

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

AISRAP Programme Seminar Series
Building Healthy Communities



Wednesday 25th October 2017



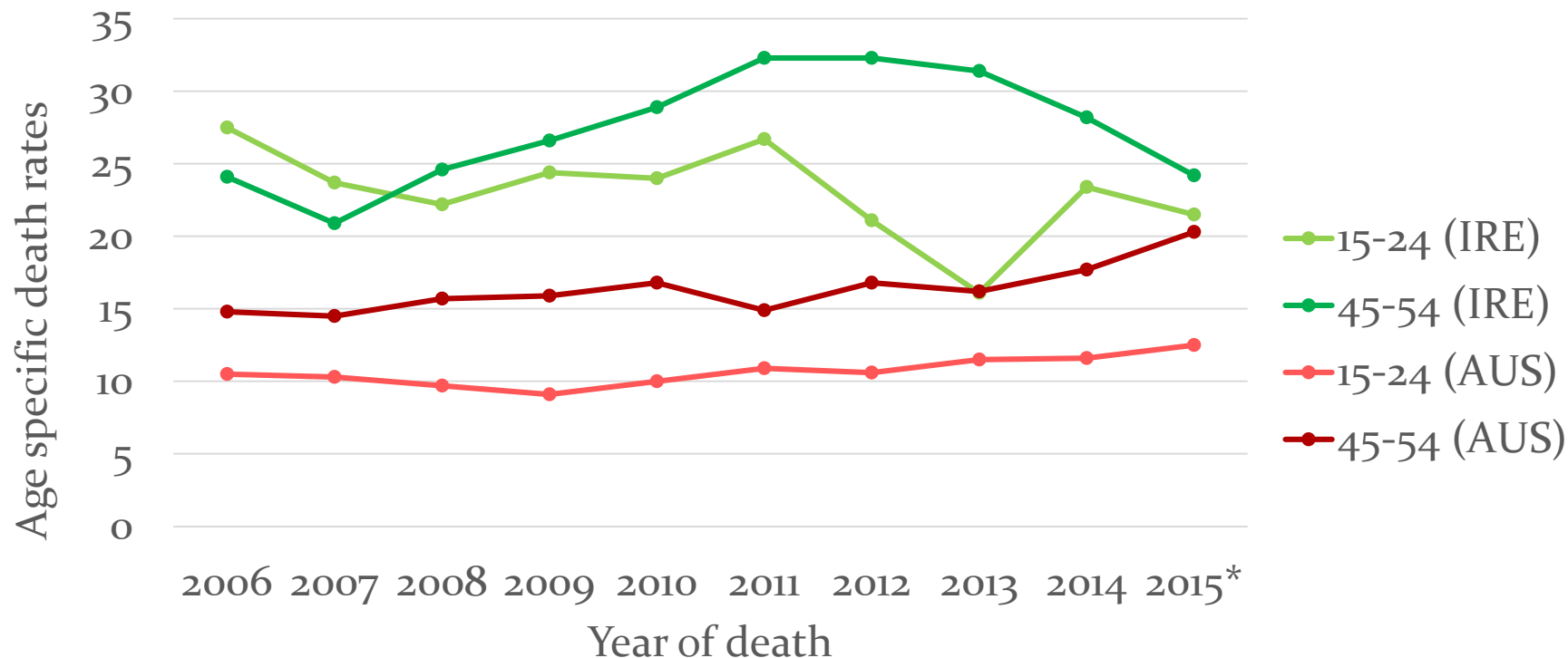
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Overview

- Extent of self-harm among adolescents and young adults
- Risk factors associated with self-harm and suicide among adolescents and young adults
- Psychotherapeutic interventions for self-harm in adolescents and young adults
- Suicide contagion and clustering, including examples from Australia, Ireland and UK

Extent of the problem of self-harm in adolescents and young adults

Suicide rates in Ireland and Australia, by age, 2006-2015



Sources: Central Statistics Office, Ireland; Australian Bureau of Statistics.

Suicide among young people in Australia

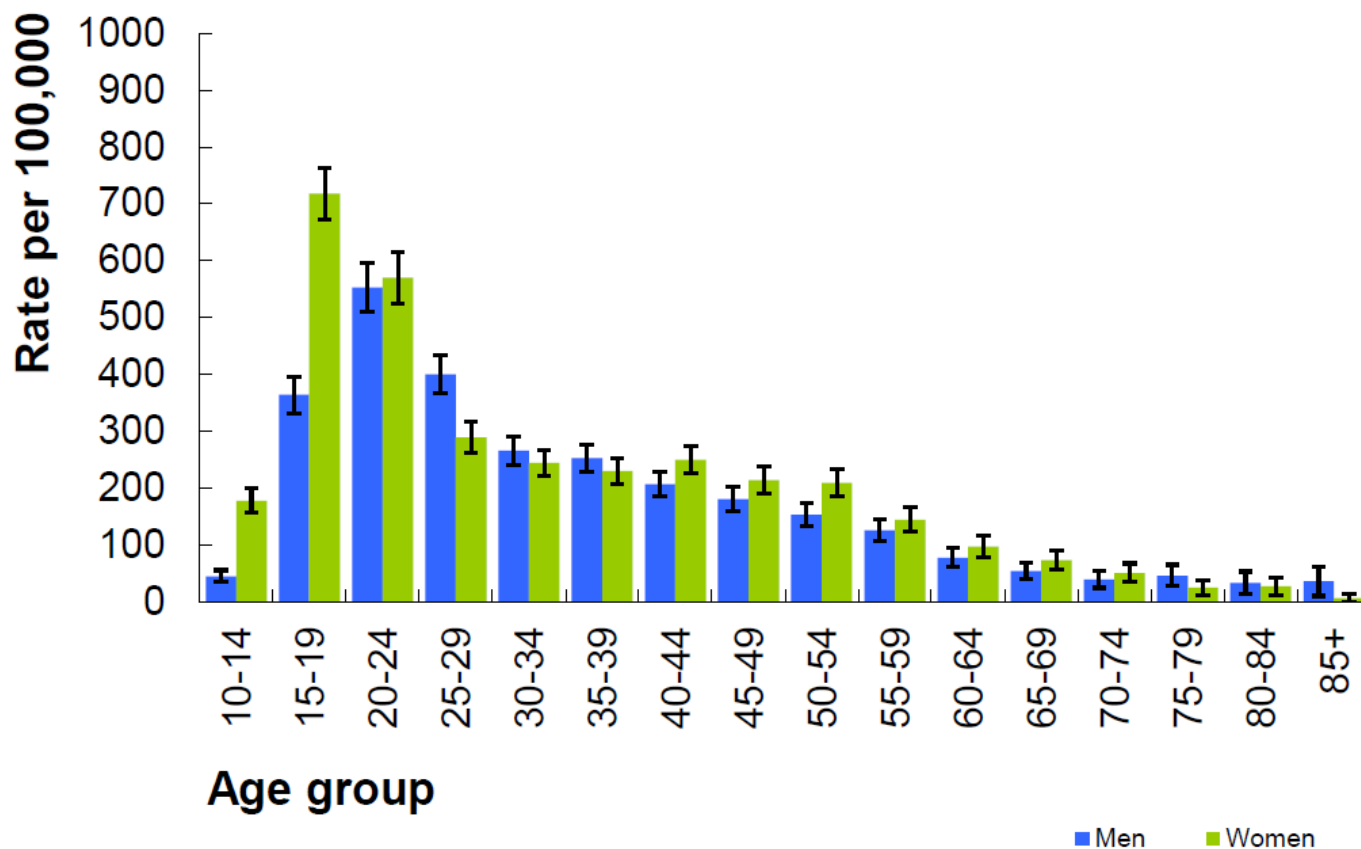
Kolves and De Leo, 2015 (QSR)

