Self-harm and suicide:  
Associated risk factors and evidence based interventions

Wales’ first International Suicide and Self-Harm Symposium

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Overview

- Suicide and suicide prevention in international context
- First responders and specific challenges relating to suicide and self-harm
- Self-harm among adolescents and young adults; risk and protective factors
- High risk groups for self-harm and suicide
- Evidence based interventions for self-harm and suicide
- People who do not benefit from evidence based interventions and case studies
Context


- WHO Global Report on Preventing Suicide (WHO, 2014)

- Progress in terms of new countries developing national suicide prevention programmes or second programmes

- Emerging evidence supporting key components of national suicide prevention programmes including community/population based interventions
Challenges in developing and implementing national suicide prevention programmes

- Ineffective planning, co-ordination, collaboration, lack of enforcement of guidelines and insufficient resources

- Lack of independent and systematic evaluations of national suicide prevention programmes

- Address real-time developments, in particular, mental health needs and suicide prevention among refugees and migrants from LMICs
Suicide and self harm prevention strategy for Wales 2015-2020

Specific vulnerable or at risk groups:

- Vulnerable young people, especially those who are not in education/training/employment;
- Middle-aged men
- People over-75;
- People in psychiatric care
- People in prison or in custody
# Core components of national suicide prevention strategies

(\textit{WHO, 2014})

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Suicide and medically treated self-harm - The tip of the iceberg (example Ireland)

Suicide
Approx. 550 p.a.

Medically treated self-harm
Approx. 11,000 p.a.

“Hidden” cases of self-harm
Approx. 60,000 p.a.
Suicide rates in England and Wales by 3 year moving average rates per 100,000 population, 2002-2016

Source – Office for National Statistics
Self-harm rates in England per 100,000 of the population, 2003-2012

Males

Female

Source – Clements et al, 2016
First responders’ role and challenges relating to suicide and self-harm
Unique challenges for first responders

- First interveners dealing with emergency situations on a daily basis, including police officers, firefighters, paramedics, ED staff training

- First responders are also involved with people who suffer from recurrent and severe mental health problems, who have a history of sexual and physical abuse, alcohol and drug misuse/addiction

- However, training in awareness and skills relating to people with mental health problems and suicidal behaviour is limited

- Training, supervision and self-care is often not available on a regular basis
Unique challenges for first responders ctd.

- Frequent interaction with suicidal individuals
- Frequent interaction with people affected by suicide
- Lack of clarity on referral pathways
- Dealing with the media (high profile suicides, murder suicide)
  - Finding the balance between providing facts and preventing copycat
  - Always mention sources of assistance/quality assured services for other at risk individuals
First responders: Quality and safety issues

- Ensure that a policy on dealing with critical incidents is in place

- Be aware of Acute Traumatic Stress Management strategies to aid overwhelming work experiences

- Sustainable training and upskilling programmes, e.g. Train the Trainer programmes

- Access to regular supervision

- Awareness of warning signs of depression and suicidal behaviour, if a colleague appears in distress
Risk and protective factors associated with self-harm in young people
Increasing trend of self harm acts involving highly lethal methods among males and females aged 15-29 yrs
Risk factors associated with self-harm in adolescents - *Girls*

- Substance abuse, including alcohol and drug abuse
- Self harm by friends and family members
- Sexual abuse and physical maltreatment
- Problems related to sexuality
- Problems with parents
- Bullying
- Difficulties in making – keeping friends
- High levels of depressive symptoms
- Sleep problems

Risk factors associated with self-harm in adolescents - *Boys*

- Substance abuse, including alcohol and drug abuse
- Self harm by friends and family members
- High levels of anxiety
- High levels of impulsivity
- Problems related to sexuality
- Bullying
- Problems with school work
- Sleep problems

Motives related to self-harm by gender among adolescents and young adults
Balancing the risks and opportunities of internet use

- In a population survey of 21 year olds, of the 248 participants who had made suicide attempts (6% of the overall sample), almost three quarters reported some kind of suicide-related internet use at some point in their lives.

- One in five had accessed sites giving information on how to harm yourself or take your life. In addition, help-sites were accessed as well.

