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

- Global Mental Health Action Plan, 2013-2020 *(WHO, 2013)*

- 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
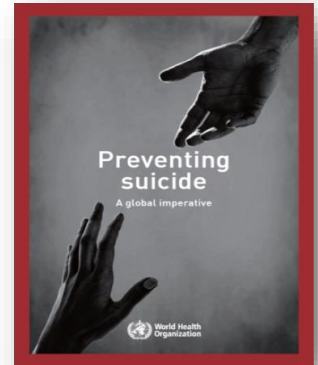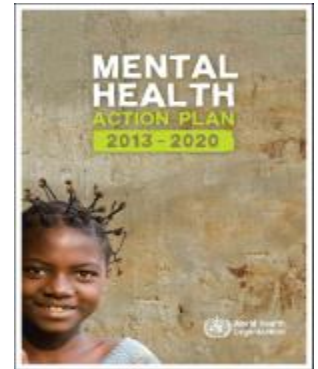
Challenges in developing and implementing national suicide prevention programmes

- 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
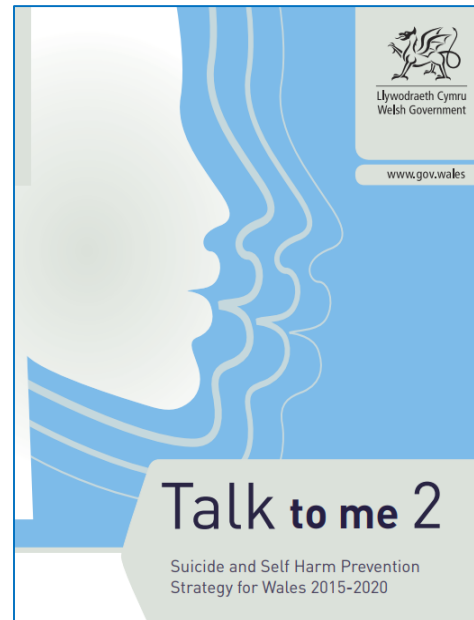
National Suicide Prevention Strategies, Wales

A National Action Plan to Reduce Suicide and Self Harm in Wales 2008-2013
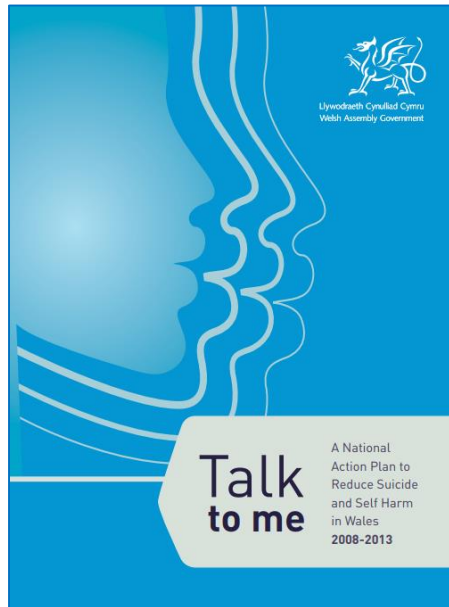
Suicide and self harm prevention strategy for Wales 2015-2020

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 *(WHO, 2014)*

|	
1) Surveillance	7) Crisis Intervention
2) Means Restriction	8) Postvention
3) Media	9) Awareness
4) Access to Services	10) Stigma Reduction
5) Training and Education	11) Oversight and Coordination
6) Treatment	

