Denmark, DENMARK

Effect of Drawing Method-Based Program on Attitude to Life and Death in Nursing Students - A Randomized Controlled Trial
H Katayama1; H Eguchi2; M Suzuki1; E Yamamoto1; T Muramatsu1; Y Totsu1; Y Shimogawa1; T Suzue1
1Hamamatsu University School of Medicine, JAPAN; 2Hiroshima International University, JAPAN; 3Sanyo Gakuen University, JAPAN

Characteristics of Suicidal Callers to the Greek National Suicide Hotline in 2012
K Kavalidou1; D Katsadorou4; D Katakis1; K Karydi1; K Katsadoros1
KLIMAKA NGO - Center for Suicide Prevention & Suicide Prevention Hotline 1018, GREECE

Publication Bias of Studies on Suicide Attempters Requiring Admission to Emergency Department: A Systematic Review of Studies Conducted in Japan
Y Kawashima1; N Yonemoto1; M Inagaki1; M Yamada1
National Center of Neurology and Psychiatry, JAPAN

Signs of Complicated Grief in the Narratives of Suicide Survivors
V Klimaite1; P Skruibis1; D. Gailiene1
Vilnius University, LITHUANIA

Suicide Trends in Australian-born and Overseas-born Individuals: Differences and Similarities over the Last Two Decades
K Kolves4; D De Leo4
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

1st Regional Depression and Suicide Prevention Programme in Poland Don’t let the Halny wind take away any more lives (2009–2012)
I Koszewska
Foundation – Prophylaxis, Prevention, Treatment–Cumulus, POLAND

Characteristics of 15 Kurdish Ladies Recently Hospitalized for Severe Self-burns
N Mahmud1; M Husni2; D Saeed1; Z Cernovsky3
1Hawler Medical University, IRAQ; 2Northwick Park Hospital, UNITED KINGDOM; 3University of Western Ontario, CANADA

The Suicidal Behavior in Nursing’ Students of Federal University in the City Of São Paulo/Brazil
JF Marcolan1; PC Pereira1; MC Mazzaia1; FC Marquetti1; MEO Marcolan2
1Universidade Federal de São Paulo, BRAZIL; 2Prefeitura Município de São Paulo, BRAZIL

Implementation of Psychological Autopsy Studies in Slovenia
U. Marx; V Postuvan; T. Podlogar; J Ziberna
Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA
Japanese Junior High School Councillors’ Experiences of Working with Students who Self Injure

ÅL Mattson¹; T Matsumoto²; M Ono³
¹University of Bergen, NORWAY; ²National Center of Neurology and Psychiatry, JAPAN; ³Waseda University, JAPAN

The Lost Portraits Gallery: Tracing Youth Suicide from Anonymity to Identity. A Science/Arts Collaboration

K Malone¹; S Mc Guinness²
¹University College Dublin, IRELAND; ²Galway Mayo Institute of Technology, IRELAND

Suicide in the Children of Ireland From 2003-2008

A McLoughlin¹; C Kelleher²; K Malone¹
¹St. Vincent’s University Hospital, IRELAND; ²UCD School of Public Health, Physiotherapy and Population, IRELAND

Effects of Educational Intervention on Primary Care Physicians’ Recognition and Treatment Approaches to Depression and Suicidality

Y Nakamoto¹; H Fukuhara¹; S Michishita¹; T Kuba¹; T Yakushi¹; S Travis¹; O Tanaka¹; T Kondo¹
¹University of the Ryukyus, JAPAN; ²Hirosaki University, JAPAN

Study of the First Psychiatric Hospitalization Throughout Life caused by a Suicide Attempt

E Nieto; M Guitart; J Carreras; L Plans
Althaia Xarxa Assistencial Universitaria de Manresa, SPAIN

Regional Differences in Life Lost Due to Premature Deaths from Suicide from 1993 to 2010 in Japan

Y Odagiri¹; H Uchida²; M Yamakita¹
¹Yamanashi Prefectural University, JAPAN; ²Josai University, JAPAN

“He Is A Murderer”: Perceptions of Suicidal Persons in Ghana

J Osafo¹; H Hjelmeland²; C Akotia¹; BL Knizek³
¹University of Ghana, Department of Psychology, GHANA; ²Norwegian University of Science and Technology, NORWAY; ³Sør-Trøndelag University College, NORWAY

Doing Advocacy Work on Decriminalizing Attempted Suicide in Ghana

J Osafo; C Akotia
University of Ghana, GHANA

Impact of Childhood Adversity on the Course and Suicidality of Depressive Disorders: The CRESCEND Study

C Park¹; S.W Kim¹; S.Y Kim¹; H.J Kang¹; J.M Kim¹; J.S Yoon¹; S.W Jung¹; M.S Lee¹; H.W Yim¹; T.Y Jun¹
¹Chonnam National University Medical School, KOREA (REP.); ²Keimyung University, KOREA (REP.); ³Korea University, KOREA (REP.); ⁴Catholic University of Korea College of Medicine, KOREA (REP.)

Combined Effects of Physical Illness and Comorbid Psychiatric Disorder on Risk of Suicide: A Population Study

P Qin¹; K Hawton²; PB Mortensen²; R Webb⁴
¹National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; ²Department of Psychiatry, Oxford University, UNITED KINGDOM; ³National Centre for Register-based Research, Aarhus University, DENMARK; ⁴Centre for Mental Health and Risk, University of Manchester, UNITED KINGDOM
The Influence of Social Norms and Normative Perceptions on Suicidal And Self-harming Behaviours in Adolescents: A Systematic Review

J Quigley1; S Rasmussen1; J McAlaney1
1University of Strathclyde, UNITED KINGDOM; 2University of Bradford, UNITED KINGDOM

Non-fatal Suicidal Behavior in Young: A Clinical Study on 463 Patients

CB Saraiva1; A Craveiro2; F Alte da Veiga2; N Madeira2; P Garrido1; J Andrade1; JC Santos3
1CHUC, PORTUGAL; 2Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL; 3Coimbra Nursing School, PORTUGAL

A Study on 1070 Non-fatal Suicidal Behaviour in Portugal: A Socio-demographic and Clinical Profile

CB Saraiva1; F Alte da Veiga1; A Craveiro1; N Madeira1; J Andrade1; P Garrido1; JC Santos1
1Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL; 2Coimbra Nursing School, PORTUGAL

2-year-evaluation of the Suicide Prevention Program GO-ON, Styria, Austria

U Schrittwieser1; G Dietmaier2
1GO-ON Suicide Prevention Styria, AUSTRIA; 2Psychosocial Center Hartberg, Styria, AUSTRIA

Suicide Attempt in Psychiatric Hospitals: A Prefectural Study of Incident Reports in Nara, Japan

S Shimoda1; K Ikeshita1; K Norimoto1; K Arita1; T Shimamoto1; K Murata2; T Kishimoto1
1Nara Medical University, JAPAN; 2Preventive health division, Nara Prefecture Office, JAPAN

Taking Evidence-based Action against Depression, Suicide, including E-health Solutions. Joint Action of the European Countries to Tackle Depression

A Szekely; G Purebl; T Kurimay
Semmelweis University, HUNGARY

Suicide Prevention - Safer Bridges in the Country of Mountains and Fjords, Norway

A Sæheim1; I Hestetun2; L Nrugham1
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2Department of Child and Adolescent Psychiatry, Telemark Hospital, NORWAY

Filicide Followed by Suicide: Review of Literature

A Tarelho1; M Duarte1; J Melim1; J Ramos2
1Centro Hospitalar de Leiria-Pombal, EPE, PORTUGAL; 2Hospital de São Teotónio, EPE-Viseu, PORTUGAL

STRONG ENOUGH with Dialectical Behavioural Therapy (DBT): Development and Acceptability of an Advanced Skills Group for Adolescent

AJ Tørmoen1; G Kvalstad2; M Stornes2; A Miller3; L Mehlum1
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2St.Olav Hospital, NORWAY; 3Montefiore Medical Center, UNITED STATES

Student Suicide in a UK Mental Health Patient Population: 1997-2010

K Windfuhr; S. Farrell; D. While; N Kapur
Centre for Mental Health and Risk, UNITED KINGDOM

Developing the Psychological Strain Scales (PSS): Reliability, Validity, and Preliminary Hypothesis Tests

J Zhang1; J Lu2; S Zhao3
1State University of New York Buffalo State, UNITED STATES; 2Weifang Medical University, Shandong, CHINA; 3State University of New York at Buffalo, UNITED STATES
### The Psychometric Properties and the Short Form of the Reynolds’ Suicidal Ideation Questionnaire (SIQ) in Hong Kong Adolescents

Y Zhang¹; P.S.F. Yip¹; KW Fu²
¹The HKJC Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR; ²Journalism and Media Studies Centre, The University of Hong Kong, HONG KONG, CHINA PR

### Attitudes toward Suicide Among Slovenian Police Officers

J Žiberna¹; A Petrovic¹; V Postuvan¹; U Mars¹; T. Podlogar¹; A Tancic Grum¹; S Roskar²; D Kozel¹; D De Leo¹
¹Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA; ²Institute of Public health, SLOVENIA

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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tr>
<td>11:00-12:30</td>
<td><strong>PLENARY SESSION 4</strong></td>
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<td>Chair: Nav Kapur, UNITED KINGDOM &amp; Lanny Berman, UNITED STATES</td>
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<tr>
<td>11:00</td>
<td><strong>Innovations in Suicide Risk Assessment and Crisis Intervention</strong></td>
<td>D Jobes</td>
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<td>The Catholic University of America, UNITED STATES</td>
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<tr>
<td>11:30</td>
<td><strong>Interventions to Prevent Suicidal Behaviour in Individuals with Psychotic Disorder</strong></td>
<td>M Nordentoft</td>
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<td></td>
<td>University of Copenhagen, DENMARK</td>
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<tr>
<td>12:00</td>
<td><strong>Lessons Learned from Suicide Intervention Research:</strong></td>
<td>B Stanley</td>
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<td></td>
<td>Intersecting Clinical, Ethical and Methodological Concerns</td>
<td>New York State Psychiatric Institute, Columbia University, UNITED STATES</td>
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<tr>
<td>12:30-14:30</td>
<td><strong>LUNCH</strong></td>
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<td>13:00-14:30</td>
<td><strong>NATIONAL REPRESENTATIVES MEETING</strong></td>
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<td>13:00-14:30</td>
<td><strong>GENERAL MEETING OF TASK FORCES AND SPECIAL INTEREST GROUPS</strong></td>
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<td>13:30-14:30</td>
<td><strong>LUNCH WITH THE EXPERTS</strong></td>
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<td>Chair: Ella Arensman, IRELAND</td>
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<tr>
<td>14:30-16:00</td>
<td><strong>PS2.1 WORKSHOP: UNDERSTANDING, MANAGING, AND TREATING NON-SUICIDAL SELF-INJURY</strong></td>
<td>B Walsh</td>
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<td>Chair: Barent Walsh, UNITED STATES</td>
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<tr>
<td>14:30</td>
<td><strong>Understanding, Managing, and Treating Non-Suicidal Self-Injury</strong></td>
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<td>B Walsh</td>
<td>The Bridge, UNITED STATES</td>
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14:30 - 16:00  Film

**PS2.2 ONLINE SUICIDE PREVENTION**
Chair: Ad Kerkhof, NETHERLANDS

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<tr>
<td>14:30</td>
<td>Current Practices, Theoretical Models and Latest Findings in Research on the Effectiveness of Online Suicide Prevention</td>
<td>B Mishara; L-P Côté CRISE - Université du Québec à Montréal, CANADA</td>
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<tr>
<td>14:45</td>
<td>Prevention 2.0: Towards Automatic (sentiment) Detection of Suicidal Behaviour on The Social Media and Internet</td>
<td>M Bloemen; P Vanderreydt; K. Pauwels; I. Impens Centrum ter Preventie van Zelfdoding, BELGIUM</td>
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<tr>
<td>15:00</td>
<td>E-learning Modules for Gatekeepers in Adolescent Suicideprevention: An RCT Study into Mental Health Online</td>
<td>R Ghoncheh; H. M. Koot; A Kerkhof VU University Amsterdam, NETHERLANDS</td>
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<td>15:15</td>
<td>Mental Health Care Professionals’ Use and Appreciation of E-learning Alongside an Interactive Small Group Training for Suicide Prevention Skills</td>
<td>D de Beurs1; M de Groot1; J de Keijser2; A Kerkhof1 1VU University, Amsterdam, NETHERLANDS; 2GGZ Friesland, NETHERLANDS</td>
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<tr>
<td>15:30</td>
<td>Effects of Online Crisis Intervention and Therapy through Chat (instant Text Messaging)</td>
<td>J Mokkenstorm1; L Stut2 1113 Online Foundation, NETHERLANDS; 2113 Online foundation, Amsterdam, NETHERLANDS</td>
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<tr>
<td>15:40</td>
<td>Effectiveness, Cost-effectiveness, and Client Evaluation of an Online Self-help Intervention to Reduce the Burden of Suicidal Ideation</td>
<td>A Kerkhof2; B.A.J. Van Spijker2 1VU University Amsterdam, NETHERLANDS; 2Black Dog Institute, AUSTRALIA</td>
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<td>15:50</td>
<td>Medical Ethical Issues in Internet Research</td>
<td>A Kerkhof; P. Cuijpers VU University Amsterdam, NETHERLANDS</td>
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14:30 - 16:00  Olympia

**PS2.3 TEEN SUICIDAL BEHAVIOUR - AN UPDATE ON RISK FACTORS**
Chair: Kirsten Windfuhr, UNITED KINGDOM & Sabahat Haqqani, UNITED KINGDOM

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<tr>
<td>14:30</td>
<td>Deliberate Self Harm among School Going Adolescents in Pakistan</td>
<td>S Haqqani1; M Schwannauer1; S Chan1; F Qadir2 1University of Edinburgh, School of Health in Social Science, UNITED KINGDOM; 2Fatima Jinnah Women University, Dept. Behavioural Sciences, PAKISTAN</td>
</tr>
</tbody>
</table>
14:45  Suicide and Accidental Deaths in Children and Adolescents in England and Wales, 2001-2010  
K Windfuhr; D. While; I.M. Hunt; J Shaw; L Appleby; N Kapur  
Centre for Mental Health and Risk, UNITED KINGDOM

15:15  Sleep Problems and Hospitalisation for Self-harm - A 15 Year Follow-up of 9,000 Norwegian Adolescents. The Young-HUNT Study  
A. Junker1; J.H. Bjørngaard1; D. Gunnell2; O. Bjerkeset1  
1Norwegian University of Science and Technology, NORWAY; 2University of Bristol, UNITED KINGDOM

15:45  Adolescents Exposed to Suicidal Behaviour of Others: Prevalence of Self-harm and Associated Psychological, Lifestyle, and Life Event Factors  
E McMahon1; P. Corcoran1; H Keeley2; IJ Perry3; E Arensman1  
1National Suicide Research Foundation, IRELAND; 2HSE Southern Area, IRELAND; 3University College Cork, IRELAND

14:30 - 16:00  Room 301

PS2.4 CHALLENGES IN MEASURING THE EFFECTS OF RESILIENCE IN SUICIDE PREVENTION INTERVENTIONS  
Chair: Alec Roy, USA & Latha Nrugham, NORWAY

14:30  Studies on Resilience with Psychiatric Patients and Prisoners in the USA and Italy  
A Roy1; V Carli2; M Sarchiapone3  
1VA Hospital, UNITED STATES; 2Karolinska institutet, SWEDEN; 3University of Molise, ITALY

14:45  The Saving and Empowering Young Lives in Europe (SEYLE) Project: Comparative Efficacy of Suicide Preventive Interventions Targeting Adolescents  
V Carli1; M Sarchiapone2; D Wasserman1; C Wasserman2; C Hoven3  
1Karolinska Institutet, SWEDEN; 2University of Molise, ITALY; 3Columbia University, UNITED STATES
15:00 What Resilient Survivors can Teach those at Risk: Why they Decided not to Suicide, What Supported Recovery and Built Resilience  
A Chauvin  
School of Population Health Griffith University and School of Medicine University of Queensland, AUSTRALIA

15:15 Low Resilience and Suicidality Risk. A Lifespan Analysis of an Australian Community Based Sample.  
D W Y Liu; A K Fairweather-Schmidt; R M. Roberts; R Burns; K J. Anstey  
1University of Adelaide, AUSTRALIA; 2Centre for Traumatic Stress Studies, The University of Adelaide, AUSTRALIA; 3School of Psychology, The University of Adelaide, AUSTRALIA; 4Centre for Research on Aging, Health and Wellbeing, The Australian National University, AUSTRALIA

15:30 Study on Resilience and Suicide Attempts Among Norwegian Youth Living in Open Society  
L Nrugham; A Holen; A M Sund  
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2Faculty of Medicine, NTNU, NORWAY; 3RBUP, NTNU, NORWAY

14:30 - 16:00 Munch 2  
PS2.5 STUDIES OF SURVIVORSHIP  
Chair: Onja Grad, SLOVENIA & Eric Kelleher, IRELAND

14:30 Consultant Psychiatrists as Survivors: The Impact of Patient Suicide on Treating Consultants in Ireland  
E Kelleher; A Campbell  
1Trinity Centre for Health Sciences, Dublin, IRELAND; 2Cork University Hospital, IRELAND

14:45 General Practitioners’ Reactions to Patients’ Suicides  
M Treven; O Grad; D Rotar Pavliè  
1Faculty of Medicine of the University of Ljubljana, Department of Family Medicine, SLOVENIA; 2University Psychiatric Hospital, Centre for Mental Health, Ljubljana, SLOVENIA

15:00 Stigma in Suicide Survivors  
E Toffol; S Totaro; F. Olivii; C. Ometto; A. Ferrari; C. Castriotta; P. Scocco  
1National Institute for Health and Welfare (THL), and SOPROXI Project, FINLAND; 2SOPROXI Project, ITALY

15:15 How to Restore Self-confidence after the Suicide of Somebody we Professionally Care for?  
O Grad; A. Castelli Dransart; K Andriessen  
1University Psychiatric Hospital, SLOVENIA; 2University of Applied Sciences Western Switzerland Social Work, SWITZERLAND; 3Tele-Help Federation & University of Leuven - KU Leuven, BELGIUM

15:30 Missing Voices - Suicide Bereavement of Rural Australian Young People  
W Bartik  
University of New England, AUSTRALIA

15:45 Developing a Successful Survivors of Suicide Program in Your Community: Using Volunteers to Make it Happen  
S McNally; J McMahon  
EMPACT-Suicide Prevention Center, UNITED STATES
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| 14:30  | Interpreting Media Guidelines on Reporting of Suicide                   | J Pirkis1; A Machlin1; J Skehan2; M Sweet3; A Wake4; J Fletcher1; MJ Spittal1  
1University of Melbourne, AUSTRALIA; 2Hunter Institute of Mental Health, AUSTRALIA; 3University of Sydney, AUSTRALIA; 4RMIT University, AUSTRALIA |
| 14:45  | Did the Launch of Guidelines for Responsible Reporting on Suicide Influence the Way of Suicide Reporting in Slovenia? | S Roskar1; A Tancic Grum1; V Postuvan3; A Podlesek2; J Ziberna2; D De Leo4  
1Institute of Public Health, SLOVENIA; 2University of Primorska, Andrej Marusic Institute, SLOVENIA; 3University of Ljubljana, Faculty of Arts, SLOVENIA; 4University of Primorska, Andrej Marusic Institute; Griffith University Australia, SLOVENIA |
| 15:00  | Cognitive and Emotional Responses to Suicide Portrayals in Movies: Evaluation and Extension of the Modeling Hypothesis | L Pouliot; B Mishara  
Université du Québec à Montréal, CANADA |
| 15:15  | Social Strains & Suicide: Comparisons of 1,400 Portrayals in Film With 30,000 in Real Life | S Stack1; B Bowman2  
1Wayne State University, UNITED STATES; 2Center for Suicide Research, UNITED STATES |
| 15:30  | Representation of Deaths by Suicide on the Greek Internet Resources     | K Karydi; E Liakopoulou; M Kilaidoni; K Kavalidou; K Katsadoros  
Klimaka NGO, GREECE |

**PS2.7 DEVELOPING NATIONAL SUICIDE PREVENTION STRATEGIES (A)**

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| 14:30  | International Developments in Mental Health, Human Rights and Suicide Prevention: Forthcoming Opportunities for Suicide Prevention | M Dudley  
Suicide Prevention Australia, AUSTRALIA |
| 14:45  | Who gets to Influence Policy and what are the Implications?            | L de Chenu  
University of Hertfordshire, UNITED KINGDOM |
| 15:00  | Sessions after Attempted Suicide - Who make use of them?               | B. Seggaard  
Center for Selvmodsførebygelse Region Syd Danmark, DENMARK |
15:15 Researching Quality Systems and Developing Accreditation Standards for Voluntary Suicide Prevention Organisations in Ireland
B. Friel
University of Ulster, UNITED KINGDOM

15:30 Developing a Suicide Prevention Research Agenda - Tools from the US National Action Alliance for Suicide Prevention Research Prioritization Task Force
C Claassen1; J Pearson2; L Berman3; D Reidenberg4
1University of North Texas Health Sciences Center, UNITED STATES; 2National Institute of Mental Health, Bethesda, Maryland, UNITED STATES; 3American Association for Suicide Prevention, Washington, DC, UNITED STATES; 4Suicide Awareness Voices of Education, UNITED STATES

15:45 A Study on the Cultural Implications of Attempted Suicide and its Prevention in South India from Survivors Perspective
RA Lasrado1; K Chantler2
1University of Manchester, UNITED KINGDOM; 2University of Central Lancashire, UNITED KINGDOM

14:30 - 16:00 Munch 1

PS2.8 FIGHTING AGAINST SUICIDE WITH EVIDENCE!
Chair: Merete Nordentoft, DENMARK & Mitsuhiko Yamada, JAPAN

14:30 Effective Interventions for Suicide Attempters after Discharge from Emergency Unit: A Systematic Review of Randomized Controlled Trials
N Yonemoto1; M Inagaki2; Y Kawashima3; Y Shiraishi4; T Furuno1; T Sugimoto1; H Tachikawa1; K Ikeshita1; N Eto2; C Kawanishi3; M Yamada1
1National Center of Neurology and Psychiatry, JAPAN; 2Yokohama City University, JAPAN; 3National Hospital Organization Yokohama Medical Center, JAPAN; 4Kansai Medical University, JAPAN; 5University of Tsukuba, JAPAN; 6Nara Medical University, JAPAN; 7Fukuoka University, JAPAN

14:50 Effect of Assertive Outreach after Suicide Attempt in the AID-trial (Assertive Intervention for Deliberate Self-harm): A Randomized Controlled Trial
B Morthorst1; J Krogh1; A Erlangsen2; M Nordentoft1
1Research Unit, Mental Health Centre Copenhagen, DENMARK; 2Department of Mental Health, John Hopkins School of Public Health, Baltimore, UNITED STATES

15:10 ACTION-J: A Randomized, Controlled, Multicenter Trial of Post-suicide Attempt Case Management for the Prevention of Further Attempts in Japan
C Kawanishi1; N Yonemoto1; M Yamada2; M Inagaki3; Y Kawashima2; Y Hirayasu1
1Yokohama City University, JAPAN; 2National Center of Neurology and Psychiatry, JAPAN

15:30 The Impact of Policy Initiatives on Self-harm
N Kapur
University of Manchester, UNITED KINGDOM
### PS2.9 REGIONAL SYMPOSIUM LATIN AMERICA

**Chair:** Silvia Pelaez, URUGUAY & Humberto Correa, BRAZIL

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<tr>
<td>14:30</td>
<td>Bullying and Suicide in Peruvian Children and Adolescents</td>
<td>F Vasquez; Y Nicolas; S Falconi; V Vite National Institute of Mental Health, PERU</td>
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<td>14:50</td>
<td>Biological Research in Latin America</td>
<td>H Vallada USP, BRAZIL</td>
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<td>15:10</td>
<td>About Interventions in Countries of ASULAC Suicide Prevention Task. With Special Emphasis on the Southern Cone</td>
<td>C Boronat ASULAC, ARGENTINA</td>
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### PS2.10 NEW PSYCHOTHERAPY STUDIES

**Chair:** Anita Tørmoen, NORWAY & Simon Hatcher, CANADA

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| 14:30  | Feasibility of Dialectical Behavior Therapy (DBT) with Suicidal and Self-harming Adolescents: Training, Adherence and Retention | AJ Tørmoen1; B Grethol2; E Haga1; A Brager-Larsen1; A Miller1; F.A. Walby1; B Stanley1; L Mehlum1  
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY;  
2Institute of Clinical Medicine, University of Oslo, NORWAY;  
Oslo University Hospital, Division of Mental Health and Addiction, NORWAY;  
Montefiore Medical Center, UNITED STATES;  
New York State Psychiatric Institute, Columbia University, UNITED STATES |
| 14:45  | Assessment of Treatment Provided to Persons after Suicide Attempt: A Register-based, Multicenter Study | A Erlangsen1; BD Lind2; KJ Nielsen2; P Qin3; E Stenager4; A.G. Wang3; M. Hvid2; AC Nielsen3;  
CM Pedersen1; C Langhoff4; J-H Winsløw5; M Nordentoft1  
1Mental Health Centre Copenhagen, DENMARK;  
2Competence center for Suicide Prevention, DENMARK;  
3University of Southern Denmark, DENMARK;  
4Clinic for Suicide Prevention, DENMARK;  
5Center for Suicide Prevention, DENMARK |
| 15:00  | Te Ira Tangata: An RCT of a Treatment Package including Problem Solving compared to Treatment as usual in Mâori who present to Hospital with Self-harm | S Hatcher The University of Ottawa, CANADA |
| 15:15  | ACCESS: An RCT of a Treatment Package Including Problem Solving Compared to Treatment as usual in People who Present to Hospital after Self-harm | S Hatcher The University of Ottawa, CANADA |
| 15:30  | “It Could Have Been Written About Me”: Participants’ Experiences of an Intervention Designed for People with Recurrent Suicide Attempts | A O'Reilly; E Gordon Dublin City University, IRELAND |
**15:45 Processes of Building a Therapeutic Alliance with Suicidal Clients; A Longitudinal Qualitative Case-by-case Study**  
K Østlie; H Haavind  
1Lovisenberg hospital, NORWAY; 2University of Oslo, Department of Psychology, NORWAY

**14:30 - 16:00 Ekeberg**

**PS2.11 SUICIDE PREVENTION IN THE ELDERLY**  
Chair: Diego De Leo, AUSTRALIA & Sylvie Lapierre, CANADA

**14:30 Suicidal Ideation and Suicide Attempts in Women Followed over 42 Years: A Population-based Study**  
M Mellqvist Fässberg; T Hällström; E Joas; S Östling; D Gustafson; S Wiktorsson; M Kaplan  
1University of Gothenburg, SWEDEN; 2Portland State University, UNITED STATES; 3University of Oxford, UNITED KINGDOM

**14:45 Contacts with Health Professionals before Suicide: Missed Opportunities for Prevention?**  
D De Leo; B Draper; J Snowdon; K Kolves  
1Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA; 2School of Psychiatry, University of New South Wales, AUSTRALIA; 3Sydney Medical School, University of Sydney, AUSTRALIA

**15:00 A Multidimensional Approach to Loneliness among the Elderly**  
E Fleischer; G Jessen  
1NEFOS - The Network for Bereaved and Relatives, DENMARK

**15:15 Depressive Symptoms in Elderly Suicide Attempters: A Prospective Study**  
S Wiktorsson; E Joas; M Waern  
1Institute of Neuroscience and Physiology, Göteborg, SWEDEN

**15:30 An Innovative Suicide Prevention Program for Depressed Older Adults**  
S Lapierre; M Dubé; L Marcoux; S Desjardins; P Miquelon; M Alain; R Boyer  
1University of Quebec in Trois-Rivieres, CANADA; 2University of Montreal, CANADA

**14:30 - 16:00 Gaio**

**PS2.12 NEW FOLLOW-UP STUDIES**  
Chair: Maurizio Pompili, ITALY & Liv Mellesdal, NORWAY

**14:30 Prospective Self-harm Predicted by Borderline Diagnosis and -criteria, and PTSD Diagnosis in Patients Admitted to a Psychiatric Acute Ward**  
L Mellesdal; R. Gjestad; E. Johnsen; H.A. Jørgensen; R.A. Kroken; K.J. Ødegaard; L Mehlum  
1Haukeland University Hospital, NORWAY; 2University of Bergen, NORWAY; 3National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

**14:45 The Association between Depression and Suicide when Hopelessness is Controlled for**  
J Zhang; Z Li  
1State University of New York Buffalo State, UNITED STATES; 2Shandong CDC, China, CHINA
15:00 
**Psychosocial Risk and Protective Factors of Suicidal Ideation Among Clinical Patients with Depression**

S Ando¹; K. Kasai²; M. Matamura¹; Y. Hasegawa¹; H. Hirakawa³; N. Asukai¹
¹Tokyo Metropolitan Institute of Medical Science, JAPAN; ²The University of Tokyo, JAPAN; ³Hirakawa Clinic, JAPAN

15:15 
**Insomnia as Predictor of High Lethality Suicide Attempts**

M Pompili
Sapienza University of Rome, ITALY

15:30 
**Supported Housing for Patients with Schizophrenia. A Cohort Study of Patients Acutely Admitted to Hospital**

T.S. Wiker¹; R.A. Kroken¹; L Mellesdal¹; R. Gjestad¹; L Mehlum²; K.J. Ødegaard³; E. Johnsen¹
¹Psychiatric Division Haukeland University Hospital, NORWAY; ²National Centre for Suicide Research and Prevention, NORWAY

15:45 
**The Effectiveness of Volunteer Mentorship Program for Young Adults with Deliberate Self-harm Behaviors**

F Law¹; C Lai²; P.W.C. Wong¹; P.S.F. Yip²
¹Department of Social Work and Social Administration, The University of Hong Kong, HONG KONG, CHINA PR; ²Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR

16:00 - 16:30  
**COFFEE/TEA BREAK**

16:00 - 16:30  
**Poster Area**

**POSTER WALK**
Chair: Annette Beautrais, NEW ZEALAND

16:30 - 18:00  
**Kunst**

**PS2.13 SUICIDE ATTEMPT, PSYCHIATRIC DIAGNOSIS AND RISK OF LATER SUICIDE**
Chair: Bo Runeson, SWEDEN

16:30 
**Bipolar Disorder and Suicidal Behavior: Follow-up of 6088 Bipolar Patients in a National Quality Register**

D Tidemalm¹; M Landen²; B Runeson¹
¹Karolinska Institutet, Centre for Psychiatry Research, SWEDEN; ²Sahlgrenska Academy, Institute of Neuroscience and Physiology, SWEDEN

16:45 
**Suicide Attempt, Psychiatric Diagnosis and Later Suicide - National Cohort Studies**

B Runeson¹; D Tidemalm¹; A Haglund
Karolinska Institutet, SWEDEN

17:00 
**Suicide within One Year after Psychiatric Inpatient Care - Cohort Study of 2.9 Million Discharges**

H Lysell¹; A Haglund¹; H Larsson; P Lichtenstein; B Runeson
Karolinska Institutet, SWEDEN
### Thursday

#### 17:15 - 17:30

**A One-year Observational Study of all Hospitalized and Fatal Acute Poisonings in Oslo: Epidemiology, Intention and Follow-up**

C Lund; B Teige; P Drottning; B Stiksrud; TO Rui; M Lyngra; O Ekeberg; D Jacobsen; KE Hovda

1. Oslo University Hospital Ullevaal, NORWAY
2. Institute of Forensic Medicine, NORWAY
3. Lovisenberg hospital, NORWAY
4. Diakonhjemmet hospital, NORWAY
5. Oslo University Hospital Aker, NORWAY
6. Akershus University Hospital, NORWAY

#### 17:30 - 17:45

**Five-year Mortality after Acute Poisoning Treated in Ambulances, an Emergency Outpatient Clinic and Hospitals in Oslo**

C Lund; MA Bjornaas; L Sandvik; O Ekeberg; D Jacobsen; KE Hovda

Oslo University Hospital Ullevaal, NORWAY

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### 16:30 - 18:00

**PS2.14 HELPLINES - ADVANCES IN THINKING**

Chair: Mary Parsissons & Diego De Leo, AUSTRALIA

#### 16:30

**Befrienders Worldwide: Volunteer Action to Prevent Suicide Worldwide**

B Mishara

Centre for Research and Intervention on Suicide and Euthanasia, CANADA

#### 16:45

**IFOTES Experience on the New Dimension of Web Based Crisis Intervention**

S Schumacher

IFOTES (International Federation of Telephone Emergency Service), GERMANY

#### 17:00

**The National Suicide Prevention Lifeline (USA): Innovative Crisis Center Approaches to Suicide Prevention**

G Murphy

National Suicide Prevention Lifeline, UNITED STATES

#### 17:15

**Child Helplines: Giving a Voice to Children and Young People Worldwide**

J Martens

Child Helpline International, NETHERLANDS

#### 17:30

**Helplines - Advances in Thinking - Lifeline Australia’s Crisis Support Model**

A Woodward

Lifeline Foundation, AUSTRALIA

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### 16:30 - 18:00

**PS2.15 TEEN SUICIDAL AND SELF-HARM BEHAVIOUR - CLINICAL ASPECTS**

Chair: Egil Haga, NORWAY & Sue Simkin, UNITED KINGDOM

#### 16:30

**Young People who Self-harm: Interview Study to Investigate the Experiences and Needs of Parents and Carers to Provide a Web-based Resource**

S Simkin; K Hawton; N. Hughes; L. Locock; A. Stewart

1. University of Oxford Centre for Suicide Research, UNITED KINGDOM
2. University of Oxford Health Experiences Research Group, UNITED KINGDOM
3. Oxford Health NHS Foundation Trust, UNITED KINGDOM
16:45  Piloting a Child and Adolescent Suicide and Suicidality Prevention Module which can be Deployed along the Spectrum of Clinical Care  
A Glowinski\(^1\); M Buxton\(^1\); N Navsaria\(^1\)  
\(^1\)Washington University School of Medicine, UNITED STATES;  
\(^2\)Washington University in St. Louis, UNITED STATES

17:00  Characteristics of Teenage Severe Suicide Attempters; Preliminary Cohort Study at the Emergency Department.  
N Eto; Y Honda; N Kawano; K Harada; R Nishimura  
Fukuoka University, JAPAN

17:15  Communication Therapy for Parents of Young Suicide Attempters  
AF Knudsen; E Fleischer  
NEFOS - The Network for Bereaved and Relatives, DENMARK

17:30  Suicide Risk Assessment in Child and Adolescent Mental Health Services - Exploring the Relationship between Suicide Ideation and Suicide Behaviour  
TBB Sørensen\(^1\); KJ Larsen\(^2\)  
\(^1\)Centre for Suicide Prevention, Child and Adolescent Mental Health Services, DENMARK;  
\(^2\)Centre for Suicide Prevention, Child and Mental Health Services, Region of Southern Denmark, DENMARK

17:45  Costs of Treatment for Self-harming Adolescents - A Comparison of Dialectical Behaviour Therapy and Enhanced Usual Care  
E Haga\(^1\); E Aas\(^1\); L Mehlum\(^1\)  
\(^1\)National Centre for Suicide Research and Prevention, University of Oslo, NORWAY;  
\(^2\)Department of Health Management and Health Economics, NORWAY
17:30 Mixed Presenters in Emergency Departments
S Kuehl
University of Otago, NEW ZEALAND

17:45 Manifestations of the Suicidal Process in Everyday Social Encounters: Limitations of Existing Models
C.V. Owens; G.J. Owen
University of Exeter Medical School, UNITED KINGDOM

16:30 - 18:00 Munch 2

PS2.17 SUICIDE POSTVENTION AND THE WORKPLACE
Chair: Sally Spencer-Thomas, UNITED STATES

16:30 A Manager’s Guide to Suicide Postvention in the Workplace
L Berman1; S Spencer-Thomas2
1IASP, UNITED STATES; 2Carson J Spencer Foundation, UNITED STATES

16:45 First Responders as Survivors of Suicide Loss
S Spencer-Thomas
Carson J Spencer Foundation, UNITED STATES

17:00 Prevention of the Negative Impact on Railway Crew after Involvement in a Rail Fatality
C Bardon; B Mishara
CRISE - Université du Québec à Montréal, CANADA

17:15 Impact of Patient Deaths by Suicide on Thai Psychiatrists Through one-to-one Interviews
P Thomyangkoon1; A Leenaars2
1Rajavithi Hospital, College of Medicine, Rangsit University, THAILAND; 2Private practice, CANADA

17:30 Suicide by Occupation: A Systematic Review and Meta-analysis
A Milner; AD LaMontagne; MJ Spittal; J Pirkis
University of Melbourne, AUSTRALIA

17:45 Guidelines for Postvention in the Workplace and Communities
L Berkowitz; J McCauley; R Mirick
Riverside Trauma Center, UNITED STATES

16:30 - 18:00 Gaio

PS2.18 THE INTERNET AND SOCIAL MEDIA IN SUICIDE PREVENTION
Chair: Daniel Reidenberg, UNITED STATES & Ella Arensman, IRELAND

16:30 Suicide and Social Media: A Scoping Study Examining Current Activity and Stakeholder Opinion with regard to Suicide and Social Media
J Robinson1; H. Herrmann1; S. Fisher2; M. Rodrigues3
1Orygen Youth Health Research Centre, AUSTRALIA; 2Community Works Associates Pty. Ltd, AUSTRALIA
"Suicide Autopsy": The Development of a Web-based Serious Game for Suicide Prevention
D Garoni; K Kavalidou; O Theodorikakou; K Katsadoros
KLIMAKA, GREECE

Euregenas: The Development of an E-conceptual Model for Suicide Prevention (Work Package 5)
E De Jaegere1; M. van den Berg2; E Dumon1; S. Wallyn2; G Portzky1; C van Heeringen1
1Unit for Suicide Research, Ghent University, BELGIUM; 2Flemish Agency for Care and Health, BELGIUM

IFightDepression: Using the Internet to Enhance Awareness and Self-Management Capacity for Depression
E Arensman1; C. Larkin2; N. Koburger3; M. Maxwell4; R. Gusmão5; C. Van Audenhove6; F. Hariss7;
S. Costa8; A. Ibelshäuser2; M. Jushkin9; V. Perez-Sola8; A Szekely10; I. Todorova11; U Hegert12
1National Suicide Research Foundation/University College Cork, IRELAND; 2National Suicide Research Foundation, IRELAND; 3Universitätsklinikum Leipzig AöR, University of Leipzig, GERMANY;
4University of Stirling, UNITED KINGDOM; 5CEDOC, Universidade Nova de Lisboa, PORTUGAL;
6LUCAS, Catholic University of Louvain, BELGIUM; 7Pro mente tirol, Innsbruck, AUSTRIA;
8Estonian-Swedish Mental Health & Suicidology Institute, ESTONIA; 9Hospital de la Santa Creu/Sant PauPerez-Sola, SPAIN; 10Semmelweis University, Budapest, HUNGARY;
11Health Psychology Research Center, Sofia, BULGARIA

Using Big Data to Prevent Suicide
D Reidenberg1; F. Wolens2
1SAVE, UNITED STATES; 2Facebook, UNITED STATES

The Pilot Study of Keyword Formation Methods for Searching Self-disclosed Suicidal Micro Blogs in Chinese Social Media
H Li1; O.J. Chen1; Y Liu2; V Silenzio1; E.D. Caine1
1Department of Psychiatry, Medical Center, University of Rochester, UNITED STATES; 2Graduate School of Management, University of Chinese Academy of Sciences, CHINA

Zero Suicide in Healthcare (Not Another Life to Lose): Suicide Care in Systems Framework Generates National Learning Collaborative
J Draper1; M Hogan2; D Covington3
1National Suicide Prevention Lifeline, UNITED STATES; 2Hogan Health Solutions, UNITED STATES;
3Magellan Health Services, UNITED STATES

Zero Suicide in Healthcare (Not Another Life to Lose): 2012 Revised US National Strategy for Suicide Prevention and 4 Key NAASP Priorities
R McKeon1; D Covington2
1Substance Abuse and Mental Health Service Administration (SAMHSA), UNITED STATES;
2Magellan Health Services, UNITED STATES
### 17:10

**Zero Suicide and Healthcare (Not Another Life to Lose):**

**TERROS Case Study of Community Mental Health Center Suicide Care in Systems Framework**

_P Chase¹; D Covington²_

¹TERROS, UNITED STATES; ²Magellan Health Services, UNITED STATES

### 17:30

**Zero Suicide in Healthcare (Not Another Life to Lose):**

**Assessment of Suicide Related Knowledge and among Health Professionals Competencies**

_D Covington¹; T Joiner²; C Silva³; A Smith³_

¹Magellan Health Services, UNITED STATES; ²Florida State University, UNITED STATES; ³University of Miami Ohio, UNITED STATES

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### 16:30 - 18:00  Ekeberg

**PS2.20 PSYCHIATRIC DISORDERS AND SUICIDE RISK**

Chair: Tambu Maniam, MALAYSIA & Trine Madsen, DENMARK

#### 16:30

**Suicide amongst Psychiatric In-Patients and those Recently Discharged:**

**Findings from 4 Case-Control Studies**

_I.M. Hunt; H Bickley; K Windfuhr; J Shaw; L Appleby; N Kapur_

University of Manchester, UNITED KINGDOM

#### 16:45

**Suicide Rates in Psychiatric Inpatients: Time Changes from 1998 through 2005 in a Nationwide Cohort**

_T Madsen; M Nordentoft_

Copenhagen Mental Health Center, Research Unit, DENMARK

#### 17:00

**Psychiatric and Demographic Risk Factors for Suicidal Ideation, Plans and Attempts in Malaysia - Results of an Epidemiological Survey**

_T. Maniam¹; M Marhani¹; M Firdaus¹; AB Abdul Kadir²; MJ Mazni³; A Azizul³; I Nurashikin³; AA Salina³; KT Ang³; K Jaswinder³; M Fadzillah³; A Noor Ani³_

¹National University of Malaysia, MALAYSIA; ²Universiti Putra Malaysia, MALAYSIA; ³Universiti Malaysia Sarawak, MALAYSIA

#### 17:15

**Population Attributable Fraction of Suicidal Behaviors Associated with Common Mental Disorders in Taiwan**

_S-C Liao¹; M-B Lee¹; W.J. Chen²_

¹National Taiwan University Hospital, TAIWAN; ²College of Public health, National Taiwan University, TAIWAN

#### 17:30

**Improving Adherence to Suicide Guidelines in Mental Health Care. Results From PITSTOP Suicide, A Multicentre Cluster Randomized Trial**

_D de Beurs¹; M de Groot¹; J de Keijser²; J Mokkenstorm³; A Kerkhof⁴_

¹VU Amsterdam, NETHERLANDS; ²GGZ Friesland, NETHERLANDS; ³GGZ ingeest, NETHERLANDS

#### 17:45

**Do Patients Benefit from the Training of Healthcare Professionals in the Application of Suicide Guidelines? Study Protocol of a Randomized Trial**

_D de Beurs¹; M de Groot¹; J de Keijser²; J Mokkenstorm³; R de Winter⁴; A Kerkhof⁴_

¹VU Amsterdam, NETHERLANDS; ²GGZ Friesland, NETHERLANDS; ³GGZ ingeest, NETHERLANDS; ⁴Parnassia Bavo Group, NETHERLANDS
### PS2.21 REGIONAL SYMPOSIUM ASIA AND THE PACIFIC
Chair: Yueqin Huang, CHINA & Anthony Davis, AUSTRALIA

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Suicide Prevention in the Asia-Pacific Region</td>
<td>Y Huang</td>
<td>Institute of Mental Health, Peking University, CHINA</td>
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### PS2.22 INTERVENTION STUDIES
Chair: Maja Zorko, SLOVENIA & Jameson Hirsch, UNITED STATES

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Decreasing Suicide Rates in Both Genders. An Effectiveness Study of a Community-based Intervention</td>
<td>A Szekely¹; G Purebl¹; U Hegerl²</td>
<td>¹Semmelweis University, HUNGARY; ²University of Leipzig, GERMANY</td>
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<tr>
<td>16:45</td>
<td>The Acute Effects of Intensive Repetitive Transcranial Magnetic Stimulation on Suicide Risk in Depression</td>
<td>S Desmyter¹; R Duprat²; C Baeken¹; C van Heeringen¹</td>
<td>¹Unit for Suicide Research, University Hospital Ghent, BELGIUM; ²Multidisciplinary Research Platform, Ghent University, BELGIUM</td>
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<tr>
<td>17:00</td>
<td>A Series of Studies of Risk and Protective Factors for Suicidal Behavior in Rural Primary Care: An Eye Toward Intervention Design</td>
<td>J Hirsch¹; K.L. Walker¹; S.A. Nsamenang¹; C.A. Rowe¹; K.C. Cukrowicz²</td>
<td>¹East Tennessee State University, UNITED STATES; ²Texas Tech University, UNITED STATES</td>
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<td>17:15</td>
<td>GPS Study. (Cost-)Effectiveness of Gatekeeper Training in the Prevention of Suicidal Attempts: A Randomised Controlled Trial</td>
<td>M Steendam; J De Keijser</td>
<td>Mental Health Center GGZ Friesland, NETHERLANDS</td>
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<td>17:30</td>
<td>Suicide in Slovenia between 1997 and 2010: Characteristics, Trends and Preventive Activities</td>
<td>M Zorko¹; S Roskar¹; A Podlesek²; A Tancic Grum¹; M Kravanja¹</td>
<td>¹Institute of Public Health, SLOVENIA; ²University of Ljubljana, Faculty of Arts, SLOVENIA</td>
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<td>17:45</td>
<td>A Study of the Feasibility of the Application of ACASI Technique in Suicide Related Surveys among Lower Education Level Residents</td>
<td>ZR. Liu¹; L. Zhou¹; YQ Huang¹; SY. Xiao²; J. Yan¹; YC. Lin¹; GQ. Cheung⁴</td>
<td>¹Institute of Mental Health, Peking University, CHINA; ²School of Public Health, Central South University, CHINA; ³Institute of Social Science Survey, Peking University, CHINA; ⁴Institute for Social Research, University of Michigan, UNITED STATES</td>
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<td>16:30 - 18:00</td>
<td><strong>PS2.23 RISK FACTORS FOR SUICIDE IN THE ELDERLY</strong>&lt;br&gt;Chair: Katalin Szanto &amp; Silvia S Canetto, UNITED STATES</td>
<td>PS2.23-1</td>
<td>PS2.24-1</td>
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<tr>
<td>16:30</td>
<td><strong>Social Factors in Older Adult Suicide:</strong>&lt;br&gt;&lt;br&gt;Its Perceived Acceptance in Response to Illness?&lt;br&gt;S.S. Canetto¹; E. Winterrowd²</td>
<td>PS2.23-1</td>
<td>PS2.24-1</td>
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<tr>
<td></td>
<td>¹Colorado State University, UNITED STATES; ²University of Wisconsin Oshkosh, UNITED STATES</td>
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<td>16:45</td>
<td><strong>Developing a Questionnaire on Death Wishes in Old Age</strong>&lt;br&gt;A Verlinde¹; A.M. Pot²; R.C. Oude Yoshaar³; A Kerkhof⁴</td>
<td>PS2.23-2</td>
<td>PS2.24-2</td>
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<tr>
<td></td>
<td>¹Mediant, NETHERLANDS; ²VU- Trimbos, NETHERLANDS; ³UMCG, NETHERLANDS; ⁴VU, NETHERLANDS</td>
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<td>17:00</td>
<td><strong>Cognitive Deficits and Decision Processes in Late-life Suicide</strong>&lt;br&gt;K Szanto</td>
<td>PS2.23-3</td>
<td>PS2.24-3</td>
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<td>University of Pittsburgh, UNITED STATES</td>
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<td>17:15</td>
<td><strong>Suicide in the Old Elderly</strong>&lt;br&gt;M Pomplii</td>
<td>PS2.23-4</td>
<td>PS2.24-4</td>
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<td>Sapienza University of Rome, Italy, ITALY</td>
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<td>17:30</td>
<td><strong>Physical Disorders as Predictors of Suicide in Older Adults</strong>&lt;br&gt;A Erlangsen¹; E Stenager²; Y Conwell³</td>
<td>PS2.23-5</td>
<td>PS2.24-5</td>
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<tr>
<td></td>
<td>¹Mental Health Centre Copenhagen, DENMARK; ²Dept. of Psychiatry, University of Southern Denmark, DENMARK; ³University of Rochester Medical Center, UNITED STATES</td>
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<td>16:30 - 18:00</td>
<td><strong>PS2.24 PROSPECTIVE STUDIES OF SUICIDE ATTEMPTERS</strong>&lt;br&gt;Chair: Rory O’Connor, UNITED KINGDOM &amp; Juliane Brüdern, SWITZERLAND</td>
<td>PS2.24-1</td>
<td>PS2.24-2</td>
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<td>16:30</td>
<td><strong>The Relationship between Primary Suicidal Drivers and SSF Macro-coded Suicidal Typologies within CAMS</strong>&lt;br&gt;B.C. Schembari; D Jobes</td>
<td>PS2.24-1</td>
<td>PS2.24-2</td>
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<td>The Catholic University of America, UNITED STATES</td>
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<td>16:45</td>
<td><strong>Intrapersonal Positive Future Thinking Predicts Repeat Suicide Attempts in Hospital-treated Suicide Attempters</strong>&lt;br&gt;R O’Connor¹; R. Smyth²; J.M.G. Williams³</td>
<td>PS2.24-2</td>
<td>PS2.24-3</td>
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<tr>
<td></td>
<td>¹University of Glasgow, UNITED KINGDOM; ²Royal Infirmary of Edinburgh, UNITED KINGDOM; ³University of Oxford, UNITED KINGDOM</td>
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<td>17:00</td>
<td><strong>A Model of the Suicidal Process based on Evidence from people who have Attempted Suicide, Their Significant Others and those Bereaved by Suicide</strong>&lt;br&gt;O Benson¹; S Gibson¹; Z Boden¹; G.J. Owen²</td>
<td>PS2.24-3</td>
<td>PS2.24-4</td>
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<td>¹SANE, UNITED KINGDOM; ²University of Exeter, UNITED KINGDOM</td>
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<td>17:15</td>
<td><strong>“Implicit” Attitudes to Abstract and Personal Death Distinguish Suicidal Ideators from Controls: Potential for Non-Invasive Risk Assessment</strong>&lt;br&gt;I Hussey; D. Barnes-Holmes</td>
<td>PS2.24-4</td>
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<td>National University of Ireland Maynooth, IRELAND</td>
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17:30  
Dysfunctional Social Problem-solving and Brooding Rumination within the IMV Model of Suicidality  
J Miller¹; R.E. O’Carroll²; R O’Connor³  
¹SBRL, University of Glasgow, UNITED KINGDOM; ²University of Stirling, UNITED KINGDOM; ³University of Glasgow, UNITED KINGDOM  

17:45  
Beyond Symptoms: Typical Plans and Motives of Suicide Attempters Compared to Non-Suicidal Depressive Individuals  
J. Brüdern¹; T. Berger¹; A. Gysin-Maillart²; K. Michel³; I. Schmutz¹; F. Caspar¹  
¹University of Bern, SWITZERLAND; ²University Hospital of Psychiatry, Bern, SWITZERLAND

16:30 - 18:00  
Holmenkollen  

16:30  
Introduction and Overview  
K Hawton  
University of Oxford, UNITED KINGDOM  

16:50  
Pesticides and Suicide in China  
M Phillips  
Suicide Research and Prevention Center and Research Methods Consulting Center, CHINA  

17:10  
Study for Implementing Secured Storage of Pesticides to Prevent Suicides in the State of Andhra Pradesh, India  
SB Ravulapati  
Krishna Nursing Home, INDIA  

17:30  
Cluster Randomized Controlled Trial to Determine the Effectiveness of Safe Storage to Prevent Self- Poisoning: Update of Study Progress and Challenges  
K Hawton  
University of Oxford, UNITED KINGDOM  

18:30 - 20:30  

SOCIAL PROGRAMME: MODERN ART TOUR
### FRIDAY, SEPTEMBER 27

<table>
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<tr>
<th>Time</th>
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<tr>
<td>08:00 - 18:30</td>
<td>REGISTRATION</td>
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<tr>
<td>08:00 - 08:45</td>
<td>MORNING ACTIVITIES</td>
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<tr>
<td>08:00 - 08:45</td>
<td>THE IASP TASK FORCES AND SPECIAL INTEREST GROUPS MEETINGS</td>
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**THE IASP TASK FORCE GENETICS AND NEUROBIOLOGY MEETING, PART 2: NEUROBIOLOGY**

Chair: J John Mann, UNITED STATES & Ina Giegling, GERMANY

<table>
<thead>
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<th>Time</th>
<th>Title</th>
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<th>Institution</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Disturbed Facial Anger Recognition associated with Suicidal Ideation in Depressed Patients Normalizes during Treatment with Escitalopram</td>
<td>K van Heeringen</td>
<td>Unit for Suicide Research, BELGIUM</td>
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<tr>
<td>08:15</td>
<td>Toxoplasma Gondii, The Kynurenine Pathway and Suicidal Behaviour</td>
<td>T Postolache</td>
<td>University of Maryland School of Medicine, UNITED STATES</td>
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<tr>
<td>08:30</td>
<td>Peripheral Biomarkers for Suicide</td>
<td>Y Dwivedi</td>
<td>University of Illinois at Chicago, UNITED STATES</td>
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**PLENARY SESSION 5**

Chair: Jerry Reed, UNITED STATES & Onja Grad, SLOVENIA

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<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
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<tr>
<td>09:00</td>
<td>Complicated Grief Treatment for Suicide Survivors</td>
<td>K Shear</td>
<td>Center for Complicated Grief, Columbia University, UNITED STATES</td>
</tr>
<tr>
<td>09:30</td>
<td>After Suicide: Suicide Bereavement and Postvention, New Directions and Developments</td>
<td>K Andriessen</td>
<td>KU Leuven - University of Leuven &amp; Tele-Help Federation, BELGIUM</td>
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<tr>
<td>10:00</td>
<td>Systematic Antibullying Work in School and Prevention of Suicidal Behaviours</td>
<td>D Olweus</td>
<td>Uni Research, Uni Health, NORWAY</td>
</tr>
</tbody>
</table>

10:30 - 11:00 COFFEE/TEA BREAK
Impact of Mortality from Suicide on Life Expectancy in The Republic of Bashkortostan (1989-2009)
I Aminov
National Research University - Higher School of Economics Institute of Demography, RUSSIAN FEDERATION

Nine Candidate Genes and Suicidal Status an a Sample of Suicide Completers, Attempters and Controls
N Antypa1; R Calati1; I Giegling2; B Schneider3; M Balestri1; A Malafosse4; A Serretti1; D Rujescu2
1University of Bologna, ITALY; 2University of Halle, GERMANY; 3University of Frankfurt, GERMANY; 4University of Geneve, SWITZERLAND

Suicide Rates across Brazilian Regions and Implications for Prevention Strategies
D. Borges Machado; D. Neves
Federal University of Bahia, BRAZIL

Evaluation of a Pilot Online Outreach and Engagement of At Risk Youths Project in Hong Kong
M.K.Y. Chan1; F Law2; P.S.F. Yip1; P.W.C. Wong2; KW Fu2; G.S. Chak1; W.K.S. So2
1Centre for Suicide Research and Prevention, University of Hong Kong, HONG KONG, CHINA PR; 2University of Hong Kong, HONG KONG, CHINA PR

Characteristics and Risk Factors for Non-suicidal Self-injury in Major Depression Inpatients
Y Chen; Z Yao; J Shi; H Liu
Nanjing Medical University Affiliated Brain Hospital, CHINA

Rationale and Outline of an E-Learning Supported Train-The-Trainer Program to Disseminate a Practice Guideline on Dealing with Suicidal Behavior
M de Groot; D de Beurs; A Kerkhof
Vrije University, NETHERLANDS

Consultation in Mental Health during the Period Preceding Suicide
R de Winter1; S.E.M Bakker2
1Parnassia Groep, NETHERLANDS; 2Parnassia Groep The Hague, NETHERLANDS

Longevity of Gatekeeper Traits gained through Training Programs in Youth Suicide Gatekeepers- A Systematic Review
N Dehghani; L Molloy
University of Tasmania, AUSTRALIA

Suicide Epidemiological Survey in the Psychiatric Emergency Unit of The General Hospital
I D’Orta; A Costanza; A Canuto
Geneva University Hospital, SWITZERLAND

EUREGENAS: The Development of Suicide Prevention Guidelines and Toolkits (Work Package 6)
E Dumon; G Portzky; C van Heeringen
Ghent University - Unit for Suicide Research, BELGIUM
Vulnerability among Adolescents in Foster Care
B Ejdesgaard
Centre for Suicide Research, DENMARK

Suicide Attempt and Deliberate Self-harm in General Hospital Inpatients: Study of Incident Reports in Nara Medical University Hospital
M Fukase; M Shintani; M Kaneko; M Uemura; M Nishiki; M Tanaka; T Morikawa
Nara Medical University Hospital, JAPAN

What is Really Needed to Help the Media Contribute to Suicide Prevention by Following Responsible Reporting Guidelines in Suicide Cases?
A Glowinski¹; K Fehr²
¹Washington University School of Medicine, UNITED STATES; ²Fox TV Detroit, UNITED STATES

Daily Variation in Suicide Mortality in Finland and Temperature Related Weather Variables
L Hiltunen¹; J Haukka¹; R Ruuhela¹; K Suominen¹; T Partonen¹
¹National Institute for Health and Welfare, FINLAND; ²Finnish Meteorological Institute, FINLAND

Interrelationships between Future Orientation and Risk Factors for Suicidal Behavior
J Hirsch
East Tennessee State University, UNITED STATES

Suicidologi - The Only Scientific Journal on Suicide Research and Prevention in The Nordic Region
H Holmesland; L Mehlum
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Factors Associated with Suicide Methods among General Population in Korea
TY Lee; MH Ahn; AR Lee; JP Hong
Asan Medical Center, Ulsan University College of Medicine, SOUTH KOREA

Suicide Attempts and Low Socio-economic Status in Osaka, Japan: A Contribution from Survey at Emergency Medical Facilities
M Honyashiki¹; K Ichikawa¹; H Hirotune¹; T Sugimoto¹; H Oda²
¹Osaka prefectural mental health center, JAPAN; ²Osaka National Hospital, JAPAN; ³Kansai Medical University, JAPAN

Study on Association of BDNFrs6265 Gene Polymorphism and Rural Attempted Suicide in China
C-X Jia¹; L-L Wang¹; A-Q Xu¹; H-M Qiu³
¹Shandong University School of Public Health, CHINA; ²Shandong CDC, CHINA; ³Shandong Center for Mental Health, CHINA

Characteristics of Elderly Suicide Attempters Admitted to the Emergency Department of Fukuoka University Hospital
K Kira; N Eto; K Harada; N Kawano; Y Honda; R Nishimura
Fukuoka University Hospital, JAPAN
The Suicide Assessment Scale: Psychometric Properties of a Norwegian Language Version
B. O. Koldsland1; F.A. Walby2; L. M. Diep3; L. Mellesdal4; L. Mehlum5
1Ringerike Psychiatric Outpatient Clinic, NORWAY; 2Diakonhjemmet Hospital, NORWAY; 3Institute for Community Medicine at University of Oslo, NORWAY; 4Haukeland University Hospital, NORWAY; 5National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Non-fatal Repetition of Self-harm in Taipei City, Taiwan: Cohort Study
RCL Kwok1; P.S.F. Yip1; D. Gunnell2; C-J Kuo3; Y-Y Chen3
1The University of Hong Kong, HONG KONG, CHINA PR; 2The University of Bristol, UNITED KINGDOM; 3Taipei City Psychiatric Center, Taipei City Hospital, TAIWAN

Self-efficacy of Volunteer Mentors of Helping Patients with Deliberate Self-harm Behaviors
C Lai1; F Law2; P.W.C. Wong3; P.S.F. Yip4
1HKJC Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR; 2Department of Social Work & Social Administration, The University of Hong Kong, HONG KONG, CHINA PR

School Crisis Management in Hong Kong: Suicidal Prevention, Intervention and Postvention for School-aged Children
V Lau; J Fong; T Wong
Education Bureau, HONG KONG, CHINA PR

The Efficacy of MAPS Group Therapy for Suicide Prevention to Bipolar Disorder Patients
C Lin; Y Huang; F Sun
Mackay Memorial Hospital, TAIWAN

Informal Help-seeking Behavior and Suicide Intent in Adolescents with Self-harm
H-C Liu; H-C Huang; Y-H Huang; T-C Chen; S-I Liu; Y-C Chen
Mackay Memorial Hospital, TAIWAN

‘Deadly Blokes’: Perceptions and Responsibilities of Aboriginal Peer Educators in a Remote Suicide Awareness and Prevention Program
J Sibosado1; K McKay2; J Tighe1; C Sampi1; A Howard1; K McKenzie1
1Alive & Kicking Goals!, AUSTRALIA; 2CRN Mental Health and Well-Being in Rural and Regional Communities, University of New England, AUSTRALIA

Women and Suicide: Beyond the Gender Paradox
A Milner1; K McKay2; M Maple2
1McCaughhey VicHealth Centre for Community Wellbeing, Melbourne School of Population and Global Health, AUSTRALIA; 2CRN for Mental Health and Well-Being in Rural and Regional Communities, University of New England, AUSTRALIA

Suicide, Parasuicide and Self-Injurious Behaviors: Study of Genesis, Assessment and Phenomenology
S. Bessa; A. Mlodozeniec
Stavanger Universitetsjukehus Dalane DPS, NORWAY
Characteristics of Suicide Attempts Among the Emergency Department Patients: Comparison Study between 2007 and 2012
K Norimoto1; K Ikeshita2; T Seki1; Y Kawai1; H Fukushima1; S Shimoda2; T Kishimoto2; K Okuchi1
1Department of Emergency and Critical Care Medicine, Nara Medical University, JAPAN; 2Department of Psychiatry, Psychiatric Institute, Nara Medical University, JAPAN

Communication of Suicidal Ideation and Intent: Where and how does it go Wrong?
C.V. Owens1; G.J. Owen1; J.M. Belam2; F.L. Rapport1; H. Lambert4; J.L. Donoval4
1University of Exeter Medical School, UNITED KINGDOM; 2PAPYRUS [Prevention of Youth Suicide], UNITED KINGDOM; 3University of Swansea School of Medicine, UNITED KINGDOM; 4University of Bristol, UNITED KINGDOM

Reasons for Attempted Suicide of those Visiting Emergency Rooms: A Case Study
M Lim1; SJ Lee2; JI Park1
1Seoul National University Bundang Hospital, KOREA (REP.); 2Korea Suicide Prevention Center, KOREA (REP.); 3Korea Suicide Prevention Center, Kangwon National University College of Medicine, KOREA (REP.)

MUNCH: His Art and His Suicidality
S Peleaz; P. Wels; G. Moreira; C. De Los Santos
Ultimo Recurso, URUGUAY

Validation of the Suicidality Assessment Instrument PRISM-S (Pictoral Representation of Illness Self Measure - Suicidality)
M Ring1; V Ajdacic-Gross2; G Harbauer1; S Haas1
1Integrated Psychiatry Winterthur, SWITZERLAND; 2Psychiatric University Hospital Zurich, University Zurich, SWITZERLAND

Crisis Intervention Unit
R Rodrigues1; J.M. Freitas2; E. Lopes3; C. Lima3
1Department of Psychiatry and Mental Health of CHAA, PORTUGAL; 2Chaves, PORTUGAL; 3Guimarães, PORTUGAL

Preventing Suicide through Online Support: Practical Considerations
J Russell; M Gonzalez; C Wyllie; J Ferns
Samaritans, UNITED KINGDOM

Self-aggressiveness and Guilt in Non-fatal Suicidal Behaviour in Young Adults
CB Saraiva1; F Alte da Veiga1; A Craveiro1; N Madeira1; J Andrade1; P Garrido1; JC Santos2
1Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL; 2Coimbra Nursing School, PORTUGAL

Translating and Generating Evidence to Inform Community Discussions about Suicide
J Skehan
Hunter Institute of Mental Health, AUSTRALIA

Female Suicide Increases Three Times from 2000 to 2009 in the 5th Biggest Brazilien City
F Souza; S C G Medeiros; N.R.P Sousa; AC Almeida; JM Aquino Neto; VHD Silva; HA Pinheiro; T.P. Souza
Universidade Federal do Ceará, BRAZIL
Effects of Targeted Educational Lecture on Medical Students’ Attitude towards who may have Suicidal Risk, using Attitude towards Suicide Questionnaire

O Tanaka
Aomori Prefectural Center for Mental Health and Welfare, JAPAN

Effects of Targeted Educational Lecture on Medical Students’ Consciousness and Approach toward who may have Suicidal Risk

O Tanaka
Aomori Prefectural Center for Mental Health and Welfare, JAPAN

OUT and Reaching Out: Attitudes to Help-seeking Behaviour in Gay, Bisexual, Trans and Intersex Men

B Taylor
National LGBTI Health Alliance, AUSTRALIA

Human and Professional: Strategies for Dealing with Loss and Grief and Vacarious Trauma in Suicide Prevention Workers

B Taylor
National LGBTI Health Alliance, AUSTRALIA

Those Looking for What: The Users of Services for Suicide Survivors

E Toffoli; C. Castriotta; S. Totaro; F. Olivi; C. Ometto; A. Ferrari; P. Scocco
1National Institute for Health and Welfare (THL) and SOPROXI Project, FINLAND; 2SOPROXI Project, ITALY

Surviving Suicide by a Suicide Survivor

H.R. Topp
Canterbury District Hospital, AUSTRALIA

Non-Suicidal Self-Injury and Stress-Coping Style in Japanese University Students

E Tsujimoto; R Taketani; H Ono
Kwansei Gakuin University, JAPAN

Suicide among Young People of Buryatia - A Disaster - Causes, Prevention - Landmark Results

S Tsyrempilov
Buryat State University, RUSSIAN FEDERATION

A Study of Poverty and Shame Related Suicides in Kerala, India

S Vellara Francis; I Lødemel
Oslo and Akershus University College of Applied Sciences, NORWAY

Development of a Conceptual Framework to Guide a University Campus-Wide Suicide Prevention Initiative

P.A. Wren; D. Connally; L. Hawley; E. Wallace; B. Wummel; M. MacDonald
Oakland University, UNITED STATES

Understanding Excessive Suicide Risk among Disadvantaged Men in Mid-life: Challenges for Theory, Policy and Practice

C Wyllie; S. Platt; J. Brownlie; A. Chandler; S. Connolly; R. Evans; B. Kennelly; O.J. Kirtley; G. Moore; R O’Connor; J. Scourfield
1Samaritans, UNITED KINGDOM; 2The University of Edinburgh, UNITED KINGDOM; 3University of Stirling, UNITED KINGDOM; 4National University of Ireland, Galway, IRELAND; 5Cardiff University, UNITED KINGDOM
### Scenario of Urban & Rural Suicide in Bangladesh

**PO3-58**

Z Islam; R Karim  
Society for Voluntary Activities-SOVA, BANGLADESH

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#### PLENARY SESSION 6

**Chair:** Rory O'Connor, UNITED KINGDOM & Paul Yip, HONG KONG, CHINA PR

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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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</table>
| 11:00    | The Relative Roles of Mental Illness and Pesticides in Suicide in Asia: Evidence for the Need of a Paradigm Shift in Suicide Prevention? | M Phillips  
Suicide Research and Prevention Center and Research Methods Consulting Center, CHINA |
| 11:30    | Alcohol Prevention Strategies: Their Effectiveness on Drinking Problems in General and on Suicidal Behaviour in Particular | I Rossow  
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY |
| 12:00    | How Life Events Get “Under the Skin”: Implications for Suicide Research | G Turecki  
Douglas Mental Health Research, CANADA |

**12:30 - 14:30  LUNCH**

**13:00 - 14:30  IASP GENERAL ASSEMBLY**

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#### PS3.1 SUICIDAL BEHAVIOUR IN DIVERSE CONTEXTS (A)

**Chair:** Axel Haglund, SWEDEN & Roger Webb, UNITED KINGDOM

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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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| 14:30    | Identifying Differential Types of Suicide. Results of a Psychological Autopsy Study of 98 Suicide Cases in The Netherlands | M de Groot1; R de Winter2  
1Vrije University, NETHERLANDS; 2Parnassia, The Hague, NETHERLANDS |
| 14:45    | Suicide after Release from Prison - A Population-based Cohort Study | A Haglund; B Runeson; D Tidemalm  
Department of clinical neuroscience, Karolinska Institutet, SWEDEN |
| 15:00    | Risk Factors for Suicide and Violent Offending in a National Cohort of People Diagnosed with Bipolar Disorder | R Webb1; P Lichtenstein2; M Landen3; S Fazel4  
1University of Manchester, UNITED KINGDOM; 2Karolinska Institutet, SWEDEN; 3University of Gothenburg & Karolinska Institutet, SWEDEN; 4University of Oxford, UNITED KINGDOM |

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**SCIENTIFIC PROGRAMME / 69**
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<th>Event</th>
<th>Authors/Institutions</th>
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<tbody>
<tr>
<td>15:15</td>
<td>National Study of Suicide Method in Violent Criminal Offenders</td>
<td>R Webb¹; P Qin²; H Stevens³; J Shaw¹; L Appleby¹; PB Mortensen³</td>
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<tr>
<td></td>
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<td>¹University of Manchester, UNITED KINGDOM; ²University of Oslo, NORWAY; ³University of Aarhus, DENMARK</td>
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<tr>
<td>15:30</td>
<td>Patterns of Contact with Primary Care in the Year before Suicide: A Population Based Nested Case-control Study in England</td>
<td>K Windfuhr; R Webb; D While; J Shaw; L Appleby</td>
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<td>Centre for Mental Health and Risk, UNITED KINGDOM</td>
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<tr>
<td>15:45</td>
<td>Influence of Social Network and Problem Solving Methods on Risk for Suicidal Behavior among Chinese College Students</td>
<td>F Tang¹; P Qin²</td>
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<td></td>
<td></td>
<td>¹School of Public Health, Shandong University, CHINA; ²National Centre for Suicide Research and Prevention, University of Oslo, NORWAY</td>
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**14:30 - 16:00 Film**

**PS3.2 STRATEGIC PLANNING FOR SUICIDE SAFER COMMUNITIES AROUND THE WORLD**
Chair: Heather Stokes, UNITED STATES

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<th>Time</th>
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<th>Authors/Institutions</th>
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<tr>
<td>14:30</td>
<td>Strategic Planning for Suicide Safer Communities around the World</td>
<td>H. Stokes¹; D.W. Tallaksen²; A.-J. Moller³; L Macgregor⁴; M Taylor⁵</td>
</tr>
<tr>
<td></td>
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<td>¹LivingWorks Education, UNITED STATES; ²Oslo and Akershus University College of Applied Sciences, NORWAY; ³VIVAT Suicide Prevention, NORWAY; ⁴National Centre for Suicide Prevention Training, AUSTRALIA; ⁵National Native Children’s Trauma Center at University of Montana, UNITED STATES</td>
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<tr>
<td>14:45</td>
<td>ASIST in Norway. Development and Research</td>
<td>D.W. Tallaksen¹; AJ Møller²</td>
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<td></td>
<td></td>
<td>¹Høgskolen i Oslo og Akershus, NORWAY; ²VIVAT Suicide Prevention, NORWAY</td>
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<td>15:00</td>
<td>Implementation of Standardized Gatekeeper Programs in South Korea</td>
<td>I.H. Cho</td>
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<td>Gachon University, Gil Hospital, SOUTH KOREA</td>
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<tr>
<td>15:15</td>
<td>Saving Face - Suicide Stigma in Asia</td>
<td>L Macgregor</td>
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<td>National Centre for Suicide Prevention Training Inc, AUSTRALIA</td>
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<td>15:30</td>
<td>Sustaining Upstream Prevention Support Systems with Native Communities</td>
<td>M Taylor</td>
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<td>National Native Children’s Trauma Center, UNITED STATES</td>
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<td>15:45</td>
<td>Strategic Planning Process for Suicide Safer Construction Industry (Australia)</td>
<td>J Gullestrup</td>
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<td>MATES in Construction Ltd, AUSTRALIA</td>
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### PS3.3 SUSCEPTIBILITY TO SUICIDAL BEHAVIOUR: NEUROBIOLOGICAL DETERMINANTS
**Chair:** Yogesh Dwivedi, UNITED STATES

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<th>Institution(s)</th>
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<tbody>
<tr>
<td>14:30</td>
<td>MicroRNA Expression is Down-Regulated and Reorganized in Prefrontal Cortex of Depressed Suicide Subjects</td>
<td>Y Dwivedi</td>
<td>University of Illinois at Chicago, UNITED STATES</td>
</tr>
<tr>
<td>14:45</td>
<td>Animal Model in Gene Environment and Timing Interaction in Adolescent Depression and Suicide</td>
<td>G Zalsman</td>
<td>Tel Aviv University, Geha MHC, ISRAEL</td>
</tr>
<tr>
<td>15:00</td>
<td>Toxoplasma Gondii and Suicidal Behavior: Mediation by Aggressive Personality Traits?</td>
<td>T Postolache¹; TB Cook²; D Rujescu³</td>
<td>¹University of Maryland School of Medicine, UNITED STATES; ²Baldwin Wallace University, UNITED STATES; ³University of Halle-Wittenberg, GERMANY</td>
</tr>
<tr>
<td>15:15</td>
<td>Global DNA Methylation Patterns in Depression and Suicide</td>
<td>G Turecki</td>
<td>Douglas Mental Health Research, CANADA</td>
</tr>
<tr>
<td>15:30</td>
<td>Genetics of Suicidal Behavior and Intermediate Phenotypes</td>
<td>D Rujescu</td>
<td>Martin-Luther-Universität Halle-Wittenberg, GERMANY</td>
</tr>
<tr>
<td>15:45</td>
<td>Hypothalamic-pituitary-adrenal (HPA) Axis Dysregulation as a Biomarker of Suicide Risk in Mood Disorders</td>
<td>J Jokinen; P Nordström</td>
<td>Karolinska Institutet, SWEDEN</td>
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### PS3.4 RAILWAY SUICIDE: UNDERSTANDING AND PREVENTION
**Chair:** Brian L. Mishara, CANADA

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<th>Institution(s)</th>
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<tr>
<td>14:30</td>
<td>Risk Factors for Railway Suicide and Countermeasures to Reduce the Prevalence of Railway Suicides</td>
<td>B Mishara; C Bardon</td>
<td>CRISE, Université du Québec à Montréal, CANADA</td>
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<tr>
<td>14:45</td>
<td>The European Project Restrain on Reduction of Suicides and Trespassing on Railway Property</td>
<td>H Rådbo¹; M-H Bonneau²</td>
<td>¹Karlstad University, SWEDEN; ²UIC, FRANCE</td>
</tr>
</tbody>
</table>
15:00 Reduction and Displacement of Suicides after the Removal of Level Crossings in The Netherlands
B Hoogcarspel
Program suicide prevention, ProRail railway infrastructure manager, NETHERLANDS

15:15 Challenging Approaches to Railway Suicide Prevention: An International Perspective on (New) Soft Measures
K Lukaschek1; K-H Ladwig2
1Helmholtz Zentrum München, GERMANY; 2Helmholtz Zentrum München; Dept. of Psychosom. Medicine and Psychotherapy, TU München, GERMANY

15:30 Samaritans Collaboration with The UK Rail Industry - Ownership of Suicide on our Railways
R Kirby-Rider
Samaritans, UNITED KINGDOM

15:45 Prevention of Railway Suicides in Sweden
E Lindberg
Swedish Transport Administration, SWEDEN

14:30 - 16:00 Munch 2

14:30 Parents of Sons and Daughters Who have Attempted Suicide: An On-going Qualitative Study of their Experiences
L Nygaard1; N Buus2; E Stenager3; E Fleischer4
1Odense University Hospital, DENMARK; 2University of Southern Denmark, DENMARK; 3Region of Southern Denmark, DENMARK; 4NEFOS (Network for the Suicide Struck), DENMARK

14:45 Risks of Adverse Mental and Somatic Health Outcomes in Partners Bereaved by Suicide: A Population-based Longitudinal Study
A Erlangsen1; B Runeson2; J Bolton3; H Wilcox4; JL Forman5; J Krogh1; K Shear4; M Nordentoft1; Y Conwell7
1Mental Health Centre Copenhagen, DENMARK; 2Psychiatry, Karolinska, SWEDEN; 3University of Manitoba, CANADA; 4Johns Hopkins School of Public Health, UNITED STATES; 5University of Copenhagen, DENMARK; 6Columbia University School of Social Work, UNITED STATES; 7University of Rochester Medical Center, UNITED STATES

15:00 "IS THERE REALLY NO ONE LIKE ME HERE?!!!": Young Suicide Mourners’ Support Seeking on The Internet
A Silvén Hagström
Dep Social Work, ISV, Linköping University, SWEDEN

15:15 Using Survivor Accounts to Understand Suicidal Behaviour by Offenders in Community Settings
J-M Mackenzie; J. Borrill
University of Westminster, UNITED KINGDOM
15:30 The Experience of a Group Therapy Program for Adolescent Suicide Survivors: What Works? PS3.05-5
M. Leonard¹; V. Hamel²
¹Centre for research and intervention on suicide and euthanasia (CRISE) / UQAM, CANADA; ²Ressource Regionale Suicide du CSSS de Laval / CRISE, CANADA

15:45 Supporting Suicide Survivors Online: Possibilities, Pitfalls and Best Practice PS3.05-6
K Krysinska¹; K Andriessen²
¹KU Leuven - University of Leuven, BELGIUM; ²Tele-Onthaal (Tele-Help) Federation & KU Leuven - University of Leuven, BELGIUM

14:30 - 16:00 Gaio
PS3.6 WORKSHOP: THE LANGUAGE OF SUICIDOLOGY
Chair: Morton Silverman, UNITED STATES
14:30 A Brief Overview and History of the Nomenclature Conundrum PS3.06-1
M Silverman¹; D De Leo⁴; L Berman³
¹Suicide Prevention Resource Center, UNITED STATES; ³Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA; ²IASP, UNITED STATES

15:00 The Many Tongues of Suicide Nomenclature: Labeling Suicidal Behaviors PS3.06-2
L Berman
IASP, UNITED STATES

15:30 A Standardised, Culture-sensitive, Internationally Applicable Nomenclature for Suicide Ideation and Behaviors: A Dream yet to Come True PS3.06-3
D De Leo
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

14:30 - 16:00 Base 1
PS3.7 REGIONAL SYMPOSIUM EUROPE
Chair: Marco Sarchiapone, ITALY & Erlend Mork, NORWAY
14:30 Preventing Suicide through Internet Based Actions: The SUPREME European Project PS3.07-1
M Sarchiapone²; G Hadlaczyk²; S Hokby²; D Wasserman²; V Carli²
²University of Molise, ITALY; ²Karolinska Institutet, SWEDEN

15:00 Risk Behaviours and Psychiatric Symptoms among Adolescents in European Schools PS3.07-2
V Carli⁵; M Sarchiapone²; C Wasserman²; C Hoven³; D Wasserman³
⁵Karolinska Institutet, SWEDEN; ³University of Molise, ITALY; ²Columbia University, UNITED STATES

15:30 Reducing Truancy by Improving Mental Health and Preventing Suicidality among Adolescents: The European Perspective in the WE-STAY Project PS3.07-3
M Sisask; A Varnik; P Varnik
Estonian-Swedish Mental Health and Suicidology Institute (ERSI); Tallinn University, ESTONIA
### PS3.8 SUBSTANCE USE AND SUICIDAL BEHAVIOUR
Chair: Ingeborg Rossow, NORWAY

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<th>Time</th>
<th>Title</th>
<th>Presenter</th>
<th>Institution</th>
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<tbody>
<tr>
<td>14:30</td>
<td>Substance Abuse and Suicide Risk among Adolescents</td>
<td>M Pompili</td>
<td>Sapienza University of Rome, Italy</td>
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<tr>
<td>14:50</td>
<td>Risk Factors for Suicidal Behaviour in Substance Abusers</td>
<td>A Roy</td>
<td>VA Hospital, UNITED STATES</td>
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<tr>
<td>15:10</td>
<td>Substance Use Disorders, Addictions Treatment and Suicide Risk</td>
<td>M Ilgen</td>
<td>Dept. of Veterans Affairs &amp; University of Michigan, UNITED STATES</td>
</tr>
</tbody>
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### PS3.9 REGIONAL SYMPOSIUM AFRICA, ESTABLISHING SUICIDE PREVENTION SERVICES AND RESEARCH IN AFRICA, EXPERIENCES AND CHALLENGES
Chair: Lourens Schlebusch, Cithra Bheamadu, SOUTH AFRICA & Eugene Kinyanda, UGANDA

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<th>Time</th>
<th>Title</th>
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<tr>
<td>14:30</td>
<td>Developing Suicide Prevention Services and Research in Ghana: Experiences and Challenges</td>
<td>J Osafo¹; C Akotia¹; H Hjelmeland²; BL Knizek³</td>
<td>¹University of Ghana, GHANA; ²Norwegian University of Science and Technology, NORWAY; ³Sør-Trøndelag University College, NORWAY</td>
</tr>
<tr>
<td>15:00</td>
<td>Suicide Research in Uganda: Development and Challenges</td>
<td>E Kinyanda¹; J Mugisha²; D Kizza²; H Hjelmeland²; BL Knizek⁴</td>
<td>¹MRC/UVRI Uganda Research Unit on AIDS/Senior EDCTP Fellowship, South Africa, UGANDA; ²Butabika National Psychiatric Referral Hospital, UGANDA; ³Norwegian University of Science and Technology, NORWAY; ⁴Sør-Trøndelag University College, NORWAY</td>
</tr>
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</table>
### PS3.10 "DEFENSE AGAINST SUICIDE" - WORLDWIDE MILITARY SUICIDE PREVENTION AND CONTINUUM OF CARE EFFORTS

**Chair:** Carl Castro, UNITED STATES

<table>
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<th>Time</th>
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<th>Institution(s)</th>
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<tbody>
<tr>
<td>14:30</td>
<td>Research Continuum Approach</td>
<td>CC Castro</td>
<td>US Army, Dir. Military Operational Medicine Research Program, UNITED STATES</td>
</tr>
<tr>
<td>14:45</td>
<td>An Investigation of the Interactive Effects of the Acquired Capability for Suicide and Acute Agitation on Suicidality in a Military Sample</td>
<td>T Joiner</td>
<td>Florida State University, UNITED STATES</td>
</tr>
<tr>
<td>15:00</td>
<td>Toward a Gold Standard for Suicide Risk Assessment for Military Personnel</td>
<td>P Gutierrez</td>
<td>Denver VA Medical Center, VISN 19 MIRECC, UNITED STATES</td>
</tr>
<tr>
<td>15:15</td>
<td>Operation Worth Living Project: A Randomized Clinical Trial of CAMS vs. Enhanced Care as usual with Suicidal Soldiers</td>
<td>D Jobes</td>
<td>The Catholic University of America, UNITED STATES</td>
</tr>
<tr>
<td>15:30</td>
<td>Study to Examine Psychological Processes in Suicidal Ideation and Behaviour (STEPPS)</td>
<td>R O'Connor</td>
<td>University of Glasgow, UNITED KINGDOM</td>
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### PS3.11 GP AND COMMUNITY BASED APPROACHES

**Chair:** Murad Khan, PAKISTAN & Jayne Cooper, UNITED KINGDOM

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<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tr>
<td>14:30</td>
<td>Challenges of Managing Deliberate Self-harm in Developing Countries' Settings: The Pakistan Experience</td>
<td>MM Khan</td>
<td>Aga Khan University, PAKISTAN</td>
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<tr>
<td>14:45</td>
<td>The Efficacy of Community-based Interventions for Suicide Prevention - A Pilot Project in Hong Kong</td>
<td>F Law¹; P.S.F. Yip²; C Lai²; S-l Chow²; RCL Kwok¹; P.W.C. Wong¹; S-S Chang²</td>
<td>¹Dep. Social Work and Social Administration, The University of Hong Kong, HONG KONG, CHINA PR; ²Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR</td>
</tr>
</tbody>
</table>
15:00 Case-Based Analysis of Suicide Attempts in Last Twelve Months of Life and Help-Seeking at the General Practitioner
S Mallon1; K Galway2; L Hughes3; J Rondon4; G Leavey5
1NIAMH, UNITED KINGDOM; 2Queen’s University of Belfast, UNITED KINGDOM;
3University of Manchester, UNITED KINGDOM

15:15 A GPs Conundrum: A Qualitative Study Exploring GP-suicidal Patient Interactions and Treatment Prior to Suicide
P Saini1; K Chantler2; N Kapur3
1University of Liverpool, UNITED KINGDOM; 2University of Central Lancashire, UNITED KINGDOM;
3University of Manchester, UNITED KINGDOM

15:30 Exploring the 'Triangle of Care' in Relation to Suicidal Individuals: A Qualitative Study
G.J. Owen1; O Benson2; S Gibson2; Z Boden3; G.V. Owens4
1University of Exeter Medical School, UNITED KINGDOM; 2SANE Mental Health Charity, UNITED KINGDOM

15:45 Developing a Contact-based Intervention: A Qualitative Approach
J. Cooper1; C Hunter1; A. Owen-Smith2; D. Gunnell2; J. Donovan2; K Hawton1; N Kapur1
1University of Manchester, UNITED KINGDOM; 2University of Bristol, UNITED KINGDOM;
3University of Oxford, UNITED KINGDOM

14:30 - 16:00 Olympia

PS3.12 ASSESSMENT OF SUICIDE RISK
Chair: Celine Larkin, IRELAND & John Olav Roaldset, NORWAY

14:30 Risk Factors for Repetition of Self-Harm: A Systematic Review of Prospective Hospital-Based Studies
C. Larkin1; Z Di Blasi2; E Arensman1
1National Suicide Research Foundation, IRELAND; 2School of Applied Psychology, IRELAND

14:45 A Risk Score for Predicting Deliberate Self-Harm
MJ Spittal; DM Studdert; J Pirkis
The University of Melbourne, AUSTRALIA

15:00 Characteristics of Repeat Self-harmers Admitted to a Psychiatric Emergency Department
JO Roaldset1; OM Linaker2; S Bjerkly3
1Psykiatrisk avdeling Ålesund sjukehus, Møre & Romsdal Health Trust, NORWAY;
2St Olavs Hospital, NORWAY; 3Molde University College, NORWAY

15:15 The Development of a Population-level Clinical Tool for Emergency Department Self-harm Repetition and Suicide: The ReACT Self-Harm Rule
S Steeg1; N Kapur1; R Webb1; E Applegate1; S Stewart1; K Hawton1; H. Bergen1; K. Waters1; J. Cooper1
1University of Manchester, UNITED KINGDOM; 2University of Chester, UNITED KINGDOM;
3University of Oxford, UNITED KINGDOM; 4Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM

15:30 Nonlinear Dynamics in Suicidology. First Steps to an Early Warning System
M Plöderl1; G Schiepek1; B Mishara2; C Fartacek1; R Fartacek1; K Kralovec1; E-M Pichler1; R Goldney1
1Paracelsus Private Medical University, AUSTRIA; 2Université Québec à Montréal, CANADA;
3University of Adelaide, AUSTRALIA
15:45 Classification Algorithm for the Determination of Suicide Attempt and Suicide (CAD-SAS): A Tool for Reliable Assessment of Suicidal Behaviours
I.E. Fedyszyn; M.G. Harris; J Robinson; S.J. Paxton
1Melbourne School of Population and Global Health, The University of Melbourne, AUSTRALIA; 2School of Population Health, The University of Queensland, AUSTRALIA; 3Orygen Youth Health Research Centre, AUSTRALIA; 4School of Psychological Science, La Trobe University, AUSTRALIA

16:00 - 16:30 COFFEE/TEA BREAK

16:00 - 16:30 Poster Area

POSTER WALK
Chair: Keith Hawton, UNITED KINGDOM

16:30 - 18:00 Kunst

PS3.13 NEUROBIOLOGICAL ASPECTS OF SUICIDAL BEHAVIOUR
Chair: Vladeta Ajdacic-Gross, SWITZERLAND & Jørgen Bramness, NORWAY

16:30 Are there Specific Neural Correlates of Suicidal Mental Pain? PS3.13-1
A Habenstein; A. Federspiel; K. Michel
University Hospital of Psychiatry, Bern, SWITZERLAND

16:45 Variations in Reelin Gene and Completed Suicide PS3.13-2
AV Paska; M Grgic; T Zupanc; R Komel
University of Ljubljana, Faculty of Medicine, SLOVENIA

17:00 Neurobiological Dysfunction behind the Psychological Readiness for Suicide diagnosed by a Test with 97% Sensitivity and 98% Specificity for Suicide PS3.13-3
L-H Thorell
Linköping University and Emotra AB Sweden, SWEDEN

17:15 Study on the Association between Gene Polymorphism of COMT and Rural Attempted Suicide in China PS3.13-4
C-X Jia; X Hu
Shandong University School of Public Health, CHINA

17:30 Beyond Regular Weekly Cycles in Suicide PS3.13-5
V Ajdacic-Gross; U. S. Tran; M. Voracek
1Psychiatric University Hospital Zurich, SWITZERLAND; 2University of Vienna, AUSTRIA

17:45 Seasonal Variation in the Frequencies of Suicides, does it Vary by Gender, Age, Latitude, Method or Time? A Registry Based Study from Norway 1969-2007 PS3.13-6
J Bramness; F.A. Walby; G Morken; J Røislien
1University of Oslo, NORWAY; 2National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 3St Olav Hospital, NORWAY
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<th>Time</th>
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<th>Chair/Author Details</th>
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<tr>
<td>16:30</td>
<td><strong>Film</strong></td>
<td>PS3.14 LEGAL STATUS OF SUICIDE AROUND THE WORLD</td>
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<td>WORKING TOWARDS DECRIMINALIZATION</td>
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<td>Chair: Brian Mishara, CANADA</td>
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<tr>
<td>16:30</td>
<td>The Legal Status of Suicide and Assisting Suicide around the World</td>
<td>PS3.14-1</td>
<td>B Mishara, Centre for Research and Intervention on Suicide and Euthanasia, CANADA</td>
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<tr>
<td>16:50</td>
<td>Legal Status of Suicides &amp; DSH in WHO</td>
<td>PS3.14-2</td>
<td>Eastern Mediterranean Region (EMR) Member States</td>
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<td></td>
<td></td>
<td>MM Khan(^1); K Saeed(^2)</td>
<td>1Aga Khan University, PAKISTAN; 2WHO Regional Office, Cairo, EGYPT</td>
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<td>17:10</td>
<td>Decriminalizing Suicide around the World</td>
<td>PS3.14-3</td>
<td>L Vijayakumar, Voluntary Health Services, INDIA</td>
</tr>
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<td>17:30</td>
<td>Stigma: A Major Barrier for Suicide Prevention</td>
<td>PS3.14-4</td>
<td>P.S.F. YIP, The University of Hong Kong, HONG KONG, CHINA PR</td>
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<td>16:30</td>
<td><strong>Olympia</strong></td>
<td>PS3.15 SELF-HARM IN A HOSPITAL TREATMENT CONTEXT</td>
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<td>Chair: Ping Qin, NORWAY &amp; Eve Griffin, IRELAND</td>
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<td>16:30</td>
<td>Hospital Registration of Self-harm and Suicide Attempt: Norwegian Observation</td>
<td>PS3.15-1</td>
<td>P Qin; EA Fadum; L Mehlum, National Centre for Suicide Research and Prevention, University of Oslo, NORWAY</td>
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<td>16:45</td>
<td>Severity of Hospital-treated Self-cutting and Risk of Future Self-harm: A National Registry Study</td>
<td>PS3.15-2</td>
<td>C. Larkin(^1); P. Corcoran(^1); IJ Perry(^2); E Arensman(^1)</td>
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<td>1National Suicide Research Foundation, IRELAND; 2University College Cork, IRELAND</td>
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<tr>
<td>17:00</td>
<td>Risk of Repetition among Hospital Treated Patients with Medicinal Poisoning 2008-2011</td>
<td>PS3.15-3</td>
<td>EA Fadum(^1); P Qin(^1); B Stanley(^2); L Mehlum(^1)</td>
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<td>1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2Columbia University, UNITED STATES</td>
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<td>17:15</td>
<td>Characteristics of Hospital-treated Intentional Drug Overdose in Ireland: A Comparison of North and South</td>
<td>PS3.15-4</td>
<td>E Griffin(^1); P. Corcoran(^1); L. Cassidy(^2); A. O’Carroll(^1); B. Bonner(^2)</td>
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<td>1National Suicide Research Foundation, IRELAND; 2Public Health Agency, Derry, UNITED KINGDOM</td>
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</tbody>
</table>
**Risk Factors for Deliberate Self-Harm in Patients Presenting to the Emergency Departments - A Multi-centre Case Control Study from Karachi, Pakistan**

M. Shahid; R. Iqbal; M. Khan; M. Zaman; U. Shamsi; A. Khan; R. Nakeer; B. Afzal; S. Tauseeq

1 The Indus Hospital, PAKISTAN; 2Aga Khan University, PAKISTAN; 3Sindh Jinnah Medical University, PAKISTAN; 4Dow University of Health Sciences, PAKISTAN; 5Baqai Medical University, PAKISTAN

**The Actual Situation of Suicidal Patients admitted to the Emergency Unit of Fukuoka University Hospital**

K. Harada; N. Eto; K. Kira; R. Nishimura

Fukuoka University, JAPAN

**The Protective Factors against Suicide among Chinese Rural Young Men**

J. Zhang

State University of New York, Buffalo, UNITED STATES

**Gender Differences in a Dialogue-Based Suicide Intervention Treatment at Pieta House and the Consequences for Therapeutic Treatment Models**

P. Surgenor

Pieta House, IRELAND

**The Role of Gender in the Process of Bereavement after Suicide of Someone Close**

P. Ozbic; O. Grad

University Psychiatric Hospital, Ljubljana, Slovenia, SLOVENIA

**“Many Young Men of Twenty Said Goodbye”: Ageing Towards 21 as a Risk Factor for Youth Suicide in UK and Ireland**

K. Malone; L. Quinlivan; T. Grant; C. Kelleher

University College Dublin, IRELAND

**Looking Good and Feeling Better: Are Australian Women’s Perceptions of Models Linked to their Self-destructive Behaviours?**

K. McKay

CRN Mental Health and Well-Being in Rural and Regional Communities, AUSTRALIA

**Collaboration between Survivors and Professionals**

J. Peters

Survivors of Bereavement by Suicide, UNITED KINGDOM
16:45  The Role of Formal and Informal Help-seeking in Developing Resilience for those Bereaved by Suicide  
S Mallon  
NIAMH, UNITED KINGDOM

17:00  "Forever Memorialised": An Evaluation of Participants’ Perspectives of the Lifekeeper Memory Quilt Project  
A Staines¹; K. Peters²  
¹Salvation Army Suicide Prevention - Bereavement Support Services, AUSTRALIA; ²University of Western Sydney, AUSTRALIA

17:15  New Guidelines for Creating and Sustaining a Suicide Bereavement Support Program  
M Koenig  
UNITED STATES

17:30  StandBy - An Effective Response to Suicide Bereavement  
J.M. Fisher  
StandBy Response Service, United Synergies Ltd, AUSTRALIA

17:45  Where are the Gaps in Provision of Support? How do we fill these Gaps?  
J Peters  
Survivors of Bereavement by Suicide, UNITED KINGDOM

16:30 - 18:00  Room 303

PS3.18 SUICIDAL BEHAVIOUR IN DIVERSE CONTEXTS (B)  
Chair: Teresita Morfin, MEXICO & Martin Plöderl, AUSTRIA

16:30  The Neglected Importance of the Affects of Suicide and Self Harm: A Re-consideration of their Role in Theory and Clinical Practice  
J Brophy  
IAS, IRELAND

16:45  Generational Differences in the Expression of Emotions Related to Suicide and Suicide Attempts  
T. Morfin¹; L.M. Sanchez Loyo²  
¹ITESO University, MEXICO; ²Guadalajara University, MEXICO

17:00  Suicide and Other Unnatural Deaths in a National Cohort of People Diagnosed with Diabetes  
R Webb¹; P Lichtenstein²; M Dahlin¹; N Kapur¹; J Ludvigsson³; B Runeson³  
¹University of Manchester, UNITED KINGDOM; ²Karolinska Institutet, SWEDEN

17:15  The Suicide Closet: Strategies for Suicide Prevention in LGBTI Communities  
B Taylor  
National LGBTI Health Alliance, AUSTRALIA

17:30  Explaining the Suicide Risk of Sexual Minority Individuals by Contrasting the Minority Stress Model with Suicide Models  
M Plöderl¹; M Sellmeier²; C Fartacek¹; E-M Pichler¹; K Kralovec¹; R Fartacek²  
¹Paracelsus Medical University / Suicide Prevention Research Program, AUSTRIA; ²University of Regensburg, GERMANY
17:45 Suicide Prevention at Schools. “*Contigo*”  
JC Santos; R Simões; M Erse; J Façanha; L Marques  
1Coimbra Nursing School, PORTUGAL; 2CSRSI, PORTUGAL; 3CHUC, PORTUGAL; 4ARSC, PORTUGAL

16:30 - 18:00 Gaio

**PS3.19 PATIENT SAFETY AND SUICIDE PREVENTION**  
Chair: Anna Baran, SWEDEN & Fredrik Walby, NORWAY

16:30 Can early Follow-up after Deliberate Self-harm reduce Repetition?  
A Prospective Multicenter Study of 325 Patients  
K Bilén; H Pettersson; B Owe-Larsson; K Ekdahl; C Ottosson; M Castrén; S Ponzer  
1Department of clinical science and education, Södersjukhuset, Karolinska Institutet, SWEDEN;  
2Department of clinical neuroscience, Karolinska Institutet, SWEDEN

16:45 Assessment of Suicidal Patients by Emergency Psychiatry,  
Factors Determining Voluntary and Involuntary Admission  
R de Winter; M de Groot  
1Parnassia Groep, NETHERLANDS; 2VU Amsterdam, NETHERLANDS

17:00 Prevention of Repeated Suicide Attempts  
- 5 Year Follow-up after Active Outreach Intervention  
R R. Thomesen; M. Hvid; A.G. Wang  
Centre of Suicide Prevention, Copenhagen University Hospital Amager, DENMARK

17:15 Systematic Intervention to Prevent Suicide on  
the Emergency Ward : Pilot Study before RCT  
L Michaud; M Andronicos; B Langer; S Brovelli; Y Dorogi; F Stiefel; C Bonsack  
Centre Hospitalier Universitaire Vaudois, SWITZERLAND

17:30 Suicide Prevention at Inpatient Psychiatry Units;  
A National Patient Safety Initiative  
F.A. Walby; M Brudvik; E Ness; R Sørensen  
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY;  
2Norwegian Knowledge Centre for the Health Services, NORWAY

17:45 Analysis of Lex Maria Suicides in Healthcare in Södermanland,  
in Sweden (2006-2007) with Help of Kilimanjaro Checklist  
A Baran  
Mental Health Clinic, Nyköping, SWEDEN

16:30 - 18:00 Munch 1

**PS3.20 IMPACT OF MEANS RESTRICTION ON SUICIDE RATES**  
Chair: Helena Rådbo, SWEDEN & Latha Nrugham, NORWAY

16:30 Firearms - Means Restriction as Suicide Prevention Intervention in Norway  
L Nrugham; L My Diep; L Mehlum  
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY
16:45

Deliberate Self-Poisoning and Availability of Prescribed Drugs before and after the Episode: A Longitudinal Study

B Gjelsvik; F. Heyerdahl; D. Lunn; K Hawton

University of Oxford Department of Psychiatry, UNITED KINGDOM; Oslo University Hospital, Department of Acute Medicine, NORWAY; University of Oxford Department of Statistics, UNITED KINGDOM; University of Oxford Department of Psychiatry, Centre for Suicide Research, UNITED KINGDOM

17:00

Patterns of Suicide and Other Trespassing Fatalities on State-Owned Railways in Greater Stockholm; Implications for Prevention

H Rådbo; R Andersson

Karlstad University, SWEDEN

17:15

The Impact of Alcohol Prohibition in a Remote Aboriginal Community in Canada

M Jong

Memorial University, CANADA

17:30

Suicide by Firearms Decrease 25% after Gun Control Law in Fortaleza, the 5th Biggest Brazilian City

F Souza; S C G Medeiros; N.R.P Sousa; AC Almeida; JM Aquino Neto; VHD Silva; HA Pinheiro; T.P. Souza

Universidade Federal do Ceará, BRAZIL

17:45

Train Suicide in The Netherlands: The Impact of Railway Traffic Intensity and National Suicide Mortality

CAJ Van Houwelingen; D.G.M. Beersma; A Kerkhof; B Hoogcarspel

Integrated Mental Health Services Eindhoven (GGzE), NETHERLANDS; Rijksuniversiteit Groningen, Research Unit of Chronobiology, NETHERLANDS; Vrije Universiteit Amsterdam, Department of Clinical Psychology, EMGO+ Institute, NETHERLANDS; Program suicide prevention, ProRail railway infrastructure manager, NETHERLANDS

16:30 - 18:00  Oslofjord

PS3.21 DEVELOPING NATIONAL SUICIDE PREVENTION STRATEGIES (B)

Chair: Lourens Schlebusch, SOUTH AFRICA

16:30

Australia’s Suicide Call Back Service: Delivering Professional Telephone and Online Counseling Services to the Nation

A Miller; S. Rosenthal; G. Thomson

On the Line, AUSTRALIA

16:50

Preventing Suicide in a Developing Society

L Schlebusch

University of KwaZulu Natal/St Joseph’s, Life Entabeni Hospital, SOUTH AFRICA

17:10

Australia’s ATAPS Suicide Support Line: Enhancing Continuity of Care through Strong Alliance between Face-to-Face and Remote Counselling Services

G. Thomson; A Miller; S. Rosenthal

On the Line, AUSTRALIA
17:30  Scenario of Suicide and its Preventive Strategies in Bangladesh  
MMJ Uddin; HU Ahmed; NM Khan; MA Hamid; MF Alam; MG Rabbani  
National Institute of Mental Health, BANGLADESH

16:30 - 18:00 Gamlebyen

**PS3.22 SUICIDAL BEHAVIOUR AND PREVENTION IN THE WORK PLACE**  
Chair: Merike Sisask, ESTONIA & Trine Madsen, DENMARK

16:30  MATES In Construction - Industry Based Workplace Suicide Prevention in the Australian Building and Construction Industry  
J Gullestrup  
MATES in Construction Ltd, AUSTRALIA

16:45  The Impact of Suicidal Behaviour on Prison Staff: Examining Resilience, Working Relationships, Attitudes to Suicide and Emotional Labour  
K Slade  
Nottingham Trent University, UNITED KINGDOM

17:00  Returning to Work Following a Suicide Attempt: An Exploratory Study  
F Roy  
Center for Research and Intervention on Suicide and Euthanasia - University of Quebec in Montreal, CANADA

17:15  Work Stress Assessment in French Police Force  
C. M. Poissonnet; F. Bonoli  
Hopital Des Gardiens De La Paix - Prefecture De Police, FRANCE

17:30  Trajectories of Post-traumatic Stress Disorder (PTSD) Predict Suicidal Ideation Three Years after Deployment to a Combat Zone  
T Madsen1; K-I Karstoft2; SB Andersen1; M Bertelsen1  
1Research and Knowledge Center, The Danish Veteran Center, DENMARK; 2National Center of Psychotraumatology, University of Southern Denmark, DENMARK

17:45  Current Efforts of the NATO Research Task Group on Military Suicide  
M Sisask  
Estonian-Swedish Mental Health and Suicidology Institute (ERSI); Tallinn University, ESTONIA

16:30 - 18:00 Room 301

**PS3.23 STUDIES OF CONTINUITY OF CARE APPROACHES**  
Chair: Nav Kapur, UNITED KINGDOM & Johan Siqveland, NORWAY

16:30  Audit of the use of Landline & Mobile Answering & Messaging Machines in Mental Health Services  
M Kane  
Public Health Agency, UNITED KINGDOM
16:45 Chain of Care after Suicide Attempt: Feasibility of a Collaboration Model Involving a University Hospital and Community Mental Health Care J Siqveland¹; T Ruud¹; G Schjelderup²
¹Akershus University Hospital, NORWAY; ²Oslo and Akershus University College of Applied Sciences, NORWAY

17:00 Telephone Management Programme for Patients Discharged from an Emergency Department after a Suicide Attempt in a Spanish Population: 5-year Follow-up
AI Cebria¹; I. Perez-Sola¹; P. Cuipers²; A Kerkhof³; I. Parra¹; A. Escayola¹; G. García–Parés¹; J.C. Oliva¹; J. Punti¹; D. López¹; V. Valles¹; M. Pamias¹; U Hegerl⁵; V. Perez-Sola⁶; D.J. Palao¹
¹Institut Universitari Parc Taulí—Universitat Autonoma de Barcelona, SPAIN; ²Vrije Universiteit Amsterdam, NETHERLANDS; ³VU University of Amsterdam, NETHERLANDS; ⁴Corporacio Sanitaria i Universitaria Parc Taulí de Sabadell, SPAIN; ⁵Hospital Clinic Barcelona, SPAIN; ⁶Consorci Sanitari de Terrassa, SPAIN; ⁷Universitätsklinikum Leipzig AöR, University of Leipzig, GERMANY; ⁸Universitat Autonoma de Barcelona, SPAIN

17:15 The Variation of Self-harm Service Delivery in the UK: An Observational Study examining Hospital Management, Service Provision and Temporal Trends
S Steeg¹; J. Cooper¹; O. Bennewith²; M. Lowe¹; D. Gunnell³; A. House¹; N Kapur¹
¹University of Manchester, UNITED KINGDOM; ²University of Bristol, UNITED KINGDOM; ³University of Leeds, UNITED KINGDOM

17:30 Does Clinical Management Improve Patient Outcomes Following Self-harm? Results from the Multicentre Study of Self-harm in England
N Kapur¹; S Steeg¹; R Webb¹; M. Haigh¹; H. Bergen³; K Hawthorn¹; J. Ness³; K. Waters³; J. Cooper¹
¹University of Manchester, UNITED KINGDOM; ²University of Oxford, UNITED KINGDOM; ³Royal Derby Hospital, UNITED KINGDOM; ⁴Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM

17:45 An Evaluation Study of a Universal, Internet-based Mental Health Enhancement Programme for Adolescents with Parental Involvement in Hong Kong
SY Lai¹; M.K.Y. Chan¹; W.K.S. So¹; P.W.C. Wong²; F Law²; P.S.F. Yip¹
¹The Hong Kong Jockey Club Centre for Suicide Research & Prevention, The University of Hong Kong, HONG KONG, CHINA PR; ²Dep. of Social Work and Social Administration, The University of Hong Kong, HONG KONG, CHINA PR

16:30 - 18:00 Base 1

PS3.24 TRAUMA AND SUICIDAL BEHAVIOUR
Chair: Gwendolyn Portzky, BELGIUM & Eugene Kinyanda, UGANDA

16:30 The Relevance of Shneidman’s Theory of Suicide in Conflict Afflicted Northern Uganda
E Kinyanda¹; D Kizza²; H Hjelmeland³; BL Knizek¹; J Mugisha³
¹MRC/UVRI Uganda Research Unit on AIDS, UGANDA; ²Butabika National Psychiatric Referral hospital, Kampala, UGANDA; ³Norwegian University of Science & Technology, NORWAY; ⁴Faculty of Nursing, Sør-Trøndelag University College, NORWAY

16:45 Psychotic Symptoms in Severe Depression – A Qualitative Study about Suicidality
K.J. Fredriksen¹; H.K. Schoeyen¹; JO Johannessen¹; F.A. Walby¹; M.A. Schaufel³
¹Stavanger University Hospital, Division of Psychiatry, NORWAY; ²National Centre for Suicide Research and Prevention; University of Oslo, NORWAY; ³Haukeland University Hospital, Department of Heart Disease, NORWAY
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<tr>
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<tr>
<td>17:00</td>
<td>Traumatic Life Events and Suicidal Behavior</td>
<td>R Fjeldsted</td>
<td>Psychiatry West, Region Zealand/ Institute of Psychology, University of Copenhagen, DENMARK</td>
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<td>17:15</td>
<td>The Relationship between Suicidal Behaviour, Exposure to Trauma and</td>
<td>J Bantjes1; T. Gower2; H. Steel3; A. Kagee3</td>
<td>Stellenbosch University, SOUTH AFRICA; University of Stellenbosch, SOUTH AFRICA; Stellenbosch UNIVERSITY, SOUTH AFRICA</td>
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<td>Symptoms of Depression and Anxiety among South African University Students</td>
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<td>17:30</td>
<td>Traumatic Life-events and Social Support in Adolescence: A National Study of</td>
<td>M Christoffersen</td>
<td>SFI - The National centre for Social Research, DENMARK</td>
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<td>PTSD, Low Self-esteem And Suicidal Behavior In Young Adults</td>
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<td>17:45</td>
<td>Associations between Eating Disorder Subtype and the Risk of Attempted Suicide</td>
<td>G Portzky1; M. Vervaet2; C van Heeringen3</td>
<td>Unit for Suicide Research - Ghent University, BELGIUM; Department of Psychiatry and Medical Psychology - Ghent University, BELGIUM</td>
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**19:00** Sonja Henie Ballroom

CONFERENCE DINNER
# SATURDAY, SEPTEMBER 28

## 08:00 - 12:00   REGISTRATION

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<tr>
<td>09:00</td>
<td><strong>PLENARY SESSION 7</strong>&lt;br&gt;Chair: Ella Arensman, IRELAND &amp; Lars Mehlum, NORWAY</td>
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<td>09:00</td>
<td><em>Reducing Global Suicides - Innovations and Interventions</em>&lt;br&gt;L. Vijayakumar&lt;br&gt;Voluntary Health Services, INDIA</td>
<td>PL7-1</td>
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<td>09:30</td>
<td><em>Innovative Suicide Prevention - Next Steps</em>&lt;br&gt;D. De Leo&lt;br&gt;Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA</td>
<td>PL7-2</td>
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<td>09:45</td>
<td><em>Innovative Suicide Prevention - Next Steps</em>&lt;br&gt;B. Mishara&lt;br&gt;Centre for Research and Intervention on Suicide and Euthanasia, CANADA</td>
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<td>10:00</td>
<td><strong>PANEL DISCUSSION</strong></td>
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<td><strong>COFFEE/TEA BREAK</strong></td>
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<td>11:00</td>
<td><strong>CLOSING CEREMONY</strong></td>
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SOCIAL AND CULTURAL PROGRAMME

OPENING CEREMONY
is on Tuesday 24 September, 16.00 - 17.30 at Radisson Blu Plaza Hotel (Sonja Henie Ballroom).
Official opening of the conference with welcome speeches, opening lecture by Siri Hustvedt, and music.

WELCOME RECEPTION
OSLO CITY HALL
Tuesday 24 September, 19.00 - 20.30 at Oslo City Hall.
The City of Oslo welcomes all delegates to a reception at City Hall.

CONCERT IN THE OLD UNIVERSITY AULA
Wednesday 25 September 19.00 - 20.00 in Old Oslo University Aula, Karl Johans Gate 47.
A classical concert featuring music by Norwegian composers such as Edvard Grieg and Ole Bull will be offered in the historic Aula of the University of Oslo. The Aula was beautifully decorated with large murals by the renowned Norwegian expressionist painter Edvard Munch in the years 1909-1916. Please note that due to limited seating capacity, registration for this concert is mandatory, but the event is included in the registration fee.

MODERN ART TOUR
Thursday, 26 September 18.30 - 20.30.
All delegates will have the opportunity to spend an evening focusing on modern art. We will visit one of Oslo’s modern art museums and delegates will also have the opportunity to familiarize themselves with some of Oslo’s newest exciting architecture. This event costs NOK 150 per person. Delegates and accompanying persons must register in advance for the tour.

DINNER WITH THE LOCALS
For those who wish to join in for dinner at a restaurant with some of the locals among the congress delegates, Thursday 26 September at 19.30 is set aside. Please sign up for this at the Registration Desk at the latest within two hours before the event.

MINDFULNESS PRACTICE AT THE OPERA ROOFTOP
Morning mindfulness is offered on Thursday 26 and Friday 27 September.
Join us for mindful minutes, practiced in surroundings with natural sounds and visual input, as in life itself. Instructors will form groups and lead us through exercises. Mindfulness practice is free of charge, but due to practical issues there will be a limitation regarding number of participants.

CONFERENCE DINNER
Friday, 27 September 19.00 and into the late hours at Radisson Blu Plaza Hotel (Sonja Henie Ballroom).
Conference dinner with live music and dancing at the Sonja Henie Ballroom of the IASP Congress’ hotel. There is a fee of NOK 650 per person for this event which must be paid with the conference registration.

CLOSING CEREMONY
The congress closes Saturday, 28 September 11.00 - 12.00 at Radisson Blu Plaza Hotel with a farewell ceremony with music.
ABSTRACTS
Complicated grief (CG) is an intense and long-lasting form of grief that takes over a person’s life. It is natural to experience acute grief after someone close dies, but complicated grief is different. Complicated grief is a form of grief that takes hold of a person’s mind and won’t let go. People with complicated grief often say that they feel “stuck.” Many of those who have been bereaved through suicide will recognize some or all of the typical features of complicated grief. The term “complicated” refers to factors that interfere with the natural healing process. These factors might be related to characteristics of the bereaved person, to the nature of the relationship with the deceased person, the circumstances of the death, or to things that occurred after the death. People with CG know their loved one is gone, but they still can’t believe it. They say that time is moving on but they are not. They often have strong feelings of yearning or longing for the person who died that don’t seem to lessen as time goes on. Thoughts, memories, or images of the deceased person frequently fill their mind, capturing their attention. They might have strong feelings of bitterness or anger related to the death. They find it hard to imagine that life without the deceased person has purpose or meaning. It can seem like joy and satisfaction are gone forever.

In this workshop the goals are to a) to present a model of grief and mourning to guide in recognition and treatment of CG, b) to show how this model was used in constructing an efficacy-tested treatment for CG and c) to explain, demonstrate and practice treatment techniques used in CGT. In recognizing and understanding of CG, basic assumptions about grief and mourning will be discussed and symptoms of complicated grief and how they arise will be highlighted. Similarities and differences between CG, major depression and PTSD will also be discussed. How the principles in CGT was developed based on the model of grief and mourning and what strategies and procedures are used to implement the principles and the structure of the treatment will then be presented along with key procedures such as grief monitoring, personal goals work, revisiting exercises and imaginal conversation.
PRE2-1
Mindfulness Based Cognitive Therapy (MBCT) in Treatment of Suicidal Depression
Crane, C; Gjelsvik, B
Oxford Mindfulness Centre, University of Oxford, UNITED KINGDOM

Clinical depression is common and debilitating, and carries an increased risk of suicide. There is evidence that mindfulness-based cognitive therapy, which combines psychological education and meditation, prevents new episodes of depression.

In this workshop the goals are:
* To present a theoretical introduction to Mindfulness Based Cognitive Therapy (MBCT)
* To present the cognitive science background for its applications to recurrent depression treatment
* To explain, demonstrate and practice treatment techniques used in treatment of patients with recurrent depression and a history of suicidality

A combination of lectures and exercises will be used incorporating a significant experiential component and the workshop participants will be guided through a number of the mindfulness practices taught in MBCT. Finally, outcomes of a recently completed trial comparing MBCT to both psychological education and usual care for relapse prevention in individuals with recurrent depression will be presented.

OC-01
Assessing and Formulating Risk for Death by Suicide: Challenging Clinical Assumptions
Berman, L
IASP, UNITED STATES

Approximately one in three to one in four of those who die by suicide contact a clinical care provider in the year prior to their death and an estimated 31% are in treatment at the time of death. Hence, mental health clinicians have significant opportunity to identify and engage patients with potential risk for suicide, yet many lack the essential training and skills to, thereby, effectively act to reduce that risk. In clinical suicidology, the focus of training is on risk assessment of the potentially at-risk patient, treatment planning, and interventions designed to reduce the level of assessed risk. Risk assessment is actually a two-step process involving the gathering of data associated with suicide risk (suicide risk assessment) and the formulation of a level of risk (suicide risk formulation), the latter process requiring a clinical judgment and scaling (e.g.,
ABSTRACTS

TUESDAY

none-low-moderate-high-imminent) of the patient’s risk to act in a life-endangering way. The dominant mode of teaching to these tasks, world-wide, has been via received clinical wisdom primarily delivered through case supervision from senior clinicians relative to the trainee’s assessment and treatment of patients seen during training. This presentation challenges the modal received wisdom that historically - and to this day - has guided what has been taught to, what has been learned by, hence what is done by mental health professionals in accomplishing the risk assessment and risk formulation phases of work with at-risk patients. The result of this less than adequate process is that significant opportunities to save lives are missed.

Notably, this presentation will focus on and discuss: 1. the normative approach to conducting a suicide risk assessment which relies heavily on a patient’s communicated suicide ideation; 2. the misinformed clinical belief that if a patient is not thinking about suicide, suicide risk is, at best, low; 3. the misguided clinical belief and practice that if suicide ideation is communicated, that passive suicide deation is less associated with significant near-term risk than is active suicide ideation; 4. the misguided practice in general practitioner and emergency department settings that relies on the PHQ-9 to assess suicide ideation; 5. the lack of models for deriving a suicide risk formulation and the over-reliance on clinical intuition to inform this formulation; and 6. the need for suicidologists to create an empirical foundation for these efforts.

OC-02

Suicide and the Drama of Self Consciousness

Hustvedt, S

UNITED STATES

It is safe to argue that without some form of reflective self-consciousness, suicide is not possible. Self-murder appears to require the ability to conceive of the self as another in time. Mirror self recognition is not unique to human beings, but an awareness of the self as a being in time, as a person with a recollected past and an imagined future, which can be articulated in narrative form to others is most highly developed in people. Because suicide in children under five appears to be either extremely rare or non-existent, the act must be seen as predicated on a level of development. We are social creatures from birth onward, and our early interactions become templates for what we call personality. Therefore, although suicide always involves a decision (conscious intentionality), either meditated or rash, its complex causes inevitably include unconscious processes. In this paper I explore the role of reflective self-consciousness in suicide by drawing from multiple disciplines, including phenomenology, psychoanalysis, psychiatry, sociology, neuroscience, epigenetic, and narrative theory. I emphasize the vital importance of reconfiguring subjective narrative as a form of suicide prevention and relate some of my experiences with psychiatric inpatients who had survived their own suicide attempts while I was a volunteer writing teacher at the Payne Whitney Psychiatric Clinic in New York City.
Politicians have talked endlessly about the seismic economic and social impacts of the recent financial crisis, but many continue to ignore its disastrous effects on human health - and have even exacerbated them, by adopting harsh austerity measures and cutting key social programs at a time when constituents need them most. The result is that many countries have turned their recessions into veritable epidemics, ruining or extinguishing thousands of lives in a misguided attempt to balance budgets and shore up financial markets. Yet sound alternative policies could instead help improve economies and protect public health at the same time. In his lecture David Stuckler present data to show how government policy becomes a matter of life and death during financial crises. Yet people can and do stay healthy, and even get healthier, during downturns. During the Great Depression, U.S. deaths actually plummeted, and today Iceland, Norway, and Japan are happier and healthier than ever, proof that public wellbeing need not be sacrificed for fiscal health.

Public Health Interventions for Suicide Prevention: Need for Innovative Strategies

Saxena, S
World Health Organization (WHO) Department of Mental Health and Substance Abuse, SWITZERLAND

Approximately one million people commit suicide every year. Over 50% of these occur in the age group 15-44 years and the vast majority (85%) in low- and middle income countries. Suicide is among the top three causes of death for young people (15-34 years) worldwide. Estimates suggest that there are some 10-20 attempted suicides for every completed suicide. Self-harm/suicide is one of the priority conditions of mhGAP which is WHO’s flagship programme to scale up care for mental, neurological, and substance use disorders. For the identification and management of the priority conditions, including self-harm/suicide, the mhGAP Intervention Guide (mhGAP-IG) was developed through a systematic and consultative process resulting in evidence-based guidelines. The mhGAP-IG provides recommendations not only at the population level but also to facilitate care at first and second level facilities by non-specialist health care providers. For its implementation, training materials have been developed, including for the self-harm/suicide module. Additional momentum for improving care for patients at risk for suicide will come from the new global action plan for mental health which was adopted by the World Health Assembly in May 2013. This includes several specific actions and indicators related to self-harm/suicide.
PL1-3
Optimizing Suicide Prevention Programmes and their Implementation in Europe (OSPI-Europe): Outcome of a Multilevel Suicide Prevention Programme

Hegerl, U
Department of Psychiatry and Psychotherapy of the University of Leipzig, GERMANY

A variety of factors such as access to lethal means, media coverage of suicidal acts, alcohol consumption and undertreatment of psychiatric disorders (mainly depressive disorders, alcohol and drug addiction, schizophrenia, personality disorders) contribute to the high numbers and rates of completed and attempted suicides in Europe. The 4-level-intervention concept developed within the model project “Nuremberg Alliance against Depression” provided evidence for the efficiency of an intervention approach targeting simultaneously several of the above mentioned factors. Up to now, similar 4-level interventions have been implemented in more than 100 regions in Europe (Hegerl et al 2013; Neurosci Biobehav Rev; doi:pii: S0149-7634(13)00045-6). Within the EU-funded suicide prevention project OSPI-Europe (www.OSPI-europe.com), (7th Framework Programme), the 4-level-approach was optimized and then implemented in 4 intervention regions in 4 different European regions. Primary outcome are suicidal acts (completed + attempted suicides) after 18 months of intervention in comparison to baseline and control regions. Furthermore, intermediate outcomes (changes in attitude or knowledge of the general population, GPs, and community facilitators, the media coverage of suicidality) were analysed and a process evaluation as well as health economic evaluation are performed. First data from OSPI-Europe will be presented. A manual for the implementation of regional alliances as well as a catalogue with many intervention materials in several European languages are available and will facilitate the dissemination of alliances against depression to other regions and countries in- and outside of Europe.

11:00 - 12:30
PLENARY SESSION 2

PL2-1
Clustering and Contagion of Suicide and Self-Harm: Early Identification and Intervention

Arensman, E
National Suicide Research Foundation, IRELAND

The lecture will provide an overview of risk factors associated with clustering and contagion of suicidal behaviour, examples of systems that enhance early identification of suicide clustering and contagion, and present evidence-based and best practice guidelines to respond to emerging suicide clusters and contagion. Internationally, there is growing public and professional interest in clustering and contagion in suicidal behaviour (fatal and non-fatal). There are indications of increasing clustering and contagion effects in suicidal behaviour associated with the rise of modern communication systems. Yet, the research in this area and information on effective response procedures and prevention strategies is limited. The methodological approaches in assessing clustering and contagion of suicidal behaviour are wide ranging and internationally, there is lack of consistency regarding the definition of clustering and contagion and regarding the statistical techniques assessing spatio-temporal aspects.
Outcomes will be presented of comparative research of suicide clusters with a specific focus on individual level and contextual risk factors. Various systems have been developed to facilitate early identification of emerging suicide and self-harm clusters (e.g. Ireland and Scotland), such as the Suicide Support and Information System (SSIS) which has been successfully piloted in Ireland. Strengths and weaknesses of the various systems will be addressed.

In recent years, a growing number of countries (e.g. Australia, Ireland, New Zealand) have produced guidelines or implemented national programmes for responding to suicide clusters. An overview will be presented of common elements and outcomes of available evaluations.

PL2-2
Preventing Suicide in the Elderly - What are the Challenges and how can they be met?
Waern, M
University of Gothenburg, SWEDEN

High rates of suicide are observed in older people in most countries worldwide. Older persons who attempt suicide are at particularly high risk for future suicide. Given these facts, it is surprising that the literature on the prevention of suicidal behaviour in later life is so limited. One reason for this might be an attitude on the part of society that it is “normal” to feel suicidal in old age. Yet individual accounts of older persons who survive suicide attempts describe experiences of deep despair, feeling invisible or disconnected from others, and of the struggle to maintain control over life itself.

This plenary lecture will give an overview of the literature on prevention research that focuses on older persons. Screening programs to detect depression and interventions that reduce social isolation are two of the more common approaches. To date, programs seem to have been more efficient for women than for men, and the need for interventions that target older males will be stressed.

PL2-3
Can Neuroimaging Inform Treatment and Prevention of Suicidal Behaviour and Measure Effectiveness of Interventions?
Mann, JJ
Columbia University, UNITED STATES

Neuroimaging studies of suicidal behaviour have their origins in postmortem studies of suicides that mapped neureceptor systems and first showed that the serotonin system associated with suicide as a cause of death were confined to brainstem serotonin nuclei and their projections to ventral prefrontal cortex and anterior cingulate cortex. These areas are involved in willed action and decision-making and as such seemed highly relevant for the diathesis for suicidal behaviour. This presentation will focus on what we have learned from in vivo imaging studies of suicide attempters and aspects of the diathesis for suicidal behaviour that include decision-making, impulsive-aggressive traits and cognitive regulation of mood. Some of the studies employ functional MRI or structural DTI to map circuits and connectivity, other studies are neurotransmitter-specific and employ PET and SPECT. A brain circuit coupling dorsal lateral prefrontal cortex, amygdala, anterior cingulate and ventral prefrontal cortex has been identified. Suicide prevention approaches such as cognitive therapy and medications appear to target this circuitry and may modify it as part of a process that reduces the predisposition to suicidal behaviour.
The initial findings raise the possibility of finding a biomarker that can measure the impact of an intervention for the purpose of suicide prevention. This presentation will describe where we have reached in this process and how it may one day become part of clinical practice.

14:30 - 16:00

**PS1.1 ONLINE SEARCH BEHAVIOURS, SEARCH OUTCOMES AND ONLINE SAFETY -THE SOCIAL MEDIA & INTERNET SYMPOSIUM OF THE TASK FORCE MEDIA & SUICIDE**

**PS1.01-1**
The Study of “Suicide Contagion” during Dawning Social Media Era: A Critical Review from a Network Science Perspective  
Cheng, Q1; Li, H2; Silenzio, V2; Caine, E.D.2  
1The University of Hong Kong, HONG KONG, CHINA PR;  
2University of Rochester Medical Center, UNITED STATES

**Study objectives**
Our review considers how the study of “suicide contagion” will benefit from examination through the lens of Network Science, especially during this era of rapidly expanding use of electronic social media. We will clarify the concept of “contagion,” trace its historical usage and theoretical basis as related to suicide, and explore the potential leverage offered by Network Science.

**Methods**
Publications relevant to “suicide contagion” were collected through systematic literature searches; full-texts were downloaded. References cited as explaining or demonstrating “suicide contagion” also were included in the review. We used citation network analysis to identify key papers for in-depth review. Critical review was performed to identify research gaps and propose potential utility of Network Science and social media studies.

**Results**
Many studies invoked “suicide contagion” without clearly defining what was meant. Among those where the denotation was more apparent, “contagion” has been used principally in two fashions. One referred to the pattern of suicidal behaviors, reflecting a temporally associated (most often local) increase in deaths - also labeled a “suicide cluster.” The other referred to the mechanism that was postulated to explain local clusters or an upsurge of deaths following media coverage of a suicide - suggesting that these were imitation or “copycat” suicides.

The theoretical root of suicide contagion can be traced to studies of biological or social contagions. The former is based on the germ theory and motivated by disease control and prevention, whereas the latter more often is motivated by promoting new ideas, products, or healthy behaviours. Studies of both biological and social contagions are increasingly adapting Network Science perspectives and models into their research designs. However, we found few studies that have examined empirically whether suicide contagion fits any biological or social network model. Online social media can provide essential data to investigate the transmission of suicide-related knowledge, information, attitudes, affects, and behaviors in complex social networks, with a flexible range from aggregated level to individual level.
Conclusion
It is essential for researchers to precisely define “contagion” as the first step when investigating its relevance to suicide. Network Science and social media studies both offer promising approaches for exploring this important phenomenon.

PS1.01-2
Best Practices Tool for Online Safety
Reidenberg, D
SAVE, UNITED STATES

In early 2011 the group convened at the headquarters of Facebook in Palo Alto, CA. At the meeting each platform described their organization’s history and experiences with suicidal content. Efforts to address responding to user generated content was reviewed by the group and ideas were generated on what could be next steps for the tech industry and suicide prevention field which included developing best practices. This led to a consensus building meeting held in early 2012 again at the headquarters of Facebook in Menlo Park, CA.

