

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

**Connecting for Life Dublin North City and County
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Professor Ella Arensman

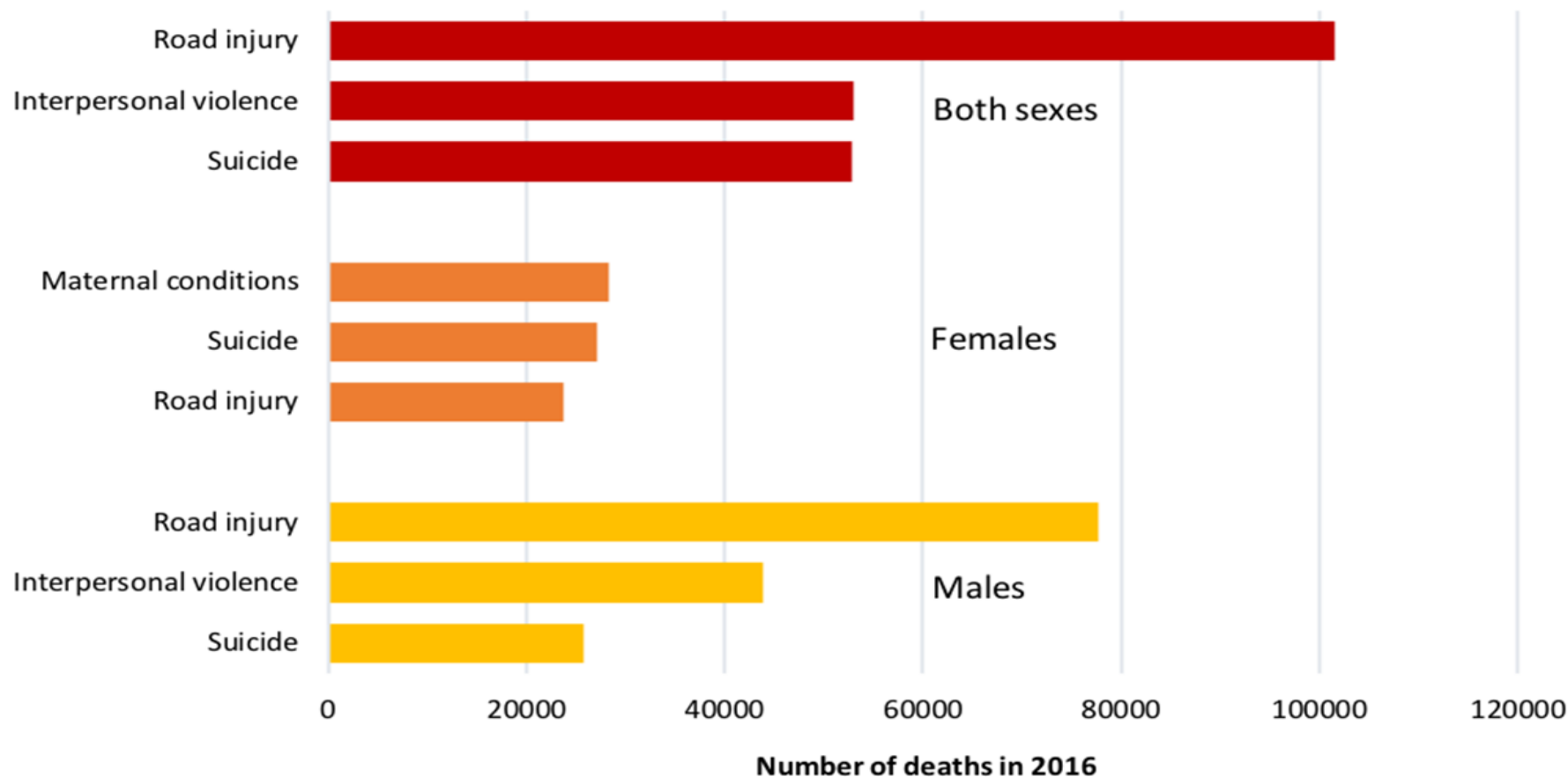
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University College Cork, Ireland
International Association for Suicide Prevention

Overview

- Extent of suicide and self-harm among adolescents and young adults
- Risk factors associated with self-harm and suicide among adolescents and young adults, and cases
- Psychotherapeutic interventions for self-harm in adolescents and young adults
- Suicide contagion and clustering
- Young people's experiences and perspectives

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

Leading causes of death among young people aged 15-19 years at global level (*WHO, 2017*)



Mental Health Atlas, 2017

Self-harm presentations in Ireland (NSHRI, 2019)

2018 Statistics at a Glance

Presentations
12,588

Persons
9,785



+29%

2007

2018

Rates in young people
aged 10-24 years increased
by 29% between 2007-2018

RATES:

210
per 100,000

1 in every 476
had a self-harm act



Male: 20-24 year-olds
(543 per 100,000)