# 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.
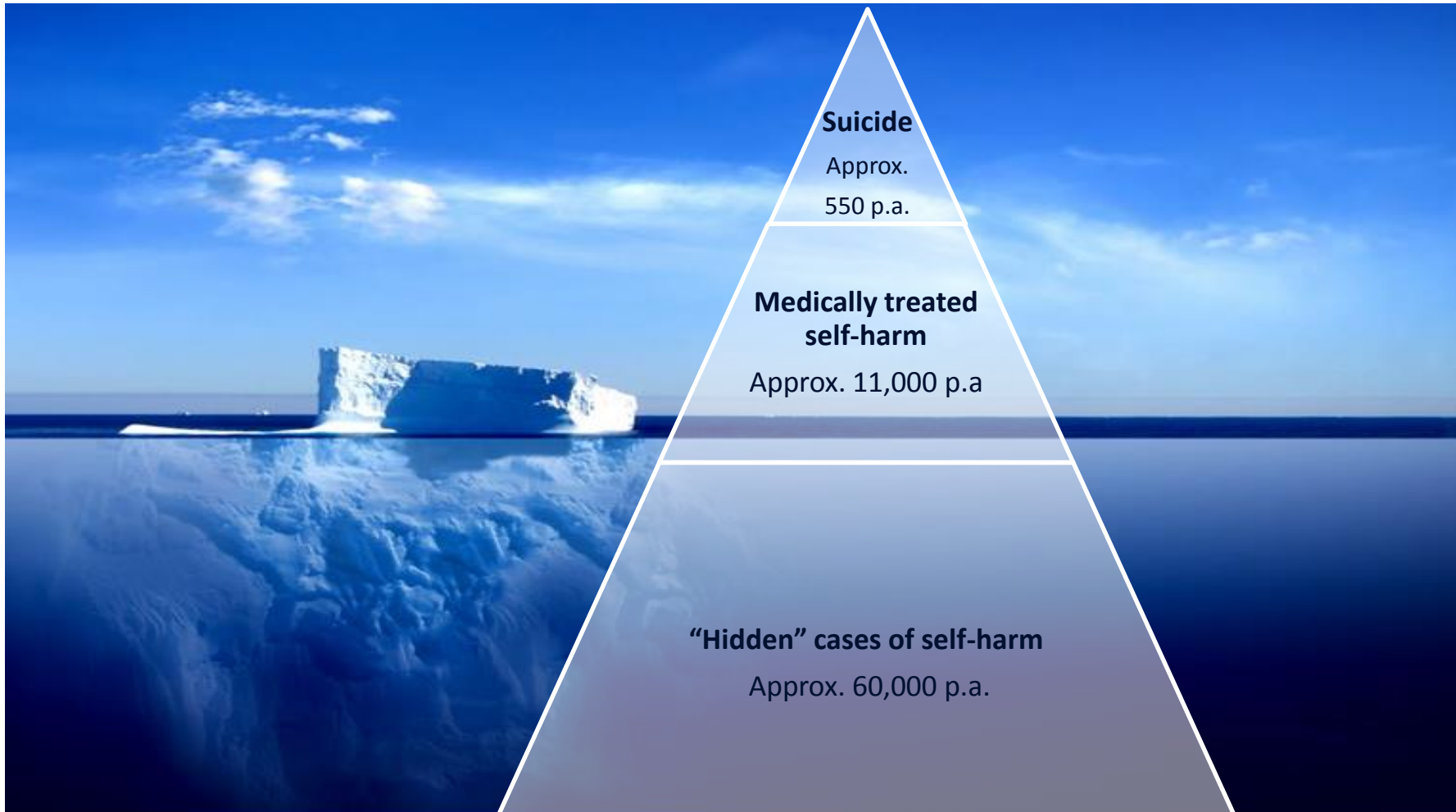
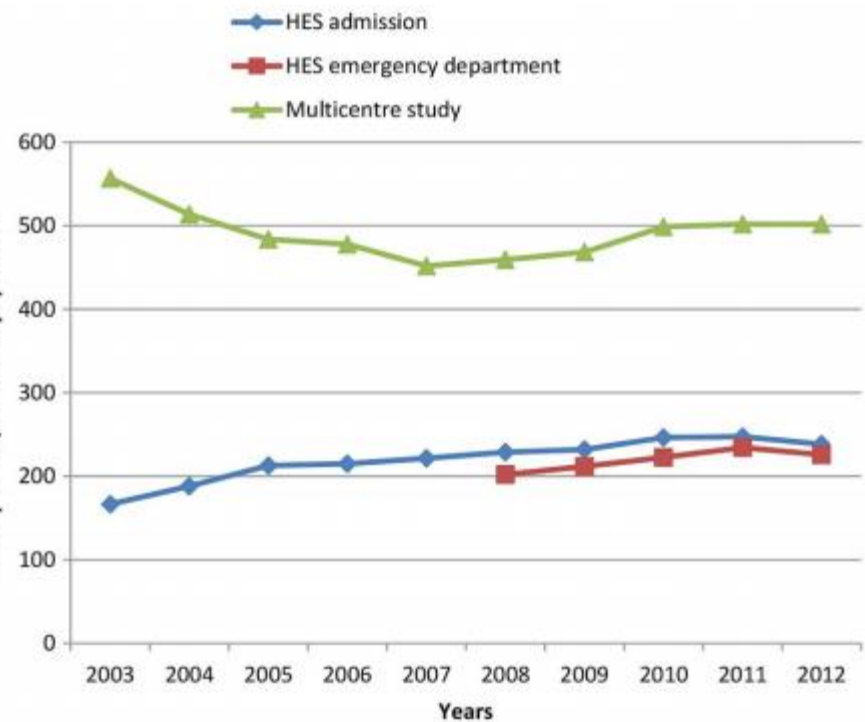# Suicide rates in