In many industries a set of best practices helps drive success when the practices are implemented fully and appropriately. To date no set of best practices have been developed for the online/user generated content/social media and technology platforms. As a matter of fact, there is no existing or prevailing knowledge on this subject (suicide prevention in the online communication world). Given the ever increasing amount of time spent and information shared on the Internet, and recognizing the tremendous opportunity to reach the vast majority of the internet’s 2.3 billion users a meeting was held to develop best practice standards in the field. Experts from the technology industry worked in collaboration with experts in the suicide prevention and mental health field to develop consensus and ensure the standards met with current knowledge of research and practice for safety of those using this form of communication. In addition, to prepare for the consensus meeting and as background work, we researched other technology fields that had conducted a similar process and found issues that pertained to this work included: data privacy and security, focus on planning for development, transparency and reducing risk were important to address. With that said, the designers and authors of this paper and tool approached this as establishing the groundwork for the future, as a current basis to begin. We acknowledge that this is a dynamic process, in particular because it involves and ever and rapidly changing industry. As new technology is developed and standards are determined, these guidelines will be updated.

PS1.01-3
How to Engage in 140 Characters or Less (#suicideprevention)
Skehan, J1; Burns, J2; Blanchard, M2; Bryant, M1
1Hunter Institute of Mental Health, AUSTRALIA; 2Young and Well Cooperative Research Centre, AUSTRALIA

The media is a major source of information for the community, and has an important role to play in influencing attitudes and perceptions regarding issues such as suicide. In Australia the Mindframe National Media Initiative has worked to address the reporting of suicide, with research indicating a six-year improvement in the quality of suicide reporting.
However, there have been increasing discussions in Australia and internationally about the role of the internet, and social media specifically, on suicidal behaviour. The potential risks and benefits of social media are poorly understood, however suggested extensive use by the media, the mental health and suicide prevention sectors and the community at large.

This paper will draw together the outcomes of three separate processes in Australia to develop best-practice principles for the suicide prevention sector, the media and the community more broadly when engaging with vulnerable people online. It will draw on research outcomes and recommendations from:

1) cross-sector social media scoping studies and a series of consultations with the media (led by the Mindframe National media Initiative);

2) a series of round tables and consultations with young people and the suicide prevention sectors (led by the Young and Well Collaborative Research Centre and the Mindframe National Media Initiative); and

3) An evidence review, expert forums and focus groups to develop community guidelines for the discussion of suicide (led by the Hunter Institute of Mental Health for the NSW Ministry of Health).

This paper will conclude by discussing both the benefits and challenges to developing broad reaching resources to guide the way we discuss suicide online and the relative responsibilities of the media, the suicide prevention sector and the community more broadly.

**PS1.01-4**

*Surfing for Suicide and Prevention: A Content-analytic Comparison of German and US-American Web Content*

Niederkrotenthaler, T; Sonneck, G; Till, B

1Medical University of Vienna, AUSTRIA; 2Crisis Intervention Center Vienna, AUSTRIA

**Introduction**

There is little structured content-analytic research which has focused on web contents retrieved with online searches for suicide and suicide methods.

**Methods**

We retrieved the first three pages of search results from google and bing search engines in the respective Austrian and United States version, and developed a qualitative coding system to characterize web contents. We compared differences in results across search engines, countries, and search terms.

**Results**

Searches for “suicide” retrieved more websites dedicated to general information about suicide and suicide prevention in the US than in Austria. Searches for “suicide” were closely linked to help resources, but help resources were uncommon in searches on suicide methods. Searches for widespread suicide methods (e.g., “how to hang yourself”) often retrieved detailed information on how to complete a suicidal act, while this information was relatively uncommon when using more unspecific search terms. We observed several differences between US and German-speaking websites.

**Conclusions**

This analysis shows several differences in search engine results between countries and search terms. The underrepresentation of help resources when searching for specific suicide methods needs to be addressed in prevention efforts, because more suicidal individuals are likely to search for specific methods.
Accessing Suicide-Related Information on the Internet: A Retrospective Observational Study of Search Behavior

Wong, P.W.C.; Fu, KW; Yau, R²; Ma, H²; Chang, S-s²; Law, F²; Yip, P.S.F.²

¹The University of Hong Kong, HONG KONG, CHINA PR; ²HKU, HONG KONG, CHINA PR

Background
The Internet’s potential impact on suicide is of major public health interest as easy online access to pro-suicide information or specific suicide methods may increase suicide risk among vulnerable Internet users. Little is known, however, about users’ actual searching and browsing behaviors of online suicide-related information.

Objective
To investigate what webpages people actually clicked on after searching with suicide-related queries on a search engine and to examine what queries people used to get access to pro-suicide websites.

Methods
A retrospective observational study was done. We used a web search dataset released by America Online (AOL). The dataset was randomly sampled from all AOL subscribers’ web queries between March and May 2006 and generated by 657,000 service subscribers.

Results
We found 5526 search queries (0.026%, 5526/21,000,000) that included the keyword “suicide”. The 5526 search queries included 1586 different search terms and were generated by 1625 unique subscribers (0.25%, 1625/657,000). Of these queries, 61.38% (3392/5526) were followed by users clicking on a search result. Of these 3392 queries, 1344 (39.62%) webpages were clicked on by 930 unique users but only 1314 of those webpages were accessible during the study period. Each clicked-through webpage was classified into 11 categories. The categories of the most visited webpages were: entertainment (30.13%; 396/1314), scientific information (18.31%; 240/1314), and community resources (14.53%; 191/1314). Among the 1314 accessed webpages, we could identify only two pro-suicide websites. We found that the search terms used to access these sites included “commiting suicide with a gas oven”, “hairless goat”, “pictures of murder by strangulation”, and “photo of a severe burn”. A limitation of our study is that the database may be dated and confined to mainly English webpages.

Conclusions
Searching or browsing suicide-related or pro-suicide webpages was uncommon, although a small group of users did access websites that contain detailed suicide method information.
14:30 - 16:00
PS1.2 BEST PRACTICE ELEMENTS OF MULTILEVEL COMMUNITY INTERVENTIONS

PS1.02-1
Best Practice Elements of Multilevel Community Interventions for Suicide Prevention: An Update
Sarchiapone, M
University of Molise, ITALY

Evidence-based best practices for suicide prevention are identifiable in the literature. The aim of this presentation is to describe effective interventions for the prevention of suicidal behavior. A literature search has been performed for systematic reviews found in the Pubmed, Cochrane, and DARE databases. Steps include risk-of-bias assessment, data extraction, summarization of best practices, and identification of synergistic potentials of such practices in multilevel approaches. Six relevant systematic reviews were found. Best practices identified as effective were as follows: training general practitioners (GPs) to recognize and treat depression and suicidality, improving accessibility of care for at-risk people, and restricting access to means of suicide. Although no outcomes were reported for multilevel interventions or for synergistic effects of multiple interventions applied together, indirect support was found for possible synergies in particular combinations of interventions within multilevel strategies. A number of evidence-based best practices for the prevention of suicide and suicide attempts were identified. Research is needed on the nature and extent of potential synergistic effects of various preventive activities within multilevel interventions.

PS1.02-2
Optimizing Depression Treatment and Prevention of Suicidal Behaviour by Community Based 4-level Interventions
Hegerl, U
Department of Psychiatry and Psychotherapy of the University of Leipzig, GERMANY

Depressive disorders as well as completed and attempted suicides continue to be important mental health issues. Because of the close relation between depression and suicidal behaviour, it is likely that preventive actions improving care and optimizing treatment for depressed patients result in a reduction of suicidal acts. This was shown in the model project Nuremberg Alliance against Depression, a two-year four-level community based intervention program. Training and support of primary care providers (level 1), a professional public relation campaign (level 2), training of community facilitators (teacher, priests, geriatric care givers, pharmacists, journalists) (level 3) and support of self help of patients and their relatives (level 4) were associated with a 24% reduction of suicidal acts (completed and attempted suicides combined, primary outcome) compared to a baseline year and a control region (Wuerzburg). Within the European Alliance against Depression (www.EAAD.net), this concept and the developed intervention materials have been improved by the input from many other european experts and alliances against depression have
up to now been started in more than 100 regions in Germany and Europe. Within the EU-funded suicide prevention project OSPI-Europe (www.OSPI-europe.com), the four-level-approach was optimized and further implemented and evaluated in different European regions (Hegerl et al 2013; Neurosci Biobehav Rev; doi:pii: S0149-7634(13)00045-6). Experiences show that the 4-level approach is likely to be an efficient concept to improve the care of depression and to prevent suicidal behaviour which can be easily adapted to different cultures and health care systems.

PS1.02-3
A Community Intervention Trial of Multimodal Suicide Prevention Program: NOCOMIT-J.
Otsuka, K1; Ono, Y2; Sakai, A1; Inagaki, M3; Yonemoto, N2; Yamada, M2
1Iwate Medical University, Dept. of Disaster and Community Psychiatry, JAPAN; 2National Center of Neurology and Psychiatry, JAPAN

Background
Multilevel and multimodal interventions have been suggested for suicide prevention. However, few studies have reported the outcomes of such interventions for suicidal behaviours.

Methods/Design
NOCOMIT-J is a community-based large-scale non-randomized controlled trial, examining the effectiveness of a community-based multimodal intervention for suicide prevention in rural areas with high suicide rates, with a parallel prevention-as-usual control group, covering a total of 631,133 persons. The effectiveness will also be examined in highly populated areas near metropolitan cities (1,319,972 persons). The intervention is multilevel and multimodal, targeting the entire population in the participating communities. The intervention is developed to reinforce human relationships and connectedness in the community by focusing on building social support networks within the general public and the health-related resources. The primary outcome is the incidence of suicidal behaviours, consisting of completed suicides and suicide attempts requiring admission to an emergency ward for critical care. We are planning to compare the change rates from baseline between the two groups for the incidence of suicidal behaviour modelled by sex, age group, region and period. Analyses will be performed on an intention-to-treat basis and stratified by sex and age groups. The study protocol was approved by the Central Research Ethics Committee of Japan Foundation for Neuroscience and Mental Health. The protocol was also approved by the local Ethics Committees of affiliated universities or institutes in the participating regions. In addition, the regional investigators obtained the written authorization to conduct the study from the head of the local governments, and announced it by public publications. These processes comply with the Ethical Guidelines for Epidemiology Research in Japan.

Progress
The intervention started in July 2006, and continued for 3.5 years. Because treatment and prevention of suicide are complex and encompass many factors, success will need multi-sector collaboration. Currently, our team is analyzing the study data, and we are continuing our effort to monitor the suicide rate in the participating regions. We hope that the results of NOCOMIT-J will help to develop effective strategies to reduce future suicide rate. [Trial registration: UMIN-CTR: UMIN000000460. ClinicalTrials.gov: NCT00737165]
Suicide prevention is a complex challenge for every nation. There are many factors that influence suicide and therefore it requires multilevel and multimodal action, from promoting resiliency to crisis management and support. In New Zealand, the Ministry is the key government agency responsible for leading and coordinating the implementation of the Strategy and Action Plan. The New Zealand Suicide Prevention Strategy 2006-2016 provides a framework for the suicide prevention efforts. The New Zealand Suicide Prevention Action Plan 2008-2012 provides detail on action plans. It describes the types of actions required across the range of sectors involved in suicide prevention and is made up of two companion documents: 1) The Summary for Action provides detailed tables outlining outcomes, actions, milestones, whanāu ora considerations, timeframes, and agencies responsible for implementing the actions, and 2) The Evidence for Action provides detail about the evidence, rationale and context underlying the actions. On the other hand, in 2007, Japan outlined a nationwide master plan, the Comprehensive Suicide Prevention Initiative. The Initiative has been revised and updated in 2012. In Japan, as elsewhere, known major risk factors for suicide are mental health problems and a history of suicide attempts. Another significant factor in Japan, as noted in the World Report, is the ageing of its society. The initiative addresses these factors. The initiative addresses these factors. The goal of the initiative is to reduce the rate of suicide by at least 20% by 2016. This goal has functioned as a marketing promotion - almost as a slogan - and thus has served to encourage the implementation of various actions. However, what Japan currently needs is the further reinforcement of action plans based on the current master plan. Further discussion and rethinking is necessary to allocate resources effectively within the larger context of social security. The evidence-based policymaking for suicide prevention is a crucial task.

14:30 - 16:00

PS1.3 ECONOMIC RECESSION AND UNEMPLOYMENT AS RISK FACTORS FOR SUICIDE

PS1.03-1
The Effect of Economic Recession on Suicide Mortality among South Korean Working-age Adults: A 7-year Observational Analysis
Chan, C-h1; Caine, E.D.2; You, S3; Fu, KW1; Chang, S-s1; Yip, P.S.F.1
1The University of Hong Kong, HONG KONG, CHINA PR; 2University of Rochester, UNITED STATES; 3Chungbuk National University, KOREA (REP.)

Study objectives
We investigated how the recent economic recession, marked by the increased unemployment, affects suicide rates among South Korean working-age adults by employment status and occupational types.
Methods and material
South Korea nationwide suicide data between 2003 and 2009 were obtained. Time-series analyses were performed to examine the temporal association of national unemployment rates and gender-employment-specific suicide rates. Increases of suicide rates during the period of economic recession were assessed. Increase of suicide risk among different occupations in this period was also compared.

Results
The national unemployment rate was positively and significantly associated with suicide rates among the employed and the unemployed with a 2-month lagged period (male unemployed: $\beta = 4.87$, 95%CI = 2.06-7.68, $p=.001$; male employed: $\beta = 0.75$, 95%CI = 0.30-1.20, $p=0.002$; female unemployed: $\beta = 1.32$, 95%CI = 0.39-2.24, $p=.007$; female-employed: $\beta = 0.16$, 95%CI = 0.02-0.29, $p=0.023$). Male unemployment rate was more closely tied to both male- and female-working age suicide rates than that of female unemployment rate. During the period of economic recession, significant increase of suicide rates were detected among all employed gender-specific age groups except those in 50s. Among the unemployed, significant increases were noted in all gender-specific age groups except the male population in 30s. Larger proportion of suicide increase among men was from the employed, whereas, among women, the greater contribution was from the unemployed. Overall 44% of the suicide increases during the recessionary period were from the employed population. Suicide risk of mangers during the period of economic recession increased by more than 3 folds (RR in pre-crisis period: 0.75, 95%CI=0.57-0.99; RR in recessionary period: 2.49, 95%CI=2.14-2.90); changes of suicide risk among other occupations were in a lesser extent.

Conclusion
Change of macroeconomic condition affects population level suicide risk for both employed and unemployed. However, the gender differential in the suicidal risk and the excessive risk among the manager can enhance our understanding on some unique cultural perspectives and the gender role differentials in Korean or Asian countries with similar cultures. More focused and effective prevention for certain occupations can be developed to mitigate the impact of economic recession among the employed.
PS1.03-2
Impact of the Economic Recession on Fatal and Non-fatal Suicidal Behaviour in Ireland
Corcoran, P.1; Griffin, E1; Fitzgerald, AP2; Arensman, E1; Perry, IJ2
1National Suicide Research Foundation, IRELAND; 2Department of Epidemiology and Public Health, University College Cork, IRELAND

Study objectives
The advent of the financial crisis in 2008 brought economic recession to many countries but the impact on Ireland has been particularly devastating given the transformation from a decade of economic boom to sudden economic ruin. Studies have shown that economic recession is associated with increased suicide rates but none have examined the impact on non-fatal suicidal behaviour. We aimed to assess the impact of the recession in Ireland on national rates of suicide and hospital-treated deliberate self harm.

Methods
We obtained national suicide data from the Irish Central Statistics Office for the period 1980-2011 and we established a national registry that recorded self harm presentations to all hospital emergency departments in the country since 2003. Age-adjusted and age-sex-specific incidence rates were calculated and numbers and rates were examined using Joinpoint regression, Poisson regression and interrupted time series analysis.

Results
There was no evidence of a change in trend in the female suicide rate in Ireland. In contrast, the male suicide rate increased steadily from 1980 to 2001 when the trend reversed and the male suicide rate decreased. The fall in male suicide lasted until 2007 and was reversed, in line with the advent of the recession in 2008. The recession was associated with increased male suicide across the age range 15-64 years. While the impact of the recession on suicide was specific to men, the incidence of deliberate self harm increased among men and women. There was a step increase in the rate of approximately 10% (11% for men and 8% for women) with the greatest increase among men aged 25-44 years (+15%). As well as the step increase, there was also a reversal of the trend in self harm rates. They had been falling in the few years before the recession but an increasing trend was evident, particularly for men, since 2008.

Conclusion
For the first time, we have shown that economic recession impacts on national rates of both fatal and non-fatal suicidal behaviour. While countries may be preoccupied by economic factors at times of recession there is a need for greater concern about the human costs and access to mental health services.

PS1.03-3
The Role of Under-employment and Unemployment in Recent Birth Cohort Effects in Australian Suicide
Page, A1; Milner, A2; Morrell, S.3; Taylor, R.3
1School of Science and Health, University of Western Sydney, AUSTRALIA; 2Melbourne School of Population Health, University of Melbourne, AUSTRALIA; 3School of Public Health and Community Medicine, University of New South Wales, AUSTRALIA

Background
High suicide rates evident in Australian young adults during an epidemic period in the 1990s
appear to have been sustained in older age-groups in the subsequent decade. This period also coincides with changes in employment patterns in Australia.

**Objectives**

This study investigates age, period, and birth cohort effects in Australian suicide over the 20th century, with particular reference to the period subsequent to the 1990s youth suicide epidemic in young males.

**Methods**

Period- and cohort-specific trends in suicide were examined for 1907-2010 based on descriptive analysis of age-specific suicide rates and a series of age-period-cohort (APC) models using Poisson regression. Under-employment rates (those employed part-time seeking additional hours of work) and unemployment rates (those currently seeking employment) for the latter part of this time series (1978-2010) were also examined and compared with period- and cohort-specific trends in suicide.

**Results**

A significant increasing birth cohort effect in male suicide rates was evident in birth cohorts born after 1970-74, after adjusting for the effects of age and period. An increasing birth cohort effect was also evident in female suicide rates, but was of a lesser magnitude. Increases in male cohort-specific suicide rates were significantly correlated with increases in cohort-specific under-employment and unemployment rates.

**Conclusion**

Birth cohorts that experienced the peak of the suicide epidemic during the 1990s in Australia have continued to have higher suicide rates than cohorts born in earlier epochs. This increase coincides with changes to a labour force characterised by greater «flexibility» and «casualised» employment, especially in younger aged cohorts.

**PS1.03-4**

Ecological Association between Hospital Treated Self-Harm, Deprivation, Social Fragmentation, Area Type and Travel Time to Hospital: A National Study

O’Farrell, I1; Corcoran, P.2; Perry, IJ1

1University College Cork, IRELAND; 2National Suicide Research Foundation, Cork, IRELAND

**Introduction**

Previous research has shown an inconsistent relationship between the spatial distribution of hospital treated deliberate self-harm and area level factors such as deprivation and social fragmentation. However; many of these studies have been confined to urban centres, with few focusing on rural settings and fewer studies being carried out at a national level. This study aims to investigate the area level relationship between hospital treated deliberate self-harm, and the following four area level factors: deprivation; social fragmentation; travel time to the nearest hospital emergency department and geographical area type (distinguished by population density) in the Republic of Ireland.

To our knowledge, this is the first national study to examine how travel time to the nearest hospital emergency department influences small area level incidence rates of self-harm.

**Methods**

From 2009 to 2011, the Irish National Registry of Deliberate Self Harm collected data on self-harm presentations to all hospital emergency departments in the country. The Registry uses standard methods of case ascertainment and also geocodes patient addresses to small area
geographical level. Negative binomial regression was used to explore the relationship between area level self-harm rates and the various area level factors.

Results
From 2009 to 2011, an estimated 23586 persons aged 15-64 years presented with self-harm. The male and female incidence rates were 245 and 268 per 100 000, respectively, leading to a total combined rate of 257 persons per 100,000. Self-harm incidence increased with each quintile of deprivation, social fragmentation and population density. Deprivation had a stronger effect on the area level rate of self-harm than social fragmentation but population density had the strongest independent effect of three area level factors. Self-harm rates in the most densely populated areas (urban areas) were four-fold greater than self-harm rates in the least densely populated areas (rural areas). In general; areas that had a shorter journey time to hospital had higher area level incidence rates of self-harm.

Discussion
Deprived urban areas were shown to have the highest rates of self-harm and this effect was more pronounced in males than females. In terms of resource allocation for strategies aimed at tackling self-harm, priority should be given to deprived urban areas with a particular focus on males.

PS1.03-5
Duration of Unemployment and Suicide in Australia: An Ecological Investigation by Sex and Age During Rising Versus Declining National Unemployment
Milner, A1; Page, A2; LaMontagne, AD1
1University of Melbourne, AUSTRALIA; 2University of Western Sydney, AUSTRALIA

Background
The relationship between unemployment and suicide may be sensitive to demographic factors, national unemployment rates, and length of time without employment. This study investigated these factors in relation to suicide in Australia for the period 1985 to 2006 in an ecological study. This presentation will specifically focus on changes in suicide during different national periods of unemployment.

Methods
The outcome variable was annual suicide rate by age-group, sex and the eight states and territories over 22 years of observation (total observations = 1760). The main predictor variable was average duration of unemployment in the population, categorised into three time periods (<2 weeks, 2-4 weeks, >4 weeks). Poisson regression models were used to investigate the relationship between unemployment duration and suicide over the years 1985 to 2006 in a series of cross-sectional analyses. Interaction analyses indicated significant differences during periods of declining or increasing labour market opportunity and by age-group.

Results
During periods of declining unemployment rates in the country, longer durations of unemployment were associated with higher male suicide rates. During periods of increasing unemployment in the country, longer unemployment duration was associated with lower male suicide rates. Effect modification was also apparent by age-group, with stronger associations between unemployment duration and male suicide evident in those aged 25-34 and 55-64, and weaker associations in those aged 15-24 and 44-54 years. Longer length of unemployment was not associated with an increase in female suicide rates.
Conclusion
Labour market opportunity in Australia modified the effect of unemployment duration on suicide, and the effect was more prominent in males and older age-groups. This may reflect social norms and acceptability about unemployment, as well as life-stage influences associated with transitions into and out of the labour market.

14:30 - 16:00
PS1.4 ETHNIC AND CULTURAL FACTORS IN SUICIDIOLOGY

PS1.04-1
Suicidal Ideation and its Associated Risk Factors among Mental Health Clinic Attenders in Afghanistan
Sayed Sabour, M¹; Maniam, T.²
¹Herat Mental Health Clinic, AFGHANISTAN; ²National University of Malaysia, MALAYSIA

Background and Objective
There is a paucity of data on suicidal behavior in Afghanistan. The objective of this paper is to describe suicidal ideation and associated risk factors in a sample of clinic attendees in Herat, Afghanistan.

Methods and Material
A random sample of patients attending an outpatient mental health clinic were studied using the Mini International Neuropsychiatric Interview, the Brugha Life Events Questionnaire and Barratt’s Impulsiveness Scale.

Results
A total of 124 subjects participated and 47% had suicidal ideation. The following factors were highly significantly associated with having suicidal ideation: bipolar disorder, post traumatic stress disorder, younger age group (18-29 years), having experienced injury or assault to self and having high attentional impulsivity. Among those with suicidal ideation 38%, mostly women, chose self-immolation as their preferred method, and this was significantly associated with having higher frequency of life events and higher impulsivity scores, besides the presence of major depressive disorder with psychotic features, among others. Unhappy marital relationship and girls being forced into marriage were not uncommon contributing life events.

Conclusion
In war-torn Afghanistan, with minimal mental health services, these findings give rise to concern. Self-immolation is a highly dangerous method and the combination of impulsiveness and mental illness provides a lethal mix. There is a strong case for improving mental health services for this population.
Deliberate Self Poisoning in Hungary: Socio-demographic Differences in the Risk Factors of Multiple Suicide Attempts between the Roma and Non-Roma Populations

Toth, MD1; Adam, Sz.1; Zonda, T.2; Susanszky, E.1; Purebl, G1
1Semmelweis University Institute of Behavioral Sciences, HUNGARY; 2Hungarian Association for Suicide-Prevention, HUNGARY

Objective
Suicide rates in Hungary have been one of the highest in the European Union. Attempted suicide rates in the Roma population, the biggest ethnic minority group in Hungary, are 2-3 times higher than in the non-Roma population. Since multiple attempters have higher probability of eventual death by suicide and there are limited data on suicidal behaviour of the Roma population, the aim of this study was to explore socio-demographic and psychological risk factors of Roma and non-Roma multiple suicide attempters.

Method
Semi-structured interviews were conducted within 1 week after detoxication among 150 suicide attempters including 65 multiple attempters hospitalized for deliberate self-poisoning. Socio-demographic information and data about patients’ physical and mental health status were collected. Detailed information regarding the causes, frequency, suicidal intent, and method of suicide attempts were also recorded. Patients also completed the Shortened Beck Depression Inventory, the Hopelessness Scale, and the Social Support Questionnaire. Independent samples t-tests were used to evaluate the difference in the level of psychological variables between the Roma (N=90) and non-Roma (N=60) groups. Stepwise linear regression analyses were performed to identify potential risk factors of multiple suicide attempts.

Results
Most frequent causes of self-poisoning were interpersonal conflicts (60.7%), financial problems (38.7%), grief (18.0%), and physical illness (16.7%). There was a significant difference in the mean (SD) of multiple suicide events between the Roma and non-Roma groups (6.8 (7.0) vs. 2.3 (2.1), p<.001, respectively). There was no significant difference in the level of depression, hopelessness, and social support between the Roma and non-Roma groups. Depression (β=0.39), older age (β=0.27) and previous suicide in the family (β=0.27) were identified as the main risk factors of previous suicide attempts among Roma patients (adjusted R²=0.276), while hopelessness (β=0.31) was the only identified risk factor of previous suicide attempts in the non-Roma group (adjusted R²=0.085).

Conclusion
Significant differences in the risk factors of multiple suicide attempts were identified between Roma and non-Roma patients. The specific background factors in each ethnic group should be addressed by tailored suicide intervention programmes. There was no significant difference in the level of depression, hopelessness, and social support between the Roma and non-Roma groups. Compared to the Roma population, serious intent to die has been reported more frequently (p<.000) among non-Roma patients (N=90). Higher level of education was associated with 35 times higher frequency of reporting serious intent to die among Roma patients, while hopelessness was associated with a 1.5 times higher risk in the non-Roma group. Significant differences in the risk factors of serious suicide intent were identified between Roma and non-Roma patients. High educational level as a risk factor in the Roma group requires further research to ensure tailored suicide intervention strategies in the Roma population.
**PS1.04-3**
Suicide and the Dakota Sioux: A Durkheimian Analysis Stretching Across High Risk Populations Worldwide
Rendeiro, A.
UC Irvine, Critical Care Nurse, UNITED STATES

“One cannot long have one’s feet placed in two canoes” - Iroquois Proverb.
The stress of social change and pressure to acculturate into mainstream America, while maintaining traditional integrity, has strained the nearly 300 tribes of Native American Indians to the point of cultural disintegration. The resulting repercussions are manifest in the myriad of psychosocial pathologies from which many of them suffer. Presently, one of the most disturbing of these pathologies is the act of suicide. While the subject of suicide and the other well-documented sociological problems are complicated by the intricacies of tribal diversity and lack of accurate data, the methodology of Emile Durkheim (1897) offers tremendous insight into a broader understanding, at the aggregate level, the cultural response of the stress of social change, lack of tribal homogeneity and consequent collective disorder. While Durkheimian theory is not new there is no research on the application of his theory in creating a culturally competent and sensitive risk assessment tool. The ensuing analysis of Durkheimian theory is examined in terms of how each of his four suicide types fit with distinct periods of diverse social changes among the Dakota Sioux. Anomie, Fatalistic, Altruistic and Egoistic types of suicide, according to Durkheim can be utilized to frame an understanding of current collective general conscience. This author theorizes that the analysis of a high risk group in terms of their psychic experience can guide the creation of an assessment tool by understanding their collective history. Further exploration is conducted as to the ability of Durkheim’s theory to further explain elevated suicide levels across other Native American tribes and high-risk minority groups such as Veterans of War, L.G.B.T. populations and the Aged. Finally, this study offers suggestions for immediate application of the four suicide types and the culturally adroit assessment tool to identify proximate risk within each of the high-risk groups by overlay of the theory to known social stressors, relative deprivation and hopelessness present in each group that may press an individual not only to attempt the act of suicide but succeed.

**PS1.04-4**
Attitudes Toward Suicidal Behaviour among Health Professionals in Mental Health in Stavropol, Russia and Oslo, Norway
Norheim, AB¹; Loskoutova, E²; Grimholt, TK³; Ekeberg, Ø⁴
¹Diakonhjemmet Hospital/RVTS East, NORWAY; ²Propsky, RUSSIAN FEDERATION; ³Oslo University Hospital /RVTS East, NORWAY; ⁴Oslo University Hospital, NORWAY

**Study objectives**
To investigate attitudes among professions in mental health care outpatient clinics in Stavropol, Russia and Oslo, Norway.

**Methods and material**
Understanding of Suicidal Patient Scale (USP) (11= positive - 55 = negative; scores < 22 considered positive) and Attitudes towards Suicide (ATTS) (1 = totally disagree, 5 = totally agree) were studied. Questions about perceived competence, religious background, experiences of and views on suicidal behaviour and treatment (0 = totally disagree, 4 = totally agree) were examined.
Professionals in outpatient clinics in Stavropol, Russia and Oslo, Norway were enrolled (Stavropol 119: 94 %, Oslo, N = 229: 77 %).

**Results**
Understanding and willingness (USP 21.8 vs. 18.7 p<0.001) and interest in suicidal prevention (2.0 vs. 2.7 p<0.001) were somewhat lower in Stavropol than in Oslo. They agreed more in Stavropol than Oslo to the ATTS factors: avoid communication on suicide (3.1 vs. 2.3, p<0.001), suicide is acceptable (2.9 vs. 2.6 p=0.002), suicide is understandable (2.9 vs. 2.7 p=0.012), and less with suicide can be prevented (4.2 vs. 4.5 p<0.001).

In Stavropol 15 % had participated in courses in suicide prevention vs. 79 % in Oslo, supervision (1.5 vs. 2.1, p<0.001), had guidelines (23% vs. 90%) and experienced suicide among own patients (16% vs. 23% ns), suicide attempt (50% vs. 69%) and self-harm (42% vs. 91%). 91% in Stavropol and 60% in Oslo reported Christian background. 41% in Stavropol and 12% in Oslo reported that this moderate to a high degree influenced their view of suicide. Talking with priest/imam as treatment was considered more important in Stavropol than Oslo (2.5 vs. 2.1 p<0.001). Psychiatric disorders (3.4) were considered the most important cause of suicide, and use of alcohol (2.2 vs. 2.8 p<0.001) less important in Stavropol than Oslo. Psychotherapy was considered as the most important treatment method in Stavropol and Oslo (3.6 vs. 3.4 p=0.001). Sleep and rest (2.2 vs. 2.9 p<0.001) and use of medication (2.3 vs. 2.6 p=0.002), inpatient treatment (2.3 vs. 2.7 p<0.001) were considered of moderate importance in both cities.

**Conclusions**
Even though there were some differences in the attitudes to suicide in Stavropol and Oslo, the health professionals in both cities reported positive attitudes, considered psychiatric disorders to be a major reason for suicide and psychotherapy the most important treatment measure.

**PS1.04-5**

**Punishment or Help? Attitudes towards the Law Criminalizing Attempted Suicide in Ghana**

Hjelmeland, H1; Osafo, J2; Akotia, C3; Knizek, BL3
1Norwegian University of Science and Technology, NORWAY; 2University of Ghana, Legon, GHANA; 3Sør-Trøndelag University College, NORWAY

Attempted suicide is still criminalised by law in Ghana. The WHO has, however, encouraged countries still criminalising suicidal behaviour to decriminalise it. The purpose of this study was to investigate how health workers and police officers in Ghana view this law. We conducted qualitative interviews with clinical psychologists, emergency ward nurses and police officers. None of the psychologists agreed with the law, whereas the majority of the nurses and a few of the police officers did. Those who agreed with the law argued for its suicide preventive effect in that the law is deterring or scaring people from killing themselves. The main argument against the law was that suicidal individuals need help to solve their problems rather than to be punished. The reasoning behind each of these standpoints is analysed with the aim to provide a basis for education of relevant groups on how to understand suicidal behaviour and suicidal people as well as to provide culture sensitive arguments for abolishing this law.
14:30 - 16:00

**PS1.5 Research in Postvention (1)**

**PS1.05-1**

**Suicide Bereavement Narratives within Families**

**Ratnarajah, D; Minichiello, V**

University of New England, AUSTRALIA

**Objectives**

The goals of this research project were to understand the differing narratives of loss that the bereaved family members described in their meaning making following the death of their family member.

**Method**

The complex family environments in which a suicide death had occurred were explored in a qualitative research project. Eighteen family members spoke of the deaths by suicide of twenty family members. All classes of first-degree relatedness to the suicide deceased family member informed this study.

**Results**

This meaning making involved the bereaved family members wrestling with the question why the suicide had occurred. In this search for understanding, the family history prior to the suicide death and also in the aftermath formed the focus of the construction of meaning, during which the participants described the family culture and the manner of their relationship with their deceased loved one. Family relationships are multifaceted and a suicide death affects all within the family.

**Conclusions**

This study revealed that there are differences in the suicide bereavement narratives depending on whether it was a parent describing the suicide death of a child, a spouse speaking of the death of a partner, a sibling grieving the death of a sibling, or a child grieving the death of a parent. All spoke of wrestling with the question ‘what this suicide says about me?’ And also, ‘what this suicide says about my family?’ This presentation will describe stories of conditions in the family that may have led to persistent negative feelings. Also described will be examples of family culture that led to resilience in the suicide-bereaved.

**Impact**

These stories highlight the importance of postvention support for those bereaved by the suicide of a close family member for they also share this same family context that places people in vulnerable situations.

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**PS1.05-2**

**Identifying how Parents Bereaved by Suicide are informed of their Child’s Death and the impact this has on their Grief Responses**

**McDonnell, S; Kapur, N; Appleby, L; Cordingley, L**

University of Manchester, UNITED KINGDOM

**Introduction**

Parents bereaved by suicide are usually made aware of the death in one of four ways. They either
a) witness the death, b) find the deceased or c) are informed by a family member or d) by officials. Little is known about the impact of the manner in which parents learn of the death upon their subsequent grief responses.

**Method**
Detailed qualitative semi-structured interviews were undertaken with 19 parents of 12 young men aged between 18-32 years who had died by suicide between 12 and 24 months previously. Interpretative phenomenological analysis (IPA) was used to analyse the data.

**Results**
Parents provided very vivid accounts of the moment they learned of the death of their child. As expected, those who discovered the body themselves found the event particularly traumatic. Less expected were the accounts of parents who were given the news by police or health professionals in ways which they described as lacking empathy or professionalism. Parents retrospectively described those experiences as adding to their emotional burden, as leading to loss of faith in the National Health Service or police service, and contributing to feelings of further isolation and helplessness.

**Conclusion**
The majority of parents reported feeling distressed at the way they had been informed of their child’s death. The findings of this study have highlighted the importance of developing specialised training for frontline staff who first come into contact with those bereaved by suicide.

**PS1.05-3**
*And the Light Shines On: After Death Communication Experiences of People Bereaved by Suicide*

Spencer-Thomas, S
Carson J Spencer Foundation, UNITED STATES

Many people bereaved by suicide report having mystical connections or “after death communications” with the loved ones they have lost that affect their healing journey - powerful dreams, meaningful coincidences or other “signs” that their loved one’s spirit continues. Sally Spencer-Thomas will present findings from research collected to 1,500+ survivors of suicide loss about their after death encounters with the people they have lost to suicide.

Learning Objectives: By the end of the presentation, participants will be able to:
1. Describe many different types of after death communications and their prevalence among people bereaved by suicide
2. Articulate the many ways people bereaved by suicide make sense of these contacts and how they are integrated (or not) into the grief journey
3. Appreciate the qualitative narratives of the research subjects’ after death communication experiences.
**PS1.05-4**

Impact and Challenges of a Patient Suicide: Distinguishing Subgroups of Most Distressed Mental Health Carers in Switzerland

*Castelli Dransart, D; Heeb, J-L.; Gutjahr, E.M; Gulfi, A*

University of Applied Sciences and Art Western Switzerland, SWITZERLAND

Mental health carers are very likely to face a patient suicide in the course of their career. Although a variety of consequences of such an event have previously been ascertained by scientific as well as clinical investigations, their intensity is still controversial, especially with regard to traumatic impact. This type of data is very scarce in Switzerland: therefore, two studies supported by the Swiss National Science Foundation (SNSF) have been conducted 1) to ascertain the various effects experienced by professionals on both a personal and professional level and 2) to describe subgroups of the most affected professionals.

An anonymous questionnaire, comprising 60 questions and 9 scales, was sent to 5,123 mental health carers (psychiatrists, nurses, nursing auxiliaries, psychologists, social educators, and social workers) in French-speaking Switzerland working either with populations at risk within socio-medical institutions or in private practice. Of the 1,626 professionals who completed the questionnaire, 862 had been faced with at least one patient suicide. Cluster analyses were performed in order to identify subgroups of carers who had a score of 25 or higher on the IES-R (Impact of Event Scale-Revised range 0-88). Three subgroups were identified, differing with regard to: a) professionals’ characteristics (sex, profession, age) and work context; b) relationship with the patient (intensity and duration); c) context of the suicide (predictability, scene); and d) training and support provided to professionals.

Contrasts between subgroups according to perceived responsibility toward the patient, presence (or absence) of a therapeutic relationship between patient and professional at the time of death or the intensity of the professional relationship to the patient were especially marked, suggesting different patterns that combined patient-related variables. These patterns also showed that classic risk factors should be considered in a subgroup perspective, as they may be present at different degrees in the subgroups evidenced.

In pointing out the various profiles of those professionals who are in the clinical range for traumatic impact, the preliminary findings presented at the conference will allow for the suggestion of tailored postvention procedures to support the most vulnerable carers, on both an individual and institutional level.

**PS1.05-5**

Supporting Suicide Bereaved People during the Coronial Process.

A Practitioner-researcher Partnership

*Maple, M1; Nugus, D2; Pont, S2*

1University of New England, AUSTRALIA; 2Newcastle Department of Forensic Medicine, AUSTRALIA

**Study objectives**

This paper will provide the context in which a practitioner-research partnership developed to understand the way in which people bereaved by suicide can best be supported through the coronial process and beyond. The presentation will present findings of the original project undertaken (which aimed to understand the support needs of those bereaved by suicide during and after the coronial process) and provide an overview of the partnership that has since developed between the practice team (Forensic Counsellors) and the researcher to further extend research within the immediate context of the coronial process following a suicide death.
Methods and materials
The initial project invited all next of kin of coronial reported deaths referred to the Newcastle Department of Forensic Medicine (Australia) in 2010. A simple survey was sent to all 105 families of suicide registered deaths in that year. The survey contained simple demographic, support and service needs using simple scales and short answer responses.

Results
While initially focussed on a needs assessment to support the targeted delivery of support and counselling to this population, this paper will present findings and implications of this research, which extend well beyond the confines of a specific needs assessment and service evaluation to include persistent intense sadness and confusion, heightened concerns for other family members, and increasing difficulty in accessing services as time from death lengthened. The recommendations consider disparities related to gender, geography and relationship to the deceased, and highlight the need for ‘a gentle push’ of proactive and sustained service provision.

Conclusion
From this initial partnership involving a small study to support evidence based service delivery, a broader research program has now been established, with a new project based on a modified RCT design is being implemented to trial a proactive model of care. The design of this project was facilitated by the relationship between the practitioners and researchers. Ideas for development of such partnerships will be discussed.

14:30 - 16:00
PS1.6 The WHO/START Study

PS1.06-1
The WHO START Study: Present Status and Future Developments
De Leo, D1; Fleischmann, A2; Bertolote, JM; Collings, S; Amadeo, S2; Chan, SMS; Yip, PSF2; Huang, Y2; Saniel, Barry; Lilo FF; Lilo C; David, AM; Benavente BSN; Nadera, DP; Pompili, M4; Koloves K1; Xiandong, W.

1Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA
2Centre Hospitalier de Polynésie française, FRENCH POLYNESIA; 3The University of Hong Kong, HONG KONG, CHINA PR; 4Institute of Mental Health, Peking University, CHINA;
5Apienza University of Rome, ITALY; 6World Health Organization (WHO) Department of Mental Health and Substance Abuse, SWITZERLAND

The World Health Organization (WHO) Suicide Trends in At-Risk Territories (START) study is an international multi-site initiative that aims to stimulate suicide research and prevention across different areas of the globe (initially the Western Pacific region, today all regions). A central component of the study is the development of registration systems for fatal and non-fatal suicidal behaviours.

Data on fatal and non-fatal suicidal behaviours from participating countries will be described in terms of age, sex and method. Globally, a greater proportion of suicide deaths occurred among males. More females engaged in non-fatal suicidal behaviours in all areas, except the Philippines. Compared to Australia, Italy, New Zealand, the Philippines, and Hong Kong SAR,
suicide in the Pacific Islands most often occurs in younger age groups. Results indicate notable variations in method choice between countries. A greater proportion of suicides occurred by hanging in Pacific Islands, while inhalation of carbon monoxide, firearms, ingestion of chemicals and poisons and drug overdose were the major methods of choice in other areas. The information drawn from this study demonstrates the enormous variation in suicidal behaviour across the areas involved in the START Study. There is a need for further research to assess the reliability of the established data recording systems for suicidal behaviours. The baseline data established in START can allow the development of suicide prevention initiatives that are sensitive to variation in the profile of suicide across different locations. The next steps in the development of the START plan will be also briefly discussed.

PS1.06-2
Data from the WHO/START Study: What can be learned from them?
Kolves, K; De Leo, D
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

Study objectives
Overall, the problem of recording suicide and suicide-related phenomena has gained increased awareness, also as an obstacle to adequate and timely plans for suicide prevention. The World Health Organization has promoted several different initiatives in the area of suicide and mental health (including alcohol control) that could help to answer the increase demands for prevention. The central aim of the START study is to the development of registration systems of fatal and non-fatal suicidal behaviours. The aim of the current presentation is to present existing data from all current participants.

Methods
Descriptive analysis of the data by sex, age and methods are presented.

Results
All countries showed a greater proportion of suicides among males. In all areas except the Philippines more females than males engaged in non-fatal suicidal behaviors. When compared to other countries, in the Pacific Islands suicide most often occurs in younger age groups. There were remarkable variations between countries in choice of method. In Pacific Islands a greater proportion of suicides occurred by hanging, while inhalation of carbon monoxide, use of firearms, ingestion of chemicals and poisons, and drug overdose were the most frequent methods of choice in other areas.

Conclusions
Remarkable differences in age, sex and method use between locations might be attributable to a range of demographic, social and cultural factors, as well as differences in method availability and lethality. Further research is needed to assess the reliability of existing and established data recording systems.
**PS1.06-3**  
**WHO START Study in French Polynesia: An Example of Implementation of the Start 'culture' in a Pacific Nation**  
Amadeo, S1; Rereao, M1; Malogne, A2; Favro, P3; Jehel, L4; Nguyen, NL1; Milner, A5; Kolves, K6; De Leo, D1  
1Centre Hospitalier de Polynésie Française, FRENCH POLYNESIA; 2Centre de Prevention du Suicide, FRENCH POLYNESIA; 3UPF, FRENCH POLYNESIA; 4UAG, MARTINIQUE; 5University of Melbourne, AUSTRALIA; 6AISRP, AUSTRALIA

**Study objectives**  
The WHO Suicide Trends in At-Risk Territories (START) study is a multi-site regional research program operating in countries of the Western Pacific, Europe and South America. The aim of the study in French Polynesia was: 1) to establish a monitoring system for suicidal behaviours; and, 2) to conduct a randomised control trial intervention for non-fatal suicidal behaviours.

**Methods and material**  
Over the period 2008 to 2010, 557 patients (31.1% male, 68.4% female, 0.5% trans-sexual) were treated at the Emergency Department of the Centre Hospitalier de Polynésie Française (CHPF) for suicidal behaviour. These persons were asked to be involved in the Brief Intervention and Contact (BIC), which provides long-term follow-up contact over an 18-months period. After providing consent, 100 persons were randomly assigned to treatment as usual (TAU) while 100 participants were allocated to the BIC group but only 90 were eligible to follow-up after 10 had immediately dropped-out.

**Results**  
There were no statistical significant difference in the number of reattempts in the BIC group compared to the TAU group. There were no deaths by suicide in the BIC group compared to two cases in the TAU group. A major methodological limitation was the drop-out rate in both BIC and TAU. Participants that responded better to the BIC intervention had fewer mental disorders, a psychiatric follow up combined to BIC, a history of sexual abuse and were less likely to have a history of suicide attempts.

**Conclusion**  
The BIC model suits the geographical and health care context of French Polynesia and seems to be efficient in targeted group of patients. The WHO START study has significantly contributed to the suicide prevention awareness and future development of prevention strategies in French Polynesia.

**PS1.06-4**  
** Suicide in Women**  
Vijayakumar, L  
Voluntary Health Services, INDIA

Women in developing countries commit suicide more than women in developed countries. The male female ratio of suicide for Asian countries is 1.1 : 1 whereas in the rest of the world it is over 3 : 1.

A nationally representative mortality survey determined the cause of death in 1.1 million homes in 6,671 small areas chosen randomly in all parts of India. The study shows that the number of women who die by suicide in 2010 was about 72,000. The age standardized ratio per 100,000
at the age of 15 years and older is 17.5 for women and more than 2.5 fold greater than in high income countries and nearly as high as those in China. 56% of female suicides occurred in 15 to 29 years old. At the age of 15–29, suicide occurred in nearly as many deaths as maternal deaths in women. Compared with the official data, there was 36% under reporting in suicide in women. Suicides due to family problems, marital conflict, love failure, extra marital affairs, divorce and illegitimate pregnancy and other conflicts related to marriage are common in women. Unique cultural factors like dowry, one child norm, preference for male child are considerable stressors for young women of Asia. The frequent occurrence of suicide pacts and family suicides where women outnumber men are seen in India, Sri Lanka and China. Domestic violence also correlates with suicidal behaviour.

**Conclusion**

Suicide in women has been a neglected area in suicide research and prevention. Considering that a large number of women particularly in low and middle income countries die by suicide, urgent initiatives need to be taken to reduce suicides in young women.

**PS1.06-5**

**Suicidal Behaviors in Hong Kong: An Update**

Yip, PSF

The University of Hong Kong, HONG KONG, CHINA PR

An update of the suicidal behavior in Hong Kong will be provided for the WHO START program, including self harm and completed suicide.

**PS1.06-6**

**A Pilot Study of the Surveillance of Fatal and Non-fatal Suicidal Behaviours in Kunming City China: Evidence from the START Project**

Huang, YQ; Ruan, Y; Liu, ZR; Gao, CQ; Huang, Q; Xu, XF; Ji, N; Lu, J; Wang, XD

1Institute of Mental Health, Peking University, CHINA; 2Yunnan Mental Health Hospital, CHINA; 3The First Hospital of Kunming Medical University, CHINA; 4World Health Organization Regional Office for the Western Pacific, PHILIPPINES

**Study objective**

The objective of this pilot study is to develop a valid, reliable, and standardised strategy to collect information of the incidence of suicidal behaviours (fatal and/or non-fatal) and to implement the surveillance strategy in Kunming City, China.

**Methods and material**

Five workshops were conducted and Delphi methods were applied to develop working procedures for the surveillances of fatal and non-fatal suicidal behaviours for Kunming City. The monitoring form for fatal suicidal behaviours and the monitoring form for non-fatal suicidal behaviours were translated and back translated by bilingual Chinese and English native speakers and were used during the surveillance. The surveillance lasted for six months in Dianyuan and Aziying Sub-districts in Kunming City in 2011.

**Results**

The working procedures from the Delphi methods include the following aspects: Trained community health workers were the main detectors of fatal suicidal behaviours and severe non-fatal suicidal behaviours. Information of fatal suicidal behaviour was also checked with
the death registration system by doctors in district hospitals. A special team visited the villages to find out any missed reports of non-fatal suicide behaviours by interviewing key informants. Results from the pilot surveillance showed the half year suicide rate was 4.3/100,000, with 5.7/100,000 for male and 2.8/100,000 for female. The half year rate of suicide attempts was 22.7/100,000, with 8.4/100,000 for male and 36.9/100,000 for female. All of the suicidal victims had financial difficulties before death. All of the suicidal attempters had critical adverse life experiences before committing suicide. The suicidal victims committed suicides by jumping hills, drinking pesticides or hanging themselves. The suicidal attempters committed suicides mainly by drinking pesticides or other poisons.

Conclusion
Fatal and non-fatal suicide surveillances conducted by community health workers are feasible and the data is valid.

14:30 - 16:00
PS1.7 SUICIDAL BEHAVIOUR IN AREAS OF CONFLICT AND DISASTER

PS1.07-1
Suicide and ‘Suicide’ Bombing in Pakistan: Do they have a Common Pathway?
Khan, MM
Aga Khan University, PAKISTAN

In recent years both suicide and ‘suicide’ bombing (SB) have shown a dramatic increase in Pakistan, a South Asian developing country with a majority Muslim population. Suicide is strongly condemned in Islam and there are many legal and socio-cultural sanctions against suicidal behavior. Similarly, SB was virtually unknown in Pakistan up until a few years ago. Since then there have been hundreds of such acts with thousands of casualties, both military and civilian. Both suicide and SB are carried out by young people, predominantly males and from the lower socio-economic strata of the society. While both are distinct phenomena - suicide is an intensely personal act with the intent of self-harm while the purpose of SB is to inflict injury and death on others (the perpetrator’s death being incidental to the act) - there are many commonalities between the two as well. In particular there are a number of common distal factors including poverty, deprivation, unemployment, lack of education and poor social conditions. However, the two differ significantly in proximal factors: mental disorders feature prominently in suicides while most ‘suicide’ bombers do not suffer from obvious psychopathology. Understanding the common pathway in both suicide and SB in the context of Pakistan is important for their prevention. Prevention programs should focus on improving the social conditions in the country, the absence of which leads to frustration and anger in the youth, contributing to a pool from which both the future suicides and ‘suicide’ bombers are drawn. There is also need for more research in both suicide and SB.
PS1.07-2  
Monthly Suicide Rates in 3 Disaster-Affected Prefectures Temporarily Increased with Anniversary Reaction after the Great East Japan Earthquake  
Tachikawa, H1; Aiba, M1; Takahashi, S2; Nemoto, K1; Takahashi, Y2; Asada, T1  
1Department of Psychiatry, University of Tsukuba, JAPAN; 2Department of Disaster Psychiatry, University of Tsukuba, JAPAN

Study objectives
The Great East Japan Earthquake on March 2011 has inflicted enormous damage on Japan, especially on three prefectures (Iwate, Miyagi, and Fukushima) of Tohoku region. Considering the traumatic damage, it is not difficult to forecast that suicide rates in these prefectures would increase after the disaster. However, annual suicide rates in these 3 prefectures have not significantly increased because those in Japan have been decreasing by years since 2009. To clarify more details of impacts on suicide related to the disaster, we conducted time series analyses of monthly suicide rates in the 3 prefectures.

Methods and material
First, we collected time series of monthly suicide rates from January 2009 to December 2012 in the 3 prefectures from national statistics by the Cabinet Office. Then, we extracted smoothed trend-cycle component from original ones by using the seasonal decomposition method. Finally, each trend-cycle series for the past three years in the 3 prefectures and those of Japan as a whole were compared.

Results
Each trend-cycle time series revealed that the monthly suicide rate in all prefectures decreased until the disaster’s month. However, it increased from 2.2 to 3.1 per 100,000 on August 2011, and decreased to 2.3 on December in Iwate. In Miyagi, it increased from 1.6 to 1.9 on July, and once decreased to 1.8 on October. In Fukushima, it increased from 2.1 to 2.3 on June, and decreased to 1.6 on December. Then, from March to April 2012, suicide rates in these 3 prefectures temporarily increased again all together (2.7 in Iwate, 2.3 in Miyagi, and 2.0 in Fukushima). Though the nationwide suicide rates slightly increased on June 2011, no increase of the rate was observed on March 2012.

Conclusion
By using time series analysis, we could demonstrate monthly suicide rates in the 3 prefectures increased twice on 3-5 months after the disaster as well as a year later. Differences of the trends among prefectures may depend on the specificity and severity of the damage in each area. It is also noteworthy that suicide rates of the 3 prefectures increased one year after the disaster altogether. We regard this phenomenon as ‘anniversary reaction’. Our results suggest that time trends of monthly suicide rates in the disaster-affected area might perceptively reflect each magnitude and specificity of the disaster damage to the area as well as unfortunate outcome by complicated grief of the disaster victims.
Reduced Suicide Rates in Disaster-stricken and Neighboring Areas Following the Great East Japan Earthquake

Orui, M; Harada, S; Hayashi, M
Sendai City Mental Health and Welfare Center, JAPAN

Study objectives
Devastating disasters may lead to increased suicide rates due to mental distress, including posttraumatic stress disorder (PTSD) and depression. However, previous studies in Japan reported decreased suicide rates in men. Few reports are available detailing the relative factors associated with such disasters, making it difficult to understand why changes in suicide rates occur. In the present study, we aimed to determine whether the Great East Japan Earthquake on March 11 2011, affected suicide rates and examine the association between suicide rates and known relative factors.

Methods and material
The disaster-stricken area defined in this study comprised Iwate, Miyagi, and Fukushima prefectures. These areas accounted for more than 98% of total disaster casualties. We compared changes in suicide rates pre-disaster (from March 2008 to February 2011) and post-disaster (from March 2011 to February 2012) across 47 prefectures. The following variables were used as economic variables in the ecological survey designed to evaluate the association between changes in suicide rates and relative factors: large-scale retail store sales value, number of guest lodgers, number of bankruptcy cases, and ratio of effective job offers. In addition, the number of consultation at public centers was used as a mental health service variable.

Results
According to Poisson distribution tests, post-disaster suicide rates in men decreased significantly in Iwate (p=0.005), Miyagi (p<0.001), Fukushima (p=0.008), and neighboring disaster-stricken areas. In contrast, suicide rates in women did not show consistent trend with an increase or decrease compared to pre-disaster rates. Pearson’s correlation analysis showed that the number of bankruptcy cases (r=0.468, p=0.001) and ratio of effective job offers (r=-0.501, p<0.001) were significantly associated with changes in suicide rates in men. However, none of the economic and mental health service variables was significantly associated with changes in suicide rates in women.

Conclusion
Suicide rates in men decreased significantly not only in disaster-stricken areas, but also in neighboring prefectures after the Great East Japan Earthquake. Relative factors associated with decreased suicide rates in men included a higher number of effective job offers and lower number of bankruptcy cases. Our results provide insight into measures needed for suicide prevention following a devastating disaster.
PS1.07-4
The Epidemic Spread of Charcoal-burning Suicide in East Asia: A Trend Analysis
Chang, S-S1; Chen, Y-Y2; Yip, PSF1; Lee, WJ3; Gunnell, D4
1The University of Hong Kong, HONG KONG, CHINA PR; 2Taipei City Hospital, TAIWAN; 3College of Medicine, Graduate School of Public Health, Korea University, KOREA (REP.); 4School of Social and Community Medicine, University of Bristol, UNITED KINGDOM

Objective
Carbon monoxide poisoning by burning barbecue charcoal has become a common suicide method in some East Asian countries but the pattern of cross-national spread is still unclear. We have investigated the emergence of charcoal-burning suicide in five East Asian countries.

Methods
Data on the number of suicides using gases other than domestic gas were extracted for Japan, South Korea, Hong Kong (1995-2010), Taiwan (1995-2011), and Singapore (1996-2011). Most such suicides were by charcoal burning. We used graphical and joinpoint regression analyses to study changes in suicide trends and Poisson regression analysis to study sex- and age-specific patterns.

Results
In 1995/1996, charcoal-burning suicides accounted for < 1% of all suicides in all study countries, except around 5% in Japan, but they increased to account for 14%, 28%, 13%, 4.3% and 3.4% of all suicides in Hong Kong, Taiwan, Japan, South Korea, and Singapore respectively in 2010. Rises were first seen in Hong Kong in 1999, followed by Taiwan in 2001, Japan in 2003, and South Korea in 2008, whilst there was no strong statistical evidence for a definite starting year for Singapore.
There was some evidence for an impact on overall suicide trends in Japan (females), Taiwan, Hong Kong but not in Japan (males), South Korea, and Singapore. Rates of change did not differ by sex/age group in Taiwan and Hong Kong but were generally highest in the youngest group (15-24 year olds) in Japan and South Korea.

**Conclusion**

Charcoal burning suicide increased markedly in five East Asian countries over the first decade of the 21st century. Prevention strategies such as continuous surveillance of novel suicide methods, responsible media reporting, and restricting access to online technical information may be considered to limit epidemic spread of new suicide methods.

**PS1.07-5**

**Mental Health, Suicide and the Northern Ireland Conflict**

Corry, C; O’Neill, SM; Bunting, BP; Murphy, SD; Ferry, Finola

University of Ulster, UNITED KINGDOM

**Study objectives**

The high rates of mental disorders and suicides in Northern Ireland (NI) have been linked with the civil conflict. The aim of this study was to examine the associations between the conflict, mental health and suicide using data from the NI Coroners’ records and the Northern Ireland Study of Health and Stress (NISHS).

**Methods**

The NISHS was part of the World Mental Health Surveys; this was fully structured diagnostic interview with a representative random sample of >4000 individuals to establish rates of DSMIV disorders, suicidality and risk factors. The NI suicide study involved the extraction of over 40 variables from the Coroner’s files on suicides from 1994-2004. This study focuses on suicidality, diagnosed mental disorders and adverse events prior to suicide.

**Results**

Around 39% of the NI population have experienced a conflict related trauma, 8.8% of the NI population meet the criteria for a lifetime diagnosis of PTSD and it is estimated that 2.6% of this figure can be attributed to conflict related traumatic events. There is also evidence of high rates of other mental disorders and suicidal ideation. Almost three quarters of completed suicides had a recorded adverse event and the most frequent adverse event noted was ‘relationship difficulties’. Other common events were bereavement and illness, financial crisis, employment difficulties and police/legal problems.

**Conclusion**

The NI conflict appears to account for a substantial proportion of mental disorders, however conflict related traumatic events are less commonly documented in suicide files. The NI conflict and conflict related events may be indirectly related to individual suicides through their effect on mental and physical health generally and on social and family relationships.
14:30 - 16:00
PS1.8 NATIONAL STRATEGIES FOR SUICIDE PREVENTION

PS1.08-1
United States National Strategy for Suicide Prevention: Innovation, Intervention, and Impact
McKeon, R
SAMHSA, UNITED STATES

Since the United Nations first published guidelines for the development of national suicide prevention strategies in 1996, numerous countries have developed, implemented, and evaluated their national strategies. In 2012, the World Health Organization published a public health framework for nations considering the development of suicide prevention strategies. In order to meet the challenge of reducing suicide on a national level, it is essential that nations who have made sustained, intensive efforts to implement national strategies learn from those experiences, modify their strategies as needed, and share lessons learned with other nations. In the United States, a national strategy for suicide prevention was launched in 2001, and then a revised National Strategy was issued in 2012. The revised national strategy was designed to incorporate new knowledge in suicide prevention, to capitalize on lessons learned from efforts to implement the 2001 National Strategy, and to serve as a blueprint for national suicide prevention efforts over the next decade. The presentation will describe key interventions and strategic directions utilized in the U.S. strategy, will present what was learned over time following implementation of the 2001 national strategy, and will describe how this information was used to adapt or modify the national strategy. The current status of U.S. national efforts, will be highlighted and innovative features of the strategy identified. Dr. Richard McKeon from the Substance Abuse and Mental Health Services Administration will present on the United States National Strategy for Suicide Prevention, describe its impact, and will show how the lessons learned since the launch of the National Strategy in 2001 informed the development of a revised National Strategy in 2012 and how this revised strategy is being implemented. Participants will learn about components of the United States strategy that may be of benefit to other nations as well as lessons learned that could be applicable to other national efforts.

PS1.08-2
Norway’s New National Strategy for Suicide Prevention
Mehlum, L
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Norway’s original National Strategy for Suicide Prevention was developed in the mid-1990s as one of the very first in the world and formed the basis for all suicide preventive work on multiple levels throughout the country for many years. After a protracted development phase, a new strategy has now been completed and will be implemented from 2013 and onwards. A brief description of the contents and rationale for this strategy will be given. The revised Norwegian strategy is more detailed and comprehensive than the previous one with a higher number of specific objectives embracing several new risk groups and new methodolog-
ical approaches. Where it departs most markedly from previous strategies is, however, in the much stronger emphasis on what preventive effects can be achieved through improved collaboration between service providers, institutions and interventions operating on different levels of society. Specifically, the strategy has been written to adhere to the very large new health reform - the Co-ordination Reform - currently implemented in all aspects of health care and well-being in Norway. This reform has led to large structural changes in these sectors of federal, regional and local government and has redistributed large proportions of the budgets for health care. Within the framework of this reform local municipalities' role in suicide prevention will be strengthened. This is regarded necessary for earlier detection of suicide risk and earlier intervention for risk groups and in order to strengthen the continuity of care and treatment of individuals in risk of suicidal and self-harming behaviour. In contrast to earlier approaches, this time local municipalities are regarded as the core instrument for change, whereas specialized care providers, experts, institutions and resource centres are regarded as auxiliary elements.

As in previous strategies, interventions for specific populations and sub-populations, including consumers of mental health care and primary health care; the young, the elderly, suicide survivors, military veterans, ethnic minorities, people who are incarcerated; and lesbians, gays, and bisexuals are included. However, even more emphasis has been put on strengthening interventions and preventive approaches that address commonalities between many of these subgroups. Some implications of this approach and of some of the many specific elements included in the new strategy will be discussed in this presentation.

PS1.08-3
Danish National Suicide Prevention Strategy
Nordentoft, M
University of Copenhagen, DENMARK

The Danish Parliament endorsed a national suicide prevention strategy in 1998. Since then, regional suicide prevention centers were established in all Danish Regions. Suicidal acts can be considered severe and preventable complications to a range of diseases and conditions in which social aspects play an important role. National suicide prevention strategies should be based on analyses of the possibilities for suicide prevention in different risk groups. Based on a review of the population size and suicide risk in different risk groups, the two most important risk groups for suicide are the mentally ill and those who have attempted suicide, and these groups also have the highest relative risk for suicide. There is an overlap between these two groups. Based on the size of different risk populations, the relative risk associated with the population at risk, population attributable risk can be calculated for different high risk groups. The evidence base for the effectiveness of different preventive measures is weak. However, based on the literature it is possible to combine analyses of population attributable risk and preventable fraction, and this can guide which preventive measures should have highest priority. Based on Danish figures for suicide in different risk groups, preventive efforts in the following risk groups should have the highest priority: People with mental illness, especially in the first years of illness. People who attempted suicide, especially the first year after attempted suicide. People with substance abuse. People in prisons and people with a criminal record. Elderly single men with somatic disorders.
**PS1.08-4**  
The National Suicide Prevention Strategy in New Zealand: Revision and a New Realism?  
Beautrais, A  
University of Canterbury, NEW ZEALAND

**Background**  
National suicide prevention strategies are not static. They are reinvented by both domestic developments and in response to new findings in the international arena. Many countries are now developing ‘second generation’ suicide prevention strategies: New Zealand is one of these. New Zealand developed a national Youth Suicide Prevention Strategy in 1996 to address youth suicide rates which had increased dramatically from the mid 1980s. The development of this strategy was based upon empirical findings from New Zealand research studies of suicide and attempted suicide, and was informed by a review of international evidence. In 2006 the Youth Suicide Prevention Strategy was converted to a national 10-year Suicide Prevention Strategy for all ages. In early 2013 that strategy will be revised for the next four years.

**Objective**  
We will review the goals, structure, components and evolution of the revised (2013-2016) national suicide prevention strategy and discuss omissions and remaining challenges. We will describe selected New Zealand suicide prevention programmes that may inform prevention efforts in other countries, including programmes focused on national postvention services and national youth welfare services.

14:30 - 16:00

**PS1.9 LONGITUDINAL STUDIES OF SUICIDAL BEHAVIOUR**

**PS1.09-1**  
Attenuated Psychotic Symptoms are an Important Clinical Marker of Risk for Suicidal Behaviour: Results from a Prospective Cohort Study  
Kelleher, I1; Corcoran, P2; Keeley, H2; Wigman, JTW3; Devlin, N1; Ramsay, H1; Wasserman, C4; Carli, V5; Sarchiapone, M6; Hoven, C4; Wasserman, D5; Cannon, M1

1Royal College of Surgeons in Ireland, IRELAND; 2National Suicide Research Foundation, IRELAND; 3University of Maastricht, NETHERLANDS; 4Columbia University, UNITED STATES; 5Karolinska Institute, SWEDEN; 6University of Molise, ITALY

**Background**  
Community and clinical research over the past decade has demonstrated that hallucinations and delusions, the classic symptoms of psychosis, are far more prevalent in the population (at both an attenuated and frank level) than actual psychotic disorder. These symptoms are especially prevalent in childhood and adolescence. Recent cross-sectional studies have suggested an association with suicidal behaviour but there have been no longitudinal studies to date.

**Method**  
The Saving and Empowering Young Lives in Europe (SEYLE) study is a randomised controlled
trial on suicide prevention in adolescents aged 13 to 16 years across 12 European countries. One of the goals of the study was to assess psychotic symptoms (attenuated or frank) as a clinical marker of risk for suicide attempt.

**Outcome Measures**

(i) Suicide attempts at 3-month follow up, (ii) suicide attempts at 12-month follow up and (iii) suicide attempts that occurred proximal to a report of psychotic symptoms (in the 2 weeks preceding an assessment-acute suicide attempts).

**Results**

7% of the sample reported psychotic symptoms at baseline. Of these, 7% reported a suicide attempt by 3 month follow up, compared to 1% of the rest of the sample (OR, 10.0; 95%CI 2.2-45.4), and 20% reported a suicide attempt by 12 month follow up, compared to 2.5% of the rest of the sample (OR, 11.3; 95%CI, 4.4-28.6). Among young people with baseline psychopathology who reported psychotic symptoms, 14% had a suicide attempt by 3 months (OR, 17.9; 95%CI, 3.6-88.8) and 34% had a suicide attempt by 12 months (OR, 32.7; 95%CI, 10.4-102.4). Looking at suicide attempts that occurred proximal to (within 2 weeks of) each of the 3 assessment points (acute suicide attempts), individuals with psychopathology who reported psychotic symptoms had a nearly 70-fold increased odds of acute suicide attempts (OR, 67.5; 95%CI, 11.4-399.2). Differences were not explained by non-psychotic psychopathology symptom burden, multimorbidity or substance use. In a causative model, the population attributable fraction for psychotic symptoms in terms of suicide attempts would be 55 to 74%.

**Conclusions**

Young people with psychopathology who report psychotic symptoms are at clinical high risk for suicide attempt. Increased emphasis on careful clinical assessment of psychotic symptoms (attenuated or frank) in mental health services, and improved understanding of the pathological significance of these symptoms, is urgently needed.

**PS1.09-2**

**Associations of Change in Risk Factor between the Baseline and Follow-up Assessments with the Incidence of Suicidal Ideation**

Zhang, Y¹; Yip, PS¹; Chang, S-S¹; Wong, PWC²

¹The HKJC Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR; ²Department of Social Work and Social Administration, HONG KONG, CHINA PR

**Objectives**

This study aimed to examine the associations of change in each risk factor between the baseline and follow-up assessments with the incidence of, and recovery from, suicidal ideation.

**Method**

A twelve-month follow-up survey of Hong Kong population yielded 997 adults aged between 20 and 59 years.

**Results**

Incidence risk of suicidal ideation was higher in individuals who were divorced, separated or widowed, at poor financial situation, had a history of psychiatric treatment, and experienced a recent bereavement. Change in depression, anxiety, hopelessness, and irrational beliefs, was associated with the incidence in men, whereas such associations were insignificant in women. Respondents with increased severity of depression, anxiety, and hopelessness were less likely to recover from suicidal ideation.
Conclusions
Gender differences were detected in the associations of change in psychological factors with the incidence of suicidal ideation. Table 1 Associations of change in psychological assessments between two waves with the development of suicidal ideation. Table 2 Associations of change in depression, anxiety, hopelessness, and irrational belief between two waves with the development of suicidal ideation in men and women.

<table>
<thead>
<tr>
<th></th>
<th>OR (95% CI) b</th>
<th>Gender Interaction P c</th>
<th>Age Interaction P c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in depression a</td>
<td>2.58 (1.80-3.70)***</td>
<td>0.025</td>
<td>0.80</td>
</tr>
<tr>
<td>Change in anxiety a</td>
<td>2.36 (1.65-3.38)***</td>
<td>0.009</td>
<td>0.26</td>
</tr>
<tr>
<td>Change in hopelessness a</td>
<td>2.19 (1.50-3.21)***</td>
<td>0.067</td>
<td>0.18</td>
</tr>
<tr>
<td>Change in irrational belief a</td>
<td>1.75 (1.09-2.81)*</td>
<td>0.009</td>
<td>0.15</td>
</tr>
<tr>
<td>Change in social support a</td>
<td>0.43 (0.28-0.66)***</td>
<td>0.36</td>
<td>0.17</td>
</tr>
<tr>
<td>Change in life distress a</td>
<td>2.30 (1.60-3.30)***</td>
<td>0.43</td>
<td>0.77</td>
</tr>
</tbody>
</table>

a. Change between baseline and follow-up assessments of each variable. b. Adjusted for gender, age, and baseline assessment of each variable. c. P value of interaction between gender and change in assessment of each variable. d. P value of interaction between age and change in assessment of each variable.

* P<0.05; *** P<0.001, two-sided test.

<table>
<thead>
<tr>
<th></th>
<th>Men (n=407)</th>
<th>Women (n=524)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR (95% CI) b</td>
<td>OR (95% CI) b</td>
</tr>
<tr>
<td>Change in depression a</td>
<td>3.60 (2.13-6.08)***</td>
<td>1.69 (0.92-3.08)</td>
</tr>
<tr>
<td>Change in anxiety a</td>
<td>3.50 (2.01-6.10)***</td>
<td>1.50 (0.88-2.54)</td>
</tr>
<tr>
<td>Change in hopelessness a</td>
<td>3.46 (1.87-6.41)***</td>
<td>1.60 (0.92-2.81)</td>
</tr>
<tr>
<td>Change in irrational belief a</td>
<td>3.19 (1.67-6.09)***</td>
<td>0.78 (0.36-1.67)</td>
</tr>
</tbody>
</table>

a. Change between baseline and follow-up assessments of each variable. b. Adjusted for age and baseline assessment of each variable.

*** P<0.001, two-sided test.
Recalibrating Suicide Risk after Index Suicide Attempt: Prevention Must Start Before the First Attempt

Bostwick, JM1; Pabbati, CP2; McKean, AJS2; Drozdowicz, LB2; King, NE2; Chang, MT2

1Mayo Clinic, UNITED STATES; 2University of California at San Diego, UNITED STATES

Objectives
A history of suicide attempt is one of the most robust predictors of eventual completed suicide. Most studies in the literature have limited generalizability, however, because of their reliance on convenience samples derived from patients using a particular method of attempt or identified in a particular treatment setting and resultant failure to consider other methods or settings. Furthermore, first lifetime suicide attempts resulting in death are routinely disregarded. We undertook to follow a sample from first attempt coming to medical attention including coroner reports. We hypothesized that by tracking mortality of suicidal individuals in this way, we would more accurately show the prevalence of completed suicide after suicide attempt. We further hypothesized that including individuals dying on their first attempt would yield a more accurate representation of lethality.

Methods
Using the Rochester Epidemiology Project, we identified 1,507 subjects (560 males (M), 947 females (F)) from Olmsted County, Minnesota, USA, a population isolate, making an index suicide attempt, defined as first lifetime suicide attempt coming to medical attention (ISA), between 1/1/86 and 12/31/07. We screened the cohort through the National Death Index to identify suicides during that period.

Results
Of 1,507, 81 (5.4%) killed themselves during the study period. Males were disproportionately represented: 62 suicides (76.5% of suicides; 11.1% of M) vs. 19 females (23.5% of suicides; 2.0% of F). Dying on ISA, were 37 of 62 M (59.7%), 11 of 19 F (57.9%). Of ISA survivors subsequently completing suicide, 20 of 25 M and 7 of 8 F died within a year. At 1.7 F:M, the attempt ratio was narrower than the 4:1 widely cited in the literature. At 5.5 M:F, the completion ratio was greater than the widely cited 4:1.

Conclusions
One in nine male attempters died by suicide - 1 in 15 on ISA. One in 50 females died - 1 in 86 on ISA. For survivors of ISA, suicide rate dropped for both M and F than for the full cohort. The vast majority of both M and F dying by suicide did so on ISA or within a year of it. Our findings suggest that suicide prevention efforts commencing after ISA are too late: 60% have already died. Prevention programs should thus focus on stopping individuals from ever making a first attempt. For survivors, the first year after ISA is critical for mustering preventative resources against a lethal repeat attempt.
**PS1.09-4**

*Suicide Mortality following a First Suicide Attempt in Adolescents and Adults: A National Controlled Cohort Study in Sweden*

Beckman, K; Tidemalm, D; Dahlin, M; Runeson, B

Karolinska institutet, Department of Clinical Neuroscience, Division of Psychiatry, SWEDEN

**Study objectives**

To investigate the impact of a violent method, mental disorder and repetition on suicide risk in adolescent and adult first time suicide attempters.

**Method and material**

Population-based nationwide cohort study, using data from four linked Swedish national registers. Patients admitted to hospital for attempted suicide during 1990-99 n=53 843 (58% women) were followed for 9-19 years, with population controls. Completed suicide at one year after the index attempt and during the entire follow-up, 1990-2008 were outcome measures. Exposures were violent method used at index attempt, presence of a mental disorder at index attempt and repetition of suicide attempts during follow-up, studied in patients aged 10-19 years and 20 years and above, respectively. Stratification was made on gender. Odds ratios and 95% confidence intervals were computed.

**Results**

There were substantially lower odds of suicide in patients 10-19 years of age than those aged 20 years and above, especially in women, but compared to population controls the odds ratio for suicide in the youngest were 50.1 for men (CI 11.0-228.8) and 7.5 for women (CI 1.7-33.5). In the young men, a violent index attempt method (OR=14.8, CI 4.1-53.9) and presence of a mental disorder (OR=9.2, CI 1.9-44.2) increased the one-year probability of suicide. None of the studied risk factors predicted suicide within one year in the young women. In adult patients, all factors increased the one-year probability of suicide in both genders. All three risk factors increased the long-term probability of suicide among men and women in both age groups.

**Conclusions**

Distinct differences in levels and patterns of suicide risk after suicide attempt were found between patients aged 10-19 years and patients aged 20 years and above. In the clinically important one-year follow-up, only two of the studied risk factors predicted suicide among the youngest men and none of them among the youngest women. Suicide attempt in adolescence is an important risk factor for later suicide, but further studies on predictors of suicide in young suicide attempters are needed, especially in the short-term perspective.

**PS1.09-5**

*Premature Death Following Self-harm: A Multicentre Cohort Follow-up Study*

Bergen, H¹; Hawton, K¹; Waters, K²; Ness, J²; Cooper, J³; Steeg, S³; Kapur, N³

¹University of Oxford, Centre for Suicide Research, UNITED KINGDOM; ²Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM; ³University of Manchester, Centre for Suicide Prevention, UNITED KINGDOM

**Objectives**

All-cause mortality in the self-harm population was approximately twice that of the general UK population during the 1980’s. Further investigation of cause-specific premature death in individuals who self-harm is warranted, including associations with socio-economic deprivation.
Methods
A cohort of 30,132 individuals from the Multicentre Study of Self-harm in England presenting to Emergency Departments in 2000-2007 was followed up to the end of 2009. Outcome measures included age-standardised mortality ratios (observed [O]/expected [E] number of deaths) and years of life lost (YLL).

Results
There were 1832 (6.1%) all-cause deaths after a median 6-year follow-up. Deaths were 3.6 times (95% confidence interval 3.5 to 3.8) greater than expected, the excess greater in males [O/E 4.1 (3.8 to 4.3)] than females [O/E 3.2 (2.9 to 3.4)]. Specific natural cause deaths were 2 to 7.5 times greater than expected. For individuals who died of any cause the average YLL was 31.4 years (30.5 to 32.2) for males and 30.7 (29.5 to 31.9) for females. The average YLL for natural cause deaths was 25.9 (25.7 to 26.0) for males and 25.5 (25.2 to 25.8) for females, and for external cause deaths was 40.2 (40.0 to 40.3) for males and 40.0 (39.7 to 40.5) for females (Figure 1). Circulatory and digestive diseases were major contributors to YLL by natural causes (24.8% in males, 30.8% in females). Mortality from natural but not external causes was stepwise-related to area-based socio-economic deprivation. Alcohol, drug misuse and physical health problems identified during assessment following self-harm were associated with death by digestive disease, mental and behavioural disorder, and circulatory disease, respectively.

Conclusion
Physical health and life expectancy are severely compromised in individuals who self-harm compared to the general population. In managing self-harm, clinicians assessing patients’ psychosocial problems should also assess their physical needs. Policy makers should structure services to facilitate the integration of appropriate physical and mental healthcare.
Thyroid Stimulating Hormone Levels and Impact on Self-reported Suicide Risk in Depressed Psychiatric Inpatients
Lineberry, T1; Parsaik, A1; Sola, C1; Bryan, C2
1Mayo Clinic, UNITED STATES; 2University of Utah, UNITED STATES

Introduction
Thyroid dysfunction may impact depression and anxiety syndromes and impact clinical presentation and outcomes. This in turn may impact suicidal states and clinical course. In this presentation we will describe association and impact of thyroid function on suicide risk, using sensitive thyroid stimulating hormone levels as marker of thyroid function, with self-reported ratings of overall suicide risk and agitation in patients admitted to a specialized treatment resistant depression unit at the Mayo Clinic.

Methods
Restrospective medical record review: As part of improving and standardizing suicide risk assessment, all psychiatric inpatients admitted to Mayo Clinic Psychiatric Hospital receive standardized assessment including Suicide Status Form II (Jobes et al) which is filled out as a patient self report at admission and discharge. This study reviewed data from inpatients admitted to our treatment resistant depression unit who provided research authorization for medical record review. Diagnosis was determined used medical record diagnoses made by Mayo Clinic board certified psychiatrists. Patients were controlled into two primary groups: those with diagnosis of depressive disorder diagnosis and those with depressive disorder diagnosis + anxiety disorder diagnosis. Patients with diagnosis of personality disorder were excluded from the resulting two groups. 294 (46.8%) patients were diagnosed with an anxiety disorder, and 334 (53.2%) patients were diagnosed with depressive disorder only. Bivariate correlations were first calculated to determine if any relationships existed between sTSH value and all SSF scores at both admission and discharge. TSH values were next aggregated into the following three groups: below normal, normal, and above normal. MANCOVA was utilized to compare mean SSF scores at admission and discharge while controlling for gender, age, and race.

Results
Results indicated that sTSH level was not correlated with any SSF scores. The analysis of sTSH results by clinical reference range categories, indicated no significant differences according to TSH category [F (24, 1098) = .666, p = .887].

Discussion
We will describe association with thyroid function and psychiatric illness as review and impact and limitations of our findings on clinical practice, and future directions for research.
14:30 - 16:00
PS1.10 WORKSHOP: CHALLENGES FOR IMPLEMENTING PUBLIC HEALTH APPROACHES TO SUICIDE PREVENTION

PS1.10-1
Is a Suicide Attempt a Reportable Event? Public Health and Mental Health Ethics as Complementary and Competing Perspectives
Caine, ED
Injury Control Research Center for Suicide Prevention, UNITED STATES

Public health traditions recognize ethical demands for population needs that may supersede individual-level concerns. This perspective may seem to diverge from the intensely individual focus of mental health professionals and related privacy advocates, who are especially mindful of stigma and the need for confidentiality of information and communication. Many individuals and families will view measures to prevent suicide - such as, mandatory registration of suicide attempts and protocols to engage those individuals in care; requiring interventions for intimate partner violence, which often sets the context for later suicidal behaviour; requiring firearm safety measures; or dealing with depression and other mental health concerns at a community and public health level - as invasions of individual privacy and personal rights, as well as being fraught with concerns about stigma.
Taiwan, for example, mandated reporting all suicide attempts. Taiwan’s government, commentators, and public health and medical communities view this mandate in the same light as reporting serious infectious diseases; they see suicide with a sense of dire public health urgency. Data show that more than 80% of more than 50,000 reported cases received services; those who had aftercare had a 22% lower suicide rate than those who did not have contact. Currently, such an approach would be unacceptable in much of the United States.
This presentation will review the traditions of ‘public health’ and ‘personal health’ ethics, and consider where they overlap and how they diverge. How one views the inevitable debate between advocates for these traditions likely will depend on values related to personal privacy and confidentiality, public responsibility for deaths in local communities, and whether suicide and attempted suicide truly are public health problems.
Suicide was historically seen as a social concern and more recently as a medical and personal problem. Accepting the premise that distal preventive interventions are intended to change the trajectories of people’s lives suggests a willingness to embrace broader social responsibilities. Yet it remains uncertain whether such a stance would gain wide acceptance in a nation such as the U.S., or how it would be perceived internationally. Without thoughtful and open discussion, we will have insufficient guidance to develop needed programs.
This presentation will provide a framework for such discussions.
**PS1.10-2**

Is it time to shift our Approach and Examine Non-suicide Specific Outcomes in Suicide Prevention Efforts?

Reed, J; Caine, ED; Kapur, N; O’Neil, D

1Education Development Center - SPRC, UNITED STATES; 2Injury Control Research Center for Suicide Prevention, UNITED STATES; 3University of Manchester, UNITED KINGDOM; 4Dawn O’Neil & Associates, AUSTRALIA

This presentation will focus on outcome measures shown in the literature to be theoretically related to suicide, which can be used to assess the impact of prevention programs. Suicide prevention initiatives have long been difficult to evaluate. Suicides are statistically rare and suicide research presents unique ethical challenges. Out of necessity, researchers often have assessed ‘proxy’ measures, such as: a decrease in suicidal ideation or depressive symptoms; (less often) a decrease in suicide attempts; or the inferred impact of training programs by demonstrating increased knowledge or changed attitudes. Suicide has no single cause and no single solution. As well, there is ample research available demonstrating the associations between suicide - and adverse outcomes such as accidental deaths, premature mortality, domestic violence, drug and alcohol use, and trauma - and positive outcomes such as school completion, employment rates, reduction in legal encounters, enhanced sobriety, more effective treatment of chronic pain, and increased social connectedness. Thus, while there are many targets for interventions that potentially are sensitive indicators of the impact of preventive interventions, nearly all research to date has focused on person’s suicidal attributes. It is time for research and practice to focus on protection in addition to risk, to include both proximal and distal factors, and to measure diverse outcomes that reflect common processes. The United States Air Force Suicide Prevention Program (AFSPP) begun in 1996 offered one example. The AFSPP was a multilayered community-based prevention effort that showed significant reductions in suicide deaths and other violence-related outcomes that share underlying risk factors, the latter including accidental deaths, homicides, and severe family violence. A distal or upstream example, one that was not specifically targeted to reduce suicide, has been the Good Behaviour Game (GBG). GBG uses a behaviour management strategy with elementary school students; its core components involve team membership, self- and team-behaviour monitoring, and positive reinforcement. This universal early intervention has shown impressive results carrying into early adulthood, including reduced drug and alcohol abuse, smoking, and antisocial personality disorder, especially among males who were more aggressive as first graders.

**PS1.10-3**

Implementing Suicide Prevention Initiatives, when there is Governmental and Health System Support

Kapur, N

University of Manchester, UNITED KINGDOM

**Background and aims**

Many countries now have national suicide prevention strategies, but what is the evidence that public health and specialist services have meaningfully implemented these approaches and reduced the incidence of suicide as a result? This presentation will focus on the impact of national strategies in England, particularly on individuals using mental health services.
Methods
Data will be presented from a number of national studies - including a before and after evaluation of key mental health service recommendations, a longitudinal study of suicide among psychiatric in-patients, and an investigation of the effect of limiting analgesic availability on general population suicide.

Findings and conclusion
This is a methodologically difficult area. However, there appears to be some evidence that 1) strategies have indeed been implemented and 2) that this has resulted in a meaningful reduction in suicide rates. A new suicide prevention strategy for England was published in 2012 with an emphasis on local implementation. It remains to be seen how effective this will be. An alternative mechanism for implementation might be to focus on key markers of service quality. In England, it has been proposed that these ‘Quality Standards’ be used as a basis for the commissioning and management of a wide variety of services and Quality Standards for self-harm have recently been published. The relative merits of different approaches to the implementation of suicide prevention measures will be discussed.

Note: This presentation discusses independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research scheme (RP-PG-0606-1247) and research funded by the Department of Health. The views expressed in this presentation are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

PS1.10-4
The Challenges and Opportunities for Implementing Suicide Prevention Initiatives: Does the Collective Impact Approach Offer a Solution?
O’Neil, D
Dawn O’Neil & Associates, AUSTRALIA

This presentation will focus on the need to apply different mindsets and approaches towards suicide prevention due to its inherent complexity. There is no question that suicide is highly complex and can also be defined as a ‘wicked’ problem. Wicked problems are interconnected and do not respond to simple solutions or templates. Inevitably, different players in a complex ‘wicked’ landscape have different explanations for problems and solutions, making cooperation challenging. Previously successful ways of dealing with our public health problems do not and will not work for ‘wicked’ or complex problems including suicide prevention. It is understood that we cannot use the same ‘understand, predict, control’ mindset that characterised previous waves of health improvement. The WHO says depression is the fastest growing cause of global disability, yet, neither current nor historical approaches to public health offer ways to meet these needs. The social sector has itself thrown up answers. One to consider is Collective Impact, a highly adaptable framework pioneered in the US to help diverse NGOs, government and other funders and communities cooperate on systemic, complex, social challenges.

Its central thrust, that ‘large-scale social change requires broad cross-sector coordination, yet the social sector remains focused on the isolated intervention of individual organizations’, struck a resounding chord across the US, in NGO, philanthropic and government circles. Use of the framework is gathering momentum as more communities acknowledge they must evolve their working relationships to tackle entrenched and complex social challenges. Knowing that no single policy, government department, organisation or program is enough has inspired mul-
multiple groups from different sectors to abandon private agendas. As Kramer et al found: 'There is no 'silver bullet' solution to systemic social problems and these problems cannot be solved by simply scaling or replicating one organization or program.' The framework has identified 5 elements for effective cooperation across sectors: a common agenda, common measurement, mutually reinforcing activities, continuous communications and, vitally, a backbone organisation. Our 'wicked' problem will not respond to simple solutions, no matter how well funded. We will not be able to 'coordinate' our way out of this complex tangle. We need a radically different approach, one that will challenge and stretch us in new ways.

14:30 - 16:00
PS1.11 WORKSHOP: UTILIZATION OF DATA FROM ROUTINE REGISTERS FOR SUICIDE RESEARCH

PS1.11-1
Utilization of Data from Routine Registers for Suicide Research: Concerns and Opportunities
Qin, P
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Summary of the goals, content and format of the workshop:
With the development of computerization, gradually more countries and regions have been able to join the Scandinavia countries in keeping personal data from routine registrations electronically accessible with even possibility of linkage cross various register databases. Although the primary purpose of the registration is usually for routine administration, the data has great value for scientific research. In the recent years there has been a steady increase of publications, in both social and medical sciences, that were based data from population registers. The purpose of this workshop is to discuss the utilization of data from routine registers for suicide research. Topics in the discussion will include advantages and limitations of using register data, ethical issues, design and analytic possibilities, etc., along with successful examples of register-based suicide research from Scandinavia countries.

14:30 - 16:00
PS1.12 SUICIDE AND THE SOCIAL CONTEXT

PS1.12-1
Evolution of Suicide Clusters: Suicide Couplets as Mediators from Singleton Deaths to Clusters
Malone, K; McLoughlin, A; Kelleher, C
School of Medicine & Medical Science, University College Dublin, IRELAND

The study aim was to identify and describe unconnected singleton suicide deaths, suicide couplets and suicide clusters in an Irish Suicide Survey.
Methods
The subjects included 100 families bereaved by suicide between 2003-2008, who had volunteered to participate in a suicide research survey. The families came from all over Ireland, and completed a Psychobiographical Autopsy which incorporated a quantitative semi-structured interview together with a narrative component. This generated a biographical narrative rich in content, texture and themes, providing insightful material for qualitative thematic analysis, and facilitated the identification of suicide couplets and clusters. A couplet was defined as a temporally and socially highly connected suicide pair, whereas a cluster was defined as 3 or more temporally and clearly socially connected suicide deaths occurring within an unexpectedly small geographic area (except for internet and ‘remote’ clusters).

Results
56 of the suicide-deceased were aged 25 or less (36 of whom were aged less than 21). 75 singleton suicide deaths were identified, a further 15 were part of couplets/associated suicide deaths, and a further 10 cases were part of suicide clusters. Clusters were more likely to occur in younger suicide deaths. 7/10 cases associated with clusters were under aged 21, and 5 of those cases were under 18. Couplets were more associated with young adults (rather than under 18s), but were also observed across the lifecycle. 3/15 couplet cases were under aged 18, a further 8/15 cases were between 18-30, and 4/15 case were aged over 30. One internet couplet was identified, as well as one ‘remote’ cluster which was constituted of five recently discharged psychiatric in-patients. Older romantically involved couplets were less likely to evolve into clusters.

Discussion
This is the first paper to describe the existence of “suicide couplets”, and to examine their possible role in the formation of suicide clusters. While the majority of suicide deaths within a community may be considered a one-off death event, a significant minority of younger suicide deaths are socially, temporally and geographically connected to other suicide deaths in excess of the suggested 1-2% prevalence for adolescent suicide clusters. It remains to be studied as to whether closed couplets (Romeo and Juliet effect) or open couplets (socially very close but not intimate) mediate or mitigate the formation of suicide clusters.

PS1.12-2
The Social Context of Suicide in England and Wales

Turnbull, P; Tranmer, M; Hunt, IM
The University of Manchester, UNITED KINGDOM

Suicide is a major public health concern in the UK, with the most recent published rates for England being 11.8 per 100,000 population. There has been extensive research into individual-level risk factors for suicide, and many suicide prevention strategies include goals directed at particularly high risk groups. Another school of thought suggests that ecological and social factors may also have an influence on suicide. The majority of the literature in the UK that has investigated the association between social factors and suicide has examined suicide rates in relation to area-level deprivation and/or social fragmentation scores derived from the UK census. It is wrong to assume that factors associated with suicide at this group-level would be associated with suicide at the individual-level, just as it is wrong to assume that individual characteristics associated with suicide will retain an association at the group-level. Multilevel modelling is indicated to address these issues, and would expand the literature on suicide social factors. The Office for National Statistics provided basic information on deaths in England and Wales that were assigned a suicide or open verdict at coroner’s inquest. Around 25% of people who
died by suicide were in contact with mental health services in the year prior to death. More detailed demographic, behavioural and clinical information was available on these patient suicides from The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. These datasets were linked to the 2001 Census for multilevel modelling to examine suicide amongst both the general population and people in contact with mental health services. Analysing this data by NHS Primary Care Trust highlights specific risk factors for suicide in different sub-groups within the PCTs, and could influence how NHS services are allocated. Further data manipulation of the ONS data from the year 2001 and the Census data created a virtual complete sample of people dying by suicide in this year, and enabled analysis of risk factors. This work is a collaboration between the School of Social Science and The Centre for Suicide Prevention at the University of Manchester.

PS1.12-3
The Importance of Perceived Lack of Support for Attempted Suicide in Ghanaian Men
Akotia, C1; Hjelmeland, H2; Knizek, BL3; Kinyanda, E4; Osafo, J1
1University of Ghana, Department of Psychology, GHANA; 2Norwegian University of Science and Technology, NORWAY; 3Faculty of Nursing, Sør-Trøndelag University College, NORWAY; 4MRC/UVRI Uganda Research Unit on AIDS, Entebbe, UGANDA

Study objectives
Ghanaian communities are still mainly interdependent and lives are intensely shared-from success to failure. The sense of care and neighborliness is expected to mitigate life’s hardship members in a social network might experience. This study was conducted among suicide attempters in Ghana to understand the reasons for their act.

Methods and Material
Qualitative interviews were used to gather data on reasons for suicide among suicide attempters in Ghana.

Results
Findings indicate that one critical reason for the suicidal act was the attempter’s perception of lack of some form of social support from a significant person in the social network. A preponderance of this reason was observed more often among men than women. Major themes emerging from analyses conducted include perceived lack of help in illness, lack of help in financial difficulties and lack of help during crisis. The nuances involved in being a man in such a context are also further explored.

Conclusion
The provision of social support in an interdependent culture such as Ghana is crucial to the survival of the individual, particularly for a male experiencing suicidal crisis.

PS1.12-4
Impact of Social Determinants on Suicide in Brazil
Borges Machado, D; Rasella, D; Neves, D
ISC - Institute of Collective Health, Federal University of Bahia, BRAZIL

Brazil is living in a period of important socioeconomic and epidemiological transitions. During the last decade, Brazil has experienced one of the largest decreases in income inequality.
While much progress has been made, income inequality is still a major social problem affecting the life and health of the Brazilian population. Mortality from suicide is increasing and constitutes an important problem of public health, while the effect of income inequality and other social determinants on suicides have never been studied in the country.

**Objective**
To analyze how social determinants of health and income inequality are associated with the mortality from suicide in Brazil.

**Methods**
The study has a mixed ecological design, using a panel data of all Brazilian municipalities. The data covers the period from 2000-2010 and includes 5507 municipalities. Mortality rates from suicide were calculated by age (10-24 years old, 25-64 years old and over 65 years old) and by sex for each municipality and year. The independent variables of the regression model, which represent social determinants of suicide mortality, were: GINI Index, Per capita income, unemployment rate, proportion of people who have low education and others important variables to suicide. Multivariate regression analysis was performed using negative binomial regression for panel data with fixed effect specification.

**Results**
Income inequality, expressed as GINI Index, was positively associated to suicide rates in men and women during the study period. The estimated rate ratio (RR) for GINI Coefficient, expressed as a continuous variable, was 1.010 (95% CI:1.005-1.016) for men and 1.011 (95%CI: 1.000-1.022) for women, respectively. Among the others social determinants of health, income had a significant negative association with the suicide rates while low education had a positive association, both either for men or women. The Urbanization rate was a protective factor for suicide for women (RR: 0.989; 95% CI:0.979- 0.998) and the average number of residents per household was positively associated with suicide in women and men.

**Conclusion**
Income inequality represents a risk factor for suicide mortality in Brazil, and its decrease in the last decade has probably contributed to attenuate the increase of suicides that is occurring in the country, together with the growing income per capita. Low education and social isolation are confirmed as important risk factors for suicide mortality in the country.

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**PS1.12-5**

**Self-harm in Ethnic Minorities in the UK:**

**Hospital Management and Risk Factors for Repetition. Where to Next?**

Cooper, J¹; Steeg, S¹; Webb, R¹; Applegate, E¹; Stewart, S²; Murphy, E¹; Hawton, K⁴; Bergen, H⁴; Waters, K⁵; Kapur, N¹

¹University of Manchester, UNITED KINGDOM; ²University of Chester, UNITED KINGDOM; ³Salford Mental Health Services, UNITED KINGDOM; ⁴University of Oxford, UNITED KINGDOM; ⁵Derbyshire Health and Social Care Services, UNITED KINGDOM

**Study objectives**
to calculate age and sex specific rates of self-harm in South Asian and Black people in comparison to Whites in 3 centres in the UK; to compare socio-demographic and clinical characteristics and clinical outcomes and to investigate risk factors for repeat self-harm between these ethnic groups.

**Methods and material**
we used a population-based self-harm cohort presenting in five Emergency Departments in three English cities between 2000-2007.
Results
Comparing ethnic groups, rates of self-harm were highest in young Black women (aged 16-34 years) in all three cities. The risk of self-harm in young people of South Asian origin compared to White people varied between cities. All ethnic minority groups were less likely to receive a specialist psychiatric assessment compared to White people or subsequently receive follow up referral. The risk ratios for repetition in the South Asian and Black groups compared to the White group were 0.6, 95% CI 0.5-0.7 and 0.7, 95% CI 0.5-0.8, respectively. Risk factors for repetition were similar across all three groups, although excess risk versus Whites was seen in Black people presenting with mental health symptoms, and South Asian people reporting alcohol use and not having a partner. Additional modeling of repeat self-harm count data showed that alcohol misuse was especially strongly linked with multiple repetitions in both BME groups.

Conclusion
Despite the increased risk of self-harm in young Black females fewer receive psychiatric care. Our findings have implications for assessment and appropriate management for some BME groups following self-harm. Clinical assessment in these ethnic groups should ensure recognition and treatment of mental illness and alcohol misuse. Future research should aim to contextualize these findings and identify how services need to respond to such distress and what interventions might be helpful.

16:30 - 18:00
PS1.13 SUICIDAL BEHAVIOUR IN STUDENTS

PS1.13-1
Suicidal Behaviour and Correlates among University Students in China
Qin, P
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Background
With the rapid change of socio-economic conditions in contemporary China, mental health and suicidal behaviour of young students have become major public concerns. Although living in a similar environment in university campuses, young students come from varying social and familial background and experience various life stress that can affect their psychological well-being during this transitional period of life. The purposes of this study are to assess the prevalence of suicidal ideation and attempt in university students in China and to explore important risk factors associated with this mental problem.

Methods
Of 6096 undergraduate students randomly selected from 6 universities in Wuhan, China for the present study, 5972 students completed the online survey for suicidal behaviour, mental health, stressful life events among other personal factors. Important covariates associated with suicidal behaviour were profiled with logistic regression model.

Results
16.4% of the students had seriously thought to die from suicide while 1.9% had undertaken an action attempting suicide. The prevalence of suicidal behaviour (either suicidal ideation or attempt) was significantly higher in female than male students (20.6% vs 13.1%, p<0.001).
Compared with non-suicidal peers, students with suicidal ideation or attempt were more often exposed to negative life stresses during childhood, adolescence and also the period studying at university; they less often participated in group activities, had fewer close friends and exhibited poorer skills in coping with changes that occurred during course of life. While personality traits play an important role on suicidality among this group of young people, their risk of suicidal behaviour increased progressively with the increasing scores measuring depressive symptoms, hopeless feeling, and psychological pain.

**Conclusion**

The results indicate the prevalence of suicidal behaviour and associated psychological problems among young university students in China and underscore the need of programs targeting on mental health promotion and suicide prevention in this group of population.

### PS1.13-2

**Suicide Ideation and Attempt Among High-school Youth Across 23 Countries: A Closer Look at Gender Differences**

Swahn, MH\(^1\); Palmier, JB\(^2\); Yao, H\(^1\)

\(^1\)Emory Center for Injury Control, Georgia State University, UNITED STATES;  
\(^2\)Georgia State University, Institute of Public Health, UNITED STATES

**Objective**

This study examined the prevalence of suicide ideation across 23 countries based on nationally representative samples of youth, primarily 13-15 years of age.

**Methods**

Analyses were based on the Global School-based Student Health Survey of school-attending youth and supported by the WHO and the CDC. Data from the U.S. were included for comparisons (Youth Risk Behaviour Survey). The surveys were conducted between 2003 and 2009 and each of the 23 country datasets included more than 1,000 students and was weighted to be nationally representative. Countries included in the analyses were from Africa, Asia and South America. Analyses examining the prevalence and gender differences were computed using logistic regression analyses separately for each country.

**Results**

The results from these comparisons indicate that the prevalence of past year suicidal ideation varied from 1.15% in Myanmar to 31.47 in Zambia. Gender differences where boys were significantly less likely than girls to report suicide ideation were noted in seven countries: Argentina (OR=0.66; 95%CI:0.46-0.93), Guyana (OR=0.64; 95%CI:0.45-0.89), Lebanon (OR=0.80; 95%CI:0.68-0.94), Morocco (OR=0.74; 95%CI:0.56-0.98), Trinidad/Tobago (OR=0.60; 95%CI:0.45-0.82), Uganda (OR=0.73; 95%CI:0.59-0.92) and the U.S. (OR=0.55; 95%CI:0.48-0.64).

**Conclusions**

The prevalence of suicidal ideation varied dramatically across the countries examined. Moreover, gender differences were only observed in 7 of the 23 countries examined, challenging the commonly held belief that girls across the world are more likely to report suicide ideation. More cross-national research is needed on this understudied topic to better understand the context of suicidal ideation and behaviour to inform strategies and prevention efforts.
**PS1.13-3**
Suicidal Behaviors, Student Stress in India
Nath, Y
School of Applied Child Psychology, McGill University, CANADA

**Background**
Research on mental health outcomes such as suicidal behaviors among students from non-Western countries is very sparse. Moreover, knowledge from Western studies may not be suitable for developing appropriate intervention strategies in other cultural contexts such as in India. Student mental health is of particular concern in India given that around 7,000 students lose their lives to suicide each year. Since suicides and suicide attempts are highly stigmatized and are punishable offences in India, they are frequently unreported. Thus, the actual number of suicidal behaviours may be much higher. Moreover, since there is no official system for recording suicide attempts, estimating the prevalence of such behaviours is very difficult. In contrast to findings from Western studies which show that psychopathology and suicidal outcomes share a robust link, official records from India document socioeconomic concerns, and interpersonal and familial problems as the most commonly reported causes for suicides. This suggests the salient role of social and cultural factors in shaping mental health outcomes among students in India.

**Aim**
The aim of the present study was to estimate the prevalence of suicide ideation and suicide attempt among youth in India. Correlates of suicidal behaviors were also explored.

**Method**
A total of 1,817 undergraduate college students from Gujarat University, aged 18-24 years took part in the study. Self-report measures were used to assess prevalence of and potential risk factors for suicidal behaviours. Independent risk factors were identified through multiple regression models.

**Results**
Results showed that 11.7% of participants reported suicidal thoughts in their lifetime, and 4.0% reported lifetime suicide attempt. Results indicate that suicidal behaviors were significantly associated with economic stress; illness or mental health problems of a family member; caste discrimination or caste conflict; religious or political conflict; and depressive symptoms.

**Conclusions**
The findings underscore the importance of sociocultural factors in determining mental health vulnerabilities for students in India. The results also emphasize the need for culturally appropriate and locally informed approaches in student mental health service delivery.

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**PS1.13-4**
Use of Mental Health Services among Students with Self-harm
Tørmoen, AJ; Rossow, I; Mehlum, L
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

**Study objectives**
Studies have shown that students who have a history of both attempted suicide and nonsuicidal self-harm [SA + NSSH] report more mental health problems and other psycho-social problems than adolescents who have engaged in only one of these types of self-harm [SH] or none. It is thus natural to assume that these students are more likely to report higher lifetime use of mental
health services (MHS) however; we are unaware of any studies that have focused on this. The current study aimed 1) to examine whether lifetime use of MHS differs between students according to what self-harm they report to have engaged in, and if so, to assess whether these differences can be attributed to psychosocial characteristics, and 2) to identify characteristics that are associated with MHS use in students who had engaged in both suicide attempts and nonsuicidal self-harm (SA+NSSH).

**Methods and materials**

Responses on measures of life time SH, use of MHS and various psychosocial risk factors were collected in a cross-sectional sample [response rate = 92.7%] of 11,440 students aged 14-17 years in Oslo, Norway.

**Results**

Students reporting SH were more likely than others to have used MHS, the likelihood being particularly high in the SA+NSSH group [OR = 9.3]. Multivariate analyses revealed that psychosocial factors accounted for much - but not all - of the differences in use of MHS between students in different SH groups. Students with SA+NSSH were significantly more likely to have used MHS, also when controlling for psychosocial problems. Symptoms of depression, eating problems and use of illicit drugs were associated with higher likelihood of having used MHS, whereas a non-western ethnic minority background was associated with a lower likelihood.

**Conclusion**

Students reporting self-harm are significantly more likely than other students to have used MHS and psychosocial risk factors increase this likelihood even further. In particular, those who engage in both SA and NSSH represent an important target group for interventions in MHS aiming at reducing untreated suicidal and self-harming behaviour. Such interventions should include systematic screening and procedures for referral to treatment programmes tailored to the needs of teenagers with self-harming behaviour. Possible barriers for ethnic minority students to seek mental health services should be further explored.

**PS1.13-5**

**Online Suicide Risk Screening and Brief Intervention with College Students**

King, CA  
Departments of Psychiatry and Psychology, University of Michigan, UNITED STATES

The substantial societal cost and personal tragedy of suicide call for more efforts to identify university students who are at risk and link them to potentially helpful services. This presentation will (1) describe an intervention designed to facilitate students’ linkage to professional mental health services, Electronic Bridge to Mental Health Services (eBridge); and (2) report results from a recent randomized controlled trial examining its effectiveness. An online suicide risk screening survey was completed by 1,448 students; 76 of these students screened positive for suicide risk, defined by at least two of the following: suicidal thoughts, history of suicide attempt, depression, and alcohol abuse. These students were randomly assigned to eBridge (personalized feedback and the option of brief online counseling, delivered in keeping with motivational interviewing principles) or the control condition (personalized feedback only, offered in graphic format). Students assigned to eBridge reported significantly higher readiness for help-seeking at 2-month follow-up, especially readiness to talk to family, talk to friends, and to visit a mental health professional. Students assigned to eBridge also reported lower stigma levels and were more likely to have received mental health treatment. Findings suggest that offering students
personalized feedback and the option of online counseling has a positive impact on students’ readiness to consider and engage in mental health treatment. This study is, to our knowledge, the first randomized controlled study of an online screening and intervention program for college students at risk for suicide and the first such intervention to be conceptualized within a health behaviour theoretical model, which emphasizes self-determination, personal goals, choice, and a motivational interviewing approach.

16:30 - 18:00

**PS1.14 SUICIDE CLUSTERING AND CONTAGION: EARLY IDENTIFICATION, RESPONDING AND POSTVENTION**

**PS1.14-1**

*Identifying Probable Suicide Clusters in Wales using National Mortality Data*

Dennis, M¹; Jones, P²; Gunnell, D³; Platt, S⁴; Scourfield, J⁵; Lloyd, K⁶; Huxley, P⁷; John, A⁸; Kamran, B¹

¹Swansea University, UNITED KINGDOM; ²School of Social and Community Medicine, UNITED KINGDOM; ³University of Edinburgh Medical School, UNITED KINGDOM; ⁴Cardiff University, UNITED KINGDOM

**Study objectives**

Suicide clusters can be defined as mass clusters or point clusters. Mass clusters result from a significant increase in the number of cases in a given period without respect to where they occur geographically. Point clusters are the result of a significant increase in cases in or around a particular place. There are a number of statistical techniques that can help us identify and delimit both mass clusters and point clusters. In this paper we report on the findings of a point suicide cluster analysis using space time permutation scan statistics.

**Methods and materials**

The analysis is based on official mortality statistics for Wales for 2000-2009 provided by the UK’s Office for National Statistics (ONS). The data included all deaths coded by ONS as: (i) suicide or deaths of undetermined intent (‘probable suicides’) and (ii) suicide, undetermined, and accidental poisoning and hanging deaths (‘possible suicides’). SaTScan v9.1 was used to test for temporo-spatial clusters.

**Four main analyses were conducted**

All probable suicide deaths aged 15 years and over; all possible suicide deaths aged 15 years and over; probable suicide deaths among those aged 15-34 years; and possible suicide deaths among those aged 15-34 years.

**Results**

The temporo-spatial analysis did not identify any clusters of probable suicides (total sample and 15-34 year olds) or possible suicides (total sample). However, there was evidence of a temporo-spatial cluster of possible suicide deaths in the 15-34 age group (p=0.029). Fewer than 1% of possible suicides in younger people in Wales in the ten year period were identified as being cluster-related.
Conclusion
There is evidence that there was one possible cluster of deaths in young people. Further investigation of factors leading to the onset and termination of this series of deaths, in particular the role of the media, is required to inform responses to future clusters.

PS1.14-2
Epidemiological, Methodological and Clinical Issues related to Clustering and Contagion of Suicidal Behaviour
Arensman, E
National Suicide Research Foundation, IRELAND

Study objectives
The presentation will address 1) outcomes of a literature review of research into clustering and contagion of suicidal (fatal and non-fatal), and 2) outcomes of an in-depth investigation into a large suicide cluster among young men in Ireland.

Methods and materials
A literature review of the research into suicide clustering and contagion was conducted with a specific focus on definitions, methodological approaches and statistical techniques used in determining clustering and contagion effects of suicidal behaviour. In addition, data on a large cluster of suicide of 22 young men who were involved in a suicide cluster were obtained through the Suicide Support and Information System (SSIS). The SSIS has been developed to facilitate access to support for the bereaved and to obtain information about risk factors associated with suicide and deaths classified as open verdicts and operates in close collaboration with the Irish coroner’s system. Suicide cluster cases were matched with non-cluster cases based on gender, age and suicide method.

Results
The methodological approaches in assessing clustering and contagion of suicidal behaviour are wide ranging and internationally, there is lack of consistency regarding the definition of clustering and contagion and regarding the statistical techniques assessing spatio-temporal aspects. Based on the SSIS data, matched comparison between cluster suicide and singleton cases revealed that the majority of the cluster suicide cases used multiple drugs (prescription and street drugs) often combined with alcohol, compared with none of the matched suicide cases. Most of them had a background of drug and/or alcohol abuse since adolescence. Contagion due to media reporting was ruled out as none of the suicide cases involved in the cluster was reported in the media.
Common themes related to suicide cluster cases based on qualitative information obtained from family informant interviews included undiagnosed and untreated mental health problems, recurring suicides and effects of complicated grief, lack of parental involvement and over-attachment to peers, and glorification of young persons who died by suicide.

Conclusion
From the point of view of prevention it is crucial that clusters are identified early in their development. This will require more standardised methodological approaches which will contribute to improved international comparative research in this area.
**PS1.14-3**

**Examining Narratives of Suicide Contagion: Implications for Responding and Postvention**  
Bell, J; Stanley, N; Mallon, S; Manthorpe, J

1Department of Social Sciences, University of Hull, UNITED KINGDOM; 2University of Central Lancashire, UNITED KINGDOM; 3Northern Ireland Association for Mental Health, UNITED KINGDOM; 4Kings College London, UNITED KINGDOM

**Study objectives**  
Death by suicide can have a profound and long lasting impact on the people left behind. Research has demonstrated that, in comparison to the general population, those bereaved by suicide, particularly young people, are at increased risk for suicide. However, the process of suicide contagion, as it has now become widely known, is poorly understood.

**Methods and materials**  
This presentation will examine the phenomenon of suicide contagion amongst young people who have been bereaved by suicide with data from research into student suicide in the UK (Stanley et al., 2007). It will present two in-depth case studies which draw upon young people’s narratives of their experiences of suicide and their perceptions of suicide contagion. One explores the suicide of two close friends in succession and the subsequent belief among friends that this was contagious. The second explores another young person’s own view of ‘suicide as contagious’, formed following the suicide of her best friend.

**Results**  
Implications for identification, responding, and postvention are discussed.

**PS1.14-4**

**Evaluation of Community Responses to Suicide Clusters**  
Beautrais, A

University of Canterbury, NEW ZEALAND

**Study objectives**  
The development of community response plans to minimize contagious behaviour in suicide clusters is now a standard ‘best practice’ recommendation. Although intuitively appealing, such plans have been rarely evaluated. This paper reports findings from case studies of community responses to suicide clusters.

**Methods and materials**  
Community response specialists, suicide prevention co-ordinators, first responders, community mental health staff, staff from voluntary agencies, community members with close involvement in specific clusters, and related stakeholders were invited to comment, via personal interviews, and in focus groups, on various aspects of the community response to a local suicide cluster.

**Results**  
Their evaluations and recommendations of the community response plan are discussed, along with their views of the means by which contagion occurred, and might be minimized in future responses. Clusters in geographically and sociodemographically different communities of New Zealand are compared.
PS1.14-5
Responding to Suicide Clusters: A Guidance Document
McCarrthy, S
Health Service Executive, IRELAND

Study Objectives
In 2010 the National Office for Suicide Prevention in Ireland published a guidance document for health services on the issue of clusters of suicides. The document set out the current understandings and empirical evidence on suicide clusters, prevention approaches and steps that should be taken in both preparing for and responding to such events.

Materials and objectives
The document states the need for a collaborative and strategic approach to ensure that family, friends and the extended community receive the appropriate support in the instance of a suicide cluster. It also sets out a model for the mobilisation of appropriate resources required when responding to a community’s needs at this time.

Results
This presentation details one local health service’s response to meeting the requirements as set out in the National guidance document. It will look at the planning phase, implementation phase across 3 stages, immediate aftermath (0-24 hours), reactive period (12 hours-1 week), and the outreach period including the weeks, months and years after a suicide cluster occurs.

16:30 - 18:00
PS1.15 SUICIDAL BEHAVIOR IN INDIVIDUALS WITH PSYCHOSIS. CURRENT KNOWLEDGE AND SCOPES FOR EARLY INTERVENTION

PS1.15-1
Prevention of Suicide among Patients with Psychosis in Schizophrenia Spectrum
Nordentoft, M
Department of Clinical Medicine, University of Copenhagen, DENMARK

Introduction
Suicide rates in schizophrenia are around 20 times higher than in persons never admitted.

Methods and results
Meta analyses of suicide risk in schizophrenia are mentioned and risk factors for suicide in schizophrenia are reviewed. Danish population registers were used to identify high risk periods for suicide and two sharp peaks for suicide risk in schizophrenia were identified: shortly after admission and shortly after discharge. Suicide risk in schizophrenia decreased with the same speed as the decrease in the general population, and in Denmark the suicide risk in schizophrenia decreased each year since 1981. Suicide risk among inpatients and outpatients has decreased during last decade. Risk factors for suicide in schizophrenia were previous depressive disorders, previous suicide attempts, drug misuse, agitation or motor restlessness, fear of mental disintegration, poor adherence to treatment, and recent loss.
Conclusion
Suicide in schizophrenia is an important clinical and public health problem. Risk of suicide is highest shortly after admission and shortly after discharge. Increased attention should be paid to assessing suicide risk in these two high risk periods and to measures that hopefully can influence the high risk. Assessment of suicide risk and outpatient treatment immediately after discharge is of particular importance.

PS1.15-2
Suicidality in Psychosis: Relation to Auditory Hallucinations and Persecutory Delusions
Kjelby, E1; Kroken, RA1; Løberg, EM2; Mehlum, L3; Mellesdal, L1; Sinkevičiute, I1; Johnsen, E1
1Haukeland University Hospital, NORWAY; 2University of Bergen and Haukeland University Hospital, NORWAY; 3National Centre for Suicide Research and Prevention, NORWAY

Hallucinations, most often auditory in nature, are highly prevalent in schizophrenia and related psychotic disorders. Auditory hallucinations in this context can be dramatic and may have severe impact in affected individuals and are sometimes associated with suicide risk. Indeed suicidality is highly relevant in schizophrenia as up to 40% attempt suicide and 5-10% complete suicide. Depressed mood, hopelessness and previous suicide attempts are well established as risk factors for suicidal behaviour in schizophrenia. The relationship between hallucinations, including auditory verbal hallucinations (AVH), and suicidality, on the other hand, is not extensively described and existing results are somewhat inconsistent, making the case for more research on the both quality and quantity of hallucinations and associations with suicidal behaviour. The identification of hallucinations or particular aspects of AVH being more closely associated with suicidality could have major clinical impact by contributing to a more focused suicidality screening procedure.

We present findings from the studies Bergen psychosis project 1 (BP1) and 2 (BP 2), which are prospective studies including patients with psychosis across traditional diagnostic categories. Potential associations were explored between relevant items in The Positive And Negative Syndrome Scale (PANSS) and The Calgary Depression Scale for Schizophrenia (CDSS) in BP1. There were significant correlations of low-to-medium size between PANSS item P3 (Hallucinations), and CDSS item 8 (Suicidality) in BP1-patients diagnosed with Schizophrenia spectrum disorders (N=125). By comparison, coefficients between Suicidality and known risk factors like Hopelessness (Item 2, CDSS), and Depression (Item 1, CDSS), respectively, were in the medium-to-strong range. Correlation coefficients were non-significant and low between suicidality and Items P1 (Delusions), and P6 (Suspiciousness/persecution) from the PANSS, respectively.

The BP2 facilitates a more comprehensive approach, including quality of AVH by the use of the revised Beliefs About Voices Questionnaire (BAVQ), and by the use of the Clinical Global Impression for Severity of Suicidality-scale (CGI-SS) and a self-report of Non-Suicidal Self-Harm (NSSH) and Suicide attempts (SA). Preliminary results from about 40 study participants will be presented at the symposium.
**PS1.15-3**
Clinical Characteristics in Schizophrenia Spectrum Disorder Patients with Suicide Attempts and Non-suicidal Self-harm

Mork, E1; Walby, FA1; Harkavy-Friedman, J2; Andreassen, OA3; Melle, I1; Mehlum, L1
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2American Foundation for Suicide Prevention, UNITED STATES; 3Institute of Clinical Medicine, University of Oslo, NORWAY

**Objectives**
Reporting on two studies investigating whether schizophrenia disorder patients with both suicide attempts and non-suicidal self-harm is more exposed to childhood trauma, have earlier age of onset of psychotic and depressive symptoms and higher levels of clinical symptoms compared to patients with only suicide attempts or patients without suicide attempt.

**Methods and material**
Using cross-sectional designs, the two studies included 251 and 208 patients with schizophrenia spectrum disorders treated at hospitals in Oslo, Norway. The patients were assessed with a comprehensive clinical research protocol and divided into groups based on their history of suicide attempts and non-suicidal self-harm.

**Results**
When compared with nonattempters and those with suicide attempts without non-suicidal self-harm, patients with both suicide attempts and non-suicidal self-harm were more frequently women, younger at the onset of psychotic symptoms, had longer duration of untreated psychosis, and had higher levels of current impulsive aggression and depression. Patients with both suicide attempts and non-suicidal self-harm were more likely to repeat suicide attempts than patients with suicide attempts only. Childhood trauma was associated with a history of suicide attempts and those with both suicide attempts and non-suicidal self-harm reported more often childhood sexual abuse than those with suicide attempts only.

**Conclusions**
Patients with both suicide attempts and non-suicidal self-harm had different illness history and clinical characteristics compared to patients with only suicide attempts or patients without suicidal behaviour. The studies suggest that patients with both suicide attempts and non-suicidal self-harm represent a distinct subgroup among patients with schizophrenia and suicidal behaviour. Clinical implications will be discussed.

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**PS1.15-4**
A 2-year Follow-up Study of Individuals with Psychotic Disorders: Focus on Suicidal Behaviour

Harkavy-Friedman, J
American Foundation for Suicide Prevention, UNITED STATES

**Introduction**
Individuals with psychotic disorders are at increased risk for suicide and suicide attempts. Almost half of suicide attempters in this group make repeat suicide attempts. The objective of this study was to conduct baseline and follow-up assessments of 147 participants in a 2-year longitudinal study of suicidal behaviour in psychotic disorders in order to learn about predictors and protective factors related to suicidal behaviour.
Methods
Participants included 147 people with schizophrenia and schizoaffective disorder. Baseline assessments were conducted during hospitalization and follow-up assessments were conducted at 3-months, 1-year and 2-years after discharge. A thorough assessment of psychiatric diagnoses including substance use disorders, aggression, impulsiveness and current clinical state were conducted at each assessment.

Results
One-hundred and thirty individuals completed the 2-year follow-up period with over 92% completing at least one follow-up interview and 80% completing the 2-year assessment. There were 11 suicide attempts among 10 individuals and 3 people died by suicide. Baseline factors associated with past and future suicide attempts are presented and compared. The relationships among past and future suicidal behaviour were similar and included substance use, head injury and history of major depressive episode. Associations with aggression and impulsiveness were also associated with past suicide attempts. Factors found to be negatively associated with suicidal behaviour included negative symptoms and specific demographic variables. The results are considered within the context of a stress-diathesis model. Implications for treatment will be discussed.

PS1.15-5
Suicidal Behaviours during Treatment for First-episode Psychosis: Towards a Comprehensive Approach to Service-based Prevention
Fedyszyn, IE1; Harris, MG2; Robinson, J3; Paxton, SJ1
1School of Psychological Science, La Trobe University, AUSTRALIA; 2School of Population Health, The University of Queensland, AUSTRALIA; 3Orygen Youth Health Research Centre, AUSTRALIA

Background
Suicide is the major cause of premature mortality in individuals with psychotic disorders, with early course of illness conferring the highest suicide risk. Service-based prevention of suicide attempts and suicides [suicidal behaviours] among patients receiving treatment for their first episode of psychosis (FEP) tends to be crisis-driven. Complementing existing practices with universal, selective, and indicated strategies could help to create a comprehensive, and potentially more effective, approach. However, the development of such strategies requires a better understanding of suicidal behaviours in FEP.

Objective
To present findings and implications from research examining the temporal course of suicide risk, characteristics, and predictors of suicide attempts during initial 24 months of treatment for FEP. Method Clinical data from 699 patients consecutively admitted to a specialist FEP service were used in 3 studies: a time-series analysis of suicidality ratings; a descriptive medical record audit study of suicide attempts; and a case-control study of distal and proximal predictors of suicide attempts.

Results
12% of the cohort made at least one suicide attempt during treatment, with a total of 116 attempts, including 2 suicide deaths. Suicide risk was highest in the first month of treatment. Suicide attempts most often involved self-poisoning (64%), were impulsive (78%), associated with high suicidal intent (69%), and took place at home (60%). Patients who attempted suicide were engaged in and compliant with treatment (78%), however, just under half (49%) expressed suicidal intent within 3 months prior to the attempt and only 11% sought help immediately before.
The most common precipitants were interpersonal issues (35%) and psychotic symptoms (25%). The strongest multivariate predictors were proximal non-suicidal self-injurious behaviour (AOR=72.96, p<0.001) and proximal negative life events (AOR=1.90, p=0.003).

**Conclusions**

The findings could facilitate the development of universal, selective, and indicated service-based strategies to help to reduce suicidal behaviours in first-episode patients. Examples of potentially beneficial interventions are discussed.

16:30 - 18:00

**PS1.16 THE SUPREME EU CONSORTIUM: THE PREVENTION OF SUICIDE IN ADOLESCENTS AND YOUNG PEOPLE**

**PS1.16-1**

**Overview on Websites Related to Mental Health**

Balazs, J1; Kereszteny, A1; Germanavicius, A2; Hamilton, R3; Masip, C4; Sarchiapone, M5; Värnik, A6; Westerlund, M7; Hadlaczyk, G1; Carli, V7; Wasserman, D7

1Eötvös Loránd University, HUNGARY; 2Clinic of Psychiatry of Vilnius University, LITHUANIA; 3Middlesex University, UNITED KINGDOM; 4Hospital Del Mar, SPAIN; 5University of Molise, ITALY; 6Estonian-Swedish Mental Health & Suicidology Institute, ESTONIA; 7National Swedish Prevention of Mental Ill-Health and Suicide, SWEDEN

**Background**

While the Internet is one of the main communication platforms of young people, it can play an important role in suicide prevention. However, certain types of news coverage can increase the likelihood of suicide in vulnerable individuals. The Suicide Prevention by Internet and Media Based Mental Health Promotion (SUPREME) project aims to develop Internet based suicide prevention interventions. One of the goals of the SUPREME project was to obtain an overview of the already existing suicide preventive websites.

**Methods**

The study included 7 countries: Estonia, Hungary, Italy, Lithuania, Spain, Sweden and the UK. The first thirty search hits for four different keywords related to mental health (suicide, depression, anxiety and stress) were examined using the Google search engine in March 2011 on the languages of the participating countries. Coding of the website was made according to the following categories: type of content, sender, form of communication, age group.

**Results**

Type of content: direct preventive: 40.8% (n=392), technical content: 31.4% (n=301), news: 11.5%, (n=110), pro-suicide: 1.5% (n=14), other (i.e.: forum, video): 14.9%, (n=143). Among direct preventive websites (n=392) the sender was: governmental bodies: 14.8% (n=58); non-government organizations: 28.9% (n=113); corporations: 33.2% (n=130); private senders: 19.7% (n=77), other: 3.3% (n=14). The form of communication was: monological: 35.3% (n=138); semi-dialogical: 15.5% (n=178); dialogical: 19.2% (n=75). The targeted age group was (n=388): children/adolescents/young adults: 6.9% (n=27), adults/elderly: 20.2% (n=79), no specific age group: 72.2% (n=283). Large differences were found between countries.
Conclusions
Our results highlight the importance of developing more preventive websites, especially for children, adolescents and young adults.

**PS1.16-2**

*Suicide Prevention by Internet and Media Based Mental Health Promotion (Supreme)*

Carli, V
Karolinska Institutet, SWEDEN

SUPREME is a mental health promotion programme, which comprises a multi-language, culturally adapted, highly interactive website accessible to the general public that is particularly aimed at adolescents. The general objective of the programme is to enhance and improve the mental health and well-being of European adolescents through the development of an Internet based system for mental health promotion and suicide prevention. The project started in 2010. NASP at Karolinska Institutet is the leading center. Associated partners are based in Italy, England, Spain, Lithuania, Estonia and Hungary. The project is cofunded by DG SANCO (60%) and the consortium (40%).

The long-term benefits realized by this project comprise evidence-based information on the most effective methods in Internet-based mental health promotion to reach the most vulnerable adolescents in need; and ultimately improve adolescents’ mental health and well-being by reducing depression, anxiety, conduct disorder, and other mental ill-health symptoms. The target group for the project are adolescents and young adults aged 14-24 years. This population was chosen on account that mental health problems identified in adulthood are often developed and progress during childhood and adolescent years. Research suggests that mental health problems are rapidly increasing, from being 12% of the total burden of disease, with projections of up to 15% by 2020 (WHO 2003). Mental health problems, such as depression, anxiety, and conduct disorder that persist without treatment establish a foundation for adolescents’ pattern of behaviour and life choices.

**PS1.16-3**

*Guidelines for Suicide Prevention Strategies using the Internet*

Machin, N; Waller, T; Sharpe, D; Lane, P; Martyn, M; Anghel, R; Hamilton, R Anglia Ruskin University, UNITED KINGDOM

Globally, on average, one person commits suicide every 40 seconds resulting in major trauma for family and friends. The economic costs are very high, approximately 126 billion euros annually in the 27 EU countries. Yet suicide is preventable. It needs appropriate and effective means of communication to detect suicidal tendencies and to provide rapid support. Evidence suggests that 40 percent of the general public use the internet to help them take care of their health, indicating the potential of the internet as a resource in mental health and suicide prevention. A major at-risk group is young persons and middle-aged men; groups which are more inclined to seek advice through the new digital technologies (the internet, smartphones and tablets) that to visit a clinician.

SUPREME (Suicide Prevention by Internet and Media Based Mental Health Promotion) is an EC Public Health Programme Funded Project which commenced in September 2010. Its main
objective is the organisation of a partnership of expert organizations for the development of an internet and media based, multi-language, culturally adapted, mental health promotion and suicide prevention intervention in Sweden, UK, Italy, Spain, Lithuania, Estonia and Hungary. The intervention involved a highly interactive website targeted at adolescents and young adults in the age group 14-18.

Once the best outcomes and most important elements of practice intervention have been defined, specific guidelines will be developed. Guidelines will include recommendations in relation to the following aspects: the content and implementation of the interventions, target groups that should be included when performing internet and media based mental health promotion campaigns, the duration and intensity of the campaigns, the most effective ways to refer adolescents in need, the most effective mental health promotion tools. The outcomes will be of value for countries aiming at developing strategies for mental health promotion and suicide prevention. The guidelines and all other project materials will be made available to European stakeholders and mental health professionals as both online materials on the SUPREME and collaborators websites, but also in the form of hardcopy brochures and reports.

