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

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Building Healthy Communities

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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

Rate per 100,000


Male  Female

0  10  20  30  40  50  60  70

Rate per 100,000
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)
International comparative study on self-harm and associated factors

*Child and Adolescent Self-Harm in Europe (CASE)*

The CASE study is a multi-centre study in 6 countries across Europe and AISRAP, Australia.

**Objectives:**

- The prevalence of self-harm among 15-17 year olds and the relationship with risk factors (e.g. depression, anxiety, alcohol, drug use/misuse etc.) and protective factors (e.g. coping, help seeking) across different countries

- Young people’s opinions on the prevention of mental health difficulties
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)

- Suicide: Approx. 550 p.a.
- Medically treated self-harm: Approx. 11,000 p.a.
- "Hidden" cases of self-harm: Approx. 60,000 p.a.
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

- Get my own back on someone
- Wanted to get attention
- Wanted to frighten someone
- To see if someone loved me
- Punish myself
- Show feelings of desperation
- Wanted to die
- Relief from state of mind

Females
Males
Total Pop
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
School based mental health awareness programme

- The Youth Aware of Mental Health programme (YAM), a school-based intervention of short duration (5 h in 4 weeks), was significantly more effective in preventing new cases of suicide attempts and severe suicidal ideation, including planning, than no intervention (the control group).

- The reported reduction in incident suicide attempts was more than 50% with YAM than for the control group.

- In SEYLE, the YAM not only prevented suicide attempts, but it also reduced new cases of severe suicidal ideation, including suicide planning—all important markers of poor psychological wellbeing.

- The design of the YAM, aimed at changing pupils’ negative perceptions and improving their coping skills in the management of adverse life events and stressors, which often are triggers of suicidal behaviour, could account for its significant effects.
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”

Anonymous support

“Write down problems privately and a teacher can discuss them in front of the class”

“Maybe someone else feels the same and would like to help”
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 10\textsuperscript{th} November 2009

In addition to the short term increase in railway suicides, Hegerl \textit{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 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 (31\textsuperscript{st} March - 18\textsuperscript{th} 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, 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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