England and Wales by 3 year moving average rates per 100,000 population, 2002-2016
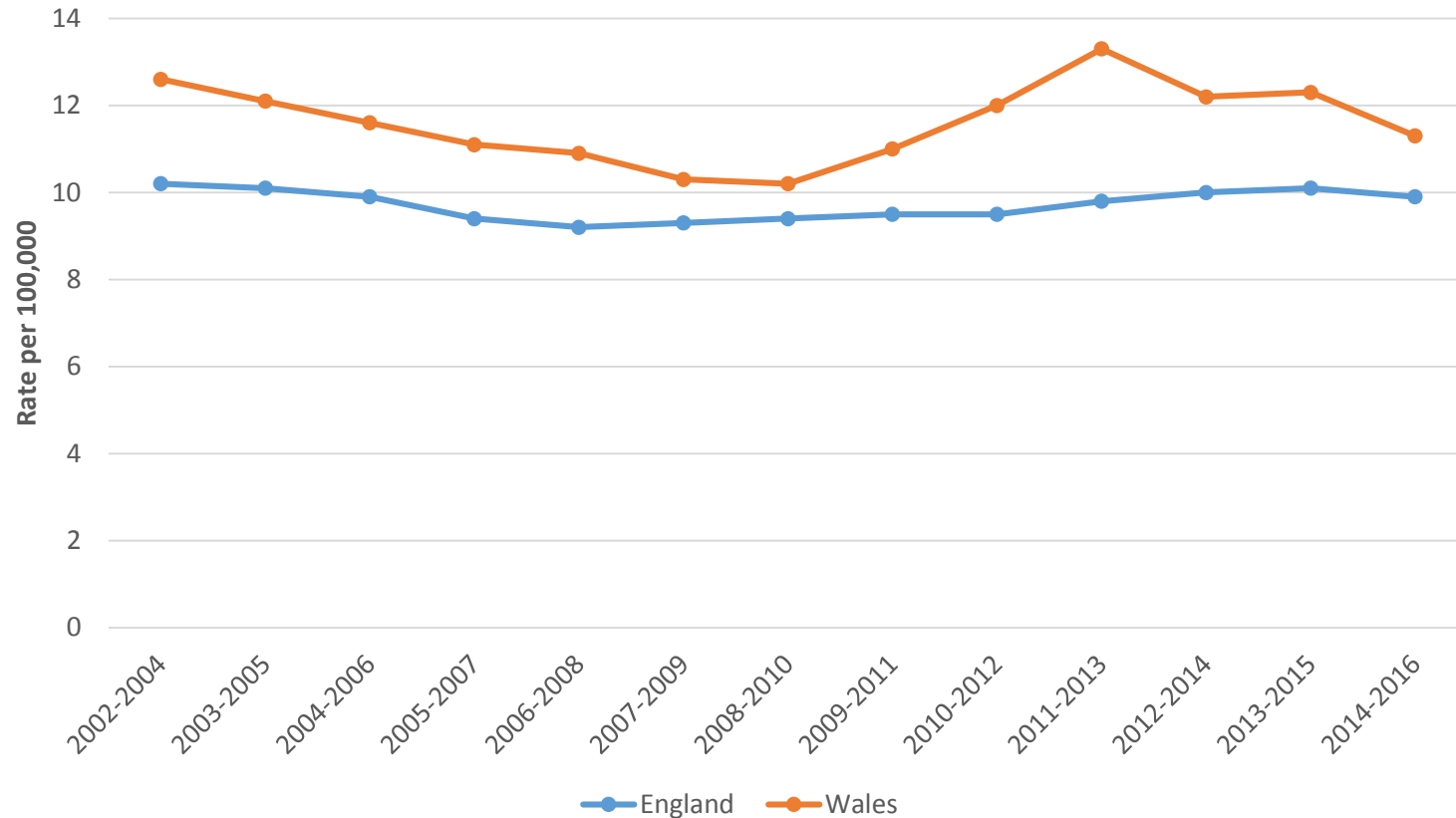
Source – Office for National Statistics