- Between 2002-2011, increase in suicide rates among young people age 15-19 years
- Increasing proportion of suicide in males aged 10-24 years
- Decreasing proportion of suicide in Indigenous people
- Suicide in early adolescence associated with family conflicts, school related problems and suicide in social groups
- Suicide among young adults associated with psychiatric disorders and relationship problems

Robinson et al, 2016

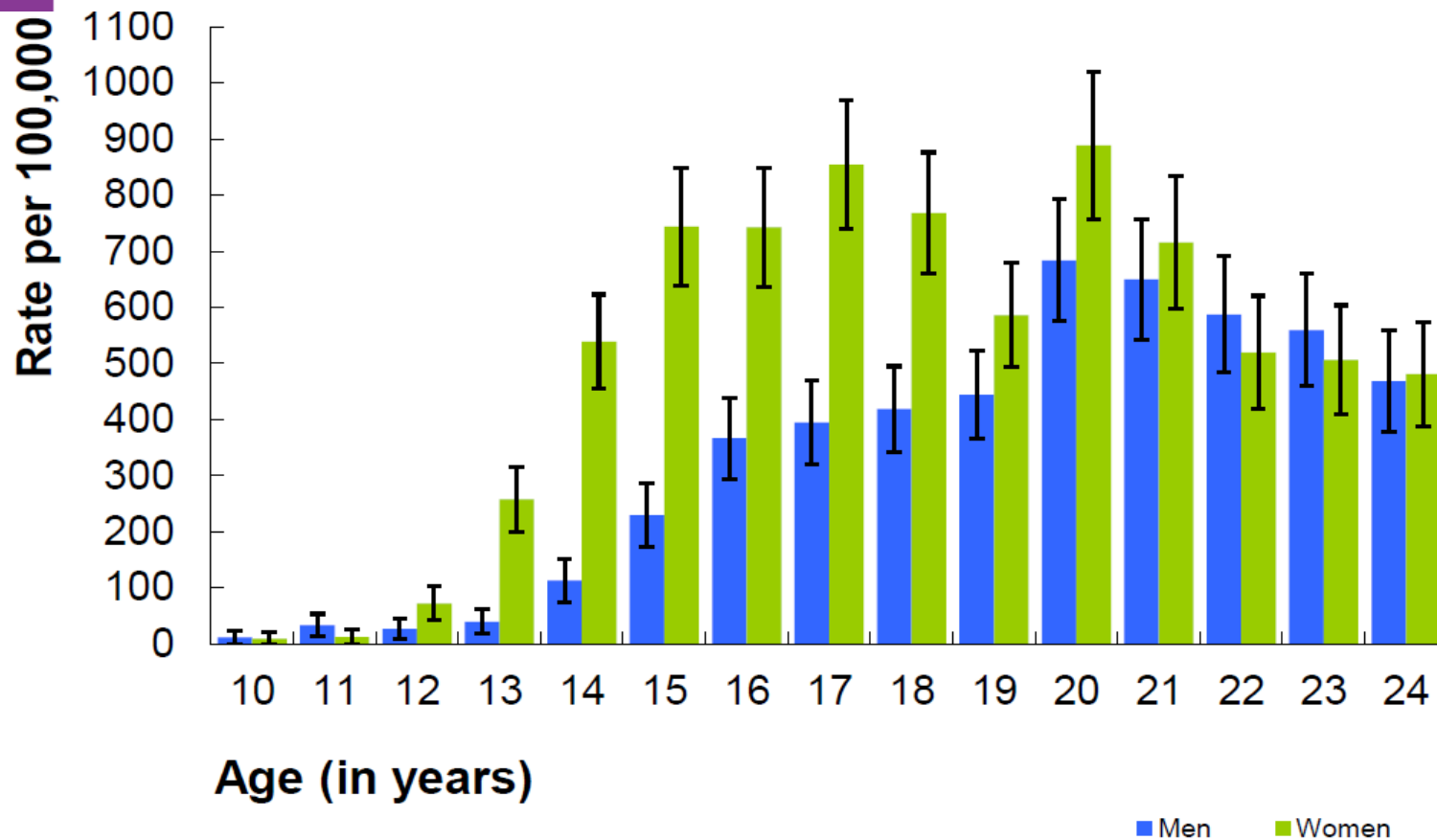
- Suicide rates for 15-24 year have increased in recent years
- Suicide rates have increased under the age of 14 years
- Among 12-17 year olds, 41,000 suicide attempts were recorded