1 in every 184



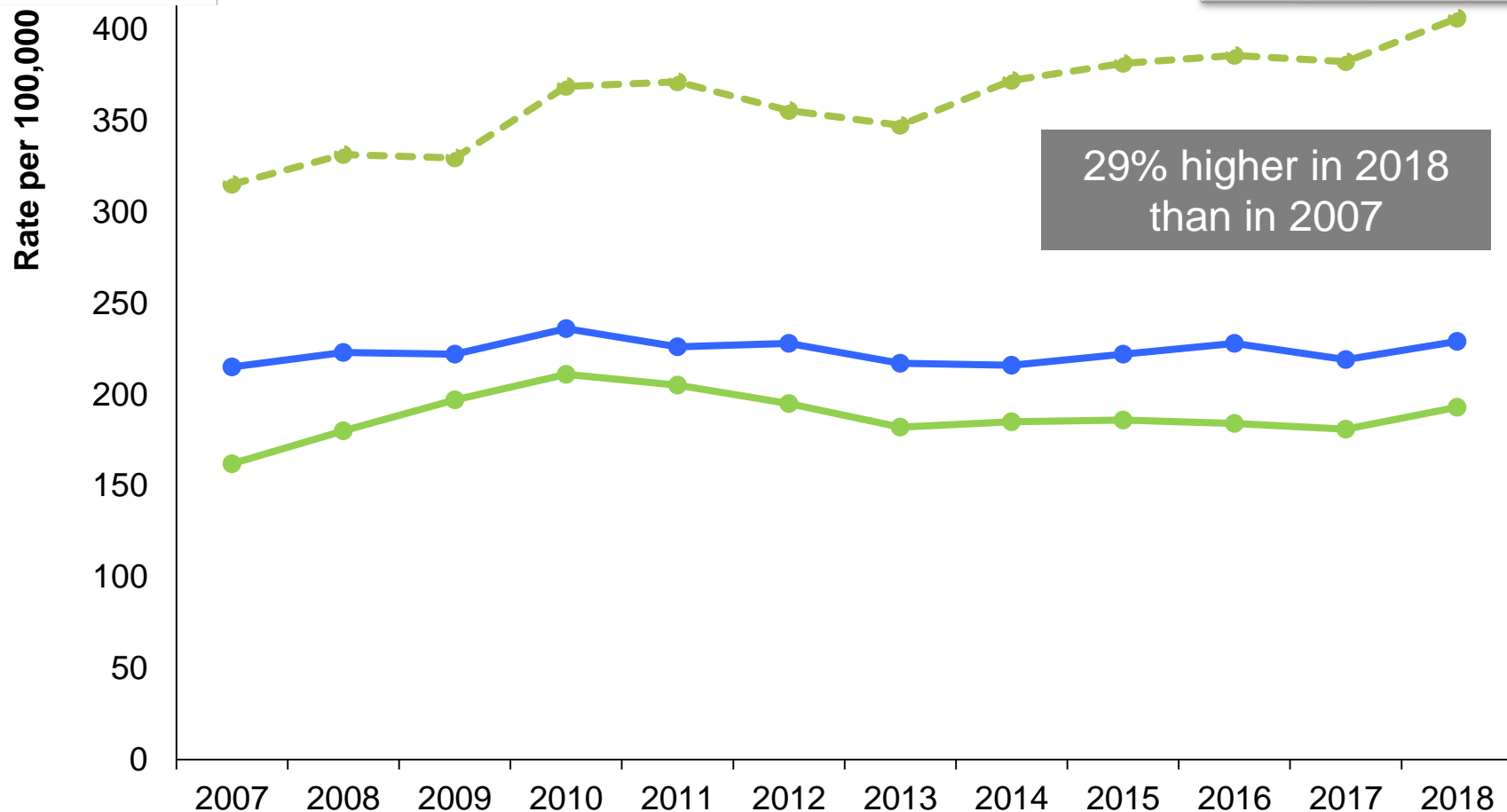
Female: 15-19 year-olds
(766 per 100,000)

1 in every 131

PEAK
RATES
WERE
AMONG
YOUNG
PEOPLE

NSRF, 2019

Trend in youth self-harm



Abstract

Purpose: Rates of hospital-treated self-harm are highest among young people. The current study examined trends in rates of self-harm among young people in Ireland over a 10-year period, as well as trends in self-harm methods.