  *Biddle et al, 2016*
Risk of suicide contagion via internet and social media

Netflix officials defend 13 Reasons Why against claims it glamourises suicide

Netflix drama series blamed for inspiring teens’ attempted suicide (Austria)

‘13 Reasons Why’ copycat suicide in Peru

• Suicide-related searches were 15-44% higher than expected, 12-19 days after the show’s premiere

• Searches “how to commit suicide” (26%); “commitsuicide” (18%); “howtokillyourself” (9%) were all significantly higher

• Queries related to help seeking were also higher (Ayers et al, 2017)
Challenges in relation to harmful information on internet and social media

- Harmful/potentially harmful media can be accessed across jurisdictions
- Increasing speed of circulating information via social media
- Unclear whether regulatory agencies for traditional media are responsible for monitoring social media
- Existing evidence on suicide contagion not translated into practice for all media stakeholders
Young People’s perspectives

**School-based individual support**

“Show them there is always someone there to help”

**School-based mental health education**

“More mental health classes”

“Get someone who had a problem to give a talk in school”

**Peer discussion groups**

“A group where kids can sit and discuss problems freely”

“Maybe someone else feels the same and would like to help”

**Anonymous support**

“Write down problems privately and a teacher can discuss them in front of the class”
Clinically relevant subgroups of people who engage in self-harm
Clinically relevant subgroups of Patients who engage in self-harm

Two subgroups:

1. **High risk self-harm patients:** high lethality self-harm presentations, and low lethality self-harm presentations with high level of suicide intent

2. **Major repeaters:** low lethality/intent self-harm presentations to hospital by patients who have a history of 5 or more previous self-harm presentations

- Prospective interview study involving consecutive self-harm patients presenting to hospital emergency departments
- Interdisciplinary research team, including psychiatry, psychology, primary care, public health, implementation research and people with lived experience
High-risk self-harm

- **First outcomes:**
  - 233 consecutive cases fulfilled the criteria for high risk self-harm (*July 2014-September 2016*)
  - Gender: 66.3% Male; Mean age: 47 years

- **Self-harm history:** History of one or more self-harm episodes (58.7%)

- **Addiction history:** Alcohol abuse (53.3%), Drug abuse (33.3%), and both drug and alcohol abuse (21.2%)

- **Experience of abuse:** History of physical, sexual or emotional abuse (46.0%)

- **Contact with healthcare services:** Attended GP in the past year (93.3%), previously treated as a psychiatric inpatient (57.8%)

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**National Suicide Research Foundation**

**HRB Health Research Board**

**IASP**

**UCC**
People with a history of major self-harm repetition

- First outcomes:
  - 63 cases fulfilled the criteria for people with a history of major self-harm repetition (August 2016 - May 2017)
  - Gender: 66.6% Female; Mean age: 45 years

  - **Self-harm history:** History of 10+ self-harm episodes (78.3%)
  - **Addiction history:** Alcohol abuse (30.4%), Drug abuse (56.5%)
  - **Experience of abuse:** History of physical, sexual or emotional abuse (82.6%)
  - **Contact with healthcare services:** Attended GP in the past year (95.7%), previously treated as a psychiatric inpatient (73.9%)

  - **Most prevalent psychiatric diagnoses:** Personality Disorder (65.2%) and PTSD (30.4%)
Evidence based interventions

Internationally consistent evidence:

- Dialectical Behaviour Therapy, in particular among women
- Cognitive Behaviour Therapy

DBT among men who engaged in high-risk self-harm has not yet shown consistently positive effects in reducing repeated self-harm and suicide (Goodman et al, 2016)
But...... not everybody is able to benefit from the evidence based interventions:

**Reduced impact of DBT when:**

- People suffer from severe PTSD. Increased repetition of self-harm during treatment

- Higher levels of dissociation throughout DBT treatment

➤ Greater severity of PTSD is associated with lower likelihood of self-harm cessation during DBT *(Harned al, 2010; Barnicot and Priebe, 2013)*
Explaining negative treatment outcome

- Patients with comorbid PTSD and Borderline Personality Disorder have a poorer outcome from dialectical behaviour therapy than those with BPD alone, possibly because of the negative impact of unaddressed trauma.

- Treatment should target BPD traits and PTSD symptoms simultaneously.

*(Barnicot and Priebe, 2013)*

**Complex Post Traumatic Stress Disorder**

Means the past abuse, is never in the past.
The memories, the emotions, the fears, the pain, are with you now.
In your sleep and when you are awake.
It feels like torture, the abusers are still subjecting you to, over and over.
And you can’t stop it, it’s involuntary.
Core components of national suicide prevention programmes:
An update of the evidence base
Training and education

• Educating health care and community based professionals to recognise depression and early signs of suicidal behaviour are important for determining level of care and referral for treatment and subsequent prevention of suicidal behaviour

  (Wasserman et al, 2012; Kapur et al, 2013; Coppens et al, 2014)

• Sustainability and capacity building of trainers and benefits in terms of knowledge, attitudes and confidence among community facilitators via a Train-The-Trainer model

  (Coppens et al, 2014; Isaac et al, 2009)