Self-harm by age and gender, National Self-Harm Registry Ireland, 2016

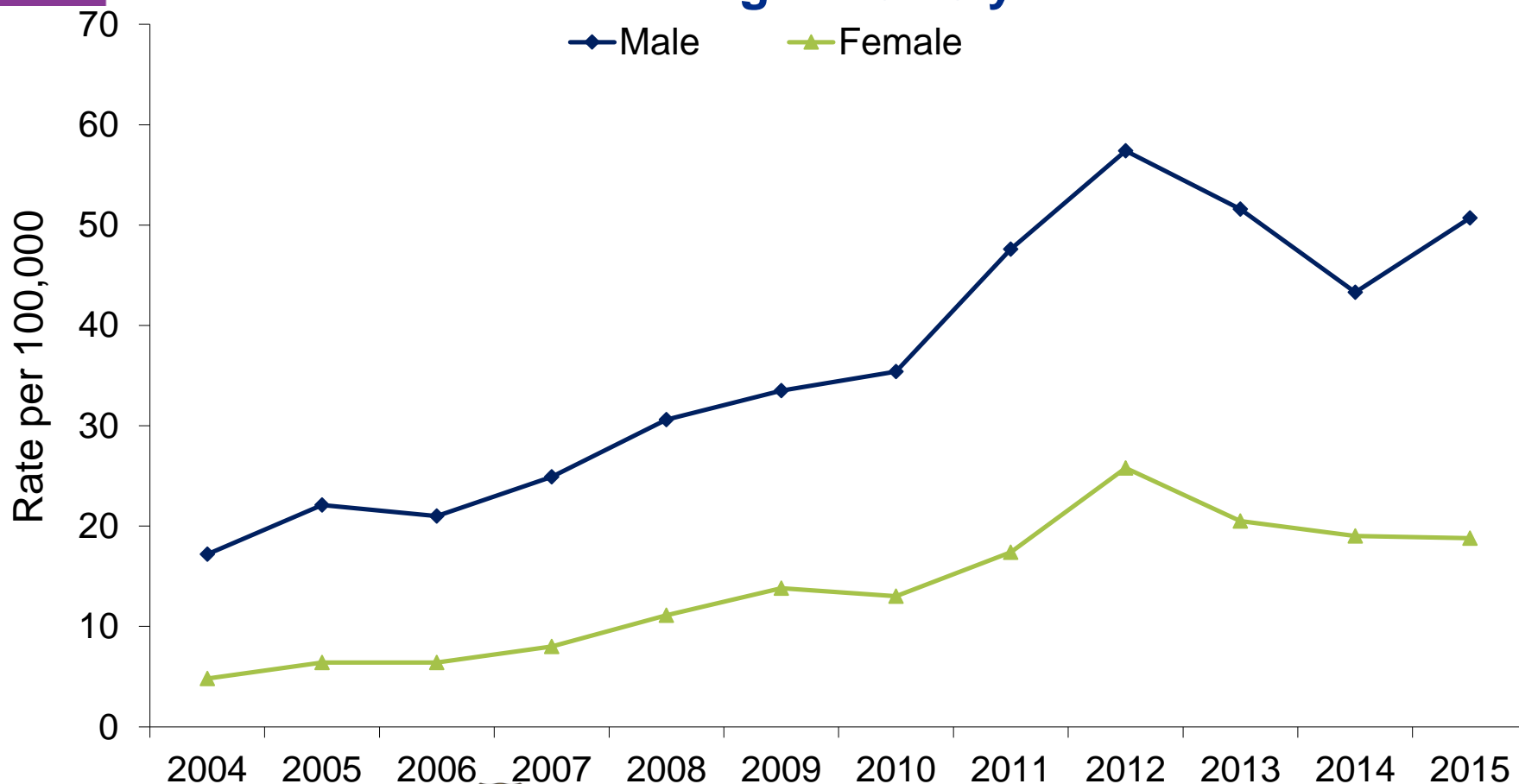




Self-harm in young people, 10-17 years, National Self-Harm Registry Ireland 2016



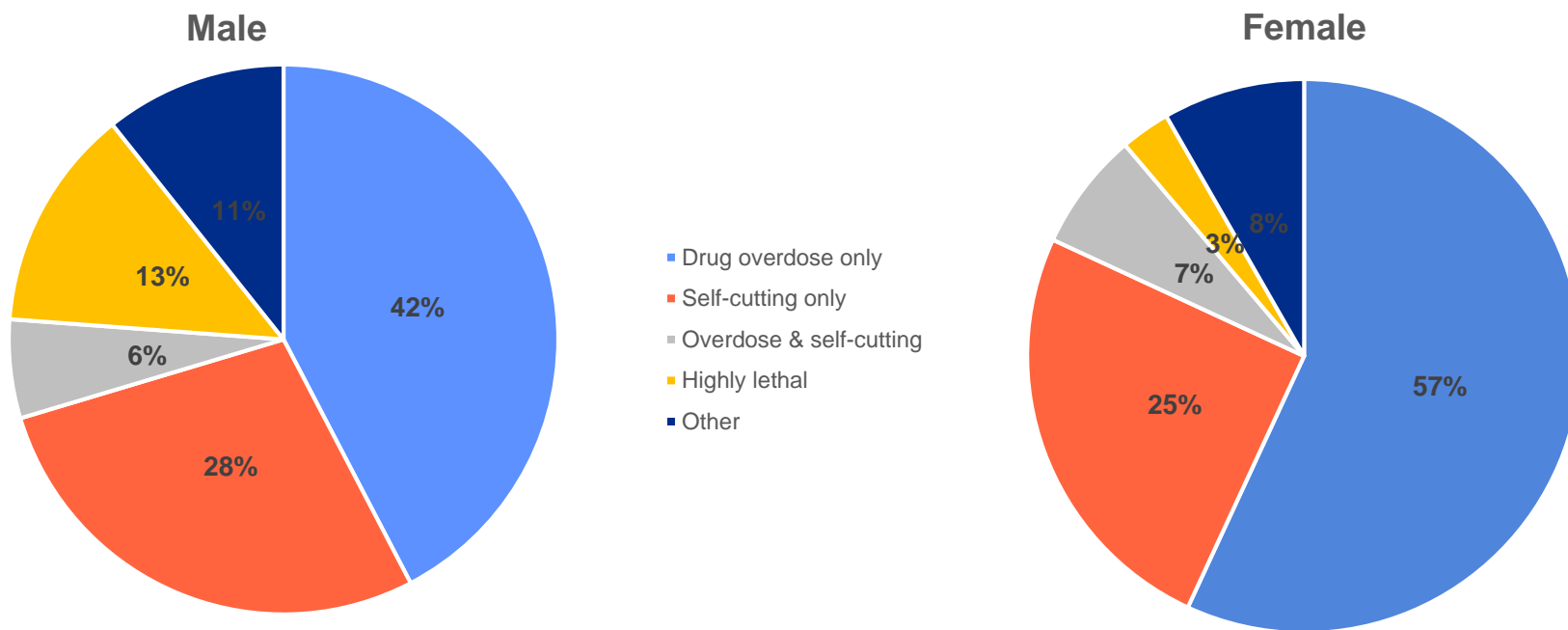
High-risk groups: Increasing trend of self harm acts involving highly lethal methods among males and females aged 15-29 years