16:30 - 18:00
PS1.17 RESEARCH IN SUICIDE POSTVENTION - SYMPOSIUM 2

PS1.17-1
How Parent Suicide Survivors use Healing Aids to Cope with a Child’s Suicide Death: Short-term and Longer-term Adaptations
Feigelman, W
Nassau Community College, UNITED STATES

Based on survey data collected from the largest ever sample of traumatically bereaved parents (N=575), this study compared and contrasted the use of healing aids, such as counseling, peer-support group participation and help from clergy and psychics among suicide bereaved parents (N=462) and other bereaved parents (N=113) during the years after a child’s death. Time after the death ranged from as short as several weeks afterwards to 27 years later. In their quests to deal with their enormous burdens of grief during the early months after loss, survivors used a wide variety of healing aids: counseling, general bereavement and suicide specific peer support groups, clergy and psychic help all at the same time. With the passage of time, fewer aids were employed, with help from counselors and psychics undergoing the sharpest decline in use. Our data showed smaller declines in using peer support groups with the passage of time, with many survivors either assuming positions of leadership (demonstrating post-traumatic growth) in these groups or withdrawing altogether. This was based on our survey data and from additional follow-up interviews conducted with 24 respondents who withdrew from support groups. Our sample showed heavy reliance upon support groups and counseling help with more than 75% of our respondents taking advantage of these resources. Yet, despite this help, among respondents who averaged 10 years since the death, most still showed elevated levels of depression, when compared to same aged non-bereaved counterparts, who answered identical
questions. Our data suggests that survivors’ needs for emotional support and grief help extend long beyond the death of their child. More complete details of these findings will be found in our coauthored book: Devastating Losses: How Parents Cope With the Death of a Child From Suicide or Drugs by William Feigelman, John R. Jordan, John L. McIntosh and Beverly Feigelman, (NY: Springer Publishing Co., 2012).

**PS1.17-2**

**Society’s Response to Suicide and Survivors**

Postivan, V  
Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA

It is a common estimation that six people are deeply wounded or seriously distressed in case of suicide death. For these suicide survivors, e.g. family, relatives, colleagues and close friends, suicide is not an end, but a beginning of a long process of reintegrating to normal every-day life. Our study investigated the experiences of 17 suicide survivors with different relationships with the deceased and time since death. We used the qualitative grounded-theory method of in-depth interviews and a reflective approach in the analysis of the data.

The findings show that suicide survivors experience the impact of suicide in many ways. Their needs can be described on the continuum from a very psychological and private to the very public ones. The nature of the needs might differ not only according to an individual, but also regarding the circumstances in which the suicide occurred. The social environment plays an important role in responding to these circumstances - but this is not always done in a supportive way. Intense suffering or ruminations about suicide might persist long after, sometimes for the rest of their lives, not only due to the suicide per se, but also due to the response of the environment.

There seems to be a lack of interventions for suicide survivors in Slovenia, which is many times perceived as an ignorance of the system. Therefore, initiatives to implement new ways of interventions are mostly welcomed by suicide survivors.

**PS1.17-3**

**A Critique of Suicide Bereavement Research: Where have we been and where are we heading?**

Maple, M  
University of New England, AUSTRALIA

**Study objectives**

All over the world people are bereaved by suicide. Following each death, spouses, partners, mothers, fathers, brothers, sisters, daughters, sons, friends, extended family members, friends, mentors, and colleagues all commence a new chapter in their lives, lives devoid of the person now deceased. Researchers continue to report that those bereaved by the suicide death of a first degree relative are at increased risk of suicidal ideation, self-injurious behaviours and death by suicide. This risk is also evident among others associated with the deceased. While this knowledge has been reported in multiple settings, the methodologies used are often limited to self-selecting individuals, and most often with those with first degree kinship to the deceased. This paper aims to explore and highlight the limitations of the current state of knowledge in the field of suicide bereavement, as well as offer areas requiring further attention.
Methods and materials
The methodological challenges examined in this paper were identified through a critical review of the literature specifically relating to suicide bereavement published in the previous 10 years (date range was 2003 to early 2012). This review sought to be representative of the samples used in different suicide bereavement studies across the world. The search terms used were ‘bereave*’ and ‘suicide’ and ‘sample’. Studies had to report on samples including those bereaved by suicide. Reviews or theoretical papers, or papers in a language other than English, were not included.

Results
Key methodological challenges were identified in this study that have contributed to a limited knowledge base. These include methodological challenges relating to sampling procedures (including the resultant gender bias and those accessing support services dominating the samples reported), definitional variation in who is identified as bereaved by suicide and challenges with determining the size of the population, and to whom and when support is best provided.

Conclusion
To better address the needs of those at risk of suicide, and bereaved by suicide, it is vital that a way to define and identify individuals bereaved in this manner is determined. This presentation provides a critical insight into the state of the current knowledge base in suicide bereavement, as well as proposing directions for future research in the suicide postvention field.

PS1.17-4
Online Memorialization after Suicide: An Analysis of Memorials in Web Cemeteries
Krysinska, K¹; Andriessen, K²
¹KU Leuven - University of Leuven, BELGIUM; ²Tele-Onthaal (Tele-Help) Federation & KU Leuven - University of Leuven, BELGIUM

Study objectives
In addition to providing grief-related information and support, the Internet offers an opportunity for memorialization of the deceased via personal websites and online cemeteries and memorials. Although a number of studies has analysed the content and functions of messages in online cemeteries, and the psycho-demographic profile of their authors, not much is known about online memorialization in case of suicide deaths. The aim of this study was to analyse memorials dedicated to individuals who died by suicide in order to find out who are their authors, who are they written for, and what is their content and form.

Methods and material
Two memorialization websites: www.facesofsuicide.com (suicide deaths only) and www.gone-toosoon.org (a general online cemetery, including suicide deaths) were selected for the study. The content of 252 randomly selected memorials (2x126 memorials) was analysed to ascertain a) the type of relationship between the author and the deceased, b) the demographic characteristics of the deceased, c) the type of memorials, and d) the common memorial themes.

Results
The majority of the memorials were written by parents (27%), siblings (13%) and friends (9%) of suicide victims. The memorials were devoted mostly to young adult males (79%; mean age=29.5 years). More than half of the memorials were obituaries (53%), the other were letters to the deceased (37%) and tributes (10%). Among the common themes were missing the deceased and sadness (81%), messages of love (45%), and descriptions of the deceased (39%). Approximately one third of the messages contained acknowledgement of suicide and/or description of the cir-
circumstances of the death (29%), and provided explanation for the suicide and/or expressed the desire to know ‘why?’ (35%). Also frequent were descriptions of feelings of the bereaved (29%), such as shock, need for consolation, and regret for what has happened and what might have been.

Conclusion
This study provides a valuable insight into the common themes in online memorialization of suicide victims, and the general profile of the bereaved who get involved in this type of post-death rituals. There remains a question what are the functions of such activity, and whether online memorialization supports the process of coping with loss or hampers it by encouraging rumination. Further studies involving the bereaved directly are needed to answer these important questions.

16:30 - 18:00

**PS1.18 AMBIVALENCE IN SUICIDE**

**PS1.18-1**
The Inner Voice in Suicide  
Firestone, L  
The Glendon Association, UNITED STATES

A theoretical model for understanding ambivalence in suicide will be presented, focusing on the role of the critical inner voice that drives suicidal behaviour. An innovative cognitive/affective/behavioral approach for eliciting self-destructive thoughts and changing self-destructive behaviour will be outlines. Video examples from interviews with attempt survivors will be shown to illustrate the role of the critical inner voice in suicide. The attempters also discuss the manifestations of their ambivalence prior to their suicide attempts.

**PS1.18-2**
Suicidal Ambivalence and the Nature of the Suicidal Mind  
Jobes, D  
The Catholic University of America, UNITED STATES

Historically suicide risk assessment has tended to over-emphasize a dichotomous approach to thinking about suicidal ideation (e.g., acute vs. chronic, clear and imminent vs. not clear and imminent). Back in the 1970’s Kovacs and Beck first proposed the notion of an ‘internal struggle hypothesis’ that created a more complex understanding of the range of suicidal states. Interestingly, this line of thinking has not been a particular focus in suicide prevention research until relatively recently. This presentation will thus examine the full suicidal spectrum and the important role of psychological ambivalence in the minds of many suicidal people. Recent quantitative and qualitative research is revealing valuable information about the spectrum of suicidal presentations with distinct implications for clinical risk assessment and treatment. Given that the vast majority of suicidal patients who present in clinical settings are by definition ambivalent, clinicians may find that a more complex appreciation of the nature of the suicidal mind may enhance their assessments of prospective suicidal risk with clear implications for clinical interventions therein.
**PS1.18-3**  
**Ambivalence in Suicide**  
*Firestone, L*  
The Glendon Association, UNITED STATES

Ambivalence is a central component of suicidology for both the suicidal individual and the therapist. Research on attraction/revulsion to life vs. death in suicidal adolescents demonstrates that the more attracted to death the person is, the higher the risk. It is crucial that therapists connect to the part of the person that wants to live. Sustaining hope and valuing aspects of the client can be life saving to someone in crisis. It is important for therapists to address their own inner patterns of life and death and what it would take for them to be suicidal. In addition the therapist developing the ability to be with an individual who may take their own life is essential to working with suicidal patients.

**PS1.18-4**  
**Assessing Ambivalence in Suicidal Psychiatric Inpatients - Lessons Learned from Structured Assessments**  
*Lineberry, T*  
Mayo Clinic, UNITED STATES

Ambivalence about living and dying is felt to be integrally related to suicide. Theoretically, this construct is often felt to be as one continuum with wish to live and wish to die being linked, i.e. a high wish to live is associated with a low wish to die and vice versa. Previous research using wish to live and wish to die scales (Brown 2005 Am J Psych) found that the difference between the wish to die and wish to live on the SSI was uniquely associated with risk of suicide. The wish to die and wish to live scales are also incorporated in the Suicide Status Form II (Jobes et al.) which is used as part of routine clinical practice at Mayo Clinic Psychiatric Hospital. As part of this workshop, examples and research data utilizing this structured approach will be described along with approaches to assess suicide risk and clinical treatment.

**PS1.18-5**  
**Brief Interventions for Short-term Reductions in Suicide Risk among Suicidal Military Personnel**  
*Bryan, C*  
National Center for Veteran Studies, UNITED STATES

The alarming rise in the U.S. military’s suicide rate is one of the most vexing issues currently facing military leaders, mental health professionals, and suicide experts. Since 2004, the number of suicides by military service members has steadily increased, eclipsing the suicide rate of the general U.S. population for the first time in history. In response, rates of inpatient hospitalization for suicide risk have increased dramatically despite no evidence of efficacy for reducing the rates of suicidal behaviours. One of the most commonly-used interventions for the short-term management of suicide risk is the crisis response plan (CRP), also known as ‘safety planning.’ The CRP is designed to target deficiencies in problem solving that contribute to suicidal behaviours by first enhancing the suicidal individual’s awareness of emerging emotional
crises, and then outlining appropriate responses to these crises other than suicide. The CRP was originally developed for use within the context of suicide-focused psychotherapies as an ongoing intervention that facilitates problem solving across psychotherapy sessions, but it is now commonly used in military emergency settings as a single-session intervention. Because the CRP was originally designed as a multi-session intervention, it is possible that its effectiveness in emergency settings is diminished since it does not explicitly target suicidal intent or ambivalence. Research has shown that suicidal individuals who are able to identify reasons for living are less likely to have attempted suicide (Linehan et al., 1983), and that greater ambivalence about living and dying is associated with decreased suicidal intent (Kovacs & Beck, 1977) and risk for future death by suicide (Brown et al., 2005). Directly targeting the desire to live thereby facilitating ambivalence about suicide, might therefore be an essential element of effective crisis interventions for suicidal military personnel. The current presentation will provide an overview of a randomized controlled trial currently underway with active duty Soldiers who present to behavioral health clinics with acute suicidal crises, designed to test the effectiveness of three different versions of the CRP. The first intervention (treatment as usual, or TAU) will provide supportive counseling and resources for accessing professional assistance, the second intervention (crisis response plan, or CRP) will also include self-management skills and personal sources of social support, and the third intervention (crisis response plan with reasons for living, or CRP+RFL) will add in a brief intervention designed to identify reasons for living and speed up Soldiers’ ability to remember these reasons. The study will therefore provide critical information regarding the underlying mechanisms of change that contribute to reduced suicide risk. Progress with preliminary data will be presented.

**PS1.18-6**

**Intention to Die is a Non-static Dimension**

**De Leo, D**  
Griffith University/Australian Institute for Suicide Research and Prevention, AUSTRALIA

An increased number of self-cutters (X78 in ICD-10) have been reported from Emergency Departments (ED) of several hospitals in western countries. This has created the basis for much debate among suicidologists, and the proposition of a new diagnosis in DSM-5, Non-Suicidal Self-Injury (NSSI). While there is converging evidence that media like the Internet have a role in popularizing this method of self-harm, the importance of determining ‘intentions’ - both in nomenclatures and clinical settings - is emerging as a kind of ‘compulsory’ next step in a field where, however, subjects (the actors of the behaviour) are often ambivalent, manipulative, and forgetful, thus hindering clarification efforts.

Apart from difficulties intrinsic to clinical and non-clinical environments (e.g., emergency wards, insurance benefits, work compensation and relationship reconciliation agencies, etc.), the appropriateness of the newly proposed diagnostic category, and - more in general - the adequacy of any possible nomenclature should find shared bases of/for standardization among scholars. Whilst it is clear that a certain degree of approximation needs to be accepted in order to favor public health management, it is also obvious that the topic of ‘intentions’ requires a degree of complexity that might continue to render futile most efforts.

This presentation would highlight issues arising from large cooperative efforts, such as the CASE Study and the WHO/SUPRE-MISS and START projects.
16:30 - 18:00
PS1.19 REGIONAL SYMPOSIUM NORTH AMERICA

PS1.19-1
Regional Symposium for North America
Reed, J1; Mishara, B2; Reidenberg, D3; Barnaby, L4
1Education Development Center - SPRC, UNITED STATES; 2Université du Québec à Montréal, CANADA;
3Suicide Awareness Voices of Education, UNITED STATES; 4University of West Indies - Mona, JAMAICA

This 90 minute Regional Symposium for North America is proposed for the upcoming IASP World Congress in Oslo in September. It is our understanding that several such symposia for different regions around the world will be organized. Dr. Reed and Dr. Gould will moderate the symposium and have invited three representatives from different regions in North America to comment on challenges and possible solutions to advancing suicide prevention in their respective regions. Dr. Brian Mishara from Canada, Dr. Dan Reidenberg from the United States and Dr. Loraine Barnaby from Jamaica have agreed to participate. Each will prepare a 10 minute presentation on challenges and possible solutions in suicide prevention from the perspective of their respective countries. It is anticipated that a wide range of clinical and public health suicide prevention strategies will be discussed. The moderators will welcome attendees to the symposium and introduce the panelists who will make their presentations and then engage attendees in a 50 minute discussion. The symposium will conclude with moderators providing a brief summary of main outcomes of the discussion.

16:30 - 18:00
PS1.20 TASK FORCE MEDIA & SUICIDE SYMPOSIUM II:
MEDIA MARKET DYNAMICS, MEDIA EFFECTS AND
PREVENTIVE ACTIVITIES RELATED TO
TRADITIONAL MEDIA TYPES

PS1.20-1
The Interaction between Traditional Media and New Media in Suicide
News Production and Dissemination in Chinese Societies
Cheng, Q
The University of Hong Kong, HONG KONG, CHINA PR

Study objectives
To understand media professionals’ experiences with producing and disseminating suicide news in the new media era in Mainland China, Hong Kong, and Taiwan.

Methods and material
Face-to-face interviews with 33 journalists from Mainland China, Hong Kong, and Taiwan were conducted to understand their experiences with using online media in their journalism work. The grounded theory method was used for data analysis.
Results
Online microblogs, forums, search engines, and instant messaging tools are commonly used by journalists in their work. The impact of online media on traditional media’s work can be categorized into four parts:
1) providing more suicide news tips;
2) increasing news values of some suicide cases;
3) changing the representation of suicide news; and
4) increasing channels for news dissemination.
In turn, traditional media is also contributing more suicide content to online media and Mainland Chinese journalists are often active in reposting information about suicide incidences on microblog sites. The interaction between traditional media and new media are relatively more active in Mainland China than in Hong Kong and Taiwan.

Conclusion
Journalists in traditional media are also actively using online social media for producing and disseminating suicide news and are still playing an important role in spreading suicide information in the new media era. More studies are needed to systematically investigate their behaviour patterns and the interactive disseminating routes of suicide information on both online and offline media platforms.

PS1.20-2
A Study on the Mutual Causation of Suicide Reporting and Suicide Incidences
Yip, PSF1; Kwok, S2; Chen, F3; Xu, X4; Chen, Y5
1The University of Hong Kong, HONG KONG, CHINA PR; 2The University of Sydney, AUSTRALIA; 3The University of New South Wales, AUSTRALIA; 4Cornell University, UNITED KINGDOM; 5Taipei City Psychiatric Center, Taipei City Hospital, TAIWAN

Study objectives
The complex relationships between the impacts of news reporting on suicide incidence and vice versa (i.e., mutual causation) have seldom been studied. Furthermore, the change in media dynamics after a new media channel enters the market has rarely been addressed.

Methods and material
A recursive two-way feedback model was used to investigate the mutual causation between suicide reporting and suicide incidence on a daily basis. We applied the model to examine the effect of the arrival of the Apple Daily (AD) newspaper in Taiwan and how its reporting on suicide affected the suicide incidence and the suicide reporting of two other newspapers, the United Daily (UD) and the China Times (CT).

Results
The AD’s entry into Taiwan led to a major shift of causal dynamics of suicide incidence and suicide reporting. The AD stimulated more suicide coverage by the UD and the CT on the next day; conversely, the UD and the CT had no such impact on the AD which seems to work independently from others. Before the entry of the AD, there was little correlation between daily suicide incidence and suicide reporting, but the two correlated significantly for the UD and CT after the entry of the AD.
Conclusions
The vicious business competition facing a new daily in Taiwan’s media circle has changed the mass media ecology. Preventing suicide through media regulation should closely monitor not only the ’behaviour’ of a newcomer, but also the reaction of the traditional news media towards new competitors.

PS1.20-3
Achieving Sensitive Reporting of Suicide through Understanding
How the Media Works: Learning From Experience
Lalji, S
Samaritans, UNITED KINGDOM

Objectives and approach
The importance of responsible media reporting on suicide has a considerable evidence base and has become a largely standard objective in national suicide prevention strategies. Samaritans (a suicide prevention charity in the UK and ROI) has extensive experience of achieving this policy objective in practice. The presentation examines what can be learned from Samaritans’ practical experience in this area, including the approach; successes; challenges; and emerging concerns for research, policy and practice. This will be elucidated through case studies of specific suicides in the UK and how this coverage was influenced by Samaritans.

Learning from practice
Samaritans has taken the unique approach of using its press team to progress its work to obtain responsible reporting of suicide in the media. It has proved highly successful, in the main, because the team is able to utilize their understanding of the industry and relationships, to successfully influence practice. There are several components to Samaritans approach:

Raising awareness and educating
Using evidence to publish media guidelines on suicide reporting allows Samaritans to act as a reference point for the media, for advice and expertise prior to publication; working proactively to build awareness and educate the industry at all levels; allowing a space for the media to confidentially debate and ask questions without fear reproach.

Correcting content and influencing coverage
Daily monitoring of media coverage, reviewing thousands of articles each year; working with the media to correct coverage as it is published; intervening and influencing high profile stories as they break or unfold to prevent harmful content being published; using knowledge through monitoring coverage to spot future trends.

* Working with stakeholders and lobbying for change: Working closely with experts and regulators, as well as groups with a vested interest such as coroners and the police, to influence coverage; lobbying for change within media regulation.

Challenges
The key challenge undoubtedly is the need for constant education. In addition, the UK media regulation’s focus on ‘excessive’ detail of method is insufficient as volume, positioning and portrayal of a method as quick, painless and easy can exacerbate copycat behaviour. Finally, the availability of information via the internet can act as a catalyst to undermine the positive work being done with the mainstream media.
**PS1.20-4**
The Impact of Media Reporting on the Emergence of Charcoal Burning Suicide in Taiwan
Chen, Y-Y¹; Chen, F²; Gunnell, D³; Yip, PSF⁴
¹Taipei City Psychiatric Center and National Yang-Ming University, TAIWAN; ²University of New South Wales, AUSTRALIA; ³University of Bristol, UNITED KINGDOM; ⁴University of Hong Kong, HONG KONG, CHINA PR

**Study objectives**
It has been suggested that extensive media reporting of charcoal burning suicide was a key factor in the rapid spread of this novel method in some Asian countries. But no previous studies have provided empirical evidence on the impact of media reporting on the incidence of charcoal burning suicide.

We investigated the association of the intensity of newspaper reporting of charcoal burning suicide with the incidence of such deaths in Taiwan during 1998-2002.

**Methods and material**
A counting process approach was used to estimate the incidence of suicides and intensity of news reporting. Conditional Poisson generalized linear autoregressive models were performed to assess the association of the intensity of newspaper reporting of charcoal burning and non-charcoal burning suicides with the actual number of charcoal burning and non-charcoal burning suicides the following day.

**Results**
We found that increases in the reporting of charcoal burning suicide were associated with increases in the incidence of charcoal burning suicide on the following day, with each reported charcoal burning news item being associated with a 16% increase in next day charcoal burning suicide (p<.0001). However, the reporting of other methods of suicide was not related to their incidence.

**Conclusion**
We conclude that extensive media reporting of charcoal burning suicides appears to have contributed to the rapid rise in the incidence of the novel method in Taiwan during the initial stage of the suicide epidemic. Regulating media reporting of novel suicide methods may prevent an epidemic spread of such new methods.

**PS1.20-5**
Impact of Drama Films with Portrayals of a Suicidal Crisis: A Laboratory Experiment
Till, B; Niederkrotenthaler, T
Medical University of Vienna, Center for Public Health, AUSTRIA

**Study objectives**
Effects of suicide portrayals in fictional films have received increasing attention in media psychology in recent years due to possible copycat behaviour, but research that directly tests film effects on the audience’s well-being is scarce.

**Methods and material**
This study investigated the impact of drama films with portrayals of suicidal crises on viewers’ emotional state. Ninety-five non-suicidal adults watched a movie that either concluded with the suicide of the protagonist [Night, Mother], ended with the resolving of a suicidal crisis [Elizabeth-town] or concluded with the protagonist’s natural death [A Single Man]. Data on viewers’ mood, self-worth, life satisfaction, depression, suicidality, assumed benevolence of the world, identifi-
cation with the protagonist, and film involvement were collected via questionnaires before and after the film.

Results
Exposure to Night, Mother and A Single Man was linked to a deterioration of mood and an increase in depression scores. There was a qualitative interaction between suicidality and the impact of Night, Mother: Participants with relatively higher suicidal tendencies (above the median) experienced a rise in suicidality due to the film screening. In contrast, participants with relatively low suicidality (below the median) showed an increase in self-worth when watching this film. The screening of Elizabethtown led solely to positive effects.

Conclusion
Clinically suicidal individuals may experience a film drama concluding with a suicide in a different and more detrimental way than healthy and non-suicidal individuals.

16:30 - 18:00
PS1.21 Suicidal Behaviour in Youths around the World

PS1.21-1
The Methods of Suicide Used by Children and Adolescents
Hepp, U1; Stulz, N1; Unger-Köppel, J1; Ajdacic-Gross, V2
1Psychiatric Services Aargau AG, SWITZERLAND; 2University of Zurich, SWITZERLAND

Background
Although being relatively rare, suicide is a leading cause of death in children and adolescents in Western countries. In this study we examined whether children and adolescents choose different methods of suicide than adults.

Method
We extracted suicide data from the Swiss cause-of-death statistics for a 10-year period (1998-2007). The main methods of suicide were analysed with respect to age and gender.

Results
Of the 12,226 suicides which happened in the 10 years between 1998 and 2007, 333 were committed by children and adolescents between 0 and 19 years (226 males, 107 females). The most prevalent methods of suicide in children and adolescents were hanging, jumping from heights and railway-suicides (both genders), intoxication (females) and firearms (males). Compared to adults, railway-suicides were statistically significant over-represented in young males and females (both p<.001). Jumping from heights was statistically significant over-represented in young males (p<.001).

Conclusions
The availability of suicide means seems to be crucial for the methods of suicide used by children and adolescents. Restricting access to the most favoured methods of suicide might be an important suicide prevention strategy.
**PS1.21-2**

Child and Adolescent Suicides Around the World: Changes in the Last Two Decades  
Kolves, K; De Leo, D  
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

**Study objectives**

Although child suicide is a rare event, it is still a leading cause of death in children younger than 15 years of age worldwide. It has been suggested that the low suicide incidence in children might be related to fewer risk factors, rather than their resilience to these risk factors. The aim of the current presentation is to compare child (age group 10-14 years) and adolescent (age group 15-19 years) suicide rates in different countries around the world in the last two decades.

**Methods**

Age-standardised suicide rates for children (10-14 years) and adolescents (15-19 years) by gender were obtained from the WHO Mortality Database. Considering the small incidence of suicides in children, average rates per year for the last two decades (1990-99 and 2000-09) were calculated. Countries with suicide and population data for at least 5 years in both decades were included.

**Results**

Suicide rates for males showed a decrease in most of the countries in both age groups. Only minor changes were observed for females within the last two decades. However, former Soviet Bloc countries still have the highest rates for child and youth suicides, especially for males. With some countries like Kazakhstan, Kirgizstan and the Russian Federation showing the biggest increase for the age group 10-14 years in last two decades. Nevertheless, Ireland showed the strongest increase for both genders in the age group 15-19 years.

**Conclusion**

Variations might be related to differences in the cultural and socio-economic factors between the countries. Furthermore, the prevalence of suicide in children is likely to be underestimated due to underreporting and/or misclassification of suicide deaths as accidental or undetermined.

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**PS1.21-3**

‘Of Course we address Suicidal Thoughts when Talking to Children’  
Dåsvatn, Ø; Ringereide, K; Albæk, M  
RVTS Sør, NORWAY

This is a presentation of experiences with a suicide prevention workshop (VIVAT) as an integrat-ed part of a comprehensive psychosocial competence development program for professionals in various child and youth services [i.e. child welfare services, school/kindergarten, refugee services, family therapy services, child health clinic etc].

Public services like child welfare services, child health clinic, school and kindergarten/preschool are important venues for preventive work directed towards children and youth. RVTS Sør has implemented a competence development program for various children’s services with the overarching aim of increasing professionals’ sensitivity and behavioural competence when they are confronted with expressions of children’s pain. Methodically, professionals are given tools and occasion to reflect upon their personal sensitivity and their relational contribution, as well as communication skills training, affect self-regulation exercises, and application of personal responsibility for interpretations and attributions. The VIVAT-course is a
mandatory part of these competence development programs. The VIVAT-course is a Norwegian
adaptation of the ASIST suicide interventions skills training program from LivingWorks (www.
livingworks.net) Our program evaluations indicate that utilizing VIVAT in this manner can have
significant positive benefits:
VIVAT will include all of the professionals in the workplace enabling "communal ownership" of
the terminology. The foregoing training in self sensitivity and behavioral competence enhances
learning in the VIVAT-course. VIVAT reaches services and professionals that traditionally do not
perceive suicide prophylaxis as part of their regular agenda.
This oral presentation will outline the composition and content of the competence development
programs of RVTS Sør, as well as the theoretical background and rationale for the choices
made. The presentation will give special attention to the integration of VIVAT in the programs
and to our experiences with this integration. The question raised by the presentation is whether
suicide prophylaxis would be more successfully implemented in various professional organiza-
tions by integration of VIVAT in more comprehensive competence development programs.

PS1.21-4
Perceptions about Suicide and Developing Prevention
Programs among Myanmar Students in Bangkok, Thailand
Kyi, A1; Aye, K2
1Assumption University, THAILAND; 2Sarasas Witead Romklao school, THAILAND

Suicide is one of the world’s major public health problems that affects individuals as well as
being a burden on health systems and also it has negative impacts on both families and commu-
nities. There are several causes of suicidal behaviour and when committed the methods used
are various. However, little is known about perception to suicide among Myanmar nationals.
To understand this, the purpose of the present study is to investigate how Myanmar students,
who study in undergraduate programs in Thai universities in Bangkok, perceive and respond to
the issue of suicide. The initial assessment involved a study of Myanmar student’s responses toour key aspects of suicide, namely, reasons, methods, prevention and the use of school-based
suicide awareness education programs. Data was collected using a self-administered question-
naire (N=100) with fortythree items that measured the students perception based on a five Likert
scale. Students were asked to complete the self-reported questionnaires and the data collect-
ed was analysed by using both descriptive and inferential statistics. Analysis of the responses
about the reasons for suicide by gender, using an independent samples t-test showed male
students perceived past/present experiences of sexual abuse as the most influencing reason
for a suicidal attempt compared to female students who perceived low self-esteem as the most
influential reason for a suicidal attempt. Moreover, female students were more likely than males
to respond positively to a school-based suicide awareness education program. To examine the
different responses about above mentioned four key aspects with respect to age group and year
of schooling, a one-way ANOVA test was used. The results indicated there was no significance
between the four variables for a student’s year of schooling. However, the one-way ANOVA test
did reveal that the group of students aged 18-20 years is more likely to perceive drowning as
the most common method of suicide. Beneficially this independent study would be helpful in
designing future suicide prevention programs which can be based on an understanding of the
perception of Myanmar students to suicide and also in developing programs that can contribute
to healthy citizens by reducing the risk of suicide among Myanmar students not only those who
live in Thailand but also in Myanmar.
**PS1.21-5**  
**Deliberate Self-harm and Associated Factors in an Urban Irish Adolescent Cohort**  
**Doyle, L;** Treacy, MP; **Sheridan, A**  
¹Trinity College Dublin, IRELAND; ²University College Dublin, IRELAND

**Background**  
Deliberate self-harm (DSH) and suicidal behaviour often emerges during adolescence, however, there are a limited number of community studies that report on this from an Irish perspective and fewer still which identify factors associated with adolescent self-harm.

**Aim**  
To identify the self-reported rate of deliberate self-harm in Irish adolescents and to determine the factors associated with self-harm.

**Methods**  
The findings reported here emerged from Part 1 of a two-part mixed methods study, the first part focused on adolescent self-harm and the second part focused on adolescent help-seeking. Part 1 involved the administration of the ‘Lifestyle and Coping’ questionnaire to 856 post-prima-ry students (mean age 16 yrs) across 11 schools in Dublin, Ireland. Descriptive and inferential statistics were reported and a logistic regression model was developed to identify factors predictive of self-harm.

**Results**  
Deliberate self-harm was reported by 12% (n=103) [95% CI: 9.9%-14.3%] of adolescents. Females were significantly more likely to engage in self-harm than males with a ratio of 3:1, and the most common method of self-harm was cutting (63.1%). The factors most strongly related to self-harm were worries about sexual orientation (OR 3.53), experiencing the self-harm of a friend (OR 3.15) or family member (OR 2.74) and being in a non-intact family structure (OR 2.11). Help-seeking before and after an incident of self-harm was very low.

**Conclusions**  
Findings from this study suggest that one in every eight adolescent engages in DSH and stressful life events appear to be strongly associated with self-harm. Identifying the prevalence of, and factors associated with, deliberate self-harm in a population of young people is important to effectively determine the preventative programmes and outreach initiatives required to target at-risk groups.

**PS1.21-6**  
**Normative Misperceptions of Suicidal and Self-harming Behaviours in an Undergraduate Student Population**  
**Quigley, J;** Rasmussen, S; **McAlaney, J**  
¹University of Strathclyde, UNITED KINGDOM; ²University of Bradford, UNITED KINGDOM

**Background**  
A systematic literature review of 97 papers reporting on the relationship between adolescents’ own suicidal and self-harming behaviour, provided considerable evidence that an adolescent’s own behaviour is related to the behaviour of those around them and that suicide and self-harming behaviours may be contagious. Social norms of other negative health behaviours have been shown to influence one’s own engagement in those behaviours. However, social norms are often misperceived, such that it may be one’s misperception of a social norm of a given behaviour that
is related to one’s own engagement in that behaviour. There is a dearth of research into the existence of misperceptions surrounding suicidal and self-harming behaviours.

Methods
Undergraduate students completed an anonymous, online self-report survey, exploring their engagement in suicidal and self-harming behaviours (as well as 5 other risky health behaviours), their perceptions of others’ engagement in those behaviours (descriptive norms), their own approval of those behaviours, their perceptions of others’ approval of those behaviours (injunctive norms), and whether or not they felt their knowledge or perceptions of others’ engagement in those behaviours influenced their own.

Results
Those who reported engaging in suicidal or self-harming behaviours were more likely than those who did not, to overestimate the incidence of those behaviours in others, and participants tended to believe that others would share their views on those behaviours. Due to missing data (a number of incomplete surveys), it was not possible to make any conclusions based on whether or not participants believed their own behaviour was influenced by that of others.

Conclusion
Results suggest that the apparent association between one’s own suicidal and self-harming behaviours and that of others may in fact represent an association between misperceptions and behaviour. The Social Norms Approach has been used in other areas to reduce misperceptions and reduce target behaviours, and a similar approach may be effective in reducing suicidal and self-harming behaviours.

16:30 - 18:00
PS1.22 WORKSHOP: ASSIP - ATTEMPTED SUICIDE SHORT INTERVENTION PROGRAM. A NOVEL PATIENT-ORIENTED SHORT-TERM THERAPY; THEORY, PRACTICE, AND ONE-YEAR FOLLOW-UP

PS1.22-1
Attempted Suicide Short Intervention Program (ASSIP):
Theoretical Background and Introduction to the Four-Session Intervention
Michel, K; Gysin-Maillart, A
University Hospital of Psychiatry, Bern, SWITZERLAND

This presentation is part of the symposium on ASSIP - Attempted Suicide Short Intervention Program. A novel patient-oriented short-term therapy; theory, practice, and one-year follow-up.

Theoretical background
The Attempted Suicide Short Intervention Program ASSIP is based on an understanding of suicide in the context of goal-directed action systems, in contrast to a concept of suicide as a symptom of psychiatric pathology. A major objective of ASSIP is to establish a collaborative working relationship in order to increase the patient’s motivation to apply individualized safety strategies in future suicidal crises.
Introduction to ASSIP
This specific short-term intervention is normally offered to suicide attempters in addition to the treatment as usual and does not replace a long-term treatment. The manualised treatment will be presented step by step. ASSIP consists of 4 sessions, followed by continued contact through regular semi-standardized letters over 2 years. The first session consists of a narrative interview carried out by a trained interviewer. This is followed by a video-playback in the second session, and a subsequent reconstruction of the patients’ individual vulnerabilities and relevant biographical issues. A homework task is used to foster a shared understanding of the suicidal crisis. In the third session individualised safety strategies are developed in a collaborative manner. The fourth session includes a mini-exposure to the initial video-recorded suicide narrative as a test of the coping strategies. A written formulation of the suicidal process and the individual safety strategies, including a credit-card-sized hope leporello, is handed to the patient, with a copy for the therapist and, if applicable, the GP. Semi-structured letters are sent to the patients every three months in the first year, and every six months in the second year.
To evaluate the program, 120 patients were included and followed up for two years. Patients were randomly assigned to an intervention group ASSIP or a control group. The two-years follow-up evaluation will be completed by the end of 2013.

PS1.22-2
Attempted Suicide Short Intervention Program (ASSIP):
Preliminary Results of One-Year Follow-up
Michel, K; Gysin-Maillart, A; Soravia, L
University Hospital of Psychiatry, Bern, SWITZERLAND

This presentation is part of the symposium on ASSIP - Attempted Suicide Short Intervention Program. A novel patient-oriented short-term therapy; theory, practice, and one-year follow-up.

Theoretical background
The Attempted Suicide Short Intervention Program ASSIP is based on an understanding of suicide in the context of goal-directed action systems, in contrast to a concept of suicide as a symptom of psychiatric pathology. A major objective of ASSIP is to establish a collaborative working relationship in order to increase the patient’s motivation to apply individualised safety strategies in future suicidal crises. Study design: The current study started in January 2009. A total of 120 patients were included in the study, randomly assigned to the ASSIP intervention group and a control group. The intervention group received 3-4 treatment sessions according to the ASSIP protocol plus treatment as usual, followed by a two-year contact through regular half-standardised letters. The control group was offered an initial suicide risk assessment interview in addition to treatment as usual. Both groups filled in a set of questionnaires initially, and every six months over two years.

Outcome measures
Primary outcome measures are repetition of attempted suicide completed suicide and suicidal ideation, secondary outcome measures are levels of depression, and contacts with the mental health system. The influence of moderating parameters such as therapeutic alliance, psychiatric diagnosis, previous suicide attempts, and coping styles were analysed. Statistical analysis was performed using Intention-to-treat (ITT) and LOCF (numeric imputation strategy).
Results
The two-years follow-up will finish at the end of 2013. Results of a one-year cut-off period for 120 patients will be presented. Limitations: Limitations of the study and problems associated with a long-term follow-up of suicide attempters will be discussed.

PS1.22-3
Introduction to the ASSIP Project Plan in Finland 2013-2017
Djupsund, C
The Finnish Association for Mental Health, SOS Crisis Centre, FINLAND

This presentation is part of the symposium on ASSIP - Attempted Suicide Short Intervention Program.
A novel patient-oriented short-term therapy; theory, practice, and one-year follow-up. In the Finnish Association for Mental Health the work in suicide prevention started in 1970. There is a network of 19 crisis centres in Finland. The amount of suicides in Finland is approximately 1000 per year. The number of suicide attempts is estimated to be ten times higher. Attempted suicide represents the main suicide risk factor. Strategies and evidence based models and tools are needed in the work with individuals at risk. The aim of the five-year current project is to focus on increasing our efforts in suicide prevention and crisis intervention through the implementation of the ASSIP short intervention program for suicide attempters in Finland. The five-year plan includes several goals. 1) To adapt the ASSIP intervention model to Finland, translating the ASSIP material to Finnish and developing the necessary structures. 2) To engage, educate and secure the collaboration of the hospitals and other social- and healthcare professionals. 3) Defining and putting into practice the evaluation and follow-up plan. 4) Starting client-work according to ASSIP in SOS crisis centre, Helsinki. 5) Implementing and initiating ASSIP in 2-3 local crisis centres in areas with the highest suicide rates. 6) Analysing the results of the follow-up evaluation. 7) Distributing and implementing the intervention model to the network of crisis centres in order to increase the effect of the intervention and to extend suicide prevention more nationwide. An important partner in the collaboration is the hospital district of Helsinki. Contact persons have been appointed from every hospital district. Furthermore, Helsinki Psychiatry Centre is also committed to collaboration. The developing unit of FAMH is responsible for the evaluation and follow-up of the project. The applicability of the ASSIP intervention, results in preventing suicides and decreasing the number of suicide attempts will be measured and evaluated. We expect a reduction in the number of suicides and suicide attempts of individuals at risk, an increase of coping mechanisms among clients, and improved subjective wellbeing. One aim is that suicide prevention receives higher priority in Finland, and that suicidal individuals get more effective support. In future, ASSIP should be a permanent intervention used in crisis centres.
PS1.23-1
Skills-based Training for Gatekeepers
Green, G1; Robinson, J2
1University of Manchester, UNITED KINGDOM; 2University of Melbourne, AUSTRALIA

In order to promote early identification, assessment and appropriate treatment of persons at risk of suicide, a sustainable training and education programme for gatekeepers is essential. In the mid 1990’s, researchers at the University of Manchester developed a skills-based suicide risk assessment and management training package in response to frontline workers lack of basic skills in suicide prevention. Increasing evidence suggested that didactic lecture in pre-qualification courses, the preferred approach to training, was inadequate in skills development. Thus, whilst students had a good theoretical understanding of suicide, they lacked the ‘skills’ needed to conduct appropriate and timely risk assessment and safety planning procedures.

The STORM® (Skills-based Training On Risk management) model of training utilises methods that enhance skills through rehearsal, self-reflection and group appraisal; the core skills needed for the assessment of suicide risk and safety planning. Three research studies proved the model of training effective at improving skills, attitudes and confidence. A number of dissemination studies have also shown that the training is useful, relevant and highly valued by participants; key factors in the routinization of an intervention into practice.

The STORM® training package is being adapted with the addition of a postvention element for gatekeeper staff in Australian secondary schools. A joint pilot study led by the University of Melbourne will evaluate its effectiveness and feasibility in a contextually different environment.

This practical workshop has three main aims:
* To share experiences adapting a skills-based training package to be contextually relevant in different countries
* To share experiences disseminating suicide prevention and postvention training within schools
* To demonstrate the value of skills-based training above didactic lecture. Delegates will engage in activities designed to showcase skills development methods.
16:30 - 18:00
PS1.24 STUDIES OF PSYCHOLOGICAL FACTORS IN SELF-HARM

PS1.24-1
Using Joiner’s Interpersonal Theory of Suicide to Explicate Van Gogh’s Ear Self-Injury and Suicide
Walsh, B
The Bridge, UNITED STATES

Vincent Van Gogh is one of the most esteemed artists in history, yet he was unappreciated during his lifetime. For many years he suffered from symptoms of serious mental illness, and presented with numerous forms of self-destructive behaviour including self-burning, restrictive eating, and ascetic self-mortification. In addition, he performed the notorious act of cutting off a portion of one ear and he ultimately died from a self-inflicted gunshot wound.
To date, Thomas Joiner’s influential Interpersonal Theory of Suicide has seldom - if ever - been applied to the task of psychobiography. Joiner’s contention is that his theory is universal as to its applicability across cultures and geographies. Also intriguing would be to see if the theory provides insights into the suicide of a notable historical figure such as Van Gogh.
This presentation will employ a detailed application of Joiner’s interpersonal theory in order to explicate Van Gogh’s outer ear removal and death by suicide. More specifically, details from Van Gogh’s biography will be employed to explicate his almost lifelong thwarted belongingness and during adulthood, his profound sense of burdensomeness in relation to his brother, Theo. This thwarted belongingness and burdensomeness in combination with Van Gogh’s gradual habituation to self-harm resulted in an escalating trajectory of lethality, culminating in his suicide. Clinical implications for this life course will conclude this discussion.

PS1.24-2
Exploring Avoidant Behaviour in Self-harm using a Novel Behavioural Task
Hochard, KD; Nielsen, E; Heym, N; Townsend, E
University of Nottingham, UNITED KINGDOM

Self-harm serves multiple functions but the reasons most consistently endorsed by those who self-harm relate to the avoidance/elimination of, or escape from, aversive experience. Thus, self-harm can be conceptualised as an experientially avoidant coping function. Preliminary studies (based on retrospective psychometric assessment) suggest a strong avoidance component in self-harm. However, there is a dearth of research employing behavioural paradigms. We explored whether individuals with self-harm and without self-harm perform differently on a laboratory task measuring avoidance behaviour. The influence of stimuli arousal; the intensity of the emotion elicited was also investigated.
Participants with (n=70) and without self-harm (n=55) completed a novel computer-based behaviour task assessing approach/avoidance behaviours in response to standardised negative, positive and neutral images. Via joystick responses participants physically resized the presented
stimuli by enlarging (approach) or minimizing (avoiding) the image. The intensity of the stimuli was manipulated high [e.g. image of corpse] vs. low [e.g. image of angry face]. Self-reported valence ratings were used to categorise images because avoidance response tendencies are thought to be more evident in those with heightened emotional intensity, deficits in mood regulation or problems with distress tolerance. We also took psychometric measures [e.g. Behavioural Inhibition System - BIS, relating to avoidance of stimuli and, depressive symptoms inventory] to compare to performance on the behavioural task.

BIS measures negatively correlated and predicted final size of standardised negative images, yet contrary to expectations no differences between the self-harm groups were observed in final image size chosen. However, significant differences were observed in the time taken to make the final size decision. Participants responded significantly faster to high intensity [positive, neutral and negative] images. For negative images a significant effect of lifetime self-harm engagement was also observed; those who had engaged in self-harmful behaviours responded to negative images more slowly than those with no history of self-harm.

The study provides preliminary behavioural support for differences in avoidance in a non-clinical population with a history of self-harm.

**PS1.24-3**

**Insecure Attachment Style Predicts Repetition of Self-harm in Adolescence**

Townsend, E1; Glazebrook, K2; Sayal, K1

1University of Nottingham, UNITED KINGDOM; 2UCL, UNITED KINGDOM

**Background**

Increasing understanding of the factors that increase the risk of repetition of self-harm is a current research priority highlighted by the recent National Suicide Prevention Strategy in the UK. The factors associated with risk of repetition in adolescents are particularly poorly understood. We examined whether insecure attachment would be associated with worse outcomes (increased risk of repeated self-harm, less improvement in problem-solving and poorer attendance at clinical appointments) over 6-months in an adolescent clinical sample.

**Method**

A prospective, longitudinal study of adolescents referred to Specialist Child and Adolescent Mental Health Services who had self-harmed within the last year. At baseline participants were interviewed using the Child Attachment Interview. The Means End Problem-Solving Task and self-report measures of self-harm, peer attachment, anxiety and depression were administered at baseline and follow-up.

**Results**

Fifty-two adolescents (49 females) aged 13 - 17 years were recruited to the study, with 14 (27%) classified as having secure attachment to their mothers. Of the 49 (94%) participants assessed at 6 month follow-up, 78% (28/36) of participants with insecure maternal attachment had repeated self-harm, compared to 42% (5/12) of securely attached adolescents. After adjusting for age, levels of previous self-harm and baseline anxiety and depression, insecure maternal attachment (OR= 7.80, 95% CI= 1.15-52.91) and insecure peer attachment (OR= 8.01, 95% CI= 1.00-64.20) predicted repetition of self-harm. Securely attached adolescents also showed greater improvement in problem-solving skills but there was no difference between groups in the proportion of clinical appointments attended.
Conclusions
Insecure attachment is associated with repetition of self-harm in adolescents and may impair the acquisition of protective problem-solving skills. These findings highlight the importance of considering attachment when assessing clinical risk and when developing psychological interventions to prevent repetition of self-harm.

PS1.24-4
Hurting Inside and Out? The Relationship between Emotional and Physical Pain Reactivity in Self-Harm
Kirtley, OJ1; O’Carroll, RE2; O’Connor, R1
1University of Glasgow, UNITED KINGDOM; 2University of Stirling, UNITED KINGDOM

Introduction and aims
Social neuroscience research suggests that those who are more sensitive to emotional pain are also more sensitive to physical pain. However, when considered within the context of self-harm, those who self-harm have been found to be more sensitive to emotional pain and yet also less sensitive to physical pain. Sensitivity to physical pain has been demonstrated to increase following self-harm cessation, but changes in emotional pain sensitivity are as yet unknown. The current study aimed to explore the relationship between and predictors of, self-reported emotional and physical pain sensitivity in recent and former self-harmers.

Methods
351 healthy adults completed a battery of online self-report measures assessing self-harm, depression, emotional pain reactivity, physical pain distress, socially prescribed perfectionism and self-rated feelings of guilt, worthlessness, social ineptitude, inferiority and self-criticism.

Results
Emotional reactivity was significantly higher in the self-harm group, compared to controls and significantly associated with past self-harm, whereas physical pain distress was not. Within the self-harm group, recent self-harmers reported greater emotional reactivity than former self-harmers, but this effect was not found for physical pain. Emotional reactivity was the only significant predictor of pain distress. Presence of perfectionistic cognitions and pain distress significantly predicted emotional reactivity.

Conclusions
Consistent with previous studies, higher emotional reactivity was associated with self-harm and also decreased following self-harm cessation. Also supporting previous research, higher emotional reactivity was associated with higher levels of physical pain distress. Presence of more socially perfectionistic cognitions predicted emotional reactivity in self-harm. This suggests that high social perfectionism could predispose an individual to greater emotional reactivity.
**PS1.24-5**  
**Young Self-cutters: Are they Different from other Non-fatal Suicidal Behaviour Patients?**  
Saraiva, CB; Santos, JC; Alte da Veiga, F; Madeira, N; Garrido, P; Craveiro, A; Andrade, J  
1CHUC, PORTUGAL; 2Coimbra Nursing School, PORTUGAL; 3Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL

**Background**  
Self-cutting is a troubling phenomenon because it is difficult to understand and hard to treat.

**Objectives**  
From a 20-year experience involving young self-cutters (15-24 years old) referred from the Emergency Room to our unit, our aim was to study eventual different characteristics comparing with other patients who were admitted by self-poisoning (psychotropic overdose).

**Methods**  
We used a semi-structured questionnaire designed by our unit with 77 items covering socio-demographic and clinical aspects. Two groups were compared: Young Self-Cutters Group 39 vs. Non-Self-Cutters Group 424.

**Results**  
Self-cutters are globally younger, live in the city, not in the countryside, higher schooling, and less religious. When focus on clinical variables, the following findings are more frequent among self-cutters: Abnormal childbirth or psychomotor development, history of physical or sexual abuse during childhood, absence of engagement in group activities, like sports, social isolation, drug abuse, personality disorders, previous non-fatal suicidal behaviours, psychiatric disorder within the family, bereavement, history of completed suicide or suicide attempts among family or friends, and vulnerability to the Werther effect. In addition, we emphasize this paradox concerning self-cutters: They more frequently seek medical help (at least this kind of population observed in emergency rooms), leave suicide notes, associate alcohol to the cutting, denote a suicide plan involving self-aggressiveness cognitive schema, and show less satisfaction for surviving; however, they never need intensive care.

**Conclusions**  
These findings suggest a strong ambivalence of these patients who seem to pursue a ‘career’ engaging in a lifestyle much like drugs addicts did some decades ago. They need cutting to relief pain, isolation, despair, but also for discovering power over their own body. Nevertheless, we think it should be very interesting to know the ‘other’ secret self-cutters of the general population, those individuals who exceptionally are admitted into an emergency room.

**PS1.24-6**  
**Impulsivity in Suicide - How is it Measured?**  
Podlogar, T; Postuvan, V; Mars, U; Ziberna, J; De Leo, D  
Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA

Impulsivity has been found to be an important risk factor for suicidal behaviour. There are two aspects of impulsivity that need to be taken into consideration: i) impulsivity as a personality trait that is often recognized among people with suicidal behaviour; and, ii) impulsive (as opposed to premeditated) initiating of a fatal or non-fatal self-harm act. Both aspects of the role of impulsivity in suicidal behaviour are being researched extensively, and there is a broad variety of instruments presently used to measure them. However, the literature on comparability of these
instruments is limited. The objective of this study is to present the first results of a systematic review of literature on this specific topic. Two electronic databases (PubMed and Science Direct) were searched with selected key words searching for impulsivity in connection to suicidal behaviour and the measurements used for assessing it. Publications meeting these criteria were included into the analysis. Characteristics of the most widely used and most valid instruments measuring impulsivity in connection to suicidal behaviour are here presented. Two main categories of instruments were identified: i) instruments measuring impulsivity as a personality trait; and ii) instruments assessing impulsivity in the context of a fatal or non-fatal self-harm act. Similairities and differences among instruments are presented and discussed. This contribution offers an overview of existing measures, used to assess impulsiveness in connection to suicidal behaviour. It also tries to address issues of uniformity of these different instruments, which appears to be closely related to the uniformity of results of the studies in which the instruments were used.

16:30 - 18:00

PS1.25 SPECIAL LECTURES

PS1.25-1

Messages from Manchester: Contact Interventions for Self-harm and Results from a Pilot Randomised Controlled Trial

Kapur, N1; Gunnell, D2; Hawton, K3; Nadeem, S1; Khalil, S1; Longson, D4; Jordan, R4; Donaldson, I1; Emsley, R1; Cooper, J1

1University of Manchester, UNITED KINGDOM; 2University of Bristol, UNITED KINGDOM; 3University of Oxford, UNITED KINGDOM; 4Manchester Mental Health and Social Care Trust, UNITED KINGDOM

Background and aims

Brief interventions of telephone or postal contact following self-harm have shown some promise in reducing the incidence of repeat self-harm, but research findings have been equivocal and mechanisms of action uncertain. In this presentation we will discuss the results of studies to date. We will also describe the findings of our own pilot trial in Manchester, England.

Methods

Using qualitative methodology we developed an intervention that consisted of an information leaflet listing local sources of help, two phone calls soon after presentation to an emergency department, and a series of letters expressing concern sent over a 12-month period. We carried out a pilot randomised controlled trial comparing the intervention plus usual treatment to usual treatment alone in two hospitals in Manchester. The participants were patients over 18 years old living in Manchester and attending the study hospitals following self-harm. We recorded repeat episodes of self-harm at 12 months and use of in-patient and outpatient health care services from hospital databases.

Results

We screened 250 potential participants. Overall, 30% of eligible individuals could not be contacted, a further 28% did not consent to take part, and 66 patients were eventually randomised (with 33 patients in each group). The 12-month repeat rate for individuals in the intervention group was 34% (95% CI: 20 to 52%) versus 12% for the usual treatment group (95% CI: 4 to 29%), p value for difference =0.046. The total number of repeat episodes of self-harm was higher in the
intervention group (41 v. 7). Resource use was similar. The risk of repetition and the number of repeat episodes remained higher in those who received the intervention, even after adjustment for baseline clinical characteristics.

**Conclusion**

This pilot trial proved challenging to carry out but showed the methodology was feasible. Our findings on the repetition of self-harm may partly reflect an unequal distribution of baseline risk factors between groups. Alternatively, presenting to hospital after repeat episodes of self-harm could be a marker of better engagement with services. However, we cannot rule out the possibility that the intervention was associated with a true increase in the risk of repetition. Future studies of these apparently simple contact interventions need to be alert to this and should aim to identify the active components of therapeutic contact with a view to refining existing interventions or developing new ones.

**Note:** This presentation discusses independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research scheme (RP-PG-0606-1247). The views expressed in this presentation are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

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**PS1.25-2**

**Quantitative and Qualitative Psychological Autopsy of 70 High School Students: Tragic vs. Regressive Narratives**

Zalsman, G; Siman-Tov, Y; Tsuriel, D

Psychiatry Dep., Sakler Faculty of Medicine, Tel Aviv University and Child Psychiatry Div., Geha MHC, ISRAEL

**Aim**

To analyze lifetime narratives, risk factors, family profiles, internal and external signs of distress and environmental reaction to it, using the method of psychological autopsy and narratives typology analysis in order to better understand and predict suicide in high schools.

**Method**

The psychological autopsy of 70 high school students suicide victims (54 Jewish, 50 males, 43 born in Israel) were analyzed post mortem using quantitative, qualitative and narrative approach.

**Results**

We traced two leading narratives: tragic and regressive. Specific risk factors were found including gender, school mal-behaviour and truancy, low school grades and learning disorders. Fight with parents and teachers especially with humiliation aspects were a major facilitating factor. Despite the fact that most of the victims gave signs of distress, the adults in their life did not notice it while the peers noticed but refused to believe they are true. Methods of suicide did not differ significantly between genders in this sample. Yet, 20% of the suicide victims were excellent students and fitted the tragic life narratives. They had lower rate of mental disorders (p=0.03), shorter crisis (p=0.006), and less life events (p=0.03) when compared with those with regressive narratives.

**Conclusions**

We identify two major life narratives in high school students suicides: tragic and regressive. School truancy for the regressive narratives and fight with authority figures and humiliation for the tragic narratives are major risk factors at high school and should be a focus of prevention programs.
**PS1.25-3**  
Suicide Prevention seen through Systemic Eyeglasses  
Beskow, J  
Sahlgrenska Academy and Suicide Prevention in the West, SPIV, Gothenburg, SWEDEN

Systems theory may be of good help in search for models for understanding and helping suicidal persons. These theories describe reality through many hierarchically arranged systems, each of them with their own self-regulation capacity. Focus is changed from fixed objects to processes. The stimulus-response interactivity with feedback between the systems is extremely rapid. The borders are elastic but may burst when overloaded. The normal and often successful suicidal process may however deteriorate into a ruminating, unproductive pathological suicidality. The focus is then shifted from the limited cognitive problem to the nearly unlimited personal system: ‘I am the cause of all problems’. When the person’s efforts to change herself are used up she shifts her attention to the suicidal cognitive system with suicide as the only available solution. The pathological suicidal process consists of four features: Deep experiences of unsuccessful problem solving, exhaustion, severe mental pain and decreasing capacity to relate to other persons with feelings that no help is available. Now at the border of her self-regulating capacity she may be overwhelmed by anxiety, depression and intrusive suicidal thoughts, a mental accident. This perspective radically changes the understanding of pathological suicidality and how it should be treated.

**10:30 - 16:30**  
DAY 1 - POSTER SESSION

**P01-01**  
‘Iku Ya J’esin Lo’: Sooner Death than Indignity, Growing Individualism and the Rising Suicide Rate among the Yorubas of Southwestern Nigeria  
Ademowo, AJ  
Afe Babalola University, NIGERIA

‘Everything has become very shameful ... Iku ya ju esin lo ... Accept my apology for this action of mine. Enough is enough...’ - Victim 1 (Leadership 27 March, 2012)  
‘Please forgive me for committing suicide, but iku ya ju esin lo ... it is due to debt I owe people which I find difficult to pay’ - Victim 2 (Vanguard, 15 April, 2012)

The use of suicide language as a threat to symbolize ‘brick wall’ and as palliative, to enable others to understand why the ‘victim’ has to take his or her life, is not new because suicide is not alien to many cultures; indeed suicide is embedded as an intricate part of cultural practice, most especially as a price for betrayal of trust.

This study is focused on the popularity of suicide expression, Iku ya j’esin, in recent suicide notes in Southwestern Nigeria. Iku ya j’esin among the Yorubas is an expression that easily finds equivalents in numerous cultures, and captures the essence of self-worth, the sheer integrity of being that animates the human spirit, and consequently the ascription of equal membership of the human community thereby making it necessary for ‘victims’ to explain why the tenets of the ‘community’ has to be violated.
Using the theory of hermeneutics, the study explains the cultural underpinnings, the necessity of the notes and the imperatives of the inclusion of the ‘Iku ya j’esin’ suicide expression through the study of 30 suicide notes.

The study concludes that the growing individualism in southwestern Nigeria encourages suicide contemplation because the ‘family care’ that deters users of the expression in the past is fast fading.

**PO1-02**

**Use of Psychotropic Medication Last Year Before Suicide**  
Chen, Y; Hui-Li, L  
Kaohsiung Medical University, TAIWAN

**Background**  
Previous literature has shown that subjects who later committed suicide more often visited general practitioners than psychiatrists before death. The National Taiwan Insurance Database provides an opportunity to describe characteristics of health care contacts before suicide. This study linked death records and the National Health Insurance Database to analyse the characteristics of psychiatric drug utilization before suicide.

**Methods**  
These data were linked, using personal ID, with National Health Insurance Database (CD, DD) of 2003-2005 to obtain the data of inpatient and outpatient records within the three years preceding death. This is a nested case-control study. Data of suicide subjects were identified using Taiwan Death Records in the period of January 1 2003 to December 31 2005.

**Results**  
Altogether 89.2% of the suicides, 89.0% of accident deaths, and 91.2% of natural deaths had been treated in outpatient clinics within the last year before death. Within one year before death, 50.6% of suicides had used psychiatric medication. Among suicides, 5.6% had psychiatric diagnosis in the last admission, 4.0% had been hospitalization in psychiatry in the last admission, 11.8% had psychiatric diagnoses in the last outpatient visit, 6.5% had been treated in psychiatric department during the last outpatient visit. In the last outpatient visit, among suicide subjects, 11.8% had psychiatric diagnoses, 4.0% had mood-related diagnoses, and 2.6% had depressive-related diagnoses. Among suicide subjects, 5.5% had psychiatric diagnoses, 2.1% had mood-related diagnoses, and 2.0% had depressive-related diagnoses in the last outpatient visit. There were 69.9% and 27.0% of suicide subjects who had outpatient and inpatient records within the last month before death.

**Conclusion**  
This study found that subjects who used psychiatric medication were significantly more than the psychiatric disorder subjects to have a health care contact in the last inpatient and outpatient records. These findings will be of practical interest and should support designing appropriate methods of suicide intervention and effective preventive strategies.
PO1-03
Can we Differentiate Suicide ‘hotspots’ on Railways from Non-hotspots?
Krysinska, K1; Debbaut, K2; Andriessen, K3
1University of Leuven - KU Leuven, BELGIUM; 2Infrabel, Suicide Prevention Unit, BELGIUM; 3Tele Help (Tele-Onthaal) Federation & KU Leuven, University of Leuven, BELGIUM

Background
Suicide by collision with a train is a highly lethal suicide method. Restricting access to suicide methods is an evidence-based suicide prevention strategy, which has also been applied on railway networks.

Objectives
This study sought to identify so-called hotspots on the Belgian railways, i.e. areas on the railway network with an observed elevated incidence of suicide, and to identify characteristics that could differentiate suicide hotspots from non-hotspots.

Results
Following a designated procedure, 43 ‘hotspots’ were identified, accounting for 35% of suicides on Belgian railways. The major characteristics of these locations were easy access to the railway (n=43), isolation and lack of social control providing anonymity to the suicidal person (n=30), and the vicinity of a medical institution (n=17, especially a mental health facility). A further analysis of the suicide locations on the Belgian railway network revealed additional characteristics of the “hotspots” differentiating them from other relatively easily accessible, isolated locations adjacent to mental health facilities.

Conclusions
The study concludes that a comprehensive railway suicide prevention program should continuously safeguard and monitor hotspots. In addition, such a program should be embedded in a comprehensive suicide prevention program in the community.

PO1-04
Attempted Suicides in Suriname - A Comparative Study of a Rural and Urban Area
Lewis, LF
Anton de Kom University and ERASMUS University, SURINAME

The WHO figures show that suicide and suicide attempt rates are high in India and in countries with people who are part of the Diaspora of Indians. This is also the case in Suriname, a country with a population of 500,000, where 400 to 750 suicide attempts were registered annually in the years 2003-2012. Suicide attempts are much more frequent among Hindoestanis, an ethnic group descending from Indian immigrants, than among Creoles, who descend from African slaves. Both groups comprise together nearly half of the population of Suriname (Hindoestanis 29% and Creoles 19%), but the question: which social factors influence this suicidal behaviour, has not been answered satisfactory. One reason for that situation may be that the data gathering of suicide attempts in Suriname is concentrated more on data concerning individual characteristics, without sufficient attention to the social and cultural factors that influence this behaviour. The importance of the social factors of suicide, however, has been proven already by the sociologist Durkheim. In an attempt to answer the posed question, this study will concentrate on suicidal behaviour in the center of Suriname, Paramaribo and a rural district Nickerie, in the period 2009-2011. In the tradition of Durkheim’s social integration and regulation theories, factors that
influence the suicidal behaviour, will be explored. A model has been designed to analyze the social integration and social regulation theory of Durkheim, combining the quantitative and qualitative research methods, which assess the influence of deeper social and cultural variables. The data gathered will be presented.

**P01-05**

Analysis of Suicide Attempts in Public Emergency’s Sao Paulo City, Brazil.

Araújo, TSG; Marcolan, JF; Mazzaia, MC; Marquetti, FC

Universidade Federal de São Paulo, BRAZIL

**Study objective**
To analyze suicide attempts of individuals taken care of in university public emergency rooms in the São Paulo City in 2013 and to study predisposing factors.

**Methods and material**
Exploratory-descriptive, quantitative study; semistructured interviews.

**Results**

Had participated until the moment 21 individuals, 11 women and 10 men; the majority was single, between 20 to 41 years old, with up to 8 years of basic education, did not have job, with low familiar income support, without specific professional formation, without social net of support and 4 had related to have relationships for the social nets of the Internet; 8 did not have religion and those who had was majority catholic; 10 without activities of recreation and leisure, the ones that had such activities were no cost financial as to play soccer and to go to the park; 15 had previous diagnosis for depression and the majority had 5 years or more, 14 made ambulatory treatment; 16 had psychiatric comorbidity; 11 had families with mental disease; 17 had had previous suicide attempt and the majority had made several attempts; methods in the current suicide attempt: 12 medicine ingestion and other poisonous substances, 4 to cut with knife or perforating object, 2 hanging, 2 to jump from high site, 1 to jump in the front of car in movement.

Reasons that had led to the suicide attempt had been mainly due to psychosis (6), affective losses and difficulties in the familiar relationships (6) and symptoms due to depression (6); the majority tried to commit suicide at home, did not plan the act, made impulsively after some negative incentive, to prevent this behaviour to treat with the loneliness and the lack of appropriate affective relations; 14 had not informed anyone previously about the act; 11 had not changed the form to think and continued wanting to commit suicide, 16 did not see another possibility to solve the problems besides the death, 8 wanted to repeat the attempt when leaving the hospital; 9 believed that the families would change the relation with them for negative way because of the attempt; they believed that prevention would have to focus on aspects about family relationships, the belief in God, and give attention to the loneliness they had.
PO1-06
Gender Differences in Suicidal Behaviour in a Population Based Sample of Patients with First-Episode Psychosis.
Austad, G1; Joa, I1; Johannessen, JO2; Larsen, TK2
1RVTS Vest/Stavanger University Hospital, NORWAY; 2Stavanger University Hospital, NORWAY

Study objectives
In the early phases of psychosis there is a high risk of suicide and suicidal thoughts, suicidal plans and suicide attempts (suicidal behaviour). Previous research on first-episode psychosis has shown contradicting gender patterns in suicidal behaviour. This study aims to describe the prevalence of suicidal ideations, suicidal plans and suicide attempts analysed according to gender and risk factors.

Methods and material
Consecutively included patients with first-episode non-affective psychosis (n=246) from a hospital catchment area with a program for early detection of psychosis. Baseline social, demographic and clinical variables were analysed and compared between genders. Suicidal behaviour were studied during two time periods; month prior to study entry and lifetime.

Results
Suicidal behaviour was highly prevalent, lifetime (65.9 %) and last month (50.8 %), and more prevalent in females than males. Depressive symptoms and female gender were associated with suicidal behaviour for both time periods, longer duration of untreated psychosis and young age was associated with suicidal behaviour only for the period of lifetime, when controlled for other risk factors.

Logistic regression with suicidality in life (non-suicidal/suicidal) as dependent variable (n=233)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E</th>
<th>p</th>
<th>Exp (B)</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>Age</td>
<td>-0.035</td>
<td>0.015</td>
<td>0.023*</td>
<td>0.965</td>
<td>0.936-0.995</td>
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<td>Schizophrenia spectrum</td>
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<td>0.339</td>
<td>0.924</td>
<td>0.968</td>
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<tr>
<td>logDUP</td>
<td>0.498</td>
<td>0.200</td>
<td>0.013*</td>
<td>1.646</td>
<td>1.112-2.437</td>
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<tr>
<td>PANSS Depressive component</td>
<td>0.251</td>
<td>0.052</td>
<td>0.000*</td>
<td>1.286</td>
<td>1.162-1.423</td>
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<tr>
<td>PANSS Cognitive component</td>
<td>-0.034</td>
<td>0.057</td>
<td>0.548</td>
<td>0.966</td>
<td>0.864-1.081</td>
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<td>GAF-F</td>
<td>-0.008</td>
<td>0.018</td>
<td>0.674</td>
<td>0.992</td>
<td>0.957-1.029</td>
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<td>Drug misuse</td>
<td>-0.352</td>
<td>0.340</td>
<td>0.301</td>
<td>0.703</td>
<td>0.361-1.370</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.878</td>
<td>0.347</td>
<td>0.011*</td>
<td>0.416</td>
<td>0.211-0.820</td>
</tr>
</tbody>
</table>

logDUP=duration of untreated psychosis log transformed (log of DUP value + 1). Model Chi Square=46.921, df=8, pb.000. The model as a whole explained between 18.2 (Cox and Snell R2) and 25.3 % (Nagelkerke R2) of the variance and correctly identified 73.4 % of the cases.

Conclusion
Suicidal behaviour was frequent in this large representative population based cohort of consecutively included FEP patients, with higher prevalence of suicidal behaviour in females than in males. Our results are in line with gender differences in suicidal behaviour seen in the general population. Whether these findings can be generalized to all FEP patients or not, needs to be further explored.
**PO1-07**  
**Self-injury among Adolescents and Young Adults in South Africa**  
Bheamadu, C  
University of Johannesburg, SOUTH AFRICA

The phenomenon of self-injury elicits much controversy and evokes shock, revulsion and horror. The notion that an individual deliberately inflicts physical harm through cuts, burns, welts and wounds to the body is often viewed as abhorrent and the individual viewed as weird, unstable, psychiatrically unbalanced or crazy. The elevated prevalence rates within the general population and in adolescents in particular, have created a burgeoning interest in research about this problem worldwide. The secret nature, lack of awareness, understanding, knowledge and comprehensive treatment measures perpetuates the stigma attached to self-injury. Although there is vast knowledge and interest internationally, in South Africa there is a paucity of research and literature on self-injury creating barriers for the adolescent who self-injures, for professionals and the general public. In the light of the above, I conducted a study to explore the experiences of self-injury among adolescents as they are identified internationally as the highest risk group for this behaviour. An interpretative qualitative research approach was followed. The use of a phenomenological research design facilitated the exploration and gathering of descriptions of subjective experiences of adolescents’ self-injury. The data were primarily collected through in-depth phenomenological interviews which were audio-taped and transcribed. The use of collages and personal written material provided depth and insight to the data. The data was analyzed with phenomenological data analysis. The biopsychosocial perspective, an integrative and holistic perspective conceptualized self-injury within a biological, psychological and social domain of functioning. Developmental, trauma and attachment theories served as adjunct theories to clarify developmental adaptation and maladaptation and to elucidate intrapersonal and interpersonal functioning within the various domains of functioning. The results of the data found that self-injury developed and was perpetuated by a complex integration of intrapersonal and interpersonal factors within the biopsychosocial context. Although the adolescents saw self-injury as maladaptive, it was conceptualized as adaptive coping mechanism in times of severe stress and emotional turmoil. Based on the findings an integrated biopsychosocial intervention programme to manage and alleviate self-injury was developed. The programme focused on a multi-systemic and holistic intervention which encompassed the individual, the family system and the school environment. The aim of the intervention programme was to work integratively and systemically to depathologize self-injury, raise awareness of the high prevalence of self-injury, provide psychotherapeutic support to adolescents, parents and school personnel. An intervention programme can be integral practical tools for schools, families, communities and the adolescent to understand and cope with self-injury.

**PO1-08**  
**Profiles of Callers to Flemish Suicide Prevention Hotline**  
Bloemen, M; Muijzers, E; Pauwels, K.  
Centrum ter Preventie van Zelfdoding, BELGIUM

De Zelfmoordlijn, founded in 1979, is a Flemish suicide prevention hotline available 24-hours, 7 days a week, to anyone in a suicidal crisis. All calls are answered by professionally trained volunteers. After each call the volunteers fills in an anonymous report including different types
of variables. Since 2009 anonymous data have structurally been collected of all crisis calls, resulting in an extensive dataset comprising data on demographic variables, the degree of suicidal intent, the presence of a previous attempt, experiences and obstacles related to professional health care, life events, and reasons for living. Descriptive statistics are used to sketch elaborate gender- and age-specific profiles of callers to the crisis hotline. Data of over 6000 cases have been analyzed. The results of this study will be presented in a poster, indicating differences in the profiles of attempters and non-attempters, differences in experienced social problems such as bullying and financial problems, and the presence of reasons for living.

**PO1-10**

**Occupation and Suicide Attempts in Taiwan: 2006-2011**

Chang, CM1; Liao, S-C2; Lee, M-B3; Chen, CH4

1Chang Gung Memorial Hospital at Linko & Chang Gung University, TAIWAN; 2National University College of Medicine, TAIWAN; 3National University Hospital and National University College of Medicine, TAIWAN; 4Academia Sinica, TAIWAN

**Study objective**

Most suicides occur in working age and their relationship with occupation has been extensively investigated. However, it is unknown about the relationship between suicide attempt and occupation. The aim of this study was to investigate the relationship between occupation and suicide attempts.

**Methods and material**

We linked National Suicide Surveillance System (NSSS), 2006-2011, with labor insurance database and estimate their proportional morbidity ratio (PMR).

**Results**

As a total, the highest three occupations among suicide attempters were manufacture, real estate, and construction industry. We found the highest three occupations among male suicide attempters were support services (PMR=2.21), real estate (PMR=1.85), and mining industry (PMR=1.61). The highest three occupations of female suicide attempters were mining industry (PMR=3.57), agriculture, forestry, fishing, and animal husbandry (PMR=3.05), and construction industry (PMR=2.67).

**Conclusions**

Gender differences in their occupations among suicide attempters. To identify high risk labors in these industries are necessary in the suicide prevention.

**PO1-11**

**Suicide Risk and Health in University Students - A National Cohort Study**

Dahlin, M; Vaez, M; Ljung, R; Runeson, B

Karolinska Institutet, SWEDEN

A growing proportion of young adults engage in higher education in the western world. In Sweden, 44-48% of those born in the early 1980’s had entered higher education before the age of 24. While there is evidence of lower life-satisfaction and self-rated mental health among university students from limited samples, there are to our knowledge no studies with nationwide coverage of students’ health, suicide or overall mortality compared to non-students. Suicide risk differ
between occupational groups; there is repeated evidence of elevated risks in medically related occupations, in which the over-risk by occupation seem to be more pronounced when controlling for psychiatric morbidity and occupational status. There may be a selection of vulnerable individuals into certain occupations. Such vulnerability could be related to heredity. It is further possible that vulnerability factors covariate with certain intellectual capabilities, which may influence the selection of individuals to different educational paths. If this is the case, differences in suicide risk might be seen between different student populations as well. In a national cohort of Swedish residents between 18 and 40 years of age, collected between 1990-2011, we will estimate the risk of death by suicide among university students compared to non-students. The cohort will consist of approximately 2.6 million individuals. We will further estimate suicide risk in different fields of education. Overall mortality and risk of negative health outcomes may also be studied. By linkage of several national registers a wide variety of exposures and risk factors such as heredity, previous health problems and educational or occupational status can be assessed. The results are expected to yield knowledge on risk factors for suicide among students, as well as contribute to the understanding of the variation in suicide mortality in different occupations. This will have implications for healthcare, universities and possibly policy-makers.

**PO1-12**

**Suicide Mortality in Second Generation Migrants, Australia, 2001-2008**

De Leo, D; Law, CK; Kolves, K

Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

**Study objectives**

Due to a lack of official statistics, little is known about suicide mortality in second-generation migrants. This presentation aims to present the profile of second-generation migrants who died by suicide and the suicide risk differentials of second-generation migrants with other Australians in the ACT and NSW.

**Methods**

Official suicide data from 2001 to 2008 were linked with State/Territory registries to collect information about the birthplace of the deceased’s parents to differentiate migration status [first, second or third-plus generation]. The profile and suicide risk of second-generation migrants were compared with other generations by logistic and Poisson regression.

**Results**

Second-generation migrants accounted for 811 (14.6%) suicides. They tended to be younger and more often never married compared to others. Second-generation males aged 25-39 years tended to have a higher suicide risk than first-generation migrants, but a lower risk was found when compared with the third-plus generation. Second-generation migrants aged 60+ tended to have a lower suicide risk than first-generation migrants.

**Conclusion**

Second-generation migrants are not at a higher suicide risk compared to first-generation migrants or locals [third-plus-generation]. In males aged 25-39 years, a lower suicide risk was found in second-generations compared to locals. This may be explained by their more advantageous socioeconomic status and the flexibility and resources rendered by having grown up in a bicultural environment.
PO1-13
EUREGENAS: European Regions Enforcing Actions against Suicide
Dumon, E; De Jaegere, E; Portzky, G; van Heeringen, C
Ghent University - Unit for Suicide Research, BELGIUM

Study objectives
Euregenas (European Regions Enforcing Actions Against Suicide) is a three year project, which has received funding from the European Union under the Public Health Programme 2008-2013. The overall objective of the Euregenas project is to contribute to the prevention of suicidal behaviour in Europe through the development and implementation of strategies for suicide prevention at regional levels which can be of use to the European Community as examples of good practice.

Methods and material
The Euregenas project brings together 11 regions with diverse experiences in suicide prevention, located in Belgium, Italy, Sweden, Portugal, Romania, the United Kingdom, Finland, Spain, Germany, and Slovenia. To meet the objective, the project aims to identify and catalogue literature and good practices of existing actions and strategies of suicide prevention at regional and local levels, and carry out a stakeholders’ needs analysis. Based on the literature, good practices database and the needs analysis, the Euregenas project will develop and disseminate suicide prevention guidelines and toolkits, and technical specifications for an integrated model for e-mental healthcare focusing on suicide prevention. Finally, Euregenas aims at improving knowledge and capabilities regarding suicide prevention among professionals. The Euregenas project also holds an evaluation framework that focuses on the processes, outputs and outcomes of the project. It outlines the procedures to be followed, schedule activities and the evaluation tools for the internal and external evaluation process.

Results
The Euregenas project will provide a needs analysis and develop and disseminate: - An on-line library of literature and good practices in actions and strategies for suicide prevention at local and regional levels; - The technical specifications of an e-conceptual model; - Suicide prevention guidelines and targeted toolkits for different stakeholders (Media - Schools - Workplace); - A training module for local and regional professionals; - An evaluation tool for the efficacy of survivors support groups. All deliverables will be disseminated at the final Euregenas conference in December 2014.

Conclusion
The Euregenas project aims at contributing to the prevention of suicidal behaviour in Europe, through the development and implementation of an on-line library, an e-conceptual model, guidelines and toolkits, a training module and an evaluation tool for survivors support groups.

PO1-14
The Bereaved by the large number of Suicides During the 80’s
Fleischer, E; Fog, SA
NEFOS - The Network for Bereaved and Relatives, DENMARK

Rates of suicide peaked during the late 1980’s. Between the years 1985-1990, 1,589 women and 2,851 men committed suicide in Denmark. Many of these suicides were committed by men and women in the 30-50 age range who had already established families. Consequently, significant
numbers of young children and adolescents were left bereaved by the actions of their parents. Inconclusive data restricts knowing the exact numbers of children and youths who were affected by these suicides. Talking with bereaved youngsters about parental suicide was often seen as unnecessary during the 1980’s. This has resulted in NEFOS being contacted by an increasing number of these bereaved children, who are now adults, with various problems such as: low self-esteem, lack of confidence and relational difficulties. Work in NEFOS shows significant events such as: finishing one’s education, getting married, becoming a parent can often be the cause of asking existential questions in the form of: ‘who am I?’, ‘what am I?’, ‘who created me?’ If these questions remain unchecked it can result in a feeling of existential loneliness. Many of these bereaved adults often associate their lack of confidence, making important life choices, or their difficulties in maintaining relationships, with parental suicide. Individual counselling followed by group therapy over approx. ¾ of a year, can help reduce the experienced existential loneliness of the bereaved adult. Instead of feeling different from others of the same age, they are able to express more assured views of their experiences, regarding themselves as being ‘something special’ and not solely having an identity of being a bereaved child. With a new outlook and attitude they become capable of making choices with regard to their own future. They experience an increased knowledge and understanding of how both active and passive choices have consequences for the present and for the future. To date this project is limited to a description of practice. Further research is still required.

**P01-15**

**The Effectiveness of Community Empowerment, A Community Suicide Prevention Intervention Approach, in Rural Japan**

Fujita, K¹; Kaneko, Y²; Yong, R³; Motohashi, Y¹

¹Department of Public Health, Akita University Graduate School of Medicine, JAPAN; ²Akita University Graduate School of Medicine, JAPAN; ³Tokyo University Graduate School of Medicine Mental Health and Nursing Department, MALAYSIA

**Objective**

In recent years, community-based suicide prevention approach has been seen as promising. It aims to build a supportive community to tackle the needs of the community members, especially communities with high elderly population. This study aims to examine the effect of a suicide prevention intervention program, Community Empowerment, with two waves of cross-sectional population study.

**Method**

A community intervention program, Community Empowerment, was conducted in A town, a rural community in Akita, Japan (population aging rate: 36.6%) from December 2011 to February 2012, to promote positive community relationships among local residents. The local residents living in three different communities in A town were invited to participate in forums to discuss their needs and community problems in the program. The forums were held three times at each community. The outcomes of the intervention were assessed by two population cross-sectional surveys, using self-administered questionnaires, with mental distress (K6) and cognitive social capital (CSC) as the desired outcome measures, before and after the intervention. Response rates were high in both surveys, 74.3% respectively. Regression analysis, General linear model, GLM, was used to examine the effect of intervention on the difference of average value of K6 and CSC Score of each area, adjusting for age, weighting by sample number of each area.
Results
Multivariate analysis showed that the average CSC scores of samples in the intervention area was significantly higher (p=0.038) than the controlled area. However, the average K6 score had shown no significant differences between the two areas.

Conclusion
The suicide prevention intervention program, Community Empowerment, which aimed to build an engaged society and elevating community trust among the residents, was seen to be promising in improving the cognitive social capital of the people.

P01-16
Family Resilience following Adolescent Suicide: Tailored Interventions for different types of Families
Genest, C1; Malo, D2; Gratton, F1
1Montreal University, CRise, CANADA; 2Montreal University, CANADA

The purpose of this study is to understand and explain the resilience of families bereaved by a teenager’s suicide. Suicide of an adolescent is a violent, unexpected, self-inflicted death that falls outside the normal order of life and the crisis faced by the family requires the mobilization of most of its energy. Despite this ordeal, the fact remains that most families continue to function. The concept of family resilience, which refers to a family’s ability to bounce back from a crisis situation, may explain this phenomenon. Thus, to understand and explain the resilience process which families go through following a teenager’s suicide, a grounded theory research has been conducted. Theoretical sampling was progressively constructed from data through interviews with members of seven families (n=17 participants); socio-demographic questionnaires; personal documentation submitted by the participants (diary, homily, etc.); and field notes. Constant comparative analysis of the data across triple coding led to an innovative theory of the family resilience process following the suicide of a teenager: Emerging despite the indelible wound. The main results indicate that the suicide itself is a major ‘cataclysm’ for all families who, in turn, will ‘sink’ and ‘rebound’ quite differently based on their past experiences, social context and emotions. The presence and use of lifebuoys, inside or outside the family, will enable the family to emerge more or less rapidly and continuously thus defining four types of family resilience following a teenager’s suicide: the energetic families, centrifugal and centripetal, the stunned family, the combative family and the tenacious family. Each type of family requires specific interventions, tailored to their particular path through the resilience process. Understanding this path and helping families identify relevant lifebuoys to support their actions provides direction for health professionals to design effective interventions to support family resilience following the suicide of an adolescent and prevent suicide behaviour within those bereaved families. Those interventions can focus on the entire family, some members in particular or even on the family relatives.
PO1-17
Informing The Ethics of Qualitative Suicide Research: Evidence from an Impact Evaluation
Gibson, S1; Benson, O1; Boden, Z1; Owen, GJ2
1SANE Mental Health Charity, UNITED KINGDOM; 2University of Exeter, UNITED KINGDOM

While ethical research and the process of ethics review require an evidence base there has been little systematic assessment of the impact of participating in qualitative suicide research with people who have first-hand experience of suicide. This paper reports on the impact of taking part in a programme of suicide research, including an online mixed-methods study investigating the experience of suicidal feelings and a qualitative interview study exploring the process of suicide from the perspectives of people who have attempted suicide, their significant others, and people who have been bereaved by suicide. In both studies, participant were asked to rate their suicidality and wellbeing on an 18 item Likert-style questionnaire before and after participation. Results from the online study show that the negative experiences significantly decreased while positive experiences showed no change. Participants in the online study also answered open-ended questions about their experience of taking part which were analysed thematically to produce 4 themes: ‘Recovery and distress’, ‘The importance of being heard’, ‘Therapeutic impact’ and ‘Engendering hope’. Although some participants reported upsetting aspects of taking part, this was often balanced by benefits, or they were accepting of this aspect of participating in a study on suicide. They were also able to distinguish between the negative feelings associated with engaging in the research, and the distress associated with pre-existing suicidal feelings. Further, it appears that participants felt able to assess and manage their distress, and to reflect on this process; that is, they articulated a capacity for informed decision-making. We conclude that it is possible to undertake qualitative suicide research in a way that safeguards the wellbeing of participants, and that participants who have first-hand experience of suicide are able to make an informed decision about taking part. In online suicide research, particular attention should be paid to supporting participants. Developing ways to facilitate contact between participant and researcher, where this is desired, needs to be addressed.

PO1-19
Illness Beliefs of Depressed Patients in Taiwan
Huang, H-C; Huang, C-R; Liu, S-I
Mackay Memorial Hospital, TAIWAN

Study objectives
This study investigated the illness belief of 280 depressed patients in primary care setting for more representative populations’ illness belief to have implication for provision of efficient health services.

Methods and material
All 18 years or older patients were recruited from the family medicine clinics. After patients had completed the PHQ-9 and then were interviewed using the depression module of the SCAN and HAMD-17. All participants who were meet criteria for depression were also interviewed to explore their illness beliefs toward the depressive symptoms by the Explanatory Model of Interview Catalogue (EMIC).
Results
Name of Condition: The most name of illness from patient’s point of view reported physical illness, stress, sleep disturbance, depression, fatigue, neuragenia, pain, anxiety, menopause, manic-depressive, immune dysfunction, hot temper, poor concentration and kidney deficiency were followed. Mind and Body Relations: When asked whether they thought body and mind was related, most of them reported unity and related (61.8%), 26.8% thought separated but related, 6.8% thought doubted and 2.9% thought separated and unrelated. As to the domination between body and mind, 48.9% of patients thought equal, 30.7% thought mind dominated body, 11.1% were unsure and 9.3% thought body dominated mind. Perceived Causes: Most patients was psychosocial causes (62.9%), 35% were somatic causes, traditional beliefs were 1.1% and the reminder magical-religious-supernatural causes (0.7%) and unknown (0.4). Help Seeking: In order of first preference of help seeking behaviour were self-administered alternative treatment, non-psychiatric physician, lay help, spiritual treatment and traditional medicine. Only one patient reported the first preference help seeking behaviour was mental health care. The majority of most preference behaviour also was self-administered alternative treatment and mental health care was least preference.

Conclusions
The study found that more than half patients perceived psychosocial cause but the psychosocial approach did not reflect on the help seeking behaviour. These patients’ help seeking behaviour relied on themselves and rarely sought mental health care. The lack of awareness of depression as a treatable illness may affect the outcome of depression treatment.

P01-20
Prevention Program On Media Covering Suicide
Inostroza, I
STOP SUICIDE, SWITZERLAND

Journalists have an important role to play in informing the public about suicide, although they often face a myriad of challenges when covering suicide. Our program is based on the results of more than 50 research studies worldwide. Those studies have shown that certain types of media coverage are potentially harmful as they can increase the likelihood of suicide in people who are already vulnerable. By covering suicide carefully, media may participate in destigmatising the issue of suicide and in encouraging help-seeking. STOP SUICIDE decided to implement a pioneering media program along four objectives:
- Raise awareness among and inform journalists about suicide and media coverage;
- Help prepare journalism students to address the difficult process of covering suicide;
- Hold a daily press review of suicide media coverage and bring complaints of violations of the Code of Deontology before the Swiss Press Council;
- Document and issue statistics about media coverage.

The main goal of the program is to improve the quality of media reporting. In the beginning of 2012, STOP SUICIDE initiated a process of documenting the news coverage. In september, STOP SUICIDE released a 20 pages survey on the way Swiss French-speaking print media reported on suicide. The survey is not a scientific study. We wanted to produce new data and draw a general critical picture of suicide coverage as a basis for further discussions with journalists. The survey evaluates the quality of reporting in accordance to several criteria defined in various international and national recommendations. Between the 1st of January and the 30th of June 2013 STOP SUICIDE collected articles containing at least one of the keywords “suicide”, “suicide attempt”.
During six months of monitoring, a total of 158 articles were found in ten medias with at least one of the key-words. Two newspapers, with high-circulation, produced almost half of the total amount of articles. The articles reporting on completed or attempted suicide have a news character and a preference for suicide through violent methods and the extraordinary or unusual circumstances of the act. We noticed that suicides occurring in private places are often the target of media coverage. As for the risk of imitation “score”, there was a general trend to give details and publish pictures about the method or the location of suicide although media policy differ. We were especially interested in tracking misconceptions about suicide.

**P01-21**

**Differences in Suicidal Patient Profiles by Type of Suicidal Behaviour:**

**Results from a Multicenter Emergency Sample**

Jimenez-Trevino, L¹; Saiz, P²; Buron, P¹; Garcia-Portilla, MP²; Chinea, ER³; Navio-Acosta, M⁴; Bobes, J⁵

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**Objectives**

Suicide attempters and completers differ in terms of sociodemographic and clinical correlates: young females with personality or adjustment disorders for attempters and older males with affective or psychotic disorders for completers. Most accepted nomenclatures have now extended suicidal behaviours to suicide ideation (SI), instrumental suicide-related behaviour (ISRB), and suicide attempt with or without injuries (SAWI - SAWOI). We have tried to determine if such differences may apply to the newest suicidal behaviour nomenclatures.

**Methods and material**

Data on 2585 suicidal presentations to general hospitals in Oviedo, Madrid and Tenerife were collected through monitoring systems in each centre as part of the National Suicide Network (ReNEPCA). Suicidal behaviours were classified following O’Carroll et al.’s¹ NIMH approved nomenclature. Chi-square and ANOVA tests were performed.

**Results**

Differences were observed in variables such as sex ($p<0.001$): SAWI were more frequent males (55.5%) while the rest of suicidal behaviours were more frequent females (ISRB 68.2%; SAWOI 60.0%; SI 56.8%); age ($p<0.001$): mean age was higher in SAWI (40.65), SI (36.8), SAWOI (36.16) and lower in ISRB (32.57); previous attempts ($p<0.001$): more frequent in SI (71.1%), SAWOI (65.2%), SAWI (61.7%) and less frequent in ISRB (53.1%); and ICD-10 diagnosis ($p<0.001$): the most frequent ICD-10 diagnosis for SI was personality disorder (44.4%), for ISRB was anxiety disorder - including adjustment disorders - (38.3%), and for SAWOI and SAWI was affective disorder (30.9% and 42.2%).

**Conclusion**

The classic different profile of an older male in severe suicide attempts vs. other behaviours is confirmed in our study. The higher prevalence of personality disorders in patients with suicidal ideation was not expected but it is consistent with the higher prevalence of previous attempts found in the same group. The classic feature of the young female suicide attempter fits better with the instrumental suicide-related behaviour. **Reference:** 1. O’Carrol, P., Berman, A., Maris, M., Moscicki, E., Tanney, B., Silverman, M. (1996) Beyond the tower of Babel: A nomenclature for suicidology. Suicide and Life-Threatening Behaviour 26:237-252.
A Randomised Control Trial using the Internet to prevent Suicide in Adolescents:
A Case Study from England

Machin, N; Almond, P; Waller, T; Sharpe, D; Anghel, R; Lane, P; Martyn, M; Hamilton, R
Anglia Ruskin University, UNITED KINGDOM

Worldwide suicide is amongst the leading causes of death in young people under 25 years of age particularly in some European countries. Nearly a third of the 3,994 deaths in children aged 15-17 years reviewed in England at the end of March 2012 were categorised as modifiable deaths (mainly suicide and road traffic accidents). Modifiable deaths relate to factors that may be amenable to national or local interventions to reduce risk of child mortality. Furthermore, factors that may make a young person suicidal such as depression are treatable. This suggests that over a 1000 of the deaths might have been avoidable.

The aim of this poster is to illuminate the process of conducting a pan-European trial of suicide prevention in adolescents, using England as a case study.

A randomised controlled trial involving seven European countries testing a web-based intervention to communicate preventative information and sources of support was conducted over six months during 2012/2013. At least 200 students in each country received the intervention with another 700 students in control groups. Additionally comparisons were made between workshops delivered to participants by ‘peers’ (ie young people) and health professionals informing adolescents about the website.

This poster reports the findings of a small qualitative element of the project. Focus groups with participants were undertaken to explore more fully their thoughts about suicide, its prevention through the internet and their research participation. It details the complex and sensitive process of conducting school-based trials in England and lessons learnt about the use of technology in research and the prevention of suicide.

Decrease of Suicide Rate in Region Celje in Slovenia and 10 Years of Activities of Regional Suicide Prevention Group - Is there A Connection?

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1Public Health Institute Celje, SLOVENIA; 2National Institute for Public Health, SLOVENIA

Background
Suicide in Slovenia is a major public health problem, more pronounced in north-eastern regions among which is also the region of Celje. Next to good suicide statistics and follow up, in the last decade loads of attention was aimed at coordinated raising awareness, educating expert and lay public.

Aims
Aims of our research are firstly to present and compare suicide rate trends in region Celje in two distinct time periods, namely 1985-1999 and 2000-2010. Next we want to introduce suicide prevention activities launched from 2000 onwards within the regional suicide prevention group. Last but not least we want to interpret the change of suicide rate in the light of lunched suicide prevention activities.
Methods
Suicide data from 1985 to 2010 were obtained from the National mortality Database. Logistic regression models were used to establish differences between time periods. Internal documents, projects reports and minutes of meetings of the regional suicide prevention group were analysed to gather information on all suicide prevention activities in the last 10 years. Results Suicide rate in region Celje decreased significantly in the studied period. In the years 1985-1999 the suicide rate was 36.5 while it decreased to 30.9 in the period 2000-2010. The decline was noticed in all age groups. Between 2000 and 2010 following suicide prevention activities were launched: educations about different topics on mental health [depression, suicide, how and where to get help ...] for more than 2000 experts [health care system, school workers, social health care ...] and more than 1000 lay representatives; proactive work with the media [more than 30 public statements launched on the topic of mental health, more than 200 publications, more than 90 radio and tv shows]; we developed two programs for helping individuals at risk and a program for youth [strengthening selfesteem in youth]; we launched a postvention programe.

Conclusion
Suicide rate decreased significantly in the region Celje between 1985-2010. The decrease is in line with numerous launched suicide prevention activities. Although a direct cause effect relationship between prevention activities and suicide rate decrease is difficult to prove we can conclude that the beneficial effect is at least partially seen through greater destigmatization of suicide, greater awareness of the problem and ways of help and added value of help for those at risk in region Celje.

PO1-26
Toolbox Suicidal and Self-harming Behaviour
Kool, N1; Ferber, M2; de Graaf, I3
1Palier, NETHERLANDS; 2the Hague, NETHERLANDS; 3Utrecht, NETHERLANDS

Study objectives
Suicidal and self-harming behaviour is a big problem among young people. According to the Child & Adolescent Self-harm in Europe (CASE) Study almost 18% of the 15-16 years old reports at least one period of self-harm. Many of these young people do not talk about their behaviour, and struggle in loneliness with feelings of pain, grief, anger and despair. Treatment staff, confronted with suicidal and self-harming behaviour among young people, experience many different feelings. This varies from anger and frustration to empathy and concern, often leading to powerlessness and helplessness. Knowledge about the background and mechanisms of suicidal and self-harming behaviour, and about interventions and skills helps to understand these young people and to make contact with them. To respond to this problem, the Toolbox Suicidal en Self-harming Behaviour has been developed. This toolbox consists of a box filled with material concerning suicidal and self-harming behaviour, like articles, books, DVDs, self-help programs, experiences of lay-experts, addresses and websites, tips for wound care, etc. Before health-care givers can make use of this toolbox, they first have to complete a training aimed at the recognition of and caring for young suicidal and self-harming people. The training specifically targets the attitude of caregivers towards this vulnerable and complicated group of young people. The Toolbox has been developed by experts in the Netherlands and Belgium. The training is pilot-tested among 49 professionals between 2011 and 2012. Methods and material: Pretest - posttest measurements were used to evaluate the project, using a self-constructed question-
naire about skills and knowledge concerning suicidal and self-harming behaviour. Open-ended questions were used for additional information.

Results
49 people took part in the training, 42 women and 7 men. Average age: 41 (range 22–61), 31% being a nurse, 25% school-social worker, 25% psychologist. From pretest to posttest we found a significant increase on the questionnaire: t(46) = -9.64, p < .001. No significant difference was found between the different functions, nor between men and women. Overall, participants were satisfied with the training as well as with the toolbox.

Conclusion
Participants of the training Toolbox Suicidal and Self-harming Behaviour afterwards perceived themselves more competent in caring for suicidal and self-harming youth and were satisfied with the toolbox.

P01-27
Descriptive Study of Suicidal Adolescents Referred to a Child and Adolescent Outpatient Psychiatric Unit in Copenhagen, Denmark
Kristensen, TD
Child- and adolescent outpatient unit at BUC Region H, DENMARK

Study objective
The objectives of this study have been to describe the group of adolescents referred to treatment in a clinic for suicide prevention, working within a child and adolescent outpatient psychiatric unit in Copenhagen.

Method and material
The applied method was a retrospective review of all records of adolescents below the age of 18 referred to the clinic during a time period of 18 months. Included in the study was a total population of 75 adolescents. We extracted socio-demographic data, data concerning suicidality and self-harm, data about the classification of diagnoses and specific psychological parameters such as impulsivity and affect regulation from the journals. A priori defined variables were registered, coded, and entered into spreadsheets for statistical processing, including calculating the significance of subgroup variance. The average age of the study population was 15.8 years, and 85 % were females.

Results
Socio-demographic data for the group show a significant high degree of psycho-social problems corresponding with previous research in risk factors. The data concerning suicidality show that the suicidal ideation in the population has been almost 2 years on average before admission to the clinic, and more than half of the group reports prior self-harming behaviour. 25 % of the populations have been diagnosed before. However after a psychiatric screening in the clinic, almost 70 % of the adolescents were diagnosed, and almost 50 % were characterized by co-morbidity. The most frequent diagnoses fall within the affective disorders (40 %), to a lesser extend conduct and emotional disorders as well as anxiety disorders. Nearly 70 % report more general affect regulation difficulties through childhood. Subgroups characterized by gender, impulsivity, affect regulation difficulties, former self-harm episodes, and former suicide attempts were extracted from the overall study population. Most significant was the difference between the subgroups that had had general affect regulation difficulties in childhood, and those that did not.
Conclusion

In conclusion, the study supports the notion that the developmental issue of affect regulation abilities could be critical in understanding the specific characteristics of some adolescent suicidal behaviour. The results suggest a need for further research on relevant subgroups of adolescent suicide attempters for the purpose of describing age and development-related risk factors as well as possible specific suicide behaviours and processes.

PO1-28
Association with Attitude toward Suicide of Mental Health Nurses working in Community and Work Performance in Suicide Prevention

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Purpose

This study investigated the association between community mental health nurses’ work performance in suicide prevention and their attitude towards self-immolation. This study was conducted to produce basic data on suicide prevention activities in communities.

Methods

158 mental health nurses serving in community mental health facilities in the Seoul metropolitan area participated in this study. Their attitudes toward and awareness of suicide was examined using the Suicidal Opinion Questionnaires (SOQs). Attitudes towards self-immolation were examined in light of the following factors: ethics, mental illness, religion, risk, and motivation. Moreover, performance evaluation tool for suicide prevention was developed and used through consensus meeting by 10 experts for content validity. Duties consisted of promoting mental health, educating, intervening crisis, following up on suicide attempts, managing suicide survivors, etc.

Results

Groups that were older and groups that attained higher education were against suicide due to ethical reasons. When suicide-related attitudes were analyzed based on one’s religion, those who were Christian were more likely than their atheist counterparts to report lack of religious beliefs as reasons for suicide. In addition, those with greater awareness on suicide were more likely to report mental illness as a causative factor. The mental health nurses were questioned on the performance of their suicide-prevention duties. They responded that while their performances in counseling people with suicide ideation and in referring suicide attempters to corresponding organizations were above average, their performances in following up on suicide attempters and in caring for the suicide survivors were subpar. The reasons of inadequate performance were scarcity in funding, manpower, knowledge and etc. In performance of duties, those with post-university education and those in higher position than managers self-reported that they executed their training and educating duties well.

Conclusion

The results of this study demonstrated that one’s work performance in suicide prevention was associated with his/her attitude towards self-immolation. Hereafter, augmentation of community mental health nurses’ suicide awareness, enhancement of programs for suicide attempters and bereaved families, as well as training for educators is essential. Continual research and development of related education program is necessary as well.
PO1-30
Profile of the Individual with Suicidal Behavior Taken Care of in University Hospital Of São Paulo City /Brasil
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¹Universidade Federal de São Paulo, BRAZIL; ²Prefeitura Município de São Paulo, BRAZIL

Study objective
To verify the profile of the individual with suicidal behaviour taken care of in the emergency room of university hospital of São Paulo City/Brazil in 2007 and 2008.

Methods and material
Exploratory-descriptive, quantitative study; analysis of the 122 files of attendance with diagnosis of suicidal behaviour. Results: had participated 61 (50%) women and 61 (50%) men; 15 (12.3%) women and 18 (14.8%) men had job; to try to commit suicide at night and dawn was preferred for women and men (27.9% each); previous attempts of suicide had occurred in 20 (16.4%) women and 17 (13.9%) men; 9 (7.4%) women and 23 (18.8%) men has drug abuse; minority planned suicide attempt (2.4%); 12 (9.8%) women and 7 (5.7%) men had repeated; 26 (21.3%) women and 28 (22.9%) men had diagnosis for mental disease; with previous treatment 20 (16.4%) women and 19 (15.5%) men. In women and men, respectively, the methods most used had been medicine ingestion (25.4% and 13.1%), cut in the arteries and self-injury (4.8% and 5.7%), to jump from a high place (3.3% and 5.7%) and poisoning (2.4% and 4.8%); were singles (13.1% and 14.7%) and married (9.0% and 11.4%); months with more attempts of suicide had been March (13.1%), June (12.3%), September (10.6%), November and December (9.8% each); the majority had suicide attempts between the ages of 10 and 39 years (83.6%), in women of 10 to 29 years (29.5%) and men of 20 to 29 years (39.3%); reasons associated with the suicide attempt were for women quarrels in love relationship (8.2%) and disturbed familiar relations (15.6%), for men disturbed familiar relations (7.4%) and unemployment/financial problems (4.8%).

Conclusions
Suicidal individuals were characterized by having mental disease, substance abuse, problems in relationships and private economy, being young or young adults. This profile of suicidal individuals is important when implementing a monitoring program.

PO1-31
The Experience of the Suicide Survivors Group 'The Continuation of Life' through the Services of the Universidade Federal De São Paulo
Marquetti, FC; Mazzaia, MC; Marcolan, JF; Berto, JS; Cogo, JH; Buzzo, ML
Universidade Federal de São Paulo, BRAZIL

The goal of this experiment is to contribute with a series of suicide preventive actions and an approach for individuals involved in suicide attempts at the Mental Health Network of São Paulo City and thus offer a group intervention process for people who attempted suicide or likely to do it. On the set of strategies for suicide prevention, the later approach is one of the most important interventions, since a previous suicide attempt is one of the major risk factors. On the other hand, it is known that sharing problems, being permeable to others and seeking help are important protective factors to avoid suicide. However, this post-intervention strategy has been neglected in both São Paulo City and Brazil. This project relates to the city’s population through the Emergency Section of the Hospital São Paulo, which is a school-hospital known as a reference in the emergency care of suicidal behaviour cases and has a partnership with Universidade
Federal de São Paulo. The main objective of this professional team is to approach the continuity of life after a suicide attempt. In this perspective, we can list some key points of this therapeutic approach: relieve anxiety, analyze the psychological effects after the suicide attempt (guilt, remorse, shame), discuss cultural repercussions, build new operational chains in daily their daily life, seek the reintegration of these individuals and reflect on how to face the probable existent taboos related to the victim of suicide attempt. We have noticed that concomitantly to the development of this group there is also a survey being applied about suicide attempts in the same location and the individuals who are interviewed are also invited to join our treatment group. A team of four researchers approach these guys every day of the week in the hospital emergency section and such procedure has proved to achieve successful results, since we have managed to do three weekly interviews in average. It is important to emphasize that the adhesion of those individuals to the group is not as simple as it seems and we have to make use of other strategies to keep them with us, such as providing guidance and advice to the family members in order they help the patients to return to the emergency and to the infirmaries after the initial interview and thus we can keep in touch with them.

**P01-32**

*The Taboo Regarding Suicide and its Consequences in Health Prevention Strategies*

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¹Universidade Federal de São Paulo, BRAZIL; ²Unifesp/SP, BRAZIL

The aim of this study was to verify the existence of taboo on the part of health professionals in the city of Santos (São Paulo State, Brazil) in relation to death/suicide and its possible implications for prevention strategies. Studies have shown that suicidal leaves many traces during the preparation of his/her act and these changes in everyday life can be observed and used in prevention. However, most health professionals do not recognize these clues. This fundamental transition between the knowledge of the signs of the suicidal journey and its recognition was our object of research. Why signs of suicide are not recognized when they occur nearby a health professional? Does the taboo for the part of the health professionals in relation to such voluntary deaths and the consequent avoidance reactions of the victims preclude the recognition of important signs that the victims might reveal in their daily routine? Methodological steps: survey of healthcare professionals dealing with patients at risk of suicide in Santos (SP/Brazil), active search and pre-selection of professionals who were able to recognize the signs of imminent suicidal risk, interview to assess the attitude of health professionals towards death/suicide and discourse analysis of these same professionals to identify possible taboos regarding suicide. The difficulty in accessing health professionals went beyond our expectation because there were numerous denials and dodges. We conducted six interviews and at analyzing them we detected several topics related to the death/suicide taboo similar to the stages of death representation in the West. We also identified during the interviews, psychological reactions and defense mechanisms to deal with the anxiety related to death/suicide by the professionals interviewed. Our interviewees dealt with the subject of death with subterfuge and defensive reactions: denial, rationalization, ambivalence, disorganization, generalization, inconsistency, fear/anxiety, avoidance, anger and projection. The speech about death/suicide were used to minimize the subjects in question and keep away from this phenomena. Professionals cannot recognize signs of suicide because they keep avoidance and camouflage reactions related to suicide. We must enable the professionals to recognize the developing process of the suicidal desire and its signs and such training should address the existential aspects of death.
P01-33
Suicide Prevention in Young Population by Internet: Preliminary Data from the Supreme Project in Catalonia
Masip, C1; Roquer, A2; Flores, P1
1Parc de Salut Mar, SPAIN; 2IMIM, SPAIN

Introduction
SUPREME (Suicide Prevention by Internet and Media Based Mental Health Promotion) is a multicentric european project related to mental health. The project will have a duration of three years and started in September 2010. The leading partner of this project is Sweden, Karolinska Institute, and is carried out also in UK, Hungary, Spain, Italy, Lithuania and Estonia. The project is financed by the European Commission Directorate General for Health and Consumers, DG SANCO.

Purposes
1.- Mental health promotion and suicide prevention in adolescents and young adults in the age group 14-24 years by creating a highly interactive website 2.- Developing partnerships: Create a network of organisations related to mental health promotion and suicide prevention in each of the participating countries.

Methods
To map and produce an exhaustive list of existing resources that promote mental health and prevent suicide on the Internet, in Scientific Journals and in the general media Implementation of an Internet based mental health promotion and suicide prevention intervention Development of guidelines for best practices in Internet and media-based mental health promotion and suicide prevention Developing partnerships for action: ensuring sustainability and future actions through connections with other organisations
1.- Development of a culturally adjusted model for mental health promotion on the Internet 2.- Creation of a questionnaire to evaluate a sample of teenagers, including the Paykel y DASS-42 scales. 3.- Administration of the questionnaires to a sample of students, taken from 3 high schools in Barcelona, divided in 3 groups, two intervention groups and one control group. 4- A total of 3 interventions will be carried out in the students groups, to evaluate the risk behaviour of the adolescents as well as the use of the website.

Results
The total number of students was 182 (mean age 15 years old). At the first intervention 20 students (11%) were considered with suicide risk according to the Paykel scale, and among them 15 (8.4%) reported a previous suicide attempt. We contacted these pupils and in further intervention sessions we will follow the cases to verify the results.

Conclusions
Preliminary data indicate a high prevalence of suicide risk in the young population of our environment, which emphasises the need of programs such as the Supreme Project for mental health promotion and suicide prevention.
Researchers who walk with Communities: How is Innovative Research Theory turned into Positive Research Practice?
McKay, K; Maple, M
CRN for Mental Health and Well-Being in Rural and Regional Communities, AUSTRALIA

Study Objectives
The ways in which researchers have sought greater understanding of suicide among Indigenous populations throughout the world continues to be debated for its appropriateness and rigor. However, it is becoming apparent that this debate is not, and should not be, simply about methods used in research but about the ways in which research is approached as a whole. This reflective study aimed to unpack the epistemological and methodological traditions which have long underpinned suicide research.

Methods and material
This study utilised both textual and reflective analyses to examine previous and current research practices with Indigenous communities. Epistemology was analysed through an exploration of the experiences and existence of knowledges within Indigenous communities, in terms of the language used, the way stories are told and reality is perceived. Research practice was examined in terms of different methodological approaches and method utilisation in terms of partnership and collaboration.

Results
There is a vital need to include the voices of Indigenous men and women, young and old, in research around suicide awareness, prevention and bereavement. To date, the most effective studies have occurred where the research has been embedded within the community - where the researchers have worked alongside community members as partners in a trustful and adaptive collaboration. In this way, qualitative methodologies have been found to be more appropriate than quantitative ones. However, this needs to be further extended where research practice truly begins to incorporate traditional knowledges and stories as important in and of themselves, not just as differential findings. Research needs to be constantly practised in a way that ensures findings that are appropriate, relevant and naturally sustainable within the community.

Conclusions
Too much of what is known in suicide prevention has been grounded in a white-male-medical framework where too many voices are missing. While the value of quantitative methodologies is not denied, these methodologies cannot be valorised at the expense of qualitative methodologies, or at the expense of including communities. Suicide impacts upon the whole community and so the research undertaken must take a whole-of-community approach. Communities must be supported in ways that will lead to beneficial and appropriate outcomes for them.
PO1-36
Violent Suicide Attempts and First Psychiatric Hospitalization
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Althaia Xarxa Assistencial Universitaria de Manresa, SPAIN

Objective
To determine in a large sample of psychiatric inpatients the clinical and sociodemographic factors associated with violent suicide attempt prior to first lifetime admission.

Material and method
* Subjects: All the patients admitted consecutively for the first time in his life to the acute psychiatric Unit of Althaia Xarxa Assistencial of Manresa during a 15-years period (1996-2010) were included as study subjects. If patients were admitted following an attempted suicide the suicide attempts were classified in two groups:
  - Non-violent suicide attempts: drug intoxication or non-dominant forearm cut
  - Violent suicide attempts: all other methods or combination of the above two
* Procedure: All charts of inpatients were reviewed retrospectively. The basic data, such as sociodemographic, psychiatric and medical diagnosis, details of suicide attempt, previous suicide attempts, were obtained. The psychiatric diagnosis according to DSM-IV criteria of the hospitalization was recorded.
* Statistical analysis: Data were analyzed with the SPSS. The proportions of categorical variables between violent suicide attempters and the rest of inpatients were compared with the ÷2 test. The Student’s t test was used to compare continuous variables normally distributed. The Multivariate analysis with multinomial logistic regression was used with their 95% confidence intervals for all explanatory variables.

Results
Of the 1606 patients admitted during the study period, 324 (20.2%) were admitted as a result of suicide attempt. Only 44 (13,6%) of suicide attempts were violent. Table I shows the significant association in the univariate analysis between violent suicidal group and different variables. The table reflects the percentage of patients in the violent suicide group according the presence or none of the different variables

<table>
<thead>
<tr>
<th>YES</th>
<th>NONE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH LETHALITY</td>
<td>29%</td>
<td>9%</td>
</tr>
<tr>
<td>AGGRESSION</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>PSYCHOTIC SYMPTOMS</td>
<td>26,2%</td>
<td>10,8%</td>
</tr>
<tr>
<td>FIRST SUICIDE ATTEMPT</td>
<td>16,1%</td>
<td>6,4%</td>
</tr>
<tr>
<td>SEX MALE</td>
<td>18%</td>
<td>10%</td>
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</table>

We found no significant differences between violent suicidal and non-violent suicidal patients in terms of age (Mean of 47,3 vs. 42, 3 years, P<0.12). The average stay for violent suicidal patients was significantly higher than the average stay in non-violent suicidal (Mean of 25,1 vs. 16,9 days, P<0.004) After perform the multivariate logistic regression analysis most of the above variables except the sex remain associated.

Conclusions
In our large sample of first psychiatric admissions violent suicide attempts were significantly associated with the first attempt, high lethality, psychotic symptoms and aggression.
**P01-37**

**Suicidal Ideation and Stress-Coping in Young Japanese Adults**

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**Study objectives**

Suicidal ideation in young adults is recognized as a growing public health problem in Japan. Therefore, associations between suicidal ideation and stress coping in young Japanese adults were identified.

**Methods and material**

A questionnaire was distributed to 1545 participants in western Japan between September 2009 and May 2012. The response rate was 73.3% (n=1132) and responses of participants between 18 and less than 40 years (n= 809, 230 men and 579 women, Age: 20.3±4.0 years) were analyzed. To measure suicidal ideation, one question in the Zung Self-Rating Depression Scale (SDS) ‘How often do you feel that others would be better off if I were dead, during the past several days?’ was used. Participants responded to the question by choosing from the following four options: ‘Most of the time’, ‘Good part of the time’, ‘Some of the time’ and ‘A little of the time’. To assess stress-copings, the Coping Inventory for Stressful Situations, which assesses task-oriented, emotion-oriented and avoidance-oriented coping, was administered. The survey was conducted anonymously with no identifying information being collected.

**Results**

Of the participants, 2.1% (n=17) chose ‘Most of the time’, 4.2% (n=34) ‘Good part of the time’, 14.8% (n=121) ‘Some of the time’ and 74.8% (n=610) ‘Little of the time’ in response to the SDS question. An analysis of variance indicated that task-oriented, emotion-oriented and avoidance-oriented coping scores were significantly different in participants with different responses to the SDS question (p=0.002, p<0.001, p=0.015, respectively). Multiple comparisons indicated that the score for task-oriented coping was significantly lower in participants that chose ‘Most of the time’ compared to participants that chose ‘Little of the time’ (p=0.024). The score for emotion-oriented coping was significantly higher in participants that chose ‘Most of the time’, ‘Good part of the time’ and ‘Some of the time’ in comparison to participants that chose “Little of the time” (p<0.001, p=0.009, p=0.001, respectively). There were no significant differences in the score for avoidance-oriented coping.

**Conclusion**

The results of this study suggest that young Japanese adults with suicidal ideations were less likely to use task-oriented coping and more likely to use emotion-oriented coping. This study was supported by JSPS KAKENHI Grant Number 22530776.

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**PO1-38**

**Longitudinal Associations between Serum Cholesterol Levels and Suicidal Ideation in an Older Korean Population**

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**Objective**

Relationships between low total cholesterol levels and suicidality have been reported but there
has been little investigation of this issue in older age groups. This study aimed to investigate longitudinal associations between serum lipid levels and suicidal ideation in an older population.

**Methods**
732 community dwelling elderly aged 65 or over were evaluated at baseline. Of 639 did not have suicidal ideation at baseline, 579 (90.6%) were followed two years later. Prevalence and incidence of suicidal ideation within the previous one month was ascertained. Serum levels of total-, high density lipoprotein (HDL)-, low density lipoprotein (LDL)- cholesterol, and triglycerides were assayed at both baseline and follow-up. Baseline data on potential covariates including sociodemographic characteristics, life stress, social support, pain, alcohol drinking, depressive symptoms, cognitive function, and disability were gathered.

**Results**
Both high and low total and LDL cholesterol levels at baseline and a decline in total cholesterol levels over the follow-up period predicted an increased incidence of suicidal ideation at follow-up independent of sociodemographic and clinical covariates. Significant cross-sectional associations were found between suicidal ideation at baseline and higher total and LDL cholesterol levels.

**Conclusions**
These results support a role of dyslipidemia in the aetiology of late-life suicidal ideation. Not only low but also high cholesterol levels predicted the incidence of suicidal ideation in elders. Lipid sub-fraction assays might be informative in this respect at least in older populations.

**P01-39**
**Correlation between On-line Provision of Positive, Suicide-intervention Information on Hope Click and the rate of Self-induced Death**
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**Introduction**
Those with suicide ideation are believed to have ambivalent attitudes towards self-induced death. As such, those browsing the internet for information on suicide methods may still anticipate life and may be wistful to live. Under this assumption, this study investigates the correlation between number of completed suicides and the number of visitors to Hee-Mang Click (liter-al translation: Hope Click), an intervention site providing positive, anti-suicide information.

**Methods**
From August 2, 2010 to December 31, 2011, top five search engines in Korea - Naver, Daum, Nate, Yahoo, and Paran - basically had Hee-Mang Click displayed first when five expressions, ‘suicide’, ‘suicide method’, ‘how to die’, ‘suicide pact’, and ‘let’s commit suicide’, were searched. The before mentioned search engines were chosen for this study, since they account for 95% of all search queries in Korea. Each portal autonomously included words and phrases such as ‘Gramoxone’, ‘wrist slashing’, ‘JASAL(suicide)’ in accordance with its policies. The number of visitors to Hee-Mang Click was checked daily using a program, and the number of deaths by suicide was obtained daily from Statistic Korea’s statistics on causes of deaths. Correlation analysis was conducted using these data.

**Results**
142,810 visited the suicide intervention website in the duration of the investigation: in average,
there were 276 visits per day. An average of 43 completed suicides occurred daily during the study period. There was a significant relationship between the number of Hee-Mang Click visits and that of completed suicides ($r=0.424$, $p=0.0001$). Furthermore, the correlation was greater when the number of visits and deaths were counted by week ($r=0.600$, $p=0.0001$). Because those over 65 years old have relatively low activity levels on the internet, the number of suicides of these individuals were exempted from analysis: this yielded a significantly greater correlation ($r=0.604$, $p=0.0001$).

**Conclusion**
The results of this experiment indicated that individuals with thoughts and/or plans on committing suicide displayed contrasting emotions towards self-immolation. That is, these individuals browsed the web not only for pro-suicide but also for intervention information. These findings suggest that in order to prevent suicides, it is important to not only withdraw suicide-instigating information, but also to actively provide intervention contents on the internet.

**P01-40**
**Impulsivity and Methodology for Attempted Suicide of those visiting Emergency Rooms: A Case Study**
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1Korea Suicide Prevention Center, KOREA (REP.); 2Seoul National University Bundang Hospital, KOREA (REP.); 3Korea Suicide Prevention Center, Kangwon National University College of Medicine, KOREA (REP.)

**Study objectives:**
As of 2011, under Article 11 of the Suicide Prevention Law, the South Korean government must appraise national status of suicide every five years. This was enacted to gain accurate insight on the suicide status, and to assess the urgency and demand for intervention services. This study was conducted as a preliminary to the proposed national evaluation. People taken to emergency rooms for their attempt at self-immolation were investigated in this study to determine their suicide impulsivity and methodology.

**Method**
This study obtained its sample from seven emergency rooms in Korea. It consisted of patients admitted from July 6th, 2012 to November 25th, 2012 for attempted suicide. Interviews were conducted using semi-structured questionnaires, and their results, filed as medical records, were retrospectively evaluated and analyzed.

**Results**
502 subjects participated in this study. Drug-overdose was most commonly used with 47.2% of the suicide attempters having employed this method. Both wrist-cutting and agricultural-pesticide poisoning were used in 15.4% of the cases. Drug overconsumption was responsible for the largest proportion of attempted suicides in all age groups. Wrist-cutting and pesticide-consumption were the second-most chosen methods in younger (or youngest/juvenile) and senile age groups, respectively. More female suicide attempters (58.4%) tried to self-immolate by overdosing on drugs than males (31.6%), while more males attempted suicide via agricultural pesticide and poisonous gas consumption. Incidences involving methods such as pesticide ingestion and asphyxiation were more fatal than those employing drug overdose and wrist-cutting. Males’ suicide ideation was found to be much stronger and more definite than those of females. The Suicide Intent Scale (SIS) results indicated that suicide intent was stronger in the following
ABSTRACTS

WEDNESDAY

subjects: those who were male; those who are older; and those who lived alone. Of the studied suicide attempters, 56.2% reported that they did not plan to commit suicide prior to the event that led them to the emergency room. Fatality of the subjects’ suicide attempts was analyzed: 50.4% resulted in minor injuries, 0.3% and 3.7% ended in death and serious injuries, respectively.

Conclusion
The results of this experiment indicated that with regards to suicide methods, fatality impacted mortality. Accessibility had influence over the chosen method of self-immolation.

P01-41
SOUTH SUAS-S: Validation with Clinical Search from Uruguay
Pelaez, S; Wels, P; Moreira, G; De los Santos, C; Bentancur, F; Pérez, L; Valencia, I
Ultimo Recurso, URUGUAY

Study objectives
Relationship between SUAS-S and clinical evaluation at the beginning and immediately after 6 months of the treatment.

Methods and material
Sample: out-patients with suicide behaviour. SUAS-S was applied in 48 out-patients who were clinically tested in 2 times. Clinical evaluation: Diagnostic (DSM IV), risk factors and protective factors.

Results
Not in all cases of high suicide risk from the clinical standpoint SUAS scored high.

Conclusion
In Uruguay, SUAS-S is a very important tool to prevent suicide, but in every cases it must be supported by clinical evaluation.

P01-42
Suicide Attempts and Ideation in Type 1 Diabetic Patients
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1Psychiatry Service, Department of Veterans Affairs, UNITED STATES; 2UMDNJ-DOC, UNITED STATES

Objective
To examine suicidality and its correlates in type 1 diabetic patients.

Methods
Four hundred and thirty nine type 1 diabetic patients and 404 controls underwent a semi-structured interview that asked if they had ever attempted suicide. Patients completed the Childhood Trauma Questionnaire (CTQ), Hostility and Direction of Hostility Questionnaire (HDHQ), and Beck Depression Inventory (BDI). Diabetic patients and controls were compared for their rate of suicide attempt. Diabetic patients who had or had never attempted suicide were compared on socio-demographic and clinical data.

Results
Significantly more of the diabetic patients than controls had attempted suicide (12.5 vs 3.5%, respectively, p < 0.001). Diabetic attempters were significantly more likely to be female, depressed and hostile, and to report a history of childhood trauma, smoking, alcohol abuse, and drug
abuse than diabetic non-attempters. Multivariate analyses showed that female sex, severity of childhood abuse, hostility, history of alcohol abuse, and depression were significantly and independently associated with having attempted suicide among diabetic patients.

**Conclusion**

Patients with type 1 diabetes have a raised risk of attempting suicide. Suicide risk in diabetics appears to be multifactorial and includes gender, developmental, personality, psychiatric, and substance abuse determinants.

**PO1-43**

**Independent effects of 5’ and 3’ functional variants in the Serotonin Transporter Gene on Suicidal Behavior in the Context of Childhood Trauma**

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**Background**

The serotonin transporter influences the synaptic actions of the mood-altering neurotransmitter serotonin and is sensitive to stress, due to the presence of a glucocorticoid response element in the SLC6A4 encoding gene. We hypothesized that a functional SLC6A4 promoter polymorphism, 5-HTTLPR and two putatively functional 3’ UTR tightly-linked SNPs (rs3813034, rs1042173) might have independent effects on suicidal behaviour in the context of childhood trauma.

**Methods**

DNA and childhood trauma (CT) questionnaire scores were available for a total of 474 African Americans, including 112 suicide attempters and 362 non-suicide attempters. Genotyping was performed for 14 SLC6A4 haplotype tagging SNPs, the triallelic 5-HTTLPR and 186 ancestry information markers. Results: There were independent G x E interactive effects of 5-HTTLPR (p=0.017) and rs3813034-rs1042173 diplotype (p=0.011) on suicidal behaviour. In individuals exposed to high CT the risk of suicide attempt was 0.52 in carriers of the low activity 5-HTTLPR variant, 0.32 in medium/high activity variant carriers and 0.12-0.20 in individuals without CT exposure. Likewise, CT exposed carriers of the major ATAT diplotype had an increased risk of suicidal behaviour relative to the ATCG/CGCG diplotype carriers (0.40 vs 0.31). Genotype had no effect in individuals without CT (0.15-0.22). In CT exposed individuals, the prevalence of suicide attempt was 0.56 in carriers of both 5’ and 3’ risk variants, 0.39 in carriers of one risk variant and 0.25 in individuals without either risk variant.

**Discussion**

Independent effects of the 5’ and 3’ SLC6A4 functional variants on suicidal behaviour may have pharmacogenetic implications for SSRI therapeutics.

**PO1-44**

**Reaching the Target Population: A Descriptive Analysis of Taiwan’s National Suicide Prevention Hotline and the Taipei Lifeline Database**

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1National Chi Nan University, TAIWAN; 2Taipei Lifeline Association, TAIWAN

**Objectives**

Established in 1969 and then undertaking Taiwan’s National Suicide Prevention Hotline con-
tracted by the Department of Health since 2009, the Taipei Lifeline Association has provided the much-needed crisis intervention, as well as suicide prevention, services for hundreds of thousands of callers each year. The purpose of this descriptive study was to answer a simple yet important question: Did the hotline services reach the target population?

**Methods**

Archival data from the National Suicide Prevention Hotline and the Taipei Lifeline 2009-2011 Database were used to summarize the demographic characteristics and counseling issues of the callers. The findings were then compared to government data drawn from the National Statistics and the Taiwan Suicide Prevention Center.

**Results**

Overall, more and more people with suicide ideation and/or suicide plan or who were taking actions to kill themselves were willing to call the hotlines (from 6,012 in 2009 to 11,875 in 2011). The hotlines were also able to intervene more and more acute suicide crises (from 143 in 2009 to 475 in 2011). However, contradicting to the fact that the suicide rate for males was two times higher than that for females, 56.1% of the calls were made by females. Young adult and middle-aged females were more likely to call the hotlines for family, intimacy, emotion, and marriage related issues; while young adult and middle-aged males were more likely to seek help for issues related to mental illness, substance abuse, financial crisis, and sex, which are similar to the national suicide statistics. Inconsistent with the national statistics that more than 40% of mature adults committed suicide for physical health problems, only 6.3% of elders sought help for concerns related to physical health. Last, people in urbanized areas with lower suicide rates were more likely to use the hotline service than those in rural areas with higher suicide rates.

**Conclusion**

The suicide prevention hotline services did reach the target population, especially among those in young adulthood and middle age. More effort, however, is needed to promote the service among males, physically ill elderly, and rural population.

**PO1-45**

**Attempted Suicide: Experiences of Young Men and Teenage Girls**

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Attempted and completed suicides are major social and public health problems in Lithuania, as the country has the highest suicide rate in European Union - 28.5 per 100,000 population (2010). During the last 100 years Lithuania experienced big and sharp fluctuations of suicide rates. Therefore there is a need of an understanding of the perceived causes and the personal meaning of the suicidal behaviour within the unique social world of individuals.

Two separate studies were carried out using interpretative phenomenological analysis - a qualitative research method which aims to explore personal experience and how one is trying to make sense of it. One study explored experiences of three young men and the other study looked into experiences of three teenage girls.

Both young men and girls named difficulties in close relationships as very important factors contributing to their suicidal behaviour. Some differences in most painful experiences were found: a frustration of needs to be respected, to have socio-economic security and to assert oneself in the professional carrier were among the most painful experiences for men. Among the most important experiences for girls were overwhelming emotions, difficulties with
self-control, impulsiveness. Young men had very ambivalent attitudes towards professional help. Teenager girls often met negative emotional reactions when they revealed suicidal intentions to adults.

**P01-46**

**Effective Organisational Suicide Prevention: The Identification of the Elements of an Effective Correctional Suicide Prevention Process**

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**Background**

Suicide within prison environments is at a significantly higher level than in the community and even within different prisons, there are major fluctuations in suicide rates. One prison in London, UK, underwent major changes in policy, practice and culture towards suicide prevention and with it, moved from a high level of suicide (up to four per year) to four years without a suicide.

**Aims**

To consider the policy and practice changes which influenced the reduction in suicide in prison; To identify the developments and outcomes which can inform suicide prevention good practice and indicators of effective change; to provide advice for policy and managers in the implementation of suicide prevention measures.

**Method**

A case study method was used to evaluate the policy developments and organisational change which were undertaken in the period 2008-2011 to identify the indicators of effective practice. Local policies and independent evaluations [e.g. audit, independent inspections] were analysed for themes and a range of prison staff and managers were interviewed to identify how these policy and practice developments had been implemented. These were triangulated to provide details of the methods to implement effective policy change.

**Results**

A range of policy and practice implications were identified, which affected the development of effective suicide prevention in prison. These included policy decision making and implementation, the methods and outcomes of changes in prison culture and attitudes, the role of managers and the elements of effective multi-disciplinary working in suicide prevention.

**Conclusion**

The results inform policy developers and organisational managers in key aspects of effective suicide prevention, in action. The results will be discussed as to their application to suicide prevention practice implementation within correctional services and other institutional care.

**P01-47**

**Athlete Suicide & Hegemonic Masculinity: Frames of Physical Injury & Occupational/Economic Strain in The Cinema**

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1Wayne State University, UNITED STATES; 2Center for Suicide Research, UNITED STATES

Sports reflect masculine values including aggression, physical prowess, competitiveness, and success.

**Objectives**

Given the centrality of these values in sports, it is hypothesized that the cinematic presentation
of athlete suicide will be more apt to attribute suicide to failures to achieve masculine values (poor health, occupational and economic strain) than portrayals of non-athlete suicide.

**Methods**

Forty-three cases of athlete suicides were located through a search of seven online filmographies. A larger study (Stack & Bowman, 2012) provided a control group of 1,568 non-athlete suicides, and a taxonomy of seven motives for suicide. Motives for classifying the suicides include physical problems, economic/occupational strains, and social strains.