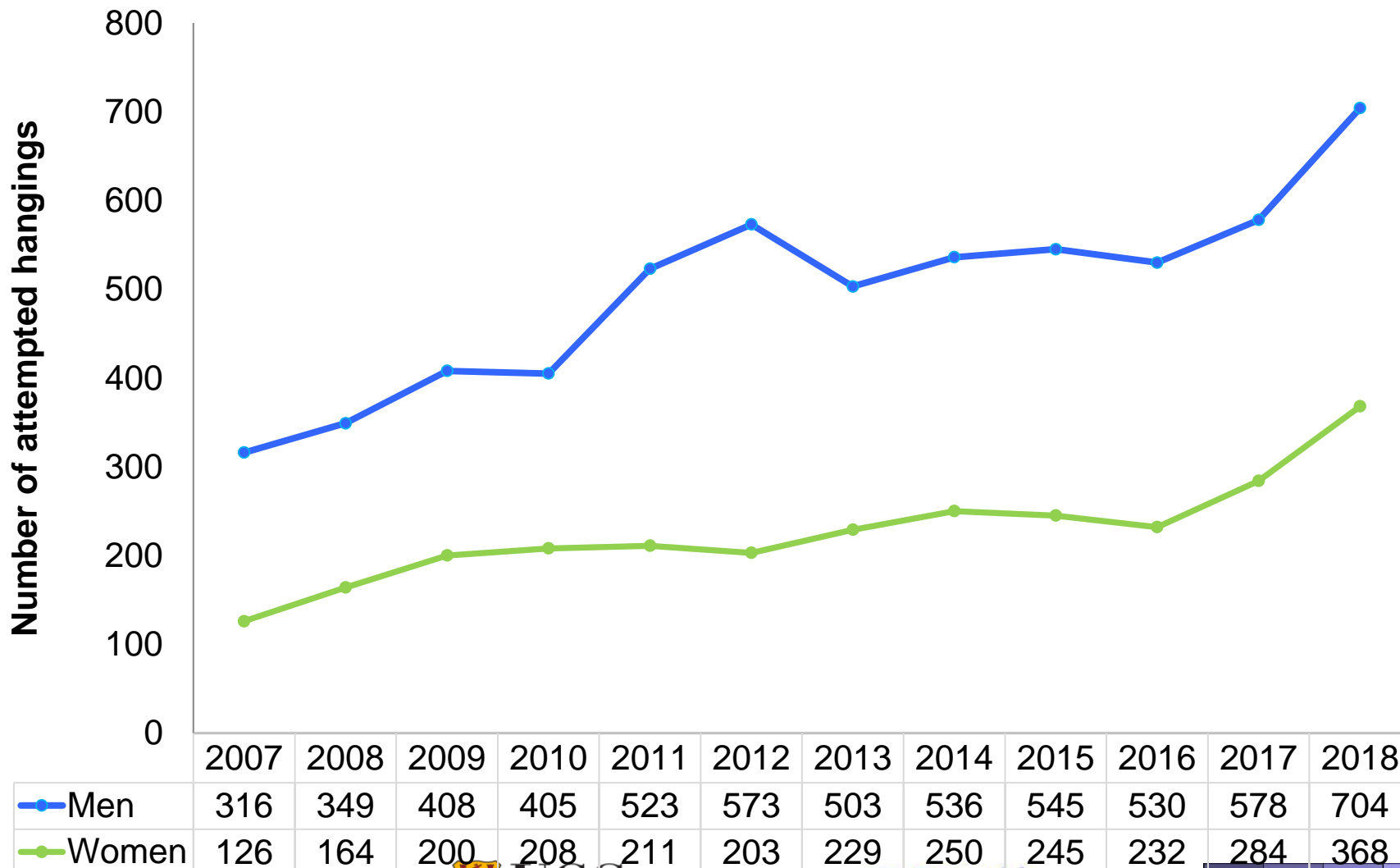
Methods: Data from the National Self-Harm Registry Ireland on presentations to hospital emergency departments (EDs) following self-harm by those aged 10–24 years during the period 2007–2016 were included. We calculated annual self-harm rates per 100,000 by age, gender and method of self-harm. Poisson regression models were used to examine trends in rates of self-harm.

Results: The average person-based rate of self-harm among 10–24-year-olds was 318 per 100,000. Peak rates were observed among 15–19-year-old females (564 per 100,000) and 20–24-year-old males (448 per 100,000). Between 2007 and 2016, rates of self-harm increased by 25%, with increases most pronounced for females and those aged 10–14 years. There were marked increases in specific methods of self-harm, including those associated with high lethality.

Conclusions: The findings indicate that the age of onset of self-harm is decreasing. Increasing rates of self-harm, along with increases in highly lethal methods, indicate that targeted interventions in key transition stages for young people are warranted.

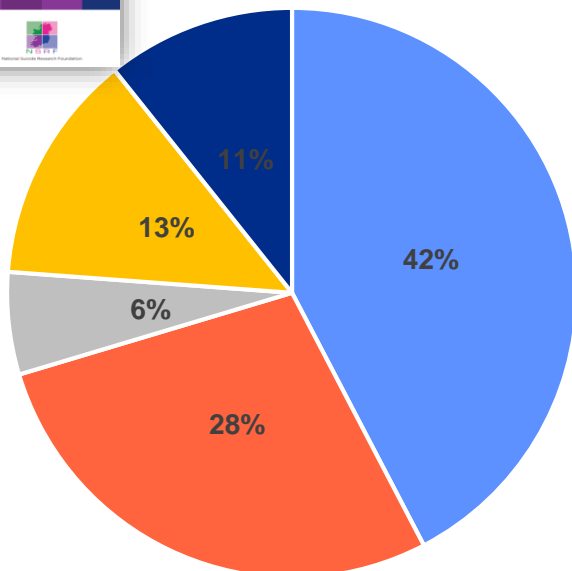
Keywords: Self-harm · Young people · Epidemiology