Self-harm rates in England per 100,000 of the population, 2003-2012

Males
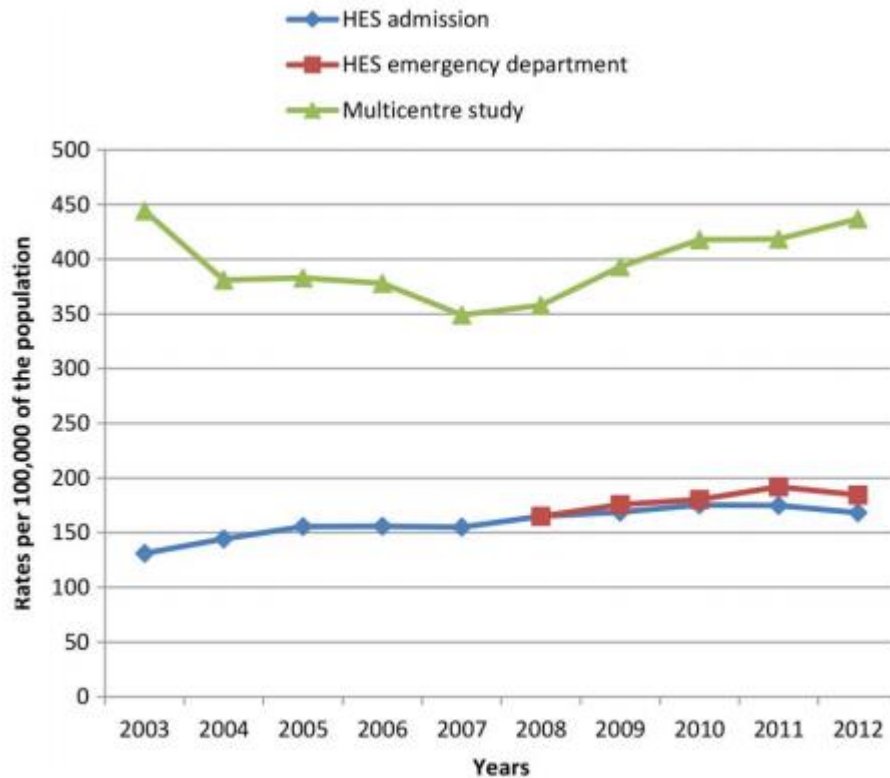
Female

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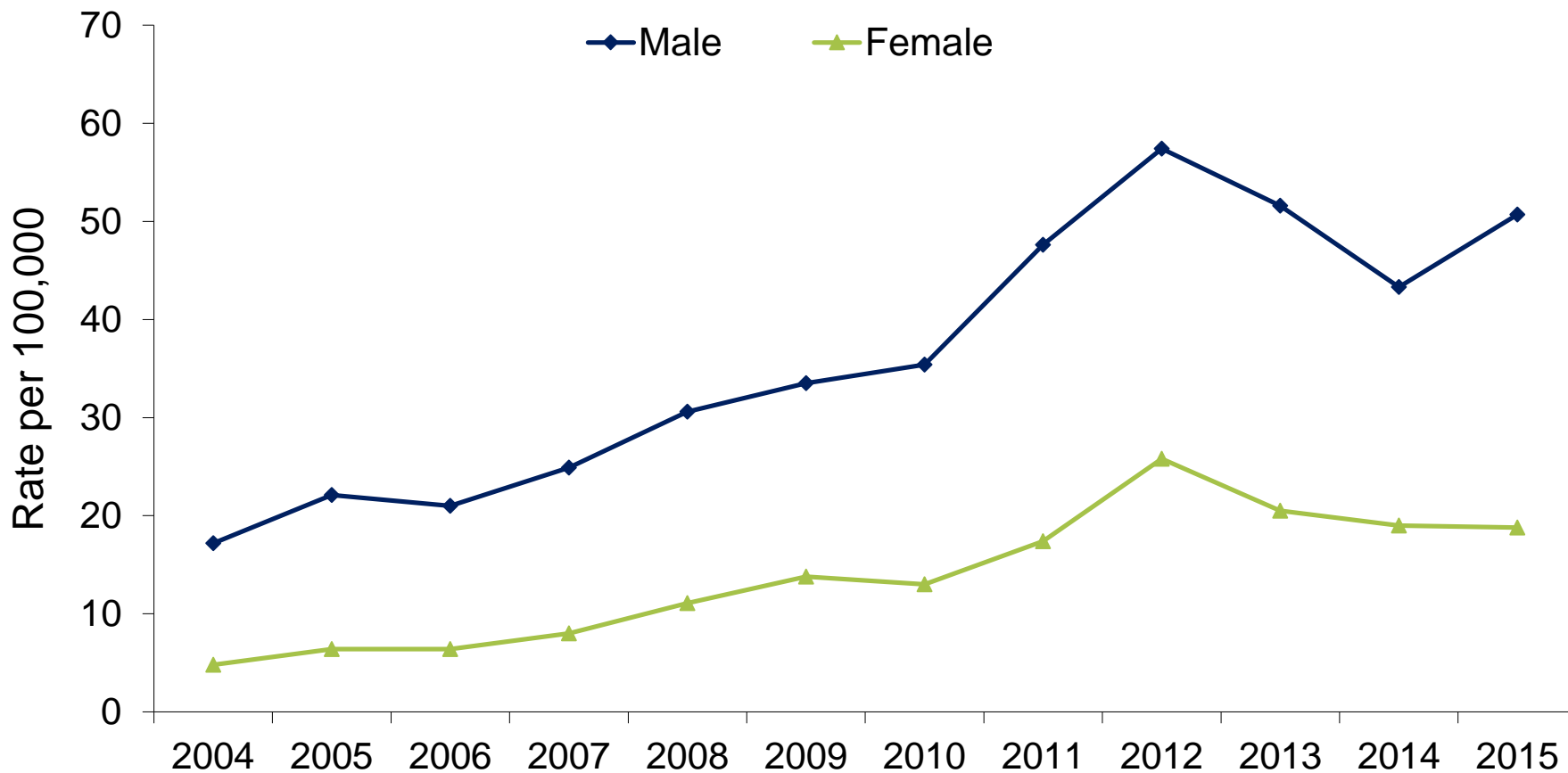
Risk factors associated with self-harm in adolescents - *Girls*

❖ 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

McMahon et al, 2013; Hysing et al, 2015

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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