**Results**

As anticipated, the suicides of athletes were over three times more apt to be portrayed due to physical problems including injuries than the suicides of non-athletes (25.6% vs. 7.8%, p < .000). Further, athlete suicides were more than twice as apt as non-athlete suicides (39.5% vs. 17.2%, p < .000) to be portrayed in the context of economic/occupational strain. However, portrayals of athlete suicide did not significantly differ from those of non-athletes on five other motives for suicide including psychiatric morbidity, social strains, and death of a loved one.

**Conclusion**

The portrayal of athlete suicide in the movies draws disproportionate attention to the loss of health, failures at work, and financial problems as precursors for suicidality. These patterns are interpreted in terms of the construct of toxic masculinity, fundamental to American sports. Future research on athlete suicides in the real world is needed to determine the extent to which toxic masculinity drives real life suicides among athletes. Suicide prevention among athletes might include screening for high adherence to the norms of hegemonic masculinity combined with failures in physical health, athletic performance and/or financial matters.

**P01-48**

**Geographical Variations And Contextual Effects On Suicide Mortality In Japan**

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**Objectives**

To investigate geographical variations in suicide mortality to identify contextual effects on suicide risk in Japan.

**Methods**

Bayesian estimates of suicide rates for 354 health districts in 1973-1982, 1983-1987, 1988-1992, 1993-1997, 1998-2002, and 2003-2007 were obtained from the Center for Suicide Prevention at the National Center of Neurology and Psychiatry (http://ikiru.ncnp.go.jp). A ratio of the suicide rate in a health district to the Japan overall rate (RR) was calculated by age group, gender, and period. Eligible 352 health districts, belonging to 47 prefectures, grouped into 10 regions (Hokkaido, Tohoku, Kanto, Hokuriku, Koshin, Tokai, Kinki, Chugoku, Shikoku, and Kyusyu) that probably share similar characteristics. A three-level random intercept model was used to examine variations in suicide rates across prefectures (level 2) and regions (level 3).

**Results**

Suicide rates for men varied widely across health districts. In 2003-2007, the RR was above 1.25 in 34 health districts and below 0.75 in 4 health districts (Fig.1). The geographical distribution of suicide risk was almost unchanged over the 30 years in spite of the sharp increase in suicides in 1998. After adjustment for population density and average household income, there were significant variations in suicide rates at both the prefecture and region levels. Significantly negative
contextual effects were found in Aomori, Niigata, and Fukuoka prefectures and also in the Tohoku region, while significantly positive contextual effects were found in Tokushima prefecture. When multilevel analysis was performed separately for each age group, the contextual effects, as indicated by variance partition coefficient, were larger in the 45-54 years group (Table 1). In contrast to men, geographical variations in suicide rates for women diminished over the 30 years. In 2003-2007, only 2 health districts had a RR above 1.25 (Fig. 2).
Conclusion
There have been substantial variations in suicide rates across Japan, without apparent change over recent decades. Suicide risk may be related to political, economic, social, cultural, climatic, and geographical contexts. Further studies are needed to identify contextual factors that contribute to the geographical variations in suicide rates, which may help develop a suicide prevention program at a local level. Table 1 Variations in suicide rates across prefectures and regions, men, 2003-2007.

<table>
<thead>
<tr>
<th>Prefecture-level</th>
<th>Region-level</th>
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<tbody>
<tr>
<td></td>
<td>Variance (SE)</td>
</tr>
<tr>
<td>All ages</td>
<td>3.0 (1.0) **</td>
</tr>
<tr>
<td>15-24y</td>
<td>0.3 (0.2)</td>
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<tr>
<td>25-34y</td>
<td>0.9 (0.8)</td>
</tr>
<tr>
<td>35-44y</td>
<td>3.8 (2.8)</td>
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<tr>
<td>45-54y</td>
<td>19.0 (7.5) **</td>
</tr>
<tr>
<td>55-64y</td>
<td>18.3 (7.1) **</td>
</tr>
<tr>
<td>65-74y</td>
<td>13.6 (6.0) *</td>
</tr>
<tr>
<td>75+y</td>
<td>24.5 (9.0) **</td>
</tr>
</tbody>
</table>

VPC: variance partition coefficient, * p<0.05, ** p<0.01

P01-49
The Structure and Effect of Socio-psychological Factors on Mental Health Status in Japanese University Students under Economic Recession

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Objectives
In Japan, suicides are increasing under long-term economic recession. Especially in young people, aged 15-39 years, suicide is a major cause of death. The purpose of this study was to investigate the relationship between mental health status and socio-psychological factors in university students by using covariance structural analysis.

Methods
A total of 1,626 students of A university from January to February 2011 were enrolled in this cross-sectional study. Their mental health status was evaluated by using 6-item instrument (the K6). Socio-psychological factors were evaluated by 26 items questionnaires with work-related problems (6 items), family problems (6 items), health problems (3 items), love affair problems (3 items), and other problems (4 items). The effect of socio-psychological factors on the K6 was analyzed by covariance structure analysis.

Results
Nine hundred and thirty-seven (57.7%) subjects recognized that suicide was an important social issue. The total K6 score was 11.4±4.8 (mean±SD). In socio-psychological factors (26 items),
4 factors were extracted by factor analysis using varimax rotation. We named 4 factors as “family and individual problems”, “university life issues”, “anxiety for the future” i.e. promotion problems, employment problems and economic problems, and “human relationship issues”. All these factors were related to each other. “Family and individual problems” was closely linked to “university life issues”. “Anxiety for the future” was also associated with “human relationship issues”. In addition, the effect of “anxiety for the future” on the K6 was remarkably and independently noted by using covariance structural analysis.

Conclusion
In university students, mental health status and socio-psychological factors had related each other. “Anxiety for the future” had directly affected on their mental health, and improving human relationship issues might be effective for “anxiety for the future” in some Japanese university students under economic recession.

A Comic Book to Promote Mental Health among Teenagers in Switzerland: A Project to Prevent Youth Suicide and Strengthen the Prevention Network
Trabichet, A-M
STOP SUICIDE, SWITZERLAND

STOP SUICIDE has developed a comic book project for youth mental health promotion. The project aims to tow goals:
- How can we strengthen the prevention network in Switzerland by providing a tool that could be used by all prevention actors?
- How can we prevent suicide risks among teenagers by emphasizing protective factors?
Suicide prevention in Switzerland is very heterogeneous and is not coordinated. The prevention actors work separately from each other and with very few interactions. One of STOP SUICIDE goals is to make prevention more consistent. We thought of creating a tool that would represent a reference for mental health promotion in French-speaking Switzerland and could be used by many prevention actors and distributed through schools, community centers, consulting rooms, etc. The comic book execution represents an opportunity to gather prevention network actors related to different themes in youth mental health. Therefore, five different organizations are participating in this project. They deal with many issues such as drug and alcohol addiction, alcohol-addicted parent, homophobia, LGBT issues, cyber-bullying, physical, sexual and mental violence and eating disorders (anorexia and bulimia).

Every chapter of the book will be related to an organization, this means that every chapter will address a specific issue. This structure allows us to avoid focusing on one character who experiences all different suicide risk factors. The structure of the book is twofold: the first part is the informative one, seeking to provide factual and useful information about suicide and its surrounding myths. Our specific approach tends to stress the importance of resources and protection factors like strong entourage and social activities rather than risk factors like mental sickness or tough life events. The second part contains the 6 short stories illustrating each one of the issues. The stories are focused generally on one character who isn’t the one who experiences the risk factor but can be a witness of the pain or crisis situation of a friend.

In sum, the reader will experience the book in two different ways: by reading artistic stories related to suicide prevention, illustrated in such a way that protection factors are emphasized, and by finding some useful information to help someone. It also helps to learn more about this too little-known central issue of young suicide.
**PO1-51**

The Effects of Media Reports of Suicides by Well-Known Figures between 1989 and 2010 in Japan

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**Study objectives**

We examine the impact of media reports of 110 suicides by well-known figures on the number of suicides in the general population between 1989 and 2010 in Japan. This study improves upon the related past studies by using daily data on suicide, as opposed to monthly data. In addition, our study includes a large number of suicides by nationally well-known figures, including politicians and artists, not just entertainment celebrities.

**Methods and material**

We constructed an original dataset that contains the information on suicides by well-known figures and daily suicide data taken from the Vital Statistics. We broadly defined “well-known figures” and they include entertainers, politicians, athletes, artists/writers, academics, and the heads of large corporations. The list of suicides by well-known figures was constructed by searching articles of the most-widely circulated newspaper in Japan. Using daily suicide data, a Poisson model is estimated to examine if the number of suicides increased during the 3-week period after the media reports of well-known suicides.

**Results**

After controlling for the effects of seasonal, the date of the week, and year-specific factors, we found a statistically-significant increase in the number of suicides after the media reports of suicides by nationally well-known figures. Compared to the pre-media reports period, the number of suicides is about 6% higher during the first ten days after the reports. We also estimate a model that allows the media impact to vary by the occupation of the prominent figures. We found that the media reports on the deaths of prominent politicians are followed by the largest increase in the number of suicides in the population. The estimated results suggest that, on average, total suicides increase by about 15.2 percent during the 10-day period following their deaths are reported.

**Conclusion**

Our findings strongly suggest that the media reports of suicides by well-known figures have a significant impact on the number of suicides in the subsequent period and also that the impact differs by the type of well-known figures.
P01-52
The Agreement between Care Needs and Treatment Recommendations following Medically Serious and Medically Non-serious Suicide Attempts
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Ghent University, BELGIUM

Objective
Although agreement between care needs and treatment recommendations can be expected to contribute to compliance with treatment, little is known about the relation between care needs of medically serious suicide attempters (MSSA) and medically non-serious suicide attempters (MNSSA) and professional treatment recommendations. This study therefore aimed at investigating (1) the care needs of MSSA and the MNSSA and (2) the level of agreement between care needs and treatment recommendations in MSSA and MNSSA.

Method
By means of a semi-structured interview (the Instrument for Psychosocial Evaluation and Care for suicide attempters = IPEO), information about care needs and treatment recommendations was collected from all attempted suicide cases (n= 3690) presented to the emergency department of participating Flemish general hospitals from 2007 to 2011 (n =30). Suicide attempters were regarded as MSSA or MNSSA based on the severity of physical injury resulting from their attempt. Care needs were assessed and coded as 1) no treatment, 2) outpatient treatment or 3) inpatient treatment. Psychiatric treatment recommendations were monitored in terms of 1) no further treatment, 2) outpatient treatment or 3) inpatient treatment.

Results
There was a significant association between care needs and treatment recommendations in MNSSA but not in MSSA. There was a significant difference between MSSA and MNSSA regarding recommended psychiatric treatment. Recommended inpatient psychiatric treatment was significantly more common in MSSA than in MNSSA, while outpatient psychiatric treatment was recommended more commonly in MNSSA than in MSSA. Regarding subjective care needs there however was no significant difference between MSSA and MNSSA.

Conclusion
This study shows an effect of severity of physical injury following a suicide attempt on psychiatric treatment recommendations. The lack of a significant association between subjective care needs and professional treatment recommendations in MSSA may have a negative effect on compliance with treatment and needs further study.

P01-54
NPY and Suicidal Behaviour
1Copenhagen University Hospital, DENMARK; 2Copenhagen University, DENMARK

Aim
Neuropeptide Y (NPY) is a peptide neurotransmitter in CNS. It has been associated with regulation of many functions, such as balance and memory. Some studies have linked cerebrospinal NPY to suicidal behaviour. So far no study has been published about NPY genetic variations and
suicidality. We aimed to study NPY gene on chromosome 7 as well as NPY receptors Y1 and Y2 on chromosome 4 in patients with schizophrenia with and without suicidal behaviour.

**Method**
The design was a case-only study. The cases were patients with schizophrenia. Thus cases and controls had the same background. From records and interviews the history of suicidal behaviour was recorded and classified into categories: no suicidal behaviour, suicidal behaviour of non-determinant type, suicidal behaviour of determinant type (including suicide). From Danish Psychiatric Biobank 650 patients participated. Several SNPs in the NPY gene were analyzed, including two functional variants: -399 C>T (rs16147) and leu7Pro (rs16139). The receptors genes we also analyzed with several SNPs, including 1278 G>A (rs11946004).

**Results**
The groups were comparable according to gender, age at onset and duration of illness. Frequency of some variants were small. We did not find any SNP variations related to suicidal behaviour, nor any haplotype.

**Conclusion**
Our study could not confirm a genetic impact from NPY on suicidal behaviour among schizophrenic patients.

**PO1-55**
**Effects of the Anti-stigma-targeted Lecture on Public Recognition and Attitudes regarding Depression and its Treatments**
Yakushi, T1; Kuba, T1; Nakamoto, Y1; Fukuhara, H1; Michishita, S1; Travis, S1; Tanaka, O2; Kondo, T1
1Faculty of Medicine, University of The Ryukyus, JAPAN; 2School of Medicine, Hirosaki University, JAPAN

**Aims**
We aimed to clarify public recognition and attitudes regarding depression and its treatments and the affecting factors.

**Methods**
Subjects were 827 citizens (241 males and 586 females), who received an anti-stigma-targeted (n=467) or non-targeted lectures (n=360). The 18-item questionnaire for recognition of depression and attitudes toward its treatments, each item score of which ranging from 1 (very negative) to 5 (very positive), was administered to each subject before and after the lecture.

**Results**
All the items except for perfect self-awareness were significantly improved after the lectures (P<0.001). Factor analysis of baseline scores in the 18 items extracted 4 distinct subscales, namely, disease-model recognition (Cronbach’s α=0.74), help-seeking behaviours (α=0.73), negative affect against depression (α=0.67) and medication free solutions (α=0.75). All the items except for perfect self-awareness were significantly improved after the lectures (P=0.000). At both baseline and post-lecture, older age groups (50-59 and 60-years) had lower subscale scores in disease-model recognition and/or negative affect against depression than other generation groups, whereas younger age groups (-29 and 30-39 years) showed poorer help-seeking behaviours (P<0.05). Anti-stigma-targeted lecture was superior to non-targeted lecture in improving disease-model recognition, negative affect against depression and medication free solutions (P<0.05). Multiple regression analyses revealed that each subscale score at post-lecture was strongly dependent on its baseline score (P=0.000), and that baseline disease-model recognition
indirectly affected post-lecture scores in two other subscales, i.e., negative affect against depression and medication free solutions ($P<0.01$).

**Conclusions**

The present study suggests that main target of educational intervention for citizens appears to acquire correct recognition of depression as a disease and its treatments in a medical model, which can secondarily attenuate negative affect/attitudes toward depression and medication. However, other strategies should be considered for enhanced help-seeking behaviours, especially in younger generation.

**P01-57**

**Self-harm in Early Psychosis: Effects of Duration of Untreated Psychosis**


1Division of Psychiatry, Haukeland University Hospital, NORWAY; 2Department of Clinical Medicine, University of Bergen, NORWAY; 3Department of Biological and Medical Psychology, University of Bergen, NORWAY

**Objective**

Earlier treatment of psychosis might reduce the incidence of Non-Suicidal Self-Harm (NSSH) and Suicide Attempt (SA) before and after treatment of first-episode psychosis. The aims of the present study is to detect the prevalence of deliberate self-harm and suicide attempts in patients admitted to a psychiatric emergency ward during early psychosis, and to examine the effect of the duration of untreated psychosis (DUP) on deliberate self-harm and suicide attempts. It is hypothesized that long DUP increases the risk for suicide attempts and deliberate self-harm.

**Methods and material**

The study is an open cohort study including all consecutively admitted patients 18-30 years diagnosed with an early psychosis schizophrenia spectrum disorder (ICD-10 F20-29) during a six year period. The patients were acutely admitted to a psychiatric hospital serving 400,000 inhabitants in a combined urban and rural area in Norway. 250 patients had early psychosis defined as the first three years after their first psychosis treatment. Two groups will be compared, psychotic patients with self-harm and psychotic patients never involved in self-harm, measured from two weeks before first hospitalization for psychosis. All case records were read by a clinician who registered the DUP. The incidences of deliberate self-harm, suicide attempts and death (all causes) were registered during a continuous follow-up period until 30 April 2012. Both information from somatic hospitals and psychiatric departments were registered. When the case records contained information about the patient’s motivation for self-harm (depression, temporal relief of intense feelings, or the influence of psychosis), this was also registered. Finally, drug and alcohol abuse, psychiatric and somatic comorbidity, and previous contact with Child Protection System or Child and Adolescent Mental Health Services were registered.

**Results**

Results are expected to be ready in June 2013 and will be presented at the conference.

**Conclusion**

Results from the present study may have implications for treatment services in early psychosis.
PL3-1
Clinical Management of Self-harm Patients: Current Evidence and Future Possibilities
Hawton, K
University of Oxford, UNITED KINGDOM

Clinical management of self-harm (intentional self-poisoning or self-injury) patients is receiving increasing attention. This is understandable given the large numbers of people who present to hospitals following self-harm, growing awareness of the problems they face in terms of both their lifesituations and the often negative attitudes of many hospital staff, the extent to which self-harm is repeated, and the high risk of future suicide and other fatal outcomes. Evidence to guide clinical practice is slowly but surely growing.

A key first step in improving clinical management of self-harm in the general hospital is to try to improve the attitudes of medical and nursing staff towards patients, which is likely to come through training to increase their knowledge of the problems that these patients face and their potentially severe adverse outcomes. Preliminary evidence for effectiveness of such programmes exists. Official guidance such as that from the National Institute for Clinical Excellence (NICE) in England quite rightly recommends that all self-harm patients presenting to hospital should receive a psychosocial assessment. This may reduce risk of repetition of self-harm but this may depend on the socio-economic characteristics of patients.

In terms of aftercare, brief psychological therapy may reduce repetition of self-harm and have more impact on depression, hopelessness and suicidal ideation than usual care. There is mixed evidence about the possible effectiveness of contact interventions such as letters and postcards, their value perhaps being greater where other available services are lacking. Dialectical behaviour therapy may also reduce repetition of self-harm, but the cost of this approach as currently applied in adults is a major limitation. All self-harm services should have ready availability of staff with expertise in management of patients who are misusing alcohol.

Future advances might include improved treatments for multiple repeaters of self-harm, evidence-based therapy programmes readily available through the internet, use of electronic feedback and interaction with therapists to help ensure availability of therapy, especially for individuals unable or unwilling to have face-to-face contact, and instant electronic feedback of psychological functioning, backed up by a rapid response service for individuals whose risk has increased or are otherwise getting into difficulties.
PL3-2
Dialectical Behavior Therapy for Suicidal and Self Harming Adolescents
Mehlum, L
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Non-lethal self-destructive behaviours such as repetitive self-harm and suicide attempts are important public health problems throughout age segments of adolescents. Community surveys have, however, shown that only about 10-20% of adolescents who have engaged in self-harm report to have subsequently received any kind of treatment; an even smaller proportion report to have received treatment in child- and adolescent psychiatric services. Among those who actually have been referred to such specialized care many will not comply with treatment and/or drop out prematurely due to treatment interfering factors associated with characteristics of the adolescents themselves, their families or the clinical services. Unfortunately, few controlled intervention trials have so far addressed self-harm in adolescents, and these studies have with very few exceptions been unsuccessful in demonstrating effectiveness of the trial interventions. Repetitive self-harming behaviour is very often linked to personality disorders, in particular to Borderline Personality Disorder (BPD). Dialectical Behaviour Therapy (DBT) was developed by Linehan for outpatient treatment of women with BPD and chronic suicidality, but has since become an effective treatment for people with self-harming behaviour, personality disorders and complex comorbidity. The adult version of DBT now has a great deal of empirical support lending incentive to the development and testing of a considerably shortened and adapted version of DBT for adolescents. To date, no RCTs testing the efficacy of the adolescent DBT version have been published. This lecture will provide a brief overview of key elements of DBT and how it has been tailored to self-harming adolescents’ needs. Furthermore, results from the first randomized controlled study of the efficacy of 16 weeks of DBT-A to reduce self-harming behaviours, suicidal ideation and depressive symptoms in adolescents with emotion dysregulation and recent and repeated suicidal and/or self-harming behaviours will be presented. Finally, implications for further treatment development will be discussed.

PL3-3
Acceptability and Effectiveness of Web-based Treatment of Depression and Self-harm
Cuijpers, P
Department of Clinical Psychology, VU University Amsterdam, NETHERLANDS

The Internet offers several new ways of developing, implementing and disseminating evidence-based interventions for depression and self-harm. In the past decade a considerable number of treatments have been developed and several dozens of randomized controlled trials have been conducted, showing that these interventions are effective. Most research has been done in the treatment of depression and anxiety disorders, but much work has to be done in the fields of suicide prevention and self-harm. In this presentation an overview will be given of the research in these fields, and the different settings in which the acquired scientific knowledge about effectiveness and efficacy can be applied. Furthermore, a view on the future will be given, and the new generation of innovative technologies, such as mobile applications, serious gaming, and avatars.
PL4-1
Innovations in Suicide Risk Assessment and Crisis Intervention
Jobes, D
The Catholic University of America, UNITED STATES

Throughout the world the field of clinical suicidology is experiencing an explosion of innovations in suicide risk assessment; there are a number of new approaches to suicide crisis intervention as well. There is the natural evolution of traditional approaches to assessing risk (e.g., clinical interviews) as well as continued work in the development of suicide-specific assessment tools. Beyond traditional approaches there are also “occult” assessment approaches where suicide risk is not obviously being evaluated. Innovations in technology are also providing new assessment avenues. Research in suicidal typologies (using both quantitative and qualitative methods) can provide valuable information for prospective suicidal risk with implications for using different treatments for various suicidal states. In relation to crisis intervention, there is increased interest in brief interventions and the use of non-demand follow-up contacts. At the policy level in the United States there is an increasing focus on stratifying suicidal risk and matching patients to appropriate levels of intervention and intensity.

PL4-2
Interventions to Prevent Suicidal Behaviour in Individuals with Psychotic Disorder
Nordentoft, M
University of Copenhagen, DENMARK

Introduction
Suicide rates among people with psychotic disorders are 20 fold higher than among people in the general population.

Methods and results
Meta analyses of suicide risk in schizophrenia are mentioned and risk factors for suicide in schizophrenia are reviewed. Danish population registers were used to determine a long term cumulated risk of suicide of four percent for women and six percent for men. Two high risk periods for suicide were identified: shortly after admission and shortly after discharge. Suicide risk in schizophrenia decreased with the same speed as the decrease in the general population, and in Denmark the suicide risk in schizophrenia decreased each year since 1981. Suicide risk among inpatients and outpatients has decreased during last decade. Risk factors for suicide in schizophrenia were previous depressive disorders, previous suicide attempts, drug misuse, agitation or motor restlessness, fear of mental disintegration, poor adherence to treatment, and recent loss.

Conclusion
Suicide among people with psychotic disorders is an important clinical and public health problem. Risk of suicide is highest shortly after admission and shortly after discharge. Increased attention should be paid to assessing suicide risk in these two high risk periods and to measures that hopefully can influence the high risk. Assessment of suicide risk and outpatient treatment immediately after discharge is of particular importance.
Lessons Learned from Suicide Intervention Research: Intersecting Clinical, Ethical and Methodological Concerns
Stanley, B
Columbia University/New York State Psychiatric Institute, UNITED STATES

Conducting intervention research with suicidal individuals is fraught with ethical and clinical management issues. This presentation will address lessons learned from conducting intervention research with suicidal individuals and how these lessons learned can inform management and treatment of suicidal individuals in clinical practice. Some of these issues include: what are the appropriate procedures for monitoring suicidal individuals; is there an ethical imperative to include suicidal individuals in trials; are there special problems with the competency of suicidal individuals to consent to research and treatment; what are the appropriate comparison conditions in trials and what are the pros and cons of the choices? The underlying ethical principles used to understand these issues will be identified and possible resolutions to ethical issues will be described as well as how these ethical issues relate to methodological concerns and clinical management. The resolution of these issues has implications for routine clinical practice and helps to inform how to best manage suicidal individuals.

14:30 - 16:00
PS2.1 WORKSHOP: UNDERSTANDING, MANAGING, AND TREATING NON-SUICIDAL SELF-INJURY

Understanding, Managing and Treating Non-Suicidal Self-Injury
Walsh, B
The Bridge, UNITED STATES

One of the most challenging problems for clinicians and other professionals is dealing effectively with non-suicidal self-injury. Of special concern is that self-injury has recently moved from clinical populations such as those served in hospitals and group homes to the general population including middle, high school and college students. This presentation will focus on understanding, managing and treating diverse forms of self-injury including arm and body cutting, self-inflicted burning, excoriations of wounds, and other more serious examples. Self-injury will be distinguished from suicidal behaviour in terms of a number of key characteristics, but will also be discussed as a risk factor for suicide attempts.

A “Stepped Care Approach” regarding the management and treatment of self-injury will be reviewed, including:

Step I:
* The informal response
* Crisis assessment (when needed)
* Formal assessment of self-injury (questionnaires)
* Cognitive-behavioural assessment
Step II:
* Replacement skills training
* Cognitive-behavioural treatment
* Family therapy
* Pharmacotherapy (when indicated)

Step III:
* Body image work
* Prolonged Exposure
* Cognitive Restructuring for PTSD

Step IV:
* Residential treatment
* Treatment of multiple self-harm behaviours and/or severe self-injury

A stepped care approach is used so that clients and families receive only as much support and targeted treatment as they need. Those with greater challenges (such as histories of PTSD) receive more treatment by moving up the Steps.

Very practical suggestions in dealing with self-injury will be provided including a protocol for responding in group settings such as schools, hospitals and residential programs. The topic of social contagion of self-injury will also be addressed with guidelines for preventing and managing this problem.

14:30 - 16:00
PS2.2 ONLINE SUICIDE PREVENTION

PS2.02-1
Current Practices, Theoretical Models and Latest Findings in Research on the Effectiveness of Online Suicide Prevention
Mishara, B; Côté, L-P
CRISE - Université du Québec à Montréal, CANADA

Essential characteristics of the Internet and its use in contemporary society determine the nature of best practices in suicide prevention. We review the variety of internet users, what they seek and their patterns of use, and particularly Internet use by people at risk of suicide. Some seek information, others support, some concrete suggestions and help, others information on "best" suicide methods, glorification of their suicide and even partners to commit suicide together. There are differences between users of social media, chat and forums; and prevention varies according to the Internet media. We examine theories of online behaviour and their implications for suicide prevention, including the Social Identity Model of De-individuation Effects, Lack of Social Context Cues, and Social Information Processing Models. We discuss cyber-dependence and its relationship to suicide. We describe existing suicide prevention activities and the current state of empirical data on their effectiveness, with an emphasis on both empirically and theoretically justified differences between help provided over the Internet and help provided by telephone and face-to-face interventions. We discuss future challenges in evaluating internet suicide prevention and propose an agenda for future research.
**PS2.02-2**

Prevention 2.0: Towards Automatic (sentiment) Detection of Suicidal Behavior on the Social Media and Internet

Bloemen, M; Vanderreydt, P; Pauwels, K; Impens, I
Centrum ter Preventie van Zelfdoding, BELGIUM

Online communication is booming: especially young people communicate a lot on social media, the main way to search for information or advice is via the internet ... This is also the case for suicide. In 2007, the Flemish suicide prevention centre started chatting with people in a suicidal crisis. Next to that, we soon became aware that a lot of [worrying] information and communication concerning suicide circulates on the internet.

Within this session we present the results of 3 years prevention 2.0: from using Google adwords to guide people to correct preventive information, towards cooperating with social media such as Netlog and Facebook to react properly on suicidal messages. What is worrying content concerning suicide on the internet and how can we respond to it? What can we teach online community moderators? What are the experiences of 3 years online activity?

Finally, we also look at perspectives for the future: the development of automatic sentiment detection systems. What’s the state of the art in Flanders and where are we heading to?

**PS2.02-3**

E-learning Modules for Gatekeepers in Adolescent Suicide prevention: An RCT Study into Mental Health Online

Ghoncheh, R; Koot, HM; Kerkhof, A
VU University Amsterdam, NETHERLANDS

Mental Health Online is focusing on professionals working with adolescents, also known as gatekeepers. The aim is to enhance suicide prevention among gatekeepers by offering a training online. Eight e-learning modules have been developed in this study, each capturing an aspect of the process of early detection, guidance and referral of suicidal adolescents:

<table>
<thead>
<tr>
<th>Module</th>
<th>Aim</th>
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<tbody>
<tr>
<td>1. Suicidality among adolescents</td>
<td>Introduces the subject of adolescent suicidality</td>
</tr>
<tr>
<td>2. Risk factors</td>
<td>Reviews the risk factors which underlie adolescent suicidality</td>
</tr>
<tr>
<td>3. Ethnicity</td>
<td>Offers skill training when interacting with adolescents from ethnic minorities</td>
</tr>
<tr>
<td>4. Recognition of suicidality</td>
<td>Discusses how to recognize warning signs associated with suicidality</td>
</tr>
<tr>
<td>5. Conversation with the suicidal adolescent</td>
<td>Offers skill training on how to engage in a conversation with a suicidal adolescent</td>
</tr>
<tr>
<td>6. Conversation with the parents</td>
<td>Offers skill training on when to approach the parents, and how to engage in a conversation with them</td>
</tr>
<tr>
<td>7. Suicide first-aid</td>
<td>Discusses the required steps when a adolescent attempts suicide</td>
</tr>
<tr>
<td>8. Care and aftercare (for schools)</td>
<td>Offers schools guidelines regarding to the process of care and aftercare when students commit or attempt suicide</td>
</tr>
</tbody>
</table>
Gatekeepers can access any of these modules at any time they choose, from their work or from their home computer, each module takes 10 minutes at maximum. Long side the modules, participants have access to additional information on the website http://www.MentalHealthOnline.nl: papers, documentaries, links and an online discussion board. Currently the effectiveness of these modules is being tested in a Randomized Control Trial (RCT) in schools, centers for youth and families, and mental health institutions. The data collection for the main study is expected to be completed by July 2013. First results will be presented in Oslo.

**PS2.02-4**

**Mental Health Care Professionals’ Use and Appreciation of E-learning Alongside an Interactive Small Group Training for Suicide Prevention Skills**

de Beurs, D¹; de Groot, M¹; de Keijser, J²; Kerkhof, A¹

¹VU Amsterdam, NETHERLANDS; ²GGZ Friesland, NETHERLANDS

**Background**

To improve suicide prevention guideline adherence, a train the trainer program called PITSTOP suicide was developed. The training consisted of a one day interactive small group training. To increase the effect of the training, and to promote adherence to the guideline, an e-learning module was developed. E-learning is argued to be both an efficient and economical tool to educated health care professionals. Not much is known about the effectiveness of e-learning for mental health care professionals. In this study we evaluated the use and appreciation of our e-learning module.

**Method**

420 mental health care professionals attending the PITSTOP study were offered an e-learning module alongside an interactive small group training on suicide guideline adherence. The e-learning module consisted of six different movies showing prototypical interaction between a professional nurse or psychiatrist and an actor playing a suicidal patient. Next to the six movies, we added PowerPoint-slides with audio comments explaining the most important principles and recommendations from the guideline. The total running time of the module was 60 minutes. We investigated if the use of the module could be predicted by age, gender, years of work experience and profession. We were also interested in the evaluation of the module by its users.

**Results**

255 professionals completed the pre and post test. 55% (n = 140) of the respondents used the e-learning module (average time of 40 minutes). No differences on age, gender, years of experience or profession between users and non-users were found. The module was highly evaluated: 60% stated they learned a lot on the topic of suicide prevention, 75% found the e-learning a good addition to the training, 65% would recommend it to their colleagues. 16% (n = 40) even said they learned more from the module than from the small group interactive training.

**Discussion**

Our e-learning module was well received by its users. Most users stated that they learned a lot about suicide prevention, that they would recommend the module to their colleagues and that they found the module a good addition to the group training. 40 participants even found the module more informative than the group training. Age, gender, or years of work experience did not predict if a participant would use the e-learning module. Although not significant, our data does suggest that nurses were more likely to use the module compared to psychologists and psychiatrists.
PS2.02-5
Effects of Online Crisis Intervention and Therapy Through Chat (instant Text Messaging)
Mokkenstorm, J1; Stut, L2
1113 Online Foundation, NETHERLANDS; 2113 Online foundation, Amsterdam, NETHERLANDS

Background
The national Dutch suicide prevention platform 113Online offers online crisis intervention and solution focused brief therapy to anonymous suicidal help seekers.

Methods
Transcripts of volunteer operated crisis chat interventions were analysed using Mishara’s format used in the silent monitoring study of the 1-800-SUICIDE network investigating both callers’s emotional states as well as volunteer performance.

Excerpts of crisis chat transcripts containing railway related content were screened for content reflecting callers’ apparent attitude towards and preparations for railway suicide; and for content referring to 113Online signposts along the railways. Naturalistic outcomes of chat therapy performed by psychologists were assessed by analyzing changes in the Outcome Rating Scale during treatment.

Results
Preliminary data shows that the outcomes of crisis chat interventions performed by 113Online volunteers are generally similar to the outcomes of telephone crisis interventions of Mishara’s silent monitoring study of the 1-800-SUICIDE network; about 10% of all crisis calls contains railway related content generally indicating the usefulness of online help and of helpline signposts at hotspots on the railways. Outcomes of brief solution focused therapy is generally favourable while there is a substantial number of patients not completing therapy.

Conclusion
Naturalistic data indicate the usefulness and value of chat as a mode of communication in crisis intervention and psychotherapy. Chat communication lowers help seeking barriers; it seems to be preferred over telephone or face to face communication by a significant number of suicidal individuals.

PS2.02-6
Effectiveness, Cost-effectiveness, and Client Evaluation of an Online Self-help Intervention to Reduce the Burden of Suicidal Ideation
Kerkhof, A1; Van Spijker, BAJ2
1VU University Amsterdam, NETHERLANDS; 2Black Dog Institute, AUSTRALIA

Background
Many people with suicidal thoughts are reluctant to seek help and the Internet can provide anonymous, confidential and readily available services that are likely to appeal to those at risk.

In the Netherlands, a web-based self-help intervention was developed and tested in a randomized controlled trial. Effectiveness, cost-effectiveness and participant satisfaction were investigated.

Methods
Eligibility was determined via an online screening procedure. Exclusion was based on levels of depressive symptoms and suicidal thoughts, as well as age. Safety procedures involving the general practitioner were in place. Eligible participants were randomly assigned to the intervention or to a control group. Participants were assessed at baseline, 6-week post-test, and 3-month follow-up.
Results
The intervention group showed a significantly greater improvement in suicidal thoughts at post-test compared with the control group (d=0.28). Effects were more pronounced for participants who completed at least three modules and for those with a history of repeated suicide attempts. This improvement was maintained at 3-month follow-up. In addition, the intervention was found to be cost-effective, and levels of satisfaction amongst participants were acceptable.

Conclusion
Online self-help can be effective in reducing suicidal thoughts. Although the effect size is small, the reach of the Internet could enable this intervention to contribute to suicide prevention in a cost-effective way. However, the results should be seen in light of several limitations and more research is required.

PS2.02-7
Medical Ethical Issues in Internet Research
Kerkhof, A; Cuijpers, P
VU University Amsterdam, NETHERLANDS

There is a need for thorough research into effectiveness of internet interventions, crisis intervention, e-mental health, text messaging, mobile phone applications, etc. Research projects face specific medical ethical issues such as randomisation, safety protocols, participation of respondents who want to remain anonymous, how to ask for informed consent, e.g. from parents of young participants, etc. How to include or exclude respondents with suicide risk? There is a need for concerted action from suicide researchers targeted to medical ethical committees urging them to update their approval procedures.

In this discussion several experiences with medical ethical issues regarding internet research will be highlighted. Participants are invited to share theirs.

14:30 - 16:00
PS2.3 TEEN SUICIDAL BEHAVIOUR
- AN UPDATE ON RISK FACTORS

PS2.03-1
Deliberate Self Harm among School Going Adolescents in Pakistan
Haqqani, S1; Schwannauer, M1; Chan, S1; Qadir, F2
1University of Edinburgh, School of Health in Social Science, UNITED KINGDOM; 2Fatima Jinnah Women University, Dept. Behavioural Sciences, PAKISTAN

A large number of studies from Western countries have provided estimates of deliberate self-harm (DSH) and the associated risk factors for adolescents in community settings yet there is a lack of information from developing countries like Pakistan. There is a dearth of empirical studies investigating DSH, its associated risk and protective factors in the community especially among the school going adolescents. This study explored DSH in a sample of 1292 adolescents
aged 10-19 years taken from 11 schools of Rawalpindi, Islamabad and rural areas of Sahiwal District. Cross sectional survey was conducted exploring DSH (both suicidal and non-suicidal), tobacco, alcohol and drug abuse, well being and their associated risk and protective factors. A battery of self-reporting psychological questionnaires were translated into Urdu language and culturally adapted using Brislin’s translation guidelines. In this sample the rate of self harm was 7%. Self harm was more frequent in middle adolescence, and higher in males (n=53) than females (n=36). Structural Equation modelling was used to identify the role of depression, anxiety, social support, attachment styles, interpersonal relationship problems, help seeking, bullying, negative life events, disordered eating behaviours, violence and other demographic factors. The low rate of DSH reported in this sample as compared to the estimated rates reported in other studies might be a manifestation of the sacri-religious, criminal and stigmatized status of DSH in Pakistani society. The findings of the study compliment findings from the Western countries and points out important differences in the role of various predictors in Pakistani population.

**PS2.03-2**

**Suicide and Accidental Deaths in Children and Adolescents in England and Wales, 2001-2010**

Windfuhr, K; While, D; Hunt, IM; Shaw, J; Appleby, L; Kapur, N
Centre for Mental Health and Risk, UNITED KINGDOM

**Study objectives**

1) identify the number and rate of suicide and accidental deaths in a national cohort of 10 -19 year olds in England and Wales; and, 2) to investigate the impact of changes in coroner’s coding practices (i.e. narrative verdicts) on suicide statistics for children and adolescents

**Methods and materials**

Mid-year population estimates from the Office for National Statistics were used to calculate rates per 100,000 population for suicide (undetermined and suicide verdicts) and accidental deaths (poisoning, hanging) for those aged 10-14 and 15-19. Trends in rates over time (2001-2010) were investigated using poisson regression. Interaction tests were carried out to determine differences in trends between the two time periods (2001-2005; 2006-2010).

**Results**

There were 1,523 suicides (2.25/100,000) of whom 129 were aged 10-14. Suicide rates were highest in those aged 15-19 (4.04/100,000) and in males (3.14/100,000). Between 2001-2010 suicide rates significantly decreased among those aged 15-19 (IRR: 0.95), with no decrease in rates of accidental deaths (IRR: 1.01). However, there was a significant interaction between the 2 time periods for accidental poisonings (2001-2005: IRR: 0.79; 2006-2010: IRR: 1.01, interaction p=0.012) and accidental hangings (2001-2005: IRR: 0.93; 2006-2010: IRR: 1.25, interaction=0.01). Undetermined deaths significantly decreased among females aged 15-19 (IRR: 0.93) over the study period.

**Conclusions**

Suicide figures for those aged 10-14 should be routinely available to inform our understanding of suicide among children and young adolescents. Suicide rates fell among males aged 15-19. This appears to have been a genuine effect, and not the result of changes to coroners’ practices (i.e. increased narrative verdicts). Further monitoring is important to identify changing trends in verdicts and method of death to inform tailored suicide prevention strategies.
PS2.03-3
The Suicide Risk and the Frequency of Stressful Life Events Among European Youth. Results from Two Multicenter Large Scale Studies (SEYLE, WE-STAY)
Cozman, D1; Nemes, B1; Carli, V2; Wasserman, C3; Hoven, C2; Sarchiapone, M4; Apter, A4; Balazs, J5; Brunner, R6; Giurgiuca, A1; Haring, C7; Kahn, JP8; Corcoran, P9; Postuvan, V10; Saiz, P11; Varnik, A12; Wasserman, D13
1Iuliu Hatieganu University of Medicine and Pharmacy, ROMANIA; 2University of Molise, ITALY; 3New York State Psychiatric Institute, Columbia University, UNITED STATES; 4Schneider Children’s Medical Center, Tel Aviv University, ISRAEL; 5Vadaskert Child and Adolescent Psychiatric Hospital, HUNGARY; 6University of Heidelberg, GERMANY; 7University for Medical Information Technology (UMIT), AUSTRIA; 8Centre Hospitalo-Universitaire CHU de NANCY, Université H. Poincaré, FRANCE; 9National Suicide Research Foundation, IRELAND; 10PINT, University of Primorska, SLOVENIA; 11University of Oviedo, SPAIN; 12Estonian-Swedish Mental Health & Suicidology Institute, ESTONIA; 13National Swedish Prevention of Mental Ill-Health and Suicide (NASP), Karolinska Institutet, SWEDEN

Introduction
Assessing suicide risk is an important endeavor for improving mental health considering that approximately one million deaths occur globally, each year, from suicide. The causes of suicide are complex and no simple explanations of the phenomenon exist. However, stressful life events are known to influence suicide risk in individuals with genetic and/or acquired vulnerability.

Aim
This study aims to assess the association between the number of stressful life events and suicidal behaviour in adolescents.

Methods
We consider the 22 220 randomly selected adolescents who participated in two multicenter large-scale European studies, SEYLE and WE-STAY. Ten European countries and Israel joined SEYLE and five European countries and Israel joined WE-STAY to improve health through decreased risk-taking and suicidal behaviours. Paykel score was used as a measure of suicidal behaviour and the number of life events was assessed through self-report, using a list of numerous negative life events. Statistical methods included Kolmogorov-Smirnov test, χ² test, Mann-Whitney U test, Kruskal-Wallis test.

Results
Our results show that adolescents with suicidal ideation or suicide attempt in the last 2 weeks report a significantly higher number of life events for the previous 6 months, than adolescents with no suicidal behaviour. Post-hoc analysis showed no significant differences between adolescents with suicidal behaviour and those with suicide attempt regarding the number of life events reported. The same was true when accounting for the number of familial life events, and for the number of social life events. When accounting for the number of academic life events, we observed that pupils reporting a suicide attempt in the last two weeks, tend to report a lower number of academic life events for the same period of time. Adolescent girls reported a relatively higher frequency of suicidal ideation as opposed to adolescent boys who reported a relatively higher frequency of suicidal attempts.

Conclusion
The number of life events happening over a 6-month period significantly influences the intensity of suicidal behaviour in adolescents, irrespective of sex. Three or more life events conveys a risk for developing suicidal behaviour, but when stratifying by sex, this effect is only registered for females. Such a simple measure might be an important tool for the detection of suicidal adolescents by gatekeepers.
**PS2.03-4**

Sleep Problems and Hospitalisation for Self-harm
- A 15 Year Follow-up of 9,000 Norwegian Adolescents. The Young-HUNT Study.

Junker, A1; Bjørngaard, JH1; Gunnell, D2; Bjerkeset, O1

1Norwegian University of Science and Technology, NORWAY; 2University of Bristol, UNITED KINGDOM

**Study objectives**

Self-harm (SH) is among the most frequent reasons for hospitalisation in adolescents, and the strongest single risk factor for suicide. Sleep problems have been identified as a risk factor for SH, yet evidence from prospective population-based studies is lacking. Further, SH was often self-reported in previous studies. We followed almost 9,000 adolescents for 15 years, and examined the prospective association between sleep problems and risk of hospitalisation due to SH.

**Methods and material**

8,983 Norwegian 13-19 year old adolescents (88% of all invited) participated in the Young-HUNT 1 study in 1995-97. We defined problems initiating and/or maintaining sleep as exposure, and included symptoms of combined anxiety and depression, BMI, somatic illnesses or psychosomatic symptoms, smoking and alcohol use as covariates in our analyses. Using local hospital records, we identified the index episode of hospitalisation due to SH in the cohort.

**Results**

98 patients (27% males) were hospitalised following SH during follow-up, 38 (39%) of them more than once. Self-poisoning and laceration were the commonest methods. Sleep problems were twice as common among participants hospitalised for SH [HR 2.53 and 95% CI 1.53-4.17, sex and age adjusted], yet co-existent symptoms of combined anxiety and depression explained most of the sleep problem effect on SH [HR 1.25 and 95% CI 0.53-2.95, adjusted for all covariates].

**Conclusion**

Sleep problems are common among Norwegian adolescents, and co-existent symptoms of anxiety and depression significantly increase risk for later hospitalisation for SH. Prevention of sleep problems, anxiety and depression should be targeted when seeking to reduce and prevent SH.

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**PS2.03-5**

Risk and Protection among Children and Adolescent with Suicide Behaviour

Jakobsen, IS1; Larsen, KJ2; Nehr-Jensen, P2; Sørensen, TBB2; Clausen, B3

1University College Lillebaelt, DENMARK; 2Clinic of Suicide Prevention and Treatment, Odense University Hospital, DENMARK

**Study objectives**

We would like to present an original research work showing an analysis of the linkages between risk factors and protective factors for youth suicidal behaviour using data from a cross sectional study. Previous research has shown that youth with high levels of anxiety and depression are at increased risk for suicidal behaviour. However, by no means all youth with high level of anxiety and depression will go on to develop later suicidal behaviour. These observations suggest the presence of intervening factors and processes that may act to decrease the risk. Such factors may be identified using a “resiliency scale” and a resilience scale may be used to determine the level and strengthen of intervention focus on suicidal adolescents. However measures of resiliency had not been developed until recently, making it very difficult to generalize results or compare studies, so studies in a high risk sample is needed.
Methods and material
All participants (N=296) complete a self-reporting questionnaire containing the following psychometric scales. Kessler10 (measuring nonspecific psychological dissatisfaction including symptoms of anxiety and depression), The Columbia Suicide Severity Rating Scale C-SSRS (measuring the full spectrum of suicidal thoughts and behaviours) and Resilience Scale for Adolescents READ (measures the presence of personal and social protective factors). The project is designed as a survey of all patients (N=100) under 18 years who are admitted to University Hospital Odense with suicidal behaviour. The two control groups (N=97) are students in ordinary schools, and a group (N= 99) of referred patients to child and adolescent psychiatry without suicidal behaviour. Results. Preliminary results suggest young people with severe suicidal behaviour have low score on resiliency scale especial on those factors which measures protective factors in the family and social protective factors. Results show a significant association between scores on the K 10 and scores on the subscales severity of C-SSRS. Adolescents who reported higher levels of on the total resilience scores exhibited lower levels of scores on K-10.

Conclusion
The purpose of this preliminary study is to explore the predictive values of READ and C-SSRS for suicidal symptoms in a young adolescent sample, in order to use the scales in screening program for high risk youth.

PS2.03-6
Adolescents Exposed to Suicidal Behaviour of Others: Prevalence of Self-harm and Associated Psychological, Lifestyle, and Life Event Factors
McMahon, E1; Corcoran, P.; Keeley, H; Perry, IJ; Arensman, E1
1National Suicide Research Foundation, IRELAND; 2HSE Southern Area, IRELAND; 3University College Cork, IRELAND

Objectives
The aims of the study were to examine associations between exposure to suicidal behaviour and reporting own self-harm. Sub-groups of adolescents with different histories of exposure to suicidal behaviour and own self-harm were compared in terms a broad range of factors from lifestyle, life event and psychological domains.

Methods
A cross-sectional study was conducted, with 3,881 adolescents completing an anonymous questionnaire as part of the Child and Adolescent Self-harm in Europe (CASE) study. 52% of the sample were girls and the majority (53%) were 16 years old. Information was obtained on history of self-harm, life events, and demographic, psychological and lifestyle factors. Exposure to suicidal behaviour of others was defined as knowledge of self-harm or suicide of a friend or family member. Lifetime history of both own self-harm and exposure to suicidal behaviour of others were assessed, therefore exposure to suicidal behaviour did not necessarily precede own reported thoughts or acts of self-harm.

Results
Adolescents exposed to suicidal behaviour were approximately eight times more likely to report self-harm themselves than those without this experience. Those exposed to self-harm of others but not reporting own self-harm shared many risk factors with those with a history of self-harm, and self-harm thoughts were common, reported by 28.8% of this sub-group. Among those adolescents unexposed to suicidal behaviour of others, self-harm was associated with higher levels
of depressive symptoms, less use of problem-oriented coping and various stressful life events. Those reporting both exposure and own self-harm presented the most maladaptive profile on psychological, life event and lifestyle domains, but neither anxiety nor depression distinguished this group from the comparison group with neither exposure nor own self-harm.

Conclusions
Adolescents exposed to suicidal behaviour of others are particularly burdened. Factors associated with self-harm differ between those adolescents exposed and unexposed to suicidal behaviour of peers or family members. Knowledge of the factors associated with vulnerability and resilience to self-harm in this high-risk group can inform school-based intervention programmes promoting positive mental health.

14:30 - 16:00
PS2.4 CHALLENGES IN MEASURING THE EFFECTS OF RESILIENCE IN SUICIDE PREVENTION INTERVENTIONS

PS2.04-1
Studies on Resilience with Psychiatric Patients and Prisoners in the USA and Italy
Roy, A1; Carli, V2; Sarchiapone, M3
1VA Hospital, UNITED STATES; 2Karolinska institutet, SWEDEN; 3University of Molise, ITALY

Background and objective
Risk factors for suicidal behaviour have been extensively studied. However, possible protective factors have received considerably less attention. With Italian colleagues we wished to examine whether resilience might be a protective factor in relation to suicidal behaviour.

Methods
Findings from two studies published in JAD in 2011 will be presented. In both studies subjects who had or had not attempted suicide were matched for age and their scores on the Childhood Trauma Questionnaire (CTQ) and then compared for their resilience scores on the Connor-Davidson Resilience Scale (CD-RISC).

Results and discussion
In both studies subjects who had never attempted suicide had significantly higher resilience scores on the CD-RISC than the age and CTQ matched subjects who had attempted suicide. The similar results from these two studies suggest that resilience may be a protective factor mitigating the risk for suicidal behaviour associated with childhood trauma.
PS2.04-2
The Saving and Empowering Young Lives in Europe (SEYLE) Project:
Comparative Efficacy of Suicide Preventive Interventions Targeting Adolescents
Carli, V1; Sarchiapone, M2; Wasserman, D1; Wasserman, C1; Hoven, C3
1Karolinska Institutet, SWEDEN; 2University of Molise, ITALY; 3Columbia University, UNITED STATES

During the transition from childhood to adulthood, adolescents establish patterns of behaviour
and make lifestyle choices that affect both their current and future health. Given the importance
of this transitional period, it is essential to systematically monitor and assess the health and
well-being as well as resilience and coping strategies of adolescents and young adults, and eval-
uate the efforts to improve the health of young people.

Saving and Empowering Young Lives in Europe (SEYLE) is a randomized controlled trial (RCT)
aimed at promoting mental health among adolescents in European schools. The SEYLE project
was performed during January 2009 - December 2011, and comprised a consortium of 12 Eu-
ropean countries: Austria, Estonia, France, Germany, Hungary, Ireland, Israel, Italy, Romania,
Slovenia and Spain, with Sweden serving as the coordinating centre. Its main objectives are to
gather information on health and well-being in European adolescents; to lead adolescents to
better mental health through decreased risk-taking and suicidal behaviours; evaluate outcomes
different preventive programmes; and recommend effective culturally-adjusted models for
promoting adolescent mental health in different European countries. SEYLE generated a large
epidemiological database containing information regarding sociodemographics, risk factors,
lifestyles, and the mental health of adolescents in Europe. The database contains information
regarding 366 variables for 12,395 cases, for a total of over 4.5 million observations. Longitu-
dinal analysis has identified improvements following SEYLE interventions for several mental
health outcomes. Depressive symptoms in the whole sample significantly decreased in the
Screening and in the Awareness arms at 3 months follow-up, with a further significant decrease
observed at the 12 months follow-up. The awareness intervention significantly improved several
outcome measures such as help-seeking behaviour, resilience and coping strategies.

PS2.04-3
What Resilient Survivors can Teach Those At Risk: Why They Decided Not To Suicide,
What Supported Recovery And Built Resilience
Chauvin, A
School of Population Health Griffith University and School of Medicine
University of Queensland, AUSTRALIA

Background and objective
Much research has focused on risk factors for suicide. This study sought to learn from resilient
survivors. What was crucial to their recovery and building their resilience? Are there elements,
e.g. skills, behaviours, which could be made available to those at risk?

Method
Based on grounded theory principles, purposeful sampling was used to source information rich
cases for open ended, in depth interviews. An invitation was circulated through professional and
social networks, seeking people who had intended to suicide, planned the means to do so, then
changed their mind and rebuilt a life they feel is now characterized by happiness and well-being,
to share their insights on what was crucial to their recovery and building resilience to current
adversities, preventing relapse.
Results and discussion
Clear, consistent themes emerged, with implications for how we approach therapy and which also suggest some mental health promotion, prevention and early intervention activities which could be developed, working with vulnerable individuals to identify their strengths and what life skills and behaviours they could develop, to recover from distress, build resilience and become confident in their ability to overcome future adversity and construct a safe, satisfying life.

Conclusion
The study highlighted the need to engage with the person as an expert in their own life, who can inform the point from which their journey of recovery can best begin, someone whose strengths need to be affirmed and with whom to reflect on what other skills or supports they still need to construct.

PS2.04-4
Low Resilience and Suicidality Risk.
A Lifespan Analysis of an Australian Community Based Sample
Liu, DWY; Fairweather-Schmidt, AK; Roberts, RM; Burns, R; Anstey, KJ
1University of Adelaide, AUSTRALIA; 2Centre for Traumatic Stress Studies, The University of Adelaide, AUSTRALIA; 3School of Psychology, The University of Adelaide, AUSTRALIA; 4Centre for Research on Aging, Health and Wellbeing, The Australian National University, AUSTRALIA

Background
With risk as the predominant focus of suicide research, the application of resilience and the role it may play in altering this risk is still largely unknown. Similarly, whether resilience imparts protective influence over suicidality consistently for different age groups in a large population sample also remains unknown.

Objective
To explore the role of resilience in relation to suicidality across three cohorts aged 28-32, 48-52 and 68-74 years, in a community based population.

Methods and materials
Participants were drawn from the Personality and Total Health (PATH) Though Life Project in which participants are randomly identified from the electoral role for Canberra and Queanbeyan, Australia. Binary logistic regression was conducted to explore whether resilience was associated with the presence of suicidality. Several demographic, health behaviours/conditions, physical health and life conditions, social support, psychological constructs and mental health variables were utilised within the study, as was a resilience specific measure. Significant differences were noted between the three cohorts for each of the variables used within the study.

Results
Suicidality was associated with less resilience for all three cohorts. Individuals aged between 48-52 years were found to have a greater vulnerability than the other two cohorts where inclusion of variables such as social support and health behaviours reduced the impact of low levels of resilience and suicidality on individuals’ well-being.

Conclusion
This study employed a novel perspective to investigate the relative contribution of resilience on likelihood of suicidal ideation among three age cohorts from a community sample. Findings indicate that more research is needed to clarify the relationship between resilience and suicidal ideation, particularly for those aged in their 40s and 50s. With low resilience indicating vulnerability to suicidal ideation in this cohort, further exploration would be beneficial to ascertaining whether these results are generalisable to other population samples.
PS2.04-5  
**Study on Resilience and Suicide Attempts among Norwegian Youth Living in Open Society**  
Nrugham, L¹; Holen, A²; Sund, AM³  
¹National Centre for Suicide and Prevention, University of Oslo, NORWAY; ²Faculty of Medicine, NTNU, NORWAY; ³RBUP, NTNU, NORWAY

**Background and objective**  
No general agreement has yet been reached on whether resilience is a state or a trait, despite agreement on its modifying capacity and its positive implications for mental health as well as its potential for lowering the risks of suicidal behaviour. The presentation will examine the challenges involved in using findings on resilience among Norwegian youth in the prevention of suicide.

**Method**  
Findings from a study published in JNMD will briefly be presented. The possible use of the findings in intervention programmes will be discussed together with the methodological challenges, and finally, suggestions to overcome them will be made.

**Results and discussion**  
The study used a sample that neither was clinical nor drawn from the general population. Its clinical profile resembles the most that of outpatient youths. Resilience intervention in this population can be made either in the community or in the clinics. School programmes aimed at nurturing and strengthening resilience in order to foster positive health and prevent suicidal behaviour are available in Norway. However, without control groups, the effects of such programmes is not directly measureable in terms of preventing suicidal behaviour. On the other hand, clinical programmes with similar aims have not yet been tested in Norway.

**Conclusion**  
Suggestions on how the challenges related to resilience interventions may be overcome or minimized will be presented.

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14:30 - 16:00

**PS2.5 STUDIES OF SURVIVORSHIP**

PS2.05-1  
**Consultant Psychiatrists as Survivors: The Impact of Patient Suicide on Treating Consultants in Ireland**  
Kelleher, E¹; Campbell, A²  
¹Trinity Centre for Health Sciences, Dublin, IRELAND; ²Cork University Hospital, IRELAND

Patient suicide is arguably the event of most concern to consultant psychiatrists. In Ireland, consultants invariably hold clinical responsibility for patient care. Given the rise in the rate of suicide in the Republic of Ireland, the impact it has on the personal and professional lives of consultants should not be underestimated. In comparison to their colleagues in medicine, consultant psychiatrists have been shown to have higher levels of work-related exhaustion which patient suicide potentially contributes to. Up to 70% of consultants will experience patient suicide at some point in their career yet there is a dearth of literature investigating the impact of suicide on consultant psychiatrists.
Aim
The aims of the study were: to assess the effect a patient’s suicide has on a consultant’s personal and professional life; to identify what factors modulated or exacerbated their response to the suicide; and to highlight what was shown to be beneficial in coping with the aftermath.

Methods
Following a literature review, a questionnaire from a previous study was chosen. This was sent to 74 consultants working in the Munster province of Ireland. It asked consultants to recall their ‘most distressing’ suicide and their response to it. The results were analysed using quantitative methodology. A further literature review was conducted on the issues raised.

Results
The questionnaire response rate was 67.5%. A total of 80% of consultants had a patient commit suicide under their care. In the case of 27.5%, consultants said that their personal lives had been affected by the suicide and 32.5% said that their professional lives had been affected. The majority of those affected were recently appointed consultants. Consultants identified with themes of guilt and feelings of personal responsibility amongst others. Consultant peers and team were significant sources of support, as were team meetings. A total of 57.5% of consultants said that their management of future suicidal patients had changed following the suicide.

Conclusions
A proportion of consultants experience negative effects in their lives as a consequence of patient suicide, particularly those doctors new to the consultant grade. However the support of consultant peers, the team and team meetings help in the aftermath. Support networks for doctors and mentoring are cited as ways to formalise this support.

Ps2.05-2
General Practitioners’ Reactions to Patients’ Suicides
Treven, M1; Grad, O2; Rotar Pavliè, D1
1Faculty of Medicine of the University of Ljubljana, Department of Family Medicine, SLOVENIA; 2University Psychiatric Hospital, Centre for Mental Health, Ljubljana, SLOVENIA

Objective
About 50 percent of people who end their life by suicide consult their general practitioner (GP) in the month prior to suicide, which makes GPs an important group of suicide survivors. Despite this fact, the effect of suicide on GPs has not been broadly investigated. The purpose of the research was to explore GPs’ reactions to their patients’ suicides and factors that influence these reactions considerably, to investigate the impact of suicide on further treatment of patients and to identify GPs’ need for support.

Method
Qualitative approach was used. Semi-structured interviews were carried out with 22 GPs with the experience of a patient’s suicide. GPs differed in gender, years of professional experiences, mentoring and number of suicides they had experienced.

Results
GPs revealed their emotional, cognitive, behavioural, physical and social response to their patients’ suicides. They rated the degree of distress and compared the suicides to other events in everyday practice; they described how the suicides had affected their sense of professional competence, personal lives and attitude to the patients’ relatives and also indicated things they could have done differently. Factors influencing their reactions were described and the impact of the suicides on further GP’s work was identified, both for the acute period after being informed.
of the suicide and over a longer time. Participants revealed how they had coped with the suicides and what had helped them most. They expressed their view on the need for professional help and stated which forms of help would suit them best. They generally stated there was no support available, but also revealed some reasons why they did not use the help (though little) that was offered and why they were often reluctant to discuss the experience with colleagues.

Conclusions
The findings give insight into GPs’ reactions and will be helpful in organizing support.

PS2.05-3
Stigma in Suicide Survivors
Toffol, E1; Totaro, S2; Olivi, F2; Ometto, C2; Ferrari, A2; Castriotta, C2; Scocco, P2
1National Institute for Health and Welfare (THL), and SOPROXI Project, FINLAND; 2SOPROXI Project, ITALY

Objectives
Suicide is often associated with high stigma levels. Furthermore, suicide survivors happen to be themselves stigmatized, this complicating their bereavement process and limiting their access to proper support and care. The aim of this work is to describe the factors associated with stigma in a population of suicide survivors.

Methods and material
Data were collected between January 2006 and March 2013 in the context of SOPROXI project, an Italian initiative for suicide survivors. When contacting the service, participants were asked to fill in a form concerning their socio-demographic features and information on the suicide, and a pool of 4 questionnaires (the Beck Depression Inventory, BDI; the Inventory of Complicated Grief, ICG; the Stigma of Suicide and Suicide Survivor scale, STOSASS; and the Brief Symptom Inventory, BSI). Analyses were carried out via correlations between stigma levels and socio-demographic and grief-related variables. Generalized linear models were performed to identify possible predictors of high stigma levels.

Results
Data on the STOSASS were available for 81 of the 102 suicide survivors who contacted SOPROXI and accepted to collaborate during the study period. Mean stigma towards suicide and stigma towards suicide survivors scores were 2.34 (SD 0.5; range 1.0-3.5) and 2.28 (SD 0.5; range 1.0-3.6), respectively. Stigma scores did not differ by gender, marital status, level of education, suicidal method, relation with the suicide victim or having witnessed the suicide, and did not correlate with age, BDI, ICG or BSI scores. Stigma towards suicide as well as stigma towards suicide survivors correlated with time since the suicide (r=0.252, p<0.05; and r=0.239; p<0.05, respectively). In generalized linear models both stigma towards suicide and stigma towards suicide survivors scores associated with the suicidal method being firearm (B=0.573, 95% CI=0.182 to 0.963, p<0.01; and B=0.537, 95% CI=0.134 to 0.941, p<0.01) and with time since the suicide (B=0.004, 95% CI=0.000 to 0.008, p<0.05; and B=0.004, 95% CI=0.000 to 0.008, p<0.05). No associations were found with BDI, ICG or BSI scores.

Conclusion
Stigma levels in suicide survivors seem not to be related to grief or psychopathology; rather to suicide-related factors such as the suicidal mean. Unexpectedly, stigma seems to increase with time. Stigma should be specifically addressed in interventions for suicide survivors, even in the long-term.
PS2.05-4

How to Restore Self-confidence after the Suicide of Somebody we Professionally Care for?

Grad, O¹; Castelli Dransart, A²; Andriessen, K³

¹University Psychiatric Hospital, SLOVENIA; ²University of Applied Sciences Western Switzerland Social Work, SWITZERLAND; ³Tele-Help Federation & University of Leuven - KU Leuven, BELGIUM

Research shows that patient/client suicide is likely to cause emotional disruption among professionals who cared for him/her. Professional as well as personal self-confidence can be shattered. For example, professionals might doubt their clinical and relational skills. In such situations, what helps professional to deal in a constructive way?

After a brief input, the workshop will provide an opportunity for exchanging experiences and knowledge among clinicians and researchers concerning the impact and the consequences of a patient/client suicide on professionals both on a personal and on a professional level on one hand and on the other hand on the way self-confidence can be restored after such an event. The facilitators will launch the discussion with some intriguing questions and dilemmas concerning the most effective types and modalities of support after the suicide of a patient/client.

PS2.05-5

Missing Voices - Suicide Bereavement of Rural Australian Young People

Bartik, W

University of New England, AUSTRALIA

Introduction

In Australia suicide accounts for 25% of all deaths in young people aged 24 years or less with a disproportionate number dying in rural areas. Suicide bereavement brings with it complex grief and greater risk of mental health issues including self-harm and suicide. There is an assumption that all people bereaved by suicide will have similar experience however young people are potentially at greater risk given their concurrent developmental and life transitions. Despite this there is limited published research about the suicide bereavement experience of young friends but their missing voices are integral to aid our understanding and help guide innovative interventions.

Study objectives

Give voice to rural young Australians bereaved by the suicide death of a friend to:
1. Determine the extent of their grief and risk of health and mental health issues
2. Investigate how rural communities can mediate or exacerbate risk
3. Determine what helps or hinders their bereavement
4. Develop recommendations for interventions

Methods

This mixed methods study targeted rural young people aged 12-24 years who had experienced the suicide death of a friend and continued to live in the rural area where the death occurred. Participants from a number of rural areas completed psychometric questionnaires to assess coping skills, symptoms of depression, anxiety, prolonged grief, stigma about suicide and post-traumatic growth. A semi-structured interview was competed with each participant, transcribed and thematically analysed.
Results
Reduced coping skills, elevated levels of depression and prolonged grief were reported. Young friends described stigma that also impacted help seeking and access to services and they had multiple experiences of suicide. Many were withdrawn and isolative following the suicide death feeling they did not deserve to feel grief because they were ‘just friends’. Binge drinking was particularly problematic if there were other social difficulties. Social networking and communication about their friend’s suicide often had a negative impact involving rumours and false expressions of grief.

Conclusion
This study provides new knowledge about young friends’ suicide bereavement and their issues and risk behaviours suggest distinct differences to other suicide bereaved groups. Their missing voices support recommendations for assertive intervention and follow-up plus better communication and information following the suicide death of a friend.

PS2.05-6
Developing a Successful Survivors of Suicide Program in Your Community:
Using Volunteers to Make it Happen
McNally, S; McMahon, J
EMPACT-Suicide Prevention Center, UNITED STATES

At the conclusion of this presentation, the participants will understand how to develop and facilitate a successful Survivors of Suicide program within their own community, using volunteers as their primary resource. Presenters, Sandra McNally and Jill McMahon, will share their expertise in running such a program. They will highlight the importance of volunteer recruitment and training, and ongoing outreach to survivors. These efforts are continuous and necessary for the longevity of this program model.

This model begins with developing protocol for volunteer recruitment. The presenters will speak about the criteria used in their recruitment process. They will explain how senior SOS group members are utilized for future group facilitation. It is typical in the healing process for one who is bereaved to want to reach out and help others; the presenters will demonstrate that through this model, volunteer facilitation can serve that purpose for many Survivors of Suicide. The participant will learn that through careful selection of passionate volunteers, using a specific set of criteria, it is possible to staff several successful groups within one county.

Next, the presenters will discuss their SOS Group Facilitation Training program. This training component covers such issues as group facilitation skills, general listening skills, and deflection skills. An additional component of the facilitator training is reviewing survivor issues with potential volunteers to ensure that volunteers have worked through their own grief and will not process their loss during group facilitation. The presenters will also discuss the need for continued education and annual refresher trainings. This training program also covers agency policies and the importance of boundaries, both in and out of the group setting. Lastly, the training curriculum encourages self-care for the well-being of the group facilitators and those that they may serve in our community.

Participants of this presentation will also learn about community involvement and how vital it can be for a program. The presenters will speak to the importance of expanding SOS group services beyond a monthly support meeting. Presenters will give examples of their community outreach programs, events such as a 5K Memorial Walk specific to Survivors of Suicide, an
annual Survivors of Suicide conference held locally, and their LOSS [Local Outreach to Suicide Survivors] program. The participant will learn how to expand such services through the funding of donations.

Lastly, the participant will learn that volunteer appreciation is an integral element in this model. Appreciation is shown through planned volunteer retreats and annual celebrations. The presenters will discuss the need for ongoing communication and collaboration with volunteers in order to validate their efforts, keeping them connected to the program.

14:30 - 16:00
PS2.6 REPORTING AND PORTRAYAL OF SUICIDE IN MASS MEDIA - CHALLENGES FOR SUICIDE PREVENTION

PS2.06-1
Interpreting Media Guidelines on Reporting of Suicide
Pirkis, J1; Machlin, A1; Skehan, J2; Sweet, M3; Wake, A4; Fletcher, J1; Spittal, MJ1
1University of Melbourne, AUSTRALIA; 2Hunter Institute of Mental Health, AUSTRALIA; 3University of Sydney, AUSTRALIA; 4RMIT University, AUSTRALIA

Numerous international studies have shown that media reporting of suicide can encourage copycat acts. Australia, like other countries, has developed guidelines [referred to as Reporting Suicide and Mental Illness] to encourage responsible reporting of suicide and to avoid imitative behaviour. These guidelines have been well-received by media professionals. Some, however, have indicated that the guidelines are not always easy to interpret. This study explored the interpretability of the Australian guidelines. Three trained independent reviewers coded 197 newspaper articles [relating to 28 suicides] for quality against nine criteria from the Australian guidelines. The level of inter-rater agreement was “good” or “very good” for all of the questions except one. Excluding this question, the overall percentage agreement was 79%. Agreement was poorest when the questions required subjective judgements. In particular, independent reviewers had difficulty agreeing on whether individual articles provided simplistic or more contextualised views of suicide. The study suggests that the guidelines’ meaning is generally understood. Interpreting the more nuanced recommendations is not always straightforward. Future revisions to Reporting Suicide and Mental Illness may need to consider opportunities to clarify them and to test this with journalists.
Did the Launch of Guidelines for Responsible Reporting on Suicide Influence the Way of Suicide Reporting in Slovenia?
Roskar, S1; Tancic Grum, A1; Postuvan, V; Podlesek, A3; Ziberna, J2; De Leo, D4
1Institute of Public Health, SLOVENIA; 2University of Primorska, Andrej Marusic Institute, SLOVENIA; 3University of Ljubljana, Faculty of Arts, SLOVENIA; 4University of Primorska, Andrej Marusic Institute; Griffith University Australia, SLOVENIA

Background
Media reporting on suicide can be linked either with the »Werther« (copycat) or the »Papageno« (preventive) effect. Hence, working with Media representatives on responsible reporting on suicide is of great importance for suicide prevention.

Objectives
The aims of our research are two fold: Firstly, we aim to introduce the development and dissemination of an intervention on responsible media reporting in Slovenia. The intervention included development of Guidelines for responsible media reporting on suicide in Slovenia and an implementation of workshops in all Slovene regions for media representatives about their role in suicide prevention. Second aim was therefore to evaluate the effectiveness of the implemented intervention on suicide reporting.

Methods
We used pre-post research design. Newspaper articles were retrieved over two 12-months periods: baseline period (1.5.2009-30.4.2010) and follow up period (1.5.2011-30.4.2012). In between we had a year of implementation of our intervention programme (launching and disseminating the Guidelines via workshops). For each retrieved article descriptive information were assessed and quality ratings were made (whether or not they are in accordance with the Guidelines).

Results
Comparison between the baseline and the follow up period showed some significant changes of the media reporting on suicide. Namely, media reporting in the follow up period was marked with less sensationalistic reporting and usage of inappropriate photographic material compared to baseline data. Also there was less reporting about individual cases of suicides and more about causes of suicide and pathways out of mental distress. Furthermore, in the follow up period there was a significant improvement in the headlines of the media articles and more often contact information about where to seek help were included in the story.

Conclusion
The findings are promising but working with the Media needs to be continuous and ongoing to achieve sustainable results.

Cognitive and Emotional Responses to Suicide Portrayals in Movies: Evaluation and Extension of the Modeling Hypothesis
Pouliot, L; Mishara, B
Université du Québec à Montréal, CANADA

Context
Over the past thirty years, there has been a steady increase in explicit depictions of suicidal behaviours in fictional movies, and during this period concerns have been raised that such depictions may foster suicidal modeling behaviours in viewers.
Objectives
To test experimentally important tenets of the modeling hypothesis, the most common explanation of the association between media presentations of suicide and increases in suicide rates, called the “Werther Effect”.

Methods
Using a Latin Square design, two independent studies were conducted. In Study 1, 51 participants were exposed to six film excerpts depicting a completed suicide by male or female protagonists. The method of suicide was kept constant across excerpts while the triggering event varied. In Study 2, 58 participants were exposed to four film excerpts depicting a completed suicide by male of female protagonists. The method of suicide was varied across excerpts while the triggering event was kept constant. Memory of the excerpts, emotional arousal and identification with the suicidal protagonists were assessed in both studies, as well as a series of psychological vulnerability factors that have been suggested to be associated with the “Werther Effect”.

Results
Study 1 indicated that gender similitude, which was previously considered one of the prerequisites for imitation to occur, did not influence memory, emotional arousal, and identification. Overall, women identified more strongly with protagonists. Thought suppression significantly predicted memory of excerpts and intensity of emotional arousal. Study 2 indicated that gender similitude did influence identification with the suicidal protagonist, but not memory and emotional arousal. Unlike Study 1, there was no significant main effect for participant’s gender on identification. There were indications that thought suppression may influence the extent of memory of graphic depictions of suicide and that dissociation tendencies may predict the degree of emotional arousal.

Conclusions
Our findings do not support the often invoked imitation hypothesis and suggest that other psychological processes may underlie the “Werther Effect.” Identification cannot be readily explained solely by gender similitude to the model in film presentations of suicide. The nature of the triggering event and method used by the protagonist may play an important role in the “Werther Effect”.

PS2.06-4
Social Strains & Suicide: Comparisons of 1,400 Portrayals in Film with 30,000 in Real Life
Stack, S1; Bowman, B2
1Wayne State University, UNITED STATES; 2Center for Suicide Research, UNITED STATES

Watching movies is the leading leisure time pursuit of Americans, thus providing vast opportunities for public understandings, or misunderstandings, of suicide. Movies provide narratives & rich images on the causes of suicide.

Objectives
(1) Describe the prevalence & distribution of subtypes of social strains in cinematic suicides. (2) test a social constructionist hypothesis: compared to real world suicides, how accurate are cinematic portrayals?

Methods
Data on suicide movies are based on analysis of 1,400 suicides in American feature films. Data on real world suicides are from the National Violent Death Reporting System (NVDRS) from the American Centers for Disease Control. Data from the NVDRS refer to 30,593 suicides and are
based on a synthesis of information in coroner’s investigation files, police reports, death certificates, toxicology reports, & other sources. A typology of social strains is based on the nine standard categories of social strains in the NVDRS: including legal (custody, criminal issues), job (e.g., Unemployment, demotion), financial (e.g., debt), secondary relationships (e.g., bullying, parent/child conflicts, racial prejudice, social shame), & intimate partner problems, IPP (e.g., divorce, domestic violence, extradyadic sex).

**Results**

The prevalence of several categories of social strains in society were accurately reflected in the movies: IPP (27% vs. 25%), other relationship strains (9 vs. 6%), financial strains (9.9 vs. 10.3%), job problems (10 vs. 9.6%), & death of a significant other (7.3 vs. 7.6%). Three other strains were over-represented in the movies, suicides of violence perpetrators (4.8 vs. 20.4%), legal problems (12% vs. 30%) and violence victimization (.6 vs. 6.6%). Altruistic suicides (for the benefit of others) comprised 19% of cinematic suicides. Several subthemes were found within categories including sexual jealousy in the IPP group, which could serve as points of departure for new academic research.

**Conclusion**

Most cinematic suicides are linked to social strain. Six social strains are accurately reported, with IPP being the most common in both film and society. Three violence-oriented strains are over-reported in film, consistent with the American cinema’s general emphasis on violence. Future work is needed on how social strains interact with mental disorders over time, in order to gain a full understanding of the causes of suicide & to develop more effective suicide prevention programs.

**PS2.06-5**

**Representation of Deaths By Suicide on the Greek Internet Resources**

Karydi, K; Liakopoulou, E; Kilaidoni, M; Kavalidou, K; Katsadoros, K
Klimaka NGO, GREECE

**Study objectives**

The aim of the current study was to investigate the suicide cases reported on the Greek internet resources during the years 2010, 2011, 2012. The years’ selection criterion was based on the recession affecting Greece.

**Methods and material**

The characteristics of suicide cases reported on the Greek Internet resources for the period 2010-2012 were analyzed.

**Results**

A descriptive analysis was carried out. The analysis revealed that the reported suicides for the 3 years were 598 (159 in 2010, 178 in 2011, 261 in 2012). Overall, more suicides were reported among males (81.8%) than females (18.2%), having no significant differences within each year. Most suicides were in the 50-54 age group, while the most common suicide method was hanging followed by gunshot. In the overall sample, the prevalence of financial difficulties was 18.9%, more specifically, 25.8% in 2010, 16.9% in 2011, 16.1% in 2012. Furthermore, psychological issues were mentioned in 102 suicide cases (2010-2012), taking into account that these cases did not include official psychiatric diagnoses.

**Conclusion**

Deaths by suicide, reported by the Greek media, reached their highest number in 2012. This trend does not seem to be in accordance with international suicide prevention guidelines re-
Regarding suicide media representation. Relevant studies on recession period and deaths by suicide show that the significant number of deaths by suicide was observed during the first year of recession. Future research should focus on the years of economic recession and suicide trends, in conjunction with the following period of financial growth.

14:30 - 16:00
PS2.7 DEVELOPING NATIONAL SUICIDE PREVENTION STRATEGIES (A)

PS2.07-1
International Developments in Mental Health, Human Rights and Suicide Prevention: Forthcoming Opportunities for Suicide Prevention
Dudley, M
Suicide Prevention Australia, AUSTRALIA

Suicide and mental disorders have a massive impact worldwide. While mental health and suicide prevention programs and services exist in some countries, and standards have been established in various contexts, gaining traction at the WHO and (more widely) at UN and other peak bodies, international NGOs, associations of nations, central, local and regional governments, and educational, health and media organizations, remains a significant challenge. Moreover mental health and suicide prevention are seldom addressed in international human rights covenants and legislation. While there is a Right to Health and a UN Special Rapporteur for Health, the Millennium Development Goals neglect mental health, no Special Rapporteur exists for mental health, and the international reporting system covering state parties to human rights conventions fails to systematically include mental health or suicide prevention. Recent developments signal change. The Movement for Global Mental Health, the Great Push for Mental Health, the mh-GAP program, the WHO Action Plan for Mental Health, the People’s Charter for Mental Health and new international classifications are raising the profile of mental health and suicide prevention internationally. There have been calls for an urgent UN Assembly Special Session for Mental Health and the appointment of a Special Envoy/Rapporteur for Mental Health, to raise governments’ awareness and document the global challenges; for mental health to be recognized as part of the Sustainable Development Goals and mental disorders as one of the five major non-communicable diseases; for mental health’s representation on all disaster emergency committees; and that the WHO Comprehensive Action Plan be expeditiously implemented. Key goals of an international, broadly representative campaign for mental health have included: creating national plans and increasing national resource allocations; challenging stigma; increasing numbers and training of mental health professionals, while strengthening the response capacity of communities and primary care; and calling attention to the problem of human rights and mental health, including establishing mental health laws that protect consumers and their families. The need for cultural acceptability, but also the universality of these concerns, is widely acknowledged. The relevance of this bold international program for suicide prevention in particular is explored, and potential next steps in collaboration discussed.
PS2.07-2
de Chenu, L
University of Hertfordshire, UNITED KINGDOM

Study objective
The study involved a contemporary history comparative case study analysis of the development of suicide prevention policies in Norway & England between 1989-99. Because the process of policy-making is universal to all societies it can be argued that a comparison is possible between countries. Moreover when different countries develop new policies a comparison provides useful information about the probable consequences of different political systems and policy making frameworks and the identification of issues that would have been missed without comparison. The project draws on the discipline of public policy and takes an historical institutionalist approach to identify national influences. The paper analyses the institutional context, its influence on the policy process and the implications for the selection of preventative interventions and target groups.

Methods and material
A contemporary history comparative case study methodology included three phases. Phase one included the selection of countries and then the design and implementation of the methods of data collection and analysis. Qualitative methods included interviews with policy actors and analyses of government reports and secondary literature. Phase two included an holistic analysis of each country specific case study. Phase three included comparison of the country specific studies to identify which variables influenced the emergence of differences and similarities.

Results
The research found that national separations of power act as an independent variable on the policy process of agenda setting and influenced the response to international policy developments, choice of interventions and the selection of target groups.

Conclusion
A comparative study highlights the similarities and differences between policies in two countries and explanations of their causes, such as the separation of powers, are suggested. It is argued that historical lessons are relevant to contemporary suicide prevention policy as critical conditions and variables are identified.

PS2.07-3
Sessions after Attempted Suicide - Who Make Use of Them?
A Study of Participants in Denmark’s Tertiary Suicide Prevention Program
Søgaard, B
Center for Selvemordsforebyggelse Region Syd Danmark, DENMARK

Background
Preventing suicide and parasuicide is an issue of concern to the public health service. In 1998, the National Board of Health in Denmark presented a plan for suicide prevention. A part of this plan is specific treatment and interruption of the suicide process. The Centre of Suicide Prevention in Odense, Denmark has treated adult persons attempting suicide (81%) and with serious suicidal ideations (19%) since 1992. Excluded from treatment are persons with abuse and severe psychical illness. Each patient’s treatment produced answers to a multifaceted questionnaire. The sample size was 2985.
Purpose
The purpose of this study was to describe the persons who have made use of these treatment sessions. It has been a concern to identify whether risk groups and vulnerable groups are represented among the persons who have made use of the treatment from 1992 to 2011. From 46 subjects covered in the questionnaire, eight parameters have been chosen in order to review characteristics of persons who have been in treatment. These are: gender, age, earlier suicide attempts, education, subjective reasons, psychiatric diagnosis, physical illness, and methods used for the suicide attempt.

Results
It was found that elderly persons, who have the highest rates of suicide, were poorly represented. Young women had the highest representation of all groupings. This correlates to the number of parasuicides among younger women, also the highest among all age groupings. Problems of relational matters dominated as reasons for suicidal behaviour, and the feeling of loneliness was prevailing, especially among younger persons. Persons with psychiatric diagnosis were highly represented. Half of the persons had made an earlier suicide attempt.

Conclusion
It seems necessary to make a special effort to get in touch with elderly persons with suicidal ideations, because their depression and suicidal ideations are often expressed in physical symptoms. Further investigation into young person’s loneliness as a reason for parasuicide is needed in order to adjust treatment interventions. The high representation of persons with psychiatric diagnosis was interpreted to be positive, as the predisposition for completed suicides among persons with such diagnosis is well known. It is also positive that persons with an earlier suicide attempt make use of the treatment. Tertiary suicide intervention for repeaters may prevent suicides due to the fact that they are at increased risk of dying by suicide.

PS2.07-4
Researching Quality Systems and Developing Accreditation Standards for Voluntary Suicide Prevention Organisations in Ireland
Friel, B
University of Ulster, UNITED KINGDOM

This research was commissioned by the Irish Association of Suicidology (IAS), funded by Department of Health in Ireland and conducted by the Community Youth Work Department of the University of Ulster.

Aim of research
The aim of this research was to use mixed (qualitative and quantitative) methodologies to research existing quality standard systems and to develop a draft accreditation model for voluntary organisations in Ireland working in the area of suicide prevention, intervention and postvention.

Objectives of research
The objective of the research coalesces around the development and presentation of a draft accreditation process and model that would support and affirm best practice” and a more collaborative development of services at a national, regional and local. Establishment of such a process will create improved response within the sector, offer boundaries, and structural supports for involved organisations to facilitate the sharing of knowledge skills, processes, and procedures within the area of suicide prevention, intervention, and postvention in Ireland. The research
involved a review of national and international literature on accreditation models and quality systems, in order to inform the development of key standards and indicators and in addition the research included the following:
1 Through a quantitative survey review existing structures and quality systems within groups/organisations in Ireland (N=102).
2 Qualitatively explore and effectively audit the nature of current and existing practice in identified national regional and local organisations, identifying the most effective model(s) of practice and intervention as recognised by service providers.
3 Develop a draft accreditation model that is realistic grounded in good practice and effective thus supporting organisations to inform best practice.
4 To present the emergent and developed draft model of accreditation for consideration and discussion.

Conclusion
In proposing this abstract to the conference our aim is to share the research undertaken and the results of the processes of a truly national Irish research piece. The aim is to share with conference the development of an effective and organically informed model of accreditation that can be effectively rolled out across voluntary and community organisations across the island of Ireland.

PS2.07-5
Developing a Suicide Prevention Research Agenda-Tools from the US National Action Alliance for Suicide Prevention Research Prioritization Task Force
Claassen, C1; Pearson, J2; Berman, L3; Reidenberg, D4
1University of North Texas Health Sciences Center, UNITED STATES; 2National Institute of Mental Health, Bethesda, Maryland, UNITED STATES; 3American Association for Suicide Prevention, Washington, DC, UNITED STATES; 4Suicide Awareness Voices of Education, Bloomington, MN, UNITED STATES

Background
The need for a United States national suicide prevention research agenda was identified in the 1999 Surgeon General’s Call to Action to Prevent Suicide, the 2001 National Strategy for Suicide Prevention and its recent 2012 update, and the 2002 Institute of Medicine report on reducing suicide. A National Suicide Prevention Research Agenda has the potential to accelerate knowledge development through careful articulation and sequencing of work on key research challenges.

Objective
The objective of this workshop will be to describe the steps used to develop the prioritized listing of research needs found in the US national suicide prevention research agenda, the tools that were utilized during prioritization, the final agenda itself and the process that will be used to implement this research plan. Briefly, a hybrid agenda development model was adopted for the project combining elements from multiple research agenda prototypes. “Tools” that were adopted / developed to support the process and which will be reviewed in this symposium include:
* A goal-setting strategy using an online, modified-Delphi process Stakeholder Survey;
* A strategy for identifying subpopulations who could benefit from various interventions;
* A strategy for creation of research pathways associated with each agenda goal;
* A strategy for prioritization of research activities within the agenda using a value-of-information approach; and
* A strategy for developing a process for mobilizing funding and support using a funders’ portfolio review and conference.
These tools are to be made available internationally, and the final agenda will be distributed during this meeting.
A Study on the Cultural Implications of Attempted Suicide and its Prevention in South India from Survivors Perspective

Lasrado, RA1; Chantler, K2
1University of Manchester, UNITED KINGDOM; 2University of Central Lancashire, UNITED KINGDOM

Objectives
Suicide in India is a complex social issue and a neglected arena by the state. Research has focussed on risk factors and epidemiology of suicide but lacks cultural understanding of risk factors. The aims of the study were to compare and contrast the accounts of survivors of attempted suicide concerning- i) the precursors to suicide attempts; ii) perception of problem situation; iii) help seeking patterns in times of distress and following an attempt to suicide.

Design
A qualitative design was used, guided by Grounded theory approach as it draws a mid pathway between phenomenology - considering individual experiences; and ethnography- concentrating on the role of culture. This approach is informed by the philosophy of symbolic interaction.

Method
Fifteen survivors of attempted suicide from Bangalore, India were interviewed in-depth. These interviews were analysed thematically and discussed in the light of Bourdieu’s concept of symbolic power, cultural capital and symbolic violence.

Results
Through the survivors’ accounts, it was clear that the interaction between cultural and structural factors had a large amount of influence on suicidal behaviour. For women, their gender was associated with being victimised into abuse and violence. For men, their gender presented them with power and responsibility within the family structure. The most accessible methods were used to attempt suicide. As suicide is illegal in India, There is an understandable fear of legal implications and social stigma that limits willingness to approach help.

Conclusion
Application of Bourdieu’s theory of symbolic power and violence, cultural capital and habitus to the analysis of data revealed the process of constant interaction among visible and invisible fields such as faith, power, control, family, religion and the social system which impact on survivors’ disposition to situations. Survivors considered religious and traditional methods of support as socially accepted norms where they discussed life’s problems. Medical assistance was sought only during apparent ill health. Psycho social support was very rarely accessed and availed. A lack of awareness among members of family and friends to identify the need to seek mental health consultation and a wide gap between identification of severe stressors and treatment increased the risk for suicide and limited timely intervention.
PS2.08-1
Effective Interventions for Suicide Attempters after Discharge from Emergency Unit: A Systematic Review of Randomized Controlled Trials

Yonemoto, N¹; Inagaki, M¹; Kawashima, Y¹; Shiraishi, Y²; Furuno, T³; Sugimoto, T¹; Tachikawa, H¹; Ikeshita, K⁴; Eto, N⁵; Kawanishi, C⁶; Yamada, M¹
¹National Center of Neurology and Psychiatry, JAPAN; ²Yokohama City University, JAPAN; ³National Hospital Organization Yokohama Medical Center, JAPAN; ⁴Kansai Medical University, JAPAN; ⁵University of Tsukuba, JAPAN; ⁶Nara Medical University, JAPAN; ⁷Fukuoka University, JAPAN

Objective
Suicide is a devastating event for individuals, families, and communities. A history of previous suicide attempts is one of the most prominent predictors of subsequent suicidal behaviour, yet the suicide prevention for these well-known high-risk individuals remains undeveloped. Therefore, we carried out a systematic review to examine the results of interventions aimed at suicide attempters requiring admission to an emergency department (ED) for critical care, and to identify successful strategies and areas needing further exploration.

Method
We conducted a search of PubMed, PsycINFO, CINAHL, and EMBASE, for randomized controlled trials (RCT) examining the effects of interventions for suicide attempters. Studies were included if they met the following criteria: i) all participants were suicide attempter or deliberate self-harm within a month, ii) it is described in the manuscript that assessment for eligibility or initial intervention of study was performed during the period when patients admitted in ED, iii) studies were RCT and the effect of intervention was described in the manuscript. Also, studies were excluded if they met the following criteria: i) experimental intervention was simply to treat physical problems, ii) manuscripts were not written in English, iii) only the secondary analysis data were provided.

Results
A total of 7207 articles were examined; PubMed (N=1740), PsycINFO (N=2126), CINAHL (N=387), EMBASE (N=2936), and hand-searching (N=18). After removal of duplicates, 4867 articles were examined whether the study met the eligibility criteria. Several studies investigating the effects of interventions for suicide attempters admitted to ED were identified and included in the review. Many of the interventions examined in these reports had been previously developed for patients who did not admitted to an ED. There were several trials with apparently insufficient statistical power to detect effects on “suicidal death” as an outcome. Instead, most of the studies used “re-attempt” as a primary outcome. In addition, several studies were using various psychometric tests to examine the effects of interventions.

Conclusion
This review suggests that there is no clear evidence to identify effective intervention aimed at suicide attempters requiring admission to ED for critical care. Further investigations are expected to accumulate knowledge and develop interventions for these well-known high-risk individuals.
PS2.08-2
Effect of Assertive Outreach after Suicide Attempt in the AID-trial
(Assertive Intervention for Deliberate Self-harm): A Randomized Controlled Trial

Morthorst, B1; Krogh, J1; Erlangsen, A2; Nordentoft, M1
1Research Unit, Mental Health Centre Copenhagen, DENMARK; 2Department of Mental Health, John Hopkins School of Public Health, Baltimore, UNITED STATES

Objective
To assess whether an assertive outreach intervention after suicide attempt could reduce the frequency of non-fatal and fatal suicidal acts compared to standard treatment.

Method
A randomised, parallel-group, superiority trial with blinded outcome assessment. The setting was outpatient intervention carried out at one location at Copenhagen University Hospital, Denmark. Participants were patients > 12 years of age with a recent suicide attempt. The intervention was case-management as assertive outreach providing crises intervention and flexible, problem solving, incorporating motivational support and actively assisting patients to scheduled appointments as add on to standard treatment. Main outcome was repeated suicide attempt and death by suicide recorded in medical journals and death register.

Results
In total 243 patients were included. During 12 months follow-up, we found that 20/123 (16%) patients in the intervention group had been registered in hospital records with subsequent attempt compared to 13/120 (11%) patients in the control group (OR=1.6, 95% CI 0.8 to 3.4; P=0.22). By contrast, self-reported data on new events showed 11/95 (12%) in the intervention group versus 13/74 (18%) in the control group (OR=0.6, 95% CI 0.3 to 1.5; P=0.27). Statistics of multiple imputations based on self-report estimated 15/123 (12%) and 23/120 (19%) for the intervention and control group, respectively (OR=0.7, 0.3 to 1.4; P=0.32).

Conclusion
We found no significant effect of assertive outreach compared to standard treatment. Comparing rates of events between register data and self-reported data this could indicate detection bias.

Trial registration ClinicalTrials.gov NCT00700089

PS2.08-3
ACTION-J: A Randomized, Controlled, Multicenter Trial of Post-suicide Attempt Case Management for the Prevention of Further Attempts in Japan

Kawanishi, C1; Yonemoto, N2; Yamada, M3; Inagaki, M2; Kawashima, Y2; Hirayasu, Y1
1Yokohama City University, JAPAN; 2National Center of Neurology and Psychiatry, JAPAN

Objective
Crisis intervention, psychiatric and psychosocial evaluation at emergency medical facilities, and follow-up care for suicide attempters are considered important components for preventing their later suicide. The aim of the ACTION-J is to examine the effectiveness of an extensive case management intervention for preventing later suicide in suicide attempters.

Methods/Design
ACTION-J is a single blinded randomized controlled trial. Potential study samples were suicide attempters who admitted to 19 emergency departments to receive medical treatment from July 1, 2006 to December 31, 2009 in Japan. After medically stabilized, crisis intervention including
psychiatric evaluation, psychosocial assessment, and psychological education were implement-
ed, further, they were randomly assigned to either a group receiving continuous case manage-
ment or a standard care group receiving standard care. The primary outcome measure was the
incidence of the first recurrent suicide attempt. The secondary outcomes included:
1) mortality rate,
2) the number and incidence rate of recurrent suicide attempts,
3) the number of self-harm behaviours,
4) the type and number of individuals and/or organizations to consult,
5) other medical services received,
6) physical function,
7) Beck Hopelessness Scale score,
8) BDI-II score, and
9) SF-36 score.
The stratified logrank test based on allocation factors will be performed for all eligible partici-
pants in the intent-to-treat analysis, in order to examine the null hypothesis that the two groups
are equal in the period of time until the incidence of the event.

Progress
Totally 914 subjects were randomized (continuous case management group: 460; standard care
group: 454); continuous case management intervention and follow-up were implemented for 1.5
to 5 years until the end of June 2011. A reference about any cause of death was made according
to the national registry data.

Conclusion
ACTION-J would provide valuable information on suicide attempters and may develop effective
case management to reduce risk of later suicide attempt on.

PS2.08-4
The Impact of Policy Initiatives on Self-harm
Kapur, N
University of Manchester, UNITED KINGDOM

Background and aims
Randomized controlled trials of interventions such as those discussed in this symposium pro-
vide ‘gold-standard’ evidence but can national policies also influence suicidal behaviour? Over
the last few years a number of policy documents and clinical guidelines relevant to self-harm have
been published in England. This presentation will attempt to assess the impact of these initiatives.

Methods
Data will be presented from a number of national studies including the Multi-Centre Self-Harm
Project, a study using routine hospital data to investigate the effect of follow up arrangements
following discharge from psychiatric in-patient care, and a recent study of 32 hospitals across
England.

Findings and conclusion
Although challenging to interpret, there is some evidence that policy initiatives and guide-
lines in England have had a positive influence on the management of people who have harmed
themselves. How might we maximise the impact of future national strategies? A focus on com-
prehensive implementation is likely to be of benefit. Assessing the impact of policy on mental
health practice is methodologically as well as practically difficult and robust systems of evalu-
ation are needed.
Note: This presentation discusses independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research scheme (RP-PG-0606-1247) and Policy Research Programme. The views expressed in this presentation are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

14:30 - 16:00
PS2.9 REGIONAL SYMPOSIUM LATIN AMERICA

PS2.09-1
Bullying and Suicide in Peruvian Children and Adolescents
Vasquez, F; Nicolas, Y; Falconi, S; Vite, V
National Institute of Mental Health, PERU

Objective
To study prevalence of Suicide in Peruvian children and adolescents victims of bullying during last year [2012]

Materials and methods
Descriptive and longitudinal design to study occurrence of suicide amongst Peruvian children and adolescents (less than 18 years old) as consequence of bullying, regarding relatives interviews, teachers and classmates testimonies, Internet notes, Police and Legal Medicine reports, as well as mass media informations.

Results
Of 53 children and adolescents reported to have been committed suicide during 2012 in Peru, it was established that 15 of them (28.3 %) were victims of bullying, being male ones 6 (40.0 %) and females 9 (60.0 %). July was the most prevalent month with 4 victims (26.7 %); According sub-groups of age, between 8 to 11 years old there were 2 victims (13.3 %), between 12 to 14 years old 7 victims (46.7 %), and between 15 to 17 years old 6 victims (40.0 %). Almost 90 % of victims had been reporting depressive states. Regarding thematic of bullying, it was reported offensive insults in 4 cases (26.7 %), physical abuse in other 4 cases (26.7 %), sentimental features in other 4 (26.7 %), and hostility via Facebook in other 3 cases (20.0 %). The type of bullying registered in sample was direct in 12 victims (80.0 %) and virtual in 3 cases (20.0 %). Suicidal methods amongst victims were: hanging in 12 cases (80.0 %), poisoning in 2 cases (13.3 %) and gun-shot in 1 victim (6.6 %). More fatal cases were reported in capital of country, Lima with 8 cases (53.3 %) while other 7 cases in rest of cities (46.7 %). Generally, victims came from low socio-economic classes in nearly 60 % of cases.

Conclusions
According to this study, nearly one third of Peruvian children and adolescents who committed suicide during 2012, was suffering bullying and its consequences, being this phenomena most prevalent amongst female ones, and almost half of victims aged between 12 to 14 years old. Furthermore, the majority of victims was suffering depressive states, The first suicidal method was hanging. Bullying was direct more than virtual, and most cases occurred in capital city; victims came from low socio-economic layers. Authors emphasize that suicide involving bullying phenomena is increasing dramatically along last 3 years over the country, consequently needs to be appropriately handled.
Biological Research in Latin America

Vallada, H
USP, BRAZIL

From the late nineteenth century there was an exponential growth in medical research and publications. This presentation will give an overview of the work carried out so far in this area and evaluate the Latin American scientific publications compared to international ones with respect to the association between genetic polymorphisms and suicide. The study is based on a PubMed search covering all journals without filters by date, language or types of articles. The search terms were: “Polymorphism, Genetic” [Mesh] AND “Suicide” [Mesh] and using the Mesh engine to maximize the number of available studies. Among the 350 articles evaluated, 16 (4.5%) are research institutions located in Latin America. Of these publications, two (12.5%) were of Mexican origin and the remaining 14 (87.5%) of Brazilian origin.

The most productive institution in this area is the Faculty of Medicine of Federal University of Minas Gerais, with 11 publications. Although Brazilian publications in psychiatry have demonstrated apparent quantitative and qualitative growth, the scientific production in suicide is still relatively small in relation to the international ones.

About Interventions in Countries of ASULAC Suicide Prevention Task.
With Special Emphasis on the Southern Cone

Boronat, C
ASULAC, ARGENTINA

The aim of this study is to summarize research, prevention tasks (concerning community, schools and health institutions), achievements of conferences or seminars, statistics, training of telephone assistance and many other devices to improve knowledge and to reduce suicide rates. From all this material available, it is possible to cross link the obtained data to clarify by zone, regions or countries, the existing resilience possibilities in Latinoamerican and Caribbean geography. The diversity of cultures, ethnicities and traditions in Latin America does not cooperate to clarify the causes of suicide, reasons and consequences. Instead, there are surely lots of complicated parameters that could explain the desire and action of dying in our young ´s continent population. We must get to know our roots and our desire of living, which made us strong and resilient, but also our way to die when personal or collective circumstances prevent or hinder it. Is there a desire to die in Latin America and the Caribbean? Or are there plenty of groups linked by the same circumstances that make them vulnerable? It is likely that this study, and the questions arising of it, could shed some light over the man’s most almighty desire: suicide.
Feasibility of Dialectical Behavior Therapy (DBT) with Suicidal and Self-harming Adolescents: Training, Adherence and Retention

Tørmoen, AJ; Grøholt, B; Haga, E; Brager-Larsen, A; Miller, A; Walby, FA; Stanley, B; Mehlum, L

1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2Institute of Clinical Medicine, University of Oslo, NORWAY; 3Oslo University Hospital, Division of Mental Health and Addiction, NORWAY; 4Montefiore Medical Center, UNITED STATES; 5New York State Psychiatric Institute, Columbia University, UNITED STATES

Study objectives
As preparation for a larger randomized controlled trial, the aim of this study was to evaluate the feasibility of a 16 weeks program of DBT for adolescents. Feasibility was measured by therapists' adherence, retention rate and changes in self-harm (SH) among the treatment completers.

Methods and materials
After translation of the DBT manual adapted for adolescents, the 16 weeks program with weekly individual therapy, multifamily skills-group and telephone consultation was implemented into five child and adolescent psychiatry outpatient clinics in Norway. Therapists were intensively trained and checked for adherence. Twenty-seven of the thirty-seven patients assessed for eligibility met the criteria for participation and were included. At baseline patients were assessed for DSM IV diagnosis, criteria of Borderline Personality Disorder (BPD), treatment history, and history of SH, divided into nonsuicidal-self-harm (NSSH) and suicide attempts (SA). Data on NSSH and SA (actions and urges) during treatment were collected from diary cards. Ten were interviewed a year after completing the treatment.

Results
The patients mean age was 15.7 years. Eighty-five per cent had at least one axis I diagnoses. Therapists were adherent, and retention was high, as twenty-one (78%) completed the entire program and 85% completed more than half of the treatment. Few reported SH during treatment. At follow up, seven of ten reported no SH.

Conclusions
DBT was feasible in a different country and in a different language than where it was evolved. The adherence score and the retention rate suggest it was well accepted by therapists and patients. Reductions in number of adolescents engaging in SH were observed during treatment. However, randomized, controlled trials are required to test whether DBT is more effective than treatment as usual.
**PS2.10-2**

**Assessment of Treatment Provided to Persons after Suicide Attempt: A Register-based, Multicenter Study**

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1Mental Health Centre Copenhagen, DENMARK; 2Competence center for Suicide Prevention, DENMARK; 3National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 4University of Southern Denmark, DENMARK; 5Clinic for Suicide Prevention, DENMARK; 6Center for Suicide Prevention, DENMARK

**Objective**

The aim of the current study is to examine treatment effect among persons receiving treatment after suicide attempt at regional suicide prevention centers in Denmark.

**Methods and material**

All users receiving treatment after suicide attempt at 7 regional centers of suicide prevention in Denmark during 1992 through 2010 were included in the study. Approximately 9,000 users received a psycho-social therapeutic intervention. Risk of following outcomes: repeated suicide attempt, death by suicide or other cause was examined. The control group consisted of persons who attempted suicide but did not receive the treatment - either due to lack of referral, declined treatment offer, or because they lived in a region where treatment was not offered. Controls were weighted using propensity scores for gender, age, educational level, previous suicide attempts, and previous psychiatric hospitalizations. We examined if treatment was linked to a lower risk of subsequent suicidal behaviour or mortality in general. In addition, it was examined if psychiatric diagnoses, having been placed in foster family, parents’ history of psychiatric diagnoses, job stability of parent predicted elevated risks of adverse outcomes.

**Results**

The on-going analyses are focusing on measuring a treatment effect by assessing risk of repeated suicide attempt, death by suicide, or death by other cause with respect to a control group of propensity score matched individuals who did not receive treatment. Participants were observed for maximum 18 years, which allow us to assess short and long term impact of treatment. In particular, we are interested in observing whether the time shortly after end of treatment or, for instance, during a later psychiatric hospitalization might be linked to increases in risk of adverse outcomes. All participants and controls were observed over time using nationwide register data ensuring a complete follow-up.

**Conclusion**

Attempted suicide is one of the strongest predictors for death by suicide. Evidence-based assessment of the provided treatment is needed in order to ensure optimal care. The study will inform on high risks groups. The findings of the study will assist improving treatment for persons after suicide attempt by determining if subsequent contact with previous users might be beneficial.
Māori who present to hospital after intentionally harming themselves, do so at a higher rate than non-Māori. There have been no previous treatment trials in Māori who self-harm and previous reviews of interventions in other populations have been inconclusive. These reviews have however indicated that problem solving therapy and sending regular postcards after the self-harm attempt may be an effective treatment.

We used a double consent Zelen design where participants are randomised prior to giving consent to enrol a representative cohort of patients. The study used a package of measures which include problem solving therapy, postcards, patient support, cultural assessment, improved access to primary care and a risk management strategy in Māori who present to hospital after self-harm. The main outcome was the number of Māori scoring below nine on the Beck Hopelessness Scale.

A total of 582 people presented to the three sites during the study. Of these, 365 met the inclusion criteria and were randomised. One hundred and eighty two people were randomised to
the intervention group and of these, 95 (52%) consented to participate. One hundred and eighty three people were also randomised to the control group, and of these 72 agreed to participate (39%). On the primary outcome measure of those scoring below 9 on the Beck Hopelessness Scale at 12 months there was no difference between the intervention and usual care group although there was a small but significant difference at three months. For the secondary outcome of re-presentation to hospital the intervention resulted in significantly fewer Māori presenting at three months compared to usual care but this difference disappeared at 12 months. Participants who consented to the intervention were significantly less likely to re-present to hospital for reasons other than self-harm in the year after their presentation. The qualitative process evaluation of the participants emphasised that they found having a therapy delivered by Māori helpful and that focusing on problem solving, culture and spirituality was acceptable. Participants commented that they often taught problem solving to others and would have liked the sessions to have continued for longer.

More research needs to be done to clarify what aspects of the initial assessment after self-harm should address knowledge, attitudes and behaviour around culture.

**PS2.10-4**

**ACCESS: An RCT of a Treatment Package including Problem Solving Compared to Treatment as usual in People who Present to Hospital after Self-harm**

Hatcher, S

The University of Ottawa, CANADA

Previous studies have suggested that problem solving therapy is an effective intervention in those who present to emergency departments of general hospitals with intentional self-harm (regardless of motivation). In a previous study we showed that problem solving therapy reduced the repetition of intentional self-harm after 12 months in those who presented with a repeat episode of self-harm but not in those who presented for the first time. To see if we could improve the effectiveness of the intervention we designed a package of measures to be offered to people who presented with self-harm and compared this to usual care.

The package consisted of six components, problem solving therapy; patient support; regular postcards over a year; risk management; cultural assessment; and a voucher allowing a free visit to a GP. The design of the study is unusual in that it is a Zelen design which has some advantages in health services research, the main one being that the findings are more generalisable than more conventional randomised controlled trials. It also informs several layers of decision making. The study recruited participants between August 2009 and May 2011 completing the last twelve month follow up in June 2012. The main outcome measure was re-presentation to hospital with self-harm at one year.

A total of 2140 people presented to the four sites during the study. In total 1474 people were eligible for inclusion and were randomized. 737 people were randomised to the intervention group and of these, 327 consented to participate. 737 people were also randomized to the control group, and of these 357 consented to participate. In an attention to treat analysis (all randomised) and a per protocol analysis (all those who consented) there was no difference at 12 months in the repetition rate. There were 20% fewer episodes in the intervention group at 12 months but this difference was not significant. Those who received the intervention had significantly more treatment as usual. The intervention also appeared to be more effective for those who presented with more serious suicide attempts although the differences were not statistically significant.
The dose of problem solving used in this study was lower than our previous study which may explain the lack of difference. Effective interventions after self-harm appear to be effective only in those groups who have a high rate of re-presentation.

**PS2.10-5**

“It Could Have Been Written About Me”: Participants’ Experiences of an Intervention Designed for People with Recurrent Suicide Attempts

O'Reilly, A; Gordon, E
Dublin City University, IRELAND

**Study objectives**

Individuals who make recurrent suicide attempts are described as a unique population requiring unique responses. This paper sets out the context for and outlines some of the key findings from a project carried out in Ireland which aimed to evaluate the effectiveness and acceptability of a Psychosocial/psychoeducational Intervention for people with recurrent Suicide Attempts (PISA), designed specifically for the target group in Canada.

**Methods and materials**

This study used a mixed methods design. Participants were individuals over 18 years of age who had made two or more self-reported suicide attempts over their lifetime and were availing of Irish public mental health services. Practitioners involved in delivering the intervention in these services also took part in the study. First, a pilot randomised control trial (RCT) was used to compare PISA and treatment as usual (TAU), and psychometric measures were administered to participants at pre-, post- and follow-up phases of data collection. Next, a single case design was used to determine whether certain characteristics of those in the intervention group influenced completion. Finally, qualitative interviews were conducted with client and practitioner groups, and attendance records and scores on a client satisfaction questionnaire administered to PISA participants were examined to explore the acceptability of the intervention in the Irish context.

**Results**

This paper will focus on the key findings which emerged from the project relating to the effectiveness of the PISA intervention, drawing on pre-, post- and follow-up data with PISA and TAU participants and interviews with participants. Quantitative data were analysed using PASW version 18 while qualitative data were analysed using thematic analysis.

**Conclusion**

The implications of key findings from this component of the project are discussed. These findings will be used to inform the future development and delivery of treatments for individuals with recurrent suicide attempts.

**PS2.10-6**

Processes of Building a Therapeutic Alliance with Suicidal Clients; A Longitudinal Qualitative Case-by-case Study

Østlie, K¹; Haavind, H²
¹Lovisenberg hospital, NORWAY; ²University of Oslo, Department of Psychology, NORWAY

**Study objectives**

Suicidal clients are overwhelmed by mental pain and consider suicide as the only way to escape...
or handle this pain. This may affect the client’s ability to establish and stay in a relationship - including a therapeutic one. Although it’s difficult, a good therapeutic relationship is probably necessary for starting a process of change. This dilemma makes me ask; how is an alliance that contributes to expand the client’s feeling of safety, possibilities and hope established?

**Method and material**
I have explored the establishment of a therapeutic alliance for 22 suicidal clients who started in psychotherapy immediately after discharge from a psychiatric ward. All clients were interviewed about their personal biography and suicidality, as well as their expectations for the therapeutic process just before they start therapy. The clients were interviewed again after 3 sessions of therapy and their therapists are now included in the study. The therapists are employed at a district psychiatric unit or they are psychologists or psychiatrists in independent practice. The clients and their therapists are followed to the end of therapy or in a maximum of 1 year. Standardized instruments as WAI and SSF are used regularly in the study. For this presentation I have selected 2 cases that started with a good therapeutic alliance and 2 cases that started with a troubled alliance.

**Results**
The cases selected describes different directions in the processes of building a therapeutic alliance. Some of the clients have an objectifying way of looking at themselves and their suicidality; it’s a thing, an illness, out of their control, someone else must treat their symptoms. If the therapist doesn’t agree, building the alliance starts with negotiations; what is who’s responsibility? In contrast, some therapists have an objectifying way of looking at their clients; they have an illness that should be treated. If the clients don’t agree, it’s difficult for them to negotiate. If both the client and the therapist agree in what I will call a “subjectifying” position, or in an objectifying position, the building of an alliance seems easier.

**Conclusion**
Looking at suicidality from a subjectifying or an objectifying position have consequences for building the therapeutic alliance, and also for how suicidality is handled and discussed in therapy.

14:30 - 16:00

**PS2.11 SUICIDE PREVENTION IN THE ELDERLY**

**PS2.11-1**
Suicidal Ideation and Suicide Attempts in Women Followed Over 42 Years: A Population-based Study
Mellqvist Fässberg, M1; Hällström, T1; Joas, E1; Östling, S1; Gustafson, D1; Wiktorsson, S1; Kaplan, M2; Hawton, K3; Skoog, I1; Waern, M1
1University of Gothenburg, SWEDEN; 2Portland State University, UNITED STATES; 3University of Oxford, UNITED KINGDOM

**Background**
Most population studies that focus on risk factors for suicidal behaviour in late life are cross-sectional and lack data regarding previous episodes of suicidality.

**Aims**
The aim of this study was to examine the course of suicidality in women followed from mid-life to late life.
Methods
Data are derived from The Prospective Population Study on Women in Göteborg (PPSW) which is a multidisciplinary study on a representative sample of women starting in mid-life. Women born 1908, 1914, 1918, 1922 and 1930 were first examined in 1968-69 (n=800), and were re-examined in 1974-75 (n=677), 1981-82 (n=629), 1992-93 (n=574), 2000-2002 (n=449), 2005-2006 (n=334) and 2009-2010 (n=182). In 1968, detailed history of mental health problems was taken by a psychiatrist. Since 1974, past month psychiatric signs and symptoms were rated according to the Comprehensive Psychopathological Rating Scale (CPRS). Suicidal feelings were rated in accordance with the Paykel questions since 1992.

Results
Nearly half of the women (47 %) reported that they had at some point had ideas that life was not worth living. A further 32 % had a lifetime history of suicidal ideas. At the time for the baseline examination in 1968, 15 % had experienced suicidal thoughts and 4 % reported suicide attempts. Over the entire study period, total of 13 % of the women had attempted suicide at some point. In further analyses we will follow the course of suicidal thoughts and attempts in the individual women over the 42-year follow up.

Conclusion
This unique sample provides an opportunity to examine suicidality in a life course perspective in women.

PS2.11-2
Contacts with Health Professionals before Suicide: Missed Opportunities for Prevention?
De Leo, D1; Draper, B2; Snowdon, J3; Kolves, K1
1Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA; 2School of Psychiatry, University of New South Wales, AUSTRALIA; 3Sydney Medical School, University of Sydney, AUSTRALIA

Study objectives
Suicide prevention in older people is currently focused on screening for and treatment of depression, particularly at the primary health care level. But do people who have a diagnosable mental health disorder at the time of suicide visit health professionals frequently enough to be intercepted? And what level of health care has the potential to detect different mental health problems? This presentation aims to present analyses of contacts with different health professionals in the three months prior to death in suicide cases compared to sudden death controls; and, to analyse contacts with health professionals among people who died by suicide having a diagnosable mental health disorder at the time of suicide compared to those who did not have such a diagnosis within four major groups of conditions in middle aged and older adults.

Methods
The psychological autopsy method was utilised to investigate suicides of individuals over the age of 35-59 years and 60 years and over. A case-control study design was applied using sudden death cases as controls. Odds ratios with a 95% confidence interval were calculated.

Results
In total, 261 suicides and 182 sudden deaths were involved. In terms of contacts during the last three months prior to death, 85.5% of suicides and 89.9% of sudden deaths aged over 60 years visited a general practitioner (GP). Persons who died by suicide had significantly more frequently contacts with mental health professionals than sudden death controls did. People with a diagnos-
able mental health disorder at the time of suicide attended GP surgeries with approximately the same frequency of people without a diagnosis at GP level for both age groups.

**Conclusion**
Similar proportion of older adults who die by suicide and by sudden death, seek for help from health care system, mainly from GPs in three months prior to their death. With reference to health care contacts, people who had or did not have a diagnosable psychiatric disorder are not distinguishable at the GP surgery level. These results apply to both age group. It is possible that GPs (and other clinicians) may fail to dedicate due attention to suicidal people for a number of reasons. Furthermore, the task of identifying and treating a suicidal person can be quite challenging.

**PS2.11-3**
**A Multidimensional Approach to Loneliness among the Elderly**
Fleischer, E; Jessen, G
NEFOS - The Network for Bereaved and Relatives, DENMARK

Since Durkheim, the term ‘loneliness’ often appears in international literature as a risk factor for suicidal behaviour, particularly among the elderly. However, rarely the term takes notion of how ‘loneliness’ is being defined and how the individual person experiences it. Theoretically, several variations of the term appear in literature, e.g. ‘emotional loneliness’ and ‘social isolation’ (Weiss, 1975). Inspired by Sartre ‘loneliness’ is also described as an overall human challenge (existential). In modern times, social loneliness has also been defined as ‘unwanted’ or ‘undesired alone’.

As a new developed method and tool, the underlying basis in a Danish ‘loneliness prevention package’ (www.ensomhed.info) is a multidimensional construction of loneliness with a tripartition of the term ‘loneliness’: existential - emotional - social, with emphasis on the former two. Existential and emotional loneliness are also seen as causes of retraction, isolation and thereby social loneliness. In all, the package consists of 4 parts:
- Film [documentary of elderly, introduction film, film for training purposes and more]
- Guide [a pocket guide for various professionals - with animated introduction]
- Book (‘When heaven is near’ [Danish title: ‘Når himlen er nær’] - anthology: ‘How the elderly experience the various forms of loneliness’. To be published in 2013.)
- Homepage [all material is freely available].

**PS2.11-4**
**Depressive Symptoms in Elderly Suicide Attempters: A Prospective Study**
Wiktorsson, S; Joas, E; Waern, M
Institute of Neuroscience and Physiology, Göteborg, SWEDEN

**Study objectives**
Elderly have high suicide rates and attempted suicide is a strong predictor for completed suicide, particularly in late life. The prevalence of depression is high among older people with suicidal behaviour. The aim was to examine changes in depressive symptoms among elderly suicide attempters between index attempt and at one-year follow-up.

**Methods and material**
Sixty elderly suicide attempters aged 70 and above were followed one year after a suicide at-
ABSTRACTS ⁄ THURSDAY

tempt. There were 28 men and 32 women (mean age = 80.4 years, range 71-90). Participants were recruited at 5 hospitals in western Sweden in connection with a suicide attempt. All sixty participants completed the Swedish version of the Geriatric Depression Scale (GDS-20) at index attempt and at a one-year follow up. A GDS score ≥6 is considered a suspect depression.

Results
Forty-five persons (75%) scored (≥6) within the suspected depression category at index attempt. A reduction in GDS-20 mean scores at index attempt was observed at one-year follow-up (9.60 vs. 6.67, t = 5.28, df = 59, p = <0.001). Nine GDS items including loss of interest, memory complaints and pain showed no significant reduction in score. Thirty persons (50 %) scored within the suspected depression category at one-year follow-up.

Conclusion
Depressive symptoms decreased in the one-year follow-up period. Although improvement could be expected due to regression towards the mean, half of the elderly suicide attempters still had a suspected depression according to the GDS. More intensive depression treatment may be required in the long run to prevent risk of repeated suicidal behaviour.

PS2.11-5
An Innovative Suicide Prevention Program for Depressed Older Adults
Lapierre, S1; Dubé, M1; Marcoux, L1; Desjardins, S1; Miquelon, P1; Alain, M1; Boyer, R2
1University of Quebec in Trois-Rivieres, CANADA; 2University of Montreal, CANADA

The realization of personal goals is positively related to psychological well-being, life satisfaction, happiness, self-esteem, and gives meaning to one’s life. Since reasons for living and meaning in life are incompatible with suicide, an intervention program centered on the realization of personal goals was developed as an innovative way to decrease depression and suicidal ideations in older adults living in the community.

The program is based on a cognitive-behavioural approach that guides participants through the learning process of skills and knowledge that may be relevant to efficient goal pursuit. The 14-week group intervention program was offered to help participants set, plan, pursue, and realize meaningful personal goals in order to promote their mental health, increase their psychological well-being and quality of life. The 24 participants (14 women, 10 men), aged 65 to 84 years (M = 68.6), were moderately depressed (Beck Depression Inventory-II, M = 21.1). They completed questionnaires on goal realization, depression, anxiety, and suicidal ideations as well as various measures of well-being at three times (pre, post, and follow-up, six months later).

Results indicated that an improvement was observed on goal realization abilities (F(2, 46) = 11.46, p < 0.001), and that depressive symptoms had decreased significantly (F(1.48, 34.03) = 20.86, p < 0.001), as well as suicidal ideations (F(2, 46) = 5.99, p < 0.01), and anxiety (F(2, 46) = 10.75, p < 0.001). Progress was maintained six months later. Results also indicated an increase in serenity (F(2, 46) = 7.76, p < 0.001) and in life satisfaction (F(2, 46) = 5.67, p < 0.01). Repeated manovas (time X gender) showed that men improved as much as women. This goal intervention program seems efficient to improve psychological well-being of depressed older adults and could be an innovative approach to suicide prevention, especially for men.
14:30 - 16:00
PS2.12 NEW FOLLOW-UP STUDIES

PS2.12-1
Prospective Self-harm is Predicted by Borderline Diagnosis and -criteria, and PTSD Diagnosis in Patients Admitted to a Psychiatric Acute Ward
Mellesdal, L1; Gjestad, R1; Johnsen, E1; Jørgensen, HA1; Kroken, RA1; Ødegaard, KJ1; Mehlum, L3
1Haukeland University Hospital, NORWAY; 2University of Bergen, NORWAY; 3National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Objectives
A large proportion of admissions to psychiatric acute wards are suicide risk related. Many of these patients continue to engage in suicidal behaviour over longer time periods; this is particularly true for subjects with Borderline Personality Disorder (BPD) and patients with Posttraumatic Stress Disorder (PTSD). The comorbidity between BPD and PTSD is well-known, but how the borderline and PTSD syndrome in combination influence the risk of further self-harm is less studied.

Aim
We wanted to study what borderline characteristics are associated with prospective self-harm when adjusted for a diagnosis of PTSD.

Methods
Altogether 308 non-psychotic patients were randomly selected from all patients admitted to a psychiatric acute ward due to suicide risk. The patients were interviewed at baseline (during acute admission) and at six months follow-up (response rate =91%). Baseline assessments included the M.I.N.I. International Neuropsychiatric Interview for DSM-IV Axis I disorders and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II). Additionally to assessing the diagnosis BPD, the presence of all BPD criteria was scored and rated on a 5 point Likert scale. Data on hospital referred self-harm (HSH) were retrieved through register linkage covering the six months follow-up period. Separate Mplus Two-part regression models were used to predict a binary part describing whether HSH occurred or not, and a continuous part describing the frequencies.

Results
The diagnosis of BPD predicted HSH during the follow-up both when analysed separately and in combination with PTSD. The single BPD criteria ‘suicidality’, ‘affective instability’ and ‘impulsivity’ predicted HSH during follow-up even after adjusting for a diagnosis of PTSD. The strongest association, however, was between PTSD and HSH.

Conclusion
Using structured diagnostic tools that include assessment of the BPD criteria is recommended for all patients with suicide risk related admissions to psychiatric acute wards. Because PTSD was an even stronger predictor of prospective self-harm than the diagnosis of BPD, it is also important to ensure that PTSD is assessed. Treatment targeted towards problems related to affective instability, impulsivity and PTSD symptoms may reduce the risk of suicidal behaviour in these patients.
**PS2.12-2**  
The Association between Depression and Suicide when Hopelessness is Controlled for  
Zhang, J\(^1\); Li, Z\(^2\)  
\(^1\)State University of New York Buffalo State, UNITED STATES; \(^2\)Shandong CDC, China, CHINA  

**Study objectives**  
We retested the relationship between major depression and suicide with hopelessness as a control variable, with the hypothesis that the strong relationship between depression and suicide will decrease or disappear when hopelessness is controlled for. Also, hopelessness can be accounted for by psychological strains resulted from social structure coupled with individual characteristics.  

**Methods and material**  
This was a case-control psychological autopsy study, in which face-to-face interviews were conducted to collect information from proxy informants for suicide victims and living subjects in rural Chinese 15-34 years of age who died of suicide (n=392) and who served as community living controls (n=416). Major depression was assessed by the Chinese version of the Structured Clinical Interview for DSM-IV (SCID). Hopelessness was measured by Beck Hopelessness Scale.  

**Results**  
A strong association between major depression and suicide was observed after adjustment for socio-demographic characteristics. When hopelessness was added to the analysis, the depression-suicide relationship was significantly decreased in all the six regression models.  

**Conclusions**  
Although depression as well as other mental illness is a strong risk factor for suicide, depression and suicide are both likely to be related to hopelessness, which in turn could be a consequence of psychological strains resulted from social structure and life events. Future studies may examine the causal relations between psychological strains and hopelessness.

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**PS2.12-3**  
Psychosocial Risk and Protective Factors of Suicidal Ideation among Clinical Patients with Depression  
Ando, S\(^1\); Kasai, K\(^2\); Matamura, M\(^1\); Hasegawa, Y\(^1\); Hirakawa, H\(^3\); Asukai, N\(^1\)  
\(^1\)Tokyo Metropolitan Institute of Medical Science, JAPAN; \(^2\)The University of Tokyo, JAPAN; \(^3\)Hirakawa Clinic, JAPAN  

**Background**  
Depression is a major risk factor for suicide, but psychosocial risk and protective factors of suicide among clinical patients with depression have not been examined in detail. The purpose of this study was to investigate psychosocial factors which could be associated with suicidal ideation among clinical patients with depression, including help-seeking behaviour, reluctance to admit mental health problems, and taking sick-leave.  

**Methods**  
A cross-sectional survey was conducted in 2012 at outpatient psychiatric clinics in Tokyo using a self-questionnaire. Adult outpatients who met the criteria for mood disorders (F30-F39) in the International Classification of Diseases-10 (ICD-10) were included in the study, and those who met the criteria for current hypomanic or manic episode were excluded from the study.
Results
A total of 189 patients with depression participated in the survey. Multivariable logistic regression analysis showed that having sought help from family before consultation with a psychiatrist and taking sick-leave were associated with decreased odds of current suicidal ideation. On the other hand, reluctance to admit one’s own mental health problem tended to increase risk of suicidal ideation.

Conclusions
Targeting a self-reliant personality and promoting help-seeking from others, including family members, about mental distress may be effective in suicide prevention. Industrial physicians and health staff should consider the taking of sick-leave when they see employees who have severe depression.

PS2.12-4
Insomnia as Predictor of High Lethality Suicide Attempts
Pompli, M
Sapienza University of Rome, ITALY

Introduction
Research has demonstrated that patients with insomnia are at an increased risk of experiencing suicidal ideation and/or making a suicide attempt.

Objectives
To evaluate the relation between insomnia and suicidal behaviour.

Aims
To examine factors associated with a diagnosis of insomnia in patients admitted to an Emergency Department (ED) and assessed by the psychiatrist in charge.

Methods
Participants were 843 patients consecutively admitted to the ED of Sant’Andrea Hospital in Rome, between January and December 2010. All patients admitted were referred to a psychiatrist. A clinical interview based on the MINI and a semi structured interview were conducted. Patients were asked about “ongoing” suicidal ideation or plans for suicide. Clinical diagnoses were assigned according to ICD-10 criteria.

Results
Forty-eight percent of patients received a diagnosis of Bipolar Disorder (BD), Major Depressive Disorder (MDD), or an anxiety disorder; whereas, 17.1% were diagnosed with Schizophrenia or other non affective psychosis. Patients with insomnia (compared to patients without insomnia) more frequently had a diagnosis of BD (23.9% vs. 12.4%) or MDD (13.3% vs. 9.5%; p < 0.001). Moreover, patients with insomnia less frequently had attempted suicide in the past 24 hours (5.3% vs. 9.5%; p < 0.05) as compared to other patients, but those patients with insomnia who attempted suicide more frequently used a violent method (64.3% vs. 23.6%; p < 0.01) than other suicide attempters.

Conclusions
Our results do not support an association between insomnia and suicidal behaviour. However, suicide attempters with insomnia more frequently used violent methods, and this phenomenon should be taken into serious consideration by clinicians.
Supported Housing for Patients with Schizophrenia.  
A Cohort Study of Patients Acutely Admitted to Hospital  
Wiker, TS1; Kroken, RA1; Mellesdal, L1; Gjestad, R1; Mehlem, L2; Ødegaard, KJ1; Johnsen, E1  
1Psychiatric Division Haukeland University Hospital, NORWAY; 2National Centre for Suicide Research and Prevention, NORWAY

Background  
Schizophrenia is a severe psychotic disorder that affects 0.7% of the general population and is diagnosed in late adolescence or early adulthood. Patients with schizophrenia have a 20 years reduced life expectancy caused by high suicide rates and increased risk of lifestyle diseases (3,4). The disease involves one or more periods of serious psychotic symptoms and a functional impairment that persists beyond the psychotic episodes (1). This functional impairment influences daily living, social and working skills, (2) and treatment adherence.  
Supported housing schemes involve self-contained apartments located in one site, specifically for persons with severe mental illness. Professional health care providers are available on site based on the person’s individual needs. This high-cost care has emerged in the wake of deinstitutionalization. There are, however, few studies that assess the effects of supported housing on different patient outcomes.  
The aims of this study are to investigate 1) patient related factors/predictors associated with the admission to a supported housing scheme and 2) how supported housing affects treatment adherence, hospital re-admission and suicidal behaviour.

Methods  
All patients with the diagnosis of schizophrenia (n=400) discharged between 1.May 2005 and 31.Dec 2010 from the Psychiatric Clinic of Haukeland University Hospital were included in an open cohort study. On admission to hospital demographic data, prior hospital admissions, co-morbidity, legal formality, Global Assessment of Function-Split Version (S-GAF) and (Health of the Nation Outcome Scale (HoNOS) scores, were registered. Data regarding the psychiatric follow-up was acquired from the medical records, i.e. time to discontinuation of antipsychotic medication, concomitant psychosocial treatment and readmission. Data from somatic hospital admissions caused by suicidal behaviour were registered.  
Planned statistical analyses are descriptive analyses on demographic data, survival analyses (Kaplan-Meier plots and univariate and multivariate Cox proportional hazard ratios).  
The planned analyses will be performed during spring 2013.