Risk of repeated self-harm in young people

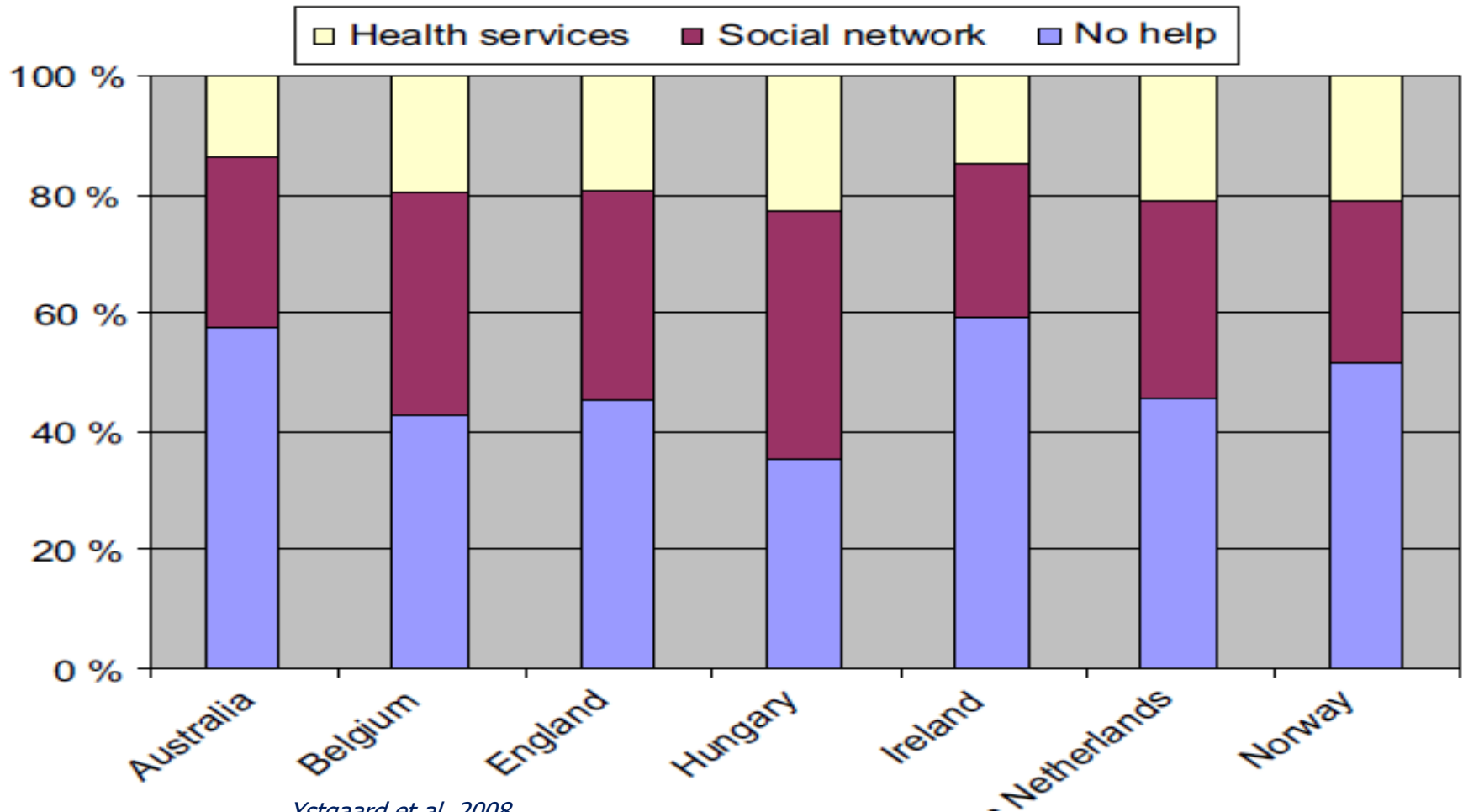
- Young people with the highest risk for repeated self-harm were 15–19-year-old females and 20–24-year-old males
- Self-cutting was the method associated with the highest risk of self-harm repetition. Time between first self-harm presentations represents an indicator of subsequent repetition
- Increased risk of self-harm method escalation among young people in recent years

Method of self-harm 10-17 year-olds, 2015



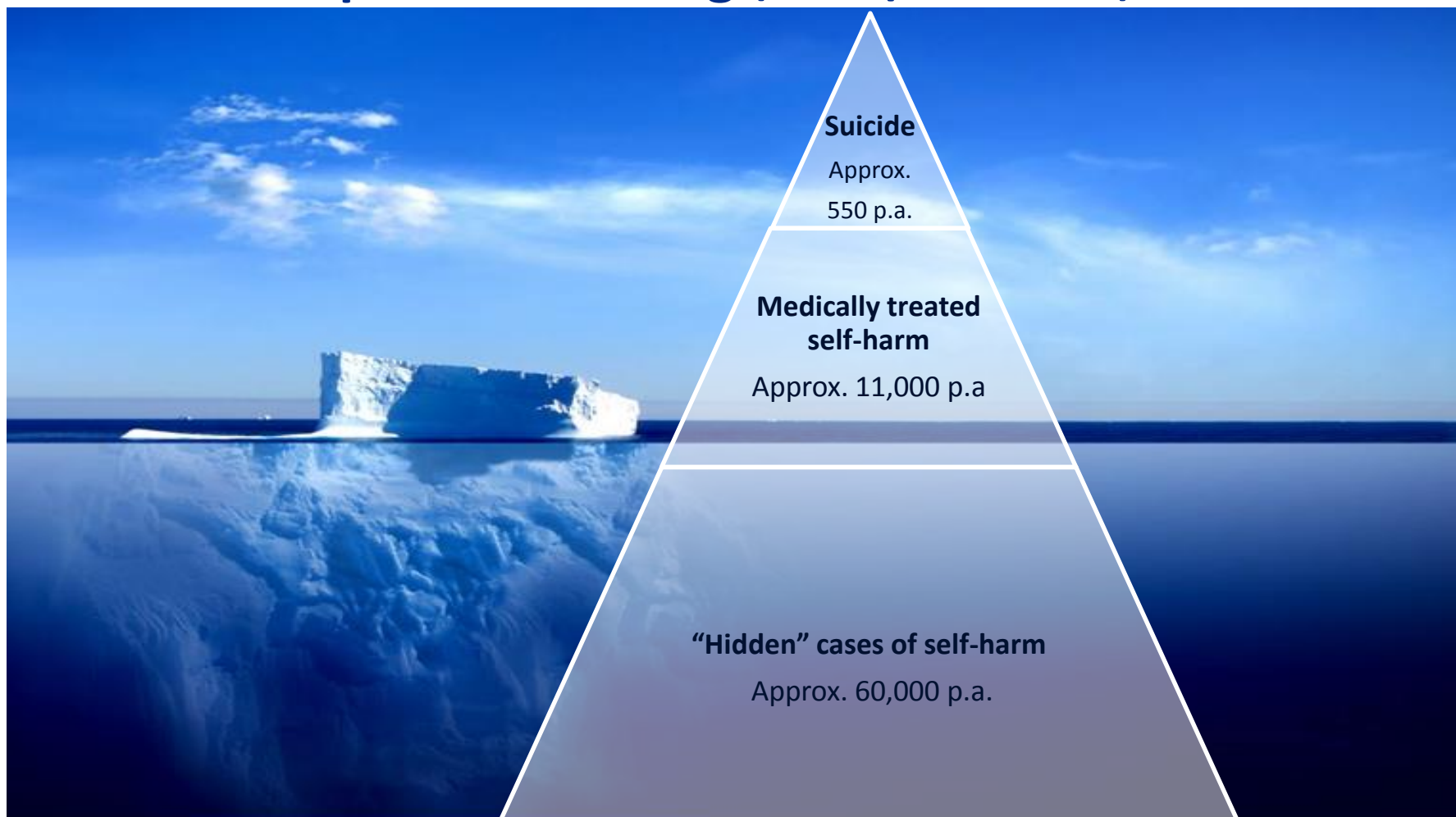
Alcohol was involved in 11% of presentations
(15% for boys, 10% for girls)