McMahon et al, 2013; Hysing et al, 2015

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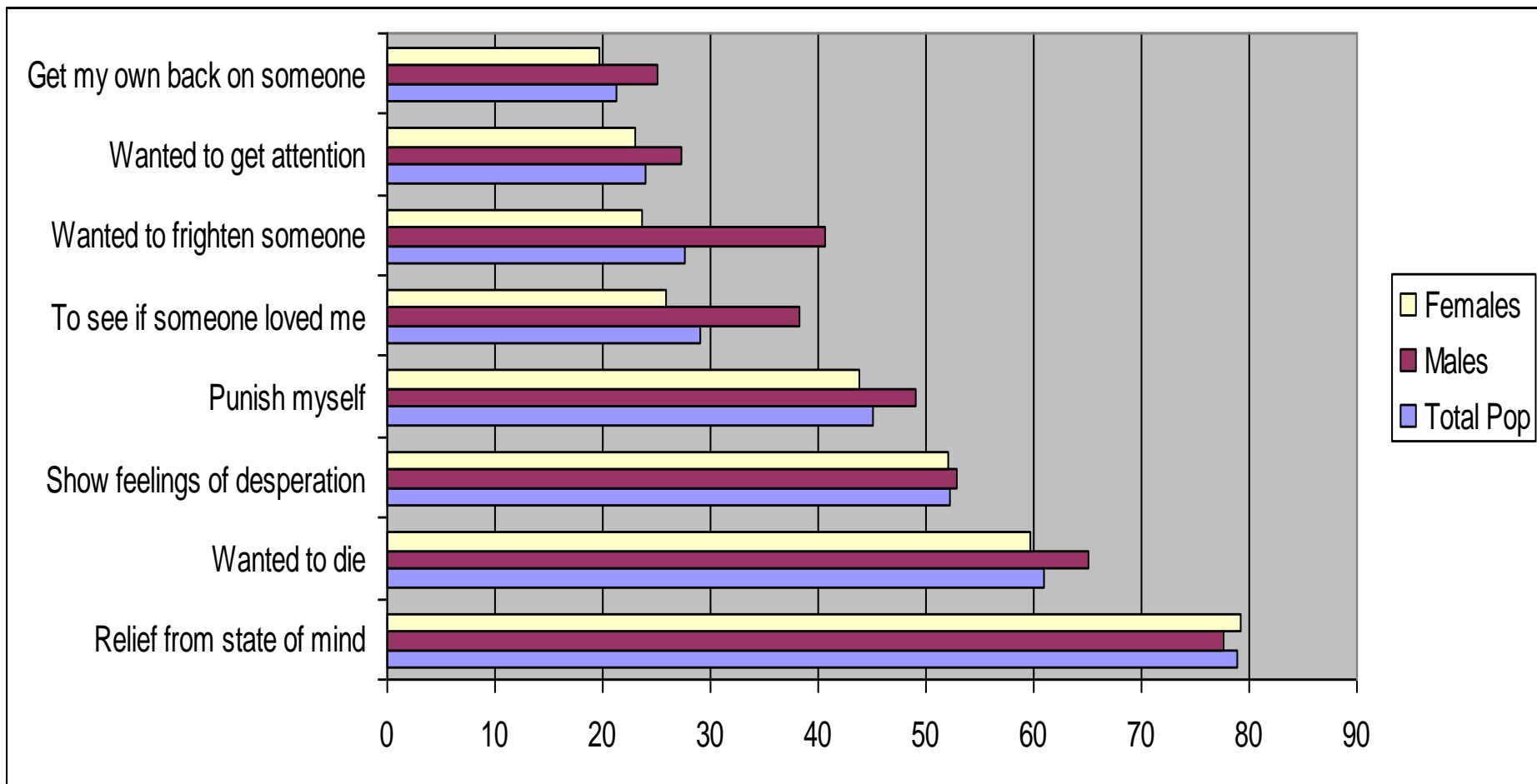
Balancing the risks and opportunities
of internet use

- 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

Dylan Minnette and Katherine Langford in 13 Reasons Why

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%)

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)

Borderline Personality Disorder
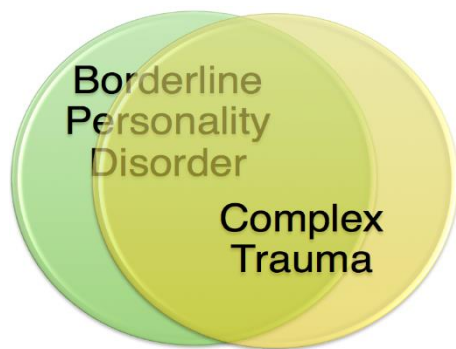
Complex Trauma

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 cant 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)

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Effectiveness of Depression–Suicidal Behaviour Gatekeeper Training among police officers in three European regions: Outcomes of the Optimising Suicide Prevention Programmes and Their Implementation in Europe (OSPI-Europe) study

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Abstract
Background: Gatekeeper training for community facilitators, to identify and respond to those at risk of suicide, forms an important part of multi-level community-based suicide prevention programmes.
Aims: This study examined the effects of gatekeeper training on attitudes, knowledge and confidence of police officers in dealing with persons at risk of suicide.
Methods: A total of 828 police officers across three European regions participated in a 4-hour training programme which addressed the epidemiology of depression and suicidal behaviour, symptoms of depression, warning signs and risk factors associated with suicidal behaviour, motivating help-seeking behaviour, dealing with acute suicidal crisis and informing bereaved relatives. Participants completed internationally-validated questionnaires assessing stigmatising attitudes, knowledge about depression and confidence in dealing with suicidal persons pre- and post-training.
Results: There were significant differences among countries in terms of previous exposure to suicidal persons and extent of previous training. Post-training evaluation demonstrated significant improvements in stigmatising attitudes, knowledge and confidence in all three countries.
Conclusion: The consistently positive effects of gatekeeper training of police officers across different regions support inclusion of this type of training as a fundamental part of multi-level community-based suicide prevention programmes and roll-out, nationally and internationally.