Results  
Results will be ready for presentation at the conference.

Conclusion  
The results from this study will have implications for the use of supported housing in the treatment and care for patients with schizophrenia.
The Effectiveness of Volunteer Mentorship Program for Young Adults with Deliberate Self-harm Behaviors

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Background

It is evident that continuity of care, problem solving therapy, easy access to services and brief contacts are effective in reducing re-attempt rates of individuals with deliberate self-harm behaviours (DSH). In this study, volunteer mentors were used to provide support and care to DSH patients with the above-mentioned elements. It aims to investigate if the use of volunteer mentorship as an intervention is effective in reducing the re-attempt rates of young adults with DSH episodes.

Method

DSH patients aged 18-34 with low to moderate suicide risk (Beck Suicide Intent Scale: 0-12) were assigned in either the control or the intervention group after they are discharged from the accident and emergency unit of public hospitals. Trained volunteer mentors were assigned to provide a nine-month follow-up service to DSH patients in the intervention group. The follow-up services consisted of emotional support, information of community services, guidance on problem solving and referrals to professional services. Three times of measurements were conducted for both the intervention and control group during the 0, 3-mth and 9-mth intervals based on the level of suicide risk (ASIQ), number of re-attempts, level of hopelessness, problem solving ability and help-seeking attitude of all DSH patients.

Result

A total of 74 cases (38 intervention group; 36 control group) had been recruited and completed the entire 9-month observation period. There is no significant age and gender difference between the two groups. Preliminary results show that the intervention group record a substantial reduction of 46.6% in the mean score of ASIQ at the 3rd measurement time-point whereas that of the control group only reduced by 11.4% suggesting that volunteer mentorship scheme may have a positive effect on reducing suicide risk. Results on other outcome indicators and their implications on future practice will be discussed in the presentation.
16:30 - 18:00

PS2.13 SUICIDE ATTEMPT, PSYCHIATRIC DIAGNOSIS AND RISK OF LATER SUICIDE

PS2.13-1
Bipolar Disorder and Suicidal Behavior: Follow-up of 6088 Bipolar Patients in a National Quality Register
Tidemalm, D¹; Landen, M²; Runeson, B¹
¹Karolinska Institutet, Centre for Psychiatry Research, SWEDEN; ²Sahlgrenska Academy, Institute of Neuroscience and Physiology, SWEDEN

Study objectives
Bipolar disorder is an illness associated with high risk of self-harm and suicide. More knowledge is needed about specific risk factors for suicidal behaviour in bipolar disorder. We wanted to study predictors of attempted suicide in a national cohort of bipolar patients. Our hypotheses were that (1) lifetime presence of suicide attempts at baseline, (2) recent affective episodes at baseline, and (3) presence of complicating social factors (e.g., family- or work-related) at baseline would predict suicide attempts during follow-up. Further, we hypothesized that (4) there would be differences in risk of attempted suicide between the subtypes bipolar disorder type 1, type 2, NOS, and schizoaffective disorder, bipolar type.

Methods and material
The study population was 6088 bipolar patients registered in the Swedish National Quality Register for Bipolar Disorder (BipoläR) 2004-2011 and followed by yearly follow-ups 2005-2012 (mean total follow-up time 2.4 years). BipoläR is one of several somatic and psychiatric national quality assurance registers established in the Swedish health care system during later decades. The register contains detailed individual patient data, usually collected by staff specifically trained in the diagnosis and treatment of bipolar disorder. Data for the study was extracted in December 2012. The outcome variable was attempted suicide during follow-up. To compute adjusted odds ratios (OR), the explanatory variables according to our hypotheses were included in multiple logistic regression models, together with potential confounders like age and gender.

Results
Lifetime presence of suicide attempts at baseline (OR=4.8, 95% CI 3.7-6.3), affective episodes during the year before baseline (OR=3.7, 95% CI 2.5-5.4), and presence of complicating social factors (OR=1.6, 95% CI 1.3-2.0) predicted attempted suicide during follow-up. There were no significant risk differences between the four subtypes of bipolar disorder.

Conclusion
Previous suicidal behaviour was the strongest predictor of suicide attempts during follow-up. Suicide prevention efforts for bipolar patients should also take into account complicating social factors and recent affective episodes, since both seem to be independent risk factors for attempted suicide. The specific features of recent episodes may be more important than bipolar subtype for the risk of suicidal behaviour.
PS2.13-2
Suicide Attempt, Psychiatric Diagnosis and Later Suicide - National Cohort Studies
Runeson, B; Tidemalm, D; Haglund, A
Karolinska Institutet, SWEDEN

Long-term studies of cohorts from decades back followed up to today have shown that the risk of later completed suicide after a suicide attempt is associated with coexisting mental disorder and also with the method of the previous suicide attempt. However, long term follow-ups do not show the current perspective on the risk, short term risk of suicide is of particular value for the clinical assessment of risk. The relatively short follow-up period when studying a recent cohort was not considered problematic, since the risk of suicide generally is high in the first one or two years after a previous suicide attempt.

A Swedish national cohort of 33 724 individuals admitted to hospital because of suicide attempts 2000-2005 was analyzed. Data from the National Patient Register and the Cause of Death Register were linked and the cases followed up to 2008, i.e., for 3-9 years. Cox regression models yielded hazard ratios for suicide risk. Temporal patterns were plotted with Kaplan-Meier survival curves, calculated separately for each mental disorder.

In the cohort, 1170 suicides were found, of which 75% had used poisoning and 6% hanging as index attempt method. In total 72% of the suicide attempters had a coexisting psychiatric disorder; the remaining probably had subclinical mental disorders. The differences in risk of suicide between disorders were similar in males and females. The survival curves showed that bipolar affective disorder followed by nonorganic psychotic disorder and unipolar affective disorder had the steepest slopes, with early loss of lives through suicide. Hanging as index suicide attempt method was a strong predictor of later suicide in both males and females. Other violent methods (drowning, using firearm, and jumping from a height) had significantly higher risk than poisoning, in both genders.

The results from this study of suicide after suicide attempt show that risk patterns are similar to earlier decades. There is still a poor prognosis in severe mental disorder, with a particularly pronounced risk of completed suicide during the first years after a suicide attempt. Also in line with studies of earlier cohorts, the risk of subsequent suicide is especially high after an index attempt using hanging or another violent method.

PS2.13-3
Suicide within One Year after Psychiatric Inpatient Care - Cohort Study Of 2.9 Million Discharges
Lysell, H; Haglund, A; Larsson, H; Lichtenstein, P; Runeson, B
Karolinska Institutet, SWEDEN

Study objectives
Patients discharged from a psychiatric clinic have substantially elevated risk of suicide compared to the population. Previous studies have lacked statistical power to identify those who are at highest risk according to discharge diagnosis and other known risk factors. Further, studies for assessing suicide risk after discharge have almost exclusively focused on how to evaluate suicide risk in one or more years. Studies large enough to enable testing of clinically relevant hypotheses are needed. With this study, we wanted to focus on the suicide risk that concerns clinicians in wards, namely with the perspective of one week or month and not more than one year.
Methods and material
The cohort study conducted was based on Swedish national registries. Two point nine million discharges from psychiatric inpatient care 1973-2008 were included. The outcome variable was suicide during the first year after discharge. Emigration, death from other cause or re-admission resulted in censoring. We used Cox regression to calculate risk according to discharge diagnosis, with previous suicide attempt as a co-variante.

Results
There were 12,375 suicides during one year of follow-up; 28.1% (n=3470) occurred within one month after discharge and 10.7% (n=1327) within one week. Depression (HR=1.8, 95% CI 1.7-1.8) and personality disorder (HR=1.2, 95% CI 1.1-1.3) predicted suicide within one year. Depression was the strongest risk factor of suicide within one month (HR= 2.5, 95% CI 2.4-2.7) and one week (HR=2.7, 95% CI 2.4-3.1). Previous attempted suicide was an independent risk factor for suicide within one year (HR=2.3, 95% CI 2.2-2.4).

Conclusion
The risk of suicide after discharge from psychiatric inpatient care is affected by type of diagnosis. Depression is associated with the highest risk, especially in the clinically important short-term perspective. A history of attempted suicide constitutes a strong risk factor regardless of psychiatric diagnosis and should be considered when assessing suicide risk at discharge.

PS2.13-4
A One-year Observational Study of all Hospitalized and Fatal Acute Poisonings in Oslo: Epidemiology, Intention and Follow-up
Lund, C1; Teige, B2; Drottning, P3; Stiksrud, B4; Rui, TO5; Lyngra, M6; Ekeberg, O1; Jacobsen, D1; Hovda, KE1
1Oslo University Hospital Ullevaal, NORWAY; 2Institute of Forensic Medicine, NORWAY; 3Lovisenberg hospital, NORWAY; 4Diakonhjemmet hospital, NORWAY; 5Oslo University Hospital Aker, NORWAY; 6Akershus University Hospital, NORWAY

Background
Up to date information on poisoning trends is important. This study reports the epidemiology of all hospitalized acute poisonings in Oslo, including mortality, follow-up referrals, and whether the introduction of over-the-counter sales of paracetamol outside pharmacies had an impact on the frequency of poisonings.

Methods
All acute poisonings of adults (≥16 years) treated at the five hospitals in Oslo from April 2008 to April 2009 were included consecutively in an observational cross-sectional multicentre study. A standardized form was completed by the treating physician, which covered the study aims. All deaths by poisoning in and outside hospitals were registered at the Institute of Forensic Medicine.

Results
There were 1065 hospital admissions of 912 individuals; 460 (50%) were male, and the median age was 36 years. The annual incidence was 2.0 per 1000. The most frequent toxic agents were ethanol (18%), benzodiazepines (15%), paracetamol (11%), and opioids (11%). Physicians classified 46% as possible or definite suicide attempts, 37% as accidental overdoses with substances of abuse (AOSA), and 16% as other accidents. Twenty-four per cent were discharged without any follow-up and the no follow-up odds were highest for AOSA. There were 117 deaths (eight in hospital), of which 75% were males, and the median age was 41 years. Thus, the annual mor-
tality rate was 25 per 100 000 and the in-hospital mortality was 0.8 %. Opioids were the most frequent cause of death.

Conclusions
The incidence of hospitalized acute poisonings in Oslo was similar to that in 2003 and there was an equal sex distribution. Compared with a study performed in Oslo in 2003, there has been an increase in poisonings with a suicidal intention. The in-hospital mortality was low and nine out of ten deaths occurred outside hospitals. Opioids were the leading cause of death, so preventive measures should be encouraged among substance abusers. The number of poisonings caused by paracetamol remained unchanged after the introduction of over-the-counter sales outside pharmacies and there were no deaths, so over-the-counter sales may be considered safe. BMC Public Health 2012;12:858

PS2.13-5
Five-year Mortality after Acute Poisoning Treated in Ambulances, an Emergency Outpatient Clinic and Hospitals in Oslo
Lund, C; Bjornaaas, MA; Sandvik, L; Ekeberg, O; Jacobsen, D; Hovda, KE
Oslo University Hospital Ullevaal, NORWAY

Objective
The long-term mortality after prehospital treatment for acute poisoning has not been studied previously. Thus, we aimed to estimate the five-year mortality and examine the causes of death and predictors of death for all acutely poisoned patients treated in ambulances, the emergency outpatient clinic, and hospitals in Oslo during 2003-2004.

Methods
A prospective cohort study included all adults (≥16 years; n=2045, median age=35 years, male=58%) who were discharged after treatment for acute poisoning in ambulances, the emergency outpatient clinic, and the five hospitals in Oslo during one year. The patients were observed until the end of 2008. Standardized mortality rates (SMRs) were calculated and multivariate Cox regression analysis was applied.

Results
The study comprised 2045 patients; 686 treated in ambulances, 646 treated in the outpatient clinic, and 713 treated in hospitals. After five years, 285 (14%) patients had died (four within one week). The SMRs after ambulance, outpatient, and hospital treatment were 12 (CI 9-14), 10 (CI 8-12), and 6 (CI 5-7), respectively. The overall SMR after opioid poisoning was 27 (CI 21-32). The most frequent cause of death was accidents (38%). In the regression analysis, opioids as the main toxic agents (HR 2.3, CI 1.6-3.0), old age (HR 1.6, CI 1.5-1.7), and male sex (HR 1.4, CI 1.1-1.9) predicted death, whereas the treatment level did not predict death.

Conclusion
The patients had high mortality compared with the general population. Those treated in hospital had the lowest mortality. Opioids were the major predictor of death.
16:30 - 18:00
PS2.14 HELPLINES - ADVANCES IN THINKING

PS2.14-1
Befrienders Worldwide: Volunteer Action to Prevent Suicide Worldwide
Mishara, B
Centre for Research and Intervention on Suicide and Euthanasia, CANADA

Befrienders Worldwide (BW) is a network of mostly volunteer-based suicide prevention and emotional support centres offering help to distressed persons and providing suicide prevention activities. Befrienders Worldwide’s vision is to contribute to a society where suicide is understood both locally and globally, leading to fewer deaths by suicide. Our mission is to be a principal resource in emotional support delivered primarily by volunteers, and to share research which can lead to innovative service practices. We value giving a person the opportunity to explore feelings which can cause distress, the importance of being listened to, in confidence, anonymously, without prejudice and we value that a person has the fundamental decision about their own life. We have an impact on suicide and suicidal behaviour through a network of about 200 independent emotional support centres in over 30 countries. These centres provide an open space for those in distress to talk and be heard. This service is provided via telephone helplines, SMS messaging, face to face, outreach, partnerships and the internet. BW links suicide prevention centres around the world and has begun to implement a recruitment and a communications strategy in its 8 regions. We present the BW strategy and goals over the coming years. Results of the 2012 survey of member centres and their vision for BW will be presented as well as specific projects currently under way and being considered.

PS2.14-2
IFOTES Experience on the New Dimension of Web Based Crisis Intervention
Schumacher, S
IFOTES (International Federation of Telephone Emergency Service), GERMANY

For 46 years IFOTES brings together National Associations of Telephone Emergency Services mainly in Europe, which offer emotional support and crisis intervention under the original intent to prevent suicide and attempted suicide. These hotlines, mostly available 24 hours a day, enable those who call to benefit from a genuine human relationship based on listening skills through experienced trained volunteers. IFOTES mission and task is to promote the exchange of experiences amongst its national members and to support the development on quality and knowledge.

The observation of the last years is the continuous increasing demand on internet-based supporting offers. Many of our members started activities in web-based mail or chat counselling or show presence in social networks. First statistical data from some countries show differences in the use of the available media and shows the tendency that crisis intervention moves over more and more from telephone to internet. The presentation will present some first impressions and interpretations from the experience of help lines, which are engaged in web based crisis intervention.
**PS2.14-3**
The National Suicide Prevention Lifeline (USA): Innovative Crisis Center Approaches to Suicide Prevention
Murphy, G
National Suicide Prevention Lifeline, UNITED STATES

The National Suicide Prevention Lifeline (USA) is a network of over 160 crisis centers throughout the US that are linked through one toll free number. A primary mission of the Lifeline is to prevent suicide through reaching and effectively serving those at risk and a significant focus is placed on developing standards of service delivery that underscore both best practices in the field of suicide prevention and innovative approaches to reaching those at risk. All Lifeline centers are independently owned and operated and as member centers must adhere to practice standards developed by the Lifeline and its subcommittee of experts in the field of suicide prevention. This presentation will provide an overview of the Lifeline network, the Lifeline use of follow-up services, the development of chat and text (SMS) based services within the network and the value of using technology and social media in crisis intervention and suicide prevention.

**PS2.14-4**
Child Helplines: Giving a Voice to Children and Young People Worldwide
Martens, J
Child Helpline International, NETHERLANDS

Child Helpline International (CHI) is the global network of child helplines giving a voice to children and young people. CHI was founded in 2003 and has its Secretariat in Amsterdam. Currently, CHI has 173 members in 142 countries (October 2012). CHI assists with the establishment of child helplines in countries where there are none; provides training and knowledge exchange to strengthen child helplines; and uses information on the contacts that children and young people worldwide make, to contribute to the strengthening of national child protection systems. Children and young people reach out to child helplines when they are in need of assistance and care. Child helplines provide a listening ear, provide counselling and empower children to take their lives in their hands. If needed child helplines refer children to other child protection organisations or intervene directly. When child protection services are weak, child helplines step up and provide additional services such as shelter, rehabilitation services, education and legal services. Child helplines are available through telephone, outreach, post and walk-in centres but also more and more child helplines provide mobile and online services through SMS, chat, web and bulletin boards and web fora. Children and young people contact child helplines directly and voluntarily. As such child helplines have a unique insight on the issues that children and young people encounter in their lives on a daily basis. CHI collects this information and uses it to influence policy and decision making.

Since 2003, child helplines worldwide have received over 126 million contacts (and counting). Abuse and violence, peer relationships, family relationships, school related issues and psycho-social mental health are some of the most common issues that children and young people wanted to talk about.

During the symposium Helplines: Advances in thinking, CHI will present trends from ten years of data collection, such as the influence of the advent of internet and mobile technologies since
2003 and the impact of the economic crisis that is taking place since 2008. Also, some examples will be shown of the efforts that child helplines are making to use new internet and mobile technologies to stay accessible for a new generation of children.
For 50 years, Lifeline has been operating a telephone helpline in Australia to reach out to those people in distress, struggling with difficulties in their lives and not coping - possibly thinking of suicide. The model of service has been refined over this time, drawing on the experiences elsewhere in the world at the time of helplines establishment, being extended by the insights of practitioners and guided by emerging research evidence.

In 2008, Lifeline Australia released a Crisis Support Model to articulate the key features of service provision, and the anticipated outcomes for callers to the telephone helpline. This Model documented much of the knowledge that had been held within the Lifeline organisation on crisis support, but which had not been stated in a definitive way. The documentation of the Model also supports research and evaluation.

The Lifeline training program has been aligned to the Crisis Support Model, providing a consistency in the learning and supervision functions associated with the delivery of the telephone helpline. The training program is competency based and enables rigorous assessment of telephone crisis supporter competency against defined elements of knowledge, skill and attributes required to deliver the service according to the Crisis Support Model.

An evaluation on implementation of the Model took place in 2010. Positive feedback on its utility and relevance was obtained from paid and volunteer staff in Lifeline. Callers to the Lifeline telephone helpline have also provided feedback that the service process is satisfactory in meeting their needs, and helpful.

Lifeline Australia has also tested this model of crisis support with other services including Online Crisis Chat and a Suicide Hot Spots Emergency Phone Service. In these cases, research trials have shown that:
- the offer of help will attract people at a time of crisis, notably those who are suicidal;
- reductions in 'upsetness' occur for contacts to the online service (replicating other research findings on mood changes, e.g.: Kalafat et al.);
- it is possible to apply qualitative research methods to examine the fidelity with which the delivery of service occurs against the Crisis Support Model.

In conclusion, a documented model of service for crisis helplines can be seen to support service quality assurance, research and evaluation on service process and outcomes for consumers/callers. Such research helps build the evidence base for helplines.
16:30 - 18:00

PS2.15 TEEN SUICIDAL AND SELF-HARM BEHAVIOUR - CLINICAL ASPECTS

PS2.15-1
Young People Who Self-harm: Interview Study to Investigate the Experiences and Needs of Parents and Carers to Provide a Web-based Resource
Simkin, S\(^1\); Hawton, K\(^1\); Hughes, N\(^2\); Locock, L\(^2\); Stewart, A\(^3\)
\(^1\)University of Oxford Centre for Suicide Research, UNITED KINGDOM; \(^2\)University of Oxford Health Experiences Research Group, UNITED KINGDOM; \(^3\)Oxford Health NHS Foundation Trust, UNITED KINGDOM

Objectives
Self-harm in young people is a major problem worldwide, but relatively little research has been done on the needs of those who look after them. We are investigating the experiences of parents and carers of young people who have self-harmed in order to provide support and advice for both parents/carers and healthcare professionals. This will include development of a module for the website Healthtalkonline (www.healthtalkonline.org) and guides for parents and clinicians.

Methods
A literature search was conducted and an Advisory Panel of experts, including academics, clinicians, parents and service users, was set up to advise on content of the interviews, help with recruitment and review eventual topic summaries for the website. Interviews are being conducted in the United Kingdom with 40 parents/carers of young people up to the age of 25 who have self-harmed. The interview begins with an unstructured narrative where the parent describes their own experiences, followed by semi-structured questions on topic areas (identified through the literature search, clinical experience and input from the Advisory Panel) not already covered in the initial narrative. Qualitative analysis of the interview transcripts will identify important themes, which will be illustrated on the Healthtalkonline website with video, audio and written clips from the interviews. Guides for parents and clinicians will be produced, using the results of the interview study.

Results
The presentation will include an introduction to the Healthtalkonline website and methodology involved, and a description of the interviewed sample and important topic areas identified, illustrated with video and audio extracts from the interviews.

Conclusions
The study will provide information on the experiences and needs of parents/carers of young people who self-harm. The results will be used to produce a readily and freely available web-based resource (Healthtalkonline), a written and electronic guide for parents, and guidelines for clinicians to help them understand the impact of self-harm on parents and carers, and how best to support them.
**PS2.15-2**

**Piloting a Child and Adolescent Suicide and Suicidality Prevention Module which can be Deployed along the Spectrum of Clinical Care**

Glowinski, A1; Buxton, M2; Navsaria, N1

1Washington University School of Medicine, UNITED STATES; 2Washington University in St. Louis, UNITED STATES

**Background**

Even for those children and adolescents with psychiatric illnesses, at high risk of suicidality or suicide both during and beyond youth, and with access to mental health care, suicide risk assessment and suicide prevention are rarely done judiciously according to empirically derived principles and/or such tasks are typically considered to be the province of very specialized experts such as child and adolescent psychiatrists, who are in short supply.

**Methods**

An inter-disciplinary team with extensive educational, suicide/suicidality and child mental health expertise, consisting of a child and adolescent psychiatrist, a child and adolescent clinical psychologist and a social work student conceptualized and designed a semi-structured module focused on suicide risk education and prevention. By design, the module met the following criteria: a-based on relevant literature; b-usable by a wide range of clinicians other than just child and adolescent psychiatrists (e.g., medical students, social work students, social workers, psychiatric and other nurses, psychologists); c-easily tolerated by patients and, if applicable, families as an addition/enhancement to care as usual; d-brief; e-deployable across a range of clinical settings including outpatient therapy, outpatient psychiatry, emergency care, consult liaison psychiatry, intensive outpatient care and inpatient psychiatric care; f-developmentally sensitive; g-child and family phenotypically sensitive (e.g., mindful of variations in emotional labeling capacity among individuals and/or mindful of psychiatric phenotypes such as autistic disorders which likely impact ability to engage with rigid, non-modifiable educational modules).

**Results**

First phase data regarding feasibility and tolerability will be presented as well as iterative improvements to module based on those preliminary results.

**Conclusion and discussion**

We present a promising child and adolescent suicide and suicidality module, which can be deployed along the spectrum of clinical care and is part of a network of other complementary efforts undertaken to effectively prevent youth and/or later suicide in individuals already at increased risk during youth, as is very common for individuals who eventually commit suicide.

**PS2.15-3**

**Characteristics of Teenage Severe Suicide Attempters; Preliminary Cohort Study at the Emergency Department.**

Eto, N; Honda, Y; Kawano, N; Harada, K; Nishimura, R

Fukuoka University, JAPAN

**Background**

About 70 suicide attempters are conveyed to the Emergency and Critical Care Centre (ECCC) of Fukuoka University Hospital annually. We started the suicide prevention programme for teen patients severely injured after their attempted suicides from 2006. In his programme, we intend to prevent them from repeating further suicide attempts.
Objective
The goal of this study was to identify the characteristics of teenage (12-19 years-old) severe suicide attempters.

Subject and method
There were 273 suicide attempters (living at the point of discharge) admitted to the ECCC from April 2002 through to April 2012. Of the 273, 21 patients (7.7%) were teenagers. Those patients were evaluated by a psychiatrist during his/her hospitalization in the ECCC. Then they were provided the psychiatric intervention, including pharmacotherapy, psycho-social case management and family support. We conducted the follow-up studies until October 2012 by a psychiatrist of our suicide prevention team.

Results
Of those twenty-one teen suicide attempters, nine were male and eleven were female. As to the methods of suicide employed, jumping from a high place (12 patients) is the most prevalent, and there were poisoning (including ingestion of drugs and household materials) (8 patients), hanging (1) in order of number. Their average duration of hospitalization in the ECCC was 19.7 days. Psychiatric diagnoses (ICD-10 criteria) of those patients were Neurotic disorders (F4) 52%, Schizophrenia (F2) 29%, Mood disorders (F3) 19%. Fourteen patients continued their treatments in the psychiatric ward of this hospital. The average follow-up period was 35.5 months, and two patients (9.5%) repeated suicide attempts after their index episodes. All patients were still alive at the point of evaluation.

Conclusions
We conducted middle-long term follow-up studies of teen severe suicide attempters, and found most of them could return to normal life. Intensive evaluation and provision of psycho-social intervention at the emergency department for teen patients may affect positively psychiatric treatment after suicide attempts.

PS2.15-4
Communication Therapy for Parents of Young Suicide Attempters
Knudsen, AF; Fleischer, E
NEFOS - The Network for Bereaved and Relatives, DENMARK

Most suicidal acts in Denmark are suicide attempts by young people under the age of 30. Parents of young suicide attempters often live in fear of new attempts. This anxiety and uncertainty can lead to controlling and offensive parental behaviour.
A practical study conducted by NEFOS offer parents the choice of receiving:
1) Individual counselling (min. 5 sessions)
followed by
2) Group therapy (8-10 sessions)
Groups are led by two professional counsellors who offer cognitive therapy with systemic oriented parental support. Parents learn effective communication skills, which can help reduce relational conflicts. The learnt skills can lead to improved parental communication for the whole family and can help reduce levels of anxiety related to any, anticipated or eventual, new suicide attempts. Talking to parents about their communication skills enables them to tackle any potentially difficult or conflict filled situations in the home without panicking. Thus, by way of guidance and dialogue, parents receive the support they need to be able to communicate more appropriately and effectively within the family.
PS2.15-5
Suicide Risk Assessment in Child and Adolescent Mental Health Services
- Exploring the Relationship between Suicide Ideation and Suicide Behaviour
Sørensen, TBB¹; Larsen, KJ²
¹Centre for Suicide Prevention, Child and Adolescent Mental Health Services, DENMARK; ²Centre for Suicide Prevention, Child and Mental Health Services, Region of Southern Denmark, DENMARK

Study objectives
To explore the interrelationship between the severity and intensity of suicide ideation and the association with past and future suicide behaviour, and to examine the utility of The Columbia Suicide Severity Rating Scale© (C-SSRS) as a means for clinical risk assessment. The longitudinal study is conducted in a clinical population of high-risk children and adolescents.

Methods and materials
To track the interrelationship between dimensions of suicide ideation and suicide behaviour the study employs a retrospective and prospective design. Participants consist of outpatients treated and discharged from The Centre for Suicide prevention, Child and Adolescent Mental Health Services, Southern Denmark. Recruitment started in November 2012 (N=120, Male=19, female=101, Mean age=15, SD= 1.6,).

Inclusion criteria
12 to 19 years of age at presentation in the outpatient treatment facility.

Exclusion criteria
Mental retardation. Assessment of the severity and intensity of suicide ideation and suicide behaviour is obtained 3 times using a web-based self-report version of the C-SSRS. The index assessment takes place at presentation in the mental health treatment facility and at discharge and 6 months after discharge.

Preliminary results
Preliminary results from the retrospective study show that both the severity and intensity of suicide ideation are moderately correlated with the number of past suicide attempts with severity accounting for 17.3% of the variation (rs = .416, N = 118, p < .0005, one-tailed.) and intensity accounting for 12.7% of the variation (rs = .356, N =118, p < .0005, one-tailed). When regressing severity and intensity of ideation on the number of past suicide attempts using the method enter, only the severity of suicide ideation turned out to be significant*: F (2,115) = 10.430, p < .0005, (Adjusted R²= .139, B = .355, SE B = .129, β= .33, p = .007.) The prospective study is not completed hence no further results are reported.

Conclusion
The preliminary results indicate that the severity of suicide ideation as categorised in the C-SSRS is associated with repeated attempts. No other conclusions can be drawn as the prospective study is not finalised.

* VIF = 1.93, TOL = .52
PS2.15-6
Costs of Treatment for Self-harming Adolescents - A Comparison of Dialectical Behaviour Therapy and Enhanced Usual Care
Haga, E1; Aas, E2; Mehlum, L1
1National Centre for Suicide Research and Prevention/University of Oslo, NORWAY; 2Department of Health Management and Health Economics, NORWAY

Background
Repeated self-harm and underlying problems related to emotional dysregulation represents a major health problem among adolescents. Psychiatric treatment is resource-demanding for this patient group, and the frequent episodes of self-harm may lead to recurrent emergency room visits and/or inpatient admittance. Self-harm implies reduced quality of life for the adolescents, and heavy burdens for their families with potential productivity losses. To date knowledge on the cost-effectiveness of treatment of self-harm among adolescents is sparse.

Study objective
Based on a randomized controlled trial, the aim was to estimate the effect of dialectical behaviour therapy (DBT) compared with enhanced usual care (EUC) on incurred costs among adolescents with repeated self-harm.

Methods and assessments
Of a total of 77 participating adolescents (age 12-18 years), 39 were randomized to DBT and 38 to EUC. Data on outpatient trial treatment were collected from clinical records over the treatment period of 16 weeks period. Use of additional (non-trial) health services were estimated on the basis of interviews with adolescents and parents and on self-report. To estimate societal costs due to extra burden of care, parents were asked to report on absence from work. All treatment and other resource units were converted into monetary units.

Results
Clinical records showed that DBT-patients attended on average 13.8 individual sessions (SD=6.9), 2.6 family sessions (SD=2.2) and 11.2 group sessions (SD=5.9). The corresponding figures for EUC patients were 11.5 (SD=6.4), 5.8 (SD=9.8) and 0.5 (SD=2.1). Three DBT-patients used at least one psychotropic drug for a mean number of 94.7 days, and 5 EUC-patients used such medication for a mean number of 72.8 days. One DBT-patient and two EUC-patients were admitted to hospital due to self-harm, whereas two DBT-patients and five EUC-patients reported emergency room visits. Six DBT-parents and 10 EUC-parents reported absence from work due to extra care.

Conclusions
Preliminary results show that there were no significant differences between DBT and EUC with respect to use of outpatient treatment resources, except that the DBT-patients attended a significantly higher number of group sessions. Our preliminary findings suggest that the amount of resource use is similar in the two treatment methods; hence the choice of treatment should be based on clinical evidence of efficacy.
THURSDAY

16:30 - 18:00

PS2.16 CRISIS INTERVENTION APPROACHES

PS2.16-1

Cost-effectiveness of 'De Zelfmoordlijn',
A Helpline for Suicide Prevention in Flanders (Belgium)

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1Centrum ter Preventie van Zelfdoding, BELGIUM; 2University Gent, BELGIUM

A unique study was carried out in Flanders (Belgium) with the objective to evaluate the cost-effectiveness of 'De Zelfmoordlijn', a suicide helpline in Flanders, consisting of a telephone and chat service.

Methods

The effect of the helpline was calculated by combining 1) the characteristics of the population that uses 'De Zelfmoordlijn', 2) the effect of the intervention style on callers known from previous research, an empathic Rogerian style which also includes directive components and 3) the longterm probabilities of evolution of suicidal people described in literature.

This information was integrated in an age- and gender-dependent health-economic Markov model, with a time horizon of ten years. A Markov model is a useful model to describe long-term evolution of an illness by defining "transition"-states and by defining transition probabilities between these transition-states. The initial state is "at risk for suicide", other states are "first attempt", "re-attempt", "follow-up", "suicide" and "death from other causes".

In the Markov model, a one-year cycle-length was applied from a societal perspective, in order to predict cumulative costs and quality-adjusted life-years (QALYs) for users of the helpline. A situation with the existence of the helpline in its current format was compared with a situation without its existence. The effect of the helpline and costs associated with model states were obtained from published literature.

Results

Over a period of ten years, it is estimated that about 35% of suicides and of first suicide attempts can be avoided in the high-risk population that uses the helpline. Total costs for society decreases in a scenario with 'De Zelfmoordlijn' present result in net direct savings of +€500 per person in the population, and a net societal saving of +€5,000 per person in the population. The model predicts a minimal impact on QALYs, given the assumptions.

Conclusion

This modeling exercise predicts that the 'De Zelfmoordlijn' is an effective, cost-saving intervention, with a minimal impact on QALYs. The study introduces a new approach of determining the cost-effective value of suicide helplines which can stimulate policy decision makers to use public health funds appropriately.
PS2.16-2
‘In a Time of Crisis’ - The StandBy Critical Postvention Response (CPR) - A Tested 8 Week Community Crisis Intervention to Suicide Clusters and Contagion
Fisher, JM
National StandBy Response Service, United Synergies Ltd., AUSTRALIA

This presentation will discuss the development, implementation and outcomes of a systemic critical postvention intervention developed to respond to suicide clusters, contagions or increased community anxieties about suicidal behaviours. Guided by all available literature including the Australian resource - ‘Developing a community plan for prevention and responding to suicide clusters’ Pirkis J. 2012, this presentation will feature research outcomes from the delivery of this response in several communities. Also discussed will be the detailed CPR Criteria Assessment which uses vulnerability analysis, risk assessment and action planning to determine likelihood and needs identification. The presentation will also discuss aspects of workforce training and media management as well as the influence of community disaster practice, trauma response and the psychological first aid interventions in program development and operations. The presentation will also feature respectful approaches for cultural responses as guided by the StandBy YOUME-WHICHWAY Indigenous Training Program and the National StandBy Indigenous, Diversity & Clinical Advisory Groups. This program is supported by the Australian Government National Suicide Prevention Strategy.

PS2.16-3
Process and Outcome Evaluation of Taiwan Suicide Prevention Hotline: A Preliminary Study
Shaw, F1; Chiang, W2
1National Chi Nan University, TAIWAN; 2Taipei Lifeline Association, TAIWAN

Objectives
The purpose of this study was to examine (A) whether the hotline volunteer helpers demonstrated different helping techniques and models in responding to different callers, and (B) the relationships between helping techniques/models, types of caller, and the proximal reduction of callers’ mental disturbance and suicide risks.

Methods
A total of 300 anonymous phone records (including 100 first-time acute suicidals, 100 first-time suicides, and 100 first-time non-suicidals) were drawn from the Taiwan Suicide Prevention Hotline 2009 database. The records were then coded using (A) the Helper’s Response List (Daigle & Mishara, 1995) for identifying the helping techniques that the helpers demonstrated, (B) the Mental State Rating Scale (Kalafat et al., 2007; Mishara et al., 2007) for measuring the reduction of mental disturbance during the call, and (C) the Suicide Risk Scale (Gould et al., 2007) for measuring the reduction of suicide risk during the call. An exploratory factor analysis was conducted to detect the structure of helping techniques (i.e., helping models). A one-way ANOVA followed by post hoc tests were then performed for examining whether the helpers demonstrated different helping models in responding to different callers. Lastly, a hierarchical linear modeling was conducted for estimating the relationship between helping models, types of caller, and the proximal reduction of mental disturbance and suicide risk.
Results

Table 1 shows that helpers displayed (A) more non-professional behaviours when facing acute-suicidal and suicidal; (B) more active listening, caller-centered problem solving, and helper-centered problem solving behaviours toward suicidal and non-suicidal; and (C) more crisis responses when encountering acute suicidal. Table 2 and Table 3 show that facts gathering and crisis response were positively associated with the MSRS and SRS posttest scores, meaning that the more of facts gathering behaviours and crisis responses the helpers exhibited, the worse of the callers' status at the end of the call.

Caller-centered problem solving was negatively correlated to the SRS posttest score, meaning that the more of caller-centered problem solving techniques the helpers utilized, the lower of the callers' suicide risk at the end.
Live Emergency Negotiation with Highly Suicidal People Attempting Defenestration: A Case Report, Review of the Literature and Thoughts on Issues

Michaud, L; Krenz, S; Stiefel, F
Centre Hospitalier Universitaire Vaudois, SWITZERLAND

Study objectives
Suicide attempts in the presence of caregivers are rare but may occur and have a dramatic impact on those involved. In such a situation, caregivers are faced with complex issues. They have to establish contact with the person while managing the emotional impact of an imminently dangerous outcome, to communicate with security services to secure the area and finally, evaluating the possibility of intervening physically.

The first author was called to negotiate with a patient attempting to commit suicide by jumping down the stair cage of their psychiatric emergency unit. The patient had attached a rope around his neck and to the banister of the staircase and was preparing to jump. With several colleagues, the author began negotiating with the patient, in order to delay the acting and to allow security services to intervene. After approximately 30 minutes of negotiation, the patient jumped. While attempting to restrain him, the author wrapped the rope around his wrist and was severely injured. Another colleague was also slightly injured. Objective of the study was to analyze this event in order to initiate thinking on scientific and ethical issues that emerge in such situations.

Methods and materials
A literature search was conducted to identify research on this specific topic. Debriefing was conducted both with the medical and security staff. The first author also used both informal contacts with colleagues and an ongoing personal psychotherapeutic experience to address psychological and ethical issues.

Results
Literature search identified little research on emergency negotiation with highly suicidal people, such situations being usually associated with hostage negotiation. Technical debriefing revealed the difficulties related to coordination and the necessity for pre-established procedures. Psychological debriefing and informal discussions highlighted questions about the right and/or duty to intervene physically, the necessity to maintain personal safety and the omnipotence of the caregiver. Based on this discussion, general principles and recommendations will be presented.

Conclusions
Fortunately, emergency suicide negotiation is rarely necessary but nevertheless presents a series of complex questions for caregivers. This should be explored and addressed in suicide prevention training.
**PS2.16-5**

**Mixed Presenters in Emergency Departments**

Kuehl, S  
University of Otago, NEW ZEALAND

It is known that some people who endure both physical and mental health problems are at increased risk of suicide. Limited studies have explored their presentations to emergency departments (ED). This study is about people who presented to ED at least twice within a short timeframe, once with intentional self-harm (ISH) and another time for physical causes; and are called Mixed Presenters (MP) for the purpose of this study. The aim was to determine if Mixed Presenters are at increased risk of serious ISH including death and if ED management could be improved. A mixed method was used and for this presentation the qualitative findings will be shared. The sample was obtained from another study (Multi-level Intervention for Suicide Prevention (MISP)). MISP data from three New Zealand District Health Boards from 1st December 2009 until 31st June 2012 were examined and possible participants identified. Nursing staff from local EDs assisted with recruitment. Semi-structured interviews were tape recorded and analyzed using Interpretive Description. Recruitment of Mixed Presenters was challenging. Preliminary analysis found several themes: Life’s struggles and coping; role of Personal Other; relationship with staff; impact of ED environment; conflicting feelings about whether to stay or leave; and processing the aftermath. During the interview, many participants expressed feelings of distress and an increased risk of ISH both during their ED stay and on discharge. Some MP required re-admission within days. Suggestions for improvement was foremost less ‘patch and dispatch’ by ED. This presentation will discuss the complex needs of Mixed Presenters and how both systems and staff in ED are important in addressing their possible risk of suicide.

**PS2.16-6**

**Manifestations of the Suicidal Process in Everyday Social Encounters: Limitations of Existing Models**

Owens, CV; Owen, GJ  
University of Exeter Medical School, UNITED KINGDOM

**Background**

The suicidal process refers to the development of suicidality in an individual, from the earliest suicidal thoughts and feelings through to a completed act of suicide. It is widely accepted that this process unfolds within a social context and that it has both observable and non-observable components (Beskow 1979, 1983), but little is known about what the process looks like from the point of view of family members and friends.

**Aims**

This research aimed to shed light on what those close to the suicidal individual saw and heard in the period leading up to the suicide and how they made sense of it, both at the time and in retrospect, and to use these data to test existing models of the suicidal process.

**Method**

In a qualitative study, we investigated 14 cases of completed suicide, aged 18-34, conducting in-depth interviews with members of the deceased’s family and social network. We used snowballing techniques to recruit as many informants as possible in each case. Informants
(n=31) were asked to tell the story of events leading up to the death. We divided each narrative into discrete episodes, each representing an event that the informant considered significant, and plotted these on a timeline, noting what the informant saw or heard (observable or audible components). We compared different suicides and different perspectives on the same suicide. We used concepts from narrative analysis to understand how stories about the individual were constructed, both at the time and in retrospect.

**Results**
Retrospectively, informants described a number of ways in which the suicidal process had manifested itself. These included things that the deceased said (verbal manifestations), things he/she did (behavioural manifestations), how he/she looked (bodily manifestations) and other forms of evidence (physical objects). Their significance was not necessarily apparent at the time. A range of complex contextual factors, including the informant’s relationship to the deceased and his/her own psychological needs, influenced how they were interpreted.

**Conclusions**
Existing models of the suicidal process do not take account of the real-life settings in which individuals make judgements about what is happening, or the fact that friends and family members are not passive recipients of external signals. A more nuanced model is needed to guide efforts to support the public to recognise and respond to suicidal crises.

16:30 - 18:00
**PS2.17 SUICIDE POSTVENTION AND THE WORKPLACE**

**PS2.17-1**
A Manager’s Guide to Suicide Postvention in the Workplace

Berman, L1; Spencer-Thomas, S2
1IASP, UNITED STATES; 2Carson J Spencer Foundation, UNITED STATES

It is estimated that 60% of those of working ages (18-54) who die by suicide are employed at the time of their death, causing significant economic, social, and personal impacts on surviving colleagues and their employing institutions. This presentation will first outline the scope and impact of the problem and, then will overview a tool, A Manager’s Guide to Suicide Postvention in the Workplace, developed collaboratively by the American Association of Suicidology, the Carson J. Spencer Foundation, and the Crisis Care Network.

The Manager’s Guide presents 10 action steps for managers to proactively deal with both acute, short-term, and recovery phases of traumatic grief in the workplace. The postvention objectives during the acute phase of trauma and grief are to contain the crisis, make appropriate notifications while respecting rights of privacy, reducing the potential for contagion, and offering practical assistance to the family. In the short-term or recovery phase, affected employees need to be identified and linked to supports, healthy grieving must be promoted, a return to equilibrium in the workplace must be restored, and organizational leadership must be demonstrated. Lastly, in the longer-term, reconstructing phase, a transition from a postvention to a prevention mentality must occur and anniversary reactions must be prepared for.
**PS2.17-2**

*First Responders as Survivors of Suicide Loss*

Spencer-Thomas, S  
Carson J Spencer Foundation, UNITED STATES

Because of the work they do, police officers, rescue personnel and fire fighters are on the front lines responding to a death by suicide, and thus, the way they react and respond can make a huge difference on the experience of those left behind. Because these professionals are dedicated to saving lives, responding to suicide calls understandably evoke a range of emotions. This presentation will briefly cover descriptive exploratory research into the nature of police response to suicide and will share qualitative findings and case studies about how first responders have been affected by a suicide death of one of their own team. The presentation will close with a video presentation on suicide postvention with fire fighters, a project co-sponsored with the Colorado Fallen Fire Fighters Foundation, the Fire and Life Safety Educators of Colorado, the Carson J Spencer Foundation, and the American Association of Suicidology.

**PS2.17-3**

*Prevention of the Negative Impact on Railway Crew after Involvement in a Rail Fatality*

Bardon, C; Mishara, B  
CRISE - Université du Québec à Montréal, CANADA

This study is part of a larger project which seeks to understand the circumstances and consequences of train related fatalities, particularly suicides, in order to propose, develop and eventually to test countermeasures to reduce the prevalence of railway suicides and to diminish the impact of railway fatalities. The purpose of the study reported here is to better understand the impact on railway employees of accidents and suicides by train and their implications for preventing negative impacts on workers. We present the results of retrospective interviews with train crew members across Canada. The analysis was performed on 40 interviews describing 132 incidents (mean: 3.4 incident described per person, ranging from 1 to 9) including 55 (41.7%) suicides. Train crew members confronted with a fatality experience intense emotional reactions, including many signs of acute stress disorder (ASD). These reactions can sometimes evolve to a Post Traumatic Stress Disorder (PTSD) over the following months (in 17.5% of crew members). Those who experienced suicides are more likely to have stronger symptoms such as PTSD, than those who experienced accidental deaths. Acute symptoms recede over time for most crew members. However, it is important to note that, for 40% of the incidents described, there are some residual effects after 3 months (flashbacks, hyper vigilance, dreams and anxiety). Several factors dramatically increase the intensity and duration of difficulties experienced by the train crew after a fatality. Other factors may alleviate the effects of fatalities and result in a quick recovery from the initial stress reaction are presented. We conclude by presenting an integrated workplace prevention model that will be tested in Canadian railways.
PS2.17-4
Impact of Patient Deaths by Suicide on Thai Psychiatrists through One-to-one Interviews.
Thomyangkoon, P¹; Leenaars, A²
¹Rajavithi Hospital, College of Medicine, Rangsit University, THAILAND; ²Private practice, CANADA

Study objective
To identify the impact of patient deaths by suicide on Thai psychiatrists through one-to-one interviews.

Method
The questionnaire letters seeking permission to interview Thai psychiatrists about the impact of patient deaths by suicide were sent to 420 Thai psychiatrists. Twenty nine mailed back the reply letters but the contacts were successful only for twelve of them.

Results
Shock was their first reaction. Half of them attended the funerals and felt good doing so. Ten out of twelve did merits and prayed for their patients. They did all of these believing that their patients would receive the merits. Two consulted their superiors about incidents. Besides possible lawsuit awareness one had the tremendous impact by his office and decided to move to another hospital. Eleven were not worried about legal consequences. All went back and meticulously conducted the reviews of those tragic cases to be more well aware of the possible preventive measures to be taken in the future. All of them came to agree that in addition to the suicide prevention for Thai psychiatry residency training program there should be another training session to prepare them for the possible impact of suchlike of their patients-to-be. Including how to handle the situation after such tragedy.

Conclusions
Patient deaths by suicide had the real impact on Thai psychiatrists. Doing merits and praying for their patients were done in the aftermath. Obvious need to integrate a workout session in psychiatry residency training program on such impact was invariably agreed upon.

PS2.17-5
Suicide by Occupation: A Systematic Review and Meta-analysis
Milner, A; LaMontagne, AD; Spittal, MJ; Pirkis, J
University of Melbourne, AUSTRALIA

Aim
Previous research has shown that persons employed in certain occupations have elevated risk of suicide, yet little research has sought to summarise these findings across working populations. This analysis summarises published research in this area through systematic review and meta-analysis. This presentation will specifically focus on higher skilled professions at risk of suicide, such as doctors.

Methods
A systematic review was conducted according to PRISM guidelines. Occupations were coded according to the International Standard Classification of Occupations (ISCO 2008). We used random effects meta-analysis and assessed study heterogeneity.

Results
Certain occupational groups such as farmers were at particularly elevated risk. Results also suggested a stepwise occupational gradient in suicide mortality, with the lowest skilled occupations (general labourers, cleaners and elementary workers) being at significantly greater risk of
surgery than the employed population. The highest skilled occupations (executive directors, and managers) were at significantly lower risk than the general employed population. Doctors and nurses were at particular risk of suicide.

**Conclusion**
This was the first meta-analytic review of suicide and occupation across the full working population spectrum of occupational skill level. There is a need for future studies to investigate explanations for the observed skill-level gradient (e.g., the role of working conditions), particularly in persons employed in lower skill level groups.

**PS2.17-6**
Guidelines for Postvention in the Workplace and Communities
Berkowitz, L; McCauley, J; Mirick, R
Riverside Trauma Center, UNITED STATES

The term postvention refers to planned interventions with those affected by a suicide death that aim to address the needs of the bereaved, reduce the risk of contagion, and promote healthy adaptation of individuals and the community. Many organizations, and communities fail to develop prevention or postvention plans in advance of a crisis, leaving them with time, resource and personnel constraints rather than the ability to compassionately and methodologically implement a well-researched and documented plan.

This presentation will describe a list of guidelines that has directed work with organizations and communities in one state in the USA following single or multiple suicide deaths. These guidelines, which incorporate recommendations developed by the CDC and others groups, have been accepted into the Suicide Prevention Resource Center’s Best Practice Registry. While a majority of the literature on postvention focuses on supporting schools, the presentation will demonstrate how these guidelines are applied in work settings and communities that have experienced suicides.

**16:30 - 18:00**
**PS2.18 THE INTERNET AND SOCIAL MEDIA IN SUICIDE PREVENTION**

**PS2.18-1**
Suicide And Social Media: A Scoping Study Examining Current Activity and Stakeholder Opinion with regard to Suicide and Social Media
Robinson, J¹; Herrman, H¹; Fisher, S²; Rodrigues, M²
¹Orygen Youth Health Research Centre, AUSTRALIA; ²Community Works Associates Pty. Ltd, AUSTRALIA

**Background**
The media has an important role in suicide prevention. The last decade has seen the Internet become an increasingly powerful form of media. The advent of Web 2.0 has extended its by enabling users to not only receive information, but to create and exchange their own content,
leading to the rise of social media sites. These are commonly used to communicate about suicide-related thoughts and/or behaviour, raising questions regarding the ways in which we talk about suicide on-line and how this may affect others, and regarding the potential for social media as a preventative tool.

**Objectives**
The aims of this project are twofold: 1) To conduct a literature review and scoping study to establish the extent of work/activity currently underway that relates to suicide and social media 2) To conduct a stakeholder consultation within the WHO Western Pacific region, to determine current gaps in knowledge, community perceptions of the relationship between suicide and social media, and future priorities for work in this field.

**Methods**
The project comprises two phases. Phase 1 is a scoping exercise to map all activity underway that relates to suicide and social media. This will involve a review of published literature and an Internet search to identify web-based providers of health information that comprise a social networking function or employ social media techniques. Phase 2 comprises a series of consultation exercises with stakeholders across the Western Pacific region, including an online survey, in-depth interviews and a small number of case studies.

**Results**
The study is still underway, but results will be presented summarising the evidence pertaining to the relationship between suicide and social media and any evidence identified supporting the use of social media as a tool for preventing suicide. We will also describe the ways in which social media are currently being used for suicide prevention. The findings from the stakeholder consultation will cover stakeholder perceptions of the relationship between suicide and social media; the potential opportunities for future suicide prevention activities employing social media techniques; the risks and advantages of this form of media for the suicide prevention sector and future directions and/or priorities.

**Conclusions**
Conclusions will be drawn regarding the safety of, and potential for, social media as a suicide prevention tool and will highlight possible future directions for this field of work.

**PS2.18-2**
“Suicide Autopsy”: The Development of a Web-based Serious Game for Suicide Prevention
Garoni, D; Kavalidou, K; Theodorikakou, O; Katsadoros, K
KLIMAKA, GREECE

**Study objectives**
Serious games are designed to entertain players as they educate, train, or change behaviours. Our aim was to develop a serious game that would educate the general population on risk factors and warning signs of suicide and provide information about where to ask for help.

**Methods and material**
A multidisciplinary team was formulated in order to decide on the form and content of the serious game. The team consisted of psychiatrists, psychologists, young volunteers and one game developer. The main idea was drawn upon the method of psychological autopsy and was enriched with risk factors and warning signs derived from WHO’s guidelines for suicide prevention.

**Results**
In the serious game “Suicide Autopsy” the player is an investigator whose aim is to complete reports regarding the profile of two persons who committed suicide. In order to collect all the
important clues the player has to interview family members, friends, neighbours and colleagues and examine suicide notes, medical files, hard disk, diary, wills, cell phone etc. The clues are categorized and the player gets points depending on the clues importance:
* 3 points if the clue gives us information on the characters habits
* 5 points if the clue is a suicide risk factor
* 10 points if the clue is a suicide warning sign

During the investigation the player is informed about the most common myths about suicide, he/she is also presented with guidelines about how to help a person with suicidal ideation, and is encouraged to seek for professional help and/or to contact with the greek national 24/7 suicide helpline 1018 or with the email service help@suicide-help.gr.

Conclusions
A pilot study will take place in order to measure players’ satisfaction. Regarding the games’ effectiveness evaluation we incorporated a questionnaire which includes items from the Suicide Opinion Questionnaire (SOQ) and the Attitudes towards Suicide Questionnaire (ATTS). In regard to the game’s evaluation a pre-post methodology will also be applied.

PS2.18-3
Euregenas: The Development of an E-conceptual Model for Suicide Prevention (Work Package 5)
De Jaegere, E1; van den Berg, M2; Dumon, E1; Wallyn, S2; Portzky, G1; van Heeringen, C1
1Unit for Suicide Research, Ghent University, BELGIUM; 2Flemish Agency for Care and Health, BELGIUM

Study objectives
Euregenas (European Regions Enforcing Actions Against Suicide) is a 3 year project, funded by the European Union under the Public Health Programme 2008-2013. The overall objective of the Euregenas project is to contribute to the prevention of suicidal behaviour in Europe through the development and implementation of strategies for suicide prevention at regional level that can be of use to the European Community as examples of good practice. The Euregenas project has 8 Work Packages (WP) and one of them is WP 5 'The Development of an E-conceptual Model' which is led by the Flemish Agency for Care and Health in collaboration with the Unit for Suicide Research (Ghent University). The main objective of WP 5 is to develop the technical specifications for an integrated model for e-mental healthcare focusing on suicide prevention.

Method
To meet the objective WP 5 aims at developing quality criteria and ethical guidelines for ICT applications in suicide prevention. This work package also aims to evaluate e-mental health applications on suicide prevention in selected partner regions in order to create an inventory of best practices. The development of the model will require two analyses. An analysis of accessibility and usability of existing programs or tools identified as relevant for the model, from the perspective of different users, and an analysis on the feasibility to adapt an integrated program for suicide prevention to regional needs, languages and culture. Making use of the information of others WPs, WP 5 aims to consolidate e-mental health needs from partner regions with current best practices in the field of e-mental health care.

Results
The aim of WP 5 is to provide all necessary information to be able to create an integrated support and intervention mainframe for e-mental health, directed at the prevention of suicide,
An e-conceptual model that can be adapted to local needs in all European regions and regional health care organisations. The e-conceptual model will be based on quality criteria and ethical guidelines, the expressed regional needs in e-mental health, the evaluated support and care programs, an analysis of the feasibility and costs for the regions and the technical requirements for such a program.

Conclusion
The final deliverable is a blueprint of the technical specifications for an integrated e-conceptual model for suicide prevention. It will be presented at the final Euregenas conference in December 2014.

PS2.18-4
iFightDepression: Using the Internet to Enhance Awareness and Self-Management Capacity for Depression
Arensman, E1; Larkin, C2; Koburger, N3; Maxwell, M4; Gusmão, R5; Van Audenhove, C6; Hariss, F7; Costa, S8; Ibelslhäuser, A9; Jushkin, M9; Perez-Sola, V9; Szekely, A10; Todorova, I11; Hegerl, U11
1National Suicide Research Foundation/University College Cork, IRELAND; 2National Suicide Research Foundation, IRELAND; 3Universitätsklinikum Leipzig AöR, University of Leipzig, GERMANY; 4University of Stirling, UNITED KINGDOM; 5CEDOC, Universidade Nova de Lisboa, PORTUGAL; 6Lucas, Catholic University of Louvain, BELGIUM; 7Pro mente tirol, Innsbruck, AUSTRIA; 8Estonian-Swedish Mental Health & Suicidology Institute, ESTONIA; 9Hospital de la Santa Creu/Sant PauPerez-Sola, SPAIN; 10Semmelweis University, Budapest, HUNGARY; 11Health Psychology Research Center, Sofia, BULGARIA

Objective
By the year 2020, depression is set to take 2nd place in the ranking of Disability Adjusted Life Years (DALYs) for all ages and both sexes. Already unipolar depression ranks first when considering the index “years lived with disability” (YLD) in high income countries but only a minority of patients receive treatment according to established guidelines. Internet-based interventions could be a cost-effective approach to reduce therapeutic deficits but, despite growing evidence endorsing the effectiveness of online interventions such as self-help programs based on cognitive-behavioural therapy techniques, a major challenge is participants’ adherence to these interventions.

Methods and materials
The presentation aims to give an overview about internet-based self-management of depression and to introduce the iFightDepression online intervention and awareness website developed in the current EC funded project Preventing Depression and Improving Awareness through Networking in the EU (PREDI-NU). After the comprehensive literature review that delivered the evidence base for the iFightDepression tool, the tool itself and the multilingual and multifaceted website in which it is embedded will be presented. The tool is being implemented through primary care services and will be evaluated using a comprehensive approach, including focus groups, interviews, questionnaires, and process data. This data will be used to optimize the self-management tool and procedures in the next phase of PREDI-NU.

Results
Preliminary data on acceptability and feasibility of the tool derived from focus group discussions will be presented.
Conclusion
The iFightDepression self-management tool and awareness website represent an innovative and promising approach to the treatment of mild to moderate depression.

PS2.18-5
Using Big Data to Prevent Suicide
Reidenberg, D1; Wolens, F2
1SAVE, UNITED STATES; 2Facebook, UNITED STATES

Facebook is a company that provides a platform for people to connect, share ideas, thoughts and pictures to anyone in the world. With over 1 billion people having a Facebook profile, it is the largest social network the world has ever seen. SAVE is a leading nonprofit agency working to prevent suicide. Through better understanding of suicide, education, awareness and support, SAVE hopes to prevent suicide. Together the two joined forces to see what might be done to help save lives by identifying people who might be at risk of suicide, connecting them with resources and helping the suicide prevention community better understand how to identify someone at risk. New technology has opened up a world for people to communicate about everything from daily thoughts to suicidal content. The large amount of data that is maintained by such platforms as Facebook, Google, etc. offers us a potential window into the life of individuals who died by suicide. In a first of its kind effort to look at big data, Facebook and SAVE partnered together to see whether or not posts on Facebook of people who died by suicide could provide more ability to prioritize reports of someone who is at risk to get them to good, quality, accessible help sooner. While research has looked at suicide notes and writings, as well as psychological autopsies of individuals and when available clusters of suicides have occurred, this is the first time anyone has looked at online behaviours of individuals who have died by suicide. Questions that could be considered included for example:
* Did suicidal individuals post more frequently or less frequently in the days prior to their death;
* Were there any common statements or phrases used by individuals who died by suicide;
* Did suicidal individuals reach out to people within their social network more or less prior to their death;
* Were reporting features and chat functions utilized by those who died by suicide.

PS2.18-6
The Pilot Study of Keyword Formation Methods for Searching Self-disclosed Suicidal Micro Blogs in Chinese Social Media
Li, H1; Chen, QJ1; Liu, Y2; Silenzio, V1; Caine, ED1
1Department of Psychiatry, Medical Center, University of Rochester, UNITED STATES; 2Graduate School of Management, University of Chinese Academy of Sciences, CHINA

Study objectives
Expressing in social media has been a burgeoning phenomenon all over the world, therefore social media is becoming a popular venue for collecting the evidence of thoughts, emotion and behaviours of people sending the message. Correspondingly, the micro blogs concerning about self-disclosed suicidal message in social media could be a new way for studying the mechanism of suicide and have the unique implication for suicide prevention and intervention. However, it's
a critical technical issue concerning about how to obtain the suicidal micro blogs efficiently, validly and representatively or comprehensively. This study employed three different search strategies to search the potential micro blogs containing suicidal message, compared the results searched by those strategies and suggested the optimal searching strategy for suicidal micro blog search in Chinese social media.

**Methods and material**

Three groups of keywords were used to search the suicidal micro blogs posted during the past half year. 1) The first group of keywords was from the translation of English keywords which were obtained from the content analysis of the post in suicidal forum and the results were published in academic journal. 2) The second group of keywords was from the results of content analysis of suicide notes collected from Hong Kong which uses Cantonese. 3) The third group of keywords was obtained from the direct-recommendation keyword identification method developed by authors. The content and searching results of three groups of keywords were compared.

**Results**

The content of keywords and their relevance to self-disclosed suicide is different. The combination of results obtained from three methods would generate a more optimal searching keyword pool for searching the micro blog containing self-disclosed suicidal message.

**Conclusion**

The keywords used for searching self-disclosed suicidal micro blogs in social media has cultural and linguistic sensitivity. The optimal identification method of keywords related to suicidality could provide the foundation for development of auto-identification system of suicidal cases in social media.

16:30 - 18:00

**PS2.19 WORKSHOP. ZERO SUICIDE IN HEALTHCARE: NOT ANOTHER LIFE TO LOSE**

**PS2.19-1**

Zero Suicide in Healthcare (Not Another Life to Lose):

Suicide Care in Systems Framework Generates National Learning Collaborative

**Draper, J**1; **Hogan, M**2; **Covington, D**3

1National Suicide Prevention Lifeline, UNITED STATES; 2Hogan Health Solutions, UNITED STATES; 3Magellan Health Services, UNITED STATES

Health care and behavioural health care systems and plans are the focus of the Clinical Care and Intervention Task Force of the US National Action Alliance for Suicide Prevention, for several reasons. First, we have evidence from innovator health and behavioural health organizations that they can do this work and save lives (Henry Ford Health Systems and Magellan Health Services in Arizona).

Second, most people including those at high risk are members or patients of health plans and programs. If we are prepared, we can use their participation to keep them safe. Third, research confirms that contacts with health and behavioural health providers often occur before completed suicide. We must make these contacts productive. Finally, we now have the tools to save
lives. The knowledge about effective suicide prevention is powerful, but until now it has been dispersed and not conveniently available. To make a difference, the tools must be pulled together, and used in a concerted fashion. We propose a go-to capacity focused on helping health plans and programs save the lives of people in their care—and to save money that would have been spent in preventable hospital admissions after acts of self harm. Deployed fully in research programs and just a few real world healthcare settings, these elements are now being tested by innovators in at least six states. A website to motivate and support implementation is being developed, and innovators are participating in conference calls to learn from each other. These resources have proven effective in testing some of the key strategies that health and behavioural health plans and programs must use in fighting suicide.

Step 1 - an organization identifies its commitment and looks at its readiness via a workforce survey, then reviews the results as baseline of workforce self-report of skills, training and support. A steering group is appointed to guide and monitor the effort, with a charter to guide their work.

Step 2 - integrated suicide intervention skills provided to direct care staff. Goals are to respond to issues raised in surveys, moving suicide care to core of business and shared clinical responsibility

Step 3 - implement standardized approaches to screening, assessment, stratification, pathways to care with focus on best practice interventions for high risk, e.g., safety planning, means restriction, open access.

Step 4 - monitor results and track trends, rates, and opportunities for learning.
Suicide prevention efforts tend to focus on “at-risk” groups (rates greater than general population)

- White Males 65+: 3-4x
- Veterans/Military: 2-4x
- Alaskan Natives/ American Indians (AN/AI): 2-4x
- Lesbian, Gay, Bisexual, Transgender (LGBT) Youth: 2-3x
- Individuals with Serious Mental Illness (SMI): 6-12x

We should focus intervention on those at highest risk

White Males 65+
The American Association of Suicidology reports the 2006 suicide rate for elderly white males was 31 per 100,000, but 83 per 100,000 for those over 85. http://bit.ly/men-a

Veterans/Military
In 2011, USA Today reported the current U.S. Army suicide rate at 22 per 100,000 (http://usat.ly/army-al), but the Fort Hood rate was 47 per 100,000. http://bit.ly/ft-h

AN/AI
In the Suicide Prevention Resource Center (SPRC) library, Alaskan Native/American Indian males ages 15 to 24 had the highest rate at 28 per 100,000. USA Today reported in 2010 a suicide rate for those AN living in Alaska of 42 per 100,000. http://usat.ly/an-ak

LGBT Youth
The SPRC library says little can be said with certainty about death rates. However, other research suggests two to three times the national rate.


Individuals with SMI
In 2000, a UK study by Osborn et al. found the hazard ratio for individuals with SMI, including schizophrenia, to be nearly 13 times the general population. In Dec. 2011, King’s Health Partners found the risk to be 12 times greater during the first year following diagnosis of a serious mental illness.


Note: The suicide rate in the general population was 11.5 per 100,000 in 2002.
PS2.19-2
Zero Suicide in Healthcare (Not Another Life to Lose): 2012 Revised US National Strategy for Suicide Prevention and 4 Key NAASP Priorities

McKeon, R1; Covington, D2
1Substance Abuse and Mental Health Service Administration (SAMHSA), UNITED STATES; 2Magellan Health Services, UNITED STATES

Everything we know about suicide suggests that a sustained, comprehensive approach is needed, and the 2012 National Strategy for Suicide Prevention represents the next phase in our intensified, national efforts to prevent suicide in the United States. For national strategies to have their desired impact, they must be living documents that guide national action, and not simply reports on a shelf without meaning or impact.

The National Action Alliance has set four priorities, which are also highlighted in the recently released revised National Strategy, including the “Zero Suicide in Healthcare” initiative. While the effectiveness of national suicide prevention strategies cannot be studied in randomized controlled trials, important evidence for their effectiveness has recently been reported from England and for this reason the revised U.S. strategy highlights these results. The adoption of a range of suicide prevention recommendations by mental health systems across England and Wales was found to greatly reduce suicide rates among patients in those systems that implemented the recommendations. They examined changes in suicide rates as public sector mental health service settings began to implement the following nine suicide prevention recommendations:

1. Implementing a Zero Suicide in Healthcare initiative
2. Developing and implementing suicide prevention policies and procedures
3. Conducting suicide risk assessments
4. Providing suicide prevention training for staff
5. Establishing a Crisis Response Team
6. Implementing a Suicide Prevention Program
7. Providing post-suicide bereavement support
8. Implementing a Suicide Prevention Plan
9. Establishing a Suicide Prevention Committee

The evidence from England reinforces the importance of a multi-sectoral approach to suicide prevention, highlighting the need for collaboration among stakeholders to achieve sustained improvements in suicide rates.
Providing 24-hour crisis teams
Removing ligature points in inpatient facilities
Conducting follow-up with patients within 7 days of discharge
Conducting assertive community outreach, including providing intensive support for people with severe mental illness
Providing regular training to frontline clinical staff on the management of suicide risk
Managing patients with co-occurring disorders (mental and substance use disorder)
Responding to patients who are not adhering to treatment
Coordinating with criminal justice agencies
Conducting multidisciplinary reviews and sharing information with families after a suicide

According to While [2012], in 1998, few of the 91 mental health services in the study were carrying out any of these recommendations. By 2004, about half were implementing at least seven recommendations, and by 2006, about 71% were doing so. Over time, as more recommendations were implemented, suicide rates among patients declined. Each year, from 2004 to 2006, mental health services that implemented seven or more recommendations had a lower suicide rate than those implementing six or fewer.
In 2009, TERROS joined a learning collaborative of a dozen behavioural health agencies in Phoenix, Arizona along with the Arizona Department of Health Services Division of Behavioural Health Services and Magellan Health Services. TERROS surveyed their workforce of clinicians, physicians, nurses, case managers, peer staff and others to establish a baseline of staff perception of preparedness to engage and support those at risk of suicide. The brief 16 question survey included “Do you have the skills to engage those at risk of suicide? Do you have the training? And, Do you have the supports and supervision?” The survey was repeated in 2010 and 2012.
TERROS had three staff become master trainers of ASIST (Applied Suicide Intervention Skills Training) in 2009 and conducted 22 ASIST trainings between 2009 and 2012. More than 500 staff have completed these trainings and the percentage of TERROS staff reporting suicide care training increased from 11% in 2009 to 81% in 2012. In 2009, nearly 90% reported no prior suicide care training. 27% of these individuals answered “Disagree” and/or “Completely Disagree” to the three core questions about self-reported skills, training and supports to effectively engage those at risk of suicide. In 2012, 81% reported going through the 2 day ASIST training. Only 2% of this group answered “Disagree” and/or “Completely Disagree” to these three questions.
Zero Suicide in Healthcare (Not Another Life to Lose): Assessment of Suicide Related Knowledge and Competencies among Health Professionals

Covington, D1; Joiner, T2; Silva, C2; Smith, A3
1Magellan Health Services, UNITED STATES; 2Florida State University, UNITED STATES; 3University of Miami Ohio, UNITED STATES

Unfortunately, knowledge about suicidal behaviour and its assessment and treatment, even among mental health professionals, has tended to lag behind related research in the field. For example, only one out of three high school counselors surveyed felt that he or she could recognize a student at risk for suicide (King, Price, Telljohann, & Wahl, 1999). Dexter-Mazza and Freeman (2003) found that only half of the over 200 predoctoral psychology interns in their study reported receiving formal training in assessing and managing suicidal clients. A group of psychiatry residents (a third of whom are expected to experience a client’s suicide during their training) reported that only one quarter of their training programs offered skill development workshops pertaining to suicide (Ellis, Dickey, & Jones, 1998). Training directors from various medical schools have also indicated inadequacies in their programs’ suicide management training (Sudak, Roy, Sudak, Lipschitz, Maltsberger, & Hendin, 2007). This is particularly notable given that close to fifty percent of those who die by suicide will have seen their primary care physician in the month before their death (Luoma, Martin, & Pearson, 2002).
In order to focus efforts on reducing stigma and increasing knowledge regarding suicidal behaviour we first need to identify knowledge gaps and biases. Thus, the purpose of the present study was to investigate mental health care workers’ knowledge about suicide as well as their confidence in their own training, skills, and support. As described below, we have obtained detailed information from a large and diverse set of mental health professionals for this purpose. Through this investigation we hope to uncover potential strengths and weaknesses of skilled workers’ understanding of suicidal behaviour. It is hoped that this knowledge will lead to further refinement of the training involved in managing suicidal patients.
16:30 - 18:00
PS2.20 PSYCHIATRIC DISORDERS AND SUICIDE RISK

PS2.20-1
Suicide amongst Psychiatric In-Patients and Those Recently Discharged: Findings From 4 Case-Control Studies
Hunt, IM; Bickley, H; Windfuhr, K; Shaw, J; Appleby, L; Kapur, N
University of Manchester, UNITED KINGDOM

Background
Risk of suicide is high in the first few days of psychiatric admission and shortly after discharge. These suicides occur in close proximity to mental health care and therefore may be most amenable to prevention by services.

Objective
We aimed to identify risk factors for in-patient suicide in general, and for suicide that occurs in the first week of admission. We also investigated the predictors of suicide after discharge from psychiatric care, both within the 3 month period and in the first 2 weeks.

Method
Four retrospective case-control studies were carried out on:
1) 222 psychiatric in-patient suicides;
2) 107 in-patient suicides that occurred in the first week of admission;
3) 238 suicides that took place within 3 months of discharge from psychiatric hospital; and
4) 100 suicides that occurred within 2 weeks after discharge.
All suicide cases were matched on date of death with a living in-patient or post-discharge patient. Conditional logistic regression identified potential risk factors for suicide.

Results
Independent predictors of in-patient suicide in general were a diagnosis of affective disorder (odds ratio [OR]=1.8), male sex [OR=2.4] and previous self-harm [OR=5.9]. Male sex and self-harm were also associated with suicide in the first week of admission, as was a short (<12 month) duration of illness [OR=5.1] and recent adverse life events [OR=3.4]. Risk factors associated with suicide within 3 months of discharge included male sex [OR=2.2], previous self-harm [OR=3.2], affective disorder [OR=2.3], comorbidity [OR=1.8], patient-initiated discharge [OR=2.5], suicidal ideation [OR=2.5], and missed last appointment [OR=2.1]. Some of these factors showed even stronger associations with suicide within 2 weeks of discharge, including male sex [OR=3.1], previous self-harm [OR=6.8], and comorbidity [OR=4.4]. Other predictors for recently discharged suicide were being aged over 40 [OR=5.3], recent life events [OR=4.6], and a short (<1 week) last admission [OR=3.4].

Conclusions
Important measures that may prevent in-patient suicide include close monitoring of those with recent illness onset and previous suicide attempts. Immediate community follow-up is recommended for patients viewed as high risk, particularly those with a short admission or patients who have discharged themselves. Knowledge of detrimental life experiences should be incorporated into risk assessments both at the time of admission and during discharge planning.
PS2.20-2
Suicide Rates in Psychiatric Inpatients:
Time Changes from 1998 Through 2005 in a Nationwide Cohort
Madsen, T; Nordentoft, M
Copenhagen Mental Health Center, Research Unit, DENMARK

Background
A cut down in the number of inpatient beds as well as shorter admission lengths has brought a concern that changes of deinstitutionalization might negatively have affected the suicide rate in hospitalised psychiatric patients. One study has indicated that a decreasing inpatient suicide rate might reflect a transfer to an increasing post-discharge suicide rate, however uncertainties about this occurrence of transfer exists as this is rather unexplored.

Aim
To estimate individually adjusted time changes in suicide rates among psychiatric inpatient and among recently discharged psychiatric patients and to estimate changes in these suicide rates by gender and diagnosis.

Method
This register-based study consists of data on all psychiatric patients admitted from 1998 through 2005. Calendar-year was applied as an independent continuous variable in Cox survival analyses modelling the hazard of suicide among psychiatric inpatients and in the three-month post discharge period, respectively. Analyses were adjusted for sex, age, educational status, primary diagnosis and previous suicide attempt.

Results
The overall inpatient suicide rate declined in psychiatric patients admitted from 1998 through 2005, in particular among women. The overall rate of suicide in the three month post-discharge period also significantly declined, and this was mostly explained by a falling rate among males as well as among patients who were discharged with a diagnosis of schizophrenia.

Conclusion
Although our results showed a decreasing trend in the suicide rates, the size of the rates emphasise that focus on suicidality in mental health care settings must continue and be improved as the rates are still very high.

PS2.20-3
Psychiatric and Demographic Risk Factors for Suicidal Ideation, Plans and Attempts in Malaysia - Results of an Epidemiological Survey
Maniam, T1; Marhani, M1; Firdaus, M2; Abdul Kadir, AB3; Mazni, MJ4; Azizul, A1; Nurashikin, I1; Salina, AA1; Ang, KT2; Jaswinder, K1; Fadzillah, M4; Noor Ani, A3
1National University of Malaysia, MALAYSIA; 2Universiti Putra Malaysia, MALAYSIA; 3Ministry of Health, MALAYSIA; 4Universiti Malaysia Sarawak, MALAYSIA

Study objective
This is an epidemiological study to determine the prevalence of suicidal behaviour and its association with generalised anxiety disorder (GAD), major depressive disorder (MDD) and demographic factors in a nationally representative sample.
Method
Suicidal ideation, plans and attempts were assessed in face-to-face interviews of respondents selected by a multistage probability sampling using items on suicidality from the WHO SUPRE-MISS questionnaire. The Mini International Neuropsychiatric Interview (MINI) was used to generate DSM-IV diagnoses of GAD and MDD. Multivariate regression analysis was conducted controlling for demographic characteristics such as age, gender and ethnicity.

Results
A total of 19309 subjects were studied. The prevalence estimates for suicide ideation, plans and attempts were 1.7% (95% CI: 1.4 - 1.9), 0.9% (CI: 0.7-1.1) and 0.5% (CI: 0.4-0.7) respectively. Younger people (16 - 24 years) had higher risk of suicidal behaviour, (OR: 2.6, CI: 1.08-6.2). Females (OR: 1.6, CI: 1.2-2.1) and Indians (OR: 3.3, CI: 2.2-4.9) also had higher risk.

Conclusion
The prevalence of suicidal behaviour in Malaysia is low, but it broadly corresponds to the pattern described in some other countries. This national study confirms that Malaysians in the younger age groups, females and those of Indian ethnic group have much higher rates of suicidal behaviour than other groups. Preventive efforts should be guided by these findings.

PS2.20-4
Population Attributable Fraction of Suicidal Behaviors Associated with Common Mental Disorders in Taiwan
Liao, S-C¹; Lee, M-B¹; Chen, WJ²
¹National Taiwan University Hospital, TAIWAN; ²College of Public health, National Taiwan University, TAIWAN

Study objectives
Asian countries have lower prevalence of common mental disorders (CMDs) in comparison with their western counterparts. However, suicide mortality rates of Asian countries are not less or even higher than that of Western world. The country-wise reversed relationship between suicide mortality rate and the prevalence of CMDs gave rise to the question that CMDs might have different effect on suicide behaviours in Asian countries.

Methods and material
This study was based on the Taiwan Psychiatric Morbidity Survey (TPMS), a survey of common psychiatric disorders in a nationally representative sample of individuals who were age 18 or older in Taiwan using the paper version of the World Mental Health Survey of the World Health Organization Composite International Diagnostic Interview (WMH-CIDI) conducted between 2003 and 2005. Stratified multistage sampling with the principle of probability proportional to size was used for the TPMS. For calculating the population attributable fraction (PAF) of CMDs, the associations were estimated using Poisson log-linear regression model in complex survey data to calculate the risk ratios. The adjusted PAF for each risk factor of suicidal behaviours was calculated by Bruzzi’s formula.

Results
The lifetime prevalence of suicide ideation, plan, and attempt are 7.52% (S.E. = 0.46), 1.31% (S.E. = 0.16), and 1.29% (S.E. = 0.16). The aPAF for suicidal behaviours increased gradually from suicidal ideation to suicidal attempt. The aPAF for suicidal attempt (45.5% for any mental disorder, 33.1% for mood disorders) is comparable with that in developing and developed countries in WMH survey. The aPAF of substance use disorders for suicidal attempt are even higher in Taiwan (21%) than in other WMH countries (9.8%-13.5%).
Conclusion
Common mental disorders, despite their low prevalence in Taiwan, are major risk factors of suicidal behaviours and still the important targets for suicide prevention from the aspects of public health and clinical medicine.

PS2.20-5
Improving Adherence to Suicide Guidelines in Mental Health Care.
Results from PITSTOP Suicide, a Multicentre Cluster Randomized Trial
de Beurs, D¹; de Groot, M¹; de Keijser, J²; Mokkenstorm, J³; Kerkhof, A¹
¹VU Amsterdam, NETHERLANDS; ²GGZ Friesland, NETHERLANDS; ³GGZ ingeest, NETHERLANDS

Objective
To examine the effect of the structured implementation of the Dutch guideline for the assessment and treatment of suicidal behaviour on mental health professionals.

Design
Multicentre cluster randomized trial with follow-up 3 months after the training Setting: Full staff of 33 psychiatric departments of mental health institutions across the Netherlands.

Intervention
Full staff of 18 psychiatric departments (n = 420) were trained with a small group interactive train the trainer program, supported by e-learning. Control condition (15 departments n =323) received implementation as usual (publications, congresses, manuals, books etc.)

Main outcomes measures
Guideline adherence as measured with adequate response on video vignettes. Secondary outcomes were confidence, attitude and knowledge regarding suicidal patients.

Results
188 participants in the experimental and 111 participants in the control condition completed the baseline and follow-up measurements. Multilevel analysis showed that the intervention resulted in significant more guideline adherence after three months when compared to the control group (effect size = 0.6). Also, both confidence and knowledge on suicidality were increased significant at follow-up (effect sizes 0.7 and 0.4) in the experimental group when compared to the control group.

Conclusion
Training of full staff of departments by peers with e-learning support resulted in more guideline adherence, confidence and knowledge at follow-up.

PS2.20-6
Do Patients Benefit from the Training of Healthcare Professionals in the Application of Suicide Guidelines? Study Protocol of a Randomized Trial
de Beurs, D¹; de Groot, M¹; de Keijser, J²; Mokkenstorm, J³; de Winter, R⁴; Kerkhof, A¹
¹VU Amsterdam, NETHERLANDS; ²GGZ Friesland, NETHERLANDS; ³GGZ ingeest, NETHERLANDS; ⁴Parnassia Bavo Group, NETHERLANDS

Background
To improve suicide prevention in The Netherlands, full staff of psychiatric departments throughout the country are experimentally trained in the application of the new Dutch guideline on the assessment and treatment of suicidal behaviour. Previous studies show beneficial effects of
guideline implementation on professionals’ attitude, knowledge and skills. However, effects on patient level are measured rarely. The main objective of this study is to examine whether patients of professionals who are trained in guideline application, show more recovery from suicide ideation than patients of untrained professionals.

**Method**
A multicentre cluster randomized controlled trial in which psychiatric departments from Mental Health Institutions are matched pair wise, and subsequently, randomly allocated to either the experimental or control condition. In the experimental condition, the full staff will be trained in the application of the guideline via a one-day small interactive group training program supported by e-learning modules. In the control condition, no extra actions next to the normal distribution of the guideline (via internet, newsletter, books, publications and congresses) will be taken. Measurements on patient level will start when the full staff of the experimental teams are trained. Measurements take place at intake and after 3 months, or earlier when the patient is discharged. Primary outcome is reduction in suicide ideation. Secondary outcomes are non-fatal suicide attempts, level of treatment satisfaction and different measures of cost-effectiveness (costs of health care consumption, health utilization and costs of production losses).

**Discussion**
Strengths of this study are the use of outcomes on patient level, the size of the study, the training of full staff of the departments in multidisciplinary teams, and the willingness of both management and staff to participate. Limitation of this study is that if usual guideline dissemination procedures will have an impact on mental health care as well, the size of the additional effect of the experimental intervention is expected to be modest.

**16:30 - 18:00**
**PS2.21 REGIONAL SYMPOSIUM**
**ASIA AND THE PACIFIC**

**PS2.21-1**
Suicide Prevention in the Asia-Pacific Region
Huang, Y
Institute of Mental Health, Peking University, CHINA

The Asia Pacific region is a vast region with diverse peoples, cultures, needs and resources. Suicide is a concern throughout this region, where suicide prevention programmes have developed in various forms and to variable degrees since the 1970’s. Prof Khan will focus on developments in the Middle East and South Asia, Prof De Leo on Australasia and Prof Huang on the Far East and South East Asia. Brief formal presentations will be followed by open discussion with the audience, with the aim of exploring opportunities for collaborative efforts in suicide prevention in the region.
PS2.22-1
Decreasing Suicide Rates in Both Genders.
An Effectiveness Study of a Community-based Intervention
Szekely, A¹; Purebl, G¹; Hegerl, U²
¹Semmelweis University, HUNGARY; ²University of Leipzig, GERMANY

Study objectives
The suicide rate in Hungary is high in international comparison. The two-year community-based
four-level intervention programme of the European Alliance Against Depression (EAAD) is de-
signed to improve the care of depression and to prevent suicidal behaviour. Our aim was to evalu-
ate the effectiveness of a regional community-based four-level suicide prevention programme
on suicide rates.

Method
The four levels of the EAAD intervention programme were 1) training general practitioners, 2)
public relations campaign, 3) training community facilitators (teachers, nurses, hotline workers,
counsellors, clerics, etc.), and 4) working with high-risk groups. The programme was imple-
mented in Szolnok (population 76,311), a town in a region of Hungary with exceptionally high sui-
cide rate. Effectiveness was assessed by comparing changes in suicide rates before to after the
start of the intervention in the intervention region to corresponding changes of national suicide
rates. In addition, changes in suicide rates were compared to those in a control region (Szeged).

Results
For the duration of the programme and the follow-up year, suicide rates in the intervention re-
gion were significantly lower than the average of the previous three years (p=.0076). The suicide
rate thus went down from 30.1 per 100,000 in 2004 to 13.2 in 2005 (-56.1 %), 14.6 in 2006 (-51.4
%) and 12.0 in 2007 (-60.1 %). This decrease of annual suicide rates in Szolnok after the onset of
the intervention was significantly stronger than that observed in Hungary (p=.017). The decrease
in suicide rates in Szolnok was also stronger than that observed in the control region Szeged
(p=.0015). In Szeged the suicide rates in the observed period were: 22.8 per 100,000 (2004), 24.6
(2005), 27.6 (2006) and 27.9 (2007). Men had the same decrease in suicide rates as women in
Szolnok. As secondary outcome, an increase of emergency calls to the hotline service (200%)
and outpatient visits at the local psychiatry clinic (76%) was found.

Conclusions
These results provide further evidence for the effectiveness of the 4-level community-based
intervention concept concerning prevention of suicidal behaviour. Whilst the majority of suicide
prevention programmes mainly change female suicidal behaviour, this programme proved to be
equally beneficial for both sexes. Sustainability of improvements should be a key point in future
research and its implementation.
**PS2.22-2**

The Acute Effects of Intensive Repetitive Transcranial Magnetic Stimulation on Suicide Risk in Depression

Desmyter, S1; Duprat, R2; Baeken, C2; van Heeringen, C3

1Unit for Suicide Research, University Department of Psychiatry, University Hospital Ghent, Belgium, BELGIUM; 2Multidisciplinary Research Platform, Ghent University, BELGIUM; 3Unit for Suicide Research, Department of Psychiatry, Ghent University, BELGIUM

**Introduction and objectives**

Mortality due to suicide in depression is a major health concern. With the exception of electro-convulsive therapy, currently no available antidepressant treatments have acute effect on suicide risk. However, due to practical limitations and side effects, the utility of ECT is limited. As repetitive transcranial magnetic stimulation (rTMS) has well-documented positive short-term effects on depressive symptoms and on neuropsychological characteristics without major side effects, this study aimed at assessing the effect of rTMS on suicide risk by means of [1] a literature review of the effects of rTMS on clinical and neuropsychological risk factors for suicide, and [2] a randomized sham-controlled study (RCT) of the acute effects of rTMS on suicide risk in depression.

**Methods**

(1) Pubmed and Web of Science were consulted with the search terms ‘[TMS OR transcranial magnetic stimulation] AND suicid*’. (2) Depressed patients were included for treatment with an intensive protocol of theta burst rTMS in a sham-controlled cross-over study design.

**Results**

(1) A limited number of studies on the effects of rTMS on depression included measurements of clinical suicide risk factors and found, in general, substantial improvement. Studies in healthy volunteers indicate positive effects of rTMS on neuropsychological functions that may be impaired in suicidal individuals including memory, attention and executive functions. (2) Preliminary results from the RCT will be presented.

**Conclusions**

The literature review indicates a positive effect of rTMS on suicide risk factors, whether or not via improvement in associated neuropsychological dysfunctions. The acute effects of rTMS on suicide risk are currently studied in a sham-controlled design, and preliminary results will be presented. rTMS appears to be a promising acute treatment of suicide risk in depressed individuals.

**PS2.22-3**

A Series of Studies of Risk and Protective Factors for Suicidal Behavior in Rural Primary Care: An Eye toward Intervention Design

Hirsch, J1; Walker, KL1; Nsamenang, SA1; Rowe, CA1; Cukrowicz, KC2

1East Tennessee State University, UNITED STATES; 2Texas Tech University, UNITED STATES

**Background**

Suicidal behavior is often more prevalent in rural than urban areas. Further, most individuals who die by suicide visit a primary care provider in the days to months prior to death, and this may occur more reliably in rural areas, where stigma is prevalent. Yet, potential protective characteristics may buffer against risk factors to decrease suicidal behaviour.
Objective
To identify potential risk and protective factors that might inform development of brief interventions able to be delivered in rural primary care medical settings.

Method
Across several primary care datasets (N=101; N=200), including working and uninsured, as well as indigent, rural primary care patients, we examined the interrelationships between risk and protective factors. Measures of health-related quality of life, perceived stigma and rurality, dispositional hope and optimism, subjective vitality, and interpersonal needs were administered.

Results
In Study 1, dispositional optimism mediated the relation between perceived degree of rurality and suicidal behaviour, and between health-related quality of life and suicidal behaviour; In Study 2, thwarted interpersonal needs mediated the relation between pain severity and interference and suicidal behaviour, as did positive affect; In Study 3, dispositional optimism mediated the relation between thwarted interpersonal needs and suicidal behaviour; In Study 4, depressive symptoms and thwarted interpersonal needs mediated the relation between forgiveness and suicidal behaviour; In Study 5, subjective vitality mediated the relation between health transition status and suicidal behaviour; and, In Study 6, both optimism and hope mediated the relation between perceived financial stigma and suicidal behaviour.

Conclusion
Suicide is more prevalent in rural than urban areas, requiring critical examination of rural-specific risk and protective factors that might be addressed in prevention efforts. We found that degree of perceived rurality and stigma were risk factors for suicidal behaviour, as were pain and health dysfunction. Importantly, however, we also found that optimism, forgiveness, vitality and hopefulness ameliorated these associations. Interpersonal dysfunction also influenced these effects. Potential models of traditional and rural-specific suicide risk/protection are discussed, and intervention strategies are highlighted as they might be applied via brief interventions in primary care settings.

PS2.22-4
GPS Study. (Cost-)Effectiveness of Gatekeeper Training in the Prevention of Suicidal Attempts: A Randomised Controlled Trial
Steendam, M; De Keijser, J
Mental Health Center GGZ Friesland, NETHERLANDS

In the Netherlands 1,400-1,600 people commit suicide annually, around 100,000 attempt suicide, 14,000 of them visit an ED and 462,500 suffer from suicidal ideation. The corresponding disease burden equals 231,000 disability adjusted life years. Many people who are suicidal (thoughts, plans, attempts) do not seek treatment. The inclination not to seek help is one of the core symptoms of the suicidal syndrome. Suicidal people typically feel pessimistic, hopeless and may not have positive expectations about treatment. Shame and fear of stigma may lead suicidal individuals to reject any form of help. The GPS study - in collaboration with Prof. Dr. AJFM Kerkhof and the Free University of Amsterdam - envisions the evaluation of an intervention which is directed at the various health care professionals (general practitioners and community facilitators) who may act as gatekeepers in early recognition of suicidality, persuasion and referral of at risk people in the community.
This project addresses three questions:

1. Is gatekeeper training effective in enhancing relevant skills?
2. Does the intervention impact on rates of (attempted) suicides at regional level?
3. Is the intervention cost-effective relative to routine medical care?

The intervention - started in April 2012 till 2014 - will be delivered in two Dutch regions: Amsterdam and Friesland. Together these two regions cover about 8 percent of the Dutch population. Amsterdam is a region with urban characteristics, with about 765,000 inhabitants, Friesland is a mainly rural area, with about 650,000 inhabitants.

Background of the training model is the QPR training. QPR was ‘invented’ as a response to the compelling evidence that people at risk tend not to self-refer. The training aims to enhance knowledge and skills in recognizing suicidal behaviour, motivating people to seek help and referring them to GP or to specialized mental health care. Measurements: Oordt, SIRI-2 and ATTS and referral behaviour.

Changes in numbers of suicides between trained regions and control regions will be compared by making use of ED registrations of suicide attempts. To maximise the effect as many gatekeepers as possible will be trained (minimum 700 in the two regions taken together). Calculation will be made how many quality adjusted life years are gained in one year thanks to the intervention. Costs and disability adjusted life years avoided are combined in an econometric model to produce incremental cost-effectiveness ratios.

**PS2.22-5**

**Suicide in Slovenia between 1997 and 2010: Characteristics, Trends and Preventive Activities**

Zorko, M¹; Roskar, S¹; Podlesek, A²; Tancic Grum, A¹; Kravanja, M¹

¹Institute of Public Health, SLOVENIA; ²University of Ljubljana, Faculty of Arts, SLOVENIA

**Background**

With an average suicide rate of 30 per 100,000, Slovenia usually was regarded as a high suicide rate country. However, in the previous decade the suicide rate was gradually decreasing, reaching 20.3 per 100,000 in 2010.

**Aim**

To analyse some characteristics of suicide rate and its changes in the period 1997 to 2010. We also gathered information on activities aimed at preventing suicidal behaviour in Slovenia, and tried to examine their relation with suicide rate changes.

**Methods**

7317 suicides (5691 men and 1626 women) were completed between the 1997 and 2010. Suicide rate and its change was studied with regard to gender, age group (10-19, 20-44, 45-64, 65+ years), method, and regionality. Data on suicide were obtained from the National Mortality Database, GDP was obtained from the Statistical Office of the Republic of Slovenia, and data on preventive activities were gathered from regional institutes of public health. Analysis of covariance was done to study the effects of gender and age on suicide rate. With regression analysis, changes in suicide rates were examined and compared to changes in regional GDP and presence of regional preventive activities.

**Results**

Between the years 1997 and 2010 suicide rate declined significantly for both genders and all age groups, except in males aged 10-19. The most frequently used method in both genders was hanging, while other methods were represented in a far lesser extent. Significant regional differences were revealed: regions with the highest suicide rate are in the east of Slovenia, while
those with the lowest rate concentrate in the west. Regions with highest suicide rate had lower GDP, and vice versa. A large negative correlation between the initial suicide rate and the change in this rate indicated that inter-regional variability in suicide rate is decreasing with time.

Conclusions
Suicide in Slovenia has declined significantly in the studied period, which at least partially may be the beneficial effect of launched preventive activities. More attention needs to be directed at young males.

PS2.22-6
A Study of the Feasibility of the Application of ACASI Technique in Suicide Related Surveys among Lower Education Level Residents
Liu, ZR; Zhou, L; Huang, YQ; Xiao, SY; Yan, J; Lin, YC; Cheung, GQ
1Institute of Mental Health, Peking University, CHINA; 2School of Public Health, Central South University, CHINA; 3Institute of Social Science Survey, Peking University, CHINA; 4Institute for Social Research, University of Michigan, UNITED STATES

Study objective
Current epidemiology studies on suicidal behaviours are usually rely on self-report by respondents and/or informants. However, because of the stigma to suicidal behaviours, the prevalence of these behaviours might be under estimated due to social desirability bias. Audio Computer-assisted Self-interviews (ACASI) technique is designed to increase the report rate of sensitive questions. But the ACASI mode might not be feasible for lower educational level population. The objective of this study is to compare the report rates of suicide ideation between ACASI mode and Computer-assisted personal interviewing (CAPI) mode, so as to evaluate the feasibility of the application of ACASI technique in suicide related survey in lower education level population.

Methods and material
From a rural village in China, 1223 respondents were randomly assigned to ACASI mode group and CAPI mode group. Thirteen college students were well trained to collect information of suicide ideation. Suicide ideation was measured by the suicide section from the Composite International Diagnostic Interview (CIDI) 3.0. The response rate and the prevalence of suicide ideation from the two groups were compared and chi-square tests were used to detect the differences between the two groups.

Results
Totally 696 and 527 respondents were interviewed by ACASI mode and CAPI mode respectively. All of the respondents were farmers. Among the whole population, 30.6% of respondents in ACASI mode group and 7.0% of respondents in CAPI mode group refused to participate into the survey after they were informed of the mode to be used. The difference is significant at the 0.05 significance level. Among 483 and 490 respondents who were willing to participate into the survey using ACASI and CAPI mode, more respondents (8.3%) reported seriously thought about committing suicide compared with people in CAPI mode group (5.3%), but without statistical significance. However, the significant difference of report rate of suicide ideation was found among farmers aged 55 years and older.

Conclusion
Although the ACASI mode may increase the report rate of suicide ideation, especially among older generations, more residents would refuse to attend the survey due to lower education level and less access to computers. Cautions must to be called in future studies when using the ACASI technique in undeveloped settings.
16:30 - 18:00
PS2.23 RISK FACTORS FOR SUICIDE IN THE ELDERLY

PS2.23-1
Social Factors in Older Adult Suicide: Its Perceived Acceptance in Response to Illness?
Canetto, SS1; Winterrowd, E2
1Colorado State University, UNITED STATES; 2University of Wisconsin Oshkosh, UNITED STATES

Study objectives
This study examined the role of perceived precipitant on the acceptability of older adult suicide.

Background
In the United States suicide is highest among older adults of European-American descent. Older European-American men have the highest suicide rates.

Methods and materials
Individuals aged 17 to 30 (N = 300) and individuals aged 50 to 95 (N = 286) (76% European-American) read a fictional obituary of a 71 year-old who died of suicide, randomized as either male or female. Respondents then indicated what they thought were the two most likely suicide precipitants as well as the percentage of suicides attributable to that precipitant. They then ranked the acceptability of the suicide depending on the perceived precipitants.

Results
Illness was believed to be the most likely precipitant of older adult suicide by both younger and older respondents. Less negative attitudes were found when the older adult suicide was perceived as precipitated by a severe/terminal illness. This was true for both younger and older adults.

Conclusions
These findings confirm and extend prior evidence on the social permissibility, among European Americans, of suicide under conditions of physical illness - a factor perhaps in the high suicide rate of older European-Americans. Older European-American men may be particularly impacted by the cultural permissibility of suicide under conditions of illness due to a connection, among European-Americans, between physical integrity/physical power/physical autonomy and masculinity.

PS2.23-2
Developing a Questionnaire on Death Wishes in Old Age.
Verlinde, A1; Pot, AM2; Oude Voshaar, RC3; Kerkhof, A4
1Mediant, NETHERLANDS; 2VU-Trimbos, NETHERLANDS; 3UMCG, NETHERLANDS; 4VU, NETHERLANDS

Introduction
Death wishes are an important concern to the elderly, to their families, to health care and to society. Ten percent of the elderly have a death wish, with or without suicidal intention or behaviour (Rurup 2005). A death wish may place a burden on the elderly and may influence the perceived quality of life and lead to an early death by suicide or other causes. It is often difficult to discuss their wishes with family and healthcare professionals. They may become more isolated, present more other health problems and can claim health care or social support
in other ways (Ekramzadeh 2012, Bartels 2002). Elderly with such wishes often lack adequate guidance. Professionals are less willing to treat elderly with a death wish as they would with younger persons (Uncapher 2001). Death wishes can bring diagnostic and therapeutic problems and perhaps hinder communication. There are cases where active death wishes may be conceived as suicidal and pathological. Sometimes they are a result of a depression. But in other cases the active wishes to end life might be considered as autonomous and well thought over. Sometimes death wishes reflect substandard living conditions, which may be improved. Several instruments for elderly are developed. However, these instruments do not differentiate between different types of deathwishes.

Methods and subjects
We hypothesize that there are several etiological characteristics of death wishes in the elderly, varying in three contributing dimensions: firstly: pathological thinking processes leading to passive and active suicidal intentions and behaviour; secondly: substandard living conditions and disease, and thirdly: autonomous and well thought over evaluation of the quality of life. We developed a questionnaire based on these three dimensions, designed to differentiate between characteristics of these dimensions, and characteristics of death wishes. Four groups of elderly, in nursing homes, psychiatric hospitals, members of the right to die society, and community dwelling elderly will be interviewed to validate the questionnaire against measures of depression and to the autonomy of the death wish by an independent observer.

Result
The research protocol, research questions, and first results will be presented.

Conclusion
Preliminary conclusion is that the care for elderly with a death wish can be improved by a questionnaire, differentiating between dimensions and characteristics of death wishes.

PS2.23-3
Cognitive Deficits and Decision Processes in Late-life Suicide
Szanto, K
University of Pittsburgh, UNITED STATES

Early studies described suicidal crisis as a state of deconstruction with low-level, concrete thinking, increased impulsivity, and a neglect of distal goals. There is accumulating evidence that the suicide diathesis involves cognitive deficits and maladaptive decision-making. Extending the stress-diathesis model, we will show how trait-like diatheses - impaired cognitive control, deficits in social processing, and impulsivity - are expressed in poor decisions, both in experimental paradigms and in the context of real-world decision making in older suicide attempters compared to both depressed non-suicidal adults and elders without a psychiatric history. Our data indicate that objective characteristics of suicidal behaviour such as planning and lethality, are related to specific cognitive deficits and decision processes. We find that deficits in cognitive control and social processing are related to serious, determined suicidal behaviour [high-medical lethality suicide attempts] (HL). Specifically, we found cognitive control deficits in HL attempters, and these deficits are linked to limited improvements following feedback during reward/punishment-based learning. Second, using an economic bargaining game we found that HL, when presented with unfair offers, inflicted social punishment without regard for its cost. This may indicate that social emotions interfere with optimal decision-making in HL and cause them to respond maladaptively to social conflict. In contrast to HL attempters, LL attempters
show deficits in two key facets of impulsivity, an excessive focus on the present at the expense of the future, and a neglect of key information while making decisions. These findings indicate the need for personalized interventions based on specific deficits in decision making.

**PS2.23-4**

**Suicide in the Old Elderly**  
**Pompili, M**  
Sapienza University of Rome, Italy, ITALY

**Study objectives**  
To investigate factors differentiating old-old elderly who died by suicide (those aged 75 years and older) from middle aged (those aged 50-64 years old) and young-old adults who took their own lives (aged 65 years to 74 years), and from living psychiatric outpatients 75 years and older who had no suicidal behaviours in the last six months before assessment.

**Methods**  
Cases for psychological autopsy interviews were 117 old-old elderly who died by suicide between 1994 and 2009. Comparisons were 97 young-old adult and 98 middle aged suicides, and 117 psychiatric outpatients admitted to the Department of Psychiatry of the University of Parma (Italy), between 1994 and 2009. Information for suicide decedents was gathered through proxy-based interviews, and data regarding living comparisons were extracted from medical records.

**Results**  
A high number of old-old elderly were widowed and lived alone before death; widowhood was more prevalent in the old-old elderly than in the younger suicide groups and the living psychiatric comparisons. Also, old-old elderly were more frequently characterized by the presence of life stressors in the few months before deaths when compared with psychiatric living comparisons 75 years and older.

**Conclusions**  
Clinicians involved in the prevention of suicide in the older adults should pay particular attention to loneliness and lack of social support, two conditions that may push the individual to feel hopeless, especially in those individuals who are facing stressful life events.

**PS2.23-5**

**Physical Disorders as Predictors of Suicide in Older Adults**  
**Erlangsen, A**; **Stenager, E**; **Conwell, Y**  
1Mental Health Centre Copenhagen, DENMARK; 2Dept. of Psychiatry, University of Southern Denmark, DENMARK; 3University of Rochester Medical Center, UNITED STATES

**Objective**  
The aim of the study was to examine the association between specific physical diseases and suicide in older adults as well as to assess whether depression or perceived burdensomeness might be causal mechanisms.

**Method**  
Individual-level register data on all older adults aged 60 years and over living in Denmark during 1990-2009 (N=2,301,709) was assessed using survival analysis. Relative risks of suicide were assessed for a total of 38 physical disorders while adjusting for age, period, conjugal status, income, physical comorbidity, and psychiatric disorders among others depression. Impact was examined within short and long term after diagnose.
Results
In all, 6,012 deaths due to suicide were observed during more than 22 mill. person-years. Presence of a physical disorders resulted in a 51% and 39% higher suicide rates for older adult men and women, respectively. Men with no physical disorders had a suicide rate of 33.0 [CI-95%: 31.6-34.4] vs. 49.7 [47.3-52.1] among those with 1-3 physical disorders. For older adult women the corresponding figures were 14.1 [13.1-15.2] and 19.6 [18.5-20.6], respectively. Suicide rate ratios were calculated for 38 different physical disorders using multivariate regression analysis. Higher risks of suicide were identified for a number of physical disorders; in particular lung cancer, intestinal cancer, chronic obstructive pulmonary disorders (COPD), liver disease, and male genital disorders. For example, older adults diagnosed within the last 3 years with COPD had a rate ratio of 1.79 [1.55-2.06] for men and 1.78 [1.47-2.15] for women when compared to those not diagnosed with COPD. Results from the combined analysis can be found in Figure 1. Disorders related to depression were associated with a 1.4 [CI-95%: 1.3-1.5] and 1.4 [CI-95%: 1.3-1.6] fold higher risk of suicide in older adult men and women, respectively, with a short time follow-up. Similarly, disorders related functional decline were associated with a 1.1 [CI-95%: 1.1-1.2] and 1.1 [CI-95%: 1.1-1.3] fold increase in risk when compared to those without any of those disorders.

Conclusion
Elevated risks of suicide were identified in numerous physical disorders, also when adjusting for psychiatric comorbidity. Subsequent screening for depression after diagnose of physical disorders might be a potential prevention strategy for late life suicide.
16:30 - 18:00

PS2.24 PROSPECTIVE STUDIES OF SUICIDE ATTEMPTERS

PS2.24-1
The Relationship between Primary Suicidal Drivers and SSFnMacro-coded Suicidal Typologies within CAMS
Schembari, BC; Jobes, D
The Catholic University of America, UNITED STATES

Jobes (2006) developed the “Collaborative Assessment and Management of Suicidality” (CAMS), a clinical intervention that can be used to identify, assess, and manage suicidal outpatients. Fundamental to the implementation of CAMS is the “Suicide Status Form” (SSF), a multi-purpose tool that guides suicidal risk assessment, treatment planning, tracking, and clinical outcome. The assessment portions of the SSF include various items that use both quantitative and qualitative approaches. The utilization of both of these approaches within the SSF allows for a richer understanding of the patient’s suicidal state (Jobes, 2006).

Jobes (2012) has recently summarized various SSF-related assessment research over the past twenty years. Recent work using SSF qualitative responses includes “macro-coding” of various responses in relation to “suicidal orientation” (i.e., self vs. relational). Beyond assessment considerations CAMS also includes a suicide-specific form of intervention. To this end, the SSF also includes space for the patient to identify those issues that make them suicidal. Within CAMS such problems are referred to as suicidal “drivers.” To date, there has been no research that has systematically studied patient-defined suicidal drivers. In this study we used a modified consensual validation process to identify and reliably code these drivers.

The current study will examine both assessment and treatment data in relation to macro-coded typologies to determine if different suicidal states correlate with different suicidal drivers. The data for this study are derived from two datasets obtained from Harborview Hospital in Seattle (n= 28) and the Menninger Clinic in Houston Texas. (n= 21). This assessment/treatment oriented study should help enhance clinicians’ understanding of patients’ suicidal risk with implications for treatment as well.

PS2.24-2
Intrapersonal Positive Future Thinking Predicts Repeat Suicide Attempts in Hospital-treated Suicide Attempters
O’Connor, R1; Smyth, R2; Williams, JMG3
1University of Glasgow, UNITED KINGDOM; 2Royal Infirmary of Edinburgh, UNITED KINGDOM; 3University of Oxford, UNITED KINGDOM

Study Objectives
There is a well established literature which suggests that a paucity of positive future thinking is implicated in suicide risk. In the present study, however, we argue that the nature of the relationship between positive future thinking and suicidal behaviour needs to be refined and
understood in terms of the content of the positive cognition. Within the context of the integrated motivational-volitional model of suicidal behaviour (O'Connor, 2011), we aimed to investigate whether a potentially deleterious type of future thinking, intrapersonal positive future thinking, predicts repeat suicidal behaviour.

Methods
Three hundred and eighty-eight patients who were seen by the Liaison Psychiatry service the morning after presenting at a general hospital following a suicide attempt were recruited to the study. At baseline, all participants completed a range of clinical and psychological measures (depression, hopelessness, suicidal ideation, positive future thinking task) while in hospital. The positive future thoughts were coded in terms of content by two independent raters. Fifteen months later, we used a nationally-linked database and inspected participants’ medical records to determine whether participants had been hospitalized again after a suicide attempt.

Results
Over the follow-up period, 25.6% of linked participants were re-admitted to hospital following a suicidal attempt. In univariate logistic regression analyses, depression, hopelessness, past self-harm, positive future thinking and suicidal ideation all predicted suicidal behaviour over this interval. However, in the multivariate analysis, intrapersonal positive future thinking and past self-harm were the only significant predictors of suicidal behaviour.

Conclusions
We need to look more closely at future orientation to further our understanding of the aetiology and course of suicidal behaviour. Different types of positive thinking appear to have differential effects on suicide risk. The clinical and theoretical implications are discussed within the context of the integrated motivational-volitional model of suicidal behaviour.

PS2.24-3
A Model of the Suicidal Process based on Evidence from People who have Attempted Suicide, Their Significant Others and Those Bereaved by Suicide
Benson, O1; Gibson, S1; Boden, Z1; Owen, GJ2
1SANE, UNITED KINGDOM; 2University of Exeter, UNITED KINGDOM

Friends and family members of suicidal people have a significant involvement in the global suicide prevention effort, but there is very little research directly related to this involvement. The aim of the present study is to add to the existing evidence base by providing a model of the suicidal process as it is experienced by suicidal individuals and their ‘significant others’.

The design, data collection and analysis combined the grounded theory approach with philosophical phenomenology. The data were analysed inductively and categories were developed through a process of ‘constant comparison’. The model was then formulated in the light of the extant literature. 46 participants have been interviewed in-depth and the interviews transcribed. The majority of the interviews were face-to-face with follow-up interviews by email or telephone. The sample includes people who had attempted suicide (11) who were interviewed with their family member or friend (12), and people bereaved by suicide (23). A substantial body of first person testimony from people who had completed suicide (diaries, correspondence, etc.) was accessed through the bereaved participants and included in the analysis.

The model that emerges from these accounts of experience presents the suicidal process as a complex interaction of three elements.
1) Loss of trust in self and other: Instability in the person’s basic structures of trust characterises the process of suicide. Pronounced self-dependence and self-reliance may shift towards dependence and reliance on others while trust remains absent.

2) Disintegration of the meaningful self: The suicidal person becomes unable to sustain a self created to hide or to substitute a more authentic version of the self, which is believed to be inadequate or ‘bad’.

3) Suicidal exhaustion: Excessive and relentless demand for mental effort, depletion of mental resources and inability to conserve and replenish these amounts to a state of exhaustion in which suicide appears as the only way to rest.

Understanding each of these elements in the suicidal process, and the relationship between them, provides an opportunity for new community based approaches to suicide prevention both in terms of helping people to recognise when someone is at risk of suicide and responding in a way that is most likely to reduce that risk.

PS2.24-4
“Implicit” Attitudes to Abstract and Personal Death Distinguish Suicidal Ideators from Controls: Potential for Non-Invasive Risk Assessment
Hussey, I; Barnes-Holmes, D
National University of Ireland Maynooth, IRELAND

“Implicit” measures assess reaction time biases to uncover attitudes and beliefs that individuals may not be aware of, or have motivation to conceal. Recently, one such measure - the Implicit Association Test - was shown to be more predictive of future suicide attempt within 6 months than traditional assessment measures within an A&E setting (Nock et al., 2010). This work further explores implicit attitudes to death across normative individuals and suicidal ideators. In order to parse out the specific implicit attitudes associated with suicidal behaviour, we employed a more sensitive implicit measure, the Implicit Relational Assessment Procedure (IRAP: Barnes-Holmes et al., 2010). Among other reasons, the IRAP is unique among implicit measures because it can assess implicit attitudes using semantically complex propositions as well as simple associations (Nosek et al., 2011). The structure and utility of the IRAP will be discussed.

Normative controls and hospital-based individuals suffering from suicidal ideation completed two IRAPs that assessed implicit attitudes to Abstract Life and Death and Personal Life and Death. Participants also completed traditional questionnaires assessing depression, hopelessness, and suicidality.

Briefly, results indicated that suicidal ideators demonstrated “My Death would not be Distressing” attitudes whereas controls did not, and controls demonstrated “My Life is not Distressing” whereas ideators did not. Puzzlingly, all participants demonstrated “My Death would be Pleasant” attitudes. Results will be discussed and potential causes and implications of all effects will be suggested.

Although the IRAP never directly asks individuals about their history, a signal detection analysis demonstrated that scores the Personal Death IRAP could correctly classify 75% of individuals into their respective groups based on history of ideation. Furthermore, participants rated the IRAP as significantly less distressing to complete than traditional assessments. The potential for implicit measures as informative and non-invasive risk assessment measures will be discussed; particularly their non-invasive nature, their increased predictive utility over traditional psychometric measures, their ability to provide information which participants might otherwise be unable to report.
Dysfunctional Social Problem-solving and Brooding Rumination within the IMV Model of Suicidality
Miller, J1; O’Carroll, RE2; O’Connor, R3
1SBRL, University of Glasgow, UNITED KINGDOM; 2University of Stirling, UNITED KINGDOM; 3University of Glasgow, UNITED KINGDOM

Introduction and aims
Recent psychological research has identified a range of personality and cognitive factors that are implicated in the aetiology of suicidal behaviour. Some of these include defeat, entrapment, rumination, and social problem-solving. In the present study, we aimed to extend previous research by focusing in detail on the dysfunctional constructs of social problem-solving (which include negative problem orientation [NPO], avoidance style [AS], impulsive careless style [ICS]) and rumination within the context of Integrated motivational-volitional model of suicide behaviour (IMV; O’Connor, 2011). Specifically, we investigated the inter-relationship between NPO, ICS, AS and rumination which are thought to act as Threat To Self moderators (TSM) within the model along with other key psychological risk factors.

Method
This is a cross-sectional study where 322 healthy adults completed a battery of questionnaires relating to the IMV model. These measures included hopelessness, depression, suicide ideation, self-harm, defeat, entrapment, social support, stress, social problem-solving and rumination.

Results
Suicide ideation, depression, hopelessness, defeat and entrapment were found to be significantly positively associated with NPO and AS; internal entrapment and reflective rumination were not significantly associated with ICS. Brooding rumination and NPO were found to be univariate mediators of the relationship between defeat and entrapment, and further analysis also found a combined effect of both on the defeat-entrapment relationship.

Conclusions
In conclusion this study yields support for the IMV and highlights the complexity of the relationship between social problem solving and suicide risk. Clinical and theoretical implications are discussed.
**PS2.24-6**

Beyond Symptoms: Typical Plans and Motives of Suicide Attempters Compared to Non-Suicidal Depressive Individuals

Brüdern, J.¹; Berger, T.¹; Gysin-Maillart, A.²; Michel, K.²; Schmutz, I.¹; Caspar, F.¹

¹University of Bern, SWITZERLAND; ²University Hospital of Psychiatry, Bern, SWITZERLAND

**Aim**

In the past two decades a considerable number of models dealing with suicidal behaviour has been developed. The main interest was to identify risk factors of suicidal behaviour and associated high-risk groups. A major depressive episode is still a frequently discussed risk factor of suicidal behaviour. However, current studies suggest that depression is predictive of suicidal ideas but much less of suicidal act (Nock et al., 2009). This implies that suicidal behaviour should not only be seen as a symptom of a depressive disorder, but should be understood as an independent behaviour, which must be examined separately. The present qualitative study focuses on typical Plans, motives and the underlying self-regulatory processes of suicide attempters compared to non-suicidal depressive individuals.

**Methods**

Plan Analysis, a clinical case conceptualization approach developed by Caspar and Grawe, was used to analyze the instrumental relations between participants’ behaviours and the hypothetical Plans and motives “behind” this behaviour. Video taped narrative interviews of 17 suicide attempters and intake interviews of 17 depressive patients without suicidal intent were investigated with the Plan Analysis procedure and a Plan structure was developed for each participant. These were used for establishing a prototypical Plan structure for each clinical group.

**Results**

Both groups have partly overlapping avoidance (e.g. avoid rejection, criticism, painful thoughts and emotions) and approach Plans (e.g. search for acknowledgement) but use different strategies to reach them. By contrast, suicidal behaviour serves various Plans and motives only found in suicide attempters.

**Discussion**

Findings are discussed with respect to current theoretical models of suicidality as well as implications for suicide prevention. Potential directions for further research are explored.

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**16:30 - 18:00**

**PS2.25 ADDRESSING THE GLOBAL PROBLEMS OF PESTICIDE SUICIDE-CURRENT INITIATIVES**

**PS2.25-1**

**Introduction and overview**

Hawton, K

University of Oxford, UNITED KINGDOM

Of the estimated one million suicides in the world each year, at least 30% involve ingestion of pesticides. Ready access to pesticides by members of households where they are used, together
with the impulsive nature of the self-poisoning acts, appear to be major contributory factors. Therefore encouraging safer storage may be one means of addressing this problem.

The topics in the symposium will include:

- An overview of restriction of access to methods of suicide as a means for suicide prevention, pesticide suicides, and secure storage studies that are being implemented in Sri Lanka, India and Surinam
- China - current initiatives
- India - secure storage in Andhra Pradesh and Tamil Nadu
- Sri Lanka - large trial of secure storage

Educational objectives:

1. To review current status of secure storage studies and projects that focus on restricting access to pesticides;
2. To add new knowledge to this field by sharing experiences, discussing findings and innovative approaches.

10:30 - 16:30
DAY 2 - POSTER SESSION

PO2-01
Characteristics of Suicide Attempts in Major Psychiatric Disorders - Pilot Study
Kim, B; Yu, HY; Joo, EJ; Lee, NY; Kim, YS; Ahn, YM
1Seoul National University College of Medicine, SOUTH KOREA; 2Eulji University School of Medicine, SOUTH KOREA; 3Dongguk University Medical School, SOUTH KOREA; 4Seoul National University College, SOUTH KOREA

Background
Suicide risk in mental patients is known to be high. However, characteristics of suicide in each psychiatric disorder have not much researched. In this study, we aim to compare the characteristics of suicide attempt within major psychiatric disorders.

Method
A DIGS (Diagnostic Interview for Genetic Studies) were performed in 1,245 mental patients who visited outpatient clinic in Seoul National University Hospital (SNUH). Trained psychiatrists and psychiatric nurses interviewed patients and made diagnoses. Three psychiatrists discussed about vague diagnosis and ruled out subjects when they were not made diagnosis even after discussion. We chose three representative psychiatric disorders, schizophrenia, bipolar I disorder, bipolar II disorder and excluded schizoaffective disorder and bipolar disorder, NOS for the purpose of definite comparison between each psychiatric disorders. We compared history of suicide attempt by chi-square test and number of suicide attempt by ANOVA. We compared familial history of suicide for the purpose effect of familial loading to suicide attempt.

Results
Among total 1,245 mental patients, 775 patients were excluded because some did not answer the question about suicidal behaviour or diagnosis was vague. Among 470 mental patients, schizophrenia, bipolar I disorder and bipolar II disorder patients were 185, 201 and 84, respectively. Twenty nine Bipolar II disorder patients had attempted suicide, and their proportion was 34.5%,
this is higher than schizophrenic patients and bipolar I disorder patients. Other two mental disorder’s number were 36 (19.5%) and 41 (20.4%), respectively \( p=0.042 \). Number of suicide attempt was also higher in bipolar II disorder, they had attempted suicide 17.12 times on average, comparing 13.08 in schizophrenia and 6.94 in bipolar I disorders. However, their difference were not significant \( p=0.332 \). Familial history of mental illness was higher in bipolar II disorder comparing to schizophrenia and bipolar II disorder. Thirty three bipolar II patients (20.2%) had familial loading and 20 schizophrenic patients (4.7%) and 52 bipolar I disorder patients (5.9%).

**Conclusion**

We compared characteristics of suicide in three high suicide risk psychiatric disorders, schizophrenia, bipolar I disorder and bipolar II disorder. Bipolar II disorder patients had higher familial loading of mental disorders. This is pilot study for exploring reason for difference of suicide in each mental illness.

**PO2-02**

**120,000 Calls per Year: The Role of Tele-Help (Tele-Onthaal) in Suicide Prevention in Flanders-Belgium**

Andriessen, K; De Ketelbutter, C

Federation Tele-Help (Tele-Onthaal), BELGIUM

**Background/objectives**

Tele-Onthaal (TO) was founded in 1959 as a volunteer suicide prevention organization providing 24/7 anonymous and free telephone crisis support for people with social, psychological, or existential problems. Currently there are five centres (one in each province of Flanders). Across the centres, 567 trained and supervised volunteers (in 2011) provide telephone and online chat support for people in distress. Suicide prevention is specifically included in training and supervision of volunteers. Tele-Onthaal is a working member of the Flemish governmental Suicide Prevention Action Plan, and a member of IFOTES, the International Federation of Emergency Telephone Services. The study aims to present a socio-demographic profile of individuals who use the service, the type of calls, and major topics of the calls, with particular interest for the suicidal callers.

**Methods and material**

Annually the five TO centres receive +120,000 calls \( N=122,113 \) in 2012). All calls are registered and computed using a standardized form.

**Results**

Female/male ratio of callers is 2/1. Majority of callers are not married (45.5%), divorced (24.5%), or widowed (9%). 58% is living alone. 1 in 4 callers is in crisis and 56% of calls are received outside regular working hours (e.g., during evenings and weekends). Major topics of calls are relational problems (38% of calls), mental health problems (19%) and loneliness (10%). 5% of the callers and 11% of the chatters are suicidal at the time of the call (including suicidal ideation, suicide plan, suicide attempt).

**Conclusion**

Tele-Onthaal is an easily accessible help service for people in distress, including suicidal people. Though many callers are not suicidal at the time of the call, they experience problems that are known suicide risk factors. Volunteers, as well as supervising staff members, need ongoing training in suicide prevention.
**PO2-03**

The Socio-antropological Aspects which Contribute to Suicide Attempt in the City of Teresina - Northeast Of Brazil

Aragão, C; Barros, FO

Federal University of Piauí, BRAZIL

**Objectives**

To analyze socio-anthropological aspects which contribute to suicide attempt in the city of Teresina located in the Northeast of Brazil. It also aims to verify the social support network that supports these people before and after the performed act, as well as preventive practices adopted by the municipality.

**Methods**

We conducted a preliminary survey with all the people who were hospitalized for attempted suicide during the period from January 2011 to June 2012, at the Hospital Epidemiology Center (NHE) of the Emergency Hospital of Teresina (HUT). The second step was to call the chosen people, inform them and invite them to participate. The third stage was the first meeting at the residence of the person and others in places with more privacy. An average of 3 meetings was held with each interviewee, a total of 7 people, 2 men and 5 women aged between 17 and 50 years old. This is a qualitative study for a master’s degree in the Department of Anthropology at the Federal University of Piauí. We used a basic questionnaire on socioeconomic data and a guiding question for the interview: What are the reasons that led these people to attempt suicide?

**Results**

The participant observation was a way of searching for the explicit and implicit content of the speeches of the research subjects. The results were listed in common categories analyzed in speeches: traumatic events; importance of family, personal relationships, spirituality and mental health.

**Conclusion**

A suicide attempt is built over an individual's life in a multifactorial way. All aspects of the human existential should be taken into account, which are: biological, psychological, socio-cultural and spiritual. The traumas that mark a person when they are not well prepared, contribute significantly to the construction of suicidal behaviour: lack of family or overprotection, sexual abuse, emotional dependence and mental disorders, were highlighted and emphasized in this research. Spirituality is a protection factor of great importance. The stigma of suicide in our society and the lack of a social support network to work on so important and profound existential issues, contribute to the worsening of the condition. It was also found that Teresina does not provide the necessary conditions for the individual with suicidal behaviour to be supported, neither before nor after the attempt. Public policies should look harder for prevention and support for victims of this serious public health problem.
As a youth suicide prevention organization led by young people, STOP SUICIDE believes that prevention can be made by young people themselves. We put some great efforts developing useful and creative material in order to inform and talk about this central issue with teenagers. STOP SUICIDE has been working on two kinds of prevention material: instructive tools and workshops.

**Youth suicide prevention instructive tools**
- The posters are used as a way to bring out protective factors. They show 4 celebrities known by teenagers and whom they consider as role models: Nelson Mandela, Lionel Messi, Alexandre Jollien (a disabled Swiss writer and philosopher) and Angelina Jolie. The posters show that with many reasons to think about suicide, these persons went beyond their pain thanks to their passion, faith, and/or civic engagement. We use those posters during prevention activities with small public.
- The quiz aims to raise some questions related to suicide issue: what is the main reason explaining youth suicide, what is the first cause of death among young people in Switzerland, why do we usually link suicide with courage or cowardice... All these questions make students talk about suicide issues and help to inform them by providing correct information.
- The short movie is about how much people would be ready to help one of their friends who think about suicide. When showing the movie, we organize a discussion afterwards so people can tell what they thought about it and share their thoughts about the importance of helping each other in moments of crisis.

**Workshops**
One of our activities is organizing prevention actions with young people presenting some suicidal risks. It is called ‘targeted prevention’ and only concerns small groups of kids living tough life situations. In these cases, we like to propose involving activities that allow everybody to express in some alternative way, since talking can sometimes be a tough way to express its feelings. We use 2 kinds of workshops:
- The video clip creation is a creative way to make kids think about the positive things in their life and the things that can become their resources in times of crisis. It will be best suited within small groups.
- The problems/solutions game can be used with a broader public. It allows kids to take part in a game while thinking about problems and how to solve them. It also allows them to think about suicide in a more global perspective.
**PO2-05**

*Psychoanthropological Analysis of Discourse in a Support Group Comprised of Inhabitants of Rural and Urban Areas in the Maya Region in Yucatan Mexico*

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Hospital Psiquiatrico, MEXICO

Although suicide appears to be an individual act, this auto-destructive behaviour occurs in complex cultural contexts. In Mexico, the Maya are one of the most numerous ethnic groups and they have the highest rate of suicide in the country. A partially collapsed Maya culture is what remains after the savage destruction by the Spanish conquest in the 16th century.

**Objectives**
To learn about the semantic content of discourse concerning suicide in a culturally heterogeneous group. To find the importance of cultural diversity in the prevention of suicide. To analyze the role of cultural identity in suicide prevention. To identify discourse transformations and group attitudes during the process.

**Method and material**
This presentation examines a support group in the local psychiatric hospital. The group consists of 30 people, the majority women, who meet once a week for one and a half hours. The sessions are in Spanish. 48 sessions, corresponding to 12 months of work between May 2012 to May 2013 were analyzed. In addition, 300 individual interviews were made to group members in the same period. The majority of the participants come from the rural areas and are bilingual, with Maya as their first language. The others live in urban areas and only speak Spanish. This study examined the transcriptions of the group sessions using Tropes Zoom software. The interpretation of the data was done with a theoretical, psychodynamic and anthropological framework.

**Results**
Analyses of the data found significant information which permitted us to understand how the ideation of suicide is created within a cultural background. Substantial differences could be established between subjects in rural areas, primarily Maya speakers, and those who are in urban areas and exclusively speak Spanish. In addition, the cultural diversity of the group enriched the participants. Also, they perceived the importance of reaffirming their historical and cultural roots as part of their integral development. All of this suggests, that rescuing ones cultural identity might be an important protective factor in suicide prevention. The psychoanthropological approach could show new paths in suicide prevention in this area of Mexico. It is hoped that this proposal is studied in another similar culture, where a new religious ideology and economic plan were violently imposed upon another with the resulting chaos.

**PO2-06**

*Can E-mail Contribute to a Crisis Helpline for Suicide Prevention?*

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A year ago the Flemish Suicide Prevention Centre started offering e-mail support next to telephone and chat help for people in a suicidal crisis. Soon, we noticed a fast increase in people contacting the helpline through e-mail. In this session, we explore some of the differences and challenges of e-mailing with suicidal people.

Do the users of the e-mail differ from the users of the chat and telephone service? Do they have different issues? Do we reach other target groups? Especially teens, elderly people, people with
an auditive disability and people who have a hard time breaking through taboo, can more easily use e-mail as a medium. Combined with its asynchronous character e-mail can make reaching out for help more accessible, all the more because it increases the mailer’s sense of control and autonomy. Next to that the process of writing down one’s feelings also stimulates reflection. On the other hand, e-mail faces the helpline with some serious challenges: How to deal with people who need immediate help? How long do you keep the e-mail conversation going? In this presentation we will talk about the specific group of people who contact us by email, our methods to answer an email, and the advantages and considerations we’ve experienced.

PO2-07
Influence of Differentially Expressed Genes from Suicide Post Mortem Study on Personality Traits as Endophenotypes on Controls and Suicide Attempters
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2Department of Psychiatry, University of Halle, GERMANY

Background
Despite a genetic contribution to the complex aetiology of suicidal behaviour is convincing since many years, the attempt to identify specific genes related to suicide has led to contrasting results. In a post mortem study on suicide, we previously detected several differentially expressed genes which, however, have not been subsequently associated with suicidal behaviour. Therefore, personality traits may represent good intermediate endophenotypes.

Aim
Our primary aim was to investigate the potential modulation of several Single Nucleotide Polymorphisms (SNPs) of the same previously investigated genes (S100A13, EFEMP1, PCDHB5, PDGFRB, CDCA7L, SCN2B, PTPRR, MLC1 and ZFP36) on personality traits, as measured with the Temperament and Character Inventory (TCI), in a German sample composed of 287 healthy subjects (males: 123, 42.9%; mean age: 45.2±14.9 years) and in 111 psychiatric patients (affective spectrum: n=76, 68.5%; schizophrenia spectrum: n=17, 15.3%; borderline personality disorder: n=18, 16.2%) who attempted suicide (males: 43, 38.6%; mean age: 39.2±13.6 years).

Methods
Multivariate analysis of covariance (MANCOVA) was used to test possible influence of single SNPs on TCI scores. Genotypic, allelic and haplotypic analyses have been performed.
Results
Controlling for sex, age and educational level, genotypic analyses showed a modulation of EFEMP1 rs960993 and rs2903838 polymorphisms on both Harm Avoidance and Self-Directedness in healthy subjects. Interestingly, we could replicate these associations in haplo-blocks within controls (p<0.0001) and in the independent sample of suicide attempters for Harm Avoidance (p<0.00001), a phenotype highly associated with suicidal behaviour.

Conclusion
This study suggests that EFEMP1 SNPs, never investigated in association with suicidal behaviour and related personality, could be involved in its modulation in healthy subjects as well as in suicide attempters.

Limitations
The major limitation of this study was the small sample size.

PO2-08
Risk Factors for Suicidal Behavior in HIV Patients
Chinea Cabello, E; Rodríguez-Fortúnez, P; Alemán, R; Hernández, I; Alonso, MM; Pelazas, R; Cruz, P; Vera, O; Salinas, MM; Jiménez, A; Gómez-Sirvent, JL; García, D; Cejas, R
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Study objectives
Evaluation of the prevalence and risk factors for suicidal ideation in HIV patients.