Proportion of adolescents with self-harm who receive help from health services, social network or no help by country



Ystgaard et al, 2008

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



Risk factors associated with self-harm in young people

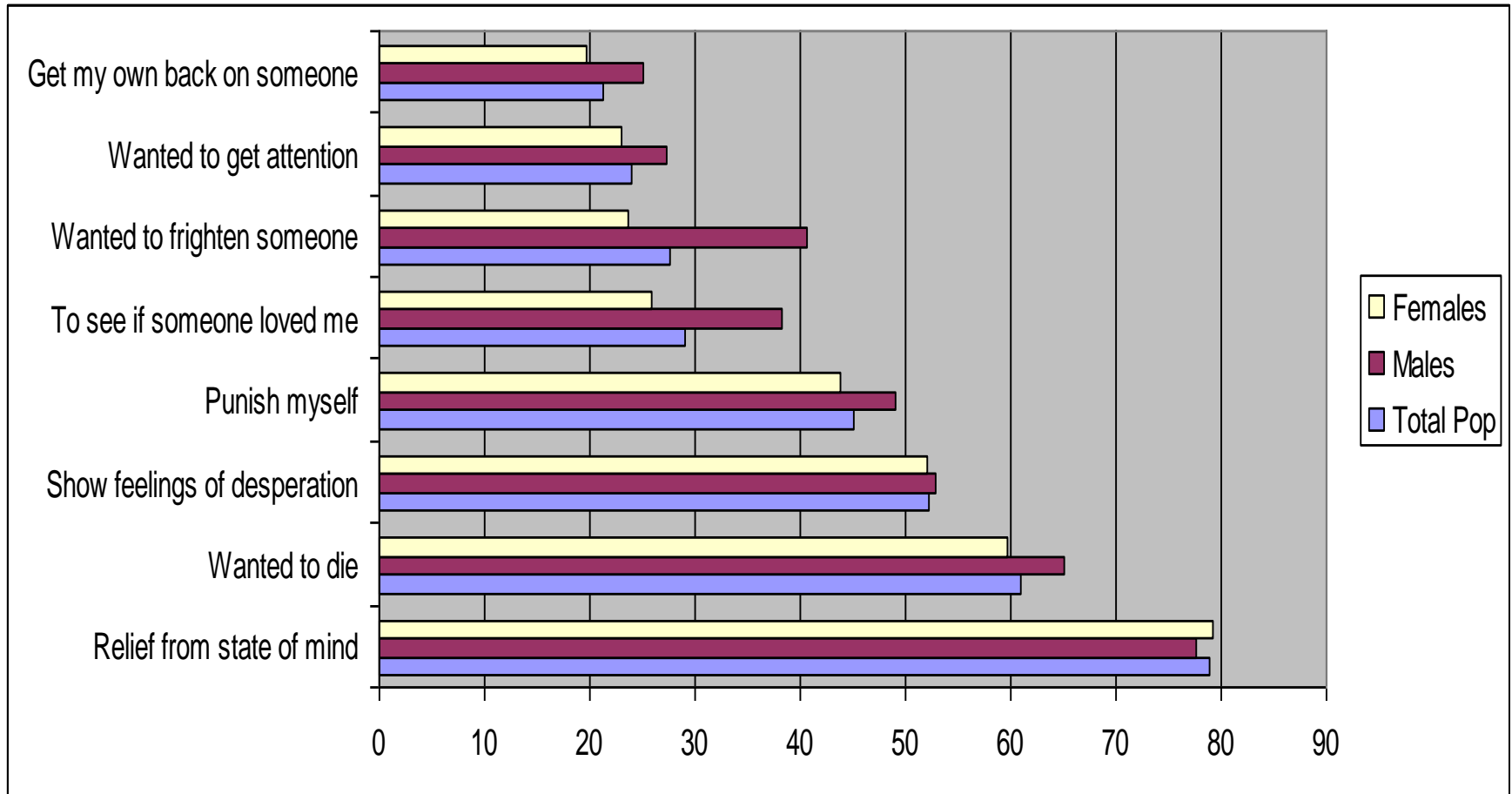
Risk factors associated with self-harm in adolescents - *Girls*

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

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

- ❖ Substance abuse, including using multiple drugs
- ❖ Self harm by friends and family members
- ❖ High levels of anxiety
- ❖ High levels of impulsivity
- ❖ Problems related to sexuality
- ❖ Bullying and Cyberbullying
- ❖ Problems with school work
- ❖ Sleep problems

Motives related to self-harm by gender among adolescents and young adults



The importance of understanding **Ambivalence**

- A critical feature in working with those who self-harm is to recognise their ambiguity and the fragility and temporality of their decisions about their destiny.