Trends in attempted hanging

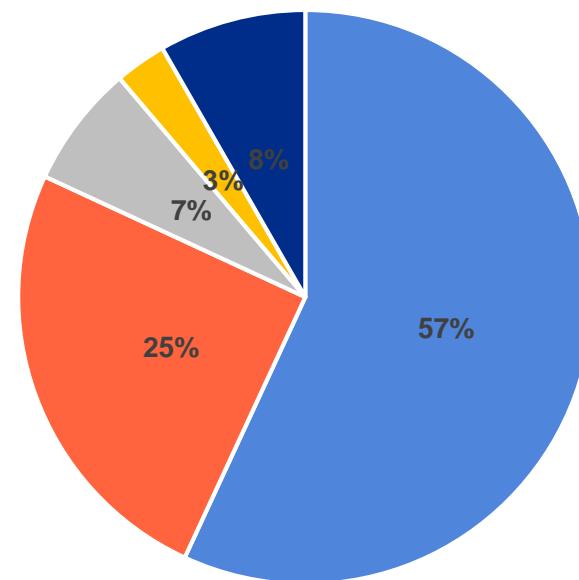


Method of self-harm 10-17 year-olds

Male



Female



- Drug overdose only
- Self-cutting only
- Overdose & self-cutting
- Highly lethal
- Other

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

Balancing the risks and opportunities of internet use

Priorities for suicide prevention: balancing the risks and opportunities of internet use

Dr Lucy Biddle, Dr Jane Derges, Prof David Gunnell (University of Bristol)
Dr Stephanie Stace, Jacqui Morrissey (Samaritans)



About the research

Many cases of internet-related suicide have been reported in the popular and academic press. These highlight the existence of pro-suicide discussions and online information about methods, leading to concern that the internet can promote suicide. At the same time, there has been speculation about the potential to use the internet as a way of reaching vulnerable people through online help sites, peer-support, and as a means of delivering mental health interventions.

However, little is known about how many people use the internet when they are feeling suicidal, why they do this and how they interpret the material that they view. Understanding when, how and for whom the internet is a positive or negative resource is paramount.

This research gathered the experiences of over 1,000 people who had used the internet for suicide-related purposes or knew someone who had used the internet when planning suicide. This was achieved by surveying 8000 young people in their 20s and over 1500 people of all ages who were hospitalized following suicide attempts, and by interviewing over 60 people, including those who had used the internet in the context of suicidal feelings or self-harm, as well as bereaved family or friends. Clinicians were also interviewed about their experiences of asking patients about internet use when making assessments of suicide risk.