Method and material
Cross-sectional and randomized study which evaluated various demographic, social, analytical and clinical issues. We used the ‘Calgary Depression Scale’ for assess depression and ‘Plutchik Suicide Risk Scale’ for suicidal ideation.

Results
125 patients were selected, 84.8% males. 19.7% with heterosexual transmission route, 63.9% homosexual and 16.4% were injection drug users. Prevalence of suicidal ideation was 21.4%, depression 23% and 9.1% with history of suicide attempts. Higher prevalence for suicidal ideation was found in men (22.6% vs. 10.5%, p = 0.001), unemployment status and work retirement (32.4% and 20% vs. 11.6%, p = 0.03), history of psychiatric disorders (25% vs. 8.4%, p = 0.03), family history of suicide attempts (66.7% vs. 17.4% p = 0.03) and drug users (50% vs. 17.2%, p = 0.03). Partnered also a greater suicide risk in patients with detectable plasma viral load (p = 0.04), lower levels of CD4+T cells (p = 0.02), worse current CDC disease staging system (p = 0.01) and lower Karfnosky Performance Scale score (p <0.001). Prevalence of suicidal ideation, depression and suicidal attempts was higher in patients living in rural communities (42.9% vs. 12.4%), (37.1% vs. 15.7%) and (23.5% vs. 6.7%) p = 0.01. It was found a higher prevalence of suicidal ideation in patients not treated with efavirenz (28.2% vs 5.6%, p = 0.004). No significant differences were found between suicidal ideation and route of transmission, educational level, marital status, employment status, family support, and number of children. Neither with years of HIV infection, Hepatitis C coinfection,CDC stage, antiretroviral therapy, treatment adherence and presence of lipodystrophy.

Conclusion
The prevalence of suicidal ideation in our HIV population is high and similar to that found in severe psychiatric conditions. Being a man, living in rural community, be unemployed or retired, drug user, with history of psychiatric illnesses,family history of suicide attempts, worst clinical CDC stage, less Karfnosky score, detectable viral load and low levels of CD4 + lymphocytes, correlates with increased suicidal ideation.
PO2-09
KEHR Suicide. A New Tool for Systematic and Multidisciplinary Evaluation of Suicide Cases
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Background
The Dutch multidisciplinary practice guideline on the assessment and treatment of suicidal behaviour, issued in 2012, states that care for patients who died by suicide should be systematically evaluated in order to provide insight that may be used to improve care for suicidal patients. However, there are no tools available whereby mental health care workers can evaluate suicide cases systematically and multidisciplinary. To bridge this gap we designed KEHR Suicide, a data-guided method based on the new practice guidelines. KEHR Suicide meets various goals: 1) systematic, multidisciplinary assessment of adherence to guideline recommendations 2) direct report of professional performance in order to encourage reflection and improvement 3) getting familiar with the practical and theoretical starting points of the new practice guideline. For quantitative research, data on professional behaviour ‘on the spot’ can systematically be collected.

Method
Shortly following the suicide of a patient, all engaged professionals are invited to complete a anonymous online questionnaire based on the five basic assumptions of dealing with suicidal behaviour as described in the guideline. In a yes/no format it is assessed whether or not guideline recommendations were followed. Demographic features of the deceased patient and the professional are assessed as well as features of the suicide case.

Results
Outcomes are systematically presented in a report containing figures displaying the numbers of respondents who rated ‘yes’ and ‘no’. Each figure displays the outcomes of questions on one of the five basic assumptions. Subsequently, the outcomes can be discussed in a multidisciplinary team meeting. The focus is on the rationale or motive to either or not following guideline recommendations. Possible improvement goals to adjust daily practice might be set.

Discussion
KEHR Suicide is a new tool that might be helpful for the improvement of professional behaviour. In the Netherlands, the urging need for such tool is clearly recognized. However, due to taboo and stigma around suicide in mental health care, professionals may be reluctant to complete the questionnaire and/or answer the items frankly. In addition, we wonder what would be a good method to discuss the outcomes. In this presentation, we would appreciate to discuss whether and/or how KEHR Suicide might be used in daily practice so that the set goals will be met.
PO2-11
Decrease in Suicide Rates in Quebec: A Brief Look at Four Strategies
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The Province of Quebec has long been recognized for high suicide rates. In 1999, the worst year for suicides on record, 1,620 people committed suicide with a rate of 26.5 deaths per 100,000 residents. Ten years later, in 2009, there were 1,146 suicides, a rate of 14.6 per 100,000. Progress was particularly noted in the first half of the 2000s, with the largest decline in rates being among the youth.

This encouraging decline suggests that suicide prevention efforts are in fact bearing fruit, although with three deaths a day by suicide, it would still be inappropriate to speak in terms of success. It is essential to understand the various reasons of this multifaceted issue in order to reinforce prevention and to develop effective measures. Indeed, the suicide prevention stakeholders in Quebec have put forward various hypotheses. They believe that the following measures have had an influence on the drop in suicide rates: telephone intervention, training in efficient intervention processes, networks of sentinels and social mobilization.

The presentation will explain these four measures and will highlight the difficulties and the keys involved in their implementation.

Graph: Adjusted mortality rate from suicide by sex, Quebec, 1990-2010

1997-2002: Quebec’s Strategy for Preventing Suicide
2001: Telephone intervention 24h/24 7/7
2003: Training in efficient intervention processes
2007: Sentinels training and implementation of networks of sentinels
2009: Project of social mobilization -‘Ajouter ma voix’
PO2-12
From Suicide Prevention Gatekeepers to Happiness Catchers - A New Model for Public Education Based on Eastern Asia Culture
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1Suicide Prevention Center, Mackay Memorial Hospital, TAIWAN; 2School of Public Health, Chung Shan Medical University, TAIWAN

Background
The concept and model of ‘gatekeepers’ for suicide prevention is developed in western culture. However, football is not very popular in Taiwan, so it is difficult to promote the suicide prevention gatekeepers. Based on eastern Asia culture and baseball as the fondest exercise in Taiwan, happiness catchers become the new concept and model which developed by the mental health organization, academic institute, and government. The goals of the service projects were to design the standard materials, to increase the amount of lectures for general population, and to encourage the reporting of suicidal ideation or attempt to the case managers.

Methods
In 2010, Mackay Memorial Hospital, Chung Shan Medical University, and New Taipei City Government design the BHC-5L (being happiness catchers - looking, listening, learning, loving, and living), including 3 standard lectures (60 to 90 minutes) of BHC-5L for community, school, and workplace. Under the funding by Public Health Department of New Taipei City Government, Suicide Prevention Center of Mackay Memorial Hospital carried out the BHC-5L in New Taipei City (population: near 4,000,000 people). We tried to analyze the efficiency of the BHC-5L. After the lectures, all happiness catchers had to complete the 10-item test by the highest score as 100 point for evaluating the efficiency and to score the acceptance rate by the highest satisfied as 5 point and the lowest satisfied as 1 point. All the data were analyzed using SPSS 18.0.

Results
There were 58 lectures (6,461 audiences) in 2010, 79 lectures (7,504 audiences), and 183 lectures (18,213 audiences) in 2012. The means of acceptance rate of the audiences were 3.85, 4.32, and 4.31 among school, community, and workplace in 2010; 3.85, 4.38, and 4.19 in 2011; and 3.98, 4.29, and 4.09 in 2012. The means of the 10-item test were 79.79, 79.08, and 84.46 among school, community, and workplace in 2010; 77.01, 79.89 and 80.66 in 2011; 78.28, 84.61, and 79.13 in 2012. The reporting numbers increased from 4,409 in 2010 to 5,787 in 2011.

Conclusion
Because of only 60 or 90 minutes, the BHC-5L is easy to promote for general population via school, community, and workspace. Even time limitation, the satisfied rates and post lecture tests were good enough. The preliminary efficiency of BHC-5L seems useful in New Taipei City. In future, the larger samples and more administrative divisions will be necessary to find the efficiency of BHC-5L.
PO2-13
Pseudobulbar Affect, Hopelessness and Suicidal Ideation in Multiple Sclerosis: A Transversal Study
Freitas, F; Gomes Neto, AP; Souza, RB; Bicalho, ALR; Christo, PP
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Study objective
Knowledge about suicide risk factors is essential for assessment, prevention and treatment of individuals at risk. Pseudobulbar affect in a symptom on which the patient is not able to control his laughing or crying. This symptom could occur in a few neurologic diseases, such as multiple sclerosis. Multiple sclerosis is a disabling disease that attacks 1.000.000 around the world. Pseudobulbar affect appears in 10 to 29% of patients with multiple sclerosis, which is a disease usually associated to mood disorders. Despite patients with pseudobulbar affect pursue inappropriate emotional expression patterns, it is not clear if its social and emotional consequences are involved with an increased risk for suicide.

Aim
This study aims to evaluate if there is a relationship among pseudobulbar affect, hopelessness feelings and suicidal ideation in individuals with multiple sclerosis, with and without depression and which tracts are involved with these symptoms in this group.

Methods and material
82 clinically stable multiple sclerosis patients, defined with McDonald criteria for diagnosis of multiple sclerosis, attended in Neurology Ambulatory of Santa Casa de Misericórdia de Belo Horizonte, Brazil, spontaneously went through a clinical interview including Center for Neurologic Study - Lability Scale, Beck Depression Inventory and Beck Hopelessness Scale. Data was analysed using STATA 12.0.

Results
In 82 patients with multiple sclerosis, 30 (36,6%) presented symptoms of pseudobulbar affect with a strong correlation with depression, hopelessness feelings and suicidal ideation (p=0,00). Among the 7 patients with pseudobulbar affect but with no depression, pseudobulbar affect was not related to hopelessness feelings and suicidal ideation (see below).

<table>
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</tbody>
</table>

Conclusion
Pseudobulbar affect has a close relation with mood disorders and suicidal ideation. When depression is isolated as an confounding information, pseudobulbar affect seems to be a debatable risk factor for suicide.
**PO2-14**  
**Increased Suicide Risk Among Romanian Adolescents with Psychoactive Substance Use and Abuse**  
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**Introduction**  
Suicidal risk is a major health issue worldwide, approximately one million deaths occurring annually through suicide. Stressors related to the social environment influence the suicide risk in adolescence and drug-dependent teens experience a higher risk of suicidal behaviour.

**Aim**  
This study aims to assess the association between Romanian adolescent drug use and drug abuse with suicidal risk, taking in account the influence of stressful life events.

**Method**  
We consider 1143 randomly selected Romanian adolescents who participated in the multicenter large-scale European study SEYLE. Suicide risk was assessed through Paykel score and drug use and abuse through a self-report questionnaire. Statistical methods included Kolmogorov-Smirnov test, \( \chi^2 \) test, Mann-Whitney U test, Kruskal-Wallis test.

**Results**  
Among Romanian adolescents the frequency of suicide attempts was 4.37% and 12.7% of them communicated suicidal ideation. Our results show that 2.5% of Romanian teens had a drug abuse problem. Adolescents with current drug use presented a 30.8% risk for suicide and from the non-consumers group only 12.5% exhibited suicide ideation and suicide attempts. The influence of family history of drug abuse on teenagers substance use was 3.57% and the suicide risk was insignificant in this group.

**Conclusions**  
Adolescent suicide risk is increased among Romanian teenagers with drug use and abuse. Intervention and prevention community based programs are required in Romania to raise awareness and help drug-abuse adolescents through suicidal crisis.

**PO2-15**  
**Suicide in Nepal and Major Issues in Prevention**  
Gyawali, B
IUHW, JAPAN

Attempted suicide is illegal in Nepal and people who attempt suicide when caught are subject to imprisonment, fines or both; therefore, any suicide figures will underestimate the incidence. Families usually only bring patients to the hospital as a medical emergency, they are likely to hide previous episodes of deliberate self-harm and may attribute suicidal death to other causes both for legal reasons and because the family of those with mental illness may face social rejection and discrimination.

Few studies have measured suicide rates in Nepal and for many providers working in the field the lack of data means they are unaware of the true scale of the problem and trends over time. It is very difficult to say whether the trend is increasing or decreasing in absence of actual data. The monitoring suicide and collectioning accurate data is the one of the great problems in Nepal.
Effective registration systems is an essential component to monitoring suicide rate, but its is not still established in Nepal. In this report data are mainly collect from different resources. Research results show that 11 persons suicide per day in Nepal, which is 6 percent increase since last year. The majority were women. One-year observation of suicide news in national daily shows 54 percent of female suicide. The police data shows that nearly 42 percent of suicide victims are of age below 30 and newspaper data shows 55 percentage of suicide in same age. This fact reveals that women and young adults are a major risk group in Nepal. This study provides important evidence on the suicide in Nepal. Further research is required to explore the findings and appropriate responses. Some evidence exists on the effectiveness of mental health interventions in resource poor and conflict-affected settings. However, limited resources are provided for mental health services in low-income countries, and the needs are particularly acute in countries emerging from conflict such as Nepal.

**PO2-19**  
**Psychosocial Needs and Coping Strategies in Children and Young Adolescents Living with a Family Member with Suicidal Behaviour**  
Halmoy, X  
CRISE (Center for Research on Suicide and Euthanasia), CANADA

The research literature indicates an association between the development of suicidal behaviours of young people and parental suicide behaviours. However, we lack empirical data on what children and adolescents know about their parent’s suicidal behaviours and how they cope with the stress of living in a family where a parent has attempted suicide and may be at risk of attempting. We present the results of a qualitative exploratory study to understand what young adolescents know about the suicidality of a suicidal parent, what they thought and felt about it and how they coped with the situation. We conducted semi-structured interviews with eight adolescents between 12 and 15 years old living in a family where a parent had attempted suicide in the past 3 years, in order to obtain information on the perception of the adolescents themselves. In most cases we did not know if they knew or what they knew about their parent being suicidal. A significant number of the adolescents knew or suspected that their parent was suicidal. They used coping strategies like talking to their best friend or listening to music, but were inclined not to confide in adults and not to bring up the subject in the family. All the parents had contacted a community crisis centre for help, the adolescents were generally not offered any support. Support was generally only provided to the suicidal parent who contacted the crisis centre and to other adults involved in the intervention. Support should also be systematically offered proactively to the children and adolescents when their parent has suicidal behaviours in order to help them find efficient strategies to cope with the stresses associated with living with a suicidal parent. Specific approaches to helping children learn to cope better will be presented and discussed.
PO2-20
Complementary External Regulation: A New Strategy in Inpatient Settings to Reduce Suicidal Behavior
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Introduction
Among the most challenging tasks in 24 hours mental health care is the treatment of chronic suicidal patients. Treatment regimes typically include external regulation imposed upon the service users. However, health professionals’ efforts to gain control frequently seem to fuel escalating spirals of self-destructive behaviours, mechanical restraints and sedating medications. In general, health care systems lack effective strategies to prevent and reverse such counter-therapeutic interaction processes.

Aim
To develop, implement and evaluate the milieu therapeutic strategy Complementary External Regulation (CER) to help hospital wards to reduce suicidal behaviours and risk for committing suicide.

Methods
Since 2000 we have developed and implemented Basal exposure therapy (BET) at a treatment facility in Norway. BET is a 3rd generation cognitive behavioural treatment modality that primarily is used to treat low functioning, chronic suicidal in-patients. In the process of BET implementation the CER strategy evolved as a core component that integrates the total body of psychotherapeutic and milieu-therapeutic interventions. CER is a therapeutic platform from which an alteration between two sets of opposite contextual contingencies is administrated. The primary regime is under-regulation, characterized by successive validation and solution-focused interventions. The back-up regime, over-regulation, is a motivating standstill with a strict focus on safety that is only used when the patient repeatedly fails to obtain self-regulation and life and health are put at risk.

Results
Data for 11 patients show that CER supported BET significantly reduced incidences of suicide attempts per year from before (mean = 4.0) to after treatment (mean = 0.05), Wilcoxon, p = 0.012, and incidences of self-harm per year from before (mean = 21.1) to after treatment (mean = 2.5), Wilcoxon, p = 0.003. Furthermore, for all the patients at the ward general and significant reductions (p < .05) were seen in the use of force and medication. Follow up data on the 11 patients 1 to 4 years after discharge indicated long-term symptom reductions and improved psychosocial functioning (p < .05).

Conclusion
While conventional regulating interventions for chronic suicidal inpatients may lead to increased suicide risk, CER may contribute to realize health political ambitions related to suicide prevention.

Incidences of suicidal behaviours per year before and after treatment in 11 patients
PO2-21
Relationship between Cancer Stage and Early Suicide Completion after a Cancer Diagnosis
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Study objectives
A diagnosis of cancer is associated with increased suicide, but it is not clear what clinical factors are associated with early suicide after a cancer diagnosis. We examined association among anatomic sites and stage of cancer and suicide completion after a cancer diagnosis in Korea.

Methods and materials
We observed 164,497 cancer patients for 577,419.5 person-years from 1996 to 2009 through a general hospital located in Seoul, Korea. We identified 386 patients who had completed suicide by December 31, 2009 using database of the National Statistical Office. At the end of 2009, the risk of suicide among cancer patients was compared with that of the general population of Korea by calculating standardized mortality ratios (SMRs). 746 controls matched to the suicide cases on age, gender, anatomic site and at the time of diagnosis were randomly sampled from the total cancer patient database using SAS program. Chi-squared and score test for trends were used to analyze the relationship between stage of cancer and suicide completion within 1 year after a cancer diagnosis.

Results
280 males and 93 females committed suicide during the study period. The most common type of cancer was stomach cancer (20.4%). The most frequently used suicide methods were hanging (44.2%), self-poisoning (26.8%), jumping (18.2%), and drowning (4.0%). Suicide SMR among cancer patients was 1.65 [95% confidence interval 1.40 to 1.94] during the 1 year after diagnosis and was the highest for biliary-pancreas, breast and lung cancer. Patients with advanced stage for cancer at diagnosis were more likely to commit suicide (SMR=9.09, p<0.00) within 1 year of cancer diagnosis. 57% of suicide victims within 1 year of cancer diagnosis were at the stage 4 at the time of diagnosis while 24% of non suicide patients were at the stage 4.

Conclusion
The present observations indicate that cancer patients with distant metastasis at diagnosis of cancer have increased risk of early suicide. Preventive measure can be provided for advanced cancer patients with risk factors.

PO2-22
Caring Project for Depression in Elderly Population Above Age 65 with Chronic Illness - An Example in Mackay Memorial Hospital, Tamshui Branch, Taiwan
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Mackay Memorial Hospital, TAIWAN

Background
The suicide rates in the elderly population of Taiwan increased during 2008 to 2011. Ninety percent of elderly died from suicide was handicapped, chronically ill or weak. The Suicide Prevention Center of Taiwan analyzed the death registry and national health insurance data, and found 62.3% of the suicide completers had seen doctor within 30 days before their death. Among these patients, elderly suicide completers even had a percentage of 89.2% visiting hospitals or clinics within one month before their death. Therefore, health institutes can screen and manage elderly suicidal patients in advance to lower suicide rates in the elderly population.
**Method**

We started the caring project of screening the elderly patients with chronic illness from Sep. 1 to Nov. 30 2012. The goal of screening case number was 2,000. We included chronic-ill elderly populations above the age of 65 in our medical outpatient clinic and medical ward. Distress Thermometer (DT scale) was first administered to screen the distressed elderly. If the DT scale was higher than 5, we administered Patient Health Questionnaire (PHQ-9) for further evaluation of emotional status. Then if both with a DT scale higher than 5 and PHQ-9 higher than 14, we would start case management process and make referrals and treat the stressful condition.

**Results**

The project screened 2024 patients, with 1856 recruited from out-patient clinic and 168 from medical ward. Among all the patients with a higher-than-5 DT, 76% identified their stress from physiologic factors, followed by family factors (12%) and economic factors (5%). Among patients with both DT > 5 and PHQ-9 > 14, 78% identified their stress from physiologic factors, followed by economic factors (15%) and family factors (7%).

**Conclusion**

Health institutes have a vital role in preventing suicides in the elderly. In addition to the improvement of caring quality, we can improve training among medical staff, social workers, and case managers to get better knowledge and ability in emotions. Thus we may be able to give these elderly patients emotional supports, help them express feelings and needs, and expose them with further care and intervention, which possibly reduce suicide risks in the elderly.

**P02-23**

**Characteristics of Suicide Attempters of Emergency Department in Osaka, Japan**

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1Kyoto University School of Public Health, JAPAN; 2Osaka Prefectural Mental Health Center, JAPAN; 3National Hospital Organization Osaka National Hospital, JAPAN; 4Kansai Medical University, JAPAN

**Aims**

More than 30,000 people died by suicide in one year over a decade in Japan, and about 25% of them attempted suicide before completing suicide. A lot of people who attempted suicide have been treated in emergency rooms. However, the examination of the patient characteristics and effectiveness of intervention have not been done yet. Thus we investigate the suicide attempters who were treated in the special emergency department in Osaka, which is the second urban prefecture in Japan, we describe the characteristics of patients and how the psychiatrists affect the length of the hospital stay and the follow-up.

**Methods**

We investigated the numbers, age, sex, the way of self-harm, insurance, history of psychiatric visit, length of hospital stay and outcome in all 14 special emergency departments in Osaka. We also investigated the difference in the hospital stay and outcome by the characteristics of facilities using multiple regression analysis in SPSS ver. 11.

**Results**

In 2011, the population of Osaka was 8,865,245 and the number of death by suicide was 1,963 (2nd/47 in Japan), suicide mortality was 21.7/100,000 and 1229 (63%) of them were dead by hanging. Transported numbers of emergency service of self-harm in Osaka was 6908 (1.3% of all transport). The number of suicide attempters in special emergency departments was 1251.
and 301 of them were completed suicide, which indicated about 20% of suicide attempters who transported by emergency service were hospitalized in special emergency departments. Demographic features of suicide attempters showed in the followings: age [mean:39.4, SD:15.58], sex (male:423), psychiatric patients (n=889, 70.9%), welfare recipients (n=382, 30.5%), the means of self-harm [over dose of tranquilizers (n=632, 50.4%), gas (n=209, 16.7%), falling suicide (n=159, 12.7%), suicide by hanging (n=77, 6.1%), cared by psychiatrists (n=555, 44.3%)], psychiatric patients (n=706, 56.3%), length of emergency departments stay [Median (min-max): 2.0 (0-224)]. The factors affected the length of the departments stay were the means of suicide attempt (falling and diving increased and over-dose decreased the lengths of stay) and intervention by psychiatrists. There was no difference between the characteristics of facilities.

**Conclusion**
The characteristics of suicide attempters in emergency departments in Osaka were different from those of completed suicide. More research and long term follow-up are needed to make up the effective intervention.

**PO2-24**
Cross-sectoral Collaboration for Vulnerable Patient Groups.
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1Centre for Suicide Prevention - Child and Adolescent Psychiatry Odense, DENMARK; 2Odense University Hospital, DENMARK; 3University of Southern Denmark, DENMARK

**Study objectives**
Vulnerable patients who deal with several challenges such as social disadvantaged and chronic and mental illness often have intersectional pathways involving many different health care and social work staff members. Those patients rarely have resources to manage their own course, why there is a need for interdisciplinary and intersectional collaboration to avoid further stigmatization of these patients. The purpose of this project is to explore the organizational pathway of those patients and gain new knowledge and insight into the progress of the coordinating work in integrated care cooperation’s. The study aims to detect and define the core components of the pathways of vulnerable patients who are in need of multiphased treatment and classification.

**Methods**
The pathways of patients from the Centre for Suicide Prevention - Child and Adolescent Psychiatry Odense (N=7) and from the Migrant Health Clinic, Department of Infectious Diseases, Odense University Hospital (N=7) will be investigated. It is a qualitative study structured as a comparative, explorative case study. The methodological approach is most-different approach, comparing how the professionals involved in the pathways manage to provide integrated care by creating interdisciplinary and intersectional direction, alignment and commitment for the patients’ course.

**Results and conclusion**
The study will present an overview of the field of providing integrated care for vulnerable patients. The aim is to develop a model for coherent intersectoral and interdisciplinary pathways for the patient group, including exploring possibilities for digitally supporting the coherence. The success criterion is implementation of the results in the Centre for Suicide Prevention - Child and Adolescent Psychiatry of Odense and the Migrant Health Clinic, Department of Infectious Diseases, Odense University Hospitals’ daily practice and development. The procurement of the study will be used in conference and training material. The clinical staff in the departments will
be important partners in implementation of the results. The various theoretical methods and approaches are expected to ensure that the results are relevant to users [patients, health care workers and social work professionals] in clinical practice. Additionally, the results will provide basis for digitalized support in complex pathways. The study will be hypothesis-generating for greater qualitative and quantitative analyzes in this area.

**P02-25**

Effect of Drawing Method-Based Program on Attitude to Life and Death in Nursing Students - A Randomized Controlled Trial

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**Purpose**

Appropriate intervention in the community is thought to be effective for preventing suicide. Suicide is affected by their own belief and their environment. However, most of Japanese don’t have particular religious own belief. In this view point, special educational program for attitude to life and death is required. We developed the drawing method-based program and evaluated the impact of this program in Japanese nursing students.

**Methods**

Self-reported questionnaire was conducted in 205 nursing students who enrolled in a class of ‘fundamental nursing for end of life’ at two universities in Japan. Attitude to life and death was assessed by the Death Attitude Inventory (DAI) which was consisted of seven factors with 27 items (7-point Likert-type scale). Effective response rate was 85.8% (176 students). Then, students were randomly divided into two groups, ‘Intervention group (I group; n=92)’ and ‘Conventional group (C group; n=84)’. In I group, program was consisted of ‘drawing about image of death’ and ‘small-group discussion’. In C group, program was consisted of ‘simple reading literature about care for end of life’ and ‘small-group discussion’. Both programs were the independent single session. Attitude to life and death was assessed before and after each session using DAI.

**Results**

Cronbach’s alpha was used to estimate the internal consistency reliability, and a good level was attained. The Cronbach’s alpha reliability coefficients of the DAI and seven subscales are as follows: DAI(\(r=0.87\)), ‘Afterlife belief’ (\(r=0.87\)), ‘Death anxiety’ (\(r=0.93\)), ‘Death relief’ (\(r=0.92\)), ‘Death avoidance’ (\(r=0.92\)), ‘Life purpose’ (\(r=0.89\)), ‘Death concern’ (\(r=0.88\)), ‘Supernatural belief’ (\(r=0.92\)). The scores of ‘Afterlife belief’, ‘Death relief’, ‘Life purpose’ and ‘Death concern’ were significantly increased, and the scores of ‘Death anxiety’ and ‘Death avoidance’ were significantly decreased with intervention in I group (\(p<0.05\)). In addition, most of changes in DAI scores in I group were significantly higher than those in C group (\(p<0.05\)).

**Discussion**

Drawing about image of death’ was a noteworthy and effective method for education about attitude to life and death. And this program might apply for general population health approach for preventing suicide in Japanese cultural background.
PO2-26
Characteristics of Suicidal Callers to the Greek National Suicide Hotline in 2012
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The Greek National Suicide hotline was launched in 2007. In this study the authors present the reported characteristics of 275 callers with suicidal behaviours, both during their call and past periods. An assessment tool, based on the suicide protocol of the Greek suicide hotline, was used for the collection of data. A descriptive analysis was conducted and the results are as follows: In 2012 more women than men contacted the suicide hotline (57.8% vs. 42.2%), having more than half of the calls coming from the broad area of Athens and Thessaloniki (50% and 15.4% respectively). The 36-40 age group reported more suicidal behaviours than any other age group. Additionally, mental illness, including undiagnosed conditions as well, was 94.7% prevalent among the suicidal callers. A significant number of these callers (41.8%, n=110) were unemployed and the education level of university graduates was more frequent. Callers with suicidal history reporting financial difficulties reached a percentage of 25.2%, whilst 91.6% of them had suicidal ideation during the call and 36.2% had a current suicide plan. After thorough assessment of 145 suicidal callers, 62.1% of them reported previous suicide attempts. Findings portray a psychosocial profile of suicide callers to the Greek National Suicide hotline. Considering the vulnerability of people at suicidal risk during economic and social changes, this study provides information about the Greek population most in need of social and health care support, reaching the hotline in 2012. Given the importance of national suicide hotlines in designing and implementing suicide prevention programs, these findings could serve as a fundamental part of the Greek suicide prevention policies, yet to be fully established in the country.

PO2-27
Publication Bias of Studies on Suicide Attempters Requiring Admission to Emergency Department: A Systematic Review of Studies Conducted in Japan
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Objective
A history of previous suicide attempts is one of the most prominent predictor of subsequent suicidal behaviour, yet the suicide prevention for these well-known high-risk individuals remains undeveloped. Suicide rate in Japan has remained at around 25.0 per 100,000 individuals, and is the highest among developed countries. However, many of the studies on suicide attempters from Japan remain unknown in the scientific community worldwide. Therefore, we carried out a systematic review to describe the characteristics of these studies, and to identify areas needing further exploration.

Methods
We conducted a search of PubMed, PsycINFO, CINAHL, ICHUSHI (in Japanese) and Cinii (in Japanese), for published studies on suicide attempters requiring admission to emergency department (ED) for critical care, which had been conducted in Japan. Studies were included if they met the following criteria; i) all participants had been admitted to ED due to suicide attempt or deliberate self harm, ii) study was conducted in Japan, iii) study was reported as an original article. Additionally, we excluded case reports, review papers, commentaries and conference minutes.
Results
A total of 3338 article were identified; PubMed (N=171), PsycINFO (N=28), CINAHL (N=5), ICHUSHI (N=2784), Cinii (N=346) and hand-searching (N=4). Eventually, 219 studies met all inclusion criteria. Most of the studies were case series. Longitudinal studies, intervention studies, and studies using standardized psychometrics were limited. For randomized controlled trials, one protocol paper of a trial, ACTION-J study, was identified. Among 219 studies, 26 studies were reported in English-language, and remaining 193 studies were prepared in Japanese-language.

Conclusion
This review suggests that there is a clear publication bias in Japanese studies, although the quality of these studies is limited. This type of publication bias would be possible in other non-English speaking countries. Further effort would be needed to solve this “language gap of the evidence” in the field of suicide prevention research.

PO2-28
Signs of Complicated Grief in the Narratives of Suicide Survivors
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Violent, unexpected death of a beloved person may provoke symptoms of complicated grief or mental illnesses, social isolation, and other difficulties (Dyregrov et al., 2003). Suicide survivors are in great risk to have difficulties in adjusting to loss, their adaptation is much more complicated (Smith et al., 2011). When integration of such a painful experience fails, bereaved person is very likely to have symptoms of complicated grief or PTSD. This integration can also be reflected in the form of narrative (Beaudreau, 2007). It is known, that structure of the narrative, fluency of the story, constructions of sentences, amount of specific words (e.g. the ones signifying emotions) can show if the narrator experience symptoms of PTSD or complicated grief (Capps, Bonanno, 2000). Though most of studies in this field investigate experiences after traumatic loss, there are no unambiguous evidence if it is valid for suicide survivors as well. There is a lack of studies on bereavement of suicide survivors.

Consequently the aim of this pilot qualitative study is to find out which constructs of the narrative form reflect the signs of complicated grief in bereavement after suicide. Three women who lost their beloved ones during one to two years period participated in this pilot study. Data was collected using narrative interview, and analysed using thematic and structural forms of narrative analysis.

Results showed that participants had integrated experience of bereavement quite differently regardless of similar time span after the loss. Participants, who had stronger sense of meaning and were adjusted to the loss a bit better, used more emotional and cognitive words. They also used more constructions of sentences that reflect the sense of control and self efficacy while talking about their loss. Participant who showed more signs of complicated grief used less emotional and cognitive words, her narrative was more fragmentary, less fluent. This research lets to conclude, that signs of complicated grief can be noticed not only in what people tell, but also in the very language and form of narrative they are using.
PO2-29

Suicide Trends in Australian-born and Overseas-born Individuals: Differences and Similarities over the Last Two Decades
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Study objectives
The present study compares Queensland suicide trends in the overseas-born population with those of the Australian-born population over the last two decades.

Methods
All suicide cases for the period 1991-2009 were identified in the Queensland Suicide Register. Age-standardized suicide rates were calculated. A Poisson regression analysis was applied.

Results
A significant decline in the suicide rate in young (15-44 years) overseas-born males, but not in other groups, was apparent over the last two decades. Although Australian-born males in the same age group showed a significant drop over the last decade (RR=0.98, 95%CI=0.96-1.00), their suicide rates were significantly higher when compared to overseas-born (RR=1.36, 95%CI=1.15-1.62). A relatively similar pattern was observed in younger females. Older Australian-born males (45+ years) had lower suicide rates than overseas-born, although this was significant only in 1990s (RR=0.85, 95%CI=0.75-0.96). There were no significant time trends for older males. Similarly, Australian-born older females had significantly lower suicide rates in 1990’s (RR=0.69, 95%CI=0.55-0.86). However, there was a significant increase in Australian-born older female suicides in 2000-2009 (RR=1.04, 95%CI=1.00-1.08).

Conclusions
Divergence in suicide rates between the Australian- and overseas-born younger populations and convergence of suicide rates in older populations seems to be related to remarkable changes in the composition of the overseas-born population. Potential reasons for lower suicide rates among young migrants might include the change in the nature of migration from involuntary to voluntary, but also lack of access to traditional means of suicide, such as pesticides in Asia.

PO2-30

1st Regional Depression and Suicide Prevention Programme in Poland - Don’t let the Halny wind take away any more Lives [2009-2012]
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Background
Tatra region in Poland is famous mountain resort with the alpine climate, including strong winds (foehn: halny). The wind is considered by locals to be the cause of suicides, which rate is on average 1.7 times higher than nationwide. However, mood disorders are diagnosed less frequently among the inhabitants than in the population nationwide. In response to this data the 1st Regional Depression & Suicide Prevention Program has been prepared in line with the guidelines of Polish National Programme for Mental Health.

Aim
Depression & suicide prevention; improvement of care for patients with depression and in mental distress.
Objectives
To sensitize doctors, psychologists, priests, teachers, pedagogues and police officers to the problem; to enable and facilitate their cooperation.

Methods and material
After profound analysis of the local situation, a list of specific risk and protective factors of suicide has been prepared. In response to the research the prevention program has been prepared and implemented in the cooperation with medical primary care and gateworkers. Its beneficiary is the local community. Actions taken in cooperation with the local government authorities:
1. Annual academic conferences for medical and social caregivers.
2. Regular educational meetings with GPs, teachers, priests, psychologists.
3. Open meetings for inhabitants of the region.
4. Fun run ‘Outrunning depression’.
Finally, evaluation was conducted by measuring the attitudes of the participants towards suicidal patients (questionnaire and interviews with local leaders), analysing media message on suicide and depression, and calculating suicide rates and incidence rate of depressive disorders.

Results
- increased sensitivity to the problem of mental distress and suicide;
- a change in media coverage of suicides and depression;
- no change in suicide rates;
- an increase in the diagnosed depression and mood disorders over the last 4 years;
- main achievement of the program - a grass-root movement meeting regularly and continuing the anti-suicidal action.
- lasting effect: establishment of new psychotherapy clinic for children and youth.

Conclusion
The 4-year course of the 1st Depression and Suicide Prevention Programme in Poland shows increased sensitivity to the problem and necessity to continue further anti-depressive and anti-suicidal activities, which proves the establishment of the local initiative group.

PO2-32
Characteristics of 15 Kurdish Ladies Recently Hospitalized for Severe Self-burns
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Study objectives
Clinicians have been aware of the silent epidemic, in recent years, in Kurdistan, of self-burning in young Kurdish females. Very little is known about the overall frequency of these unusual cases and of their particular socio-demographic and psychiatric background. This is a first attempt in Iraq to collect the related clinical data.

Method
Medical staff of a burn unit of a general hospital in the Kurdish section of today’s Iraq evaluated 15 female patients hospitalized with severe burns (mostly of third degree).
The staff compiled the demographic data on these patients as well as their ratings of the degree of burn and percent of burned body surface and also provided their evaluation of whether or not they judged the burn to be accidental. Each patient’s own report of whether or not the burn was accidental was also recorded. The age of the patients ranged from 18 to 44 years with the average at 26.7 years (SD=8.8). About two thirds of the patients were younger than 27 years.
Results and discussion
Correlation of the patients’ burns was made to some socio-demographic and other variables like marital status, number of children, ethnicity, place of birth, school accomplishment, employment, socioeconomic status, and psychiatric diagnosis.

Conclusion
The most striking finding is the discrepancy between the patients’ self-reports and their staff ratings. While only 2 of the 15 ladies (13.3%) described their burns as self-inflicted, the staff rated all but one (93.3%) as self-inflicted burns. Almost all of these were severe burns, at the level of the 3rd degree and involved, on the average, approximately half of the entire body surface.

The patients’ group is not highly educated, does not consist primarily of single nulliparous females, and is not limited to only those in their 20s or younger. The group also includes some affluent ladies.

The participation of more medical centers within Kurdistan that have burned units via a nation-wide survey would be needed to provide more conclusive data on this unusual medical phenomenon.

PO2-33
The Suicidal Behavior in Nursing’ Students of Federal University in the City of São Paulo/Brazil
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Study objective
To analyze the presence of suicidal behavior and the involved factors in students of the course of graduation in Nursing of federal university in São Paulo City/Brazil in the year 2011.

Methods and material
Study exploratory-descriptive, quantitative; interview with application of half-structuralized questionnaire.

Results
Seventy students participated in the study of which 13 (18.6%) had presented suicidal behavior. Of these 13 students, 10 were females; the majority lived with the family, had a religious belief, did not report economic difficulties, had affective entailment beyond the familiar one, were heterosexual. Ten students had had thoughts about death during the last six months, being motivated mainly by relationship problems and stress in the college. The majority reported that current suicidal ideation was rare. Six students reported behaviour that had placed them in life danger and 4 had performed self-harm; 11 had thought about killing themselves motivated by internal personal questions such as depressive symptomatology; 4 had planned and tried to commit suicide during the last two years before due to family problems, 3 had planned suicide during the last month, 1 had current suicidal ideation. Of the 13 with suicidal behaviour only 5 had received psychological or psychiatric aid linked to the suicidal episode. The majority of these students reported that their suicidal behaviour was related to academic problems and stress, problems of relationship with other students and professors. All students were given information on the necessity of psychological intervention, 2 were advices to keep the psychological and medical treatment, 5 were guided and directed to psychiatric attendance and monitored until carried through the consultation, 1 was directed to medical and psychological attendance of emergency care.
PO2-34
Implementation of Psychological Autopsy Studies in Slovenia
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Slovenia has one of the highest suicide rates in the world (20.3/100,000 in 2010). With the purpose of better understanding characteristics of suicide deaths in Slovenia, we have implemented the study of psychological autopsies (PA) in the country. Psychological autopsy is a research method that involves interviews with various informants about the psychological and contextual circumstances prior to suicide (Conner et al., 2011). The aim of this presentation is to highlight its implementation process in Slovenia, and the factors that have helped or hindered its development. The implementation of the study consisted of three phases. In the first phase relevant materials were collected, translated and culturally adapted, and researchers were recruited and trained for conducting PA interviews with informants. The second phase consisted of recruitment of proxies (closest ones and health care professionals) and conducting the interviews with them in order to obtain data on the deceased for the third phase, which represented the analysis, interpretation of data and dissemination of research findings. Our sample consisted of individuals who died by suicide (experimental group) and victims of sudden death other than suicide and road accidents involving a single driver only (control group). During PA interviews, the following instruments have been used: a questionnaire on demographics, DSM-IV SCID for diagnosing mental disorders, IQ Code for assessing cognitive functioning, NEO-FFI personality inventory, Cumulative Illness Rating Scale, Instrumental Activities of Daily Living Scale, Karnofsky Performance Status Scale, a Life Events list, the Bille-Brahe Social Support Scale, and the Aggression Scale. Additionally, the Attitudes Towards Suicide was used to assess the informant’s attitudes toward suicide. In the PA interviews with medical health professionals, information on medical history of the deceased and of possible signs of suicidal ideation during the last clinical contact are routinely collected. The study implementation plan is presented in detail. Facilitating and interfering factors, such as the process of obtaining approval from the National Medical Ethics Committee, the recruitment of participants, etc. are presented and discussed. Our experience with implementing a psychological autopsy protocol - already validated in Australia - can be of interest to other national or international research groups.
P02-35
Japanese Junior High School Counselors’ Experiences of Working with Students Who Self Injure
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Objective
The objective of this study was to explore how counselors at junior high schools in Japan experience working with students who self injure.

Methods
Ten counselors, all female, working at ten different junior high schools in the same city in Japan participated. Two semi-structured interviews were conducted with each participant. The first interview formed the basis of the analysis, whereas the second interview was a members check intended to validate the information gathered from the first interview.

Results
Four themes emerged from the analysis. The first theme “A place to ‘be’ within the school” describes how the participants see and conceptualize their workplace, and their role as counselors. The second theme “Self-injury: one of many problem behaviours” describes how the participants view self injury, and how they work with afflicted students. The third theme “Problems at home” describes what many counselors thought to be the cause of self-injury and other problem behaviours: difficult parent-child relationships. Self-injury was seen as a means for the students to regulate difficult emotions arising from problems at home, as well as a means of appealing to parents who do not ‘see’ the students. The fourth theme “The difficulties of dealing with self-injury” describes the challenges the counselors encountered in their work.

P02-36
The Lost Portraits Gallery: Tracing Youth Suicide from Anonymity to Identity.
A Science/Arts Collaboration.
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Overview
Although suicide is a very private death, it is paradoxically a very public death also, as all details are publicly examined via the Coroners Court. The suicide-deceased is frequently defined by the manner of their death, and pass quickly to the anonymity of national suicide statistics. This passage from identity to anonymity is inclined to dehumanize the human subject that is the lived life, and may contribute to stigma around suicide loss. Mc Guinness, an artist, and Malone, a scientist worked with families over 5 years to recall and acknowledge identity following a youth suicide loss, using testimony and donated images and belongings of the deceased, which became the archive for the Lived Lives artworks.

Methods
Forty three families from Ireland who had lost a loved one to suicide (under aged 35 years) participated in a combined psychobiographical and visual arts autopsy study. The resulting narratives about the lived lives lost to suicide, and objects, belongings and images of the deceased donated by families, formed a rich human archive for collaborative science/arts creative analysis and outcomes.
Results
The Lost Portraits Gallery consists of 43 portrait tapestries created from human images of the deceased, donated by the families. Tapestries were chronologically installed in a round room, each at the precise height of the deceased, with their first name and age of death woven beneath the portrait. The chronology of the installed tapestries was adjusted if there was a reason to alter this configuration. All families viewed “their” tapestry privately before they were collectively viewed, and gave consent for the Lost Portraits Gallery to go into the public domain. Bereavement Counselor support was available during private and public viewings. Bereaved families and members of the public gave feedback that The Lost Portraits Gallery was a safe-space in which to mourn, acknowledge their loss, with many reporting it as a cathartic collective public experience. The entire project was documented on film and with digital photography. There were no adverse effects reported.

Conclusions
Stigma around suicide is fuelled by ignorance and fear. Humanizing (as opposed to sensationalizing or glorifying) the “dehumanized” suicide-deceased through a creative arts process in collaboration with clinical science may reduce stigma, moving from anonymity to identity through truthful, sensitive and safe representation of the lived life lost to suicide.

PO2-37
Suicide in the Children of Ireland from 2003-2008
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Background
In tandem with global trends, Ireland has witnessed an increase in suicide by its children within the past two decades. Despite its increasing prevalence, research into childhood suicide in Ireland remains scant, with an almost complete focus on macro-level data.

Objective
To voice the stories of the suicides of children as told by their caregivers, siblings and friends. The intention of this research project is to provide an understanding and meaning beyond simple vital statistics for suicide in children.

Design and methods
We used a Psycho-biographical Autopsy template and a grounded theory approach to analyze qualitative interviews with a volunteer sample of suicide-bereaved parents, siblings, and friends of 14 children between the ages of 14 to 17 who had died by suicide. Also included were personal documents (diaries/letters/notes) belonging to the deceased to identify age-related themes concerning adolescent risks for suicide, as well as factors independent of age, such as severe mental illness. A qualitative case study of a cluster within this sample is also undertaken using an ecological approach.

Results
Themes to emerge include risk factors of peer/adult/statutory violation, displacement, lack of connectedness, mirroring/clusters, humiliation, mental distress, substance abuse, and family history of mental illness and suicidality. Within the Cluster Study, themes to emerge include connectivity and contagion.
Conclusion
This report offers a holistic reflection of child suicide in Ireland that draws together sociological, psychological and relational domains of the suicidal process that may critically inform policy development in Child Health.

PO2-39
Effects of Educational Intervention on Primary Care Physicians’ Recognition and Treatment Approaches to Depression and Suicidality
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Aims
The present study aimed to evaluate effects of educational lectures combined with a role-play session targeting primary care physicians on their recognition and approach to depression and suicidality.

Methods
The followings were investigated among primary care physicians: 1) effects of single educational lecture on recognition and approaches to depression (n=139); and 2) effects of an educational lecture combined with a role-play session on recognition of and approaches to suicidality (n=103). Post-lecture scores were compared between two different age groups, i.e., younger than 50 years and 50 years or older by using Mann-Whitney U test.

Results
1) Most of these items for image of depression and approaches to depression did not differ between the two different age groups. Meanwhile, physicians younger than 50 years showed more positive scores after the educational intervention on items pertaining to “escaping from reality” (P<0.05) as an image of depression and “supportive psychotherapy” (P<0.05) as an approach to depression compared with those with 50 years or older group.

2) Physicians younger than 50 years showed more positive scores after the educational intervention in the items of “prevalence of suicidality” (P<0.05), “active questioning” (P<0.05), “fear of provocation” (P<0.01) as the recognition of suicidality in depressed patients and all the 6 items for approaches to patients with suicidal thought (P<0.05) compared with those with 50 years or older group.

Conclusions
Physicians younger than 50 years showed more positive effects through these educational interventions, implying more active attitudes toward suicide prevention than the older group. Since younger generation tends to be better accustomed to simulative learning and more agreeable to such educational intervention, it is suggested that younger physicians are expected to be more actively involved in suicide prevention as practical gatekeepers.

PO2-40
Study of the First Psychiatric Hospitalization Throughout Life Caused by a Suicide Attempt
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Introduction
The study of patients’ first lifetime hospitalization offers the possibility of obtaining a large sample
of suicidal patients and shows in detail the clinical situation just after the attempt and in the early stages of his mental disorder

**Objectives**
To determine in a large sample of psychiatric inpatients the clinical and sociodemographics factors associated with suicide attempt just before to first lifetime admission

**Material and method**
* SUBJECTS:
All patients \(N=1606\) admitted for the first time in his life to our Acute Psychiatric Unit from 1996 until 2000 were included in the study.

* PROCEDURE:
We reviewed these patients’ medical hospitalization records and we obtained multiple biological, clinical (including DSM-IV diagnosis) and sociodemographic variables. Patients were classified into two groups:
1-Suicidal patients Group: those admitted after performing a suicide attempt immediately before admission
2-Nonsuicidal patients Group: All other admitted without committing a suicide attempt just before admission

* STATISTICAL ANALYSIS:
Data were analyzed with the SPSS. The proportions of categorical variables between suicidal and non suicidal group were compared with the \(\chi^2\) test. The Student’s t test was used to compare between two groups continuous variables normally distributed. The Multivariate analysis with multinomial logistic regression (with hospitalization caused by a suicide attempt as the dependent variable) was used with their 95% confidence intervals for all explanatory variables.

**Results**
Of the 1606 patients admitted during the study period, 324 (20.2%) were admitted as a result of suicide attempt. In our sample the lethality of attempts was mostly mild or moderate (262 suicide attempts, 81.1%) and only 62 suicide attempts were of severe lethality. In statistical analysis first psychiatric admission by suicide attempt were significantly associated with a DSM-IV diagnosis of Bipolar II Disorder \(P<0.001\), Adjustment disorder \(P<0.000\) and unipolar major depressive disorder \(P<0.000\) and with the female sex \(P<0.003\), antecedents of previous lifetime suicide attempt \(P<0.001\), and personality disorders \(P<0.000\) By contrast, non-affective psychotic disorders \(P<0.000\), aggressive behaviour \(p<0.001\) and a euphoric mood \(p<0.000\) were associated with first psychiatric admission caused for other reasons and no by suicide attempt. We found no significant differences between suicidal and non-suicidal patients in terms of age [Mean of 43,1 vs. 43, 8 years], alcohol or substance abuse and family psychiatric history. Interestingly the hospitalization mean length of stay for suicidal patients was significantly lower than the mean length of stay in non-suicidal [Mean of 17 vs. 21 days, \(P<0.001\)] After perform the multivariate logistic regression analysis most of the above variables except sex and personality disorder remain associated with hospitalization caused by suicide attempt.

Table 1 shows the odd ratio and confidence interval of different variables significantly associated with hospitalization caused by a suicide attempt as the dependent variable in the regression analysis.
**Conclusions**

In our large sample of first psychiatric admissions, hospitalization caused by a suicide attempt were significantly associated with a DSM-IV diagnosis of Bipolar II Disorder, Adjustment disorder and unipolar major depressive disorder, and with antecedents of previous lifetime suicide attempts.

**PO2-41**

**Regional Differences in Life Lost due to Premature Deaths from Suicide from 1993 to 2010 in Japan**

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The premature mortality rates for the leading causes of death, including those for cancers and cardiovascular diseases, have declined in Japan. By contrast, premature mortality from suicide has increased. In this study, we analyzed premature deaths from suicide among persons aged 0-64 years between 1993 and 2010 by calculating the years of potential life lost (YPLL) in 47 prefectures, which are the administrative divisions of Japan. Geographical clustering was performed by comparing the time trends of YPLL using cluster analysis. Results showed that the national YPLL rate for suicide in males drastically increased in 1998, dropped slightly until 2001, and then gradually rose. Although the national YPLL rate for suicide in females was comparatively low (almost 30-40% of the YPLL rate in males), it changed in a pattern similar to that in males. Cluster analysis revealed the regional variations in levels and trends in YPLL rate for suicide among prefectures. The national mean YPLL rate between 1993 and 2010 for males was 556.9 yrs/100,000 persons. Against this baseline, four clusters were identified. In the first cluster, which included prefectures with the metropolis such as Tokyo and Osaka, the YPLL rate was approximately remained around or below the national average (mean rate was 510.2). In the other 3 clusters, which mostly included rural prefectures, the YPLL rate exceeded the national average (mean rate was 607.6-798.6). The national average YPLL rate for females was 206.8 yrs/100,000 persons. Against this baseline, three clusters were identified. In the first cluster which included prefectures with metropolis, the YPLL rate remained around the national average until 2004, but has slightly exceeded the national average thereafter. In the other 2 clusters, which mostly consisted of rural prefectures, the YPLL rate was below the national average between 1993 and 2010 or after 2000. These results indicate that premature death from suicide differs regionally as well as by gender. Moreover these findings suggest that preventive measures based on regional characteristics are important to substantially reduce the suicide rate in Japan.

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PO2-43
“He is a Murderer”: Perceptions of Suicidal Persons in Ghana
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1University of Ghana, Department of Psychology, GHANA; 2Norwegian University of Science and Technology, NORWAY; 3Sør-Trøndelag University College, NORWAY

Study objectives
The study aimed at understanding suicide in Ghana from a cultural perspective and the perceptions the participants held about suicidal persons.

Methods and material
Semis-structured interviews were conducted with psychologists, nurses, police, politicians, lay persons and psychology students.

Results
The findings showed that participants perceived a suicidal person as a murderer, a wicked person, selfish, a coward, a fool, a needful individual, among others things. There is a general perception that suicidal persons are moral deviants, whilst a few participants (esp. the psychologists) viewed them as mentally sick. These perceptions are discussed within the African discourse on personhood and social ethic. The discussion will finally seek to elucidate how these perceptions of a suicidal person influence the widespread social stigma against suicide and how that could be reduced.

Conclusion
Perceptions about suicidal persons facilitate negative attitudes towards them and any attempt to address suicide prevention should address reducing such negative perceptions in Ghana.

PO2-44
Doing Advocacy Work on Decriminalizing Attempted Suicide in Ghana
Osafo, J; Akotia, C
University of Ghana, GHANA

Study objectives
Attempted suicide continues to be criminalized in Ghana. For the past two years researchers on suicidal behaviour, concerned NGOs and mental health professionals adopted an advocacy approach toward decriminalizing the act in the country. Objective of this presentation is to synthesize the processes and challenges to suicide prevention work and emphasize the cultural factors that facilitate as well as inhibit suicide prevention program in a context where the act is both legally and socially proscribed.

Methods and material
The advocacy programs of the suicide workers in Ghana (i.e. researchers, NGO’s mental health professionals) during World Suicide Prevention Day each year was examined and analyzed thematically.

Results
The specific strategies driving this advocacy include collaborative networking, shared responsibility, building up enthusiasm, lobbying, and de-mystification. Factors such as lack of funding and pervasive cultural repulsion toward the act and suicidal persons were identified challenges to the advocacy process.

Conclusion
Advocacy on de-criminalizing attempted suicide in Ghana requires more than just public education. It requires effortful and sustained engagements with the cultural context.
PO2-45
Impact of Childhood Adversity on the Course and Suicidality of Depressive Disorders: The CRESCEND Study
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Objective
The impact of childhood adversity persists across the life course. This study aimed to investigate the associations of childhood adversity with the course, suicidality, and treatment outcomes of depressive disorders.

Method
919 people with depressive disorders were recruited. Childhood adversities (< 12 years old) were ascertained using a checklist, in sexual abuse, physical abuse by parents, and separation of parents. Various assessment scales were administered at baseline and over 12 weeks of antidepressants treatment.

Results
All three forms of childhood adversity were associated with an increased likelihood of experiencing more current stressful events. Scores on the Beck Depression Inventory and Hamilton Anxiety Rating Scale were significantly higher in participants with a history of sexual abuse. Scores on the Beck Depression Inventory, Hamilton Depression Rating Scale, and Perceived Stress Scale were significantly higher, and scores on the WHO Quality of life instrument were significantly lower in participants with a history of physical abuse by parents. They were more likely to receive augmentation and combination treatment after the initial antidepressant treatment, while overall response rates to treatment did not differ. Scores on the Beck Scale for Suicide Ideation were significantly higher after treatment and/or at baseline in patients with sexual or physical abuse. Physical illness was more prevalent in individuals with physical abuse by parents or separation of parents.

Conclusions
Depressive patients with a history of childhood adversities had more severe and chronic forms of depression with high suicidality. More intensive treatment with particular clinical attention is indicated for this special population.

PO2-46
Combined Effects of Physical Illness and Comorbid Psychiatric Disorder on Risk of Suicide: A Population Study
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Study objectives
People with physical illness often suffer psychiatric disorder and this co-morbidity may have a specific influence on their risk of suicide. No large scale study has examined the extent to which psychiatric co-morbidity in physically ill individuals contributes to risk of suicide, and assessed the temporal nature of this co-morbidity effect.
Methods and material
Based on the national population of Denmark, 27,262 suicide cases from the year 1981 through 2006 were matched to 468,007 living controls on sex and birthdate through a nested case-control design. Individual-level data on hospital contacts for physical and psychiatric illnesses and covariates were retrieved from 5 interlinked Danish national registers and analyzed using conditional logistic regression.

Results
Both suicide cases and comparison controls with physical illness more often had comorbid psychiatric disorder than their physically healthy counterparts. A substantial proportion of the physically ill people, especially those who subsequently died from suicide, developed psychiatric disorder after being diagnosed with physical illness. Affective disorders and substance misuse disorders were the most frequent conditions in physically ill people. While physical and psychiatric illnesses were both significant risk factors for suicide, the two types of illness interacted significantly with each other to further increase the risk of suicide. Compared with the effect of psychiatric illness alone, co-morbid physical illness subsequent to existing psychiatric history lowered the risk of suicide; whereas co-morbidity of physical illness and a subsequently developed psychiatric disorder increased suicide risk substantially. The observed associations were consistent in both men and women.

Conclusion
The impact of physical illness on risk of suicide varies substantially according to presence of psychiatric co-morbidity, and also by the relative timing of onset of the two types of illness. Closer collaboration between general and mental health services should be an important component of suicide prevention strategies.

PO2-47
The Influence of Social Norms and Normative Perceptions on Suicidal and Self-harming Behaviours in Adolescents: A Systematic Review
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1University of Strathclyde, UNITED KINGDOM; 2University of Bradford, UNITED KINGDOM

Background
Suicidal and self-harming behaviours are an increasing and damaging problem, particularly in adolescents. Amongst a wide range of risk factors for these behaviours are social influences, including exposure to such behaviour in others. Research has shown that engagement in or approval of other health behaviours (e.g. substance use) is related to one’s own engagement in that behaviour, particularly in young people, and individuals often overestimate rates of these unhealthy or dangerous behaviours in their peers. This has never been investigated in relation to suicidal or self-harming behaviours.

Methods
Web of Knowledge (all years to Jan 2012), Medline (1951-Feb 2012), Embase (1947-Feb 2012), PsycINFO (1881-Feb 2012) and PsycArticles (1881-Feb 2012) were systematically searched for literature on the relationship between others’ suicidal and self harming behaviours (actual or perceived) and an adolescent’s own. Reference sections of relevant papers and reviews were also hand-searched. 97 papers were included in the final review (3 of which were qualitative).
Findings
Considerable evidence was found for an association between adolescents’ own suicidal and self-harming behaviour and that of others known to them, and for a greater risk of suicidal behaviour in those who knew others who engage in those behaviours than in those who did not. Furthermore, a substantial literature suggests that suicidal and self-harming behaviours are contagious and occur in clusters of time and space. The majority of papers (n=55) were based purely on adolescent self-report, although a handful report data collected through other means or a mixture of methods. A minority of papers explicitly differentiated between adolescents’ knowledge and perceptions of others’ behaviour.

Conclusion
A relationship between adolescents’ own and others’ suicidal and self-harming behaviours is apparent, but causal direction is rarely considered, and knowledge (as opposed to perception) is often assumed. The Social Norms Approach has been used effectively to reduce engagement in other health behaviours by correcting over-estimations of other negative health behaviours in the target population. The existence of misperceptions and potential effectiveness of this approach remain to be explored with regard to suicidal and self-harming behaviours. If similar misperceptions to those in other health behaviours exist for suicidal behaviours, this may open new avenues for intervention.

PO2-48
Non-fatal Suicidal Behavior in Young: A Clinical Study on 463 Patients
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1CHUC, PORTUGAL; 2Suicide Research and Prevention Unit CHUCoimbra, PORTUGAL; 3Coimbra Nursing School, PORTUGAL

Background
Non-fatal suicidal behaviour is a Public Mental Health problem, a phenomenon mostly unknown and not diagnosed.

Methods
The authors report their clinical experience (Suicide Research and Prevention Unit, Coimbra, Portugal). The study is based on a semi-structured questionnaire designed by our unit which has both a socio-demographical and clinical variables. The latter covers aspects such as development and family, personality, clinical antecedents, circumstantial factors, and characteristics of the suicidal behaviour. Regarding socio-demographical variables we found: a predominance of females, lower social class, and non-religiousness. Regarding clinical variables we found as particularly relevant: Abnormal childbirth or psychomotor development, absence of one or both parents in education, physical or sexual abuse during childhood, academic failure, non-engagement in group activities, absence of a confidant friend, poor family relationships, alcohol or drug abuse, psychiatric disorders within the family, emotional-affective problems, and history of suicidal behaviours, fatal or non-fatal, among family or friends.

Conclusions
These data and these profiles help us to keep on going to pursue the implementations of primary and secondary prevention in Mental and Public Health particularly providing formation on suicidology to the GPs and paying attention to the dysfunctional and problematic families.
PO2-49
A Study on 1070 Non-fatal Suicidal Behaviour in Portugal: A Socio-demographic and Clinical Profile
Saraiva, CB; Alte da Veiga, F; Craveiro, A; Madeira, N; Andrade, J; Garrido, P; Santos, JC
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Background
The suicidal process involves multiple concepts and different terminologies. Despite every arguments and polemics concerning these aspects, specialized units try to pursue a better understanding of the phenomenon, treat suicidal behaviour patients, and provide prevention measures.

Objectives
From a 20-year experience involving 1070 patients referred from the Emergency Room to our unit, our main objective was to establish socio-demographic, developmental, and clinical variables.

Methods
We used a semi-structured questionnaire designed by our unit with 77 items covering all those aspects.

Results
Regarding socio-demographic factors we found a predominance of lower social classes, with less schooling and lower family income, and a high percentage of non-religious and separated or divorced individuals in comparison with the general population. Regarding clinical variables the following findings were particularly frequent among our patients: abnormal childbirth or psychomotor development, absence of one or both parents in education, physical or sexual abuse during childhood, absence of a confidant friend or group activities, poor family relationships, existence of emotional or professional problems, antecedents of alcohol abuse, high frequency of suicidal behaviour within the family. The dominant profile can be briefly described as a female (70%), adolescent or young adult (75%), with emotional problems (90%), using self-poisoning with medicines (70%), mainly psychotropics, as an impulsive act following a marital quarrel. Males represent only 30% of our patients but configure a distinct pattern, with more frequent use of pesticides, need for intensive care, use of alcohol in the suicidal behaviour, leaving of suicide note and high suicidal intent according to the doctor’s evaluation.

Conclusions
After 20-years experience, these findings increased our knowledge concerning the suicidal process and coping with patient suicide. Really, these achievements inspired our contributions as experts for the governmental National Suicide Prevention Plan, to be published this year in Portugal (2013).

PO2-50
2-year-evaluation of the Suicide Prevention Program GO-ON, Styria, Austria
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Since about 25 years suicide ratios in Austria are decreasing. However, in Styria, one province of Austria, the risk of dying from suicide has been one of the highest in this country since decades. The government of Styria started a suicide prevention program to change this situation. Up to now this program works in three of thirteen districts and shall be expanded country-wide soon.
This pilot project cooperates with all psycho-social centers country-wide to guarantee sustainability. The project implements trainings for professionals like medical doctors, journalists, members of the red cross and crisis intervention teams, police and fire workers, psychologists, psychotherapists, employment services and others. Furthermore psycho-education for special risk population is provided, e.g., persons in a situation of severe crisis, persons suffering from mental diseases, persons having committed suicide attempts, as well as relatives. The general public is addressed via a first-aid-course for mental crisis, aiming at a wide spectrum from students up to elderly persons.

Thus the program operates on all levels of prevention. Additionally local, national and international networking assures to work state-of-the-art. The courses are regularly evaluated to guarantee the quality of instructed persons in crises management and suicide prevention. In the first two years of this pilot project the 9 persons, who work in the GO-ON team, organized about 100 trainings, workshops and discussion events, respectively took part in international congresses. Thus about 3,000 people were directly reached and it was possible to sensitize the general public for a topic, which is still a taboo.

1,181 persons, 556 men and 625 women, aged 18 to 88 years, evaluated different types of training. About half of the participants rated them with questionnaires for gaging content, benefit and satisfaction. First results will be presented and experiences will be shared.

**PO2-51**

Suicide Attempt in Psychiatric Hospitals: A Prefectural Study of Incident Reports in Nara, Japan

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**Objectives**

Delineation of demographic characteristics of suicide attempt in psychiatric hospitals across Nara, Japan

**Methods**

Analysis of incident reports on suicide attempt in psychiatric inpatients (n=35; age 15 to 84) using Nara prefectural incident records between April 1st, 2001 and December 31st, 2012

**Results**

35 incidents of suicide attempts were reported over eleven-year period from April 1st, 2001 to December 31st, 2012. Of these cases, 83% (n=29) were committed suicide and 17% (n=6) were not committed but with serious aftereffects such as cognitive impairment or persistent vegetative state. The number of suicide attempt was higher in males (60%; n=21) than females (40%; n=14) and the mean age of that was 50.5 years (±18.18). The range of age in which the highest number of suicide attempt took place was 60-69 year-old group (7 suicides). 54% (n=19) of all cases occurred in hospitals and the rest (46%; n=16) did outside hospital sites. While 58% (n=11) of those who attempted suicide in hospitals occurred during night-working time (18:00-8:00) and 42% (n=8) did during day-working time (8:00-18:00), 31% (n=5) and 69 % (n=11) of cases who attempted outside hospital sites happened during nighttime and daytime, respectively. The most common diagnoses were schizophrenia spectrum disorders; F2 (ICD-10) (51.4 %; n=18), and affective disorders; F3 (ICD-10) (40 %; n=14). Hanging was the most common method of suicide attempt (60%; n= 21) and followed by jumping in front of moving objects (14.3%; n=5) and jumping from height (11.4%; n=4).
Conclusion
This study suggests that we should pick up the risky fixtures which can be used in hanging and remove them. More careful observation may be required even for inpatients who are admitted going out or staying out.

PO2-52
Taking Evidence-based Action Against Depression, Suicide, Including E-health Solutions.
Joint Action of the European Countries to Tackle Depression.
Szekely, A; Purebl, G; Kurimay, T
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Study objectives
The EU Member States, recognizing the importance of the mental health and well-being, have formed a Joint Action on this issue. One main focus of the Joint Action is to tackle the depression and suicide, including the tools of the E-Health solutions. The aim of the Joint Action is to develop a framework for action at the level of policies, infrastructures and interventions for prevention and treatment of depression and suicide and mainstreaming implementation of e-health interventions.

Methods
The representatives of participating countries of the Workpackage on Depression, Suicide and E-health will create and coordinate in their countries a national working group of key stakeholders in the fields of depression, suicide and e-mental health that will be asked to contribute to analyzing the situation in their countries, focusing on advantages and barriers of such interventions that should be addressed. These key stakeholders will be approached and enquired regarding their interest in contributing to the proposed work for this workpackage. They will be invited to provide input, exchange experiences, ideas and information, within the scope of the original purpose of the JA. Other cross-national organizations will be involved in the cooperation to use their experience and knowledge. Several activities will be taken to support the endorsement of the recommendations by Member States and the EU, and promote their commitment for follow-up actions.

Results
- addressing prevention of depression and suicide in different target groups
- identifying solutions for implementing evidence-based interventions including e-mental health and improving sustainability of good practices
- tackling obstacles and using advantages of different policy approaches in different policy environments
- mediating impact of economic crises on depression and suicide
- promoting trans-national approaches to e-support for minority
- optimizing cooperation between professionals and civil society organizations
- integrating e-health interventions into the package of health services and clinical practice of health professionals

Conclusions
The Joint Action on Mental Health and Well-being can utilize the evolving interest from the political level in the mental health issues. It can raise the commitment of the EU states to lay more emphasis on policies regarding mental health issues.
PO2-53
Suicide Prevention - Safer Bridges in the Country of Mountains and Fjords, Norway
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Objective
Every year many Norwegians die by suicide by jumping from high places. In the period of 1999-2010 suicide by jumping accounted for 318 deaths. Available statistics does not specify the type of site from which jumping occurs; however reports of several single incidents give reasons to believe that bridges are commonly used. International research suggests that erecting fences on popular bridges reduce risk of suicide. Is this knowledge valid for Norway?

Methods
All suicides by jumping that occurred in Norway in the period of 1999-2010 will be examined. By combining data from Norwegian statistics and information from police records, we will get specific statistics for suicide by jumping off bridges.

Results
Data showing to which extent bridges are used as jumping sites in Norway, whether some bridges are more used than others and some characteristics of those who die by suicide by jumping off bridges will be presented. Since data has not been available till now, results of our analysis will first be presented at the conference.

Conclusion
Results will illuminate important questions regarding the possibility of saving lives by securing popular bridges in Norway with anti-suicide barriers. Implications will be discussed.

PO2-54
Filicide Followed by Suicide: Review of Literature
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1Centro Hospitalar de Leiria-Pombal, EPE, PORTUGAL; 2Hospital de São Teotónio, EPE-Viseu, PORTUGAL

Introduction
A few reports of parents who killed their children and themselves have haunted Portuguese news. Society tends to lack the ability to comprehend how this horrible phenomenon can occur, scientific community doesn’t have defined answers neither.

Objectives
To review evolving concepts and gain insight on the phenomenon of parents that kill their children and themselves.

Methods
Bibliographic search in Pubmed using the words suicide, homicide, filicide, altruistic homicide. 20 articles were selected.

Results
Resnick (1969) described specific motives for filicide, one of which named as altruistic. It consists of murder committed out of love to relieve the real or imagined suffering of the child and it may be associated with suicide, on the principle of unselfish concern for the welfare of others. A large proportion of filicides are filicide-suicide, percentages range from 16 to 29% of mothers and 40 to 60% of fathers who commit filicide also committed suicide. In a Quebec study of 27
mothers who killed their children, 15 committed suicide. Several authors concluded that the majority of parents had psychiatric symptoms prior to committing filicide and in a study 40% had recently seen a physician or psychiatrist. One study concluded that genetic parents are more likely to commit suicide than step-parents.

Authors agree that usually parents use the same method to kill the children and themselves, and they do it in the same place. Some authors made the assumption that mother filicide-suicide is a suicide extended to the offspring rather than a homicide followed by a suicide. This is further supported by substantial similarity of the geographic characteristics in both phenomena, by the fact that the dynamics and characteristics of the events were much more similar to suicides than homicides. Thus, they are frequently considered as ‘extensive suicides’.

**Conclusion**

Although there is some evidence that the majority of parents who commit filicide-suicide have a psychiatric history we cannot ascertain which are the risk factors that can predict this phenomenon. Therefore it’s important to conduct future studies to further investigate the possible individual and environmental variables involved comparing, if possible, the samples of filicide-suicide parents with a control group of parents that commit suicide but not kill their children.

**P02-55**

**STRONG ENOUGH with Dialectical Behavioral Therapy (DBT): Development and Acceptability of an Advanced Skills Group for Adolescent**

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**Background and study objectives**

Treatment with DBT for adolescents has promising results despite the shortened duration in the adaption for adolescents. Among adults, treatment effects are found to be mediated by increased use of skills. To increase the probability of continuation of treatment effect after completion of DBT for adolescents, we developed a treatment program with skills training in groups.

**Methods and materials**

A 16 weeks program with weekly skills group sessions was developed and implemented into one outpatient clinic. Six adolescents who had completed a DBT program for self-harming adolescents started. Sessions were led by two DBT therapists, but mindfulness exercises, consultation around management of current life problems and skills review were conducted by the adolescents. Attendance required active goal setting and weekly participation with sharing of own examples and personal goals to be achieved.

**Results**

The program content and the rationale for the program as well as the adolescents (both the completers and the others) evaluations of the acceptability of the program will be presented.

**Conclusions**

The program seems to be well accepted as long as the requirement of sharing of personal examples and goals are clearly stated and framed within a problem solving context. The commitment phase of highest importance. Commitment work should be done before entering the group, and adolescent should apply for participation in group.
**PO2-56**  
**Student Suicide an a UK Mental Health Patient Population: 1997-2010**  
Windfuhr, K; Farrell, S; While, D; Kapur, N  
Centre for Mental Health and Risk, UNITED KINGDOM

**Study objectives**  
Little is known about the number of student suicides, or the factors associated with student suicide, particularly among students who had been in contact with mental health services at the time of death. The overall aim was to investigate student suicide in a national clinical sample of mental health patients. Specifically, to: 1) describe their socio-demographic and clinical characteristics, and 2) compare the characteristics of student and non-student suicides, to identify factors associated with student suicides in this clinical sample.

**Method and materials**  
Data on all UK deaths from the 1st January 1997 to the 31st December 2010 with a verdict of suicide or undetermined death, who were in full time education aged 15-35, and who were in contact with mental health services in the year prior to death were included in the study (i.e. student patient suicides). The main findings are presented as frequencies and proportions with 95% confidence internal (CI). Univariate analyses were carried out to examine the association between individual factors. Multivariate analyses were performed to identify independent factors associated student suicide.

**Results**  
There were 243 (17 per year) student patient suicides aged 15-35. Key independent factors associated with this group were: being from an ethnic background (OR: 2.05; 95% CI: 1.28-3.27), short duration of contact with mental health services (OR: 2.56; 95% CI: 1.78-3.68), a primary psychiatric diagnosis of affective disorder (OR: 1.77; 95% CI: 1.23-2.56), eating disorders (OR: 8.11; 95% CI: 2.82-23.34), and receiving psychological therapy (OR: 2.53; 95% CI: 1.72-3.72). Student patient suicides were less likely to be male (OR: 0.51; 95% CI: 0.39-0.65) or to be misusing alcohol (OR: 0.60; 95% CI: 0.41-0.89).

**Conclusions**  
Factors associated with patient suicides generally, were not characteristic of suicides who were students at the time of death. Clinicians should be aware of factors associated with student suicides in this patient population to effectively assess and manage risk. Further, this patient group are amenable to prevention strategies given their close proximity to mental health services and support services through their education provider. This requires good joint working by mental health and education services.

**PO2-57**  
**Developing the Psychological Strain Scales (PSS): Reliability, Validity, and Preliminary Hypothesis Tests**  
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¹State University of New York Buffalo State, UNITED STATES; ²Weifang Medical University, Shandong, CHINA; ³State University of New York at Buffalo, UNITED STATES

**Study objectives**  
Since its inception, the Strain Theory of Suicide has been tested and supported in a number of empirical studies. This social psychological theory can be employed as a complementary
conceptualization to account for suicidal behaviours as well as mental disorders. However, the lack of consistent measurements of the strains limits the application of the theory in scientific research.

**Methods and material**

Our research team has developed such scales for future testing of the Strain Theory of Suicide in a more systematic approach. For the initial items to measure the four strains (value, aspiration, deprivation, and coping), we solicited approximately 40 items for each strain with high face validity by about 30 fellow researchers. A preliminary examination of about 160 items for consistency and validity, with a sample of about 300 college students, yielded 20 consistent items for each of the four strain scales. Then, a second study was conducted at a different university with approximately 500 students to further streamline each of the four strain scales and test the validity of each with corresponding established scales and variables.

**Results**

As a result, 15 items were selected for each of the four Psychological Strain Scales (PSS). In correlation and multiple regression analyses, we found support for the hypotheses regarding the positive associations between psychological strains measured by the PSS and psychopathology including suicidal ideation.

**Conclusion**

Follow-up research with the new scales needs to be carried out in order to test the effects of psychological strains on suicide and mental disorders for various populations.

**PO2-58**

**The Psychometric Properties And The Short Form Of The Reynolds’ Suicidal Ideation Questionnaire (SIQ) In Hong Kong Adolescents**

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**Objective**

This study aims to validate the Reynolds’ Suicidal Ideation Questionnaire (SIQ) in a Chinese society and explore a convenient short version.

**Methods**

A sample of 711 cases was derived from two territory-wide surveys of Hong Kong adolescents aged between 15 and 19 years old.

**Results**

The SIQ and the Suicidal Ideation Questionnaire-Junior (SIQ-JR) demonstrated good reliability and concurrent validity among Hong Kong adolescents. However, the factor structure for both SIQ and SIQ-JR appeared to be unclear. A four-item short form of the SIQ-JR, namely, SIQ-JR-4, was proposed.

**Conclusion**

The SIQ-JR-4 is an ideal substitute of the SIQ/SIQ-JR for future quick assessment of suicidal ideation in Chinese young adolescents. Table 1 Receiver operating characteristics curves for predicting suicidal ideation and suicidal attempts in the last 12 months among the combined sample.
Receiver operating characteristics curves for predicting suicidal ideation and suicide attempts in the last 12 months.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Area under curve</th>
<th>SE (^a)</th>
<th>Asymptotic significance (^b)</th>
<th>Asymptotic 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROC curves for predicting suicidal ideation (44 suicidal thoughts out of 711)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIQ</td>
<td>0.889</td>
<td>0.019</td>
<td>&lt;0.001</td>
<td>0.852-0.926</td>
</tr>
<tr>
<td>SIQ-JR</td>
<td>0.891</td>
<td>0.018</td>
<td>&lt;0.001</td>
<td>0.856-0.926</td>
</tr>
<tr>
<td>SIQ-JR-4</td>
<td>0.878</td>
<td>0.023</td>
<td>&lt;0.001</td>
<td>0.832-0.923</td>
</tr>
<tr>
<td>Depression</td>
<td>0.795</td>
<td>0.033</td>
<td>&lt;0.001</td>
<td>0.731-0.858</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>0.661</td>
<td>0.045</td>
<td>&lt;0.001</td>
<td>0.574-0.748</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.709</td>
<td>0.037</td>
<td>&lt;0.001</td>
<td>0.636-0.782</td>
</tr>
<tr>
<td><strong>ROC curves for predicting suicide attempts (20 suicide attempts out of 711)</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SIQ</td>
<td>0.928</td>
<td>0.016</td>
<td>&lt;0.001</td>
<td>0.897-0.960</td>
</tr>
<tr>
<td>SIQ-JR</td>
<td>0.918</td>
<td>0.018</td>
<td>&lt;0.001</td>
<td>0.882-0.953</td>
</tr>
<tr>
<td>SIQ-JR-4</td>
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<td>0.020</td>
<td>&lt;0.001</td>
<td>0.872-0.952</td>
</tr>
<tr>
<td>Depression</td>
<td>0.850</td>
<td>0.042</td>
<td>&lt;0.001</td>
<td>0.767-0.932</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>0.736</td>
<td>0.070</td>
<td>&lt;0.001</td>
<td>0.599-0.873</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.772</td>
<td>0.053</td>
<td>&lt;0.001</td>
<td>0.669-0.875</td>
</tr>
</tbody>
</table>

Note. SIQ=Suicidal Ideation Questionnaire; SIQ-JR=Suicidal Ideation Questionnaire-Junior; SIQ-JR-4=items 2, 3, 4, and 11 of the SIQ-JR.

a. Under the nonparametric assumption.

b. Null hypothesis: true area=0.5.
PO2-59
Attitudes Toward Suicide Among Slovenian Police Officers
Ziberna, J1; Petrovic, A1; Postuvan, V1; Mars, U1; Podlogar, T1; Tancic Grum, A1; Roskar, S2; Kozel, D1; De Leo, D1
1Slovene Center for Suicide Research, Andrej Marusic Institute, University of Primorska, SLOVENIA; 2Institute of Public Health, SLOVENIA

Police officers’ capability to carry out their role as gatekeepers in suicide prevention depends on their attitudes toward suicide, knowledge about suicide and non-fatal suicidal behaviour, personal experiences and feelings of competence in suicide-related situations. Objective of the study is to explore attitudes towards suicide among Slovenian police officers and see how their attitudes are related to their professional and personal experiences with suicidal behaviours. A four-hour workshop was performed with three groups of 8 to 10 police officers with a total number of 26 participants. The workshop was i) educational - aiming to provide key knowledge about suicidal behaviours to participating police officers; ii) explorative - focused on exploring their attitudes and experiences regarding suicide-related situations by using quantitative and qualitative measures; and iii) reflective - offering the police officers an opportunity to talk openly about their experiences with suicide-related situations, personal opinions and feelings. Participants’ attitudes were assessed by the Attitudes Towards Suicide, which was applied at the beginning of the workshop. Their experiences with suicide related situations were assessed by open-ended questions (e.g., ‘Have you had any experiences with suicide or suicidal behaviour in your professional career or personal life?’), which were presented and discussed during the workshop. Attitudes towards suicide among participating police officers and their diverse experiences with suicidal behaviour are presented in the context of findings from previous research. This study contributes to the understanding of the relationship between police officers’ experience with suicidal behaviour and their attitudes towards it. Insights into police officers’ experience with suicide-related situations and their attitudes towards them would have great value in understanding the nature of police officers’ role as gatekeepers in suicide prevention in Slovenia. Further on their experience and attitudes also appear to be closely related to their handling of suicide cases and coping with the stressful situation afterwards.
**FRIDAY, 27 SEPTEMBER**

**09:00 - 10:30**

**PLENARY SESSION 5**

**PL5-1**

*Complicated Grief Treatment for Suicide Survivors*

Shear, K  
Center for Complicated Grief, Columbia University, UNITED STATES

Suicide is a serious mental health problem for suicide attempters and also for those left in the aftermath of a successful attempt. These affected survivors constitute a large mental health problem as their suffering can be intense and prolonged and their numbers are large. Especially troubling aspects of the circumstances or consequences of a suicide can plague survivors and complicate the healing process. About twice as many suicide- as other-bereaved people develop complicated grief, a chronic debilitating condition now included in ICD11 and DSM5.

Complicated grief treatment is a 16-session targeted psychotherapeutic approach that utilizes strategies and techniques from CBT, Interpersonal Psychotherapy, and Motivational Interviewing to address grief complications and to facilitate the natural healing process. This presentation will provide an introduction to complicated grief and its treatment in suicide survivors. Preliminary data from our AFSP-funded project will be included.

**PL5-2**

*After Suicide: Suicide Bereavement and Postvention, New Directions and Developments*

Andriessen, K  
KU Leuven - University of Leuven & Tele-Helo Federation, BELGIUM

Suicide is now recognised as a personal issue and a public health issue. The magnitude of the problem includes the survivors, i.e. the people who have lost a significant other by suicide. Indeed, suicide is not only an endpoint, for the survivors it can be the beginning of a life after suicide (Shneidman, 1973). Postvention, i.e. the support and other activities for families and communities after a suicide, is a relatively young field in suicidology, however public and research interest in this field has increased during the past decades.

This presentation will provide a selective overview of the past forty years of postvention research in order to highlight achievements as well as important challenges and questions for future developments. Alike suicide prevention, suicide postvention can be developed from a clinical perspective and from a public health perspective. Whereas the former includes support groups, psychotherapy, and online support; the latter includes the development and evaluation of regional and national postvention programs. These programs can be related to the provision of support, awareness raising and/or tackling stigma. A major challenge for the future would be the integration of bottom-up activities developed by survivors and their social networks and top-down activities including evaluation and research, in order to better understand the nature of suicide bereavement and to develop effective postvention programs.

PL5-3
Systematic Antibullying Work in School and Prevention of Suicidal Behaviors
Olweus, D
Uni Research, Uni Health, NORWAY

A number of studies have clearly documented that children and youth who are regularly exposed to bullying by peers in school are concurrently characterized by increased levels of internalizing problems such as depression/depressive states, anxiety, suicidal ideation, and self-harm behaviours. A number of prospective studies have also shown that the odds of having depressive symptoms/states several years after the bullying in school ended are much increased, even when a number of possible confounders are controlled. The overall results from this research strongly suggest that the elevated levels of depression and similar characteristics are a consequence, and not just a correlate, of bullying. Since it is also well documented that depression is a major risk factor of suicidal ideation, self-harm, suicide attempts, and completed suicide, it is very reasonable to assume that effective prevention of bullying in school will have a preventive effect on the development of depression in some proportion of students and thereby also reduce suicidal behaviours in a school population. This is the general background of our assumption that systematic, research-based anti-bullying work with documented effects will have a beneficial effect on suicide-related behaviours, in addition to a number of other positive effects. The Olweus Bullying Prevention Program (OBPP) is a research-based, multilevel, multi-component program designed to reduce and prevent bully/victim problems in schools. Very positive effects of the program have been documented in six large-scale evaluation studies involving more than 40,000 students and covering a time span of 30 years. Average reductions in bully/victim problems have typically been in the 30-50 percent range after one or two years of work with the program. In a couple of longitudinal studies, long-term effects over more than 5 years have been documented. The OBPP works at the school, classroom, and individual levels and is both preventive and acutely problem reducing. It has been evaluated as the most effective anti-bullying program in a recent meta-analysis of all anti-bullying programs in the world. Although work with the OBPP will very likely have positive preventive effects, it should be emphasized that the program is not primarily designed for such purposes and should not be perceived as a complete suicide prevention program.

11:00 - 12:30
PLENARY SESSION 6

PL6-1
The Relative Roles of Mental Illness and Pesticides in Suicide in Asia: Evidence for The Need of a Paradigm Shift in Suicide Prevention?
Phillips, M
Suicide Research and Prevention Center and Research Methods Consulting Center, CHINA

Emerging evidence from low- and middle-income countries (LAMIC), where 84% of global suicides occur, is challenging conventional wisdom about suicide, most of which is based on research conducted on the 16% of global suicides that occur in high-income countries.
One of the most dramatic findings from LAMIC is that access to agricultural pesticides - the most common method of suicide globally - may be a more important determinant of suicide rates than the prevalence and treatment rates for mental disorders. There is, moreover, growing evidence that different methods of restricting access to pesticides can effectively reduce suicide rates, perhaps more effectively than conventional mental health interventions. In support of this contention, this lecture will present the three-year follow-up results of a project in northern China that installed 10,000 pesticide lockboxes in households of two rural townships in Shaanxi Province, assessed the utilization of the lockboxes over time, and compared changes in rates of fatal and non-fatal suicidal behaviour in the two intervention townships compared to eight control townships. These findings raise a fundamental dilemma for policy makers in LAMIC: given the very limited resources available for addressing the problem of suicide, how should they decide on their priorities for suicide prevention? If you can’t do both, is it better to establish suicide screening programs and strengthen mental health services or to take steps to decrease access to pesticides?

**PL6-2**

**Alcohol Prevention Strategies: Their Effectiveness on Drinking Problems in General and on Suicidal Behavior in Particular**

Rossow, I
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

It is well established that heavy drinking and alcohol misuse elevate the risk of non-fatal self-harm and of completed suicide. Studies further suggest that a significant proportion of self-harm episodes and suicides can be attributed to alcohol consumption. Consequently, strategies that are effective in curbing heavy drinking and alcohol misuse in general may well be effective in preventing non-fatal and fatal self-harm.

This presentation gives a brief literature review of the evidence of effectiveness of various alcohol prevention strategies to curb alcohol consumption and related problems in general and then addresses the evidence of effectiveness of these strategies to prevent self-harm and suicides in particular. The strategies reviewed are mostly universal, population targeted and include alcohol control policies - as regulation of price and physical availability - , and educational strategies - as school programs, media campaigns and warning labels. In addition, selective and indicative strategies are reviewed and these include screening and brief intervention in primary health care and alcohol misuse treatment.

Alcohol control policies are those strategies that stand out as having good evidence of significant effectiveness in preventing heavy drinking and alcohol related problems in general. There is also good evidence of effectiveness of selective and indicative strategies. The literature regarding effectiveness with respect to self-harm and suicide specifically is, obviously, much smaller. Yet, there is also evidence, mainly from natural experiments, suggesting that alcohol control policies may have a significant impact on suicide rates. So far, little is known about possible effects of early intervention and treatment of heavy drinkers on their risk of self-harm and suicide.
PL6-3
How Life Events get "Under the Skin": Implications for Suicide Research
Turecki, G
Douglas Mental Health Research, CANADA

The environment in which we live, and especially the early life environment, shapes our behaviour. Adversity during early life is strongly associated with problems in behavioural regulation and psychopathology in adulthood. Until recently, the mechanisms responsible for behavioural changes induced by early life adversity were not clear. However, recent evidence suggests that early-life environment induces behavioural changes through epigenetic mechanisms controlling the expression of genes involved in the regulation of behaviour. As such, the epigenome mediates the effects of environmental variability on behavioural, physiological and pathological responses. In this talk, I will discuss key concepts of how traumatic events occurring early in life may increase risk for suicide. I will present data from methylation studies in humans as a function of history of environmental adversity and discuss implications for behavioural development and risk of suicide.

14:30 - 16:00
PS3.1 SUICIDAL BEHAVIOUR IN DIVERSE CONTEXTS (A)

PS3.01-1
Identifying Differential Types of Suicide. Results of a Psychological Autopsy Study of 98 Suicide Cases in The Netherlands
de Groot, M1; de Winter, R2
1Vrije University, NETHERLANDS; 2Parnassia, The Hague, NETHERLANDS

Introduction and aims
Systematic observation of suicide cases (n=98) during two studies on the effect of postvention for relatives bereaved by suicide (n=206) suggests that suicide cases might be differentiated into various ‘types’ with respect to clinical psychiatric symptoms at the time of death, and the history of suicidal and help seeking behaviour of the deceased. The hypothesis was tested, aiming at identifying and describing different types. The outcomes are discussed in the context of the stress-diathesis model of suicidal behaviour.

Methods
Psychological autopsy of 98 suicides. First-degree relatives (n=206) completed a questionnaire on features of the deceased. The presence of various psychiatric symptoms including suicidal behaviour of the deceased during lifetime and respectively 12 and three months before the suicide were assessed by rating ‘yes’, ‘no’ or ‘unknown’. In a semi-structured format [yes/no] motives for the suicide according to relatives were assessed. Multivariate latent class analysis was applied to identify types of suicide. Subsequently, types were labeled by a panel of four psychiatrists who were asked to diagnose the types according to DSM-VI- classification. Subsequently, bivariate associations between types and socio-demographic features and help seeking of the deceased were computed. All outcomes are combined and the types are qualitatively described.
Results
By multivariate latent class analyses, four types of suicide were identified. Type I is characterized as ‘recidive internalizing’, Type II as ‘chronic externalizing, possible cluster B personality disorder’, Type III as ‘psychiatric symptoms absent’ and Type IV as ‘unknown’. Received (mental) health care is likely in Type I, and unlikely in Type III. Previous recurrent suicidal behaviour and a family history of suicide is likely in Type II. Support for the stress-diathesis model for suicide is found in all types, but most manifest in Type II.

Conclusions
The results suggest that different types of suicide exist. Differential prevention strategies may contribute to more efficacy of suicide prevention. However, due to possible selection bias the outcome should be considered as hypothetical.

PS3.01-2
Suicide after Release from Prison - A Population-based Cohort Study
Haglund, A; Runeson, B; Tidemalm, D
Department of clinical neuroscience, Karolinska Institutet, SWEDEN

Study objectives
Previous research have found that recently released prisoners have high suicide rates compared with the general population. However, there is a lack of knowledge about specific risk factors and possible causal pathways to guide preventive efforts. Therefore we conducted a population-based cohort study to investigate rates and risk factors for suicide in recently released prisoners.

Methods and material
We identified individuals released from prison in Sweden between 1st January 2005 and 31st December 2009 through linkage of national population-based registers. All released prisoners were followed from the day of release until death, emigration, new incarceration, or 31st December 2009. Survival analyses were conducted to compare incidence rates and psychiatric morbidity with age- and sex-matched population controls.

Results
We identified 38,995 releases among 26 953 prisoners (7.6% females) during the years 2005-2009. Overall, 127 suicides occurred, accounting for 14% of all deaths during the study period (n=920). The mean suicide rate was 204 per 100,000 person years yielding an incidence rate ratio of 18.2 (95% CI 13.9-23.8) compared with general population controls. The increased incidence was most pronounced the first 28 days after release (IRR=58.0). Previous substance use disorder, suicide attempt, and being born in Sweden vs. abroad were independent risk factors for suicide after release. The prevalence of risk factors differed significantly between prisoner and general population suicides.

Conclusion
Released prisoners are at high suicide risk and with a slightly different pattern of psychiatric risk factors for suicide compared with the general population. Substance use disorder was the only treatable condition of the identified risk factors. Our findings should inform risk assessment and suggest customised collaboration between criminal justice, health care and social service authorities.
Risk Factors for Suicide and Violent Offending in a National Cohort of People Diagnosed with Bipolar Disorder

Webb, R¹; Lichtenstein, P²; Landen, M³; Fazel, S⁴
¹University of Manchester, UNITED KINGDOM; ²Karolinska Institutet, SWEDEN; ³University of Gothenburg & Karolinska Institutet, SWEDEN; ⁴University of Oxford, UNITED KINGDOM

Study objectives
Across the full array of psychiatric diagnoses, bipolar disorder is linked with a particularly highly raised suicide risk, and externalised violence also occurs more commonly in this patient group. Therefore we aimed to estimate relative risk for suicide and violent criminal offending in a national bipolar disorder cohort, and to make aetiological comparisons between these two adverse outcomes.

Methods and material
Using national Swedish registers we delineated a historic cohort study that consisted of all people diagnosed with bipolar disorder in the course of at least two separate secondary care treatment episodes (inpatient and/or outpatient) during 1973-2010. We examined 15,114 such patients matched for age and sex to 302,262 unaffected living individuals selected randomly from the general population. We extracted and linked data on demographic and clinical factors pertaining to cohort members and their parents.

Results
Compared with the general population the bipolar disorder cohort had relative risk for suicide of 19.2 (CI 16.3-22.7) and of 4.8 (CI 4.4-5.3) for violent offending. Within the bipolar disorder cohort, male gender predicted higher risk of both suicide and violence toward others. Several other demographic factors were linked with externalised violence only, including low income, being an immigrant, and, in male conscripts, low intelligence quotient (IQ). Being unmarried was strongly protective against suicide. Having more severe bipolar disorder and history of self harm predicted both adverse outcomes, as did various measures indicating histories of substance misuse and criminal offending. Parental risk factors were predictive of violence, but not suicide, although these weak associations were explained by individual-level risk factors for violence in multiple regression models.

Conclusion
Our findings indicate markedly raised risk for suicide and violent offending in this national cohort of people diagnosed with bipolar disorder, with the elevation in risk for suicide being particularly high. We found several shared risk factors for both adverse outcomes, and some factors that were predictive or protective of one outcome only. Clinicians ought to be particularly vigilant when assessing male bipolar patients with histories of substance misuse disorders and criminal offending, and they should carefully assess the risks for both suicide and interpersonal violence in this patient group.
Study objectives
We compared suicide method profiles between violent offenders, other types of criminal offenders and non-offenders. We hypothesised that violent offenders would have a higher relative risk for suicide by a violent method than by a nonviolent one. We reasoned that violent offenders would be more prone to killing themselves using methods that are often particularly painful or disfiguring. For example, they may more frequently use guns and knives, as many of these individuals possess or have ready access to such weapons. We also believed that they would have a greater propensity for taking their lives impulsively without foresight or planning, using especially violent means such as jumping from a height or in front a train, or deliberately crashing a motor vehicle.

Methods and material
Using interlinked national Danish registers we constructed a nested case-control study dataset of all adult suicides, 1994-2006: N=9708 cases and N=188,134 age & sex matched living controls. Completely ascertained ICD-10 cause-specific mortality codes were examined, along with all criminal charges and convictions since 1980, and covariate information on secondary care psychiatric treatment and socio-demographics. Self-poisonings were classified as ‘nonviolent’ suicide; all other methods as being ‘violent’.

Results
Among male and female violent offenders, relative risk for nonviolent suicide was greater than that for violent suicide (vs. the general population). Risk was especially high for self-poisoning with narcotics & hallucinogens. We could only examine the full range of suicide methods in violent men as our national investigation had insufficient statistical power for detailed profiling of specific suicide methods among female violent offenders. In these men hanging was the most frequently used method, although risk was markedly and significantly elevated across virtually the entire range of regularly used suicide methods.

Conclusion
Gaining a greater knowledge of the means by which violent offenders die by suicide can inform tailored preventive strategies. Our findings indicate that violent offenders do not have a greater propensity for selecting a violent suicide method. Their high relative risk for self-poisoning by illicit or illegal drugs underlines the importance of access to means and of prevailing subcultures. Comprehensive and broadly-based preventive approaches are needed for tackling the markedly raised suicide risk in this group.
ABSTRACTS

FRIDAY

PS3.01-5
Patterns of Contact with Primary Care in the year before Suicide: A Population Based Nested Case-control Study in England
Windfuhr, K; Webb, R; While, D; Shaw, J; Appleby, L
Centre for Mental Health and Risk, UNITED KINGDOM

Study objectives
1) What was the frequency of contact with primary care in the year prior to suicide?
2) What are the odds ratios (OR) for suicide in frequent and non-/infrequent attenders compared to average attenders?
3) Are the observed associations modified by age and gender?

Method and materials
A nested, population-based case-control study sampled from the Clinical Practice Register Datalink cohort, with completed suicide (cases) as the outcome of interest. Patients were included if aged >16 with ≥1 year of ‘up-to-standard’ data prior to suicide. Linked mortality data (Office for National Statistics) identified suicide/undetermined deaths. Cases were matched with up to 20 living controls on age, sex, and GP practice.

Results
Between 2002-2011 49,283 subjects (2,384 cases, 46,899 controls) were included. In the year before date of suicide, cases presented more frequently to primary care than controls overall (median 23.7 v. 14.6, respectively) and between 1.2-1.9 times more frequently in any given time period prior to suicide. Compared to average attendance, non/infrequent and frequent attendance were significantly associated with increased suicide risk, except in patients aged 36-49. The magnitude of risk was greater with frequent vs. non/infrequent attendances.

Non/infrequent- and frequent attendance versus average primary care attendance, by sex and age group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Contacts</th>
<th>OR [95% CI]</th>
<th>Lrtest p</th>
</tr>
</thead>
<tbody>
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<td>All</td>
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<td>1.34 [1.19-1.51]*</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>≥6</td>
<td>2.43 [2.17-2.73]*</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<td>1.17 [1.03-1.33]*</td>
<td>&lt;0.001</td>
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<td>ref</td>
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</tr>
<tr>
<td>Female</td>
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<td>0-1</td>
<td>2.57 [1.97-3.35]*</td>
<td>&lt;0.001</td>
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<tr>
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<td></td>
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<td>ref</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥6</td>
<td>2.69 [2.13-3.40]*</td>
<td></td>
</tr>
<tr>
<td>Age group</td>
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<tr>
<td>16-35</td>
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<td>&lt;0.001</td>
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<tr>
<td>36-49</td>
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<td>0-1</td>
<td>1.13 [0.93-1.37]</td>
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<td>ref</td>
<td></td>
</tr>
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<td>2.61 [2.15-3.16]*</td>
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<tr>
<td>≥50</td>
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<td>0-1</td>
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<td></td>
<td>≥6</td>
<td>2.18 [1.82-2.62]*</td>
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</table>
Conclusion
Non/infrequent and frequent attendance was associated with increased suicide risk, across sex and age group. Systems to identify non/infrequent and frequent attenders may improve awareness of at risk patients in primary care services. Outreach work with patients who do not attend and closer management of patients who attend frequently could inform primary care suicide prevention strategies. Further analysis is in progress to investigate: reasons for attendance, identification and treatment of mental illness, and referrals to secondary mental health services.

PS3.01-6
Influence of Social Network and Problem Solving Methods on Risk for Suicidal Behavior among Chinese College Students
Tang, F1; Qin, P2
1School of Public Health, Shandong University, CHINA; 2National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Study objectives
Social network and problem solving skills play important roles on suicidality of young people. This study aims to assess the influence of social network and problem solving skills on risk for suicidal behaviour and to disentangle their possible pathways using a large sample of college students from China.

Methods and material
5972 college students, selected through a random cluster sampling method, were recruited into the study and completed the online questionnaire survey. Logistic regression analysis was performed to estimate the effect of social network and problem solving on risk for suicidal ideation and attempt. Partial least squares path model (PLSPM) was used to probe possible paths from social network and problem solving methods to suicidal behaviour.

Results
Of the 5972 students (3191 males and 2781 females), 16.39% (12.94% of males and 20.35% of females) reported a presence of suicidal ideation while 1.91% (1.35% of males and 2.55% of females) a positive history of attempted suicide. Poor social network donated a strong risk factor for both suicidal ideation and attempt. The influence of coping skills varied according to the strategies adapted toward problems. A high score of the problem approach strategies is associated with a reduced risk of suicidal behaviour whereas a high score of the problem avoidance strategies significantly increased the risk. Modeling of data with PLSPM indicated that the avoidance coping methods conferred the most important dimensional variable in the prediction of suicidal behaviour, followed by the approach coping skills and social network.

Conclusion
Poor social network and deficient problem solving methods strongly affect suicidal behaviour in young students. Prevention programs targeting on expansion of social network and improvement of adaptive coping skills may have enduring effects on reducing suicidal behaviour in this group of young people.
14:30 - 16:00

**PS3.2 STRATEGIC PLANNING FOR SUICIDE SAFER COMMUNITIES AROUND THE WORLD**

**PS3.02-1**

Strategic Planning for Suicide Safer Communities around the World  
Stokes, H1; Tallaksen, DW2; Moller, A-J3; Macgregor, L4; Taylor, M5  
1LivingWorks Education, UNITED STATES; 2Oslo and Akershus University College of Applied Sciences, NORWAY; 3VIVAT Suicide Prevention, NORWAY; 4National Centre for Suicide Prevention Training, AUSTRALIA; 5National Native Children’s Trauma Center at University of Montana, UNITED STATES

Strategic planning is essential for creating and sustaining suicide safer communities. Often, when an individual’s death by suicide receives substantial attention (usually negative) a community reacts by implementing training, policies, and other activities without taking the time to thoughtfully plan for the integration effective programming that is culturally sensitive to local beliefs and norms. Similarly, the importance of such programming achieving broad demographic impact and sustainability is often overlooked. Research suggests that comprehensive, community-based prevention efforts are effective (Burrows & Laflamme, 2008). This symposium will present a blue print model of strategic planning for creating suicide safer communities applicable and adaptable for various settings, cultures and demographics. LivingWorks Education has developed this strategic planning process from 30 years of experience working with aboriginal communities, states, provinces, and organizations in 18 countries. The recommended strategic planning process to build a suicide safer community encompasses four critical phases and this presentation will address each phase directly:  
* Community Assessment  
* Preparedness  
* Capacity Building and Training  
* Sustainability and Evaluation

This multi-national panel will share lessons learned from Norway, South Korea, the United States, Canada, Australia and New Zealand. Panel experts will discuss how they have created and sustained suicide safer communities by integrating and implementing evidence based trainings such as ASIST and safeTALK. Successes and challenges involving collaboration with indigenous populations and diverse professional disciplines (such as construction workers, law enforcement, nurses, clinicians) will be emphasized. Strategies for creating locally-responsive cultural and demographic adaptations of these interventions while ensuring fidelity to the model will also be explored. Participants are invited to share their experiences in how they have created suicide safer communities in their respective countries.
PS3.02-2
ASIST in Norway. Development and Research
Tallaksen, DW1; Møller, AJ2
1Høgskolen i Oslo og Akershus, NORWAY; 2VIVAT Suicide Prevention, NORWAY

The organisation VIVAT Suicide Prevention (VIVAT) is funded by the Norwegian Health Department, in collaboration with the University Hospital of Northern Norway. We work closely alongside Regional Centres on Violence, Traumatic Stress and Suicide Prevention (RVTS), through regionally employed staff, related to all of the five RVTS in Norway. So far (2012), we have 140 ASIST trainers in Norway, and more than 23 000 course participants have taken part in the Norwegian ASIST workshop.

The ASIST workshop was introduced in Norway in 1998, and since year 2000, VIVAT’s course “First-aid suicide intervention skills” (ASIST) has been part of the state initiated Action Plan against Suicide. The main intention behind passing on ASIST to Norway was that the whole structure of this educational program seemed suitable for the development of first aid suicide intervention skills, especially because it could be spread widely within Norway’s small communities with sometimes various health services. The purpose was to include all kinds of participants, both professional and volunteers, who could have a role as a helper for someone in risk of suicide. Many of our participants are different types of health workers. Other participants are volunteers, educators, police, clergies, and military staff.

During the years, the workshop has been used according to our intentions with success. An example of this is they way it is used as a part of the curriculum for medical students at the University of Tromsø, where the students participate alongside a multidisciplinary group. In Finnmark county the workshop is going to be implemented systematically in different communities for the next two years. And in the last years it has been used in the curriculum for students in Public Health Nursing. A newly published study (Tallaksen et al, 2013) shows that Public Health Nurses working with young pupils/students say that the workshop has increased their professional mastery, their proficiency in actions and their dialog competency. This has expanded their professional repertoire and probably improved the quality of their care.

PS3.02-3
Implementation of Standardized Gatekeeper Programs in South Korea
Cho, IH
Gachon University, Gil Hospital, SOUTH KOREA

South Korea has the highest suicide rate among OECD countries since 2003. The toll of suicide deaths doubling in the last decade and suicide is the most common cause of death for those under 40 in Korea. The suicide rate of adolescents in Korea is only slightly higher than the average rate of OECD countries. However, adolescent suicide rate also has an increasing trends during last decade.

Therefore, Korean government and local communities have been trying to do enormous efforts for stopping the suicide rate further increase again. As a part of those preventing efforts, we need a standardized gatekeeper program to train the people who can easily meet the person at suicidal risk. The Ministry of Health and Welfare has responded to this by working in conjunction with the Korean Association of Suicide Prevention (KASP) to deliver evidence based prevention program and raise awareness and alertness about suicide through the whole nation. Living
works education program, such as ASIST and safeTALK has been introduced and implemented in May 2011 and 4 trainers from Living Works were trained 24 Korean local trainers who were from non English-speaking Asian country for the first time.

2 ASIST and safeTALK T4T have been held during the past two years and each 48 and 40 Korean trainers has produced.

Despite the taboo of talking about suicide and the difference of language and cultural barrier, we accomplished remarkable achievement having 45 ASIST workshop (n=1,429) and 133 safeTALK workshops (n=3,607) only for 16 months. We trained lots of people who have a different job like mental health professionals, counsellors, teachers, hot line workers, police man and even soldiers coming from all over the country. As a result, more organization and various community resources eagerly want to involve these gatekeeper training and make a suicide safer community to reduce the high suicide rate in our country.

We want to share our experience with people from other countries, especially non English-speaking countries which don’t have an opportunity to provide well organized, evidence based gatekeeper programs before.

**PS3.02-4**

**Saving Face - Suicide Stigma in Asia**

Macgregor, L
National Centre for Suicide Prevention Training Inc, AUSTRALIA

In Asian culture the concept of ‘Face’ - (Definition: Value or standing in the eyes of others; prestige; eg lose face) - is of paramount importance in terms of community respect & social standing. The perceived loss of face that can occur after an attempted or completed suicide can result in increased stigma & additional barriers to accessing suicide prevention services. This is of particular concern in countries where suicidal acts are illegal. One such country where attempting suicide is against the law is Singapore, ensuring that the stigma around suicide is even greater in that country than most others.

The WHO Public Health Action for the Prevention of Suicide has identified that a key step in developing a national suicide prevention strategy is the provision of gatekeeper training to police, fire services, ambulance services, prison and criminal services, courts, and defence forces. Since 2006, Singapore Police Force (SPF) has provided suicide intervention training for officers from within the force & other law enforcement services such as corrections, ambulance, customs & coast guard. The LivingWorks ASIST training has been conducted with officers (n=300) who come from a range of ethnic backgrounds & speak a number of different languages. Results across a seven year period support ASIST’s international portability, capacity to deliver standardized training to diverse cultures, and ability to facilitate integrated networks of gatekeepers across law enforcement agencies through the learning of a ‘common language’ around suicide.

Participants attending this session will:
1. Learn how to overcome the barriers to openly discussing suicide in a society where it is still highly taboo & that treats such behaviour in a punitive way.
2. Learn how a standardized gatekeeper program can be used in a multi-cultural setting.
3. Understand how minor adaptations that respect local wisdom, belief systems, cultural norms and politics can be made to that program without changing the key messages.
Sustaining Upstream Prevention Support Systems with Native Communities

Taylor, M
National Native Children’s Trauma Center, UNITED STATES

Recent youth suicide clusters in a number of indigenous groups in the United States shine new light on what people working and living in American Indian and Alaska Native (AI/AN) communities have long known - while most Native children demonstrate remarkable resiliency in the face of numerous social, historical, and economic challenges, many others feel disconnected and in crisis. Native youth are more at risk than any other group in the U.S.

The National Native Children’s Trauma Center funded by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) believes working effectively and respectfully in Native communities is critical but that it is also difficult. Strategic Planning requires patience and persistence, humility, navigating complex and ever changing political structures, a respect for tribal sovereignty and an understanding of the profound impacts of intergenerational trauma. Our work teaches us there are many lessons to be learned. This presentation will highlight such six lessons:

1. Suicide prevention is not the single responsibility of one organization. Youth suicide is first and foremost a community problem. Everyone who comes in contact with youth at-risk must be comfortable to intervene, refer and support. Implementing evidence based trainings such as ASIST and safeTALK is essential.

2. Trauma and exposure to violence are significant risk factors for Native youth. It is important to address these risks by implementing cognitive behavioural and resiliency skill building interventions across all school grade levels and also to work from a multi-organizational perspective that involves juvenile justice and child protection agencies.

3. The taboo of talking about suicide must be resolved if a community is to move forward. The same is true regarding historical trauma. 4. It is critical that an individual, a family, a school or a tribe is never stigmatized as a result of a suicide, research surrounding suicide and trauma or even suicide prevention activities.

5. Outside agencies working with native communities must be sensitive to the fact that historically many non-native mental health service providers and treatment models did not value tribal holistic practices. Additionally, Tribes in the U.S exist as sovereign nations, thereby owning research data collected on their people.

6. Unique tribal values and ways of knowing are integral to the adaptations of widely-used interventions for use with indigenous people.

Strategic Planning Process for Suicide Safer Construction Industry (Australia)

Gullestrup, J
MATES in Construction Ltd, AUSTRALIA

Statistics from Construction industry based superannuation and redundancy funds confirmed what most in the industry already knew - over 20% of payouts were due to suicide. This was confirmed by Australian Institute for Suicide Research and Prevention who found significantly elevated suicide rate with young workers in particular at risk. The industry responded to the AISRAP report by establishing an industry wide and industry based suicide prevention program -
MATES in Construction.
A strategic industry based approach (rather than the traditional employer/enterprise based approach) has many advantages including:
* independence from the employer leading to credibility within the workforce
* in a transient industry workers engage with the program across various employers
* workers take the program to site regardless of employer support - it lives independently of the employer.
* an off-the-shelf program is easy for the employer / worksite to implement and
* as more employers engage pressure builds on non-participating employers to join
* a universal program creates a standard of care for Government agencies such as the Workplace Health and Safety Inspectorate to support.
An important part of the success of the MIC program lies in a high sense of industry ownership - the industry as a community identified the issue of suicide and devised a program to address the issue. It was important to devise a universal program for the industry with clear standards - in a highly competitive environment flexible standards are under constant pressure. The MATES in Construction program has since its inception inducted over 30,000 workers into the program and maintains a network of over 2000 Connectors and over 300 ASIST workers on over 400 sites in Queensland. MIC recently expanded to WA, SA, NSW.
This presentation will not focus as much on the MATES in Construction program as it will focus on the strategic planning and implementation of the program and highlight the importance of broad engagement and in using existing resources where possible. The speaker will deal with:
* how the issue of suicide was elevated as an issue requiring a strategic approach within the industry
* the importance of a solid evidence base
* community engagement in developing the model
* incorporating existing resources in new and useful ways rather than re-inventing the wheel
* data and continuous feedback - an industry owned and controlled strategy
* evaluation

14:30 - 16:00
PS3.3 SUSCEPTIBILITY TO SUICIDAL BEHAVIOUR: NEUROBIOLOGICAL DETERMINANTS

PS3.03-1
MicroRNA Expression is Down-Regulated and Reorganized in Prefrontal Cortex of Depressed Suicide Subjects
Dwivedi, Y
University of Illinois at Chicago, UNITED STATES

microRNAs (miRNAs) are newly discovered gene expression regulators that have recently been implicated in a variety of human diseases, including neuropsychiatric diseases. The present exploratory study was undertaken to examine whether the miRNA regulatory network is altered in brain of depressed suicide subjects. Brain samples were obtained from the Quebec Suicide Brain Bank. Case reports for each subject were prepared by psychological autopsy. Expression
of miRNAs was measured in prefrontal cortex of depressed suicide (n = 17) and well-matched non-psychiatric control subjects (n = 18) using multiplex RT-PCR plates. Levels of dicer, drosha, DGCR8 mRNA, and several pri-miRs were determined by qPCR. Differences in miRNA expression were analyzed by parametric t-test, 2-tailed, and non-parametric Wilcoxon sign-rank test, 2-tailed. To correct for multiple testing, SAM analysis was employed. miRNA expression was globally down-regulated in depressed suicide subjects (p = 4.5 x 10^-43) and was accompanied by a significant decrease in inter-individual variability. Using individual tests of statistical significance, 21 miRNAs were significantly decreased at p<0.05. Levels of dicer, drosha, DGCR8 mRNA and several pri-miRs were not significantly altered. In addition, a set of 29 miRNAs, whose expression was not pairwise correlated in the normal controls, showed a high degree of co-regulation across individuals in the depressed group. The findings show that miRNAs contribute substantially to a reorganization of gene expression networks that occurs in depression or suicide. miRNA profiling may assist in identifying factors that correlate with diagnosis, prognosis or response to treatment.

PS3.03-2
Animal Model in Gene Environment and Timing Interaction in Adolescent Depression and Suicide
Zalsman, G
Tel Aviv University, Geha MHC, ISRAEL

Depression and suicidal behaviour run in families and are prevalent in adolescence. Case-control and family-based studies in this age group failed to find a genetic association that survived replications. Gene environment approach gave new hope for possible associations especially with the short allele of the serotonin transporter promoter polymorphism (5-HTTLPR). However, a recent meta-analysis raised doubts about the consistency of these findings. Some new structural and functional imaging data may shed light on the age-related and gender-related development of the brain. This presentation suggests a new approach to gene by environment and timing interaction to understand the interplay that leads to depression and suicidality in adolescents and young adults. Animal model that assess this hypothesis will be presented. After exposing control and “depressed” baby rats daily for a limited period of time, our results indicate that this brief manipulation was strong enough to enhance depression-like symptoms as indicated by reduced floating in the forced swim test as well as increased consumption of saccharin in a preference test for depressed rats. In vivo MRI diffusion tensor imaging analysis at young adulthood revealed differences in fractional anisotropy in several brain areas, in both strains between rats exposed to brief daily stress and controls.

PS3.03-3
Toxoplasma Gondii and Suicidal Behavior: Mediation by Aggressive Personality Traits?
Postolache, T1; Cook, TB2; Rujescu, D3
1University of Maryland School of Medicine, UNITED STATES; 2Baldwin Wallace University. Berea OH, UNITED STATES; 3University of Halle-Wittenberg, GERMANY

Study objectives
Toxoplasma gondii, a prevalent neurotropic protozoan parasite, has been associated with suicidal
self-directed violence (SSDV). Mechanisms of this association are not known. Aggression and self-aggression, important intermediate phenotypes for SSDV, have never been studied in relation to latent toxoplasmosis among psychiatrically healthy adults by structured clinical interviews.

Methods and materials
1,000 individuals with no Axis I or II conditions by SCID for DSM-IV (510 men, 490 women, mean age 53.6 ± 15.8) were enrolled at the University of Munich, Germany and self-rated on five measures of aggression and self-aggression using the FAF questionnaire. The Temperament and Character Inventory (TCI) was also administered. Plasma IgG antibodies to T. gondii and other neurotropic pathogens (HSV1, CMV) were measured using ELISA. Multivariate tests (MANOVA) were used for overall tests with linear regression models to test for interactions by sex and age.

Results
Overall, T. gondii status was significantly associated with measures of aggression (F=3.17, df1 = 4, df2 =944, p = .013). T. gondii seropositivity was associated with higher aggression scores among women, with an opposite pattern among men, with significant interactions by sex for both FAF-Spontaneous Aggression and Reactive Aggression (p < .05). Plots of adjusted FAF-Self-Aggression scores by T. gondii status revealed higher self-aggression among post-menopausal women with a delayed, opposite age-related gap among men (p < .01). Associations with HSV1 and CMV were not significant.

Conclusions
T. gondii infection was associated with higher aggression and self-aggression among women of postmenopausal age with no history of Axis I or II psychopathology. These results are in concordance with a recent European ecological report documenting a higher frequency of suicide in older T. gondii-positive women. Gender specific TCI associations will also be presented and discussed.

PS3.03-4
Global DNA Methylation Patterns in Depression and Suicide
Turecki, G
Douglas Mental Health Research, CANADA

Objective
Astrocytes are central nervous system specific cells involved in numerous brain functions including the regulation of synaptic transmission and of immune function. There is mounting evidence suggesting astrocytic dysfunction in major depression and suicide. The objective of this study was to identify gene-based changes associated with astrocytes and to determine if DNA methylation plays a role in these abnormalities.

Methods
We conducted MBD2-based methylome sequencing of cases with astrocytic abnormalities. We first characterized prefrontal cortex samples from 121 individuals (76 who died by suicide and 45 sudden death healthy controls) for the astrocytic markers GFAP, ALDH1L1, SOX9, GLUL, SCL1A3, GJA1, and GJB6. A subset of 22 cases with consistently downregulated astrocytic markers was then compared to 17 matched controls using MBD2-sequencing followed by validation with high resolution melting and bisulfite Sanger sequencing. With these data, we generated a genome-wide methylation map unique to altered astrocyte-associated depressive psychopathology and suicide.

Results
The map revealed regions of differential methylation between cases and controls, the majority of which displayed reductions in methylation levels in cases. A large number of our differentially methylated regions overlapped with known ENCODE identified regulatory elements.
Conclusions
Taken together, our data indicate significant differences in methylation patterns specific to astrocytic dysfunction associated with depression and suicide, providing a potential framework for better understanding this phenotype.

PS3.03-5
Genetics of Suicidal Behavior and Intermediate Phenotypes
Rujescu, D
Martin-Luther-Universität Halle-Wittenberg, GERMANY

The risk of suicide-related behaviour is supposed to be determined by a complex interplay of sociocultural factors, traumatic events, psychiatric history, personality traits, and genetic vulnerability. This view is supported by adoption and family studies indicating that suicidal acts have a genetic contribution that is independent of the heritability of Axis I and II psychopathology. One of the largest epidemiological studies showed that the risk for suicide attempts increased by factor 4.2 when the biological mother or by the factor 3.3 when the biological father had committed a suicide attempt. This familial accumulation of suicidal behaviour could be partly due to genetic risk factors. Strategies to find genetic risk factors for suicidal behaviour (e.g. linkage, association or microarray studies) as well as the current developments in this field will be presented and discussed. There is hope that genetic studies can be successful in their search for genetic susceptibility factors, which can be used to identify at-risk individuals needing intensified care, and thus help to decrease the suicide rate.

PS3.03-6
Hypothalamic-pituitary-adrenal (HPA) Axis Dysregulation as a Biomarker of Suicide Risk in Mood Disorders
Jokinen, J; Nordström, P
Karolinska Institutet, SWEDEN

Several studies have implicated the hypothalamic-pituitary-adrenal axis (HPA axis) in the pathogenic processes in major depressive disorder (MDD); sustained dysregulation of HPA function in depression is associated with poorer course and worse outcome after discharge with higher suicide risk. A meta-analysis concluded that non-suppressors in the dexamethasone test (DST) have more than 4.5-fold increased risk of suicide compared with suppressors. DST data from a cohort of 382 mood disorder inpatients with and without suicide attempt was analyzed in relation to subsequent death by suicide. Optimal threshold of DST in suicide prediction was analyzed using receiver operating characteristics, ROC.

DST non-suppression was a biologic predictor of suicide in mood disorder inpatients with index suicide attempt yielding a risk ratio of 2.8. The optimal threshold for DST non-suppressor status in suicide prediction was different for males and females. In the elderly mood disorder inpatients (65 years or older) with suicide attempt with an age adjusted threshold, the DST test had a positive predictive value of 71 %.

For the clinician there is emerging evidence that biological testing can supplement clinical judgement in predicting the outcome and the risk of suicidal behaviour. Support was lent to reintroduction of the DST as a complementary measurement of biological vulnerability in clinical high-risk groups. This presentation summarizes the now extensive evidence linking both HPA axis hyperactivity to a heightened risk for suicide.
References: Do Serum Cholesterol Values and DST Results Comprise Independent Risk Factors for Suicide?
Jokinen J and Nordström P. HPA axis hyperactivity as suicide predictor in elderly mood disorder inpatients.
PS3.04-1
Risk Factors for Railway Suicide and Countermeasures to Reduce the Prevalence of Railway Suicides
Mishara, B; Bardon, C
Centre for Research and Intervention on Suicide and Euthanasia, Université du Québec à Montréal, CANADA

We present part of an extensive research programme on railway suicide, its prevention and the support of train drivers. We first analysed railway fatalities in three phases: 1) an assessment of the prevalence of and factors associated with railway suicides and other fatalities in Canada. 2) Comparison of accidental deaths with suicides on the Canadian Railway Network to identify specificities and commonalities. 3) Comparison of Canadian Railway suicide with railway suicide data available from other countries. The goal was to identify specificities of railway suicide in Canada and commonalities with railway suicide in other countries in order to assess the adaptability of suicide prevention measures from other parts of the world to the Canadian context. A sample of 428 suicides and 460 accidents was coded and analysed, covering 10 years of records. We identified physical and psychological factors associated with railway suicides and accidents. We then conducted a thorough review of existing railway suicide prevention practices and all published research on railway suicide prevention. We also contacted major railway companies around the world to identify preventive practices that have not been published. Drawing from both our analysis of the nature of Canadian railway suicides and our review of existing practices we identified three potential intervention strategies whose implementation is feasible in the Canadian context and whose impact could be evaluated within four years.

PS3.04-2
The European Project Restrail on Reduction of Suicides and Trespassing on Railway Property
Rådbo, H1; Bonneau, M-H2
1Karlstad University, SWEDEN; 2UIC, FRANCE

The project started on first October 2011 for a duration of 3 years and is coordinated by UIC (International Union of railways).
The aim is for the project to be as operational as possible, taking into account past and present experience in various European countries and their specific features, in particular sociological, public health, political and administrative aspects.
The project will enhance the efficiency of the railway system by assisting it in responding to phenomena which jeopardise its reliability, punctuality and thus attractiveness.
The main output of the project will be a ”toolbox” to be used by rail decision-makers.
The project started by identifying the state of the art of best practices and research findings (inside and outside Europe) combined with an analysis of factors (internal to railways or external...
such as media communication) influencing the occurrence of suicides and trespasses and their consequences, based on official data sources and other collected data. This was followed by an assessment of existing countermeasures (technical and soft) for reducing suicides, preventing trespasses and mitigating the consequences on rail operations. Attention was then given to the development of new approaches particularly those involving soft measures. In the last step, the project will demonstrate some selected measures in order to evaluate the findings and finally develop recommendations and guidelines. This research project is particularly original and interesting since it covers both social and technical aspects. It makes reference to safety and security, and brings together railway companies, academics, research institutes and the supply industry.

**PS3.04-3**

**Reduction and Displacement of Suicides after the Removal of Level Crossings in The Netherlands**

*Hoogcarspel, B*

Program suicide prevention, ProRail railway infrastructure manager, The Netherlands, NETHERLANDS

**Objective**

In a densely populated country like the Netherlands railway infrastructure is not static. Due to increasing train traffic intensity double-track railroads are changed into railroads with four or even more tracks. In this case level crossings are replaced by tunnels or viaducts and fences are improved to prevent unauthorized entry to the tracks. In this study we examined the effect of the removal of level crossings on the occurrence and geographic distribution of railway suicides.

**Materials**

A database containing over 6000 railway suicides in the Netherlands over the period 1980-2010, with information on date, time of day and location of every incident. A ProRail database with geographic coordinates of all level crossings and train stations in the Netherlands, and for the ones removed: the date of removal.

**Method**

Of each suicide the distance to the nearest level crossing and train station was determined. The aggregate data resulted in clusters of suicides within a distance of 500 meters on both sides of level crossings. As a next step, the number of suicides before and after the removal of level crossings were compared using a Poisson-model. This analysis was done for a distance of 500 meters and several distances up to 5 km on both sides of level crossings or the locations of removed level crossings.

**Results**

A significant reduction of suicides was found after the removal of level crossings within 500 meters on both sides. When a distance of 5 km was evaluated no reduction was found.

**Conclusions**

In the current Dutch railway infrastructure the removal of level crossings has led to a reduction of suicides within a range of 500 meters. Measured over a distance of 5 km no reduction was found, suggesting a displacement of suicides.
PS3.04-4
Challenging Approaches to Railway Suicide Prevention:
An International Perspective on (New) Soft Measures
Lukaschek, K1; Ladwig, K-H2
1Helmholtz Zentrum München, GERMANY; 2Helmholtz Zentrum München; Dept. of Psychosom.
Medicine and Psychotherapy, TU München, GERMANY

Objective
The majority of fatalities on EU railways are suicides, representing over 62% (N=2429) of all railway-associated deaths in the year 2008. The immense human and economic loss due to railway suicides calls for innovative preventive measures. "Soft measures", such as poster campaigns, crisis hotlines, or gatekeeper programmes may contribute to effective prevention. Various soft measures exist that could be used in a railway environment, but the extent to which they are implemented varies between countries. The present study was carried out within the framework of the EU-project RESTRAIL and examined soft measures across Europe, factors that may affect their implementation, and their effectiveness in reducing the number of railway suicides. Furthermore, two surveys including members of the German train drivers’ union GDL and the aid organisation Bahnhofsmission, both organisations working in a railway environment, were conducted to collect information on railway suicide victims’ behaviour.

Methods
Data on population size and suicide mortality were derived from national statistical yearbooks and data bases and the WHO data base. Data on railway suicides were derived from the European Railway Agency (ERA) and from RESTRAIL. Information on soft measures were obtained using a seven item questionnaire which was specifically designed for the RESTRAIL project and was distributed to research facilities, railway companies and transport/traffic security agencies. Information on suicidal behaviour preceding a railway suicide was obtained by analysing the experiences of members of GDL and Bahnhofsmission.

Results
The percentage of railway suicides of the total mortality varies between countries (0.4%-12.9%). Several countries have implemented, but not evaluated soft measures. Currently, GB is the only country providing a gatekeeper programme although gatekeeper programmes have been proven effective on a population based level and specific occupational groups. Despite their different work environments, members of GDL and Bahnhofsmission observed similar behavioural patterns of railway suicide victims, e.g. giving away things or wearing inappropriate clothing.

Conclusions
Educational programmes, such as gatekeeper programmes, that enable trained individuals to approach at risk subjects actively are urgently needed. These programmes should include an awareness for deviant behavioural patterns preceding railway suicide.

PS3.04-5
Samaritans Collaboration with the UK Rail Industry - Ownership of Suicide on our Railways
Kirby-Rider, R
Samaritans, UNITED KINGDOM

In 2010 Samaritans established a joint programme of work with Network Rail, UK rail infrastructure owners. Against a backdrop of suicides falling over the previous 10 years,
rail suicides were continuing to rise year on year. The resulting performance problems and commercial costs were a key driver for tackling railways suicides but the perception in the rail industry was suicides were inevitable and commercially it was a cost that couldn’t be reduced. Samaritans developed a suicide reduction programme on the railways, funded and led by Network Rail which required whole industry by in. The programme brought together all train operators, regulators, and transport police working towards a reduction over a five year period. The programme has 3 distinct elements:
1. Training for front line staff
2. Raising awareness of Samaritans as a ‘safe space’ for vulnerable and suicidal individual
3. Samaritans providing outreach support to industry and working with government agencies on developing referral processes into Samaritans

Since the programme started over 4,000 staff have been trained in managing suicidal contacts and trauma support after incident care. Industry staff trained has made over 50 interventions of suicidal people in the last 18 months. The project has also acted as a catalyst for physical mitigations along the network.

One of the most challenging aspects of the programme has been the industry attitudes to suicide and the view that nothing can be done. An essential part of this programme is culture change and communicating that suicide on the rail network can be prevented by taking a multi agency approach.

Although the programme was to run for a 5 year period it has now become a pivotal part of the operational delivery of the rail industry and continues to expand. This presentation will highlight the key aspects of the UK programme, the successes and the challenges a charitable agency has working with industry and how the programme seems to have started to change the working practices and culture of the rail industry.

**PS3.04-6**

**Prevention of Railway Suicides in Sweden**

Lindberg, E

Swedish Transport Administration, SWEDEN

Railway suicides account for about 5 per cent of all suicides in Sweden. For a long time, these fatalities have not been regarded as a ‘railway problem’, and very little has been done in order to try to prevent them. However, during the last ten years there has been a growing awareness that the number of railway suicides can indeed be reduced, and that the infrastructure manager has a responsibility for trying to prevent these suicides. In Sweden, the current strategy for railway suicide prevention entails a) identification of ‘hot spots’ (60 % of the suicides occur on less than 6 % of the network), b) making unauthorized access to the tracks more difficult (fencing, etc.) and c) detecting and taking care of unauthorized persons in the track area (camera surveillance, etc.).
14:30 - 16:00

**PS3.5 SUICIDE SURVIVORS REACTIONS TO SUICIDE – DEVELOPMENT OF SUPPORT PROGRAMMES**

**PS3.05-1**

**Parents of Sons and Daughters who have Attempted Suicide:**
**An On-going Qualitative Study of their Experiences**

Nygaard, L1; Buus, N2; Stenager, E3; Fleischer, E4

1Odense University Hospital, DENMARK; 2University of Southern Denmark, DENMARK; 3Region of Southern Denmark, DENMARK; 4NEFOS (Network for the Suicide Struck), DENMARK

**Study objectives**
Suicide is a major public health problem and relatives are understood as playing an important role in suicide prevention. However, suicide and suicidal behaviour affects the relatives’ lives profoundly, both emotionally and socially, and the psychosocial impact on families is under-researched. The aim of this on-going exploratory study was to gain further insight into the responses to the psychosocial burden experienced by parents of sons and daughters who have attempted suicide.