Bermans et al, 2009; 2017



- I said to myself, If somebody comes up to me and says, *'Are you okay? Is something wrong? Can I help you?'* I was going to tell them my whole life story and they were going to make me safe."
- A suicidal person needs to hear: *"That we care about you, your life does matter and that all we want is for you to stay,"* he says. *"If someone had looked at me on that bridge or that bus and said that to me, I would have begged for help."*

Kevin Hines

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

School-based and psychotherapeutic and interventions for self-harm in adolescents and young adults



- IASP



Young People's perspectives

School-based individual support

*"Show them
there is always
someone there
to help"*

Peer discussion groups

*"A group where
kids can sit and
discuss problems
freely"*

*"Maybe someone else feels
the same and would like to
help"*

School-based mental health education

"More mental health classes"

*"Get someone who had a
problem to give a talk in
school"*

Anonymous support

*"Write down problems
privately and a teacher can
discuss them in front of the
class"*

Psychotherapeutic interventions for self-harm in adolescents and young adults

- Cognitive Behaviour Therapy - Individual and Group-based psychotherapy
- Dialectical Behaviour Therapy for Adolescents (DBT-A)
- Home-based family therapy
- Brief compliance enhancement



What is known about CBT as a therapeutic intervention for adolescents and young adults

- CBT has resulted in significant reductions in self-harm, depressed mood and trait anxiety among adolescents and young adults (*Oldershaw et al, 2012; Taylor et al, 2011; Esposito-Smythers et al, 2011; Brent et al, 2009; Slee et al, 2008*)
- A risk reduction and relapse prevention approach to treatment, in addition to integrated CBT and DBT techniques has proven effective (*Brent et al, 2009*)
- A time-limited cognitive–behavioural intervention, has proven efficacy for patients with recurrent and chronic self-harm (*Slee et al, 2008*)



Suicide contagion and clustering in young people

Background: Suicide contagion and clustering

- Confusion between suicide ‘contagion’ and suicide ‘clustering’
- Contagion: Suicidal behaviour may facilitate the occurrence of subsequent suicidal behaviour, either directly (via contact or friendship with the index suicide or media) or indirectly (*Haw et al, 2012*)
- A single suicide increases the risk of additional suicides within a community and may serve as a catalyst for the development of a cluster (*Johansson et al, 2006; Gould et al, 1990*)
- Suicide clusters can be considered as the end result of a contagious process in which vulnerable individuals connect to influence one another (*Mesoudi, 2009; Johansson et al, 2006; Berman & Jobes, 1994; Gould et al, 1990*)

Historical evidence of contagion of suicide

1774: *“The Sorrows of Jung Werther”* – JW Von Goethe

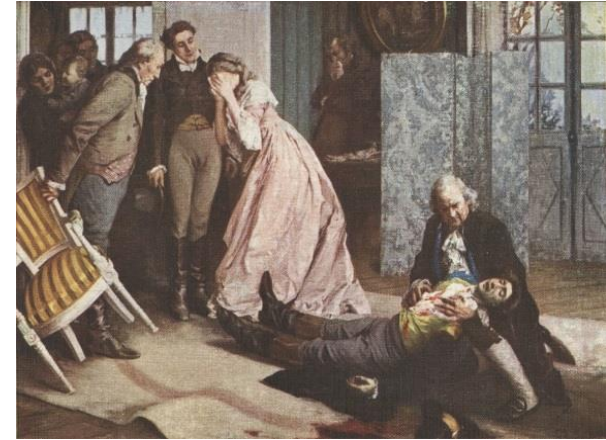
- Following publication of the novel, indications for imitative suicides among young men in Germany, and in Denmark and Italy – “The Werther Effect”

1962: *Marilyn Monroe*

- 12% increase in suicide in the month following her death by suicide.

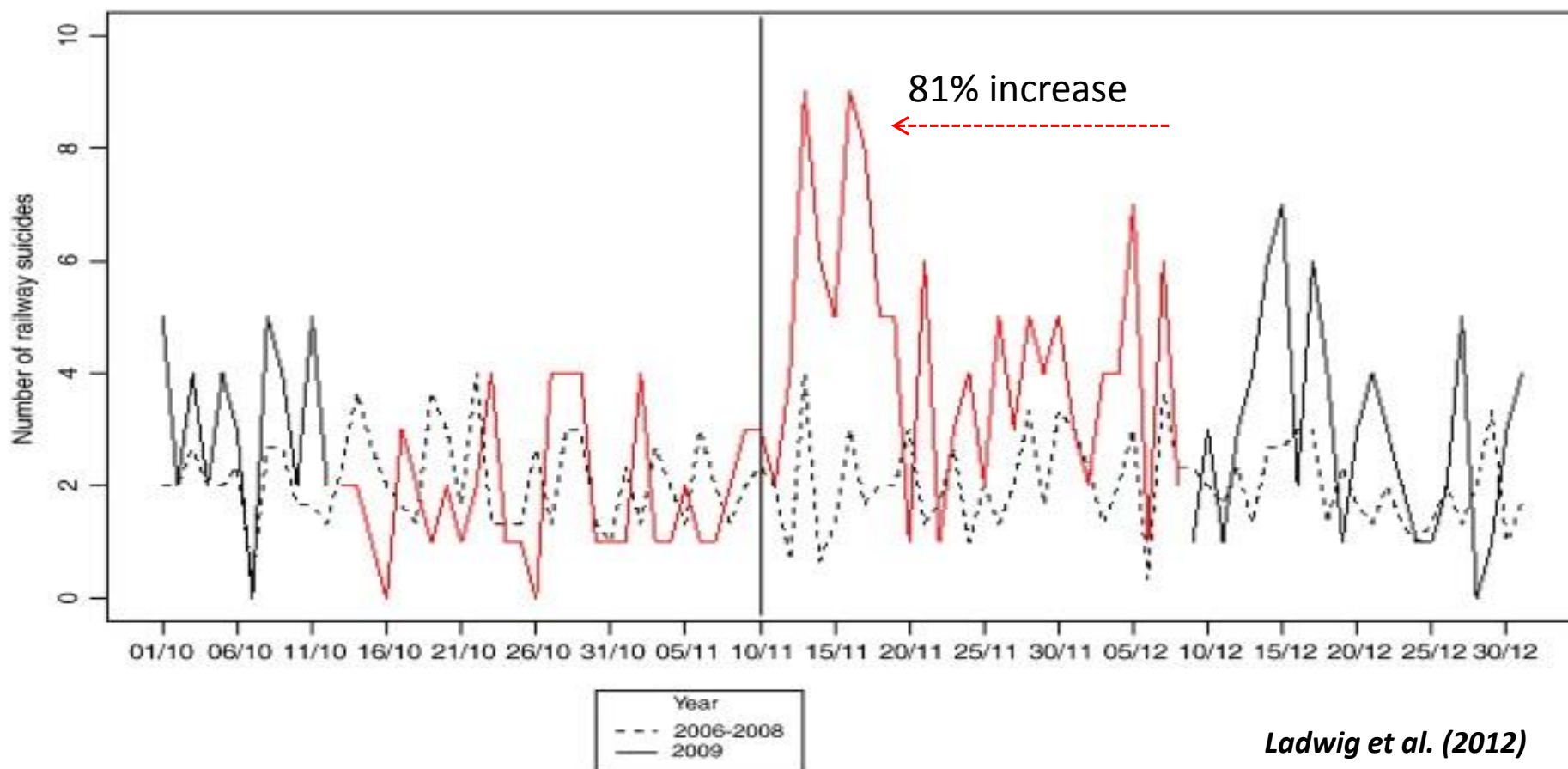
1988: *TV film of railway suicide of a 19-year old male student*