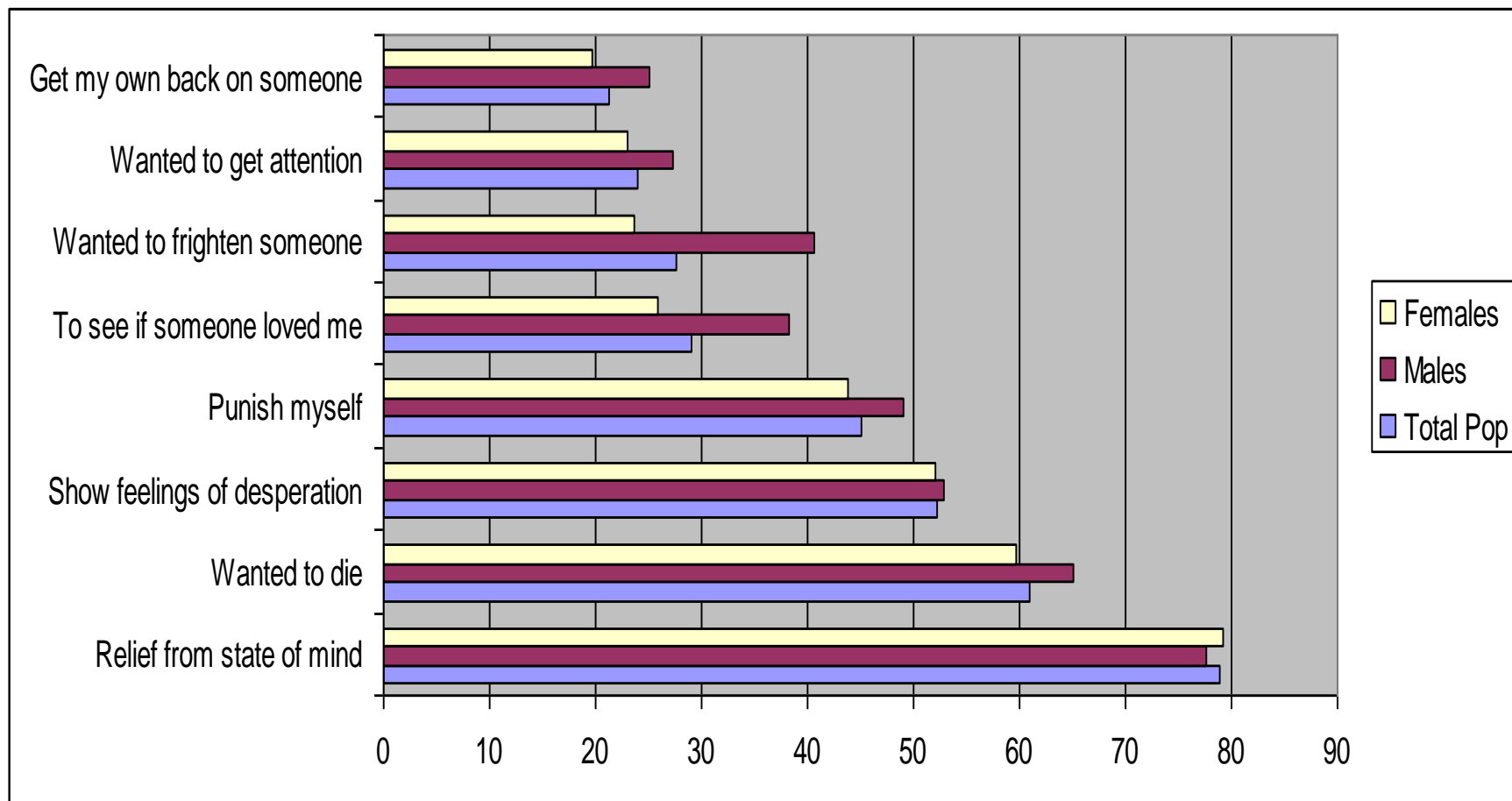
There is an urgent need to further develop regulation, policy and best practice around internet use and internet censorship. This policy report recommends a number of strategies ranging from working with search engine companies, transforming online help provision, and encouraging clinicians to explore patients' internet use and support those at risk. There is also an urgent need to encourage and promote responsible practice by all internet users.

PolicyBristol – influencing policy through world-class research

- 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

Motives related to self-harm by gender among adolescents

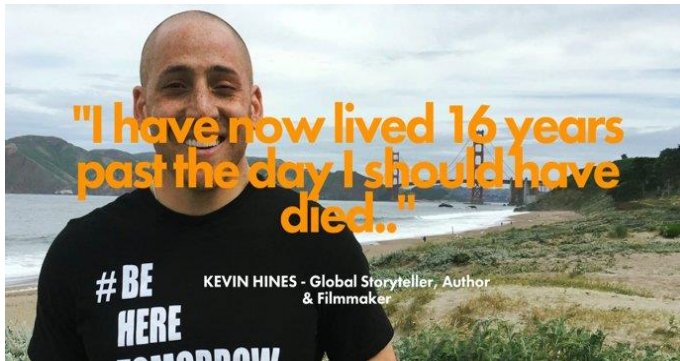


Scoliers et al, 2009; Rasmussen et al, 2016

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.