**Methods and material**
This qualitative study was designed as focus groups and individual semi-structured interviews. First, we interviewed two groups of parents recruited at a counselling program for relatives of persons who have attempted suicide. The counselling program is run by a Danish non-governmental organization The Network for the Suicide Struck (NEFOS). Results from the focus groups were used to design the interview guide for 15 subsequent individual interviews. The focus of the individual interviews was on the parent’s recognition and management of the offspring’s suicidal process and the psychosocial impact the situation have on their life. To follow the temporal process of the parent’s management of the situation, they are interviewed twice: immediately after the parent’s first contact with NEFOS and six months after the last contact with NEFOS. The findings are concurrently interpreted and discussed within an interactionist framework.

**Results**
We will present results from the focus groups and from the first set of individual interviews. The participants describe their experiences as a double trauma, which include the trauma of the suicide attempt(s) as well as the subsequent psychosocial impact on the family’s wellbeing. The pressure on the parents is intense, and the fundamentally unpredictable character of suicide attempts is frequently emphasized. Suicide attempts are mostly understood as the climax of a prolonged period of trouble and the parents describe a gradual recognition of the severity of the son or daughter’s problems.

**Conclusion**
Being the parent of a child who attempts suicide means managing a life-threatening situation and the additional moral stigma. The findings emphasize a need for psychosocial postvention on those parents and families, who struggle coping with the impact of suicide attempt(s) and suicidal behaviour.
PS3.05-2
Risks of Adverse Mental and Somatic Health Outcomes in Partners Bereaved by Suicide: A Population-based Longitudinal Study
Erlangsen, A¹; Runeson, B²; Bolton, J³; Wilcox, H⁴; Forman, JL⁵; Krogh, J¹; Shear, K⁶; Nordentoft, M¹; Conwell, Y⁷
¹Mental Health Centre Copenhagen, DENMARK; ²Psychiatry, Karolinska, SWEDEN; ³University of Manitoba, CANADA; ⁴Johns Hopkins School of Public Health, UNITED STATES; ⁵University of Copenhagen, DENMARK; ⁶Columbia University School of Social Work, UNITED STATES; ⁷University of Rochester Medical Center, UNITED STATES

Objective
To examine whether partners bereaved by suicide have higher risks of adverse mental and physical health outcomes than control groups of bereaved by traffic accidents and the general population.

Method
Individual-level linkage records on all persons aged 15+ during Jan 1st, 1980 through 31st, 2010 in Denmark were assessed (N >6.9 mill. individuals). Partners were defined as married, registered partnerships, and cohabiting couples. Diagnoses given during psychiatric and somatic hospitalization were used as proxies for adverse health outcomes. Using survival analyses, risks were calculated relative to two control groups, a) partners bereaved by traffic accidents and b) the general population 15+, while adjusting for age, gender, socio-economic status, prior psychiatric hospitalization.

Results
During the 31 years of follow-up, a total of 19,786 deaths by suicides and 7,796 by traffic accidents were linked to a bereaved partner. Partners bereaved by suicide were observed over 266,996 person-years. The control groups, bereaved by traffic accidents and the general population, were observed during 95,573 and 127,504,102 person-years, respectively. Adjusted findings show a 1.78-fold [CI-95%: 1.08-2.95] higher risks of suicide attempts for male bereaved by suicide vs. bereaved by traffic accidents. Men and women bereaved by suicide had a 2.97 [1.58-5.61] and 2.78-fold [2.07-3.95] higher risk of dying by suicide than bereaved by traffic accidents. In addition, male partners were more likely to suffer from sleep disorders; RR=2.84 [1.13-7.18]. Preliminary findings indicate elevated risk of mental and somatic disorders among partners bereaved by suicide. Higher rate ratios of depression, anxieties, alcohol misuse disorders, suicide attempts and suicides as well as cancers, chronic obstructive pulmonary disorders, osteoporosis, arthritis and liver cirrhosis were found for bereaved by suicide vs. the general population. On-going analyses are assessing these estimates in a more complex analysis setting. Although long term effects are anticipated, the time immediately after the bereavement seems to be most acute in terms of risk.

Conclusion
Partners bereaved by suicide were found to have higher risks of suicidal behaviour than partners exposed to other sudden bereavement as well as the general population.
**PS3.05-3**

“IS THERE REALLY NO ONE LIKE ME HERE?!!!: Young Suicide Mourners’ Support Seeking on the Internet

Silvén Hagström, A
Dep Social Work, ISV, Linköping University, SWEDEN

**Background**
The loss of a family member to suicide is often a traumatic and stigmatic event difficult to talk about within one’s social networks - particularly during adolescence and young adulthood. The Internet can be a source of connection and communication with others sharing similar experiences on temporary chat threads. However, it is likely that the experience of such participation can be of various kinds - in some cases maybe even to the detriment for the young mourners. The aim of an on-going study is to analyse the communication between young bereaved on the Internet, following a sibling’s or a parent’s suicide, to elucidate how the telling about the suicide experience reflects upon self-perception, and how social support is being negotiated.

**Methods and material**
The study material consists of 9 different chat threads in forums targeted to suicide bereaved on the Internet. Methods used are discourse and narrative analysis. The material (chat communication) makes it possible to study how the “initiator” (the bereaved) is presenting her-/himself and the problem at hand, how the web visitors respond to that original message, as well as how needs of support are being requested and provided for through the dialogue.

**Results**
Preliminary results show that participation in chat forums on the Internet can work supportive for suicide-bereaved adolescents and young adults and work against the stigma connected to suicide as an “unnatural” and norm-breaking death, through feelings of connectedness with others in similar situations. At the same time, the sharing of personal experiences from a sibling’s or a parent’s suicide puts the initiator in a vulnerable position, where certain responses from others are crucial for the experience of support; hence, the initiator can easily experience feelings of abandonment and reinforced otherness.

**Conclusion**
A recommendation is to offer open chat forums as part of professionally monitored web sites targeted towards this group of young suicide mourners, and where support is guaranteed as part of participation.

Anneli Silvén Hagström is a PhD student in social work with focus on adolescents bereaved by suicide. She primarily uses narrative and discourse-orientated research methods to explore how young suicide-bereaved communicate their experiences in a variety of social contexts.

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**PS3.05-4**

Using Survivor Accounts to Understand Suicidal Behaviour by Offenders in Community Settings

Mackenzie, J-M; Borrill, J
University of Westminster, UNITED KINGDOM

**Background**
There has been considerable research into suicide risks and behaviours among offenders in prisons and other custodial settings. In comparison, offenders attempting or completing suicides
while under supervision in community settings have received relatively little attention (Mackenzie et al 2013). The few studies that have examined this population have indicated high rates of suicide, but little is known about the specific risk and protective factors associated with suicide within the community setting.

**Objectives**

This presentation will explore the findings from interviews with offenders in community settings who have survived a serious suicide attempt. Their experiences will be discussed in relation to the perceptions of their managers and the experiences of non-suicidal community offenders.

**Methods**

In-depth interviews were carried out with offenders who had attempted suicide or severely self-harmed. These were analysed using interpretational phenomenological analysis. Key themes emerging from the study will be discussed along with the issues for professionals managing these offenders.

**Conclusions**

The findings of this study will help to identify potential risk and protective factors for suicidal offenders in community settings and will also contribute to suicide training and improved practice.

**PS3.05-5**

The Experience of a Group Therapy Program for Adolescent Suicide Survivors: What Works?

Leonard, M1; Hamel, V2

1Centre for research and intervention on suicide and euthanasia (CRISE) / UQAM, CANADA; 2Ressource Regionale Suicide du CSSS de Laval/CRISE, CANADA

As Dyregrov reminded us, the adolescent suicide survivor is usually the “forgotten bereaved” of the family unit. Since two of the most important protective factors for these adolescents are their parents’ mental health and parental support, interventions tend to be mostly offered to parents and not directly to their children. Doing so, adolescents suffering from the loss of their loved one may feel left aside without recognition of their pain which can manifest itself through a wide spectrum of mixed emotions and troubled behaviours. To help prevent this, Virginie Hamel and the “Ressource Regionale Suicide du CSSS de Laval” in Quebec (Canada) designed the first French group therapy program exclusively for adolescent suicide survivors. The therapy takes place over twelve group sessions with 6 to 7 participants at a time. It is facilitated by two experienced psychotherapists and it uses psychoeducative and cognitive-behavioural approaches. As a first step in discovering “what works” for their clientele, an implementation and a short-term effects mixed-method evaluation was conducted. The aim of this presentation is to present the approach, activities and structure of the program as well as the most important and significant results coming from the evaluation process. Briefly, it shows the program helps to reduce depression symptoms and feelings of shame. It also appears to be much appreciated by the adolescents, their parents and the group facilitators. Some suggestions are made regarding future interventions for adolescent suicide survivors.
PS3.05-6
Supporting Suicide Survivors Online: Possibilities, Pitfalls and Best Practice
Krysinska, K1; Andriessen, K2
1KU Leuven - University of Leuven, BELGIUM; 2Tele-Onthaal (Tele-Help) Federation & KU Leuven - University of Leuven, BELGIUM

The Internet has an enormous potential to become a valuable resource for the bereaved by providing bereavement-related support, such as opportunities for sharing information and networking, bereavement-related activities, such as online memorialization, and professional psychological interventions. Unfortunately, to-date there is not much known about how many suicide survivors use Internet resources, which resources are used and what are the psycho-social effects of online grief-related activities.

On the basis of own studies on online resources available to the bereaved by suicide, clinical experience and reviewed literature the authors will discuss several important topics related to providing online support for the bereaved, including suicide survivors. The major issues covered relate to the following questions: are online grief activities, e.g., online memorial sites, helpful for the bereaved people? What are advantages and disadvantages of working online versus face-to-face with people bereaved by suicide? What could be quality criteria for online help and websites for people bereaved by suicide? The presentation will conclude with several “food for thought” points relevant for research and clinical practice.

14:30 - 16:00
PS3.6 WORKSHOP:
THE LANGUAGE OF SUICIDOLOGY

PS3.06-1
A Brief Overview and History of the Nomenclature Conundrum
Silverman, M1; De Leo, D2; Berman, L3
1Suicide Prevention Resource Center, UNITED STATES; 2Australian Institute for Suicide Research and Prevention, AUSTRALIA; 3IASP, UNITED STATES.

One of the major problems in communicating across cultures (and across disciplines) about the phenomena of suicide is that we do not speak the same scientific language. We also do not share the same conceptualizations of what constitutes the suicidal process. The terminology we use is often based on our: training; perspectives; and the professional needs to identify and count these behaviours (i.e., clinical, epidemiological, public health, research, etc.).

One clearly identified problem is the difficulty we have in communicating with each other. The current variability in terminology has consequences that extend beyond imprecise communication, limiting comparison of epidemiological prevalence rates and hampering prevention efforts. Improved assessment of suicidal events is necessary both to better inform research-derived risk-benefit analyses and to foster improved clinical management and identification.

A number of nomenclatures and/or classification systems have been developed and tested worldwide. A historical perspective will be provided and the current systems will be reviewed, compared and contrasted.
**PS3.06-2**

The Many Tongues of Suicide Nomenclature: Labeling Suicidal Behaviours  
Berman, L  
IASP, UNITED STATES

Clinical suicidology involves the identification and assessment of, and interventions with, those at risk for suicide. Clinical team members must speak and understand the same language to effectively target suicidal behaviours. Moreover, how suicidal behaviours are defined underlies an appropriate identification of homogeneous, groups for research, for example, type-specific studies of suicidal behaviours. Suicidologists, however, continue to speak in many tongues, even when describing the same behaviour.

This presentation will pose a series of case vignettes to the workshop audience, eliciting both free-responses and multiple choice responses to label suicidal behaviours. The responses given will be further reviewed and presented to workshop attendees during the workshop and serve to lead an interactive discussion between attendees and presenters designed to forge greater consensus on the need for a common language.

**PS3.06-3**

A Standardised, Culture-sensitive, Internationally Applicable Nomenclature for Suicide Ideation and Behaviors: A Dream Yet to Come True  
De Leo, D  
Australian Institute for Suicide Research and Prevention, Griffith University, AUSTRALIA

The need for a correct labeling of suicide ideation and behaviours and its standardization has for long time been recognized. However, all previous efforts have failed to provide an acceptable basis for an internationally shared agreement on the use of a given nomenclature. For example, the use of the term ‘parasuicide’ - even if proposed in the context of a multi-national effort - represents one of such failed attempts. The implementation of the WHO START Study - through its international participants - is once again showing a wide range of choices and habits in labeling suicide phenomena throughout the world.

It is evident that cultural background, traditions, criminalization of suicide-related behaviours, stigma embedded to them, health system practices, and official recording procedures, all concur in creating serious obstacles to a sharable platform for labeling suicidality signs in standardized ways. Even within western countries, huge discrepancies exist in data recording, put aside the different opinions on interpretation and correct definition of each different form of suicidal (and non-suicidal) manifestations. For instance, in Australia, in the context of the Monitoring Phase of the WHO START Study (Component 1), more than twenty different labels were found in use in the hospital recording system to categorize non-fatal self-injury.

The consequences of such discrepancies are rather obvious; first of all, policy makers and health administrators have serious difficulties in appraising the right dimension of the phenomenon. As a proxy measure of it, ‘hospital separations’ are routinely used. However, since they specifically refer to non-fatal self-harming behaviour that caused hospital admission, they highlight only a small proportion of the suicidal behaviour actually occurring in the community.

DSM-5 sub-committees have rightly raised the issue of ‘intention’ as a discriminant issue for next nomenclatures. This also followed previous WHO Working Groups indications.
An IASP Special Interest Group has been proposed to deal in a cross-cultural, internationally acceptable manner to the many intricacies that so far have prevented shared sets of definitions to be widely endorsed. This presentation will deal with some of the issues involved and the possible ways to overcome them.

14:30 - 16:00
PS3.7 REGIONAL SYMPOSIUM EUROPE

PS3.07-1
Preventing Suicide through Internet Based Actions: The SUPREME European Project
Sarchiapone, M1; Hadlaczky, G2; Hokby, S2; Wasserman, D2; Carli, V2
1University of Molise, ITALY; 2Karolinska Institutet, SWEDEN

Background
Mental health promotion is a central aspect of the battle against suicide and mental ill-health. The internet and the media are effective tools for disseminating information and education to adolescents and improving their mental health and well-being. In 2011 there were 2.1 billion Internet users world-wide (Internet World Stats 2011). In a random sample of over 3000 American adults, it was found that 58% of the Internet users reported searching for health information for themselves (Atkinson et al. 2009).

Objectives
The main objective of the SUPREME project is to develop a website aimed at mental health promotion and to investigate its efficacy. A secondary goal is to compare two different strategies for promoting the use of the website: one where peers are the main promoters and another where the promotion is done by mental health professionals. This European Union funded study comprises 7 European countries: Estonia, Hungary, Italy, Spain, United Kingdom, Lithuania and Sweden.

Methods
Adolescents are approached in a random sample of schools, in each of the participating European Union countries, yielding a total of 2100 participants. The schools are in turn randomized into control, and intervention with pro referral, and intervention with peer referral conditions. A quasi-experimental minimal-treatment control group design with pre-, post- and follow-up measures is used to test the efficacy of the intervention. Participants are exposed to a minimal intervention and gain access to a mental health promotion website. The effects of the website are compared to a control group which receives minimal intervention, but no website access.

Research hypotheses
The following hypotheses are tested in the SUPREME study: psychological well-being of people using the website will increase significantly; the increase in well-being will be significantly correlated with website activity on behalf of the user; there will be a significant difference in the number adolescents recruited by peers vs pro-referral groups.
PS3.07-2
Risk Behaviours and Psychiatric Symptoms among Adolescents in European Schools
Carli, V1; Sarchiapone, M2; Wasserman, C2; Hoven, C3; Wasserman, D1
1Karolinska Institutet, SWEDEN; 2University of Molise, ITALY; 3Columbia University, UNITED STATES

Objective
To give a comprehensive picture of the prevalence among European adolescents of risk behaviours such as tobacco, alcohol and drug misuse, sedentary behaviour, reduced sleep, high media use, truancy, and health determinants such as underweight and obesity, and their association with psychiatric symptoms, including self-destructive behaviours.

Design
Cross sectional study.

Setting
All classrooms with majority 15 year olds in randomly selected, public, non-specialized high schools (n=179), across eleven European countries. Participants: N=12,395 pupils, mean age 14.91±0.90; M/F: 5,529/6,799.

Main Outcome Measure(s)
Latent Classes based on measures of risk behaviours, assessed with the Global School-based Student Health Survey (GSHS). Identified classes of pupils were analysed for prevalence of psychiatric symptoms, evaluated with the following scales: Beck Depression Inventory (BDI-II), Zung self-rating scale for anxiety (Z-SAS), Strengths and Difficulties Questionnaire (SDQ), Paykel Suicide Scale (PSS) and the Deliberate Self-Harm Inventory (DSHI).

Results
Prevalence of all risk behaviours increased with age and most were significantly more frequent among boys. Girls were more frequently affected by psychiatric symptoms. Latent class analysis identified three distinct groups of adolescents regarding risk behaviours. The first group (low risk, 57.8%) included pupils with low or very low frequency of risk behaviours; the second group (high risk, 13.2%) included pupils with the highest frequency of all risk behaviours. The third group (invisible risk, 29%) included pupils who showed risk behaviours such as high media use, sedentary behaviour and reduced hours of sleep, which are often overlooked by external observers due to the perception that these behaviours are not dangerous. Pupils in the invisible risk group and in the high risk group had significantly higher prevalence of all psychiatric symptoms in comparison with the low risk group.

Conclusions and relevance
The group with invisible risk, identified for the first time here, is only invisible regarding elevated risk for psychopathology and suicidal behaviour but has behaviours that are easily identifiable such as high media consumption, reduced sleep and sedentary behaviour. Thus, the invisible group poses a new intervention target group for the purpose of potentially reducing psychopathology and possibly other untoward outcomes in adolescence such as suicidal behaviour.
PS3.07-3
Reducing Truancy by Improving Mental Health and Preventing Suicidality among Adolescents: The European Perspective in the WE-STAY Project
Sisask, M; Varnik, A; Varnik, P
Estonian-Swedish Mental Health and Suicidology Institute (ERSI); Tallinn University, ESTONIA

Working in Europe to Stop Truancy Among Youth (WE-STAY) is a European school-based intervention project for adolescents with the main aim to reduce truancy rates in schools and to improve mental health of students. More specifically the objectives of the WE-STAY project are: (1) To gather information on truancy amongst European adolescents for estimating the prevalence of truancy; (2) To gather data on psycho-social and psychiatric correlates of truancy; (3) To gather data on school and family attitudes towards truancy; (4) To perform end evaluate three types of school-based interventions in comparison with a control group: a) professional screening high risk students; b) awareness program for students, parents and teachers; c) a combination of the above interventions; (5) To recommend effective, culturally adjusted models for preventing truancy and promoting mental health of adolescents in different European countries. For the current paper the cross-sectional baseline data (n = 11,191) collected from 6 intervention regions (Estonia, Germany, Israel, Italy, Romania, Spain) was used to examine the correlations between truancy and psycho-social variables as well as psychiatric conditions. The statistical method used was logistic regression analysis. Truancy, i.e. absence from school without a valid reason, served as the dependent variable. Independent variables were age, gender, psychiatric conditions, risky life-styles, and family related variables. The results show that levels of truancy are far from being acceptable in Europe - 40% of pupils report skipping at least 1 day per month without a valid excuse; truancy is associated with worse mental health and coping indicators; truancy is even more strongly associated with risky life-styles and inadequate parental control; truancy becomes more prevalent with age but gender difference is insignificant when all relevant factors are controlled.

14:30 - 16:00
PS3.8 SUBSTANCE USE AND SUICIDAL BEHAVIOUR

PS3.08-1
Substance Abuse and Suicide Risk among Adolescents
Pompili, M
Sapienza University of Rome, Italy, ITALY

Study objectives
The aim of this paper was to review literature concerning the relationship between suicide and substance abuse behaviours among adolescents, focusing on epidemiology, comorbidity and prevention programs.

Materials and methods
We performed a Pubmed/Medline, Scopus, PsycLit, and PsycInfo search to identify to identify all papers and book chapters during the period between 1980 and 2013.
Results
Adolescents with substance abuse disorder who attempt or complete suicide can be characterized as having mood disorders, stressful life events, interpersonal problems, poor social support, lonely lives, and feelings of hopelessness. The research supports the existence of a strong relationship between suicide and substance abuse.

Conclusions
Preventive programs should be based on risk factors associated with both suicide and substance abuse disorder. Management programs should combine different therapeutic strategies such as peer-to-peer education, school-based programs, psychotherapy and pharmacological treatment. Evidence suggests that targeted suicide prevention programs can be delivered which reduce the burden associated with substance abuse and suicide in youths.

PS3.08-2
Risk Factors for Suicidal Behaviour in Substance Abusers
Roy, A
VA Hospital, UNITED STATES

Objective
To review risk factors for suicidal behaviour in substance dependent patients.

Methods
Suicidal behaviour is a multi-determined act. Risk factors for suicidal behaviour may be distal or proximal. The results of clinical studies examining both distal and proximal risk factors for suicidal behaviour in substance dependent patients will be reviewed. As genetic factors may account for approximately up to 40% of the variance for suicidal behaviour recent studies examining genetic variants in relationship to suicidal behaviour in substance abusers will also be reviewed.

Results
The clinical studies will show that there are both distal and proximal risk factors for suicidal behaviour in substance abusers. The genetic studies will show that genetic-environmental interaction between childhood trauma and genetic variants of both the serotonin transporter gene and genes involved in hypothalamic-pituitary-adrenal axis function play a role in suicidal behaviour in substance abusers.

Conclusions
Suicidal behaviour in substance abusers is multi-determined involving both distal and proximal risk factors and their interaction with genetic factors.

PS3.08-3
Substance Use Disorders, Addictions Treatment and Suicide Risk
Ilgen, M
Dept. of Veterans Affairs & University of Michigan, UNITED STATES

Study objectives
Substance use disorders are established risk factors for non-fatal suicide attempts and addictions treatment programs treat large numbers of patients who report prior suicidal thoughts and behaviours. However, more research is needed on (1) the extent to which substance use disorders are risk factors for suicide mortality; (2) the relationship between addictions treatment...
and subsequent suicidal behaviours; and (3) the potential efficacy of strategies designed to reduce suicidal behaviours in high-risk individuals seen in addiction treatment programs.

**Methods and material**

This presentation will be divided into three sections:

1. a brief overview of existing evidence of the relationship between substance use disorders and suicide mortality;
2. evidence that addictions treatment, on its own, can change suicide risk in individuals with substance use disorders; and
3. recent evidence from a pilot study for the potential efficacy of a specialized Cognitive Behavioural Therapy (CBT) intervention for adults in addictions treatment who are at elevated risk for future suicidal behaviours.

There were 56 participants in the pilot recruited from a large, residential addictions treatment program and randomized to either the CBT or attention control condition. Both conditions involved 8, biweekly, 1-hour one-on-one sessions with a therapist. Participants were re-assessed at 1- and 3-months post baseline.

**Results**

Only 14% of participants in the CBT condition reported any suicidal ideation at the 1-month follow-up compared to 40% of those in the attention control condition ($p < .05$); these differences were not seen at 3-months, however, trends approaching significance were seen for the CBT participants in reporting lower levels of depressive symptoms and greater self-efficacy to avoid suicidal behaviours compared to the attention control condition at both follow-ups.

**Conclusion**

Overall, existing evidence indicates that individuals with substance use disorders are a group at high risk for both non-fatal and fatal suicide attempts and that addictions treatment, alone, may be insufficient to fully reduce the elevated risk in these individuals. Preliminary pilot findings are promising and indicate that a suicide-focused CBT intervention could decrease risk of post-treatment suicidal behaviours in those with substance use disorders.

**PS3.08-4**

**Analyses of the Alcohol - Suicide Association at the Population Level: Why and How?**

Norström, T

Swedish Institute for Social Research, SWEDEN

A large number of individual-level studies suggest a link between excessive alcohol intake and suicide risk. Heavy drinkers have thus an elevated risk of suicide, and those committing suicide often have a history of problem drinking. An obvious limitation of these studies is the risk of confounding; that the suicide risk as well as the risk of heavy drinking are influenced by common causes. Studies at the aggregate level, e.g. time-series analyses of the association between per capita alcohol consumption and suicide, are not plagued by this kind of bias, and are therefore a valuable supplement to the micro-level findings. Over the past decades, a fairly large number of such aggregate studies have been published, covering different time periods and countries with different drinking cultures. The aim of this presentation is to elaborate the rationales of aggregate studies of the link between alcohol and suicide, discuss the possibilities and limitations of the approach, and to give an outline of the main findings.
Developing Suicide Prevention Services and Research in Ghana: Experiences and Challenges
Osafo, J1; Akotia, C1; Hjelmeland, H2; Knizek, BL3
1University of Ghana, GHANA; 2Norwegian University of Science and Technology, NORWAY; 3Sør-Trøndelag University College, NORWAY

Suicidal behaviour is becoming a public health problem in Ghana and attempted suicide is socially proscribed and legally criminalized. There are no clear-cut programs for suicide research and prevention in the country as suicide research remains minimal and suicide workers and prevention programs appear invisible. In this presentation, we argue that suicide prevention in Ghana should first and foremost be informed by sound data. Thus research should drive prevention strategies. Four major ways of developing suicide research are addressed: developing a national policy on suicide, systematic data collection on suicide, funding of knowledge generation, and building enthusiasm for research. It is argued that building a systematic solid research base will provide an impetus for the development of suicide prevention programs such as public education, building collaboration, suicidological training of primary healthcare providers, advocacy, community psycho-education and individualized therapies. The presentation will highlight experiences, challenges as well as elucidating opportunities in developing suicide research and prevention programs in Ghana.

Suicide Research in Uganda: Development and Challenges
Kinyanda, E1; Mugisha, J2; Kizza, D2; Hjelmeland, H3; Knizek, BL4  
1MRC/UVRI Uganda Research Unit on AIDS/Senior EDCTP Fellowship, UGANDA; 2Butabika National Psychiatric Referral Hospital, UGANDA; 3Norwegian University of Science and Technology, NORWAY; 4Sør-Trøndelag University College, NORWAY

Since the first pieces of suicide research from Uganda were published in 1960, the growth of the field has largely mirrored the prevailing socio-political environment. The nascent suicide research which was beginning to take root from the 1960’s was abruptly halted when dictator Idi Amin assumed leadership of the country in 1971 and with it expelled all the expatriates from the country including scientists at Makerere university [the only university in the country at the time]. The turbulent political history that followed then up to the mid 1980’s saw only the occasional research output from indigenous researchers such as Emilio Ovuga. Since 1986 when the current government took over to date, the country has experienced relative peace and suicide research has flourished being largely undertaken by indigenous researchers either alone or in partnership with international partners [mainly from Norway]. The scope of research has also broadened to include epidemiology, psychology, anthropology and genetics studies. This paper examines these trends and the challenges experienced along this path.
14:30 - 16:00
PS3.10 "DEFENSE AGAINST SUICIDE"
- WORLDWIDE MILITARY SUICIDE PREVENTION AND CONTINUUM OF CARE EFFORTS

PS3.10-1
Research Continuum Approach
Castro, CC
US Army, Dir. Military Operational Medicine Research Program, UNITED STATES

A comprehensive national Interagency Research Continuum (IRC) approach utilized by the US Dept. of Defense (DoD), the Veterans Administration (VA), and National Institutes of Health (NIH) will be presented. The IRC for strategic research planning was based on the approach developed by the DoD. The continuum of care model addresses Suicide prevention from all levels of treatment through 3 basic areas of - Understanding, Prevention and Treatment. The IRC describes epidemiology, etiology, prevention, screening, treatment, follow-up care and services research. The model indicates that a comprehensive research approach must address the context, including the population (e.g., active duty, reserve/guard, veterans, families), setting (e.g., deployed locations, garrison, hospital, medical treatment facility, VA medical center), and timelines for completing research and delivering solutions. While there is a strong need to ensure that these populations receive timely care, they must be provided with effective treatments. Hence, a key challenge for researchers and clinicians has been and continues to be determining how to move efficacious prevention and treatment interventions quickly into place, improve them, and evaluate their effectiveness for these populations. We will frame the symposium by presenting on the continuum of care framework for organizing thinking about what capabilities are needed within the military, and the possible solutions that are being studied, with the areas being basic mechanisms of suicide, screening, early intervention, suicide risk assessment, treatment and postvention.

PS3.10-2
An Investigation of the Interactive Effects of the Acquired Capability for Suicide and Acute Agitation on Suicidality in a Military Sample
Joiner, T
Florida State University, UNITED STATES

According to the interpersonal theory of suicide (Joiner, 2005; Van Orden et al., 2010), the difficulties inherently associated with death by suicide deter many individuals from engaging in suicidal behaviour. Consistent with the notion that suicidal behaviour is fearsome, acute and heightened states of arousal are commonly observed in individuals immediately prior to lethal and near-lethal suicidal behaviour. When considered through the lens of the interpersonal theory of suicide, acute states of heightened arousal may be relevant to suicidal behaviour particularly when considered in the context of the acquired capability for suicide. In the present project, we present findings from an ongoing study of military recruiters. We examine how acute
agitation may interact with acquired capability to predict suicidality in a large sample (n = 1,208) of Army recruiters. We suggest that among individuals who possess the requisite levels of pain tolerance and fearlessness about pain, injury, and death, the heightened state of arousal experienced during periods of acute agitation may serve to facilitate suicidal behaviour in part because it would provide the necessary energy to approach a potentially lethal stimulus. Among individuals who are low on acquired capability, the arousal experienced during agitation may result in further avoidance. Results from hierarchical multiple regression analyses were in line with hypotheses: among individuals high on acquired capability, as agitation increases, suicidality increases whereas as agitation increases among individuals low on acquired capability, suicidality decreases. Findings are discussed with respect to the interpersonal theory of suicide as well as alternative theoretical perspectives. Limitations of the study are noted. Implications for both theory and practice are discussed.

**PS3.10-3**

**Toward a Gold Standard for Suicide Risk Assessment For Military Personnel**

*Gutierrez, P*

Denver VA Medical Center, VISN 19 MIRECC, UNITED STATES

Statistically speaking, death by suicide is a low probability occurrence. However, over 500,000 people present to emergency departments each year in the U.S. due to suicide-related concerns. In recent years the suicide rate of U.S. military service members and Veterans has been quickly rising, which has sparked a pressing interest in better ways to treat and assess this phenomenon in military personnel. Evidence-based approaches to risk assessment for previously identified high-risk clinical populations may produce the most immediate gains in the fight against suicide. Individuals come to the attention of providers for a wide variety of reasons, few more pressing than concerns about risk of suicide. Once face-to-face with a provider, the ultimate question is always a variant of “How can I best assess this individual in order to predict if they will engage in suicidal behaviour in the near future?” Providers want to know, what is the “gold standard” for suicide risk assessment? To date, the field has been unable to provide a definitive answer to this question. Administering psychometrically sound assessment tools to a large sample of at-risk individuals, following them over a fairly brief timeframe, and assessing the predictive validity of the tools used will provide clinicians and researchers with an answer to the “gold standard” question. To accomplish this task, a study is underway pitting several psychometrically sound suicide risk assessment measures against one another, to determine which tool or combination of tools optimally assesses the likelihood of future suicide-related indices over a three month period, in a large sample of U.S. military personnel seeking services from or referred to inpatient psychiatry, outpatient behavioural health, or the emergency department because of suicide risk concern. We are also testing whether brief self-report measures perform as well or better than more comprehensive interview-based assessment approaches and if there is a benefit to combining the two assessment methods. The overall design of this study will be described and preliminary findings will be presented. Additionally, a promising collaboration between our team in the U.S. and a research group with the Israel Defense Forces allowing for cross-national data comparisons will be briefly described. Implications for assessment and clinical management of high risk military personnel will be discussed.
PS3.10-4
Operation Worth Living Project: A Randomized Clinical Trial of CAMS vs. Enhanced Care as usual with Suicidal Soldiers
Jobes, D
The Catholic University of America, UNITED STATES

The Operation Worth Living (OWL) Project, is a randomized clinical trial (RCT) of suicidal US Army Soldiers (n=150) who are being seen at an outpatient military mental health clinic on a relatively large Army infantry post. This clinical trial compares treatment outcomes of suicidal Soldiers who are randomly assigned to the experimental condition that uses the “Collaborative Assessment and Management of Suicidality” (CAMS) vs. the control condition providing “Enhanced Care as Usual” (E-CAU). CAMS is a relatively new suicide-specific therapeutic framework that uses a multi-purpose clinical assessment, treatment planning, tracking, and outcome tool called the “Suicide Status Form” (SSF). CAMS emphasizes the use of a stabilization plan and the identification of ‘suicidal drivers’ - those issues that lead to the patient’s suicidality. Within CAMS there is a problem-focused treatment approach to identifying, targeting, and treating the suicidal drivers with the ultimate goal of eliminating a Soldier’s desire to cope through suicide. After considerable effort to set up this clinical trial, the OWL Project is well into the intent-to-treat phase of data collection. This presentation will thus provide an overview of the CAMS approach and give an up-date on the progress of this clinical trial including preliminary research findings.

PS3.10-5
Study to Examine Psychological Processes in Suicidal Ideation and Behaviour (STEPPS)
O’Connor, R
University of Glasgow, UNITED KINGDOM

Study objectives
This presentation outlines six strands of basic science research which aim (i) to advance our understanding of suicidal ideation and behaviour and (ii) to compare two predominant models of suicidal behaviour (the integrated motivational-volitional model of suicidal behaviour (IMV; O’Connor, 2011) and the interpersonal theory of suicide (IPT; Joiner, 2005)).

Methods
Strands 1 and 2 comprise two prospective studies (an observational research component of 3500 young people aged 18-34 years and 500 hospital-treated suicide attempters, respectively) of participants who will complete a series of psychological measures tapping the components of the IMV and IPT as well as indices of suicidal ideation/behaviour at baseline. At follow-up, (12/6 months later for Strands 1/2, respectively) participants will complete measures of suicidal ideation/behaviour. Strands 3 and 4 are experimental studies looking at the effects of defeat (n=135) and social stress (n=145) on pain sensitivity in adults with different histories of suicidal ideation/behaviour. The final two strands (Strands 5 and 6) will investigate stress reactivity and suicide risk (n=145) by conducting laboratory-based stress tests and studies of the relationship between cortisol and cytokine levels and daily stressors.

Results
Data collection is ongoing.
Conclusions
The findings should advance our understanding of the basic processes underpinning suicide risk and could form the basic for the development of intervention studies.

14:30 - 16:00
PS3.11 GP AND COMMUNITY BASED APPROACHES

PS3.11-1
Challenges of Managing Deliberate Self-harm in Developing Countries’ Settings: The Pakistan Experience
Khan, MM
Aga Khan University, PAKISTAN

The World Health Organisation (WHO) estimates that for every suicide there are at least 10-20 acts of deliberate self-harm (DSH). As 85% of the global one million suicides take place in developing countries, there are an estimated 8.5 million to 17 million DSH acts every year. DSH is therefore a serious public health problem and there are many challenges in managing DSH in developing countries. Lack of adequate medical facilities, negligence of psychological assessment, stigma of suicidal behaviour and high use of pesticides leading to high case-fatality index are some of factors. Pakistan, a conservative South Asian Muslim country, where both suicide and DSH are considered illegal acts under law and strongly religiously condemned provides a classical example. There are an estimated 60,000 to 150,000 DSH cases annually, majority of them are young, with more women than men and pesticides as the most common method used. The most commonly stated reasons are interpersonal relationship problems. Although prosecution is rare, fear and harassment by the authorities prevent many people from seeking help for their problems. The underlying psychological problem therefore remains unaddressed, leading to added psychiatric morbidity.

In view of the lack of resources, developing countries would be well served by focusing on mental health promotion and primary prevention, addressing both distal and proximal factors in suicidal behaviours. There is need for further research in this area, including a standardized system of registration and diagnosis of suicidal cases. Only then can the seemingly impossible challenge of preventing suicide and DSH in developing countries be met.

PS3.11-2
The Efficacy of Community-based Interventions for Suicide Prevention - A Pilot Project in Hong Kong
Law, F1; Yip, PSF2; Lai, C2; Chow, S-l1; Kwok, RCL1; Wong, PWC1; Chang, S-S2
1Department of Social Work and Social Administration, The University of Hong Kong, HONG KONG, CHINA PR; 2Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR

Background
In response to the rising concerns about the youth suicide-clustering pattern in a suburb area in
Hong Kong, a three-year community-based suicide prevention project (2011-2014) using a public health approach is launched with an aim to reduce the suicide risk in the community. This approach includes a universal strategy to raise awareness of mental health literacy and to restrict access to suicide means; a selective strategy to equip gatekeepers with knowledge and skills of suicide prevention; and an indicated strategy to strengthen the continuity of care for youth with deliberate self-harm behaviours. A multi-disciplinary working group consisted of different community stakeholders is set up to advise on this project. These stakeholders include government officials from a number of departments, medical professionals, police officers, social workers and parents. With the support of the working group, a series of intervention programs derived from the three-level of strategies are implemented.

**Methods**

To capture the changes of suicide risk between the pre-and post-intervention stage, a few evaluation methods are applied to examine the factors associated with these changes:

1. Surveillance and monitoring on suicide deaths and attempts through the Geographic Information System (GIS);
2. Data-mining from the suicide-deceased case files retrieved from the Coroner’s Court; and
3. A community need assessment using a panel household survey for youth aged between 15 to 29 (N=717; M:F =1:1.2).

In this presentation, we mainly report on the pre-intervention stage’s results generated from the last two methods.

**Results**

The suicide rate rises from 2.2 per 100,000 in 2008 to 10.3 in 2010, which is substantially higher than that of the general population in Hong Kong (3-5 per 100,000). The prevalence of past-year suicide ideation and suicide attempt among the youth was 9.4% and 4.9%, respectively. 27.4% (n=194) of the respondents reported suffering from depression and anxiety symptoms (DASS) while over 80% of them did not seek help for their mental health problems. Of the 592 respondents who had noticed the suicide cases happened in the community, 46.3% said they had been emotionally disturbed by the suicide cases but only 13 of them had reached out for help.

**Conclusion**

Potentials of making use of community resources to reach out to youth with suicide risk as well as its associate challenges will be discussed in the presentation.

**PS3.11-3**

**Case-Based Analysis of Suicide Attempts in Last Twelve Months of Life and Help-Seeking at the General Practitioner**

Mallon, S1; Galway, K2; Hughes, L1; Rondon, J1; Leavey, G3

1NIAMH, UNITED KINGDOM; 2Queen’s University of Belfast, UNITED KINGDOM; 3University of Ulster, UNITED KINGDOM

The management of risk in those who present at Emergency Departments with suicidal ideation or behaviour is key area for suicide prevention. However, there has been little empirical research conducted which attempts to assess the role that primary care practitioners may contribute to the management of this important area of risk.

We examined the medical records of 360 individuals who died by suicide over a two-year period, to assess help-seeking patterns in the 12 months prior to the death. 71 (19.7%) individuals were recorded as having presented at an Emergency department with a suicide attempt in the twelve
months which preceded their death. One quarter \((n=18)\) of the suicide attempts took place within the final month of life. Nearly 40\% \((n=28)\) of the whole group had no recorded suicide attempt prior to the one that occurred in the final year. The majority of individuals in this study were assessed by psychiatric services after their suicide attempt. Almost all had attended their GP during these 12 months in relation to a mental health issue and our case-based analyses suggested many individuals re-engaged with their GP in the immediate aftermath of their attempt. However, we identified specific difficulties for GP’s in responding to these consultations because of inadequate and delayed information from Emergency Departments.

This research highlights the high number of individuals who attempt suicide who go on to die by suicide within one year of their final attempt and thus re-emphasises the important role emergency staff play in identifying suicidal risk. Policies such as the Card Before you Leave Scheme focus on the psychiatric assessment and referral of individuals who present at Emergency Departments with suicidal behaviour. However, the majority of individuals in this study were assessed by psychiatric services thus demonstrating the complexities associated with the identification and effectiveness of subsequent ‘treatment pathways’ open to professionals. Our findings suggest there is a need for greater understanding of how suicide attempts fit into broader help seeking pathways among vulnerable individuals. Attendance at the GP by these individuals shortly after their attempt suggest the timing of communication between staff may be crucial to prevention.

**PS3.11-4**

A GPs Conundrum: A Qualitative Study Exploring GP-suicidal Patient Interactions and Treatment Prior to Suicide

Saini, P\(^1\); Chantler, K\(^2\); Kapur, N\(^3\)

\(^1\)University of Liverpool, UNITED KINGDOM; \(^2\)University of Central Lancashire, UNITED KINGDOM; \(^3\)University of Manchester, UNITED KINGDOM

**Objectives**

The aim of this study was to explore GPs perceptions of the relationships and treatment of patients who have died by suicide and GP relationships with mental health service providers.

**Method and materials**

Semi-structured face-to-face interviews were conducted with 39 GPs who were involved in the care of patients who had died by suicide between 1st January 2003 and 30th June 2007. The interviews were conducted between 1st June 2007 and 31st October 2009. General practices in the North-west of England.

Information was gathered for patient contact with their GP in the 12 months prior to death, including clinical characteristics of the patient, the patient’s final consultation with a GP, and the immediate antecedents of the suicide. GPs were also asked about their views and perceptions on: their relationship with the patient, risk assessments, the patient’s treatment prior to suicide and GP relationships with local mental health service providers.

**Results**

Thematic analysis was conducted and the following four themes were generated from the interviews: (i) crying for help v crying wolf; (ii) piggy in the middle v left holding the baby; (iii) lost in the referral maze v the ever expanding gap; (iv) patient autonomy v GP responsibility. This is the first study to our knowledge to utilise an in-depth qualitative approach to investigate GP experiences of the treatment and management of suicidal patients in primary care.
**Conclusion**
The themes in this study suggest areas where efforts for suicide prevention in primary care might be focussed. Firstly, increasing GP awareness of suicide-related issues and improving training and risk assessment skills. Secondly, removing barriers to ensure ready access to therapies and treatments in primary care. Thirdly, improving liaison and increasing collaborative working relationships between primary and secondary care to provide better patient outcomes. A difficult balancing act exists for GPs when trying to treat suicidal patients who do not want to be treated. This is clearly not only a GP’s conundrum, but one that health services more generally, suicide prevention policies and society need to contemplate.

**PS3.11-5**
**Exploring the 'Triangle of Care' in Relation to Suicidal Individuals: A Qualitative Study**
Owen, GJ\(^1\); Benson, O\(^2\); Gibson, S\(^2\); Boden, Z\(^2\); Owens, CV\(^1\)
\(^1\)University of Exeter Medical School, UNITED KINGDOM; \(^2\)SANE Mental Health Charity, UNITED KINGDOM

**Background**
Relatives and friends play a key role both in engaging professional help for a person who is suicidal and in continuing to manage risk. However, little is known about the social dynamics of care-giving, when the care is being shared by lay and professional carers.

**Aim**
The aim of the study was to examine the ways in which suicidal individuals, lay carers and professional caregivers interact during a suicidal crisis, and to identify barriers to effective communication and collaborative risk management.

**Method**
Data were collected as part of a grounded theory study exploring the suicidal process as experienced by people who have attempted suicide, their ‘significant others’ and people who have been bereaved by suicide. The interview transcripts of 45 participants were analysed thematically. The ‘Triangle of Care’ model (National Mental Health Development Unit, 2010) was used to conceptualise the relationships between the suicidal individual, lay carers and mental health professionals.

**Findings**
Individuals who had attempted suicide were often ambivalent about disclosing suicidal feelings to those around them because they feared losing autonomy and control. Some also expressed ambivalence about burdening relatives and friends with responsibility for their care and safety. Likewise, some relatives and friends expressed ambivalence about assuming responsibility for a person in suicidal crisis, often because they feared they lacked the skills and knowledge to offer effective help. Relatives and friends often felt excluded by professionals, who seemed unwilling to take account of their unique understandings and concerns, and were sometimes made to feel that they were ‘part of the problem’. Effective communication between lay carers and professionals was often hampered by beliefs about confidentiality. Some lay carers felt there was an expectation from professionals that relatives would take responsibility for care-giving without advice and support on how to manage suicide risk.

**Conclusion**
Greater attention needs to be given to factors that promote or block effective communication between the suicidal individual, lay carers and health care professionals. Better models of engagement which foster trust between all parties in the triangle of care are needed to support recovery and promote safety during a suicidal crisis.
**PS3.11-6**  
**Developing a Contact-based Intervention: A Qualitative Approach**  
Cooper, J1; Hunter, C1; Owen-Smith, A2; Gunnell, D2; Donovan, J; Hawton, K3; Kapur, N1  
1University of Manchester, UNITED KINGDOM; 2University of Bristol, UNITED KINGDOM; 3University of Oxford, UNITED KINGDOM

**Study objectives**  
We aimed to gain an understanding of the underlying psychological mechanisms and content of interventions that might be of benefit or detriment to patients in preventing repetition of self-harm. We wanted to further understand the pragmatic barriers to the implementation of various forms of follow-up contact care following hospitalisation due to an episode of self-harm by bringing in the perspectives of staff working on the “front line”.

**Methods and material**  
Using qualitative methodology, we investigated service user and staff experiences of, and attitudes toward, different types of intervention (for example letters, telephone calls or crisis cards) following self-harm. Self-harm patients recently discharged from an emergency department were selected using purposive sampling (n=11). Clinical staff from relevant service areas and voluntary staff took part in a focus group and individual interviews (n=10). Interviews were transcribed and thematic analyses were conducted, using methods of constant comparison to ensure that emergent themes remained grounded in the data.

**Results**  
Most service users and staff participants identified the period of time directly after discharge as the time of greatest need. A contact based intervention was viewed by service users as a gesture of caring, which counteracted feelings of loneliness. Delivery by mental health specialists was preferred, initially by phone but letters were considered helpful later. The intervention should be both genuine in delivery and linked to current services. Potential barriers included means of accessing the service and threats to privacy.

**Conclusion**  
The findings suggest that an appropriate design for an intervention might be the provision of an information leaflet, telephone calls (soon after discharge), then letters (offering continuity of contact). Aspects of value and concern expressed by service users should be helpful to clinicians and service providers.

**14:30 - 16:00**  
**PS3.12 ASSESSMENT OF SUICIDE RISK**

**PS3.12-1**  
**Risk Factors for Repetition of Self-Harm: A Systematic Review of Prospective Hospital-Based Studies**  
Larkin, C1; Di Blasi, Z2; Arensman, E1  
1National Suicide Research Foundation, IRELAND; 2School of Applied Psychology, IRELAND

**Study objectives**  
Self-harm entails high costs to individuals and society in terms of suicide risk, morbidity and
healthcare expenditure. Repetition of self-harm confers yet higher risk of suicide and risk assessment of self-harm patients forms a key component of the health care management of self-harm patients. To date, there has been no systematic review published which synthesises the extensive evidence on risk factors for repetition. This review is intended to identify risk factors for prospective repetition of self-harm after an index self-harm presentation, irrespective of suicidal intent.

**Methods and materials**
Journal articles, abstracts, letters and theses in any language published up to June 2012 which adopted a cohort study design to examine factors associated with prospective repetition among those presenting with self-harm to emergency departments. A systematic search located 129 relevant studies, which were quality-assessed and synthesised in narrative form.

**Results**
Some risk factors were studied extensively and were found to have a consistent association with repetition (previous self-harm, history of psychiatric treatment, current psychiatric treatment, alcohol misuse/dependence, drug misuse/dependence, personality disorder, living alone, schizophrenia, unemployment, not being married) while mood disorder was less reliable as a predictor of repetition. However, the sensitivity values of these measures varied greatly across studies. Psychological risk factors and protective factors have been relatively under-researched but show emerging associations with repetition. Composite risk scales tended to have high sensitivity but poor specificity. The results suggest a dose-response association between vulnerability and repetition.

**Conclusions**
Many risk factors for repetition of self-harm match risk factors for initiation of self-harm, but the most consistent evidence for increased risk of repetition comes from longstanding psycho-social vulnerabilities, rather than characteristics of an index episode. The current review will enhance prediction of self-harm and assist in the efficient allocation of intervention resources.

**PS3.12-2**
A Risk Score for Predicting Deliberate Self-Harm
Spittal, MJ; Studdert, DM; Pirkis, J
The University of Melbourne, AUSTRALIA

**Background**
Repetition of self-harm is common amongst a small group of individuals. Several recent studies have used emergency department data to develop clinical tools to assess risk of future self-harm or suicide. Routinely collected hospital admission data is another potentially useful source of information for developing risk scores.

**Aims**
To develop a population-level risk score using readily available hospital admission data to identifying those at risk of self-harm.

**Methods**
Linked hospital admission and death data from two states in Australia were used to develop a measure of deliberate self harm. Logistic regression was used to identify a set of predictors of recurrent self-harm. Risk score values were developed from model coefficients.

**Results**
There were 21,672 episodes of deliberate self-harm within 6 months of an initial episode.
Number of prior episodes, time between previous episodes, prior psychiatric diagnoses and prior psychiatric stay in hospital with the last year all predicted recurrent self-harm. A risk score based on these variables predicted recurrent self-harm well (AUC = 0.754). The risk of self-harm according to the categories of the risk score was 14% for those with a score of 0-3 and above 80% for a score of 20-25. When a threshold of ≥ 8 was applied, the positive predictive value was 0.64, the sensitivity was 0.44 and specificity was 0.92.

**Conclusions** A risk score of deliberate self-harm could be useful for targeting low-cost population-level interventions.

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**PS3.12-3**

**Characteristics of Repeat Self-harmers Admitted to a Psychiatric Emergency Department**

Roaldset, JO¹; Linaker, OM²; Bjørkly, S³

¹Psikiatrisk avdeling Ålesund sjukhus, Møre & Romsdal Health Trust, NORWAY; ²St Olavs Hospital, NORWAY; ³Molde University College, NORWAY

Patients with frequent deliberate self-harm (DSH) and acute psychiatric hospitalizations are resource-demanding and a great challenge for psychiatry and themselves. All acutely admitted patients in a psychiatric emergency unit in Norway during one year (2006-07, n=489) were the target group. Seventy % (341 patients) were followed up one year after discharge. Baseline variables were monitored during hospital stay and compared to episodes of deliberate self-harm recorded during the first year after discharge. Nineteen patients (6%) were identified with three or more hospitalisations followed by DSH during the 12-months follow-up (DSH repeaters), and 17 patients were recorded with suicidal behaviour and non-suicidal self-injury. During the first three months after discharge 14 of the 19 patients were recorded with repeat DSH. There were 14 women (74%) and 9 patients (47%) between 18 and 29 years. Ten patients (53%) were involuntarily admitted at least one time. According to ICD-10 criteria the main diagnoses were personality disorders (9 patients), anxiety disorders (4), bipolar disorders (2), alcohol abuse (2) and psychotic disorder (1). Seven patients had one or more comorbid psychiatric disorder. Nine patients (47%) used second generation antipsychotics, 7 (37%) serotonin reuptake inhibitors, and 7 used mood stabilisers. DSH repeaters scored significantly higher on the short version of the MINI suicidal scale than patients without DSH or with only one or two DSH episodes. Compared with the two other groups triglyceride levels were significantly higher among DSH repeaters, but total cholesterol, LDL, HDL and platelet-serotonin did not differ. DSH repeaters had significantly more violent episodes during hospital stay and scored higher on lack of insight. However, violent incidents prior to admission, unrealistic planning, and vulnerability to future stress-exposure did not differ. More detailed results from comparison of the DSH repeaters, other DSH patients and patients without DSH will be presented together with a brief case illustration.
The Development of a Population-level Clinical Tool for Emergency Department Self-harm Repetition and Suicide: The ReACT Self-Harm Rule

Steeg, S1; Kapur, N1; Webb, R1; Applegate, E1; Stewart, S2; Hawton, K3; Bergen, H3; Waters, K4; Cooper, J1

1University of Manchester, UNITED KINGDOM; 2University of Chester, UNITED KINGDOM; 3University of Oxford, UNITED KINGDOM; 4Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM

Study objectives
We aimed to develop a clinical tool to help identify patients at higher risk of repeat self-harm, or suicide, within 6 months of an ED self-harm presentation.

Methods and material
The tool was derived using data from three centres participating in the Multicentre Study of Self-Harm in England, a prospective cohort study. Binary recursive partitioning was applied to data from two centres, and data from a separate centre were used to test the tool.

Results
There were 29,571 self-harm presentations to five hospital EDs between January 2003 and June 2007, involving 18,680 adults aged 16+ years. We estimated sensitivity, specificity and positive and negative predictive values to measure the performance of the tool. The tool, summarised as the ReACT Self-Harm Rule, classified patients as higher risk if at least one of the following factors was present: recent self-harm (in the past year), living alone or homelessness, cutting as a method of harm and treatment for a current psychiatric disorder. The rule performed with 95% sensitivity [95% confidence interval (CI) 94-95] and 21% specificity (95% CI 21-22), and had a positive predictive value of 30% [95% CI 30-31] and a negative predictive value of 91% [95% CI 90-92] in the derivation centres. In addition the tool correctly identified 83/92 of all subsequent suicides.

Conclusions
The ReACT Self-Harm Rule might be used as a screening tool to inform the process of assessing self-harm presentations to ED. The four risk factors could also be used as an adjunct to in-depth psychosocial assessment to help guide risk formulation. The use of multicentre data helped to maximize the generalizability of the tool, but we need to further verify its external validity in other localities. References: Steeg, S., Kapur, N., Webb, R., Applegate, E., Stewart, S., Hawton, K., Bergen, H., Waters, K. & Cooper, J (2012). The development of a population-level clinical screening tool for self-harm repetition and suicide: the ReACT Self-Harm Rule. Psychological Medicine, 24(11), 2383-2394.
Nonlinear Dynamics in Suicidology. First Steps to an Early Warning System

Plöderl, M1; Schiepek, G1; Mishara, B2; Fartacek, C1; Fartacek, R1; Kralovec, K1; Pichler, E-M1; Goldney, R3

1Paracelsus Private Medical University, AUSTRIA; 2Université Québec à Montréal, CANADA; 3University of Adelaide, AUSTRALIA

Suicidology is characterized by a near exclusive assumption of linearity, i.e., the output (e.g., suicide risk) is proportional to a given input (e.g., risk factor levels, stress-inducing life events); the more the risk factors the greater the probability of attempting suicide. However, linear models of suicidal behaviour have been limited in their ability to predict suicides and individuals often commit suicide after the occurrence of a seemingly minor life event. Furthermore, that facts that there are so many risk factors for suicide and that their dynamic interplay over time is so complex would suggest that the process is most likely nonlinear by nature. As a result, the prediction of suicidal behaviour remains limited, despite decades of research. There have been repeated calls for the application of nonlinear dynamics (complexity theories, chaos theory, synergetics etc.) in suicidology, but the application of nonlinear dynamics to suicidology research has been limited due to the lack of technical possibilities and the lack of training of suicide researchers in theories of non-linear change and the mathematics of non-linear models. This session presents the results of the application of new technologies that may move nonlinear dynamics from theory to practice and to real-world phenomena. The Salzburg research group present results from their research with chronically suicidal patients using the Synergetic Navigation System, a web-based, real-time monitoring system. Mishara presents a theoretical explanation of the dynamics of suicidal behaviours and discusses the inherent limits of prediction using non-linear causal models. Goldney will discuss the presentations in relation to current challenges in suicidology research. This workshop highlights the importance of nonlinear dynamics in suicidology, outlines potential research goals, presents some research results with chronically suicidal patients, and discusses how a research agenda using nonlinear models can be developed.
PS3.12-6
Classification Algorithm for the Determination of Suicide Attempt and Suicide (CAD-SAS): A Tool for Reliable Assessment of Suicidal Behaviours
Fedyszyn, IE1; Harris, MG2; Robinson, J3; Paxton, SJ4
1Melbourne School of Population and Global Health, The University of Melbourne, AUSTRALIA; 2School of Population Health, The University of Queensland, AUSTRALIA; 3Orygen Youth Health Research Centre, AUSTRALIA; 4School of Psychological Science, La Trobe University, AUSTRALIA

Background
Despite a plethora of standardised scales to determine a person’s current level of suicide risk, there is a dearth of instruments that would help to distinguish suicide attempts and suicides (suicidal behaviours) from non-suicidal self-injurious behaviours, accidents, and accidental deaths. This is problematic because the validity of studies on suicidal behaviours is contingent on a reliable assessment of the presence or absence of the outcome variable.

Objective
The study sought to develop a tool to standardise assessment and classification of self-injurious behaviours, the Classification Algorithm for the Determination of Suicide Attempt and Suicide (CAD-SAS), and to investigate its psychometric properties.

Method
The CAD-SAS enables classification of self-injurious behaviours into 3 categories: “suicide attempt or suicide”, “not a suicide attempt or suicide”, and “undetermined incident”. It has clearly operationalised underlying constructs of self-injury and suicidal intent (explicit and implicit), standardised range and type of information to be used in the assessment, and a decision tree that ensures standardisation in classification of incidents. To examine test-retest reliability of the CAD-SAS, 217 narratives of real-life self-injurious behaviours were rated by an investigator twice, at a 4-week interval. To establish inter-rater reliability, 3 independent raters (postgraduate psychology students) used the CAD-SAS to assess a random sample of 70 narratives, which were presented in a counterbalanced order. Finally, content validity was examined on the set of 70 narratives by comparing the level of agreement between ratings of an investigator who used the CAD-SAS and clinical judgments of a consultant psychiatrist without the CAD-SAS.

Results
The CAD-SAS has excellent test-retest reliability (97.2% agreement), substantial inter-rater reliability (70.0% agreement, kappa (κ)=0.70), and good construct validity (64.3% agreement, κ=0.46).

Conclusions
The CAD-SAS has robust psychometric properties and could improve reliability and validity of future studies on suicidal behaviours.
16:30 - 18:00

PS3.13 NEUROBIOLOGICAL ASPECTS OF SUICIDAL BEHAVIOUR

PS3.13-1
Are there Specific Neural Correlates of Suicidal Mental Pain?
Habenstein, A; Federspiel, A; Michel, K
University Hospital of Psychiatry, Bern, SWITZERLAND

Current models of suicidal behaviour are based on a diathesis-stress model. Patients usually refer to unbearable mental pain as the stress condition triggering suicidal behaviour. Clinical observations imply that mental pain is part of the suicidal mode, a switch-on/off phenomenon with specific characteristics of perception, cognition, emotion and behaviour. Due to methodological difficulties, to date only a few studies have investigated the possible neural correlates of mental pain. Some of the difficulties are: The definition of mental pain related to suicide, the transitory character of mental pain and suicidal behaviour, and the difficulties in finding an adequate - non-suicidal - control group. After a first imaging study (Reisch et al., 2010) we are currently conducting a second functional MRI investigation with suicide attempters, using the method of script-driven recall of the suicidal episode. The presentation will include a review of the literature, the methodological problems, and the description of our current study. First results will be presented and discussed.

PS3.13-2
Variations in Reelin Gene and Completed Suicide
Paska, AV; Grgic, M; Zupanc, T; Komel, R
University of Ljubljana, Faculty of Medicine, SLOVENIA

Introduction
Suicide is a complex phenomenon, an outcome of environmental, genetic, and epigenetic factors. Proteins, like large secreted signalling glicoprotein reelin, involved in important processes in brain plasticity, cell-cell interactions, synaptogenesis, and in neuron migration, seem to be interesting candidate genes for study of suicide.

Objectives
Many studies have shown associations of reelin gene with different mental disorders, like major depression, schizophrenia and bipolar disorder, which are often implicated in suicidal behaviour. It has been shown that reelin expression is consistently decreased in all three disorders. However, there are no studies until today performed on suicide explicitly.

Aims
To test the association between suicide and three single nucleotide polymorphisms (SNPs) in reelin gene (rs2965087 in 5'-end, rs7341475 in intron 4, and rs362691 in exon 22).

Methods
We performed qRT-PCR [Real-Time Polymerase Chain Reaction] genotyping analysis of SNPs on 396 suicide victims and 211 controls. Blood alcohol level was determined for all samples.
Statistical analysis of genotype and allele frequency distributions between groups of suicide victims and controls was performed. There was additional analysis of different subgroups (e.g., male, female, violent and non-violent suicide).

Results
In case of intron 4 polymorphism rs7341475 we observed statistically significant lower frequency of common allele G in female suicide victims relative to female controls. Contradictory, in male suicide victims we observed higher polymorphic allele A relative to male controls, but it was statistically insignificant. Analysis of other two polymorphisms gave no statistically significant results.

Conclusions
Present investigation confirmed association between rs7341475 in reelin gene and female suicide victims in Slovenian population, which is a population with one of the highest suicide rates in the world. The results showed that reelin gene is a promising candidate gene for further investigations in association with suicidal behaviour.

PS3.13-3
Neurobiological Dysfunction behind the Psychological Readiness for Suicide Diagnosed by a Test with 97% Sensitivity and 98% Specificity for Suicide
Thorell, L.-H
Linköping University and Emotra AB Sweden, SWEDEN

Objectives
To build an explanation model of suicide based on repeated reports of high sensitivity and specificity of electrodermal hyporeactivity for suicide and violent suicide attempts in depression (Fig. 1) and the great difference in prevalence of it in patients with high and low suicide risk (Fig. 2).

Methods and materials
Results are analyzed from four materials (n= 932) of depressed in- and outpatients treated for depression in Swedish and German psychiatric clinics and healthy subjects (n= 89). They were investigated by tests of the habituation of the electrodermal response, symptomatology and suicidal behaviour.
Results
The electrodermal hyporeactivity was found to (a) be independent of the depth of the depression; (b) be stable over depressive episodes, while reactivity turns to hyporeactivity; (c) have a different time course than depressive illness - remaining in remission and over years; (d) be unrelated to 5-HIAA in CF; and (e) unrelated to successful antidepressant treatment. The prevalence is about 10% in healthy people, 15% or more in psychiatric open care patients and about 60% in inpatients, highest in bipolar patients.

Conclusions
The electrodermal hyporeactivity in these materials is the lack of specific orienting responses which in the rabbit are initiated by neurons in the CA3 of the hippocampus. It is interpreted as a biopsychological inability to “learn the usual” - an inability for normal orienting of curiosity towards events in the everyday life. It is hypothesized that this inability leads to indifference to everyday life and readiness to leave the life. It is also hypothesized that the hyporeactivity is due to synaptic hypoplasticity in the majority of cases and to psychological factors. It is suggested that it entails implications for cognitive and emotional functions and personality in ways that further increase the risk of suicide attempt with death intent. It is suggested that electrodermal hyporeactivity is a diagnostic instrument for a separate neuropsychobiological disease, existing in normal life, being be fatal in combination with depressive suicidal ideation and perhaps other severe illnesses and life situations.
It is concluded that the test of electrodermal hyporeactivity exposes a common central dysfunction caused by biological and psychological factors.

PS3.13-4
Study on the Association between Gene Polymorphism of COMT and Rural Attempted Suicide in China
Jia, C-X; Hu, X
Shandong University School of Public Health, CHINA

Study objectives
To explore the risk factors of attempted suicide and the relationship between gene polymorphism of catechol-o-methyltransferase (COMT) rs4680 site in rural areas.

Methods and materials
A community-based case-control study was carried out in 6 county-level cities that were selected from Shandong Disease Surveillance Points for attempted suicides. All selected cases committed suicides within the period of October 1, 2009 to March 31, 2011, and each case was matched with an eligible control of the same gender and age (±3 years). Both of cases and controls were living in the same community. In total, 369 cases and 369 controls were inquired for analyzing gene polymorphism of COMT.

Results
Cases and controls are statistically different in genotype distribution (X² =6.376, P=0.041), while not statistically different in gene frequency distribution (X²=1.181, P=0.277). Multivariate conditional logistic regression analysis showed that occupation, negative life event, hopelessness, social support, depression, life satisfaction and COMT Val/Val were considered to be highly associated with attempted suicides with ORs of 0.426, 7.292, 2.997, 0.296, 3.097, 0.391, and 1.962 respectively.

Conclusion
The study supports that COMT Val/Val is the risk genotype of rural attempted suicide.
Beyond Regular Weekly Cycles in Suicide

Ajdacic-Gross, V1; Tran, US2; Voracek, M2

1Psychiatric University Hospital Zurich, SWITZERLAND; 2University of Vienna, AUSTRIA

Objective

Such as seasonal also weekly cycles in suicide have been described, replicated and poorly understood for long time. Suicides are typically least frequent on weekends and most frequent on Mondays and Tuesdays. To improve the understanding a strategy is required which focuses on anomalous findings within / beyond the regular patterns. We investigated in which instances the weekly suicide patterns disappear or get interrupted.

Material and methods

We used data from the Swiss and the Austrian mortality statistics for the periods 1969-2010 and 1990-2010, respectively. Firstly, the data was crosstabulated by days of the week and the available socio-demographic information [sex, age, religious affiliation, region]. Secondly, time series of cumulated daily frequencies of suicide were built and analysed by seasonal ARIMA models (including intervention effects). These analyses targeted in particular the Easter and Pentecost holidays.

Results

The crosstabulations showed that weekly cycles may be absent above all in young persons. The ARIMA analyses displayed subtle preventive effects for holiday Saturdays and Sundays, but stronger effects for holiday Mondays. However, there were no aftereffects on Tuesdays following holiday Mondays. Conclusion Such as seasonal also weekly cycles in suicide are not universal phenomena. Our first result indicates that the absence of weekly cycles might be associated with “rash act suicides”, which are probably much more prevalent in young people than in adults. The second result confirms the protective effect of weekends and holidays on suicide. Moreover, it raises the issue of (lacking) aftereffects following an intervention or, in this instance, a natural experiment. If the preliminary conclusion were right, it implies that also “ambivalent suicides” are similarly responsive to extraordinary preventive measures such as “rash act suicides”.

PS3.13-6
Seasonal Variation in the Frequencies of Suicides, does it vary by Gender, Age, Latitude, Method or Time? A Registry Based Study from Norway 1969-2007
Bramness, J1; Walby, FA2; Morken, G3; Røislien, J1
1University of Oslo, NORWAY; 2National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 3St Olav Hospital, NORWAY

Study objectives
Seasonal variation in the number of suicides has long been acknowledged. The spring peak has involved an increase of 10-15 % of the expected rate in April, May and/or June. This has been seen mostly in male violent suicides’ and more often in relationship to psychiatric morbidity. It has, however, been suggested that this seasonality has declined in later years to a degree where it is no longer universal. Many of the previous studies have, however, used naïve statistical methodology to investigate the phenomenon. We examined all suicides in Norway 1969-2007 to see if seasonal variations were present. Further, we wanted to explore to what extent seasonality was related to age, gender, latitude and suicide method, and whether the seasonal pattern had varied over time and what could contribute to this variation.

Methods and materials
All 20156 suicides from the period 1969 till 2007 from the Norwegian cause of death registry were included. Of these 5391 (26.7 %) were female and 14765 (73.3 %) male suicides. We developed a novel statistical time series regressions model in order to estimate the contribution of age, gender, suicide method and latitude for explaining seasonality, as well as a possible change over time in this seasonality.

Results
Throughout the whole period there was a clear seasonal pattern of suicides with a spring peak in May with a heightened frequency of 14 %. This seasonality was greatest for male suicides and for violent suicides. There were also seasonal variations, however smaller, for female and non violent suicides. There was an age gradient with little observed seasonality among the young, higher among the middle aged and highest among the oldest. There was a statistically significant reduction in the magnitude of seasonality during the period. The reduction of seasonality was greatest for women and in violent suicides.

Conclusion
The novel statistical model shows that there is a clear seasonality in suicides throughout the period, and that the amplitude of this seasonality has diminished throughout the observational period. The reduction in seasonality was mostly related to a reduction in female suicide seasonality and violent suicides. A fully developed regression model will further elucidate the specific contributions of gender, suicide method, age and latitude to the explanation of both seasonality and seasonality changes.
There is no central up to date depository of the laws of all countries, and not all penal codes have been completely translated into English or other common languages. Thus, it is challenging to determine the legal status of suicide as well as the legal status of abetment, aiding and encouraging suicide throughout the world. We obtained copies of the criminal codes from almost all of the 193 countries recognized by the United Nations as well as 9 other territories with a legal justice system and criminal codes. When we could not obtain a copy of the law, we wrote to the justice minister in each country, and if no reply was received, we contacted an Embassy. We identified 26 countries where suicide is currently clearly illegal with potential punishment of a jail sentence. The vast majority of countries have laws making it illegal to abet, aid or encourage suicide, but the nature of the actions that are illegal varies greatly, as well as the nature of the punishments. We compare laws in places with Civil Law, Common Law, Islamic Law and Traditional Law systems. We tried to obtain information about the jurisprudence whenever possible. Application of laws varies greatly and over time, and sometimes varies in regions within a country. It is impossible to estimate accurately the number of people currently in jail for having attempted suicide, but jail sentences are still given to suicide attempters. The complexities of the situation are illustrated by several case examples. For example in Guyana, the current practice is not to prosecute suicide attempters despite the current law, but police sometimes jail people who attempt suicide and thus they may spend time in jail until a judge releases them. In Somaliland, suicide attempters are systematically jailed for long sentences and a legal rights group is working [with only modest success] to free suicide attempters. Several countries have recently decriminalized suicide, some have considered decriminalization, but others have had no initiatives to remove or change laws making suicide a criminal offense. We discuss the roots of laws making suicide and abetment, aiding and encouraging suicide illegal and examine prospects for future changes.

Accurate registration and diagnosis of suicide and DSH are fundamental to suicide statistics on which suicide prevention policies and programs are based. These are influenced by legal,
administrative, religious and socio-cultural factors. To assess the legal status of suicide &
DSH in the 21 predominantly Islamic countries of WHO-EMR, a 22-item questionnaire survey
(11 questions each for suicide and DSH) was carried out. The response rate was 18/21 (86%).
Suicide & DSH were deemed illegal in 14 & 13 of the EMR countries respectively, though cases
against the acts were registered in only 7 countries. There was a great variation in the profes-
sional/office responsible for giving the verdict of suicide in EMR countries. Suicide as a mode of
death was mentioned in death certificates in only 8 countries. Statistics on suicide & DSH are
officially collected & reported in 6 countries; while in 5 suicidal deaths were part of the national
vital registration system. Despite being religiously condemned, there was very little evidence
that suicide victims were discriminated and almost all received religious rites and burial in nor-
mal graveyards. Majority of those surveyed felt that both suicide & DSH are underreported in their
countries.

Our survey revealed that there was a significant variability in diagnosis, registration/recording of
suicide & DSH across the EMR countries. Both suicide & DSH were considered illegal and were
not part of national vital registration system in majority of countries surveyed.

There is urgent need to develop a standard system of diagnosis & recording of suicide and DSH
in EMR member states. Suicidal acts should be made part of national vital registration system
and all member states should be encouraged to report their statistics to the WHO. In addition
there is need to address the legal status of suicidal behaviour in Islamic countries.

**PS3.14-3**

Decriminalizing Suicide around the World
Vijayakumar, L
Voluntary Health Services, INDIA

**Documentation of Attempt to Suicide**
Over 135,000 people die by suicide in India every year. A nationally represented study has
revealed that the underestimation is 30%.

Attempt to suicide is an offense punishable under Section 309 of the Indian Penal Code. This law
has had a chequered path in India. The Law Commission recommended the repeal of this law in
1971. The Rajya Sabha passed the bill in 1978. Unfortunately before the bill could be passed in
Lok Sabha, the Lok Sabha was dissolved and the bill lapsed. In the next report in 1997, the Gov-
ernment recommended the retention of Section 309.

The various initiatives to recommend the repeal of the law will be discussed.
Currently the Law Commission in 2008 has recommended that the law be abolished and the
matter is to be taken for discussion in the Parliament.

**PS3.14-4**

Stigma: A Major Barrier for Suicide Prevention
YIP, PSF
The University of Hong Kong, HONG KONG, CHINA PR

“Stigma: A Major Barrier for Suicide Prevention” is the theme of the 11th anniversary event of
World Suicide Prevention Day. Stigma can arise for different reasons. It may be the result of a
lack of knowledge i.e. ignorance. This can be addressed by providing public education in the
community; to build a knowledge base and general awareness of the scope and nature of mental illness and suicidal behaviour in the community, its treatability, and the available treatment resources to meet the needs of such troubled people. Sometimes, even with knowledge, people can harbour forms of prejudice in relation to those suffering mental illness or struggling with suicidal ideation and impulses. This can even be found among health care professionals, who might overlook or understate the importance of certain symptoms, statements or behaviours, because of preconceived ideas about mental illness or the significance of suicidal ideation and behaviour and/or a lack of training or comfort in dealing with these disorders/problems. This can result in a failure to provide optimal care and support for the person in crisis. Furthermore, stigma can be experienced at another level, in association with certain inappropriate or even unlawful actions that constitute discrimination. This can occur at a personal, community or institutional level. Discrimination can prevent or discourage people affected by illness or suicidal ideation from seeking professional help or pursuing active rehabilitation. Beyond that, in many countries suicide is still a criminal act. Clearly, the criminal code can have a powerful negative impact on those in a suicidal crisis who desperately need to be able to access care and support, without being judged or penalized. Stigma can only be mitigated by sustained public education and development of awareness of mental illness and suicidal behaviour at all levels of our communities. Unless stigma is confronted and challenged it will continue to be a major barrier for suicide prevention. A collective effort from individuals, communities and government organizations is needed if we are to overcome this noxious obstacle to the optimal care and treatment of highly vulnerable individuals.

16:30 - 18:00
PS3.15 SELF-HARM IN A HOSPITAL TREATMENT CONTEXT

PS3.15-1
Hospital Registration of Self-harm and Suicide Attempt: Norwegian Observation
Qin, P; Fadum, EA; Mehlum, L
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Study objectives
National hospital registration, where available, is probably the most reliable resource to retrieve national data on deliberate self-harms and suicide attempts. High quality registration of self-harm and suicide attempt is important, because it can provide better guidance for treatment and referral of the patients and also ensure better report and research on this health problem, consequently influencing national strategies for suicide prevention and medical care provision. In this study, we want to use data from Norwegian Patient Register (NPR) to systematically investigate common problems in the registration of deliberate self-harm and suicide attempt, and to assess the validity and reliability of such information recorded in the database.
Methods and material
We obtained all records of patient contacts to public hospitals and emergency centers because of injury or poisoning from the year 2008 through 2011 in Norway. For each episode, we retrieved individual data on the primary and auxiliary diagnoses, urgency of contact, date of contact, place of discharge, alongside with sex and age of the patients.

Results
We found that, among 2 079 430 episodes recorded as injury or poisoning in the NPR, 59.67% were urgent contacts. Of these urgent episodes, 5.5% of them were registered more than once in the database (appeared in the register twice or more times the same day or the day after the previous episode). After removing these duplications, we identified 19 685 incidents of poisoning with medications, 5 469 incidents of poisoning with non-medical substances, and 54 150 incidents of cutting on forearm, wrist or hands, resulting in a total of 79 304 incidents from 66 781 individuals aged 10 years or above. Meanwhile, 12.9% of these patients received an auxiliary diagnosis of psychiatric disorders, while 8.8% were recorded as attempted suicide as an external cause at the time when the episode of injury or poisoning occurred.

Conclusions
Although our results are still preliminary and will be further tested with new data containing more detailed information, our examination shows that duplicated registration on self-harm is not uncommon in hospital patient registration in Norway, and that assessment for suicide intention of patients with self-harm is generally insufficient in relevant clinical wards. The findings indicate the need for improvement on self-harm reporting and registration in hospital clinics.

PS3.15-2
Severity of Hospital-treated Self-cutting and Risk of Future Self-harm: A National Registry Study
Larkin, C1; Corcoran, P1; Perry, IJ2; Arensman, E1
1National Suicide Research Foundation, IRELAND; 2University College Cork, IRELAND

Study objectives
Risk assessment forms a key component in self-harm management. Among self-harm presentations generally, lethality of an index act is a poor predictor of future non-fatal repetition. However, no study has examined whether severity of an index self-cutting episode is associated with prospective repetition. The aim of the current study was to examine factors associated with severity of self-cutting and in particular the association between severity of self-cutting and prospective repetition of self-harm.

Methods
All index self-cutting presentations to emergency departments in Ireland over five years were grouped by treatment received and compared on the basis of demographic and clinical characteristics.

Results
Receiving more extensive medical treatment was associated with male gender, being aged more than 15 years, and not combining self-harm methods. Receiving less extensive treatment conferred a higher risk of prospective 12-month repetition, even after controlling for demographic and clinical characteristics. Repeat self-harm presentations by those with more severe self-cutting in an index act were less prevalent but were more likely to involve high-lethality methods of self-harm.
Conclusion
The results indicate that the already-elevated repetition risk among self-cutting patients is further increased for those receiving less extensive wound closure treatment. Severity of self-cutting could also affect suicide risk but such an association has yet to be examined.

PS3.15-3
Risk of Repetition among Hospital Treated Patients with Medicinal Poisoning 2008-2011
Fadum, EA1; Qin, P1; Stanley, B2; Mehlum, L1
1National Centre for Suicide Research and Prevention, University of Oslo, NORWAY; 2Columbia University, UNITED STATES

Study objectives
A significant number of patients are annually treated in general hospitals for medicinal poisoning. The risk of repetition is high. Repeated episodes represent a high level of distress for the patients, a substantial allocation of health care resources and are strongly associated with suicide. The aim of this study was to identify factors associated with hospital re-presentation due to subsequent medicinal poisoning using data from the Norwegian Patient Register (NPR).

Methods and material
All episodes of acute hospital presentations with a principal diagnose of medicinal poisoning were retrieved from the NPR in 2008-2011. After exclusion of episodes that occurred within one day as the previous hospital presentation, patients who had two or more hospital presentations due to medicinal poisoning within 2008-2011 were counted as repeaters. The effects on repetition of gender, age, auxiliary psychiatric diagnoses and receiving a diagnosis of intentional self-harm at the first hospital presentation were examined using logistic regression.

Results
Of 11,693 patients with a principal diagnose of medicinal poisoning, 15.8% re-presented to hospital (9.6% re-presented once; 4.7% 2-4 times, 1.1% 5-9 times, and 0.4% re-presented 10-53 times). Females were significantly more likely to re-present than males were (OR = 1.5, 95% CI: 1.3-1.7). Compared to age 60-75, the risk of hospital re-presentation was twice as high in all younger age groups (10-19: OR=1.9; 20-29: OR=1.7; 30-39: OR=2.0; 40-49: OR=2.0; 50-59: OR=1.7 [p<0.001 in all age groups]). Nearly half of the patients (44.5%) received an auxiliary psychiatric diagnosis at their first hospital presentation. Any psychiatric condition increased the likelihood of re-presentation, with personality disorders carrying the greatest risk (OR=4.3 95% CI: 3.3, 5.6). Patients who received a diagnosis of intentional self-harm at their first hospital presentation were more likely to re-present (OR=1.2 95% CI: 1.1, 1.4) than patients with no information of external cause. Among those who did not receive a diagnosis of intentional self-harm at their first hospital presentation, five percent re-presented with subsequent medicinal poisonings that were diagnosed as intentional self-harm.

Conclusion
Risk of hospital re-presentation due to medicinal poisoning was high. Female gender, younger age, a psychiatric condition and a diagnosis of intentional self-harm were all risk factors for hospital re-presentation.
PS3.15-4
Characteristics of Hospital-treated Intentional Drug Overdose in Ireland: A Comparison of North and South
Griffin, E1; Corcoran, P1; Cassidy, L2; O’Carroll, A2; Bonner, B2
1National Suicide Research Foundation, IRELAND; 2Public Health Agency, Derry, UNITED KINGDOM

Study objectives
This study aimed to compare the profile of intentional drug overdoses (IDO}s) presenting to Emergency Departments (EDs) in the Republic of Ireland and Northern Ireland (Western Trust), over a three-year period. Specifically, we compared the incidence rates of IDOs, the most commonly-used drugs, and the risk of repetition.

Methods and material
In Ireland and Northern Ireland there are two national registries which monitor the incidence of hospital-treated deliberate self harm. Using standardised operating procedures, the registries recorded a total of 52,297 DSH presentations during the period 2007-2010. Of these, 72% (37,739) involved an IDO.

Results
The age-standardised rate of IDOs presenting to hospital in Northern Ireland was 1.8 times that observed in Ireland (279 and 157 per 100,000, respectively). In both countries most IDO patients were female (59%) and 87% were made by persons aged under 50 years. The type of drug involved in IDOs was similar in both countries, most commonly minor tranquillisers and paracetamol-containing drugs. Minor tranquilizers were more prevalent in Ireland than in Northern Ireland (42% vs. 31%), while in Northern Ireland paracetamol-compounds were involved in more cases (14% vs. 9%). The prevalence of minor tranquilizers and antidepressants in IDOs increased with age, whereas paracetamol was most prevalent in IDOs by young people. 17% of the patients represented to hospital with self harm within one year of their IDO. Rate of repetition varied with the type of drug involved in the initial overdose. Anti-epileptic/ barbiturate IDOs had the highest rate of repetition (25%), followed by major and minor tranquillisers (24%, and 21%, respectively). IDOs involving salicylates and their compounds had the lowest rate of repetition (11% and 12% respectively).

Conclusion
Hospital-treated intentional drug overdose is almost twice as common in Northern Ireland than Ireland. Whether this reflects the availability of free hospital care in Northern Ireland requires further study. However in both countries minor tranquilisers are often involved. National campaigns are required to address the availability and misuse of minor tranquilisers, both prescribed and non-prescribed.
PS3.15-5
Risk Factors for Deliberate Self-Harm in Patients Presenting to the Emergency Departments - A Multi-centre Case Control Study from Karachi, Pakistan
Shahid, M1; Iqbal, R2; Khan, MM2; Zaman, M2; Shamsi, U3; Khan, A4; Nakeer, R5; Afzal, B6; Tauseeq, S5; Qadri, A7; Adel, H8; Saleem, S9; Tauseeq, S9
1The Indus Hospital, PAKISTAN; 2Aga Khan University, PAKISTAN; 3Sindh Jinnah Medical University, PAKISTAN; 4Dow University of Health Sciences, PAKISTAN; 5Baqai Medical University, PAKISTAN

Background
Deliberate self harm (DSH) is a major public health problem in Pakistan. However, there is limited information on the risk factors of DSH.

Study objective
To determine the risk factors of DSH in patients presenting to the Emergency Departments (ED) of three tertiary care hospitals of Karachi, Pakistan.

Methods and materials
This was a multicentre matched case control study. A total of 201 cases and 201 matched controls were taken from three hospitals situated in Karachi. All patients 16 years and above presenting to the EDs of the hospitals with DSH attempt were invited to participate in the study. Controls were ED patients with complaints other than DSH. A control was matched with case for hospital, gender and age (± 4 years). Two questionnaires were used to collect information on the risk factors of DSH. Conditional logistic regression (CLR) was used to assess the association of various risk factors with DSH.

Results
Of the 201 DSH patients, 62% were females (male:female ratio 1:1.6). 47.8% of the cases were either engaged or married. Almost 72% of DSH cases live in joint family system and 70% of them have secondary or higher level education. Seventy two percent of the cases do not have their own accommodation. The most common reason of DSH (50.5%) was interpersonal problems. Risk factors of DSH in Karachi include current history of mental disorder OR= 3.6 with CI 95% of (1.79-7.25) and not sharing problems with someone OR= 4.5 with CI 95% of (2.79-7.52).

Conclusions
Early diagnosis and management of mental illness is important for prevention of DSH. Crisis intervention facilities should be established in Karachi that people can access in suicidal crises. EDs can play an important role in secondary prevention of DSH and suicide.

PS3.15-6
The Actual Situation of Suicidal Patients Admitted to the Emergency Unit of Fukuoka University Hospital
Harada, K; Eto, N; Kira, K; Nishimura, R
Fukuoka University, JAPAN

Background
The authors are engaged in treatment of suicidal patients admitted to the emergency unit of Fukuoka University Hospital, which is located in a suburban area of Japan.

Objective
To clarify the characteristics of the suicidal patients conveyed to the emergency and critical care centre after their suicidal actions.
Method
Clinical records were used to identify 382 consecutive suicidal patients from April 2006 through to March 2012. We investigated their age, gender, method of suicide attempt, outcome, and psychiatric diagnosis.

Results
There were 382 suicidal patients, who had attempted suicide and been transported to this center, in this period. Of those 382, 115 attempted suicides were completed whilst in care, whereas 267 survived at the point of discharge.
As to the methods of suicide employed by survived patients, poisoning (including ingestion of drugs and CO poisoning) was the most prevalent (135 patients), and jumping from a high place (55), cutting or piercing instruments (37), and hanging (27).
Psychiatric diagnoses (ICD-10 criteria) of survived patients were 30% of F3, 21% of F4, 16% of F2, and 9% of F6.

Discussion
The 267 suicidal patients employed various methods. We need a system where psychiatrists can consult with emergency medical care staff (especially orthopedists and specialists of 'whole body control'). These suicide attempters had various psychiatric diagnosis. More than 80% of suicide attempters have mental disorders. An intervention system for various psychiatric diagnosis such as F2, F3, F4 and F6 is needed.

Conclusions
It is said that the history of a previous suicide attempt is one of the most important risk factors of completed suicide. Intervention of suicide attempters is important for suicide prevention.
We should build up the system for suicide prevention in which psychiatrists and the emergency medical-care system can cooperate and treat suicide attempters effectively.
We need a system to deal with various psychiatric diagnosis (F2, F3, F4, F6) and various physical problems by consultation between psychiatrists and emergency medical care staff.

16:30 - 18:00
PS3.16 GENDER ASPECTS OF SUICIDAL BEHAVIOUR

PS3.16-1
The Protective Factors against Suicide among Chinese Rural Young Men
Zhang, J
State University of New York Buffalo State, UNITED STATES

Study objective
The gender (male to female) ratio of the Chinese suicide rates is different from those found in the rest of the world. None of the other societies with known suicide data has had female suicide rates higher than those for the males. In this study we try to examine some social and cultural variables in rural Chinese youths in order to identify the factors that account for the relatively low rate for men and relatively high rate for women.
Methods and material
In rural China, 392 suicides aged 14-35 years consecutively sampled from 16 counties of three provinces were studied with 416 community living controls of the same age range and from the same locations. Case-control psychological autopsy method was used for the data collection.

Results
It is found that believing in Confucianism and being married are both protecting the rural young men from suicide, while the two same variables are either risk or non-protecting factors for the rural young women’s suicide.

Conclusion
Social structure and culture play an important role determining a society’s suicide rates as well as the gender ratios. Thus, suicide prevention may need to include culture specific measures.

PS3.16-2
Gender Differences in a Dialogue-Based Suicide Intervention Treatment at Pieta House and the Consequences for Therapeutic Treatment Models
Surgenor, P
Pieta House, IRELAND

Study objectives
The presence of gender differences in help-seeking behaviour, communication strategies, and number of deaths by suicide is well established. Given that the therapeutic models used by many institutions such as Pieta House (an Irish suicide intervention charity) are based on the principles of Dialectical Behaviour Therapy, this calls into question the potential effectiveness for such models for male clients.
This research aims to establish the short, medium, and longer term impact of dialogue-based intervention strategies for male and female clients, and explore the consequences for the therapeutic models used in intervention programmes.

Methods and material
All clients over the age of 18 who attend Pieta House between July 2012 and May 2013 are invited to participate in the research. If they consent they complete a short standardised questionnaire (between 20 and 28 items assessing self-esteem, depression, and suicidal ideation) before any treatment begins. Within a month of completing their treatment to the satisfaction of their therapist they are contacted via telephone by independent psychologists who administer the same questions. This process is repeated at 3 months and again at 6 months after completion.

Results and conclusions
Analysis of data obtained at each stage will provide insight into the extent to which male and female clients can benefit from the same dialogue-based therapeutic treatment model. Potential causes of any differences will be explored and the impact on options for treatment discussed.
The Role of Gender in the Process of Bereavement after Suicide of Someone Close
Ozbic, P; Grad, O
University Psychiatric Hospital, Ljubljana, SLOVENIA

Objective
Gender differences of bereaved after suicide have been studied on cognitive, emotional, behavioural, social and physical levels. The objective of the study was to find out how the form of attachment and the process of bereavement are connected, which coping strategies were used by the bereaved and what kind of help the participants recognize or use.

Method
The quantitative-qualitative research included bereaved individuals (N=14, 7 men, 7 women), adults who lost a close family member (parent, spouse, child) by suicide. The participants were included in the study between one and two years after the suicide occurred. The qualitative method included the guided interview with projective techniques genogram, lifelong line and picture test of attachment. Participants filled out the demographic questionnaire and a combined questionnaire about the death of a close family member, Prolonged Grief Disorder (PG-13), Attachment styles test of a four-category model (RQ) and the Cope Inventory (COPE). The quantitative part has been used as the additional information and control of the qualitative methodology.

Results
Women express more sadness, while men show more anger, which is a result of the stereotyped social roles. The other major differences in gender are that women use conversation with their close social circle, something they used to do even before suicide, while men process their loss on their own with help of work and other activities. The first reaction after the event is to take care of the family, which others also expect from them. At the same time they are expected to mourn and show sadness and distress, but still offer security to the others which is a double bind situation for men. The findings show that there is a lot of unawareness of differences in gender related reactions, which can lead to difficulties in the family. The bereaved do not feel understood and accepted, especially if these feelings are not spoken about. The data show that the securely attached participants (regardless of gender) go through the process of bereavement more successfully and with less difficulties.

Conclusion
The study showed similarities and differences in the gender specific dynamics of bereavement, which can lead to some suggestions of the necessary help for the bereaved.

PS3.16-4
‘Many Young Men of Twenty Said Goodbye’:
Ageing Towards 21 as a Risk Factor for Youth Suicide in UK and Ireland
Malone, K; Quinlivan, L; Grant, T; Kelleher, C
University College Dublin, IRELAND

Aims
Youth and young adult suicide has increasingly appeared on international vital statistics as a rising trend of concern in age-specific mortality over the past 50 years. The reporting of suicide deaths in 5-year age bands, which has been the international convention to date, may mask a
greater understanding of year-on-year factors that may accelerate or ameliorate the emergence of suicidal thoughts, acts and fatal consequences. The study objective was to identify any year-on-year period of increased risk for youth and young adult suicide in the UK and Ireland.

Methods
Collation and examination of international epidemiological datasets on suicide (aged 18-35) for the UK and Ireland 2000-2006 (N = 11 964). Outcome measures included the age distribution of suicide mortality in international datasets from the UK and Ireland, 2000-2006.

Results
An accelerated pattern of risk up to the age of 20 for the UK and Ireland which levels off moderately thereafter was uncovered, thus identifying a heretofore unreported age-related epidemiological transition for suicide.

Conclusions
The current reporting of suicide in 5-year age bands may conceal age-related periods of risk for suicide. This may have implications for suicide prevention programmes for young adults under age 21.

PS3.16-5
Looking Good and Feeling Better: Are Australian Women’s Perceptions of Models Linked to their Self-destructive Behaviours?
McKay, K
CRN Mental Health and Well-Being in Rural and Regional Communities, AUSTRALIA

Study objectives
Many studies have examined potential links between the thin beauty ideal espoused in media and feelings of body dissatisfaction experienced by women after viewing such images. However, little research has been done on whether suicidal women compare themselves to images of models differently to non-suicidal women. Part of a broader PhD study completed at the Australian Institute for Suicide Research and Prevention (AISRAP), this research examined ideas of absorption and interaction with the thin beauty ideal, as well as the experiences of body dissatisfaction and body hatred.

Methods and material
In this exploratory study, 62 Australian women responded to a questionnaire regarding their feelings on beauty, sexuality, marriage, self-harm and suicidal behaviours. The beauty section of the questionnaire contained two questions about models which were open to all participants. The first asked: ‘Do you ever compare yourself to models and actresses?’ The second asked: ‘How do you feel when you see photos of models and actresses?’ While the first question simply required the participant to check a box, the second allowed them to write their feelings in their own words. Thematic and narrative analysis was undertaken on the second question.

Results
Women who interacted with, and unpacked, how they felt about images of models were less likely to report suicidal behaviours and more likely to have positive self-perception. These non-suicidal women were more likely to consider themselves to be beautiful or attractive, although not all did; they could articulate and interact with images of models because they did not see ‘beauty’ only in terms of physicality. In contrast, women who reported suicidal behaviours were more likely to negatively perceive themselves in terms of weight, and negatively compare themselves to images of models. They absorbed the thin beauty ideal. These women placed sig-
significant value on being thin, being considered beautiful by others, and looking like media images. Consequently, they did not value their (self-perceived) not-thin and un-beautiful bodies.

**Conclusions**

These results suggest that when a woman does not feel her body is valuable, she is less likely to protect it from harm. Being able to interact with, as opposed to absorb, the thin beauty ideal appeared to protect women from body hatred, even if they did not think they were beautiful. While body dissatisfaction was common among both suicidal and non-suicidal women.

16:30 - 18:00

**PS3.17 WORKSHOP: LOOKING FORWARD TO IMPROVED BEREAVEMENT PROVISION**

**PS3.17-1**

**Collaboration between Survivors and Professionals**

*C. Peters, J*

Survivors of Bereavement by Suicide, UNITED KINGDOM

This presentation will examine the extent of collaboration between Survivors and Professionals and will explore further opportunities for collaboration in research and practice.

**PS3.17-2**

**The Role of Formal and Informal Help-seeking in Developing Resilience for those Bereaved by Suicide**

*M. Mallon, S*

NIAMH, UNITED KINGDOM

Numerous studies have highlighted the specific challenges associated with bereavement by suicide. There has been a particular focus on the increased vulnerability of the bereaved to death by suicide. However, there is little research on the perceptions and reactions of the bereaved to the help that is available to them in the aftermath of a death. This presentation will present data from a mixed methods study on the use of formal and informal support in the aftermath of a death by suicide. We examine the extent to which the bereaved were aware of different sources of support and their experiences of accessing them.
PS3.17-3
"Forever Memorialised": An Evaluation of Participants’ Perspectives of the Lifekeeper Memory Quilt Project
Staines, A¹; Peters, K²
¹Salvation Army Suicide Prevention - Bereavement Support Services, AUSTRALIA; ²University of Western Sydney, AUSTRALIA

Whilst there is some evidence to suggest that family focused suicide postvention programs may be effective in reducing psychological symptoms and mental distress (Szumilas & Kutcher, 2011), research in this area remains limited. Recently, The Salvation Army initiated the Lifekeeper Memory Quilt Project which aimed to support those bereaved by suicide in remembering their loved ones. Further the Quilt project aimed to assist the bereaved to connect with family and other empathetic people in the community, and raise awareness of suicide in the greater population. The aim of this paper is to present the results of a formal evaluation of the Quilt project. The evaluation utilised a mixed method approach and collected both survey and interview data. The response rate from the survey was almost 55% (82/150), with 91% of respondents being female. A total of 30 people shared their experiences of participating in the Quilt project in telephone interviews of between 10 and 67 minutes duration (average 30 minutes). Findings from both data sets reflect overwhelming agreement that the Quilt project was a therapeutic experience, and helpful for assisting participants in their grief journey. The evaluation demonstrates that the Quilt is a positive intervention for those bereaved by suicide that acknowledges, rather than stigmatises, those who have completed suicide.

PS3.17-4
New Guidelines for Creating and Sustaining a Suicide Bereavement Support Program
Koenig, M
UNITED STATES

These new guidelines for creating and sustaining a peer support nonprofit suicide bereavement program, designed by fifty survivor families over a period of thirty years, has recently been published by State of California, USA. This comprehensive program includes how to create an essential structured education/support program supported by the community. Over the past thirty years this program has provided a variety of long-term diverse services to over 8000 survivor families.

PS3.17-5
StandBy - An Effective Response to Suicide Bereavement
Fisher, JM
StandBy Response Service, United Synergies Ltd, AUSTRALIA

This presentation will discuss results of the recent economic evaluation undertaken to estimate the cost effectiveness of the internationally recognized StandBy postvention service as well as additional findings about health and societal consequences of suicide bereavement gained from an in-depth review of StandBy’s client and community data systems. The presentation will also provide details of the unique spatial analysis methodology developed to identify the distribution
of postvention need in Australia. This information has been used to guide the further expansion of StandBy following the provision of additional funding of $6.9 million to the StandBy program as part of the Australian government’s National Suicide Prevention Strategy. In looking forward this presentation will show how a strategic, active postvention response can be effective and build the evidence towards improved bereavement provision in the future.

**PS3.17-6**
**Where are the Gaps in Provision of Support? How do we fill these Gaps?**
Peters, J
Survivors of Bereavement by Suicide, UNITED KINGDOM

This short presentation will be the basis of an extended workshop discussion on what is needed, who is able to provide this support and how bodies such as the IASP can be of value in this provision. Guidelines for peer-support non-profit suicide survivor support programs.

**16:30 - 18:00**
**PS3.18 SUICIDAL BEHAVIOUR IN DIVERSE CONTEXTS (B)**

**PS3.18-1**
**The Neglected Importance of the Affects of Suicide and Self Harm: A Re-consideration of their Role in Theory and Clinical Practice**
Brophy, J
IAS, IRELAND

Much emphasis has been placed on cognitive processes and schemata in suicidal populations, perhaps at the expense of sufficient consideration or exploration of negative affective states. Cognitive elaborations of suicidal behaviour add value in understanding schematic clusters and sequences found in self injury and suicide but are limited in their power to explain accelerant and motivational factors in final acts. Anguish/desperation, fear, hate and shame/humiliation are four negative affective states which though well known are often poorly researched in empirical studies or theoretical frameworks. Using clinical material and literature review, the paper considers the relevance of these affective states to the cognitive and other behavioural phenomena of suicide and self harm. The paper reviews the thematic validity and occurrence of negative affective states and examines how these might fit and map to cognitive, emotional and behavioural clusters when so classified. This points to a reconsideration of the affects as key clinical targets for intervention and poses questions to clinicians as to current focus and emphasis in prevention and intervention strategies. Cognitive processes and schemata are difficult to address in urgent clinical settings and without consideration of affective disturbance may not be the critical intervention point in this setting. Similarly psychiatric focus on one affective disturbance alone (anguish/desperation) leads to other affective disturbances being overlooked, and even justified as so. A broader inclusion of negative affective states also challenges current psy-
PS3.18-2
Generational Differences in the Expression of Emotions Related to Suicide and Suicide Attempts
Morfin, T; Sanchez Loyo, LM
1ITESO University, MEXICO; 2Guadalajara University, MEXICO

Objective
To present the intergenerational differences in the identification and expression of certain emotions, between parents of adolescents with no suicide attempts and adolescents (between the ages of 13 and 18) with no background of suicidal behaviour and adolescents with a recent suicide attempt, about what an adolescent feels before attempting suicide. Material and methods: Qualitative study, using the technique of free lists with a propositive sample of 40 parents of adolescents with no suicide attempts, 29 adolescents (between the ages of 13 and 18) who have attempted suicide, and 27 adolescents (between the ages of 13 and 18) with no history of suicidal behaviour.

Results
Sadness is the feeling mentioned most often by adolescents who have attempted suicide and by adolescents with no history of suicide attempts (García de Alba et al., 2011; Sánchez Loyo et al., in press) anger and fear are the two other more mentioned feelings. Parents who identified what a suicidal adolescent might feel mentioned: desperation, they feel lonely, no one pays attention to them, they are not loved (Morfin López et. al., unpublished). The difference between the cognitive models of adolescents and parents of adolescents suggests that the latter refuse to acknowledge their children’s negative emotions, due to a culturally constructed constraint regarding the expression of negative emotions in the family (García de Alba et al., 2011). Parents of adolescents emphasize feelings based on supposed loneliness, or lack of love and appreciation. It could be that they find these feelings easier to observe, or they might be recalling or evoking complaints made by their adolescent children: “you don’t pay attention to me,” “nobody loves me,” “you leave me alone.”

We believe that a generational change has arisen regarding the experience and expression of emotions; parents seem to have trouble experiencing certain negative emotions and thus expressing them verbally. Adolescents, on the other hand, seem more capable of experiencing and expressing such negative emotions as sadness, anger and fear. The experience and expression of emotions can be modified from one generation to the next (McCarthy, 1989); there are emotions that appear and disappear in everyday language, including body language, because emotions are stories, accounts of actions and embodied expressions (Belli, 2009).
**PS3.18-3**

Suicide and Other Unnatural Deaths in a National Cohort of People Diagnosed with Diabetes

Webb, R; Lichtenstein, P; Dahlin, M; Kapur, N; Ludvigsson, J; Runeson, B

1University of Manchester, UNITED KINGDOM; 2Karolinska Institutet, SWEDEN

**Study objectives**

Detailed investigations of premature death in diabetes have been focused almost entirely on natural causes. The specific mechanisms that explain higher suicide risk in these patients are largely unknown, and examination of the full range of unnatural causes is needed. We aimed to estimate relative risk for unnatural death in a national cohort of people diagnosed with diabetes, and to find evidence for the likely mechanisms of elevated risk.

**Methods and material**

Using the Swedish Hospital Discharge Register and the National Diabetes Register, between 1st January 1996 and 31st December 2010 we identified a cohort of 419,023 affected individuals. These subjects were matched on age and gender to five unexposed individuals from the general population without a diabetes diagnosis. Cause of death was extracted from a separate register and linked completely to the study cohort. Relative risk was estimated as a risk ratio (RR) via fixed effects Poisson regression.

**Results**

Unnatural deaths were a small minority of all deaths in the diabetes cohort, but risk was elevated versus the general population (RR 2.4, CI 2.3-2.5). Each specific unnatural cause also had higher risk: suicide (RR 3.7, CI 3.3-4.2); accident (RR 2.1, CI 2.0-2.2); homicide (RR 3.5, CI 1.8-6.9); medical or surgical complications (RR 2.6, CI 2.0-3.4). Especially raised risk was seen with poisoning deaths irrespective of coronial verdict. When we examined all poisoning deaths combined, to minimise potential misclassification and to maximise statistical power, we found elevated risk in relation to each main poisoning type: alcohol (RR 3.8, CI 2.6-5.5); psychotropic medication (RR 4.3, CI 3.0-6.1); narcotics & hallucinogens (RR 5.2, CI 2.9-9.2); carbon monoxide & other gases (RR 7.5, CI 3.6-15.6) and unspecified medication (RR 9.2, CI 6.7-12.7).

**Conclusion**

Diabetes patients are at higher risk of dying by suicide and by each of the other main unnatural causes: accident, homicide and medical and surgical complication. The particularly large elevation in risk for fatal poisoning by an unspecified form of medication may be partially due to insulin overdoses. However, our results indicate that multiple types of accidental or deliberate self-poisoning occur far more frequently in this population. Therefore comprehensive and well-coordinated preventive strategies are needed if the large elevation in unnatural mortality risk is to be reduced among people diagnosed with diabetes.

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**PS3.18-4**

The Suicide Closet: Strategies for Suicide Prevention in LGBTI Communities

Taylor, B

National LGBTI Health Alliance, AUSTRALIA

While most lesbian, gay, bisexual, transgender and intersex (LGBTI) people live happy and fulfilling lives, the over-representation of LGBTI people in the depression and anxiety, self-harm and suicide statistics is a matter requiring concerted, multi-faceted and collaborative responses. Despite this over-representation, there have only been a few dedicated suicide prevention pro-
grammes worldwide that target LGBTI communities. Informed by the key determinants that have been shown to have a detrimental impact on LGBTI peoples' mental health and are precipitators of psychological distress and suicidality, the Australian Government has funded a national response as part of the country’s National Suicide Prevention Strategy.

The first national project of its kind, MindOUT! is a three year programme with the aim to improve the mental health and suicide prevention outcomes for LGBTI people. The project has two main objectives:

* Assisting LGBTI organisations to be more responsive to suicide prevention and mental health issues for LGBTI persons and communities.
* Working with mainstream mental health and suicide prevention organisations to assist them to be more responsive to the needs of LGBTI persons and communities.

The workshop will argue that even with such initiatives there is still much to be done by mainstream suicide prevention programmes and that the failure by many programmes to specifically address LGBTI suicide is increasing health disparity by putting LGBTI suicide in the closet.

The workshop will:

1) Present an argument for why suicide prevention strategies and programmes need to have LGBTI as priority populations
2) Provide a theoretical framework and programme logic for the development of LGBTI focused suicide prevention programmes using the LGBTI Mental Health Promotion & Suicide Prevention Framework
3) Showcase examples of effective collaborative partnerships between mainstream suicide prevention programmes with LGBTI communities
4) Outline the key principles, criteria and recommended actions for mainstream suicide prevention programmes to be LGBTI inclusive as prescribed in the Cultural Competency Framework for LGBTI Inclusive Practice
5) Describe key clinical considerations for practitioners working with LGBTI clients experiencing suicidality as outlined in the LGBTI Practice Wisdom Resource for Clinicians

Using some scenarios, workshop participants will have the opportunity in small groups to draw all the learnings of the workshop together.

**PS3.18-5**

**Explaining the Suicide Risk of Sexual Minority Individuals by Contrasting the Minority Stress Model with Suicide Models**

Plöderl, M1; Sellmeier, M2; Fartacek, C1; Pichler, E-M1; Kralovec, K1; Fartacek, R1

1Paracelsus Medical University/Suicide Prevention Research Program, AUSTRIA;
2University of Regensburg, GERMANY

**Background**

Many studies have found elevated levels of suicide ideation and suicide attempts among sexual minority (homosexual and bisexual) individuals as compared to heterosexual individuals. The suicide risk difference has mainly been explained by the minority stress models (MSTM), but the application of established suicidological models and testing their interrelations with the MSTM has been lacking so far.

**Methods**

Therefore, we have contrasted two established models explaining suicide risk, the Interpersonal Psychological Theory (IPT, Joiner, 2005) and the Clinical Model (CM, Mann et al., 1999) with the MSTM (Meyer, 2003) in a Bavarian online-sample of 255 adult sexual minority participants and 183 heterosexual participants.
Results and conclusion
The results suggest that the CM and the IPT model can well predict suicide risk among sexual minorities according to the factors depression, hopelessness, perceived burdensomeness, and failed belongingness. The CM and the IPT were intertwined with the MSTM via internalized homophobia, social support, and early age of coming out. Early coming out seemed to increase suicide risk via violent experiences that enhance the capability for suicide; however, coming out likely changed to a protective factor for suicide ideation via enhanced social support and reduced internalized homophobia. These results give more insight into the development of suicide risk among sexual minority individuals and may be helpful to tailor minority-specific suicide prevention strategies.

PS3.18-6
Suicide Prevention at Schools. “+Contigo”
Santos, JC; Simões, R; Erse, M; Façanha, J; Marques, L
1Coimbra Nursing School, PORTUGAL; 2CSRSI, PORTUGAL; 3CHUC, PORTUGAL; 4ARSC, PORTUGAL

Introduction and aims
According to the National Mental Health Plan, the prevention of suicidal behaviours among adolescents is now one of the priority intervention areas in Portugal. Adolescent depression is a leading cause of morbidity and mortality, associated with difficulties in family relationships and social life, impaired academic performance, and increased risk for substance abuse and suicide. Epidemiological studies show that the prevalence of adolescent depression varies between 3% and 9%, with a cumulative prevalence of 20% by the end of the teenage years. However, despite available depression treatments, only about 25% of depressed youth receive treatment and at least 20% develop recurrent, persistent, and chronic depression.

The purpose of this study was to assess the presence and severity of depressive symptoms, coping and self-concept in a nonclinical population of adolescents. It aims to improve coping and self-concept, detect depression symptomatology, and fight against stigma in order to implement a school-based Suicide Prevention Plan.

Methods
The Project ”+Contigo” was developed by the authors to prevent suicidal behaviours among adolescents. The first step is a screening using the Portuguese version of BDI-II, Self-Concept Scale 2, Coping Scale and WHO-Five Well-Being Index. It was self-administered to 741 adolescents aged between 11 and 18 years from secondary education institutions in the Centre Region of Portugal. Then we had four moments in the classroom to discuss adolescence, mental health, risk behaviours and how to improve well-being, coping skills and self-esteem. The impact of the intervention was assessed one week and six months later.

Results
31.2% of adolescents experience depression and 17.7% of these have moderate to severe depressive symptoms. Girls are more depressed than boys (p<0.001). After the intervention, adolescents reduced depression, and improved coping skills, self-concept and well-being. In the six-month follow-up, the results remained satisfactory, mainly in terms of depression and well-being.

Conclusions
Due to the high prevalence of depression and its strong association with suicidal behaviours, school-based prevention strategies ought to be designed: mental health promotion by fighting
against stigma; promotion of self-esteem and problem-solving skills; health education on depressive symptoms and risk behaviours [for teachers, parents and students]; early detection, referral and adequate treatment.

16:30 - 18:00

**PS3.19 PATIENT SAFETY AND SUICIDE PREVENTION**

**PS3.19-1**

*Can Early Follow-up after Deliberate Self-harm Reduce Repetition? A Prospective Multicenter Study of 325 Patients*

Bilén, K1; Pettersson, H1; Owe-Larsson, B2; Ekdahl, K1; Ottosson, C1; Castrén, M1; Ponzer, S1

1Department of clinical science and education, Södersjukhuset, Karolinska Institutet, SWEDEN; 2Department of clinical neuroscience, Karolinska Institutet, SWEDEN

**Background**

Patients who deliberately harm themselves often repeat their self-destructive actions. The objective of this study was to assess whether a follow-up visit within 10 days to a psychiatric consultant could reduce the frequency of repeated deliberate self-harm (DSH).

**Methods**

A cohort of 325 consecutive DSH patients attending two large emergency departments in Stockholm, Sweden, were included and followed for six months. Any visit to a psychiatric consultant within 10 days was registered as an early follow-up. Repeated DSH episode within six months among the 325 patients was detected via nationwide registers.

**Main outcome measure**

Repeated DSH within six months.

**Results**

At six months follow-up 22 (24%) of 92 patients with an early follow-up had repeated their DSH actions compared to 58 (25%) of 233 patients without an early follow-up [OR 1.06 (95% CI: 0.60–1.85) p-value 0.85]. After adjustment for possible confounders, multivariable analysis showed an OR of 1.22 (95% CI: 0.62–2.38, p-value 0.56).

**Limitations**

Early follow-up was registered as any visit to a psychiatric consultant and no information regarding actions taken at the visit were obtained.

**Conclusion**

After adjusting for other factors associated with repetition there was an indication of early followed-up patients being less inclined to repeat their DSH actions.
PS3.19-2
Assessment of Suicidal Patients by Emergency Psychiatry, Factors Determining Voluntary and Involuntary Admission

de Winter, R1; de Groot, M2
1Parnassia Groep, NETHERLANDS; 2VU Amsterdam, NETHERLANDS

Background
The emergency psychiatry plays an important role in the assessment of suicidal patients. There is a lack of valuable predictors for suicide. Nevertheless, the risk of suicide is sometimes regarded as such serious that admission is carried out.

Objectives
Investigation of characteristics of suicidal behaviour in patients when assessed by emergency psychiatry. Investigation of the proportion of suicidal behaviour and clinical and demographic characteristics of the population with suicidal behaviour. Investigation for predictors of voluntary and involuntary admission.

Methods
Between June 2009 and January 2013, all psychiatric emergency assessments in the third city of the Netherlands were recorded in a database. The data was collected by the emergency psychiatry in The Hague.

Results
For more than 3 years, 16,383 assessments have been analyzed. At least 4168 patients (25.4%) were assessed for suicidal behaviour. At least 1338 patients (31.9% of patients with suicidal behaviour, 8.2% of the total) performed a serious suicide attempt. Patients with suicidal behaviour were significantly younger, more often female, there was more often a mood disorder, adjustment disorder or personality disorder. There were less frequently psychotic features and organic brain disorders. Once admitted, there were less personality disorders and adjustment disorders and more often psychotic features and organic brain disorders, there was no difference in gender. Compulsory admission was differentiated by mood disorders and age.

Conclusions
Assessment of suicidal behaviour occurs frequently during interventions by emergency psychiatry and is confronted with a high risk group of suicidal patients. Patients with suicidal behaviour differ in age, gender and psychopathology. Voluntary and involuntary hospitalization is determined by other factors. Several forecasters influence the policy and acting by emergency psychiatry during assessment of suicidal behaviour.

PS3.19-3
Prevention of Repeated Suicide Attempts - 5 Year Follow-up after Active Outreach Intervention

Thomsen, RR; Hvid, M; Wang, AG
Centre of Suicide Prevention, Copenhagen University Hospital Amager, DENMARK

Study objectives
Persons with a recent suicide attempt are at a considerable increased risk of repeated suicide attempts and completed suicide - especially in the next half year following the attempt. “The Amager project” was a RCT-study that offered ½ year active outreach to people with recent suicide attempts in order to prevent further repeated suicide attempts and completed suicides.
This presentation is a 5-year follow-up to that study, examining the number of persons with/without new suicide attempts and the rate of repeated suicide attempts.

**Methods and material**
Throughout a consecutive period, all suicide attempters within Amager (a district of Copenhagen in Denmark), who visited one of the districts hospital wards or emergency wards were approached and offered to participate in the trial. The age range was from 12+ years. Persons with schizophrenia or major affective disorders were excluded. The intervention group was offered TAU and assertive follow-up, active contact, personal and social advice and advice about further therapy (inspired by the Norwegian “Baerum-model”). The control group was offered TAU (non intervention) and one telephone call after ½ year. Both groups were passively followed and registered for any suicidal acts throughout 5 years after the inclusion.

**Results**
Of a total of 403 persons 200 fulfilled the inclusion criteria. 133 accepted to participate (66,5%) and were randomized to either the intervention group or the control group. Results show a marked and significant difference in the number of suicide attempters in the first 3 years after the intervention started. There are fewer suicide attempters and total suicidal acts in the intervention group compared to the control group. After the third year the differences start to fade. There is no longer any significant difference in the amount of persons with repeated suicidal acts. The difference in total number of suicidal acts is shrinking, although there still is a significant difference in favour of the intervention group. There were too few completed suicides in the groups to get any significant data on this parameter.

**Conclusion**
A half year of active outreach to persons with recent suicide attempts, appears to be a feasible and effective intervention, reducing the number of repeated attempters and total number of suicidal acts. This effect seems to fade 4-5 years after the intervention, which might indicate the need for renewed intervention after 3 years.
PS3.19-4
Systematic Intervention to Prevent Suicide on the Emergency Ward: Pilot Study before RCT
Michaud, L; Andronicos, M; Langer, B; Brovelli, S; Dorogi, Y; Stiefel, F; Bonsack, C
Centre Hospitalier Universitaire Vaudois, SWITZERLAND

Study objectives
Previous suicide attempts are the most important risk factor for committed suicide. People who attempt suicide are thus a high-risk population on which preventive interventions should be considered. A large proportion of people who attempt suicide are treated in an emergency somatic setting. We therefore decided to study the effect of a specific intervention on this population in that setting. The objectives were to improve the identification of suicide attempters, to engage them in an appropriate treatment and to prevent repeated suicide attempts as well as committed suicides.

Methods and materials
We conducted a systematic literature review to identify specific and effective interventions on patients who attempt suicide. Existing procedures in our general hospital and other clinics in the region were also studied in order to identify interventions, which are adapted to our health system. A pilot study was implemented on the emergency somatic ward of our general hospital, which sees approximately 400 to 600 patients who attempted suicide every year. This pilot study will test the intervention and its acceptability by both patients and caregivers. We will then be able to design a Randomized Controlled Trial (RCT) comparing treatment as usual and our intervention.

Results
Literature search identified a large range of preventive interventions on people who attempt suicide. It included minimal and easy to implement interventions (postcards or mail reminders for example), intermediate patient-centered interventions such as the joint crisis plan and more heavy interventions like classical crisis intervention. No “gold standard” intervention was identified. The literature review will be presented, together with the results of the pilot study and the design and content of the RCT. Implications on the practice and the collaboration between psychiatric and somatic emergency caregivers will be discussed.

Conclusions
In order to effectively prevent repeated suicide attempts and committed suicide, intervention techniques should be evidence-based. Nevertheless, strategies have to be adapted to local context and specificity of consultation-liaison work. We intend to design an RCT considering both aspects.

PS3.19-5
Suicide Prevention at Inpatient Psychiatry Units; A National Patient Safety Initiative
Walby, FA1; Brudvik, M2; Ness, E1; Sørensen, R2
1National Centre for Suicide Research and Prevention/University of Oslo, NORWAY;
2Norwegian Knowledge Centre for the Health Services, NORWAY

Study objectives
In health care in general, patient safety has received increased attention over the years. In mental health care, suicide and suicidal behaviour are identified as the most important patients’ safety issues. This is based on the repeated observation that the risk of suicide is highly increased during and after inpatient psychiatric care. Nevertheless, very few prevention interventions have been developed in this high risk period. Patient safety can be defined as “Pro-
tection from unnecessary harm as a result of the performance or lacking performance of the health services”. This means that initiatives should involve measures that reduce known risks to patient safety. In addition it is important to implement continuous processes to monitor and analyse results and identify new areas of risk. The Norwegian Patient Safety Campaign “In safe hands” has, in corporation with a group of experts, developed a bundle of 10 interventions to reduce the risk of suicide in this population. The initiatives are expected to be implemented in all Norwegian healthcare trusts within a nine months campaign period.

**Methods and materials**
The bundle consists of 10 single interventions. All relevant interventions should be given to all patients with suicidal risk, according to a checklist. Compliance with the interventions will frequently be reported on a web based data base “Extranet” for all or the first 20 discharged patients per month. Data from “Extranet” will be used to monitor progress and identify areas for improvement. Data will be analysed using statistical process control (SPC) and control charts.

**Results**
Two pilot studies demonstrate that it is possible to implement the routines in regular psychiatric acute units, and that the number of interventions delivered per patient increases over time. The studies also show reduced variation in services delivered. A national patient safety collaborative involving about 20 hospital trusts has been established. Results from participating hospitals, measured at three time points during the campaign, will be further discussed at the meeting.

**Conclusion**
The implementation of a comprehensive but relatively simple bundle of interventions administered to all patients using a Patient Safety approach, and measured routinely for adherence, improved suicide prevention in inpatient psychiatric units.

**PS3.19-6**
Baran, A
Mental Health Clinic, Nyköping, SWEDEN

**Objective**
According to the Lex Maria, a regulation that came into force on the 1st of February 2006, a health-care provider in Sweden is responsible to report all suicides that patients commit in connection to contact with the health care system (during treatment or within four weeks after the last treatment contact) to the National Board of Health and Welfare. The aim of study was to analyse all the Lex Maria suicides in Södermanland to get knowledge about the circumstances around committed suicides on a local level and to spread this knowledge to persons responsible for the care to increase patient safety and care quality.

**Methods**
The author reviewed patient documentation and Lex Maria decisions of 24 suicide victims in Södermanland with the help of Kilimanjaro Checklist for Suicide prevention. It is a structured checklist with 20 items in four sections: Clinical status, Psychosocial status, Demographic data and Suicidal Status.

**Results**
About 30% of all suicide victims had contact with health services due to various physical problems (pain, rash, chest pain, ear problems, memory problems, difficulty breathing). 25% threat-
ened family or relatives, and denied suicidal ideation to their caregivers. 25% announced during the last contact with the healthcare that they feel good / better. 100% of suicide victims had serious relationship problems in history, current or previous psychiatric contact and experienced no efficacy of medication, side effects or poor compliance. Identified problem: missing structured suicide assessment and relevant information in patient documentation (e.g., protective factors, education level, profession, information about suicide thoughts during last contact with patients).

Conclusions
Given that this pattern is consistent with overall characteristics of suicidal patients that are in contact with health-care providers, alternate approaches to suicide prevention may be needed for those less likely to rapport suicidal ideation during their contact with health care. Structured suicide risk assessment can be used to monitor suicide risk factors in local population in order to increase care quality and to introduce more effective suicide prevention strategies targeted identified risk factors and high risk groups.

16:30 - 18:00
PS3.20 IMPACT OF MEANS RESTRICTION ON SUICIDE RATES

PS3.20-1
Firearms - Means Restriction as Suicide Prevention Intervention in Norway
Nrugham, L; Mehlum, L; My Diep, L
National Centre for Suicide Research and -Prevention, University of Oslo, NORWAY

Aim
To investigate the trends of firearms suicide in Norway for 30 years between 1981 and 2011.

Method
Suicide rates were computed using data from Statistics Norway.

Results
Between 1981 and 2011, the rate of suicide by firearms among males dropped from 6.50(100000) to 2.68 after a peak of 9.59 in 1988. Firearms accounted for 39% of all male suicides in 1988; this proportion had dropped to 17.9% in 2007 - a reduction of 54%. The reduction was most marked among males aged 15-24 years but was also observed among men aged 25-64 years. Hanging as a suicide method revealed steady upward inclines among these two age groups of men and also among females aged 15-24 years during the study period. Females continued to have very low firearm suicide rates throughout the study period.

Discussion and conclusion
Specific suicide prevention measures introduced in the early 90’s on gun safety may have contributed to this consistent decline in the rates of suicide by firearms among young and middle-aged men. Suicide prevention efforts to prevent the use of hanging as a suicide methods in restricted environments such as institutions and hospitals (where the possibility of suicide prevention is likely to give best results) need to be prioritized.
**PS3.20-2**

**Deliberate Self-Poisoning and Availability of Prescribed Drugs Before and After The Episode: A Longitudinal Study**

Gjelsvik, B; Heyerdahl, F; Lunn, D; Hawton, K

1University of Oxford Department of Psychiatry, UNITED KINGDOM; 2Oslo University Hospital, Department of Acute Medicine, NORWAY; 3University of Oxford Department of Statistics, UNITED KINGDOM; 4University of Oxford Department of Psychiatry, Centre for Suicide Research, UNITED KINGDOM

**Study objectives**

The availability of prescribed medication to deliberate self-poisoning (DSP) patients is not known and it is not clear whether patients choose drugs prescribed to them for self-poisoning. Moreover, it is not clear whether access to prescribed medication including the ones used in the episode changes from before to after an episode of DSP, and factors associated with such change. The severely compromised health of many DSP patients increases the likelihood that they have a large medication load, despite their high risk for repeat episodes of DSP. This paper presents findings from two studies, where the aims were to determine 1) prescribed medication availability in DSP patients compared to the general population; 2) whether patients use their prescribed medication in their DSP episodes; 3) changes in prescribed medication availability in DSP patients before and after an episode of DSP.

**Methods and material**

The design was longitudinal. We included 171 patients admitted for DSP between January 2006 and March 2007. Data on patients’ prescriptions prior to admission were retrieved from The Norwegian Prescription Database. The outcome measures were type of drugs ingested in the episode and differences in medication load in the year following compared to the year prior to the episode.

**Results**

DSP patients had much greater prescribed medication load compared to the general population, with an average of 30 prescriptions collected in the year prior to DSP. In total, 77.2% ingested drugs that they had collected, whereas 25% used drugs collected the week prior to admission. A substantial post-episodic increase in total medication load was found for both psychotropic and non-psychotropic medication load, apart from antidepressant medication load which remained stable. Medication load increased with age across all medication groups irrespective of time period and gender.

**Conclusion**

DSP patients are prescribed an excessive amount of medication compared to the general public and the majority of DSP patients use medication prescribed to them in their episodes. A post episode increase in prescribed medication load may indicate that the episode serves as a marker of hitherto unrecognised health problems, but can also reflect an insufficiently comprehensive follow-up of these patients. Close monitoring of medication load for these patients are clearly warranted. The dilemma of restricting access without compromising medical will be discussed.
**PS3.20-3**  
*Patterns of Suicide and Other Trespassing Fatalities on State-Owned Railways in Greater Stockholm; Implications for Prevention*  
Rådbo, H; Andersson, R  
Karlstad University, SWEDEN

**Background**  
Each year, approximately 80-100 people are killed on state-owned railways due to train-person collisions in Sweden. Underlying causes are suicide and accidents; suicide constituting a vast majority. Earlier Swedish studies at a national level revealed a relation between population density and incident frequency, however, with places of occurrence often located to the outskirts of cities some distance away from station areas where victims can await approaching trains in seclusion.

**Study objectives**  
The aim of this study was to investigate whether this national pattern also applies to larger urban areas such as greater Stockholm, and to discuss preventative implications based on these observations.

**Methods and material**  
All registered incidents (N = 41) where people were hit or run-over by trains with a fatal outcome over the four-year period 2005-2008 were investigated.

**Results and conclusion**  
Results deviating from the national pattern include that most incidents occur at station areas, and that most victims enter the tracks from platforms. Passing express trains appear to be overrepresented, compared to commuter trains. Due to a low number of cases, our observations must be interpreted with caution. However, they imply that preventative measures in this type of area should focus on platform safety foremost, especially protection against rapid trains passing by station areas.

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**PS3.20-4**  
*The Impact of Alcohol Prohibition in a Remote Aboriginal Community in Canada*  
Jong, M  
Memorial University, CANADA

**Study objectives**  
Determine if the prohibition of alcohol in a remote Aboriginal community has any impact on the incidence of visits for suicidality in the clinic.

**Methods and material**  
We conducted a retrospective medical chart review for all individuals aged 14 years or older in two similar Aboriginal communities in Labrador, for 2006 to 2009. One of the communities legislated the prohibition alcohol in 2007. The outcome variable was suicide attempt; other information collected included community of residence, sex, age, marital status, psychiatric diagnosis, history of alcohol abuse, alcohol use at time of attempt, history of substance abuse, substance use at time of attempt, and method of suicide attempt. We also conducted a Poisson regression to examine the possible impact of the alcohol ban in the community.
RESULTS
Suicide attempts rates are high in the two communities during the study period, with age-standardized incidences of 1095.5 per 100,000 in the community with alcohol prohibition and 1011.9 per 100,000 in the community with no prohibition. Alcohol prohibition had a brief impact on suicide attempts reducing it to 1/3rd during the first year of the ban but returned to the same high rate the year after. There was no alcohol related suicide attempts during first year of the prohibition. There was illegal importation of alcohol the year after the ban. The rate of suicide attempts did not change in the community without alcohol ban.

CONCLUSION
Legislation to prohibit alcohol in a remote community was associated with temporary reduction in suicidality seen in the clinics. Maintaining illegal importation of alcohol into remote communities is a challenge.

PS3.20-5
Suicide by Firearms Decrease 25% after Gun Control Law in Fortaleza, The 5th Biggest Brazilian City
Souza, F; Medeiros, SCG; Sousa, NRP; Almeida, AC; Aquino Neto, JM; Silva, VHD; Pinheiro, HA; Souza, TP
Universidade Federal do Ceará, BRAZIL

OBJECTIVES
To analyze suicide cases by firearms in the city of Fortaleza before and after the Gun Control Law in Brazil.

METHOD
In December 22 of 2003, Brazil implemented the Federal Law no 10.826, that limits the access to firearms to brazilian civilians. In order to measure the impact of this law in suicide rates by firearms, this study was performed in Fortaleza, the 5th biggest Brazilian city. Fortaleza is the capital of the State of Ceará, and it has around 2.5 million people. The Forensic Institute of Ceará (PEFOCE) registers all violent deaths, including suicide cases, and its database was used as source for information. Two periods were compared, 4 years before and 4 years after the implementation of the law. The periods were: 2000-2003 and 2004-2007. Chi-square tests were performed to measure the statistical significance.

RESULTS
Of the 1561 cases of suicide between 2000 and 2007, 9.7% (n=151) were by firearms, being the third most used method, the first one was hanging (48%; n=750), followed by poisoning (26.5%; n=414). From 2000 to 2003, there were 670 cases of suicide, where 15.7% (n=84) were by fire arms. Between 2004 and 2007, there were 891 cases, 7.5% (n=67) were by fire arms. There was no significant difference in terms of gender between the two periods. In the period 2000 to 2003, 95.2% (n=80) were by males, and, in 2004-2007, 91% (n=61) were committed by males. About civil status, between 2000-2003, 61.2% (n=49) were single men, 33.8% (n=27) were married, 2.5% (n=2) were divorced and 2.5% (n=2) were widower. Between 2004-2007, 71.6% (n=48) were single men, 22.4% (n=15) were married, 3% (n=2) were divorced and 3% (n=2) were widow (X²=10.026; p=0.012).