- A tv film showing the railway suicide of a young men was followed by a 175% increase in railway suicides in young men over 70 days after broadcasting.



Phillips, 1974; Schmidtke & Häfner, 1988; Halgin et al, 2006

Significant increase of railway suicides after the suicide of German goal keeper, Robert Enke on 10th November 2009



Ladwig et al. (2012)

In addition to the short term increase in railway suicides, *Hegerl et al (2013)* identified a long-term effect: 19% increase in railway suicides in the two years after the suicide by Robert Enke

German goalkeeper kills self by stepping in front of train, police say

November 12, 2009 1:53 p.m. EST

Germany stunned as national goalkeeper Robert Enke commits suicide

By SPORTSMAIL REPORTER

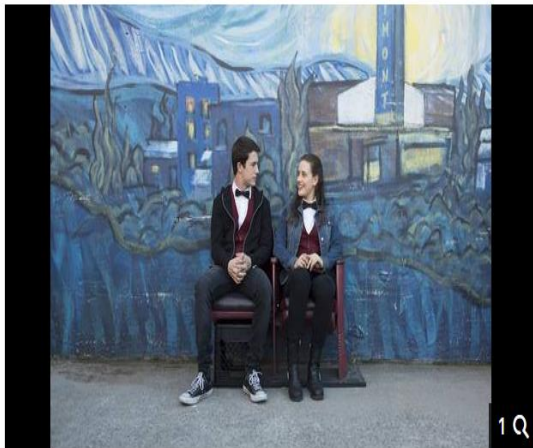
Last updated at 12:15 PM on 11th November 2009



Evidence of copycat suicides and suicide attempts/ self-harm

*Families blame '13 Reasons Why' for the suicides
of 2 teens in California (US), April 2017)*

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'
suicide and attempted suicide (Austria), May 2017*

*'13 Reasons Why' copycat suicide in Peru,
June 2017*

*Increase in teen suicidal behaviour linked to
'13 Reasons Why', Toronto, June 2017*

Internet searches for suicide following the release of *13 Reasons Why* (Ayers et al, JAMA, 2017)

- Comparison of internet search volumes (31st March - 18th April 2017) with expected search volumes if the series had never been released
- 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 than expected
- Public awareness indicative searches were also elevated.
- **Conclusion:** *13 Reasons Why* elevated suicide awareness, but it is concerning that searches indicating suicidal ideation also rose

Reasons Why Not

- The graphic nature of reporting and the reporting of specific details of highly lethal methods involved can trigger copycat cases; the effects of exposure on suicidal behaviour and violence are well-documented.
- Revenge suicide is relatively rare; revenge motive is reported by a minority of young people who self-harm.
- Evidence based information on positive mental health promotion and help-seeking for mental health problems, was not taken into account.
- There are elements of glorifying and romanticising suicide, which may further impact on vulnerable people who are considering suicide or self-harm.



Types of suicide clusters:

Point (time-space) Clusters

- ❖ A temporary increase in the frequency of suicides in time and space within a small community or institution, relative to both the baseline suicide rate before and after the point cluster and the suicide rate in neighbouring areas (*Mesoudi, 2009; Gould et al, 1990*)
- ❖ Contagion and clustering of suicide 2 to 4 times more common in younger age groups (15-24 years). However, Larkin & Beautrais (2012) and Arensman et al (2013) also identified suicide clusters across older age groups
 - Number of suicides involved in clusters -> Range: 3 – 22 suicide cases, Mean: 7
 - Time span of clusters -> Range: 2 weeks - 24 months, Mean: 6 months

Spatial suicide clusters in Australia

Robinson et al. BMC Psychiatry (2016) 16:417
DOI 10.1186/s12888-016-1125-4

BMC Psychiatry

RESEARCH ARTICLE

Open Access

Spatial suicide clusters in Australia between 2010 and 2012: a comparison of cluster and non-cluster among young people and adults

Jo Robinson^{1*}, Lay San Too², Jane Pirkis² and Matthew J. Spittal²

Abstract

Background: A suicide cluster has been defined as a group of suicides that occur closer together in time and space than would normally be expected. We aimed to examine the extent to which suicide clusters exist among young people and adults in Australia and to determine whether differences exist between cluster and non-cluster suicides.

Methods: Suicide data were obtained from the National Coronial Information System for the period 2010 and 2012. Data on date of death, postcode, age at the time of death, sex, suicide method, ICD-10 code for cause of death, marital status, employment status, and aboriginality were retrieved. We examined the presence of spatial clusters separately for youth suicides and adult suicides using the Scan statistic. Pearson's chi-square was used to compare the characteristics of cluster suicides with non-cluster suicides.

Results: We identified 12 spatial clusters between 2010 and 2012. Five occurred among young people ($n = 53$, representing 5.6% [53/940] of youth suicides) and seven occurred among adults ($n = 137$, representing 2.3% [137/5939] of adult suicides). Clusters ranged in size from three to 21 for youth and from three to 31 for adults. When compared to adults, suicides by young people were significantly more likely to occur as part of a cluster (difference = 3.3%, 95% confidence interval [CI] = 1.8 to 4.8, $p < 0.0001$). Suicides by people with an Indigenous background were also significantly more likely to occur in a cluster than suicide by non-Indigenous people and this was the case among both young people and adults.