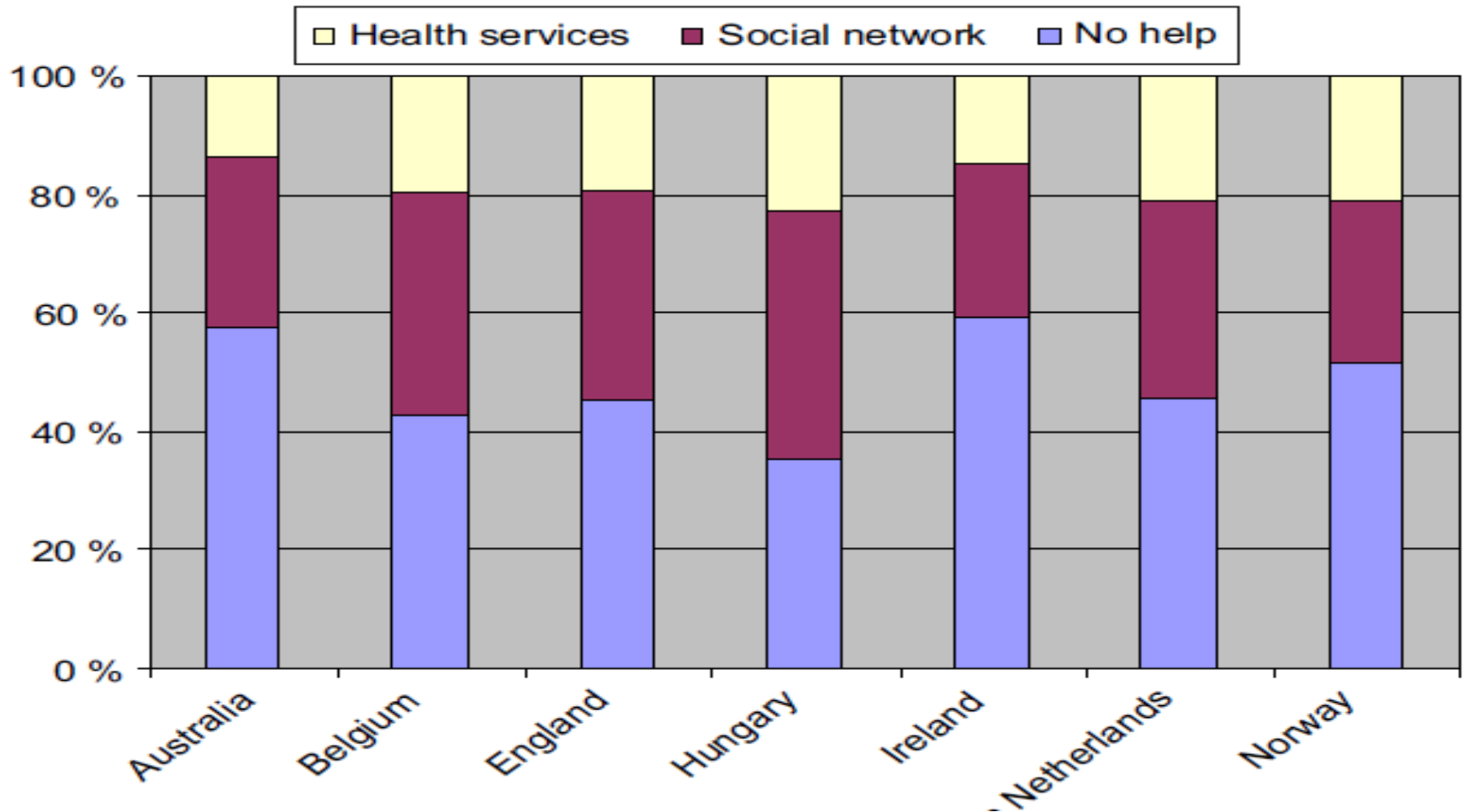
Bermans et al, 2009; 2017



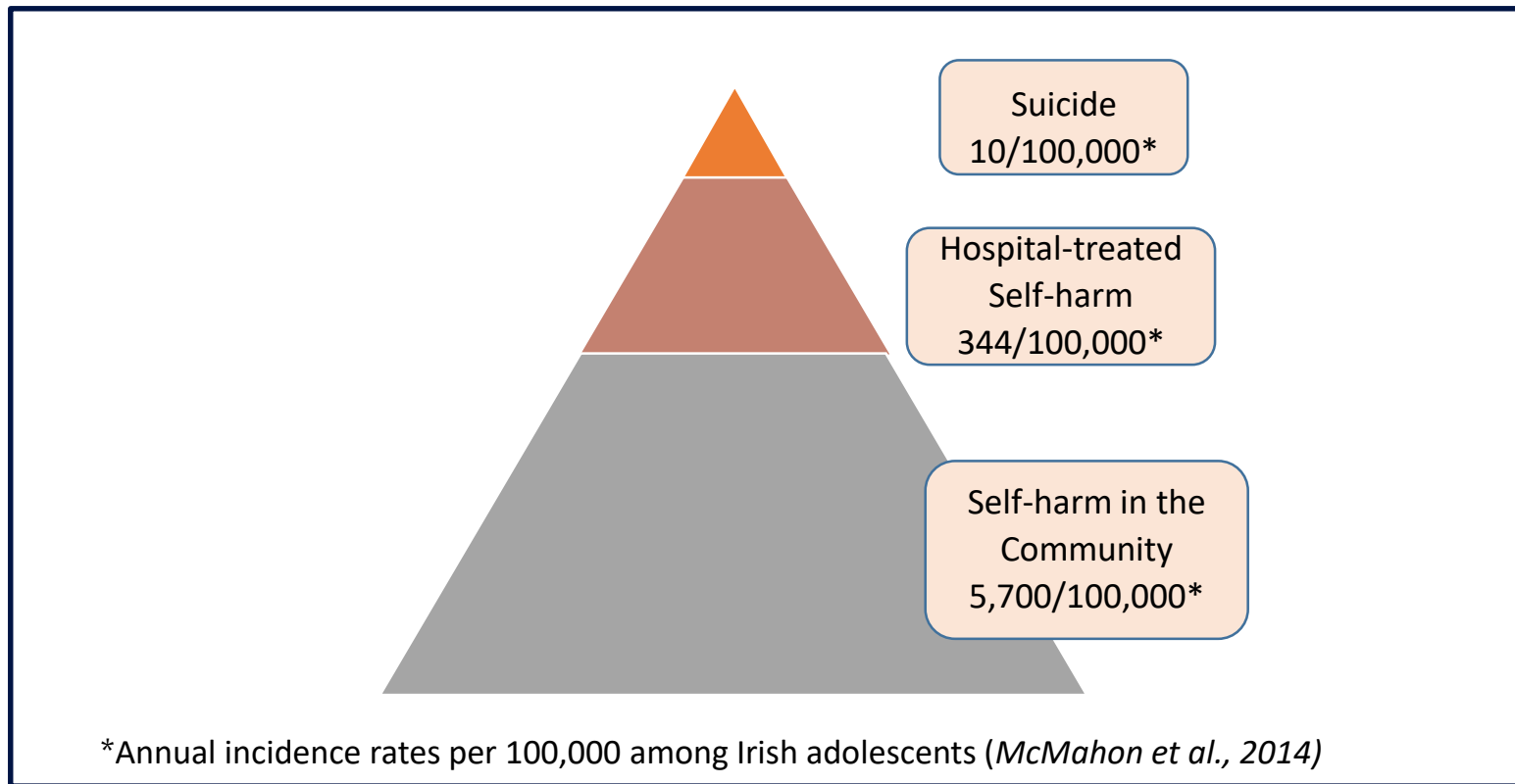
- I said to myself, If somebody comes up to me and says, 'Are you okay? Is something wrong? Can I help you?' I was going to tell them my whole life story and they were going to make me safe."
- A suicidal person needs to hear: *"That we care about you, your life does matter and that all we want is for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