• Some indications for a link between improvements in intermediate outcomes (e.g. improved knowledge, attitudes and confidence) among health care and community based professionals and primary outcomes, e.g. reduced suicide and self-harm rates

  (Mann et al, 2005; Hegerl et al, 2011; Zalsman et al, 2016)
Outcomes evaluation Gatekeeper training police officers

*Competency in recognising suicide risk*

Reported confidence increased significantly following the training programme (baseline: $M=4.45$, $SD=1.82$, post-training: $M=5.82$, $SD=1.80$, $p<.001$). Effect size: $r=0.66$
Stigma related to depression

Following the OSPI gatekeeper training the police officers showed significantly more positive attitudes towards depression (baseline: M=32.91, SD=4.61, post-training: M=35.07, SD=4.82, p<.001). Effect size: r=0.51 (large effect).

OSPI Europe is funded by the European Commission within the 7th Framework Programme.

The highest increase in 2009 was among 20-29 year old men at 21%, this is the young workforce who are finding the current climate very stressful.

Inspector John O'Reilly who has praised the immediate impact of suicide intervention training for Limerick Gardaí.

‘The highest increase in 2009 was among 20-29 year old men at 21%, this is the young workforce who are finding the current climate very stressful…'

re-training
post-training

Positive attitudes (p<.001). Effect size: r=0.51

Programme
Consistently positive effects of Depression & Suicidal Behaviour Awareness and Skills Training among Community Facilitators in terms of improved knowledge, attitudes and confidence, including:

- Social workers
- Clergy
- Counsellors
- Managers
- Pharmacists
- Teachers
- Carers for older people
School based intervention programmes

- Quality of evaluation studies involving school based programmes has improved over the past decade.

- Evidence from RCTs addressing mental health literacy, suicide risk awareness and skills training impacted on reduced repetition of self-harm and severe suicidal ideation.

- Youth Aware of Mental Health programme (YAM) had a significant impact on reducing self-harm acts, suicidal ideation and improving help-seeking behaviour.
Community based Multi-level suicide prevention programmes

- Community based interventions to improve the care for people diagnosed with depression and simultaneously address awareness and skills in early identification of suicide risk among healthcare and community based professionals (*EAAD, NOCOMIT-J*)

- Reductions in fatal and non-fatal suicidal behaviour combined up to 32% (*Szekely et al, 2013; Hegerl et al, 2013*)

- Proven synergistic effects of simultaneously implementing evidence based interventions (*Harris et al, 2016*)
European Alliance Against Depression: Multi-level suicide prevention programme

1. Training for GPs
   Aim: Improving the treatment for people with depression and prevention of suicide

2. Training for Community Facilitators

3. Awareness campaign for the general public

4. Interventions for patients & family members (evidence based interv. & guided self-help)

Reduction in suicide and suicide attempts up to 31% in 3 years (Hegerl et al, 2013)
Media

- Systematic review of 56 studies (Sisask & Varnik, 2012)
  - Most studies provided evidence for an association between sensationalised media reporting and suicidal behaviour,

Social media

- Systematic review covering 30 studies on social media sites for suicide prevention (Robinson et al, 2016)
- Social media platforms can reach large numbers of individuals and may allow others to intervene following expression of suicidal behaviour
- Challenges: controlling user behaviour, possibility of contagion, and accurately assessing suicide risk, issues relating to privacy and confidentiality

Media awareness campaigns

- The role of mass media in reducing stigma and increasing help seeking behaviour.
  - Indications for most promising results based on multi-level suicide prevention programmes (Niederkrotenthaler et al, 2016)
The suicide cluster in Bridgend and the media

• In January 2008, the UK media reported a series of deaths among young people in Bridgend as a suicide epidemic.

• The intensity of the reporting remained high for several weeks, and the numbers of cases reported in the media continued to rise.

• A time-space cluster involving 10 suicide deaths among 15–34 year olds was identified.

• The statistically identified cluster was smaller and shorter in duration than the phenomenon reported in the print media.

• Most deaths in the cluster occurred after the commencement of the attention from the print media (much of the initial newspaper focus related to deaths in the preceding 12 months).
Restricting access to means

- Consistent evidence that restricting access to lethal means is associated with a decrease in suicide and that substitution to other methods appears to be limited (Zalsman et al, 2016)

- Reducing access to frequently used sites for suicide. Evidence from 18 studies showed a consistent reduction of suicide following restricted access and increased safety of the sites involved (Pirkis et al, 2015)

- Increasing trends of suicides involving helium gas in the Western Pacific Area and in Europe (Chang et al, 2016; Gunnell et al, 2015)

- Restricting access to means to be implemented in conjunction with other suicide prevention strategies/interventions
Diolch yn fawr iawn!

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