Keywords
Gatekeeper training, suicide, depression, police, community, prevention

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Outcomes evaluation Gatekeeper training police officers
Competency in recognising suicide risk
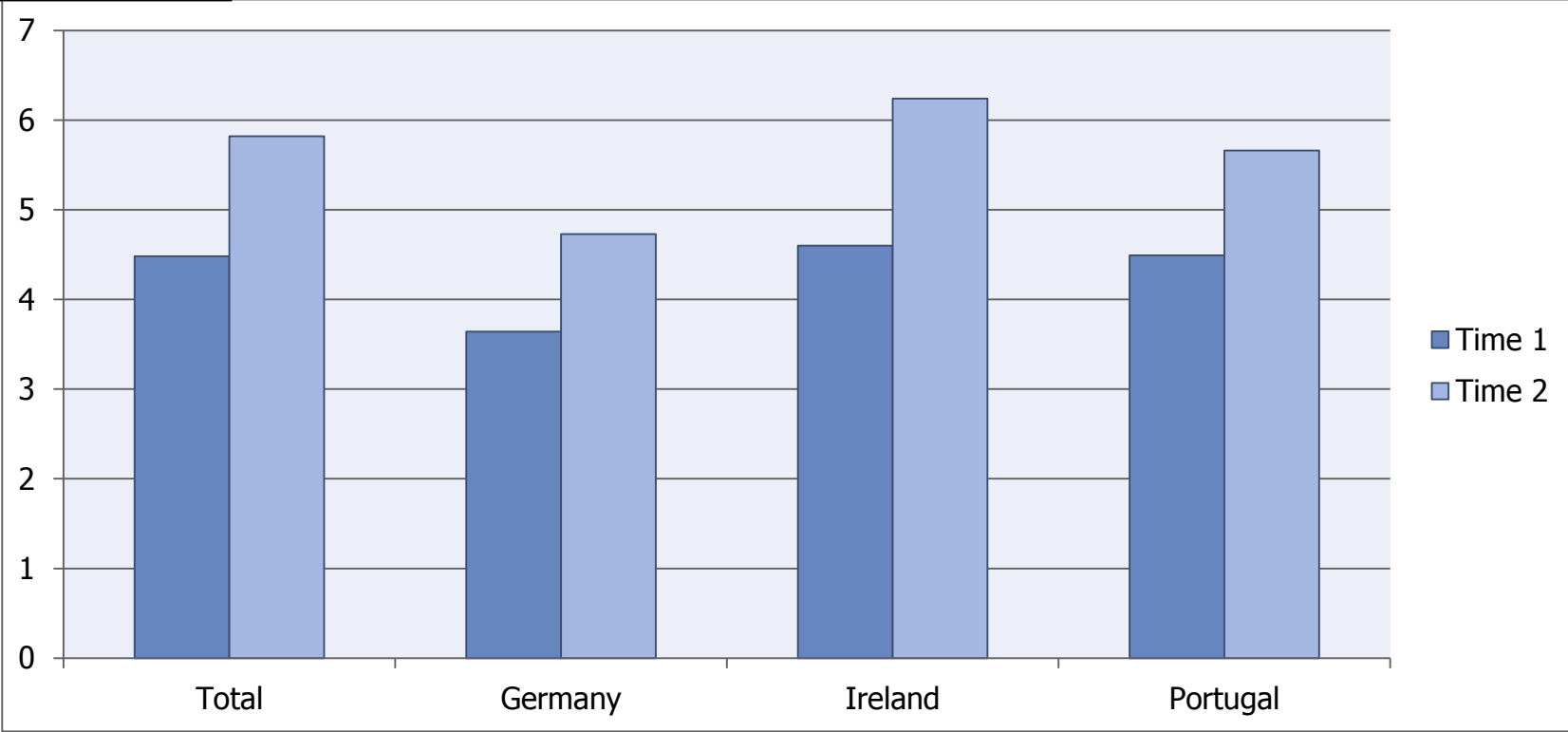
Reported confidence increased significantly following the training programme (baseline: M=4.45, SD=1.82, post-training: M=5.82, SD=1.80, p<.001). Effect size: r=0.66

Stigma related to depression

37
36
35
34
33
32
31
30
29
28

Tot...

re-training

ost-training

Special training proves 'life saver'

By Colum Coomey

Gardai 'talk' people out of going into river

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

'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...'