CONCLUSION
Although there was an increase of 33% in absolute number of suicide cases in 2004-2007. The firearm method showed a significant reduction, the decrease was 25% (n=17). The measure of 21 suicides in a year per fire arms was reduced to 16.75 cases a year.
PS3.20-6
Train Suicide in The Netherlands: The Impact of Railway Traffic Intensity and National Suicide Mortality
Van Houwelingen, CAJ1; Beersma, DGM2; Kerkhof, A3; Hoogcarspel, B4
1Integrated Mental Health Services Eindhoven (GGzE), NETHERLANDS; 2Rijksuniversiteit Groningen, Research Unit of Chronobiology, NETHERLANDS; 3Vrije Universiteit Amsterdam, Department of Clinical Psychology, EMGO+ Institute, NETHERLANDS; 4Program suicide prevention, ProRail railway infrastructure manager, NETHERLANDS

Objective
In the 19th century Durkheim [1897] noted that “the more the land is covered with railroads the more general railway suicide becomes”. Recently it has been found that train traffic intensity is a critical factor. This study explores the predictive power of train traffic intensity and national suicide mortality.

Method and material
Regression models with general suicide rates, train traffic intensity and combinations of these variables as regressors with train suicide rates as the dependent variable were compared over the period 1950-2007. Data were obtained from the Netherlands Railways, ProRail and Statistics Netherlands.

Results
A single regression model with the product of train traffic intensity and general suicide rates was found to perform best for the whole period and three sub-periods, for men and women.

Conclusion
Train suicide frequency was found to be proportional to national suicide figures and train availability. As a next step, this model is tested for the years 2008-2012, a period characterized by a rise in general suicide figures, increased train traffic intensity and substantial investments in preventive measures by railway infrastructure manager ProRail. The predicted and observed train suicide frequencies of this period will be presented at this congress.

16:30 - 18:00
PS3.21 DEVELOPING NATIONAL SUICIDE PREVENTION STRATEGIES (B)

PS3.21-1
Australia’s Suicide Call Back Service: Delivering Professional Telephone and Online Counselling Services to the Nation
Miller, A; Rosenthal, S; Thomson, G
On the Line, AUSTRALIA

Australia’s Suicide Call Back Service provides professional telephone and online counselling, debriefing, support and information to people at risk of suicide, carers, individuals who have been bereaved by suicide, and health professionals across the nation. The Suicide Call Back Service offers a suite of vital services, including: a 24/7 telephone counselling service; ongoing
programs of telephone and online counselling offering up to six weekly, one-hour sessions and also synchronous text-based counselling for people at risk, carers and bereaved individuals. The Suicide Call Back Service is funded by the Australian Government Department of Health and Ageing and is operated by On the Line, Australia’s leading provider of professional remote counselling services. On the Line is also the only Australian mental health organisation that is both a member of the IASP and also accredited with the American Association of Suicidology. During this presentation, On the Line’s Chief Executive Officer, Ms Alyson Miller, will describe the Suicide Call Back Service and its role within the national suicide prevention program. Ms Miller will describe the Suicide Call Back Service’s innovative suite of services and how they operate in synergy with healthcare providers on the ground nationally. Additionally, this presentation will focus on the components of the Suicide Call Back Service that have been instrumental in its success, and will culminate in the provision of recommendations as regards how this innovative service may be replicated internationally. This presentation will be of particular interest to those conference attendees who are CEO’s, government representatives, and others who are seeking to provide multimodal remote counselling services in synergy with services on the ground to reduce the toll of suicide.

**PS3.21-2**

*Preventing Suicide in a Developing Society*

Schlebusch, L  
University of KwaZulu Natal/St Joseph’s, Life Entabeni Hospital, SOUTH AFRICA

**Study objectives**
Suicidal behaviour is an important public health problem in Africa. The primary objectives of this research was to identify specific risk factors and priorities for prevention strategies in order to reduce suicidal behaviour with special reference to South Africa.

**Methods and materials**
Underpinned by research undertaken locally, a comprehensive multi-sectoral approach was used that involved both health care and non-health care sectors and action at various levels within an interdisciplinary context.

**Results**
South African suicide rates range from 11.5 per 100 000 to as high as 25 per 100 000 of the population, depending on sampling procedures. About 11% of all non-natural deaths are suicide related while 9.5% of non-natural deaths in young people are due to suicide. The approximate fatal to non-fatal suicidal behaviour rate is 1:20. Risk factors are multifactorial and multidimensional, but the particularly important roles of socio-economic influences, HIV/AIDS, neuropsychological correlates, dietary insufficiency, social fragmentation/violence and acute/chronic stress were explored. In this regard strategies for intervention at the individual/family, societal and community levels are discussed, which could have relevance for developing societies.

**Conclusion**
Suicide prevention efforts need to take cognisance of the numerous challenges that a developmental society in transition presents.
PS3.21-3
Australia’s ATAPS Suicide Support Line: Enhancing Continuity of Care through Strong Alliance between Face-to-Face and Remote Counselling Services
Thomson, G; Miller, A; Rosenthal, S
On the Line, AUSTRALIA

Australia’s Access To Allied Psychological Services (ATAPS) Suicide Support Line is a free, professional, specialized, 24/7 telephone counselling service, which is designed to support patients at risk of suicide and self-harm when their face-to-face ATAPS mental healthcare practitioner is unavailable. This innovative service operates nationally in close collaboration with general practitioners, mental health professionals and allied health professionals, and aims to create an unfailing system of care for patients at-risk of suicide or self-harm.

The ATAPS Suicide Support Line is funded by the Australian Government Department of Health and Ageing and is operated by On the Line, Australia’s leading provider of remote professional counselling services. On the Line is also the only Australian mental health organisation that is both a member of the IASP and also accredited with the American Association of Suicidology. During this presentation, On the Line’s Executive General Manager of Clinical Services, Mr Garry Thomson, will describe the broader national ATAPS Suicide Prevention Program, the ATAPS Suicide Support Line, and provide high-level commentary as regards how its revolutionary marriage of remote and face-to-face healthcare has profoundly enhanced the system of support for people at risk of suicide across Australia. In doing so, particular focus will be dedicated to the constituent elements of the ATAPS Suicide Support Line that have been identified as key drivers of the program’s success nationally. This presentation will conclude with recommendations for replication of this unique program.

This presentation will be of particular interest to those conference attendees who are CEO’s, government representatives, and others who are seeking to work in collaboration with multidisciplinary stakeholders in order to provide unfailing systems of care for people at risk of suicide.

PS3.21-4
Scenario of Suicide and its Preventive Strategies in Bangladesh
Uddin, MMJ; Ahmed, HU; Khan, NM; Hamid, MA; Alam, MF; Rabbani, MG
National Institute of Mental Health, BANGLADESH

Background
Suicide is a major public health problem globally as well as developing countries like Bangladesh. Bangladesh is a south Asian country with 167 million population. Among them about 16% of adults and about 18% children have mental illness. Mental disorders have strong association with suicide along with other risk factors.

Methods
Searches have been made to collect information on suicide in Bangladesh from available journals, literature, media reports, hospitals records, scientific documents and focus group discussion on selected population.

Results
The average rate of suicide in Bangladesh has been reported to be 8-10/100000 population/year. Most of the suicide victims were female (61%-73%), ages below 40 years (74%-82%). In most countries of the world male outnumber female in suicide and elderly male are the main
victims. Majority of the female suicide victims in Bangladesh were younger than male victims. About 16%-47% of suicide victim had previous history of attempted suicide, about 24% had personal problem and 37%-59% had family problem. Among suicide victims about 58% committed suicide with poisoning (agrochemicals), about 40% with hanging and rest of them were fire setting own body, gunshot, cut throat and jumping from height.

**Conclusion**

Early identification of modifiable risk factors and early detection and management of psychiatric disorders, enhancing family bonding, special emphasis on vulnerable age group, empowerment of woman, reducing available means of suicide, awareness program among population are among the essential strategies to prevent suicide in Bangladesh. Broad base nationwide survey for valid data on suicide is essential for proper planning in this issue.

16:30 - 18:00

**PS3.22 Suicidal Behaviour and Prevention in the Work Place**

**PS3.22-1**

*MATES in Construction - Industry Based Workplace Suicide Prevention in the Australian Building and Construction Industry*

Gullestrup, J

MATES in Construction Ltd, AUSTRALIA

A study conducted by the Australian Institute of Suicide Research and Prevention found the Commercial Building and Construction industry to have significantly elevated suicide rates compared with the average Australian male population with young workers being of particular risk. The industry’s redundancy trust developed a response to the AISRAP study, namely the MATES in Construction program a unique and effective way to implement the LivingWorks model. It works on the very simple idea of “MATES helping MATES.” The industry is highly competitive and segmented and any program has to incorporate the whole industry while being flexible enough accommodates individual workplaces or sites. The unique nature of the MATES in Construction program lies in it being INDUSTRY BASED but WORKPLACE FOCUSED.

On MATES in Construction sites all workers participate in a 1 hour General Awareness Training session. A minimum of 1 in 20 workers are trained as “Connectors” (safeTALK trained gate-keepers) while each site have access to an ASIST Worker able to do a safe-plan and first response care.

A site that has achieved a set standard becomes a “MIC Accredited” site. MIC Accreditation allows the site to display MATES in Construction symbols on site and site specific material. This symbol is becoming a sign of a caring employer within the industry.

Workers in the Australian construction industry are highly itinerant and hence take the benefits learnt through the program with them from site to site. The program operates in a structure separate from the employers and site manager and thus the program spreads organically.

Evaluation of the program has noted the high social validity of the program within the industry. Workers felt empowered to be part of preventing suicide within their industry.
A study of 11 MATES in Construction accredited sites have found that 91% of workers were aware of MATES in Construction and understood key messages from the program. It also showed that they were more likely to use the program than “external” agencies as they saw it as part of their industry. Workers felt that the program made a real difference on site. The program was awarded Suicide Prevention Australia’s LIFE Award in 2009, 2010, 2011 and 2012. In 2012 the program also received the National Safety Council of Australia pinnacle Award for “best Workplace Health and Safety initiative”. This presentation will focus on the program itself rather than strategy (part of symposium)

**PS3.22-2**

**The Impact of Suicidal Behaviour on Prison Staff:**

**Examining Resilience, Working Relationships, Attitudes to Suicide and Emotional Labour**

Slade, K  
Nottingham Trent University, UNITED KINGDOM

**Study objectives**

The study aims to consider the impact of experience of suicide and suicidal behaviour on prison staff and consider indicators of the robustness of staff working with suicidal clients. Specifically, the study considers if experiencing suicidal behaviour and/or completed suicide affects the attitudes to suicide, level of emotional labour, level of resilience and the quality of the working relationships between staff and suicidal clients.

**Methods and materials**

A cohort design was utilised with 150 prison officers and governors completing the study and compared with 150 members of the general population. The range of client groups for the prison staff included male and female prisoners and both young offenders and adults. The study was anonymous and conducted online with full consent and debrief to all participants. The following measures were employed: Attitudes to suicide scale (ATTS), Resilience Scale- 25, Emotional Labour Scale, Agnew Relationship Measure (ARM) measuring working relationships and Demographic information (age, ethnic group, training received, sex, professional background).

**Results**

Early results indicate that overall, prison staff may be somewhat less resilient than the general population control. However, amongst prison staff, there are differences in the resilience levels depending on their exposure to the suicidal behaviour. Results indicate that greater exposure (either frequency or seriousness of behaviour) has a negative impact on resilience. The results however also indicate that experience has positive effects as these staff have a greater willingness to show their true feelings at work along with holding back more intense feelings, and better quality working relationships with suicidal prisoners.

**Conclusion**

The results of the study can be used to enable managers to identify staff for key roles as mentors or with client groups; provide appropriate training and support to staff to encourage good working relationships with clients who may be at risk of suicide; and support the continued wellbeing of prison staff.
Returning to Work Following a Suicide Attempt: An Exploratory Study
Roy, F
Center for Research and Intervention on Suicide and Euthanasia - University of Quebec in Montreal, CANADA

Recovering from a suicide attempt can be hard and overwhelming, with the risk of reattempt markedly high during the first months after discharge. Repetition has also been found to be a strong predictor for completed suicide. Within the first 12 months after an episode of deliberate self-harm, the risk of suicide increases 20 to 100 times in comparison to the general population’s risk. Returning back to work can be a critical step in the recovery process following a suicide attempt. Work not only provides the financial resources needed for material well-being but also fosters opportunities to develop and use skills, establishes points of social contact and support, and solidifies our sense of identity and personal achievement. However, little is known about the conditions supporting successful work reintegration following a suicide attempt. Return to work can be difficult, particularly when the suicide attempt took place onsite at the workplace or if colleagues were involved in the suicidal crisis. Employees may be concerned about returning to work, fearing what their colleagues will think of them and how they will react. Managers and colleagues may avoid contact with the person, not knowing what to say and fearing to cause more damages. The purpose of this study is to gain a better understanding of the factors involved in the reintegration process among a group of employees absent from work following a suicide attempt. A total of 24 people aged between 22 and 60 years old and working in different organisations were interviewed. Participants were recruited after they were treated for a suicide attempt in general hospital emergency rooms in Montreal and through Suicide Prevention Centers in the Greater Montreal area. A qualitative approach was used, grounded theory, to analyse the return-to-work process. Semi-structured interviews averaging 90 minutes in length were recorded then transcribed word by word. Analysis of the data enabled the reconstruction of an individual’s experience at various stages of the work reintegration process, their interpretation of these events, and their responses to the difficulties they met. This presentation will explore the different trajectories of workers returning back to work following a suicide attempt. Finally, a model will be proposed to help in understand the reintegration process and recommendations for practice will be discussed.

Work Stress Assessment in French Police Force
Poissonnet, CM; Bonoli, F
Hopital Des Gardiens De La Paix - Prefecture De Police, FRANCE

Study objectives
Urban police officers are generally at high risk of workplace stress and violence. This report presents the findings of a large questionnaire survey conducted on Parisian police workers from 2008 to 2013. Two campaigns were organized in 2008-2009 and in 2012-2013. The aim of our research study was to identify level of occupational stress associated with job satisfaction within the police Force through this five year period.
Methods and material
An anonymous self-questionnaire was distributed to all police employees during their occupational medical visit in the fall and winter seasons. Items included age, gender, height and weight, job type, tobacco and medications use. Emotional status was evaluated by the HAD and the Cohen Perceived Stress scales. Job satisfaction was measured by the Minnesota Satisfaction Questionnaire (MSQ) scale. Intra-group violence among police workers was assessed with a validated 12-item scale relating to physical and mental aggression from their counterparts. Data were collected and registered in a Microsoft Excel file. Comparison tests were made using the chi-square test.

Results
A total of 3159 questionnaires (2131 in 2008-2009 and 1028 in 2012-2013) were collected. The participation rate (98%) was similar in both campaigns. Men accounted for the largest proportion with 85% in the first and 73.2% in the second campaign. Average age ranged between 25-34 and 35-54 yrs. Two thirds of the police workers were satisfied or very satisfied with their job in the first campaign. This percentage was significantly reduced in the second campaign. Compared with the 2008-2009 groups, the 2012-2013 questionnaires showed significant increases of anxiety and depression, and of medications use. This tendency was more marked in women than in men. Compared with the first campaign, there was a substantial increase in smoking among women after four years, whereas tobacco use was reduced in men.

Conclusion
These findings suggest that occupational stress has increased significantly in the Parisian police Force over the past five years. During this time the percentage of satisfied and very satisfied agents at work dropped from 60% to 50%. Among several factors as job exposure to death and injury and a negative police image, risk of suicide could be triggered by the availability of firearms in French police. Preventive measures should include psychological and managerial supports, and management of post-traumatic stress.

PS3.22-5
Trajectories of Post-traumatic Stress Disorder (PTSD) Predict Suicidal Ideation Three Years after Deployment to a Combat Zone
Madsen, T1; Karstoft, K-I2; Andersen, SB1; Bertelsen, M1
1Research and Knowledge Center, The Danish Veteran Center, DENMARK; 2National Center of Psychotraumatology, University of Southern Denmark, DENMARK

Suicidality in veterans is a problem of great concern. Veterans with PTSD are more likely to have suicidal ideations (Sher et. al., 2012). Recent longitudinal studies have revealed distinct heterogeneous trajectories of PTSD-symptoms following combat and predictors of these (Dickstein et. al., 2010; Bonanno et. al., 2012). However, it remains unclear whether deployed soldiers with certain patterns of PTSD-symptom developments are in higher risk of suicidal thoughts after deployment. If PTSD trajectories predict suicidal ideations then the accumulative knowledge on what characterizes veterans falling into different PTSD trajectories enables early identification of suicidal high-risk veterans. This study included data on 561 Danish soldiers who were assessed at six time points before, during and after deployment to Afghanistan in 2009. Three years after deployment participants reported on suicidal ideations. Trajectories of PTSD symptoms were identified by latent class growth analyses. Adjusted multivariable logistic regression analyses were applied to examine whether deployed soldiers with certain PTSD-symptom tra-
Trajectories were more likely to report suicidal thoughts. The findings revealed that trajectories with high PTSD-symptom-level at the three-year measurement were significantly associated with suicidal ideations three years after deployment. Early identification of veterans in higher risk of developing suicidal ideations after deployment has clinical importance.

**PS3.22-6**

**Current Efforts of the NATO Research Task Group on Military Suicide**

Sisask, M  
Estonian-Swedish Mental Health and Suicidology Institute (ERSI); Tallinn University, ESTONIA

To date, there has been no systematic effort across North Atlantic Treaty Organization (NATO) member and non-member (e.g., Partnership for Peace) nations to track suicide-related behaviours among military personnel, to provide a forum for the dissemination of nation specific military suicide as well as prevention information, and to identify best practices for suicide prevention targeted at military personnel during and after the time of their service. Given the public health problem of suicide among the Armed Forces, the work of a NATO exploratory team resulted in the formation of a Human Factors and Medicine (HFM), Research Task Group (RTG) on military suicide, in 2010. A total of 17 countries, thus far, have nominated members with expertise in the area of military suicide prevention to serve on this task group. To familiarize the audience with the current efforts of the NATO-HFM-RTG-218 on military suicide, the main objectives of the RTG will be briefly highlighted by the presenter, as consisting of the following: (1) to produce a technical report on military suicide for NATO; (2) to administer a survey to NATO member and non-member nations in order to enhance our understanding of current military suicide prevention efforts, best practices, and potential gaps; (3) to create a platform to organize and make available materials pertaining to military suicide across several countries; (4) to prepare a series of white papers covering key topics on military suicide prevention relevant to NATO leadership and members; and (5) to disseminate the RTG findings at an international scientific and/or military non-NATO professional conference.

**16:30 - 18:00**

**PS3.23 STUDIES OF CONTINUITY OF CARE APPROACHES**

**PS3.23-1**

**Audit of the use of Landline & Mobile Answering & Messaging Machines in Mental Health Services**

Kane, M  
Public Health Agency, UNITED KINGDOM

Health & Social Care in Northern Ireland (NI) had three reported deaths [suicides] where each of the individuals, who were in contact with Mental Health Services prior to their death, attempted
to contact the service, but, were unable to make direct contact and left a message on a telephone answering machine.

Scope of Exercise
Review current practice across Mental Health Services in relation to the use and management of telephone answering services.

Methodology
Questionnaire distributed through Survey Monkey All five Health and Social Care Trusts in NI participated in the survey with 67 surveys returned.

Results
57% of the services which responded to the survey had telephone answering machines associated with their service on landline and mobile phones. All areas use this type of service including Acute, Crisis, Rehabilitation and Continuing support services. 86% of these phone numbers are made available to patients, with 46% given specifically for contact in an emergency. Of the numbers given for contact in an emergency 10% provide an alternative number where there is a guarantee that that number will be answered, with four services providing the Life Line number.

All types of services receive crisis calls from patients or carers, not just acute or Crisis services. No services had a Protocol in place re the management of telephone answering services. The above situation has the potential to present significant risk in terms of patient safety; patients in crisis do leave messages across all services at all times of the day and night. Where a phone line has an answer service, there must be assurance that the patient or carer, who is potentially in a crisis situation, when faced with an answering service, is given clear direction in terms of how to access help immediately if that is what they require.

PS3.23-2
Chain of Care after Suicide Attempt: Feasibility of a Collaboration Model Involving a University Hospital and Community Mental Health Care
Siqveland, J1; Ruud, T1; Schjelderup, G2
1Akershus University Hospital, NORWAY; 2Oslo and Akershus University College of Applied Sciences, NORWAY

Chain of care after suicide attempt may be a useful intervention strategy to prevent completed suicides and further episodes of suicidal behaviour. Chain of care models have previously been developed and tested in many settings internationally. We will in this presentation focus on how the content of the follow up in the community can be monitored and evaluated. We describe a model for chain of care involving a collaboration between the university hospital, out-patient mental health clinics and ambulant mental health care teams. This model is based on the early and correct identification of all cases of suicidal behaviour admitted to the emergency department of the hospital, a careful psycho-social evaluation of all patients before discharge and referral to the correct unit for further follow-up after discharge. All patients are offered ambulant follow up in their home within the first days after discharge from the emergency department. What is new about this project is that members of the ambulant mental health care teams register all the type of services provided in the follow up process (e.g. network meeting with family, help with solving economical difficulties), using a standardized form. This form is an adapted version used in a study of assertive community treatment (ACT) at the hospital. The data from these forms are collected monthly by the primary investigator when the members
meet to a monthly meeting. This meeting is led by a clinical psychologist at an out-patient psychiatric clinic and this meetings serve an important quality improvement function in this chain of care. By using this standardized form the ambulant teams are better able to track their care and resources used, and we are better able to investigate what forms of help are typically given in the ambulant setting and may in a longer perspective be able to find out which kind of help that seems most efficient in preventing new episodes of suicidal behaviour. Challenges to the development of this chain of care, the feasability of the model and preliminary results from the project are presented and discussed.

**PS3.23-3**

**Telephone Management Programme for Patients Discharged from an Emergency Department after a Suicide Attempt in a Spanish Population: 5-year Follow-up**

Cebria, AI; Perez-Sola, I; Cuijpers, P; Kerkhof, A; Parra, I; Escayola, A; García–Parés, G; Oliva, JC; Punti, J; López, D; Valles, V; Pamias, M; Hegerl, U; Perez-Sola, V; Palao, DJ

1Institut Universitari Parc Taulí—Universitat Autonoma de Barcelona, SPAIN; 2Vrije Universiteit Amsterdam, NETHERLANDS; 3VU University of Amsterdam, NETHERLANDS; 4Corporacio Sanitaria i Universitaria Parc Taulí de Sabadell, SPAIN; 5Hospital Clinic Barcelona, SPAIN; 6Consorci Sanitari de Terrassa, SPAIN; 7Universitätsklinikum Leipzig AöR, University of Leipzig, GERMANY; 8Universitat Autonoma de Barcelona, SPAIN

**Objective**

In a previous controlled study, the authors reported on the significant beneficial effects of a telephone intervention program for prevention of repeat suicide attempts by those presenting with suicide attempt over a one-year follow-up period. This study reports on additional 5-year follow-up data.

**Method**

The intervention was carried out on patients discharged from the emergency room (ER) following attempted suicide (Sabadell). It consisted of a systematic, one-year, telephone follow-up program: after 1 week, and thereafter at 1, 3, 6, 9 and 12-month intervals to assess the risk of suicide and encourage adherence to treatment. The population in the control group (Terrassa) received treatment as usual after discharge, without additional telephone management.

**Results**

The effect of reattempt prevention was most marked in the first year, with a decrease from 14% (in both pre-intervention and control groups) to 6% in the intervention group. Over the 60-month follow-up period, there was a non-significant difference between the intervention and control condition groups in the proportion of subjects who had made at least one reattempt.

**Conclusions**

A telephone management program for patients discharged from an ER after attempted suicide would be a useful strategy in delaying further suicide attempts and reducing the rate of reattempts mainly in the first year. However, the results showed that the beneficial effects of the intervention became weaker throughout the five year follow up period. Further studies should explore the effect of booster sessions or maintenance therapy.
PS3.23-4
The Variation of Self-harm Service Delivery in the UK: An Observational Study Examining Hospital Management, Service Provision and Temporal Trends
Steeg, S1; Cooper, J1; Bennnewith, O2; Lowe, M1; Gunnell, D3; House, A3; Kapur, N1
1University of Manchester, UNITED KINGDOM; 2University of Bristol, UNITED KINGDOM; 3University of Leeds, UNITED KINGDOM

Study objectives
We aimed to describe the variability in management of individuals attending hospital with self-harm, measure the quality of service provision and assess changes since an earlier study in 2001.

Methods and material
Data were collected as part of an observational study involving a stratified random sample of 32 hospitals in England, UK. A tailored, one-page data collection form was completed for each hospital presentation involving self-harm. In addition, key mental health and Emergency Department staff were interviewed about specific aspects of service provision for self-harm patients and responses were mapped to a 'service quality scale'. The study collected data on over 6,000 individuals presenting with more than 7,500 episodes of self-harm during a three-month audit period between 2010 and 2011.

Results
Hospitals varied markedly in their management of self-harm presentations. There was a greater than three-fold variation in the proportion of episodes resulting in psychosocial assessment by a mental health specialist and the proportion of episodes admitted to general hospital. The proportion of episodes where a referral for specialist mental health follow up was made varied five-fold by hospital. There was also very wide variation in the proportion of episodes referred to non-statutory services and in those resulting in psychiatric admission. Levels of variability had not reduced since the earlier study. However, scores on the service quality scale had increased by a small degree since 2001.

Conclusions
Overall it appears that services for the hospital management of self-harm remain variable despite national guidelines and policy initiatives.

PS3.23-5
Does Clinical Management Improve Patient Outcomes Following Self-harm?
Results from the Multicentre Study of Self-harm in England
Kapur, N1; Steeg, S1; Webb, R1; Haigh, M1; Bergen, H2; Hawton, K2; Ness, J3; Waters, K4; Cooper, J1
1University of Manchester, UNITED KINGDOM; 2University of Oxford, UNITED KINGDOM; 3Royal Derby Hospital, UNITED KINGDOM; 4Derbyshire Healthcare NHS Foundation Trust, UNITED KINGDOM

Background
Evidence to guide the clinical management of non-fatal suicidal behaviour is relatively sparse, trials have recruited selected samples, and psychological treatments that are suggested in guidelines may not be available in routine practice.
Aim
To examine how the management that patients receive in hospital relates to subsequent outcome.

Methods
We identified episodes of self-harm presenting to three UK centres (Derby, Manchester, Oxford) over a 10 year period (2000 to 2009). We used established data collection systems to investigate the relationship between four aspects of management (psychosocial assessment, medical admission, psychiatric admission, referral for specialist mental health follow up) and repetition of self-harm within 12 months, adjusted for differences in baseline demographic and clinical characteristics.

Results
35,938 individuals presented with self-harm during the study period. In two of the three centres, receiving a psychosocial assessment was associated with a 40% lower risk of repetition, Hazard Ratios (95% CIs): Centre A 0.99 (0.90-1.09); Centre B 0.59 (0.48-0.74); Centre C 0.59 (0.42-0.68). There was little indication that the apparent protective effects were mediated through referral and follow up arrangements. The association between psychosocial assessment and a reduced risk of repetition appeared to be least evident in those from the most deprived areas.

Conclusion
These findings add to the growing body of evidence that thorough assessment is central to the management of self-harm, but further work is needed to elucidate the possible mechanisms and explore the effects in different clinical subgroups. Clinicians should be mindful that even basic interventions, such as comprehensive assessment of suicidal individuals have the potential to have a clinically meaningful impact.

Note
This presentation discusses independent research funded by the National Institute for Health Research (NIHR) under its Policy Research Programme. The views expressed in this presentation are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

PS3.23-6
An Evaluation Study of a Universal, Internet-based Mental Health Enhancement Programme for Adolescents with Parental Involvement in Hong Kong
Lai, SY1; Chan, MKY1; So, WKS1; Wong, PWC2; Law, F; Yip, PSF1
1The Hong Kong Jockey Club Centre for Suicide Research & Prevention, The University of Hong Kong, HONG KONG, CHINA PR; 2Department of Social Work and Social Administration, The University of Hong Kong, HONG KONG, CHINA PR

Internet-based intervention for mental health problems is more common in recent years. Many of them focus on symptoms reduction for specific problems such as anxiety and depression, and target people who are at risk of developing mental disorders. It is important, however, to promote mental health in general population in addition to mental illness prevention for high risk group. The present study aimed at evaluating a universal, Internet-based mental health enhancement programme for adolescents with parental involvement. This programme focused on enhancing psychological wellbeing of participants instead of symptoms reduction, and introduced digital game-based learning in mental health education. An 8-module, 12-week e-learning curriculum was developed based on Cognitive-Behavioural Theory and Positive Psychology. Participants would learn how to identify and refute their negative thoughts, ways to enhance and maintain their self-esteem, how to set goals with hope, effective communication and prob-
lem-solving skills, and other knowledge and skills related to mental health. Participants were Grade 7 and 8 students from 18 secondary schools. They were randomly assigned into 3 groups: student group, student-parent group and waitlist control group. Participants from student group would learn the curriculum alone while participants from student-parent group would learn and interact with their parents in separate user accounts. The e-learning platform for parents would contain more information in each module, especially on the application of skills when interacting with their children. The study examined whether the programme could enhance psychological wellbeing of participants and whether involvement of parents would further enhance the psychological wellbeing of their children. All participants were required to complete a questionnaire at 3 time points (0 week, 6th week, 12th week) to assess their psychological wellbeing and other constructs unique for each e-learning module. Participants from student and student-parent groups would also be invited to complete the questionnaire on the 24th week as follow-up assessment. The programme is expected to complete in summer 2013 and results will be presented after data analysis.

16:30 - 18:00

PS3.24 TRAUMA AND SUICIDAL BEHAVIOUR

PS3.24-1
The Relevance of Shneidman’s Theory of Suicide in Conflict Afflicted Northern Uganda
Kinyanda, E1; Kizza, D2; Hjelmeland, H3; Knizek, BL4; Mugisha, J2
1MRC/UVRI Uganda Research Unit on AIDS, UGANDA; 2Butabika National Psychiatric Referral hospital, Kampala, UGANDA; 3Norwegian University of Science & Technology, NORWAY; 4Faculty of Nursing, Sør-Trøndelag University College, NORWAY

Objectives
This paper examines the usefulness of Shneidman’s theory of suicide in conflict afflicted Northern Uganda.

Methodology
In a qualitative psychological autopsy study 2-4 persons around each of 6 suicides in late adulthood (60-85 years) were interviewed. Themes consistent with Shneidman’s ten commonalities were sought from the transcripts of the study cases.

Findings
The most commonly reported themes consistent with Shneidman’s ten commonalities were ‘unendurable psychological pain’ (6/6), ‘frustrated psychological needs’ (6/6), ‘seeking a solution’ (6/6), ‘cessation of consciousness’ (6/6), ‘hopelessness-helplessness’ (6/6), ‘cognitive constriction’ (6/6), ‘communication of intent’ (6/6), ‘egression’ (6/6) and ‘consistency with life-long coping pattern’ (5/6). Not readily observed in this study was ambivalence (0/6).

Conclusion
In these six cases, the individuals had experienced significant psychological pain and had high suicide intent hence the low ambivalence. Shneidman’s theory seems to provide a useful framework for studying suicide among the elderly in conflict afflicted Northern Uganda.
**PS3.24-2**

**Psychotic Symptoms in Severe Depression - a Qualitative Study about Suicidality**

Fredriksen, KJ; Schoeyen, HK; Johannessen, JO; Walby, FA; Schaufel, MA

1Stavanger University Hospital, Division of Psychiatry, NORWAY; 2National Centre for Suicide Research and Prevention; University of Oslo, NORWAY; 3Haukeland University Hospital, Department of Heart Disease, NORWAY

**Study objectives**

The relationship between psychotic depression and suicidality has not been thoroughly investigated, and the results are diverging. The aim of this study is to explore how severely depressed patients experiencing psychotic symptoms relate them to their subjective suicidality.

**Methods and material**

We present preliminary data from a qualitative study with a purposive sample of approximately ten patients referred for inpatient treatment in a psychiatric unit at a University Hospital in Norway, who fulfil the DSM-IV criteria for a severe depressive episode with psychotic symptoms as part of a unipolar or bipolar disorder. Patients are interviewed shortly before being discharged from the hospital using semi-structured interviews. Analysis is done by systematic text condensation.

**Results**

Preliminary findings include the following main themes: 1) Trapped in a new, insolvable reality of guilt, darkness and stressful conflicts. 2) Hunted by delusions and hallucinations. 3) Governed in actions and choices by these psychotic experiences. 4) Deprived of mental control. The participants reported paramount difficulties interpreting and talking about these experiences when they occurred, but after recovery they managed to identify and communicate them. Even patients who denied suicidal ideation in several suicidal assessments reported suicidal thoughts and preoccupation with death when recovered. Suicide was seen as an escape not mainly from their real problems, but from the psychotic experiences chasing them. Some patients were motivated to die in order to atone for previous actions and “do something right”. Others had a conviction described as “I will die soon anyway” based on people chasing them or by somatic illness, making suicide a way of forestalling this terrifying happening.

**Conclusion**

Suicide risk assessments based on patients' verbal report cannot be trusted in this patient group. Urgent medical treatment of the psychiatric condition and security measures such as constant observation and intensive care in a secured environment like a psychiatric hospital are therefore needed until the patients have improved.

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**PS3.24-3**

**Traumatic Life Events and Suicidal Behavior**

Fjeldsted, R

Psychiatry West, Region Zealand/ Institute of Psychology, University of Copenhagen, DENMARK

The focus of this study is to look at the association between premorbid exposure for complex trauma and suicidal thoughts and behavior. This is done using mixed methods in a 3-staged study: a case study, a comparative case-control study, and a data registry study. The study population in the first two sub studies are patients from an open psychiatric treatment facility, and in the registry study the Danish population as a whole. The case study includes 10 patients with suicidal behavior, and the aim of this study is explor-
ative, using a semi structured interview and a number of assessment tools, focusing on exposure to traumatic life events, and attachment, depression, symptomatology, personality disorder and memory function. The qualitative data analysis program NVivo is used for coding and analyzing interviews.

The comparative case control study includes 25 patients with and 25 patients without suicidal behaviour, matched on age, sex and diagnosis. Patients are tested with CTQ, SLE, SCL-90-R, MCMI-III and MDI. The aim is to investigate, whether there are differences between the two groups related to trauma exposure, and to identify reliable screening instruments for suicide risk. The third sub study also uses a case-control design, and compares a group of persons with suicide behaviour identified in a sample from the national database Statistics Denmark with a randomly selected control group, focusing on registry identifiable trauma exposure (e.g. violence, rape, traffic accidents, loss of relatives). A logistic regression model is used to identify most influential factors.

Preliminary results show, that in the case study, where all patients included has suicidal behaviour, 6 out of 8 answering the CTQ has experienced severe to extreme neglect, abuse or violation in childhood, 7 out of 10 still suffer from a severe depression, all have a diagnosis of personality disorder, and 6 out of 10 are clinically rated to have a permanently elevated suicide risk. The study is a PhD study and is expected to be completed December 2013. Concluding results will be presented on sub study 1, while sub studies 2 and 3 are still ongoing at the time of abstract submission, but expected to be concluded before the conference in September.

**PS3.24-4**

The Relationship between Suicidal Behavior, Exposure to Trauma and Symptoms of Depression and Anxiety among South African University Students

Bantjes, J1; Gowar, T2; Steel, H1; Kagee, A1

1Stellenbosch University, SOUTH AFRICA; 2University of Stellenbosch, SOUTH AFRICA

**Introduction**

Suicidal behaviour is increasingly widespread in South Africa (SA), particularly among individuals between the ages of 15 and 29. Little is known about the correlates of suicidal behaviour in SA (a middle income country). Studies from high income countries suggest that suicidal behaviour is frequently associated with mental illness and in particular with mood disorders, substance abuse and psychosis. The literature suggests that it is less common for suicidal behaviour to be associated with exposure to trauma or symptoms of posttraumatic stress and anxiety.

**Aims**

We investigated the relationship between suicidal behaviour and symptoms of posttraumatic stress disorder, depression and anxiety among 1337 students at a large residential university in South Africa.

**Methods**

Traumatic events were assessed using the Stressful Life Events Scaling Questionnaire and the symptoms of posttraumatic stress (PTSD), depression and anxiety were measured using the PTSD Symptom Scale-Self Report Version (PSS-SR), the Beck Depression Inventory and the Beck Anxiety Inventory respectively. Regression analysis was used to investigate the relationship between suicidal behaviour and symptoms of depression, anxiety and PTSD.

**Results**

Although depression was the most important predictor of suicidal behaviour, PTSD was also a
significant predictor, especially when it occurred with symptoms of either depression or anxiety. Symptoms of anxiety appeared to be the least important predictor of suicidal behaviour unless there is co-morbid PTSD.

**Conclusion**
The study confirms findings in high income countries that suicidal behaviour is associated with depression, but suggests that exposure to trauma and symptoms of PTSD may also be associated with suicidal behaviour. The study also suggests that co-morbid PTSD and depression may infer a greater risk of suicide than depression on its own. These findings are significant given the high rates of trauma in SA. This relationship needs to be explored further as it may have significant implications for the clinical assessment of suicide risk and for public health initiatives that seek to reduce the prevalence of suicide in SA.

**PS3.24-5**
**Traumatic Life-events and Social Support in Adolescence:**
**A National Study of PTSD, Low Self-esteem and Suicidal Behaviour in Young Adults**
Christoffersen, M
SFI - The National centre for Social Research, DENMARK

**Objective**
To test if adolescents who experience child maltreatment or other traumatic life-events during childhood but also experience support from significant others develop resilience.

**Method**
The data are from a retrospective study of 2,980 young adults in a stratified probability sample selected from all children born in 1984. Children with prior child protection services involvement were oversampled. Child maltreatment was based on self-reported questionnaire.

**Results**
Psychological maltreatment, physical abuse and sexual abuse or other traumatic life events are associated with PTSD, low self-esteem and suicidal behaviour among young adults. Social support is a significant partial mediator for the negative outcomes. The study confirms that social support is associated with a reduced risk of low self-esteem, PTSD and suicidal behaviour, while controlling for other risk factors.

**Conclusions**
Further research is needed to test if some of the mentioned outcomes could be reduced by introducing a supportive adult as an intervention on a long-term basis, and we would suggest that future research should consider the effect of such interventions or similar measures.

**PS3.24-6**
**Associations between Eating Disorder Subtype and the Risk of Attempted Suicide**
Portzky, G1; Vervaet, M2; van Heeringen, C1
1Unit for Suicide Research - Ghent University, BELGIUM; 2Department of Psychiatry and Medical Psychology - Ghent University, BELGIUM

**Introduction and aims**
Suicide is a major cause of mortality among patients with eating disorders, especially those with anorexia nervosa (AN). Attempted suicide is also relatively common in patients with AN or buli-
Bulimia nervosa (BN). This study aimed at assessing the prevalence and characteristics of attempted suicide according to eating disorders subtypes.

**Methods**
All patients at the Centre for Eating Disorder of the University Hospital Ghent were asked to fill in a comprehensive questionnaire covering a large number of variables such as eating disorder symptoms, psychopathology, personality traits and history of attempted suicide.

**Results**
The sample consisted of 1,436 inpatients and outpatients of the Centre for Eating Disorders. Binging/purging AN patients (OR= 2.59; 95% CI 1.47-4.56) and BN-purging patients (OR= 2.82; 95% CI 1.75-4.53) showed a significantly increased risk of attempted suicide compared to restricting AN patients. No significant differences in the risk of attempted suicide was found between restricting AN patients and Binge-Eating Disorder (BED) patients or patients from the EDNOS-group. Multivariate analyses showed that risk factors for attempted suicide differed between eating disorder-subtypes. Among restricting AN patients impulsivity and more severe depressive symptoms increased the risk of attempted suicide, while high levels of anxiety and certain personality traits increased the risk of suicide attempts among binging/purging AN patients and BN-purging patients. Among BED-patients only anxiety was found to be a significant independent risk factor for attempted suicide.

**Conclusions**
These findings indicate that there are important differences between eating disorder subtypes regarding the prevalence and risk factors for attempted suicide. Binging/purging anorexia nervosa patients and purging bulimia nervosa patients in particular appear to be at increased risk of attempted suicide. In these patients, mainly anxiety and certain personality traits increase the risk of suicide attempts, while impulsivity and depression are of importance in restricting anorexia nervosa patients. When treating eating disordered patients, professionals should be aware of these differences between eating disorder subtypes in the symptoms associated suicidal behaviour.

10:30 - 16:30
DAY 3 - POSTER SESSION

**P03-01**
Impact of Mortality from Suicide on Life Expectancy in the Republic of Bashkortostan (1989-2009)
Aminov, I
National Research University - Higher School of Economics Institute of Demography, RUSSIAN FEDERATION

According to The European Health for All Database (WHO/Europe) Russia is among the countries with the highest mortality rate from suicide in the European region. The Republic of Bashkortostan is one of the regions of Russia with increased level of mortality from suicide. The latter fact has, of course, a negative impact on overall mortality and people’s life expectancy in the region. In this regard, it is especially important to analyze the dynamics of suicide mortality and its impact on life expectancy in the region.
The methodology consists of the official statistics of Russia and the regional bureau of the WHO/Europe. The calculations of the contribution of specific causes of death and age groups to the change in life expectancy of the Republic of Bashkortostan were based on the official statistical data on the distribution of deaths by sex, age and cause of death, taking into account the current trends in life expectancy. The calculation was made on the basis of the method called component.

**Results**
- The maximum negative impact of suicide mortality on life expectancy of the population of the Republic of Bashkortostan had appeared during the period of 1989-1994, when the life expectancy of men has decreased by 1.19 years and for women by 0.1 years.
- In the period of 1989-1994 suicides in its negative impact on the life expectancy of men had conceded the leadership only to such major causes of death as “Diseases of the circulatory system” and “External causes of death” (excluding suicide). However, unlike these two classes of causes, suicides decreased the life expectancy in the younger age groups. In particular, it was observed in the age groups of 10-14, 15-19, 20-24, when the suicide accounted for 44.9%, 48.1% and 50.2% of the overall decline in life expectancy.
- The impact of suicide mortality on life expectancy of women of the republic was significantly lower than that of men. Thus, in the period of 1989-1994 on the contribution to reducing the life expectancy of women, suicides were largely conceded to such major causes of deaths as ”Diseases of the circulatory system”, ”External causes of death” (excluding suicide), ”Neoplasm” and ”Other diseases”. The reason for the decrease of life expectancy among women in the Republic of Bashkortostan in 1989-1994 year, as well as among men, was the increase of mortality from suicide at an employable young age.
- Thereafter, the decrease in life expectancy due to the suicide, but in smaller amounts, had appeared at women (-0.03) in the period 1994-1998, at men (-0.10) in the period 1998-2003. Thus, the decrease in life expectancy at women in the mentioned period was observed against the background of the life expectancy growth from all other causes of death. The decrease in life expectancy at men in 1998-2003 was amid the growth of life expectancy due to the other ”External causes” (excluding suicides).

**Conclusions**
The discontinuous increase of the number of the suicides in the Republic of Bashkortostan in the beginning of 1990’s had made a significant impact on the decrease of the life expectancy in the region. Suicides, being the only one of the causes of death, by their contribution to the decrease of life expectancy in this period, had competed with entire classes of causes of death.

**PO3-02**

**Investigation of Nine Candidate Genes and Suicidal Status in a Sample of Suicide Completers, Attempters and Controls**

Antypa, N1; Calati, R2; Giegling, I; Schneider, B2; Balestri, M1; Malafosse, A4; Serretti, A1; Rujescu, D3

1University of Bologna, ITALY; 2University of Halle, GERMANY; 3University of Frankfurt, GERMANY; 4University of Geneve, SWITZERLAND

**Study objectives**
Several lines of evidence indicate that suicidal behaviour is partly heritable, with multiple genes implicated in its aetiology. In a previous microarray study, we identified nine genes (S100A13, CDCA7L, PDGFRB, EFEMP1, PCDHB5, MLC1, PTPRR, SCN2B and ZFP36) that showed differential expression in the cortex of suicide victims in comparison to controls. The purpose of the present study was to investigate whether genetic variation in these genes was associated with suicidal behaviour.
Methods and materials
After genotypic quality control, we investigated 61 variants within these nine genes in 591 suicidal subjects (395 completers and 196 attempters) and 1608 controls (1404 healthy and 204 post-mortem controls).

Results
Only for the EFEMP1 gene we found differential distribution of genotypes and haplotypes between suicidal subjects and controls, whereas very few associations were observed with the other genes.

Conclusion
Future studies are warranted to further investigate the role of EFEMP1 in suicide, in order to evaluate the reliability of our findings. Other genes failed to show any systematic association with suicidal status. We need further research to understand how genetic variation and gene expression translates to protein level variation and how this may ultimately affect the complex phenotype of suicide.

PO3-03
Suicide Rates Across Brazilian Regions and Implications for Prevention Strategies
Borges Machado, D; Neves, D
Federal University of Bahia, BRAZIL

Suicide rates vary largely among the Brazilian regions. Despite the growth in the suicide rates and a precedent for effective programs throughout the world, there has not been any government program focused on suicide prevention.

Objectives
This study aims to describe the suicide rates tendency across the five regions in Brazil, over 12 years. It identifies high risk groups as well as programs for prevention in Brazil.

Methods
The mortality tendency of suicide was analyzed, from 2000 to 2011. The age was grouped into three strata: 10 to 24 years old, 25 to 59 years old and over 60 years old. Inter-regional variations were compared among the five macro regions in Brazil, by gender and age groups.

Results
Suicide is the fourth leading cause of death in Brazil by external causes and this has increased, a trend shared by many countries of the world. The suicide rate in man is three times higher than in woman in all regions in Brazil. However, it has risen faster in women. It increased 20% among men (8,0 to 9,7 per 100000 inh) and 30% among women (2,0 to 2,5 per 100.000 inh) between 2000 and 2010. It is also more frequent among older people. In 2010, the incidence among people 25 to 59 years old and over 60 years old was 7,2 and 7,1 per 100000 inh, respectively. The incidence among the youngest was 3,6/100000.

In the Midwest and South of Brazil, the regions where the highest rates are, the suicide has decreased while in the others regions It has increased. In the South the decrease is due to decrease among men. The Midwest presents fall in both genders. In both regions the highest mortality occurs among the elderly (over 60 years). In the North, Northeast and Southeast the highest rates are among adults (aged 25-59 years). However, it has increased at all age groups and also at both gender.
Conclusion
The mortality by suicide in Brazil is still high and it varies greatly across the country. There are important gaps in public health services for suicide prevention. As in many other countries, the mental health system of Brazil has been reformed to focus on decreasing the number of psychiatric hospitals and increase community based services. Although 21% of the municipalities in Brazil had a CAPS-Psychosocial Care Center in 2010, none of them had their team prepared to work with suicide prevention. A national strategy should be formed to provide services to high risk groups taking into consideration the regional differences.

PO3-04
Evaluation of a Pilot Online Outreach and Engagement of At Risk Youths Project in Hong Kong
Chan, MKY1; Law, F2; Yip, PSF2; Wong, PWC3; Fu, KW3; Li, MHT3; Chak, GS3; So, WKS3
1Centre for Suicide Research and Prevention, University of Hong Kong, HONG KONG, CHINA PR; 2University of Hong Kong, HONG KONG, CHINA PR

According to the government data, around 7% of the youths in Hong Kong were non-engaged in 2010. This has been rising dramatically since late 1990s. Majority of them were unemployed, and the rest of them were inactive. This group is also very active on the internet, and some are even socially withdrawn. The Social Welfare Department has therefore given funding to three NGOs to outreach and counsel the at risk youths via online platforms. Social workers search for youths who display emotional distress (e.g. blogs, search for pictures of self-harm etc) online and attempt to engage them online. Our study is to independently evaluate the effectiveness of this pioneer project. Our study also aims to examine the prevalence of ‘hidden youths’ in Hong Kong, and to explore its association with self-harm behaviour. This is an ongoing 3 years project, whilst adopting the mixed-methods approach to meet the objectives. A representative telephone survey with 1000 participants will be conducted to examine the prevalence of ‘hidden youths’ and associated indicators (measuring mental distress, problem-solving skills, and self-harm etc). Participants will then be invited to be followed up at two assessment time points via online survey. Meanwhile, cases recruited by the NGO receive online counseling and they will be invited to participate in the same online survey. They will be assessed at three time points, so that within group differences can be examined. The cases recruited by the NGO will be regarded as intervention group, and the cases recruited from the telephone survey will be regarded as the control group. The results of the telephone survey are expected to be available in Summer 2013.

PO3-05
Characteristics and Risk Factors for Non-suicidal Self-injury in Major Depression Inpatients
Chen, Y; Yao, Z; Shi, J; Liu, H
Nanjing Medical University Affiliated Brain Hospital, CHINA

Objectives
To investigate the characteristics and risk factors of non-suicidal self-injurious behaviours [NSSI] among the inpatients with MDD.

Methods
One hundred and twenty-six inpatients with first-episode major depressive disorder [DSM-IV criteria] were recruited from mental health clinics. All participants were informed of a research
study, and the anonymous surveys were administered to assess the frequency and basic characteristics of NSSI. The severity of depressive symptoms (HAMD), coping style, childhood maltreatment (physical, mental and sexual), personality traits (impulsiveness and aggressiveness) were also evaluated. The study was conducted from January 2012 to January 2013.

**Results**
Lifetime prevalence rate of NSSI was 23.0% (n=29). Fifty-eight percent of these, or 13.5% of the overall sample engaged in NSSI during the past 12 months. Among the self-injurers, 37.9% engaged in the practice more than 3 times. The most common body location self-injurers reported were upper limb, including hands (71.0%), arms (36.3%) and wrists (19.4%), second, the head (10.3%), then the thigh (9.5%). The most common method were scratching or pinching with fingernails or other objects to the point that bleeding occurred or marked remained on the skin (37.9%), banged or punched objects (27.6%), and over drink with intent to hurt oneself (20.7%). Nearly eighty percent (79.3%) chose to hurt themselves alone. Only two patients (6.9%) hurt themselves more severely than participated. The most common reason for NSSI were ‘to stop bad feelings immediately’ (79.5%), ‘to punish myself’ (70.3%), and ‘to alleviate the frustration’ (41.4%). According to the results of univariate analysis, there was no significance of coping style or aggressiveness between the groups with and without NSSI. The MDD patients with NSSI reported much higher score of HAMD, more childhood maltreatment, and more impulsiveness than the no-NSSI patients. Unconditional multivariate logistic regression results showed that, female, unmarried, childhood physical maltreatment, cognitive impulsiveness were the risk factors for NSSI.

**Conclusions**
A substantial proportion of MDD inpatients reported non-suicidal self-injurious behaviours in their lifetimes. The NSSI behaviours could be differentiated from suicide by some features, such as repetitive, hidden and low lethality. Acts of NSSI related with some valuable psychological features might play an important role among those who suffer from depression.

**P03-06**
**Rationale and Outline of an E-Learning Supported Train-The-Trainer Program to Disseminate a Practice Guideline on Dealing with Suicidal Behavior**
de Groot, M; de Beurs, D; Kerkhof, A
Vrije University, NETHERLANDS

**Objective**
In 2012, in The Netherlands a multidisciplinary practice guideline for the assessment and treatment of suicidal behaviour has been issued. Aiming at structured implementation of the guideline in mental health care, a training program was developed by which mental health care workers will be trained. The effects of the program are examined in a cluster randomized controlled trial (Dutch trial register 3092). This paper describes the theoretical and empirical background, aims, outline and materials of the training program, aiming at a more profound understanding of the expected trial outcomes.

**Method**
A integrated model of stress-diathesis and entrapment serves as the theoretical model to explain the onset of suicidal conditions. Based on Adult Learning Theory stating that people who train others remember 90% of what they teach others, and on Diffusion of Innovation Theory stating that people adopt new information better through their trusted networks, a Train-the-
Trainer model of small interactive multidisciplinary training is developed. The effectiveness is expected as benefits of peer-assisted training in medical health education are comparable to those achieved by professional teachers. The program is supported by e-learning modules as additional e-learning was found to be more successful than a single-faceted approach.

**Results**
A one-day e-learning supported Train-the-trainer program, aiming at transferring high-level empirical evidence in small, easily accessible, interactive, multidisciplinary groups.

**Discussion**
The program is expected to result in improved guideline adherence. The study in which the program is examined will yield knowledge on effective guideline implementation.

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**PO3-07**

**Consultation in Mental Health during the Period Preceding Suicide**

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¹Parnassia Groep, NETHERLANDS; ²Parnassia Groep The Hague, NETHERLANDS

**Background**
An estimation of suicide risk must be made to define treatment goals and policies when suicidal patients are admitted. Risk taxation of patients who are in danger of committing suicide short after being in contact with a person working in Mental Health Care, will contribute to the assessment of suicide risk.

**Aim**
Gaining more knowledge about the contents of the last consultation a patient had with a person working in Mental Health Care and the characteristics of this patient, just before committing suicide. To make judgements about the need for more/better suicide prevention based on the last risk assessment for patients and clients in the Mental Health Care system.

**Methods**
The files and reports to the Inspectorate of Public Health of all patients who committed suicide in the period of January 1999–January 2010 and in care of the Parnassia Bavogroep in The Hague, were thoroughly investigated. From the total of 227 patients who committed suicide in this period, patients were selected and divided into two groups: 1. recent care users who had been in contact with a person working in Mental Health Care within 48 hours before committing suicide (N=27), 2. non-recent care users who had not been in contact with Mental Health Care for more than 21 days (N=18). Clinical and demographical characteristics of these two groups were compared.

**Results**
Male gender was significantly more present in recent care users (p=0.036). Within three months before committing suicide, recent care users had been more in contact with Mental Health Care (p=0.004). Recent care users were assessed as having higher suicide risk (p=0.010). The last consultation of recent care users, was in most cases because of a crisis and therefore suicide risk was a frequent subject of the treatment consultation. However, in one third of these contacts suicidal risk was not described.

**Conclusion**
Recent care users and non-recent care users differ on the following characteristics: gender, the contents of the treatment consultations, and the frequency of the total amount of consultations.
within three months preceding suicide. In case of a crisis situation, assessment of suicide risk necessarily has to be a part of the consultation. Gender might determine urgency of the intensification of treatment consultations.

PO3-08
Longevity of Gatekeeper Traits gained through Training Programs in Youth Suicide Gatekeepers - A Systematic Review
Dehghani, N; Molloy, L
University of Tasmania, AUSTRALIA

Background
Concern over the rate of youth suicide has prompted global suicide prevention strategies. Gatekeepers play a pivotal role in identifying and referring individuals in a crisis, and increasing emphasis has been placed on the role of gatekeeper training as a suicide prevention strategy. However, research on the longevity of the traits gained through gatekeeper training is limited, despite the implications for service delivery and the competency of the gatekeepers. This is especially important for those involved in youth suicide prevention, since rapid youth culture changes may render gatekeeper traits out dated and potentially ineffective. While the parameters of the 'gatekeeper' definition are continually being explored, this systematic review specifically focuses on gatekeepers working with youths in a professional role.

Aim
To conduct a systematic review that critically appraises and synthesises the best available evidence from primary studies investigating the longevity of gatekeeper traits gained through training programs for gatekeepers involved in youth suicide prevention.

Method
An extensive search strategy was undertaken to identify relevant published and unpublished primary research papers. Published papers were identified through database searches of Scopus, Embase, PsycINFO, PubMed and CINAHL. Unpublished papers were identified through Mednar, Google, Google scholar, ProQuest Dissertation and Theses, conference proceedings and relevant organisational website searches. In addition, reference lists of identified articles were manually scanned for further papers. Studies were included if they were: conducted in English; investigated gatekeeping traits; and focused on natural gatekeepers working with youths aged 15-24 in a professional 'role'.

Results
Papers that were identified through the various searches underwent abstract and full text screenings. There was a lack of randomised controlled trials, probably due to the ethico-legal limitations on the use of that study design in this area. Selected studies were synthesised using narrative synthesis due to study heterogeneity. Proposals for future research directions arising from the review will be discussed with particular emphasis on recommendations for future practice.
**P03-09**

Suicide Epidemiological Survey in the Psychiatric Emergency Unit of the General Hospital  
D’Orta, I; Costanza, A; Canuto, A  
Geneva University Hospital, SWITZERLAND

**Study objectives**  
Suicide is increasingly recognized as a worldwide problem. Epidemiological analysis of suicide data may help to elucidate prevailing patterns in order to identify facilitate risk factors and to develop strategies of prevention. The need to review approaches and to promote programs for suicide prevention is topical not only to mental and primary care health service, but also to governments and society.

**Methods and materials**  
This study aims to investigate epidemiological data pertaining to patients who attempted suicide evaluated in the Psychiatric Emergency Unit of the Emergency Department of the Geneva University Hospital. Data collection has started in January 2013, and it will continue at least to December 2013. A results’ first evaluation is forecast after 3 months of data collection, which is starting from April 2013. Data are collected by the first and the second author from medical records.

**Results**  
Starting from conventional investigation of socio-demographic data (sex, age, marital condition, occupational status, religion adherence), we will focus on data pertaining on clinical conditions (previous psychiatric diagnostic, blood alcohol concentration, other toxics concentration, previous self-harm/attempted suicide, need of somatic treatment).

Finally, we will investigate reports on method and chronology in suicide. Methods of suicide include self poisoning, self-injury, hanging, carbon monoxide intoxication and drowning. Attempted suicide by self-poisoning will be distinguished in drug of abuse intoxication and medical drugs abuse. Regarding the chronology, we will examine especially the phenomenon of seasonality (both days of the week and month of the year) and the hour of acting and admission to the Emergency Department, in order to find correlation of variables.

**Conclusion**  
Surveillance of the event and identification of epidemiological features of patients which attempted suicide will lead to a better knowledge that will ultimately encourage intervention strategies.

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**P03-10**

EUREGENAS: The Development of Suicide Prevention Guidelines and Toolkits (Work Package 6)  
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Ghent University - Unit for Suicide Research, BELGIUM

**Study objectives**  
Euregenas (European Regions Enforcing Actions Against Suicide) is a three year project, which has received funding from the European Union under the Public Health Programme 2008-2013. The overall objective of the Euregenas project is to contribute to the prevention of suicidal behaviour in Europe through the development and implementation of strategies for suicide prevention at regional levels which can be of use to the European Community as examples of good practice. Euregenas consists of eight work packages (WPs), including work package six (WP6) which aims...
at raising awareness of suicide prevention strategies by developing guidelines and suicide prevention packages for different targets (e.g. school, workplace, media) while focusing on different risk-groups (e.g. young people, middle-aged working men).

**Methods and material**

The guidelines and prevention packages will be based on a review of literature and good practices and on a needs analysis of key stakeholders which will be examined in the broader framework of Euregenas. Furthermore, regional networks will be established in five participating regions to support the development and implementation of these packages. The networks will involve policy-makers, public health experts, community players and stakeholders in the field of education, media and workplace.

**Results**

To meet the objectives general guidelines for suicide prevention strategies will be developed, mainly targeted at policy makers. Secondly, specific prevention packages (toolkits) will be developed for media, schools and the workplace. The general guidelines and targeted toolkits both aim at improving the knowledge on suicide prevention strategies for different key stakeholders. In five participating regions sustainable regional networks on suicide prevention will be established to support the development and implementation of the guidelines and toolkits for prevention. The guidelines and toolkits will be available in five languages and disseminated at the final Euregenas conference in December 2014 targeting local, regional and national levels.

**Conclusion**

The aim of the Euregenas project and of this specific WP6 is to contribute to the prevention of suicidal behaviour in Europe, through the development of suicide prevention guidelines and toolkits which aim at improving the knowledge on suicide prevention strategies of different key stakeholders.

**P03-11**

**Vulnerability among Adolescents in Foster Care**

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The study examines the prevalence of suicide behaviour among adolescents aged 13-19 years in foster care compared to adolescents not in foster care. The study is based on nine questionnaire surveys conducted between 2001-2011, amounting to a study population of 17,708. Of these, 124 adolescents were in foster care (0.7 %). Two surveys are based on the Child and Adolescent Self-harm in Europe study (CASE) and the rest are based on the Saving Young Lives Everywhere study (SAYLE). The surveys included questions on suicide ideation and attempts, health and school related topics, eating disorders, negative life-events experienced, emotional distress, and protective factors. Due to the small number of cases, only two-way interactions could statistically be conducted.

The study shows that more adolescents in foster care have mental problems, suicide ideation, and self-mutilating behaviour. Among adolescents with mental problems, suicide ideation, and/or self-mutilating behaviour, more in foster care are smokers and drug users, have poor family ties and problems in the family, have problems with communicating their problems, have troubles keeping up in school, have been physically and sexually abused, have been in conflict with the police and have parents with suicide behaviour.

Many of these results confirms the findings in the literature for suicide behaviour among adolescents in foster care and confirms that special preventive attention should be given to this group.
**PO3-13**  
**Suicide Attempt and Deliberate Self-harm in General Hospital Inpatients:**  
**Study of Incident Reports in Nara Medical University Hospital**  
Fukase, M; Shintani, M; Kaneko, M; Uemura, M; Nishiki, M; Tanaka, M; Morikawa, T  
Nara Medical University Hospital, JAPAN

**Objectives**  
Delineation of demographic characteristics of suicide attempt and deliberate self-harm (DSH) in a general hospital, Nara Medical University Hospital.

**Methods**  
Analysis of incident reports on suicide attempt and DSH in general hospital inpatients (n=79; age 14 to 85), using the Nara Medical University Hospital incident reports database between January 1st, 2009 and December 31st, 2012.

**Results**  
79 incidents of suicide attempts or DSH were reported over four-year period from January 1st, 2009 to December 31st, 2012. Of these cases, 5% (n=4) were committed suicide and another 5% (n=4) were admitted to intensive care unit (ICU) of the emergency department and left with serious aftereffect such as cognitive impairment or persistent vegetative state. The number of suicide attempt or DSH was higher in females (73%; n=58) than males (27%; n=21) and the mean age of that was 33.7 years (17.75). The range of age in which the highest number of suicide attempt or DSH took place was 20-29 year-old group (n=28), followed by teenager (n=17) and 30s group (n=12). The most common diagnoses were neurotic, stress-related and somatoform disorders; F4 (ICD-10) (43%; n=34) and followed by schizophrenia spectrum disorders; F2 (19%; n=15) and affective disorders; F3 (14%; n=11). 93% (n=73) of all cases occurred in a psychiatric ward. 67% (n=4) of who did in the general ward had suffered from a cancer. Wrist-cutting was the most common method (54%; n=43) and followed by hanging (22%; n=17) and overdose (15%; n=12). Half (n=4) of serious events such as completed suicide or admitted to ICU occurred within two weeks after admission, and 3 cases of them resulted in death.

**Conclusions**  
More intensive observation of inpatients in the early days of admission is necessary in particular, because in this study most of serious events occurred within two weeks after admission.

**PO3-14**  
**What is Really Needed to Help the Media Contribute to Suicide Prevention by Following Responsible Reporting Guidelines in Suicide Cases?**  
Glowinski, A; Fehr, K  
1Washington University School of Medicine, UNITED STATES; 2Fox TV Detroit, UNITED STATES

**Background**  
Successful suicide prevention can only be achieved through complex, multi-faceted efforts, which must involve individuals from many distinct professions and disciplines. The following of responsible media reporting guidelines is an empirically sound suicide and suicidality prevention practice. However, the systematic implementation of such guidelines in the United States is extraordinarily challenging for many reasons, even when reporting guidelines have been made readily available (e.g., through the American Foundation for Suicide Prevention).
Methods
An interdisciplinary team with extensive mental health, suicide and suicidality, education and media expertise, consisting of a child and adolescent psychiatrist and a news community service director for a major US media organization, systematically list obstacles to responsible media reporting around a specific case involving the death by suicide of a 13 year old adolescent boy.

Results
Obstacles that can potentially be targeted for improvement (e.g., formatting of guidelines for rapid use by journalists under many looming deadlines, partial knowledge of suggested reporting guidelines, suboptimal understanding of guidelines benefits, conflicts between guidelines and media culture and/or ethos, lack of systematic preparation) are differentiated from other factors (e.g., freedom of press, multiplicity and diversity of US media organizations).

Discussion
We discuss what is really needed, at the media and interdisciplinary level, to help the US media more effectively follow responsible reporting guidelines.

PO3-16
Daily Variation in Suicide Mortality in Finland and Temperature Related Weather Variables
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1National Institute for Health and Welfare, FINLAND; 2Finnish Meteorological Institute, FINLAND

Study objectives
In Finland, the seasonal variation in suicide mortality has not vanished, but two peaks rise above the mean of suicide rate (Hiltunen et. al. 2011). Weather variables have been suspected to be involved in this uneven prevalence of suicides. In our earlier nationwide study from Finland, suicide mortality correlated with monthly mean temperature (Ruuhela et. al. 2009) along with global radiation, and several studies have found possible associations between light and/or temperature and suicide mortality, although with partly inconsistent results. Our aim was to look closer at the possible association between ambient temperature and suicide mortality on a daily basis from 42 year long period in Finland.

Methods and material
Statistics Finland provided daily number of suicides committed in Finland from 1969 to 2010. Local daily temperature data [daily mean, minimum, maximum] were provided by Finnish Meteorological Institute from three areas: 1. Helsinki, the capital of Finland, in the southern coast of Finland, 2. Jyväskylä, 270km north of Helsinki, and 3. Oulu, 608km north of Helsinki. Numbers of suicides committed in these cities with 25km radius were: 1: 5905 (men), 2587 (women), 2: 822 (m), 301 (w), 3: 1105 (m), 344 (w). Yearly populations of these areas were provided by Statistics Finland. Calendar year, time elapsed since the beginning of calendar year, and weekday were considered as background variables, and astronomical seasons as reference variables. The data were modeled and analyzed with R, version 2.15.0.

Results
No universal association between suicide mortality and temperature related weather variables were found. However, mean daily temperature after five day lag associated with suicide mortality of men in Helsinki and women in Oulu. Furthermore, mean daily temperature associated with suicide mortality of men in Helsinki and Oulu, when only mean daily temperature and lags of temperature, between one to five days, were included in the analyses.
Conclusion
In order to improve the means by which the timing of suicides could be predicted, and therefore prevented, weather related variables should not be overlooked. Our study suggests that among some suicides, ambient temperature may play a role in the timing of suicide. Future studies are needed in order to find the most vulnerable individuals in this respect.

**PO3-17**

**Interrelationships between Future Orientation and Risk Factors for Suicidal Behavior**

Hirsch, J
East Tennessee State University, UNITED STATES

**Background**
Future orientation, or the ability to envision a future timeframe, goals and behaviours, is associated with less suicidal behaviour, even in the context of mental and physical health risk factors. Yet, little research has examined differential models of the interrelationships between future orientation and risk factors.

**Objective**
To discern the effects of future orientation as a predictor, moderator and mediator of suicidal behaviour in the context of perceived interpersonal dysfunction, quality of life and psychopathology.

**Method**
Across samples of older adults, college students, primary care patients and patients with multiple sclerosis, we examined the effect of future orientation, as well as other future-oriented variables, such as optimism, hope, future time perspective and hopelessness, on suicidal behaviour.

**Results**
In sum, we found that future-oriented cognitive-emotional characteristics were related to less suicidal behaviour. Further, future orientation mediated the association between pain, functional disability and health-related quality of life and suicidal behaviour. Future orientation was also related to less perceived stigma, depressive symptoms, and interpersonal dysfunction which, in turn, were associated with fewer suicidal behaviours. Importantly, the presence of adaptive future orientation appears to be a more robust predictor of less suicidal behaviour than the absence of maladaptive future orientation; in other words, optimism rather than pessimism, hope rather than hopelessness, and a tendency toward future orientation and a future time perspective appear to be the more salient protective factors against suicidal behaviour.
Conclusion
Future orientation, when adaptive, may buffer against mental and physical health stressors, and may also contribute to the amelioration of such risk factors. Therapeutic strategies, such as enhancement of goal-setting and problem-solving abilities, and encouragement of adaptive temporally-related characteristics such as forgiveness and optimistic explanatory style, may reduce risk of suicide in the context of mental and physical health difficulties.

PO3-18
Suicidologi - The Only Scientific Journal on Suicide Research and Prevention in The Nordic Region
Holmesland, H; Mehlum, L
National Centre for Suicide Research and Prevention, University of Oslo, NORWAY

Suicidologi is a peer reviewed journal published since 1996 by the National Centre for Suicide Research and Prevention at the Faculty of Medicine, University of Oslo. The only scientific journal in this field in the Nordic region, Suicidologi has about 5000 subscribers working in research, clinical practice and prevention. Suicidologi publishes both in English and in the Nordic languages from the breadth of all disciplines in suicide research and prevention. The journal is released both in print and on NSSFs website: http://www.selvmord.no/Forside/Tidsskriftet-Suicidologi. Suicidologi publishes research-based knowledge relevant for practice, empirical studies from the field of suicide research, experience-based articles from different professions, information about suicide prevention efforts and projects. It also includes other book reviews and conference reviews. The primary readership of Suicidologi is health care professionals and other personnel who are interested in suicidal behaviour and its prevention. Suicidologi is also an important information resource for decision makers on many levels in Norway. When the journal started out in 1996 it was launched as a part of the National strategy for suicide prevention. Suicidologi has since then been released on a regular basis with three issues a year and is part of a national commitment to suicide prevention. This poster will review the role of the Suicidologi journal as part of the Norwegian national strategy and will present data on topics covered by the journal, readership responses and the utilization of the journal in different information dissemination contexts.

PO3-19
Factors Associated with Suicide Methods among General Population in Korea
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Background
Study of suicide methods in particular population contribute to effective intervention strategies for suicide prevention. The aim is to highlight the change of suicidal methods and their interaction with age and sex in Korea over time; on yearly, seasonal, daily basis.

Methods
189,407 suicide data from 1991 to 2011 from the National Statistical Office were analyzed. The relationship of suicide methods with demographic variables and time course were presented.
Results
On yearly basis, a definite change of proportion in suicidal method was observed. During a 10-year period (years 2002-2011), proportion of hanging and gas poisoning have increased, whereas proportion of pesticide poisoning have decreased. On monthly basis, completed suicide was more frequent during spring and summer, summer being the most frequent. No definite variation of suicidal method over each season was observed, with hanging being the most popular method used. On daily basis, completed suicide was more frequent during daytime, most frequent being from 15 to 18. People were more likely to use jumping as a suicidal method during 3–9, while less likely to use gas poisoning during the same time, compared to other times of day.

Conclusions
Trends of suicidal methods have changed dramatically during suicide surge of past 10 years in Korea. Strategy to limit an access to suicide methods should be developed according to correlates of suicide methods.

Proportion of suicidal methods in completed suicides, 2002-2011, South Korea.

<table>
<thead>
<tr>
<th>Year</th>
<th>Poisoning: medications</th>
<th>Poisoning: other gases</th>
<th>Poisoning: pesticide</th>
<th>Poisoning: others</th>
<th>Hanging</th>
<th>Drowning</th>
<th>Jumping</th>
<th>Others</th>
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<td>16</td>
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<td>15</td>
<td>52</td>
<td>3</td>
<td>15</td>
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</tbody>
</table>

Proportion of suicidal methods in completed suicides, 2002-2011, South Korea.
PO3-20
Suicide Attempts and Low Socio-economic Status in Osaka, Japan: A Contribution from Survey at Emergency Medical Facilities
Honyashiki, M1; Ichikawa, K1; Hirotune, H2; Sugimoto, T2; Oda, H3
1Osaka prefectural mental health center, JAPAN; 2Osaka National Hospital, JAPAN; 3Kansai Medical University, JAPAN

Objectives
Growing number of suicide attempters who are brought to the emergency medical facilities is a serious issue in Japan. The effect of socio-economic status on suicide attempts has not been well investigated in Japan. This is the first study to investigate the association between low socio-economic status and suicide attempts.

Methods and material
We conducted a case-control study of participants with low socio-economic status to the risk of becoming suicide attempters brought to emergency medical facilities. Case was all the suicide attempters brought to 14 emergency medical facilities in Osaka during 2011. Control was taken from randomly sampled residents in Osaka. The data was collected from national cross sectional survey, 'Comprehensive Survey of Living Conditions in 2010'. We defined those who live on welfare as those with low socio-economic status. We compared the basic characteristics of the suicide attempters with control population. Logistic regression model was used to estimate odd ratios (ORs) for the associations between suicidal attempts risk and low-socio-economic status, adjusting for potential confounders, gender, age and morbidity of psychiatric diseases.
Results
There were 1553 suicide attempters brought to 14 emergency medical facilities in Osaka in 2011 and we used 18815 controls. The average age of suicide attempters is 40.7 and control group was 43.9 (p<0.01). The morbidity of psychiatric disease is 79.6 among suicide attempters and 16.2 in non-suicide attempters (p<0.01). Logistic-regression analysis showed that low socio-economic status is significantly associated with suicide attempts brought to emergency medical unit in Osaka (odds ratio 7.34; 95 percent confidence interval, 5.31 to 10.14). However the morbidity of psychiatric disease (odds ratio 177.36; 95 percent confidence interval, 146.81 to 214.26) and age (odds ratio 0.984; 95 percent confidence interval, 0.979 to 0.989) were also associated with suicide attempts.

Conclusion
The risk of suicide attempts brought to emergency medical facilities is much higher in people with low socio-economic status. However the morbidity of psychiatric disease seems to have much more impact on suicide attempts. The prevention of suicide attempts especially targeting those who are already seeing psychiatrist and/or those with low-socioeconomic status are required in the community. That will contribute both to better public health and effective usage of emergency medical resources.

PO3-21
Study on Association of BDNFrs6265 Gene Polymorphism and Rural Attempted Suicide in China
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1Shandong University School of Public Health, CHINA; 2Shandong CDC, CHINA; 3Shandong Center for Mental Health, CHINA

Study objectives
The current study aims to describe the epidemiological characteristics of rural attempted suicide in China, explore the genotype and allele frequency distribution of BDNFrs6265 gene, and discuss the correlation between BDNFrs6265 polymorphism and rural attempted suicide behaviour.

Methods and materials
In this paired case-control study, 364 attempted suicides were collected in the current study. The instruments include Interview for Recent Life Events; Duke Social Support Index; Life Satisfaction Index A; FACES-II-CV; Self-Esteem Scale; Dickman Impulsivity Inventory; Simplified Coping Style Questionnaire; State-Trait Anxiety Inventory; Center for Epidemiologic Studies Depression Scale; Beck Hopelessness Scale; Structured Clinical Interview for DSM-IV. BDNF rs6265 gene polymorphism was measured by Ligation detection reaction (LDR) method.

Results
Among the 364 attempted suicides, the female attempted suicides were 249 (68.4%), the male were 115 (31.6%), and the ratio was 2.2:1. The average age of the female attempted suicides was 42.67 (SD: 12.98) and that of the male was 46.76 (SD: 13.28). About 89.0% attempted suicide occurred in their home, 84.1% of them took suicide action by ingestion of pesticides, 8.5% of them had the history of family suicide behaviour and 8.0% experienced previous attempted suicide. The main reasons of attempted suicide were as followed: interpersonal conflict, life pressure, suffering from physical illnesses and mental disorders. There were no statistical and significant differences between attempted suicide and control groups on the distribution of AA/AG/GG genotype and G or A allele frequency [p>0.05].
Conclusions
The study does not support BDNF rs6265 polymorphism is susceptibility gene of suicide, it needs more further studies to test.

PO3-23
Characteristics of Elderly Suicide Attempters Admitted to the Emergency Department of Fukuoka University Hospital
Kira, K; Eto, N; Harada, K; Kawano, N; Honda, Y; Nishimura, R
Fukuoka University Hospital, JAPAN

Background
We have conducted a study on elderly suicide attempters, who were eventually admitted to the emergency and critical care centre (ECCC) of Fukuoka University Hospital located in a suburb of Fukuoka-City, Japan.

Objective
To clarify the characteristics of suicide and suicide attempts in elderly patients conveyed to our ECCC after their suicidal actions.

Method
Clinical records were used to identify 327 consecutive suicidal patients of from April 2006 trough to May 2011. The age, gender, method of attempt, outcome, and the psychiatric diagnosis were investigated. Then comparing this data to under 65’s.

Results
1) Out of the 327 patients, over 65’s were 45, consisted of 56% male and 44% female
4) The outcomes for over 65’s were completed suicide 33%, continued hospitalization (transferred to other ward to continue psychiatric/ physical treatments) 56%, and discharged 11%.

Results
Cronbach’s alpha for SUAS-S was 0.88 and the test-retest reliability was 0.95 (95% CI: 0.93-0.97). SUAS-S was positively correlated with the BSS-5 (r = 0.66; 95% CI: 0.47-0.85) for the study sample as a whole and for the suicidal (r = 0.52) and non-suicidal groups (r = 0.50) respectively. There was no difference between the SUAS-S and the BSS-5 in the ability to identify suicidality. This ability was more pronounced when the suicide risk was high. There was a substantial intercorrelation between the score on the SUAS-S and the BDI (0.81) and the BHS (0.76). The sensitivity and specificity of the SUAS-S was explored and an appropriate clinical cut-off value was assessed.

Conclusions
The study revealed good internal consistency, test-retest reliability and concurrent validity for the Suicide Assessment Scale Self-report version. The discriminatory ability for suicidality was comparable similar to that of the BSS-5.

PO3-24
The Suicide Assessment Scale: Psychometric Properties of a Norwegian Language Version
Koldsland, B. O.1; Walby, F.A.2; Diep, L. M.3; Mellesdal, L4; Mehlum, L5
1Ringerike Psychiatric Outpatient Clinic, NORWAY; 2Diakonhjemmet Hospital, NORWAY; 3Institute for Community Medicine at University of Oslo, NORWAY; 4Haukeland University Hospital, NORWAY; 5National Centre for Suicide Research and Prevention, University of Oslo, NORWAY
Study objects
Rating scales are valuable tools in suicide research and can also be useful supplements to the clinical interview in suicide risk assessments. This study describes the psychometric properties of a Norwegian language version of the Suicide Assessment Scale Self-report version (SUAS-S).

Methods
Participants were fifty-two patients (mean age = 39.3 years, SD = 10.7) with major depression (53.8%), bipolar disorder (25.0%) and/or a personality disorder (63.5%) referred to a psychiatric outpatient clinic. The SUAS-S, the screening section of the Beck Scale for Suicidal Ideation (BSS-5), the Beck Depression Inventory (BDI), Beck’s Hopelessness Scale (BHS), the Symptom Check-List-90 R (SCL-90R) and the Clinical Global Impression for Severity of Suicidality (CGI-SS) were administered. One week later, the patients completed the SUAS-S a second time.

Results
Cronbach’s alpha for SUAS-S was 0.88 and the test--retest reliability was 0.95 (95% CI: 0.93-0.97). SUAS-S was positively correlated with the BSS-5 (r = 0.66; 95% CI: 0.47--0.85) for the study sample as a whole and for the suicidal (r = 0.52) and non-suicidal groups (r = 0.50) respectively. There was no difference between the SUAS-S and the BSS-5 in the ability to identify suicidality. This ability was more pronounced when the suicide risk was high. There was a substantial intercorrelation between the score on the SUAS-S and the BDI (0.81) and the BHS (0.76). The sensitivity and specificity of the SUAS-S was explored and an appropriate clinical cut-off value was assessed.

Conclusions
The study revealed good internal consistency, test--retest reliability and concurrent validity for the Suicide Assessment Scale Self-report version. The discriminatory ability for suicidality was comparable similar to that of the BSS-5.

PO3-25
Non-fatal Repetition of Self-harm in Taipei City, Taiwan: Cohort Study
Kwok, RCL1; Yip, PSF1; Gunnell, D2; Kuo, C-J3; Chen, Y-Y3
1The University of Hong Kong, HONG KONG, CHINA PR; 2The University of Bristol, UNITED KINGDOM;3Taipei City Psychiatric Center, Taipei City Hospital, TAIWAN

Background
Repeat self-harm is a significant risk factor of future suicide. Few studies have explored risk factors for non-fatal repeat self-harm in Asian patients. This study investigates the risk of non-fatal repetition in a large cohort of hospital-presenting self-harm patients in Taipei City, Taiwan.

Methods
7,601 cases of self-harm presenting to hospital services in Taipei between January 2004 and December 2006. Mean duration of follow-up was 1.43 years (range from 1 day to 3 years). Survival analysis was used to examine the rates, timing, and factors associated with repeat self-harm.

Results
Altogether 778 (10.2%) patients presented to hospital with one or more further episodes of self-harm. The cumulative risk of non-fatal repetition within one year following an index was 9.3% (95% CI: 8.7-10.1%), and increased to 14.8% (95% CI: 13.5-16.1%) during the entire three-year period. The median time to repetition within one year was 105 days. Females had a higher incidence of repeat self-harm [adjusted hazard ratio= 1.25, 95% CI: 1.05-1.48] but males had
slightly shorter median time to repetition (107 vs. 80 days). Other independent risk factors for repeat self-harm within 12 months of an index episode were: young age, medicine overdose or combining medicine with wrist cutting as means of self-harm and increasing number of previous episodes of self-harm.

Conclusions
The risk of non-fatal repetition in Taipei City is lower than that seen in the West. Risk factors for repeat non-fatal self-harm differ from those for fatal self-harm, suggesting risk assessment of self-harm patients should be guided more by the findings from studies using fatal self-harm as the endpoint than those with non-fatal repetition. The first three months after self-harm is the crucial period for intervention.

PO3-26
Self-efficacy of Volunteer Mentors of Helping Patients with Deliberate Self-harm Behaviors
Lai, C1; Law, F2; Wong, PWC2; Yip, PSF2
1HKJC Centre for Suicide Research and Prevention, The University of Hong Kong, HONG KONG, CHINA PR; 2Department of Social Work & Social Administration, The University of Hong Kong, HONG KONG, CHINA PR

Background
Volunteers have been employed as one of the largest forces of suicide prevention since 1950s. The selection and training programs for preparing these voluntary task forces are crucial in leading to the success of helping suicidal individuals. A series of volunteer recruitment, selection and training exercises were designed to prepare a team of volunteer mentors to provide a 9-month of follow-up service to patients with deliberate self-harm behaviours (aged 18-34) of a randomized controlled trial. This study aims to evaluate the self-efficacy of volunteer mentors including their attitude towards, and knowledge and skills of helping DSH patients, after joining the training programs.

Method
Three-wave questionnaires were given to the volunteer mentors at the beginning and at the end of the training, and after the completion of offering a 9-month follow up service to a DSH patient. Measurement outcomes include the level of mental health literacy, efficacy in handling suicide crisis [Suicide Intervention Response Inventory] and perception of intervening crisis [Crisis Intervention & Suicide Prevention Questionnaire].

Results
Of the 48 volunteer mentors selected after the training program (36.9%, N=130), 66.7% were female (F:M; 2:1). The mean age (SD) of the selected mentors was 37.35 (9.26). The mentorship scheme has lasted for about three years and the annual turn-over rate averaged 29%. They had provided follow-up services to a total of 36 DSH patients. In the post-test, there was 43.8% increase of mentors who were confident with their capability of affirming one’s suicide risk.

Conclusion
There is a prominent evidence suggesting that the self-efficacy of volunteer mentors have been significantly enhanced after the completion of the training. The selection, training and retention program seems to be adequate enough to prepare volunteer mentors for supporting DSH patients.
PO3-27
School Crisis Management in Hong Kong: Suicidal Prevention, Intervention and Postvention for School-aged Children
Lau, V; Fong, J; Wong, T
Education Bureau, HONG KONG, CHINA PR

Study objectives
Suicide is a societal problem which schools cannot be immune. A school crisis can be triggered by events, such as suicide of a student or staff and can have a devastating effect on students, parents and school personnel. However, suicide usually happens with warning signs and can be preventable by precautionary measures or its effect can be minimized by an effective crisis management mechanism. The present study aims to develop and implement a territory-wide suicide prevention, intervention and postvention mechanism and protocols for primary and secondary schools.

Methods and material
Referencing the multi-level “Health Promoting Schools Framework” as advocated by World Health Organization (2000), Education Bureau (EDB) has developed a Three-Tier Support Model for early detection, assessment and intervention with a view to identifying and supporting students who are at risk of emotional distress and possibly at risk of suicidal behaviour. To implement the model, guidelines, strategies and activities, assessment tools and resource materials such as checklists, tables, sample letters etc., were developed for use by schools. Schools were given protocols to develop their infrastructure on crisis management, including setting up a crisis management team (CMT), defining roles and functions of the team, working out procedures to manage crises, etc. With an established infrastructure, the school could provide intervention and postvention promptly to affected groups in case of a suicide crisis.

Results
The model and framework are well received by the key stakeholders in schools, including professionals, teachers, students and parents. Positive feedback was collected.

Conclusion
With concerted effort of EDB and school personnel, a multi-dimensional suicidal prevention, intervention and postvention framework and protocols for school-aged children have been established among primary and secondary schools in Hong Kong.

PO3-28
The Efficacy of MAPS Group Therapy for Suicide Prevention to Bipolar Disorder Patients
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Background
Bipolar disorders have a lifetime prevalence rate of 1-2% and individuals with bipolar disorder face challenge in leading a stable and healthy life which are associated with substantial morbidity and mortality or recurrent in about 90% of sufferers even when individuals are being prescribed appropriate medication. Bipolar disorder had high suicidal risk. The risk of suicide is 15 times higher among bipolar patients than in the general population.

Methods
This is a prospective case control study. We recruit the participants with the inclusion criteria are diagnosed as bipolar disorder, age from 18 to 80 and agree to sing the inform consent and
the excluded criteria are hard to communicate, with acute psychiatric feature and severe physical illness. The participants separated randomly to the case group or the control group. The only one different factor between two groups was attending the MAPS group therapy or not. We use Hamilton Rating Scale for Depression (HAMD) and Young Mania Rating Scale (YMRS) to evaluate the severity of mood symptoms; Beck Scale for Suicidal Ideation (BSSI) for suicidal ideation; SF-36 for life quality every 3 months within 1 year period. All analyses were performed by using SPSS, version 18.0 (SPSS, Chicago, IL).

Results
68 patients were recruited and 7 dropped out and drop out rate was 10.3%. Among 61 patients, 34 were in case group and 27 were in the control group. The average age of case group and control group was 39.82 ± 11.67 and 41.33 ± 11.96 respectively and the male to female ratio of case group and control group was 1.125 and 0.227 respectively (p=0.006). No statistic difference showed except gender in the demographic data between case group and control group. Between case group and control group, the scores of HAMD decreased gradually and in 9th month showed statistic significant difference (p=0.024); the BSSI scores had significant statistic difference in 6th month, 9th month and 12th month (p=0.005, 0.004 and 0.008, respectively).

Conclusions
The MAPS group therapy model helps bipolar patients had less suicidal ideation than control group. The limitation is small sample size and female predominated in control group. Further study should try to focus on the psychosocial intervention in our daily practice for bipolar patients to make them more stable.

PO3-29
Informal Help-seeking Behavior and Suicide Intent in Adolescents with Self-harm
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Objectives
Self-harm is common in adolescents and increases the risk for future suicide. However, self-harm could be with or without suicide intent and results in different consequences. Help-seeking behaviour could reduce the risk of suicide in adolescents. The aim of the study was to investigate informal help-seeking behaviour and correlates of suicide intent among adolescent with self-harm in an East Asian setting.

Methods
The study was undertaken in the 10 senior high schools in Taipei City and Taipei County from October 2009 to January 2011. Computer-assisted self-interviewing was applied to data collection. The depressive symptoms were measured by the 9-item Patient Health Questionnaire (PHQ-9). Lifetime help-seeking history was investigated, along with whether informal help had been sought and whether informal help was perceived effective. Bivariate analyses compared the adolescents doing self-harm with and without suicide intent in relation to depression and informal help-seeking behaviour.

Results
A total of 5879 adolescents participated over a 1-schoolyear interval. Students aged from 16 to 18 years old and the majority was female (56.7%). The lifetime history of self-harm was reported by 1472 adolescents (25%), of whom 347 (23.6%) were self-harming with suicide intent. Eighty one (5.5%) adolescents with self-harm had resulted in medical treatment. For seeking help for
personal emotional problems, a friend was the most preferred source (1407; 95.8%), followed by a relative (1069; 72.6%) and the parent (1059; 71.9%). The most effective source perceived was friend (1144; 77.7%), followed by parent (695; 47.2%) and relative (625; 42.5%). The significant differences between two groups included the severity of depressive symptoms, medical treatment required, methods of self-harm, and sources of informal help. In the multiple logistic regression, factors significantly associated self-harm with suicide intent were higher PHQ-9 score, ineffective help from parent, methods of self-harm and medical treatment required.

**Conclusion**
Adolescents seek help from family who may be untrained in dealing with emotional and personal problems, they do not receive the sort of help they need from their informal support. This would increase risk of suicide intent. The findings highlight the need to boost the capacity of these potential gate keepers to help adolescents to deal with difficult issues and to engage in the professional mental health service.

**PO3-31**
*‘Deadly Blokes’: Perceptions and Responsibilities of Aboriginal Peer Educators in a Remote Suicide Awareness and Prevention Program*
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**Study objectives**
In the Kimberley region of northern-Western Australia, suicide is an issue which not only deeply impacts upon many communities but also requires innovative prevention initiatives given its unique cultures and place. Alive & Kicking Goals! (AKG) is a grass-roots community-based and community-driven suicide awareness and prevention program. AKG’s Peer Educators - young Aboriginal men and women who run workshops grounded in their own positively-framed and local DVD - have long been perceived as one of the program’s major strengths. Indeed, the DVD shows the stories of three young Kimberley men, all of whom remain involved in AKG as Peer Educators or in other roles. Derived from the Final Report prepared by the Australian Institute for Suicide Research and Prevention, this presentation will examine the ways in which these Peer Educators were perceived by workshop participants and how they were placed within the Kimberley community.

**Methods and material**
In 2012, the AKG DVD and workshop was evaluated with a pre/post survey distributed to the mixed audiences. Altogether, 351 Aboriginal people from remote communities responded to the question: “What do you think about the young men in the DVD?” Responses were thematically analysed.

**Results**
Overall, responses were overwhelmingly positive. The majority of respondents perceived the young men to be good role models and champions for the community. Given that stigma is still attached to suicide, there was also a sense of pride that these three young men were brave enough to open up about their own experiences. Respondents felt that the DVD provided important lessons about suicide awareness and prevention that were relevant and appropriate to Kimberley Aboriginal cultures and place.

**Conclusions**
The continuing development of AKG, and the importance of its Peer Educators, demonstrates
the positive impacts of strong community champions. However, while Peer Educators were consistently positively perceived, there is a need to protect their wellbeing to ensure that they continue to remain resilient despite the enormous responsibilities taken on.

**PO3-32**  
**Women and Suicide: Beyond the Gender Paradox**  
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**Study objectives**  
Traditionally, suicide research has focused on male mortality, with little attention paid to the female experience of suicide. This means there has been a lack of research examining how female suicide rates and behaviours have changed over time and between countries. This study sought to understand how suicidal behaviours are gendered within specific cultures and societies, and by unpacking the Gender Paradox using Cultural Scripts Theory, aimed to explore some possible culturally relevant explanations for female suicide rates and behaviours worthy of future research attention.

**Methods and material**  
Through an exploration of the World Health Organisation Statistical Information System (WHOSIS) data, changes in the trends of female suicide across the period 1950 to 2009 in 106 countries were analysed. Observed changes in female suicidal behaviours were examined in the context of 12 geographical and cultural areas of the world: Africa, Anglo-Saxon countries, the Western Pacific, the Baltic States, Central and Eastern Europe, Eastern Mediterranean countries, Scandinavia, South America, South East Asia, Southern Europe and Western Europe.

**Results**  
Descriptive data demonstrated that the regions with the highest rates of female suicide were found in the Baltic States and Western Pacific; the lowest in the African region and South America. Great variation in female suicide rates over times were found in several regions including Central and Eastern Europe, South-East Asia, and South America. Interestingly, while some regions had markedly higher rates of males dying by suicide than females, the Western Pacific had a low gender ratio.

**Conclusions**  
Findings from this study contradict Durkheim’s hypothesis that females are immune to changes in their social environment as female suicide rates were high in transitional and tumultuous societies. Further, these findings also raised the question as to whether current suicide prevention resources are appropriate to the needs of suicidal women and the overarching cultures in which they sit. Cultural Scripts Theory was found to account for the Gender Paradox of suicidal behaviours, as well as its exceptions, recorded around the world. By seeking understanding as to how suicidal behaviours are gendered within specific cultures and societies, and by unpacking the Gender Paradox using Cultural Scripts Theory, this paper explores some possible culturally relevant explanations for female suicide rates and behaviour.
PO3-33
Suicide, Parasuicide and Self-Injurious Behaviors: Study of Genesis, Assessment and Phenomenology
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Introduction
The intent to produce pain to the self can have several motives. According to this and by a general perspective, we can differentiate to groups: those who self-injure themselves with intent to die and those who self-injure themselves with no intent to die. The determinants and main psychological variables underlying these behaviours are not well known and need an accurate research to better understand the suicidal processes. The aim of the study is to examine which psychological variables that are helpful in the understanding and assessment of suicidal risk and behaviour.

Objectives
An investigation study was designed to extend the findings of Gilbert (Gilbert & Allan, 1998; Gilbert et al., 2004) and the hypothesis derived from the Interpersonal-Psychological Theory of Joiner (2005) for suicide and self-harm in a clinical sample. Firstly, this study aims to explore the relative contribution of defeat feelings, perceptions of entrapment and shame centrality memory in prediction of self-harm and suicidal thoughts and behaviours (Social Rank Theory, Gilbert, 1992, 1998). Secondly, it aims to explore the relative contribution of perceived burdensomeness, thwarted belongingness and acquire capability for suicide (Interpersonal-Psychological Theory, Joiner, 2005) in prediction of suicidal thoughts and behaviours. A longitudinal study will explore how those psychological variables are associated with self-harm and suicidal behaviour taking as first evaluation moment the admission to the hospital due to self-injury/ suicidal risk/ suicidal ideation/ suicidal attempt (acute phase). We intent to find results that contribute to the identification of groups at risk for suicide, to a more effective treatment and to the decreasing of suicidal behaviours’ ratio among patients with self-harm behaviour.

PO3-34
Characteristics of Suicide Attempts among the Emergency Department Patients: Comparison Study between 2007 And 2012
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Objectives
To compare the characteristics of suicide attempters who visited the emergency department during two different periods (each in 2007 and in 2012).

Methods
Retrospective study using medical records of the emergency department in Nara Medical University Hospital during 2007 and 2012. The demographic details of patients; age, sex, method of suicide attempt, previous suicide attempt, outcome were recorded.
Results
The number of suicide attempt over each one-year period decreased with 69 cases in 2012 from 118 in 2007. In particular, the number of female patients largely decreased with 37 (54%) from 80 (68%). On the other hand, the proportion of the patients who committed suicide increased with 20.3% [n=14] from 17.8% [n=21]. There is not difference about the mean age of subjects, 44.5 years±17.8) in 2007 and 46.6 years ±19.6) in 2012. Self-poisoning was the most common method of suicide attempt and followed by hanging in both 2007 and 2012, but the number of patients with self-poising largely decreased with 26 (37.7%) from 65 (55.1%). The proportion of patients with previous suicide attempt did not have the significant difference in 2012 between 2007.

Conclusion
Our findings in this study indicated that the number of suicide attempters who visited the emergency department decreased in 2012 in comparison with 2007. It was suggested that significant decrease in female patients with self-poising was the most important factor.

PO3-35
Communication of Suicidal Ideation and Intent: Where and how does it go wrong?
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Background
Previous studies have shown that the majority of suicidal individuals attempt to communicate their suicidal thoughts and intentions to those around them, either directly or indirectly. These episodes represent key opportunities for intervention.

Aims
The study aimed to shed further light on the ways in which suicidal individuals communicate verbally with those around them and on the reasons why listeners may find it difficult to grasp what is being said.

Method
Individuals who died by suicide aged 18-34 years were identified from coroners’ records in London and South West England. Qualitative in-depth interviews were conducted with those who were close to the deceased, including parents, partners, siblings, peers and colleagues (n=31). Events leading up to the suicide were reconstructed using a narrative-based interview method. For this paper, we identified all narrative sequences describing suicide communications and analysed them using Speech Act Theory and other concepts drawn from sociology and linguistics.

Results
Suicidal individuals employed a range of face-saving strategies when communicating with those around them, including indirect, euphemistic and humorous forms of speech, which made it difficult for listeners to judge the intention behind the words. Significant others also engaged in face-work (Goffman 1967), employing indirect speech and politeness in order to avoid openly confronting the issue. This often resulted in premature closure of the conversation and a missed opportunity for intervention.

Conclusions
Verbal communications are an important element of the suicidal process. A deeper understanding of the forms they may take and the ways in which they can go wrong can inform efforts to equip lay people to play a role in suicide prevention.
**PO3-37**  
**Reasons for Attempted Suicide of those Visiting Emergency Rooms: A Case Study**  
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**Study objectives**  
As of 2011, under Article 11 of the Suicide Prevention Law, the South Korean government must appraise national status of suicide every five years. This was enacted to gain accurate insight on the suicide status, and to assess the urgency and demand for intervention services. This study was conducted as a preliminary to the proposed national evaluation. People taken to emergency rooms for their attempt at suicide were investigated in this study to determine their reasons for committing such acts.

**Method**  
This study obtained its sample from seven emergency rooms in Korea. It consisted of patients admitted from July 6th, 2012 to November 25th, 2012 for attempted suicide. Those who, unfortunately, succeeded in committing suicide were exempted from this study. Interviews were conducted using semi-structured questionnaires, and their results, filed as medical records, were retrospectively evaluated and analyzed.

**Results**  
502 subjects participated in this study. 56.2% had previous records of receiving psychological treatments, and 33.6% have had attempted suicide in the past. Subjective evaluations by participants and interview-based assessments by psychiatrists were used to analyze the subjects’ rationale for attempting suicide. Results from subjective evaluation indicated that stress and psychiatric symptoms were the reason for the attempts in 75.4% and 19.1% of the subjects respectively. Interview-based assessment yielded slightly different results: 52.8% and 33.6% of the subjects were found to have attempted suicide due to stress and psychiatric symptoms, respectively. Stress as the reason for attempted self-immolation was further analyzed. Females were more likely to receive stress from interpersonal relationships than males. In contrast, males were more susceptible to economic stress. Stress from physiological sicknesses played a relatively large role in senile subjects.

**Conclusion**  
Subjective evaluations and interview assessments yielded different results. This may be because some were unaware of, or have not yet displayed symptoms of their mental illnesses. This investigation suggests that periodic psychiatric examination may catalyze the process of gaining accurate insights on the suicide status. As individuals in different gender and age groups are affected by dissimilar factors, targeted approach to suicide intervention may be necessary.

**PO3-38**  
**MUNCH: His Art and His Suicidality**  
**Pelaez, S; Wels, P; Moreira, G; De Los Santos, C**  
Ultimo Recurso, URUGUAY  

The authors will analyze Munch’s work which shows his feelings, sufferings and thoughts during all his life. His mind was clearly represented in his art. Did he commit suicide?
**PO3-39**

**Validation of the Suicidality Assessment Instrument PRISM-S**
(Pictoral Representation of Illness Self Measure - Suicidality)

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Suicide ideation, suicide intents and suicide plans are a challenge to deal with - for professionals as well as for the person concerned. The challenge for many people is to assess the current and future degree of risk that someone will actually harm themselves. There is a great selection of instruments for measuring suicidality and associated risk factors, offering a validated rating. However, they are generally too complex and too time-consuming for use in routine clinical practice.

PRISM - the Pictorial Representation of Illness and Self Measure is a visualization technique that was initially developed to evaluate 'the subjectively perceived burden of suffering due to physical illness'. PRISM proved to take less than five minutes to complete and is unusual in relying only minimally on language. It is easy to apply and it revealed to be a simple tool to facilitate clinician-patient communication.

In our study we adapted the PRISM task in order to measure the subjectively perceived 'suicidality' (PRISM-S) of patients who were admitted to the crisis intervention center Winterthur, Switzerland. Final results of our study of validating PRISM-S will be presented.

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**PO3-40**

**Crisis Intervention Unit**

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**Study objectives**

Suicide was considered a minor problem in Portugal for years. The catchment area of our Department includes about 320,000 habitants. In April 2010 we implemented a Crises Intervention Program with a multidisciplinary team, giving support at the Hospital Emergency Unit to patients with suicide attempt.

**Methods**

The Crisis Intervention Unit combines inpatient treatment with ambulatory psychosocial and psychiatric treatment. The first approach is based on a systemic evaluation and directed to psychopathology recovery and implementation of problem solving techniques, including education to family members. The authors conduct a critical assessment of registered attempted suicide, from April 2010 to December 2012, looking for characteristics and predictors of suicidal behaviour. Patients were observed for the first time in the 24 hours after a suicide attempt.

**Results**

A total of 462 patients attempted suicide. Self-poisoning was the most common method. Women were predominant (80%) but most serious suicide attempts occurred in males (20%). The precipitant factors of the suicidal behaviour in women were family conflicts, marital conflict (alcoholism and domestic violence) with 32% having a past history of suicidal behaviour. The majority of patients were already in treatment for mood disorders. In men we found alcohol abuse, unemployment and physical illness. Patients with no psychiatric history presented difficulties in
dealing with adverse life events, separation or divorce, loss, unemployment and financial difficulties. In 2012, there was a significant increase of divorced individuals, pointing to more family tension and labour instability, associated to the global financial crisis. In the group of the repeaters with personality disorders and increased impulsivity there was a significant decrease in the number of voluntary drug intoxication. For most suicide means giving up, escape or release. Drop out was 2%.

**Conclusion**

Our population lives in the Ave river valley, with low education, working in textile industry and footwear. Female sex, younger age, divorced, having a personality disorder have an increased risk for nonfatal suicide attempt. A multidisciplinary approach seems more effective in identifying and providing appropriate targeted interventions for suicidal individuals.

**P03-41**

**Preventing Suicide through Online Support: Practical Considerations**

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**Objectives**

The online environment provides opportunities to prevent suicide through reaching people and delivering support. Many organisations are developing support services of various kinds. However, there is very little evidence available on these support services.

This research aimed to explore the provision of online support from the perspective of charities providing such services, to inform future service development by Samaritans and other organisations. The research explored why and how charities are providing online services, the perceived impact of the service, potential risk factors or challenges and examples of best practice.

**Methods**

In-depth interviews took place with twenty charities providing a range of different services located both nationally and internationally. These were analysed thematically.

**Results**

Key findings from the research are:

* Charities are providing a range of support services online, including information, discussion forums, instant messaging, self-management tools, and volunteer and professional support.
* Providing support via the online environment is a fast paced and rapidly growing field, continuously responding to the changing ways people communicate.
* The decision to ‘go online’ is a long term organisational commitment which requires on-going resource and development. It is an iterative journey of continuous learning and change.
* Development of online services must be directed by the needs of service users and the technology available, not by what the organisation already does or how they already do it.
* Working in partnership and sharing knowledge with other organisations is beneficial to charities developing online services.
* Charities are keen to find ways to reach out to and support people ‘where they are’ in existing online spaces, such as social media sites.

**Conclusions**

The findings show that providing online support can be challenging to organisations set up to deliver services via ‘traditional’ channels, requiring organisations to be highly flexible and to adopt an approach of continuous learning, adaption and change. The findings feed into an
on-going programme of research and development for Samaritans. Alongside further research into the online environment and development of online services, Samaritans are also working to develop guidelines and training for internet service providers to enable them to identify and respond to distressed users.

**PO3-42**

**Self-aggressiveness and Guilt in Non-fatal Suicidal Behaviour in Young**

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**Background**

Self-aggressiveness and guilt are uncommon topics studied in suicidology mainly because of its difficult understanding.

**Objectives**

From a 20-year experience involving 463 young patients (15-24 years old) referred from the Emergency Room to our unit our aim was to study the association between self-aggressiveness/guilt and several socio-demographic and clinical variables.

**Methods**

We used a semi-structured questionnaire designed by our unit with 77 items covering all those aspects. Two Groups were compared: Group 1 - self-aggressiveness/guilt (32%) and Group 0 - without self-aggressiveness/guilt (68%).

**Results**

Regarding socio-demographic variables within Group 1 we found: higher proportions of male, urban, middle-upper social class and advanced schooling patients. Regarding clinical variables the following findings were more frequent within Group 1: physical or sexual abuse during childhood, absence of a confidant friend or group activities, personality disorders, bereavement, previous non-fatal suicidal behaviours, self-cutting episodes, suicide note, suicide plan, and high suicidal intent. And less frequent: impulsivity, precipitant emotional-affective quarrel and satisfaction for surviving.

**Conclusions**

These findings reveal a very important subgroup of patients that need a special attention towards a deeper understanding in order to build a therapeutic alliance that provide an accurate prevention of a further completed suicide.

**PO3-44**

**Translating and Generating Evidence to Inform Community Discussions about Suicide**

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In suicide prevention, most, if not all, would argue that sound evidence should inform practice. But what happens when the need for practice, and the funding of practice, occurs before the evidence? How we communicate as communities about the issue of suicide is one of these areas. There has been healthy debate internationally about the potential benefits of talking more openly about suicide, within families, schools, workplaces and communities. While much opinion has
been shared about the need to talk more about suicide, there is limited evidence, and therefore evidence-based resources, to guide these discussions across community settings. This paper will provide an overview of a project to develop community guidelines for discussing suicide in Australia. It will also use the project to provide a conceptual framework for developing suicide prevention resources from a limited evidence base.

The paper will summarise key outcomes from a review of the international evidence, a thematic analysis of existing resources, programs and initiatives, and engagement of experts and community members through consultation forums focused on educational settings, workplaces, families and communities as well as a series of community-based focus groups.

The benefits and challenges to developing broad-reaching suicide prevention resources to guide the way we discuss suicide as communities will be explored and a model for developing community responses to suicide prevention that both translate and generate evidence proposed.

**P03-45**

**Female Suicide Increases Three Times from 2000 to 2009 in the 5th Biggest Brazilien City**

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Universidade Federal do Ceará, BRAZIL

**Objectives**

To analyze suicide cases among women in comparison with female deaths in the general population in Fortaleza, the 5th biggest Brazilian city, between 2000 and 2009.

**Method**

Fortaleza, the capital of the State of Ceará, has around 2.5 million people. The Forensic Institute of Ceará (PEFOCE) registers all violent deaths, including suicide cases, and its database was used as source for general population deaths and suicide information. Data from DATASUS, database of the Brazilian health system SUS Sistema Único de Saúde, for population information was also used. The following variables in female suicides cases were analyzed: age, method, occupation and civil status.

**Results**

The female population grew only 17.1% in the period from 2000 to 2009. In 2000 there were 1,139,166 women, and in 2009 the number was 1,334,204. In terms of female deaths, in 2000 there were 46,480 female deaths, and in 2009 occurred 57,690, an increase of 24.1%. In terms of female suicide, in 2000 were 8 female suicides, and in 2009 occurred 27 cases. There was a threefold increase in the total number of suicide cases and also the proportion of suicide in general female deaths augmented 170%.

**Conclusion**

There was a huge increase in the number of female suicide case. The proportion of suicide cases surpasses the female population growth as well as a proportion of the total death in women.
**P03-46**

**Effects of Targeted Educational Lecture on Medical Students’ Attitude towards Who May Have Suicidal Risk, Using Attitude Towards Suicide Questionnaire**

**Tanaka, O**
Aomori Prefectural Center for Mental Health and Welfare, JAPAN

**Purpose**
We performed the educational lecture which targeted for the medical students, through improving of how to recognize and deal with persons at suicidal risk, and examined its effect, using Attitude Toward Suicide (ATTS) questionnaire.

**Subjects and methods**
We performed the targeted educational lecture which was designed to improve the cognition of suicidality and anticipated behaviours toward persons at suicidal risk. Subjects were medical students (82 male, 18 female) who participated in and randomized into the practical lecture (which included role play session), or non-practical lecture. Questionnaire on ATTS were administered to them before and after the lecture, including 40 items concerning suicide as right, incomprehensibility, noncommunication, preventability, tabooing, normal-common, suicidal process, relation-caused, preparedness to prevent, resignation. Comparisons between pre- and post-lecture, and between practical and non-practical lecture scores were made, using the statistical analysis.

**Results**
At all of items of ATTS, significant improvements were marked between pre- and post-lecture. And at the items of preventability, suicide process, relation-cause and preparedness to prevent, significant higher points were marked in practical lecture group.

**Discussion**
The effect of targeted educational lecture to medical students was confirmed. And it became cleared that the practical lecture could improve not only cognition of suicidal process and cause, but also actual motivation to prepared behaviours to prevent suicide.

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**P03-47**

**Effects of Targeted Educational Lecture on Medical Students’ Consciousness and Approach toward who may have Suicidal Risk**

**Tanaka, O**
Aomori Prefectural Center for mental Health and Welfare, JAPAN

**Purpose**
We performed the educational lecture which targeted for the medical students, through improving of how to recognize and deal with persons at suicidal risk, and examined its effect.

**Subjects and methods**
We performed the targeted educational lecture which was designed to improve the cognition of suicidality and anticipated behaviours toward persons at suicidal risk. Subject were medical students (82 male, 18 female) who participated in and randomized into the practical lecture (which including role play session), or non-practical lecture. Questionnaires were administered to them before and after the lecture, including 6 items concerning cognition of suicidality (prevalence, necessity of verbalization, active questioning, fear of provocation, reluctance to interview, “how to ask” knowledge/skill) and 6 items concerning anticipated behaviours toward persons at suicidal risk (distraction, optimism, encouragement, persuasion, criticism, risk assessments). Comparisons between pre- and post-lecture, and between practical and non-practical lecture scores were made, using the statistical analysis.
**Results**
At all of items of cognition of suicidality, and of anticipated behaviours, significant improvements were marked between pre- and post-lecture. And at the items of reluctance to interview, how to ask knowledge/skill, and risk assessment, significant higher points were marked in practical lecture group.

**Discussion**
The effect of the targeted educational lecture to medical students was confirmed. And it became clear that the practical lecture could improve not only cognition of suicide, but also actual motivation to behaviours to prevent suicide.

**PO3-48**
OUT and Reaching Out: Attitudes to Help-seeking Behaviour in Gay, Bisexual, Trans and Intersex Men
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National LGBTI Health Alliance, AUSTRALIA

Beyond Barriers is an Australian project which aims to encourage men to take action against depression and anxiety and to reduce the barriers, including stigma, to seeking support. Men identifying as gay, bisexual, trans or intersex (GBTI) are one of the eleven target groups of the project. As part of the development of the programme, a national consultation of GBTI men was held through a series of focus groups and an on-line survey. The consultation focused on: Perceptions of ‘help-seeking’in GBTI men. Identifying the preferred sources of information and appropriate communication platforms and settings. Identify if there are specific ‘enablers’ and ‘barriers’ for men from the sexuality and diverse continua that differ from the ‘mainstream’.

The consultation showed that GBTI men reflected the same gender scripted attitudes about help-seeking although they were more prepared to reach out for help from male friends. GBTI men have a greater suspicion of mental health professionals and were sensitive to judgement about their sexuality or gender from clinicians. Many reported having received discriminatory attitudes or homo/trans/intersex phobia from clinicians when presenting in mainstream services. This presentation will present the findings of the consultation which can assist in informing the development of suicide prevention campaigns for GBTI men and for mainstream services to be inclusive when working with suicidal GBTI men.

**PO3-49**
Human and Professional: Strategies for Dealing with Loss and Grief and Vagarious Trauma in Suicide Prevention Workers
Taylor, B
National LGBTI Health Alliance, AUSTRALIA

As suicide prevention workers, clinicians and researchers we are often exposed to the intense human emotions and suffering related to suicide and deaths by suicide. With the expectation to be there for others, support for the suicide prevention worker can be lacking. While critical incident debriefing is often offered in a traumatic incident such as the suicide of a client, little attention is given to subtle negative outcomes that arise from being regularly exposed to suicidality, intense psychological distress and despair.
This presentation will address the questions of:
- How we manage and process our own grief?
- How does multiple loss impact on our work
- What are useful strategies to help manage the grief without minimising the human emotions we experience?
- What is the impact of vicarious trauma in researching suicide cases such as Coroner files?

Rarely are these issues addressed or spoken about yet burnout in this sector can be high. More attention needs to be given to these issues by the suicide prevention sector and organisations such as IASP. Based on the presenters experience and providing supervision to suicide prevention workers the presentation will also cover:
- The impact of suicide related loss and grief
- Cumulative loss and Compassion Fatigue
- Vicarious Trauma
- Self-care strategies for workers

PO3-50
Those Looking for What: The Users of Services for Suicide Survivors
Toffol, E1; Castriotta, C2; Totaro, S2; Olivi, F1; Ometto, C2; Ferrari, A2; Scocco, P2
1National Institute for Health and Welfare [THL] and SOPROXI Project, FINLAND; 2SOPROXI Project, ITALY

Objectives
A number of online services has recently developed for suicide survivors. It is plausible that suicide survivors who use online services differ from users of more traditional services. Understanding the differences between these two groups may help in deciding the appropriate intervention, if any. Additionally, these characteristics may have an influence on the attitude of the users towards the intervention, as well as on its final outcome. The aim of this work is to describe the characteristics of suicide survivors who have contacted SOPROXI, an Italian project for suicide survivors, either online or in person.

Methods and material
Data were collected between January 2006 and March 2013. When contacting the service, participants were asked to fill in a form concerning their socio-demographic features and information on the suicide, and a pool of 4 questionnaires (the Beck Depression Inventory, BDI; the Inventory of Complicated Grief, ICG; the Stigma of Suicide and Suicide Survivor scale, STOSASS; and the Brief Symptom Inventory, BSI). The differences between groups (online vs in-person users) were studied by means of \( \chi^2 \) test or Student’s t-test, as appropriate.

Results
Of the 102 suicide survivors who have contacted SOPROXI and accepted to collaborate during the study period, 61 (59.8%) have used the online service. Those who preferred an online contact were mostly women (96.7% vs 73.2%, \( p < 0.01 \)), younger (41.8 years vs 50.5 years, \( p < 0.001 \)), more likely to have a high school (46.7% vs 23.1%) or university (43.3% vs 20.5%) (\( p < 0.001 \)) education and to be professional workers (75.0% vs 41.0%; \( p < 0.01 \)). More often than their counterparts, they bereaved the suicide of a parent (21.7% vs 12.2%) or of a sibling (23.3% vs 4.9%) (\( p < 0.05 \)); they also had higher levels of depressiveness (BDI score 1.3 vs 1.0, \( p < 0.05 \)). The two groups did not differ with respect to their levels of grief (ICG), stigma and general symptoms (BSI). No difference emerged in relation to the suicidal mean, the time since the suicide, and having witnessed the suicide.
Conclusion
Suicide survivors who use an online support differ from those who prefer a more traditional intervention mostly with respect to their socio-demographic characteristics, rather than to their levels of psychopathology or grief. These differences have to be taken into account when implementing specific interventions for suicide survivors. Further research is needed to better clarify these findings.

PO3-51
Surviving Suicide by a Suicide Survivor
Topp, H.R.
Canterbury District Hospital, AUSTRALIA

An experiential overview following the death of my husband by suicide whilst an inpatient in a private psychiatric hospital.
The transformational growth in terms of my healing journey has been extraordinary - from the profound almost overwhelming, crushing sadness to a quiet sense of peace that does not mean I don’t miss my husband I have found “meaning making” in work as a Hospital chaplain, NSW Accredited Disaster recovery chaplain and ordained interfaith minister, and a total and profound belief in Buddhism.
By exploring Buddhism and taking refuge (converting to Buddhism) in 2007, 3 years after my husband’s death, has been a most profound experience as it allowed me to do merits in my husband’s name to allow him to reincarnate into a more peaceful next life.
Not to be forgotten and perhaps even bigger than my conversion to Buddhism is having a Down’s syndrome son, in helping him to understand the death of his father, by allowing discussions and memory sharing has been profoundly healing as it gives us permission to think “outside the box”, that is instead of his Dad’s birthday celebration cake we have a we remember cake, by allowing him to see his father in his coffin helped him to deal with the abstract of what death means viz a viz when you are in a special bed (coffin) you sleep for ever and you don’t wake up.
When he asks if his Dad will come back we able to take him to the point of reference to the “special bed” where nobody ever wakes up from.
There are now so many gifts in my journey of healing if I am able to make just one person feel a little better by my sharing of my story, again this is an incredible blessing for me. I realise this also falls into category 13 (ageing elderly) and 7 religions and philosophy but a more experiential approach.

PO3-52
Non-Suicidal Self-Injury and Stress-Coping Style in Japanese University Students
Tsujimoto, E; Taketani, R; Ono, H
Kwansei Gakuin University, JAPAN

Background
Suicide in adolescents is recognized as a growing public health problem in Japan, and non-suicidal self-injury is one of the important risk factors for suicide. We studied the association between non-suicidal self-injury and stress-coping styles across gender in a sample of university students.

Methods
A questionnaire was distributed to 1545 students in western Japan between September 2009
and May 2012. The response rate was 73.3% (n = 1132), and 707 valid responses (207 males and 500 females, mean age = 19.3 yrs, range = 18-31 yrs) were obtained and analyzed. The Coping Inventory for Stressful Situations, which assesses task-oriented, emotion-oriented, and avoidance-oriented coping, was used to evaluate stress-coping styles. The survey was conducted anonymously with no identifying information being collected.

Results
The prevalence of non-suicidal self-injury was higher in female respondents (12.6%) in comparison to male respondents (8.7%), but this difference was not statistically significant (p = 0.138). Female respondents scored higher on avoidance-oriented coping in comparison to male respondents (p = 0.001), while task-oriented and emotion-oriented coping scores did not differ by gender. Regarding the association between non-suicidal self-injury and stress-coping styles, the score of avoidance-oriented coping was lower in female respondents with a history of non-suicidal self-injury than in comparison to those without it (p = 0.001). In contrast, the task-oriented and emotion-oriented coping scores did not differ between male respondents with a history of non-suicidal self-injury and those without it.

Conclusions
The results suggest that female university students who had a history of non-suicidal self-injury were not likely to use avoidance-oriented coping. Psychological interventions focusing on stress-coping styles might be effective for the prevention of non-suicidal self-injury in female university students. This study was supported by JSPS KAKENHI Grant Number 22530776.

P03-53
Suicide among Young People of Buryatia - A Disaster - Causes, Prevention - Landmark Results
Tsyrempilov, S
Buryat State University, RUSSIAN FEDERATION

In Russia, the highest suicide rates observed among young people of Buryatia. In Buryatia, the highest rate of suicide among children and young people, 35% of the total number of suicides. In Kizhinginsky, Eravninsky, Dzhida, Zakamensky regions of Buryatia, the suicide rate is higher than 120 per 100 thousand of population, there are instances of mass suicide (mostly young people). These areas are inhabited mainly by Buryats and partly Evenks. The target is to establish the causes of the high level of suicide among indigenous youth Buryatia.

Materials and methods
The study was conducted among 1350 university students of different ethnic groups, the average age of 18 years. Students signed consent to participate in the study. To assess the risk of suicide methods were used: 1 - Kucher A.A., Kostyukevich V.P. 'Identification of suicide risk in children', 2 - Razueva T.N. 'Identification of suicide risk in children, survey of suicide risk.' Because depression is often a background of suicide, used 3 - method Zung 'Assessment of depression.' To determine the cultural values, that determine behaviour, used the method of S. Schwartz.

Results
Now received the results of research in medical faculty. Of the 121 people on the basis of one test, an increased risk of suicide at 35 persons (42%). As a result of test 2, the increased risk of suicide at 41 (49%). At the end of Test 3, the depression to varying degrees at 47 (56%). The results of test 4 are currently being analyzed. In a group of potential suicides included people with a positive result for the test 1 and 2, only 42 (50%). Among the Buryat number of potential suicides is 82% of the total, respectively among the Slavs 79%, of Tuvinians 80%.
Conclusion
- found a many people who can do a suicide, 50% of students - belonging to different ethnic
groups has no effect on the number of potential suicides.
The study is supported by the Trust Fund for the Second International Decade of the United Nations.

PO3-54
A Study of Poverty and Shame Related Suicides in Kerala, India
Vellara Francis, S; Lødemel, I
Oslo and Akershus University College of Applied Sciences, NORWAY

In-spite of its social achievements like high literacy rate and high quality of life as well as health
achievements such as high life expectancy, Kerala, a small state in south of India, is ranked high
in reported suicides among Indian states. This paper aims to explore the relation of suicides in
Kerala to factors of shame and poverty. This study is part of the project ‘Shame, Social Exclusion
and the Effectiveness of Anti-Poverty Programmes: A Study in Seven Countries’ by Economic
and Social Research Council.

It has been postulated in this paper using a shame-model-of-suicide that in most cases of sui-
cides, the victims are shameful and secretive which turns them away from being part of the so-
ciety. Shame model is based on a conceptual model introduced by Smith and McElwee aimed at
exploring the role of shame in entrepreneur processes. The shame model postulates that when
the inner understanding regarding what is expected of oneself is conflicted, shame is induced.

Individuals whose self-integrity is compromised due to shame are vulnerable victims of suicide.
Psychological studies reveal that the individual’s upbringing from childhood and the values fed
to him from the society/parents also play big role in the individual’s internal perception on what
is expected of him, the failure in living up to this expectation induces shame and eventually sui-
cide. It was observed that the society has considerable responsibility in introduction of shame
in individuals and so do all suicides. An effort has been made to reveal the potential relevance
of shame in motivating suicide by studying the reported reasons for suicides from National Crime
Records Bureau (NCRB) records. Unsurprisingly, all underlying reasons of suicides as reported in
the NCRB records could be linked to potential shaming events, which the victim had escaped/tried
to escape by committing suicide. Using the shame-model-of-suicides, an attempt has been made
to define interventions for suicide prevention. The shame model alienates conventional suicide pre-
vention interventions such as counselling and suicide helplines as it is theorized that the individual
wants “not to be seen” and to “disappear”. Restrictions to exposure mechanisms of shaming events
such as restriction to media in reporting “particularly shaming” incidents are also proposed.

Shame model of suicide
PO3-56
Development of a Conceptual Framework to Guide a University Campus-Wide Suicide Prevention Initiative
Wren, PA; Connally, D; Hawley, L; Wallace, E; Wummel, B; MacDonald, M.
Oakland University, UNITED STATES

Study Objectives
Oakland University’s suicide prevention program called GRASP - Grizzlies Response: Awareness and Suicide Prevention - is a comprehensive, multi-disciplinary effort to establish a conceptual framework to guide effective, sustainable, and collaborative suicide prevention programming for faculty, staff, and students. A social-ecological perspective frames the proposed educational activities to promote connectedness across the campus and extend the offerings to crisis intervention agencies in the broader community.

Methods and materials
We elected to begin with a campus-wide surveillance effort to systematically benchmark key indicators of the campus community’s physical and mental health. The Dillman method of pre-notification, invitation with survey link, and tailored follow-up contacts is being used. The survey instrument consists of four sections: (1) general health status; (2) mental health status; (3) suicide knowledge; and (4) demographics. General health and mental health status is measured using the 116-item Medical Outcome Study’s Core Measure of Health-Related Quality of Life. Suicide knowledge and intervention skill needs are assessed with the Suicide Prevention Exposure, Awareness, and Knowledge Survey and other application items adapted for this study. Section three taps confidence in one’s ability to interact with others about suicide prevention, perceptions of mental health seeking, and suicide information. The demographics section includes age, sex, sexual orientation, race/ethnicity, relationship status, etc.

Results
Institutional Review Board approval for the protection of human subjects was granted. The survey was launched in March 2013. Results of the surveillance effort will yield broad indicators of the physical and mental health of members of one college campus. Exposure to suicide-related behaviours and risks, assessment of suicide knowledge, and suicide intervention needs will form the basis of educational programming to be offered to targeted populations.

Conclusion
Suicide and suicidal behaviour represent pressing public health concerns in university communities. The broad multidisciplinary expertise and strong theoretical underpinnings of this effort coupled with comprehensive surveillance data strengthen this evidence-based approach to prevent suicide in a university setting and adjacent communities.

PO3-57
Understanding Excessive Suicide Risk among Disadvantaged Men in Mid-life: Challenges for Theory, Policy and Practice
Wyllie, C1; Platt, S2; Brownlie, J3; Chandler, A2; Connolly, S4; Evans, R5; Kennelly, B6; Kirtley, OJ7; Moore, G8; O’Connor, R9; Scourfield, J10
1Samaritans, UNITED KINGDOM; 2The University of Edinburgh, UNITED KINGDOM; 3University of Stirling, UNITED KINGDOM; 4National University of Ireland, Galway, IRELAND; 5Cardiff University, UNITED KINGDOM
Objectives and approach
Samaritans [a suicide prevention charity in the UK and Ireland] commissioned five leading social scientists [from psychology, sociology, economics and gender studies] to explore what evidence and theory in their area contributes to understanding why socio-economically disadvantaged men in mid-life are at excessive risk of dying by suicide, and what can be done to reduce this risk. The findings were synthesised into a model and Samaritans formulated policy recommendations. The report informed an awareness campaign and engagement with policy-makers. This paper presents the findings of the research, and reflects on its successes and challenges, its contribution to theorising about suicide, and its potential influence on suicide prevention policy and practice and engagement with this group of men.

Results and conclusion
The research took as given that mental ill-health plays a major role in suicide, and aimed to provide an alternative social scientific perspective to the psychiatric and epidemiological perspectives which dominate suicide prevention (in the UK and Ireland). The report highlights a number of significant changes in society over the last 50 years, including: threats to traditional gender roles and social relationships; transformation of culture, from repressiveness pre-war to permissiveness post-war; and economic restructuring and the decline of traditionally male industries. These changes pose challenges to men in mid-life, especially those occupying low socio-economic positions who are at increased risk of experiencing multiple, interacting risk factors for suicide. Preventing suicide in this group requires action at many levels (e.g. state, community and individual) and in many domains (e.g. employment, social welfare, health).

Implications for theory, policy and practice
Samaritans provided a plausible explanation of the high suicide in this socio-demographic group which resonated with the general public because of their lived experience of adversity arising from the current socio-economic context. However, Samaritans (and the wider suicide prevention community) still have to face many challenges, including: integrating perspectives from several disciplines; avoiding being co-opted to anti-feminist arguments that ‘women’s equality’ is the ‘cause’ of male suicide; helping policy-makers to recognise suicide as an equity issue; and making specific rather than general statements on causation and interventions.

PO3-58
Scenario of Urban & Rural Suicide in Bangladesh
Islam, Z; Karim, R
Society for Voluntary Activities-SOVA, BANGLADESH

Background
South-western region of Bangladesh is commonly known as a suicide prone area. Time to time different studies carried out for exposing the underlying causes of suicide by high up researchers, sociologists of Bangladesh. But no study has taken yet by any national & international research organization to do the like. In 2012 SOVA merely steps up to conduct a population based demographic study in Jhenidah Pourashava and six Unions under Sadar Upazila of Jhenidah District for knowing the underlying social factors behind suicide attempts.

Objectives
To get a clear perception about suicide tendency and social factors behind suicide attempts in urban & rural perspectives of Jhenidah District in Bangladesh.
**Result**

According to population the prevalence of para suicide is comparatively more in urban areas rather than that of rural area (Urban 71% Rural 69% per lac). But in case of suicide death the frequency is little more in rural areas (Urban 12% Rural 14% per lac). In urban area 80% out of all 76 suicide attempts took poison, on the contrary in rural area 70% out of all 75 suicide attempters used poison for committing suicide. Nearly 71% urban suicide attempters’ age limit was up to 25 years wherein in rural area it was nearly 61% within the same group. With regard to sex more than 59% suicide attempters are from the female in urban areas and 68% in rural areas. Family level disputes (simple & complex) found as a common and highly dominated triggering factor for provoking one to commit suicide both in urban (60%) rural area (57%). The prevalence of suicide attempts is also found more among the married and poverty stricken people both in urban & rural vicinity.

**Conclusion**

Multi level social factors like weak social integration, male dominated social structure, not to keep face with the growing challenges, uncertain future and lack of understanding should get more importance for prevention of further suicide.
PL7-1
Reducing Global Suicides - Innovations and Interventions
Vijayakumar, L
Voluntary Health Services, INDIA

The traditional risk factor amelioration to reduce suicides has yielded limited results. The emergence of cross discipline, cross organizational models without being restricted to health service modules is an important opportunity to reduce suicide. Restriction of access to pesticide by central storage of pesticides in India, interventions to reduce self immolation in Iran, addressing social issues along with health issues in Japan, providing contact to persons who have attempted suicide in Australia, using the internet and social media network to reduce suicidal behaviour, multi-modal interventions to treat depression and teaching interpersonal skills to students are some of the innovative interventions to reduce suicides. The global shift in the burden from communicable and maternal disorders to non-communicable and mental health disorders and self injury necessitates immediate and innovative action to reduce suicides. Reducing suicide around the world - can it be a Millenium Developmental Goal?
### LIST OF AUTHORS

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