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



Suicide and medically treated self-harm in adolescents - The tip of the iceberg



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



- 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"*

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



Self-harm intervention and suicide prevention among young people at national level in Ireland

- *Connecting for Life*, Ireland's National Strategy to Reduce Suicide, 2015-2020
- National Clinical Programme for the Assessment and Management of Patients Presenting to Emergency Departments following Self-Harm



Suicide contagion and clustering in young people

Historical evidence of contagion of suicide

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

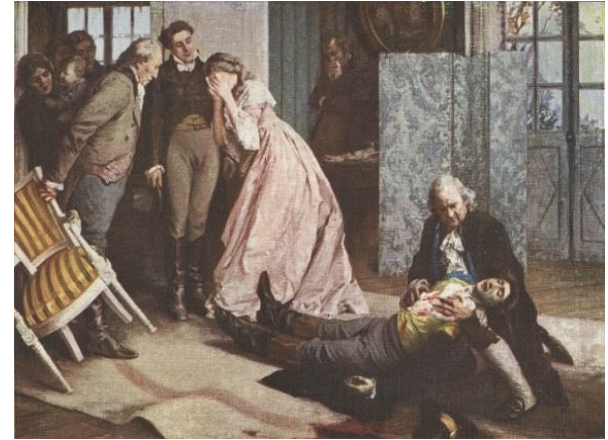
- Following publication of the novel, indications for imitative suicides among young men in Germany, and in Denmark and Italy – “The Werther Effect”

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

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 glamorises 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

Further consistent research outcomes

JAMA Psychiatry | Original Investigation

Association of Increased Youth Suicides in the United States With the Release of *13 Reasons Why*

Thomas Niederkrotenthaler, MD, PhD, MMSc; Steven Stack, PhD; Benedikt Till, DSc; Mark Sinyor, MSc, MD; Jane Pirks, PhD; David Garcia, DSc; Ian R. H. Rockett, PhD, MPH; Ulrich S. Tran, DSc

IMPORTANCE On March 31, 2017, Netflix released the show *13 Reasons Why*, sparking immediate criticism from suicide prevention organizations for not following media recommendations for responsible suicide portrayal and for possible suicide contagion by media. To date, little research has been conducted into the associations between the show and suicide counts among its young target audience.

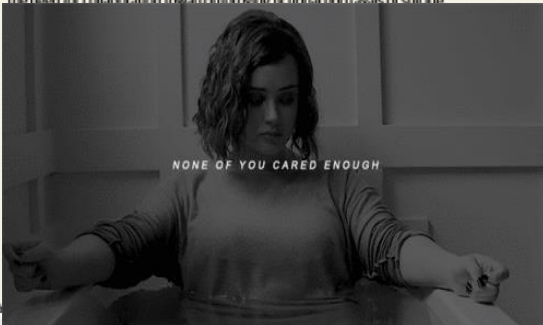
OBJECTIVE To analyze the changes in suicide counts after the release of *13 Reasons Why*.

DESIGN, SETTING, AND PARTICIPANTS For this time series analysis, monthly suicide data for the age groups 10 to 19 years, 20 to 29 years, and 30 years or older for both US males and females from January 1, 1999, to December 31, 2017, were extracted from the Centers for Disease Control and Prevention's WONDER (Wide-ranging Online Data for Epidemiologic Research) database. Twitter and Instagram posts were used as a proxy to estimate the amount of attention the show received through social media from April 1, 2017, to June 30, 2017. Autoregressive integrated moving average time series models were fitted to the pre-April 2017 period to estimate suicides among the age groups and to identify changes in specific suicide methods used. The models were fitted to the full time series with dummy variables for (1) April 2017 and (2) April 1, 2017, to June 30, 2017. Data were analyzed in December 2018 and January 2019.