Conclusions: Suicide clusters have a significant negative impact on the communities in which they occur. As a result it is important to find effective ways of managing and containing suicide clusters. To date there is limited evidence for the effectiveness of those strategies typically employed, in particular in Indigenous settings, and developing this evidence base needs to be a future priority. Future research that examines in more depth the socio-demographic and clinical factors associated with suicide clusters is also warranted in order that appropriate interventions can be developed.

Keywords: Spatial suicide cluster, Australia, Youth, Indigenous, Scan statistic

Background

A suicide cluster is typically defined as 'a group of suicides or suicide attempts, or both, that occur closer together in time and space than would normally be expected on the basis of either statistical prediction or community expectation' [1, 2]. This definition is useful although determining the presence or absence of a

cluster can be difficult in practice as it is often unclear what constitutes the minimum 'normal' number of deaths, over a given time period and particular location [3].

Suicide clusters have typically been investigated using one of two approaches. The first involves identifying a group of suicides that have occurred in a particular area within a relatively short period of time, and mapping the associations between the individuals who have died (e.g. [4, 5]). The second approach relies on quantitative methods that identify statistically greater than expected numbers of suicides occurring in particular locations

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- Robinson *et al*, 2016 examined the extent to which suicide clusters exist among young people and adults
- Identified **12 spatial clusters**:
 - 5 among young people ($n = 53$; 5.6% of youth suicides), 3-21 individuals in size
 - 7 among adults ($n = 137$; 2.3% of adult suicides), 3-31 individuals in size
- Suicides by young people were significantly more likely to occur as part of a cluster ($p < 0.0001$)
- Suicides by indigenous people were significantly more likely to occur in a cluster than suicide by non-Indigenous people

Characteristics of people involved in suicide clusters

Comparing cluster suicides to singleton suicide cases

- Younger age
- More frequent loss of friends/family members through suicide (complicated grief and PTSD)
- More often drugs in toxicology (in particular benzodiazepines)
- More often history of alcohol and drug abuse
- Less frequently left a suicide note
- More often disconnected from parents

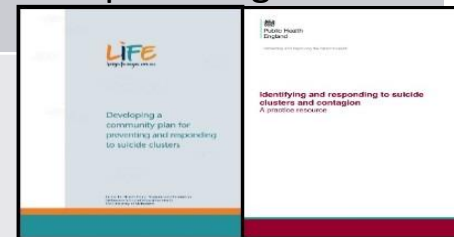
(Haw et al, 2012; Larkin & Beautrais, 2012; Arensman et al, 2012; Malone, 2013)

How to respond to emerging suicide clusters and contagion

- There is a gap in evidence-based guidelines detailing appropriate response strategies to suicide clusters and the low-frequency nature of clusters makes it difficult to evaluate strategies

Current best practice guidelines for responding to emerging clusters – the core elements

- Preparedness - Response team and core response plan should be available as part of a routine procedure
- Clarity on leadership/co-ordination of response team
- Multidisciplinary response team comprised of qualified representatives of all relevant agencies, incl. mental health services, suicide bereavement support services, social work, police, media
- Inter-agency protocols (if available) should be put in place in order to address referral procedures, confidentiality and information sharing
- Involvement of specialised staff of suicide prevention agencies and mental health professionals trained in dealing with severe traumatic incidents, post traumatic stress and complicated grief
- Response plan needs to address different phases:
 - Immediate aftermath: Up to 1 week
 - Reactive period: 1 week up to 1 month
 - Outreach period: weeks up to years (incl. anniversaries)



Important aspects in working with schools affected by suicide contagion and clustering

- Individual and group counselling for affected peers who may be at risk of developing PTSD, depression or suicidal ideation
- Individual and group counselling sessions addressing specific themes
- Supportive awareness sessions in small group sessions delivered by trained clinicians
- Promotion of health recovery within the community to prevent further suicides
- Long-term interventions to address complicated grief, PTSD, depression and anniversaries
- On-going surveillance of suicidal behaviour
- Depression and suicidal behaviour awareness training for stakeholders to increase awareness and reduce stigma

Suicide Support and Information

Informing and Supporting People Affected by Suicide

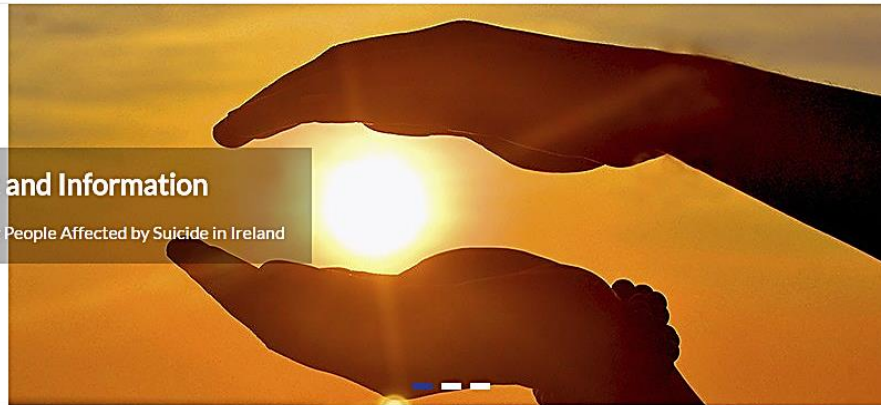
www.suicidesupportandinformation.ie



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Suicide Support and Information

Informing and Supporting People Affected by Suicide in Ireland



Suicide Support and Information

Developed by the **National Suicide Research Foundation** and funded by the Health Research Board (HRB) this website provides evidence based information on bereavement following suicide and responding to people at risk of suicide. The information is tailored for people bereaved by suicide and for health professionals, including GPs and mental health professionals, as well as the general public.

The evidence base represents up-to-date information from international systematic reviews and outcomes of a HRB funded study: *Psychosocial, psychiatric and work related factors associated with suicide in Ireland: A case-control study (SSIS-ACE)*.

The **Suicide Support and Information** website is a timely resource, which meets a key objective of the Irish National Strategy for the Reduction of Suicide, **Connecting for Life**, 2015-2020: *To enhance accessibility, consistency and care pathways of services for people vulnerable to suicidal behaviour.*

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