Saturday 18 September 2010 • LIMERICK POST
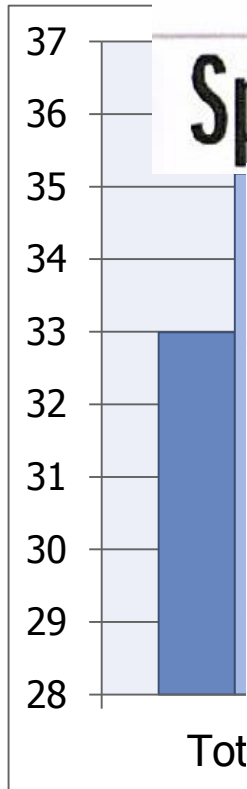
Following the OSPI ... ositive attitudes
towards depression ... :.001). Effect size: r=0.51
(large effect)

Programme

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Research report

Effectiveness of community facilitator training in improving knowledge, attitudes, and confidence in relation to depression and suicidal behavior: Results of the OSPI-Europe intervention in four European countries

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ABSTRACT

Background: Community facilitators (CFs), such as teachers, nurses and social workers, are well placed as gatekeepers for depression and suicidal behavior, but not properly prepared to provide preventive and supportive services. The current study aimed: (1) to improve CFs' attitudes toward depression, knowledge on suicide, and confidence to detect suicidal behavior in four European countries and (2) to identify specific training needs across regions and CF groups.
Methods: A standardized training program was provided to 1276 CFs in Germany, Hungary, Ireland, and Portugal. Attitudes toward depression, knowledge about suicide, and confidence in identifying suicidal persons were assessed before training, after training, and at three to six months follow-up. Additionally, several participants' characteristics were registered.
Results: At baseline, CFs showed relatively favorable attitudes toward depression, but limited knowledge on suicide, and little confidence to identify suicidal behavior. Basic skills strongly differed across CF groups and countries. For example, in Germany, carers for the elderly, nurses, teachers, and managers were most in need of training, while in Portugal pharmacists and the clergy appeared to be important target groups. Most importantly, the training program improved the competencies of CF groups across countries and these improvements were sustained after three to six months. CFs with low basic skills benefited most of the training.
Limitations: The observed training effects could be influenced by other external factors as our results are based upon a pre–post comparison with no control group.
Conclusions: Gatekeeper trainings in community settings are successful in improving knowledge, reshaping attitudes, and boosting the confidence of gatekeepers. The most effective strategy to achieve the preferred objectives is to target those CF groups that are most in need of training and to tailor the content of the training program to the individual needs of the target group.

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

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

2
Training for Community Facilitators

3
Awareness campaign for the general public

Aim:
Improving the treatment for people with depression and prevention of suicide

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)*
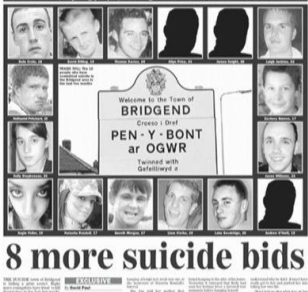
The suicide cluster in Bridgend and the media

- 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).
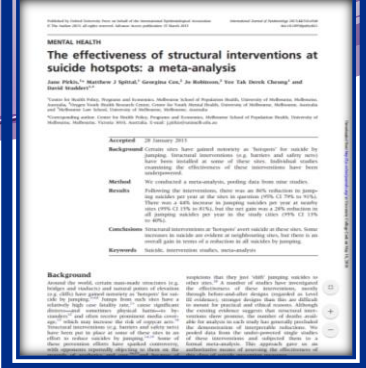
Restricting access to means

- 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

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5th-8th September, 2018

**30th IASP World Congress
17th-21st September 2019
Derry Londonderry,
Ireland**

Diolch yn fawr iawn!

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