MAIN OUTCOMES AND MEASURES Suicide data before and after the release of the show in 2017.

RESULTS Based on social media data, public interest in the show was highest in April 2017 and was negligible after June 2017. For 10- to 19-year-old males and females, increases in the observed values from April to June 2017 were outside the 95% confidence bands of forecasts. Models testing 3-month associated suicide mortality indicated 66 (95% CI, 16.3-115.7) excess suicides among males (12.4% increase; 95% CI, 3.1%-21.8%) and 37 (95% CI, 12.4-61.5) among females (21.7% increase; 95% CI, 7.3%-36.2%). No excess suicide mortality was seen in other age groups. The increase in the hanging suicide method was particularly high (26.9% increase; 95% CI, 15.3%-38.4%).

CONCLUSIONS AND RELEVANCE Caution must be taken in interpreting these findings; however, the suicide increase in youth only and the signal of a potentially larger increase in young females all appear to be consistent with a contagion by media and seem to reinforce the need for collaboration toward improving fictional portrayals of suicide.



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Author Audio Interview

Author Affiliations: Author affiliations are listed at the end of this article.

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Impact of the Netflix series *13 Reasons Why*:

- Excess suicides in females and males in the age group 15-19 years from April to June 2017 in the US, in particular for suicide involving hanging.
- Evidence supporting the need for public health and suicide experts to engage with the entertainment industry.

(Niederkrotenthaler et al, 2019)



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.





Specific aspects associated with online media and risk of suicide contagion

- Online series and social media can be accessed at all times, which increases viewing patterns, such as 'marathon' or 'binge watching'.



- This can further intensify the over-identification with people who take their lives (real-life and fictional), and therefore increase the negative impact on vulnerable people.

Characteristics of people involved in suicide contagion and 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; Malone, 2013; Arensman et al, 2016)

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)



Specific challenges related to self-harm and suicide in young people

- Self-harm more frequently observed among children and adolescents at younger age (e.g. Ireland, UK, US, Australia, Japan)
- Shift in use of more highly lethal methods of self-harm at younger age, and method escalation over shorter period of time
- More emphasis on evidence based mental health promotion and programmes addressing positive coping skills at younger age
- Improved access to mental health services for children and adolescents at risk of self-harm and suicide
- More insight required into impact of harmful social media platforms and sites on self-harm and suicide



Documentary “*My other Life*”



<https://vimeo.com/293985609>

<https://www.youtube.com/watch?v=EhwXUyM9V7g>

Suicide Support and Information

Informing and Supporting People Affected by Suicide

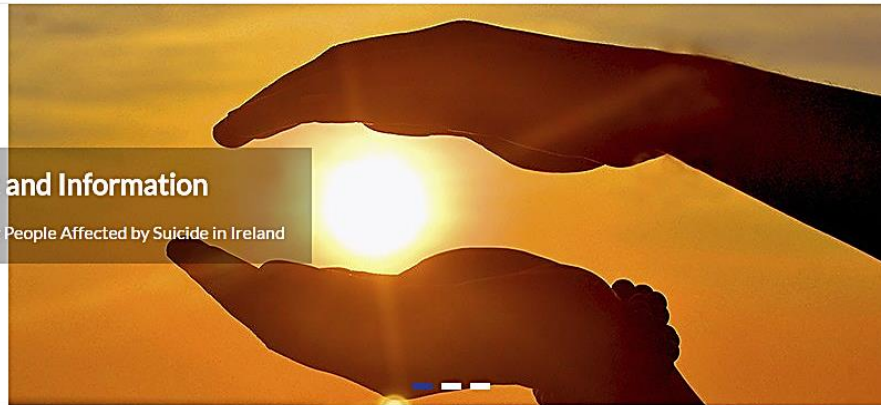
www.suicidesupportandinformation.ie



[Home](#) [Bereaved Family Members](#) [General Practitioners](#) [Mental Health Professionals](#) [Project Management](#)

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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[Grieving Family and Friends](#)

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[Support After a Suicide](#)

[General Practitioners](#)

[Aetiology and Risk Factors for Suicidal Behaviour](#)

[Responding to a Suicide Death](#)

[Responding to People at Risk of Suicide](#)

[Self-Care and Peer-Support](#)

*“People who attempt suicide don’t want to die,
wat they want is a different life”*

(Wieg, 2003; Zwagerman, 2015)



Go Raibh Maith Agat!

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Eileen Williamson, Paul Corcoran, Eve Griffin, Christina Dillon, Caroline Daly, Dorothy Leahy, Grace Cully, Elaine McMahon, Ivan Perry, Eugene Cassidy, Niall McTernan, Karen Mulcahy, Ruth Benson, Isabela Troya, Sarah Nicholson, Anvar Sadath, Eunice Philip

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