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

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#### Overview

- Trends in self-harm and suicide among young people in recent years
- Self-harm and suicide among young people during Covid-19
- Risk and protective factors associated with self-harm and suicide in young people
- Evidence-based interventions for self-harm in young people
- Suicide contagion and clustering









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



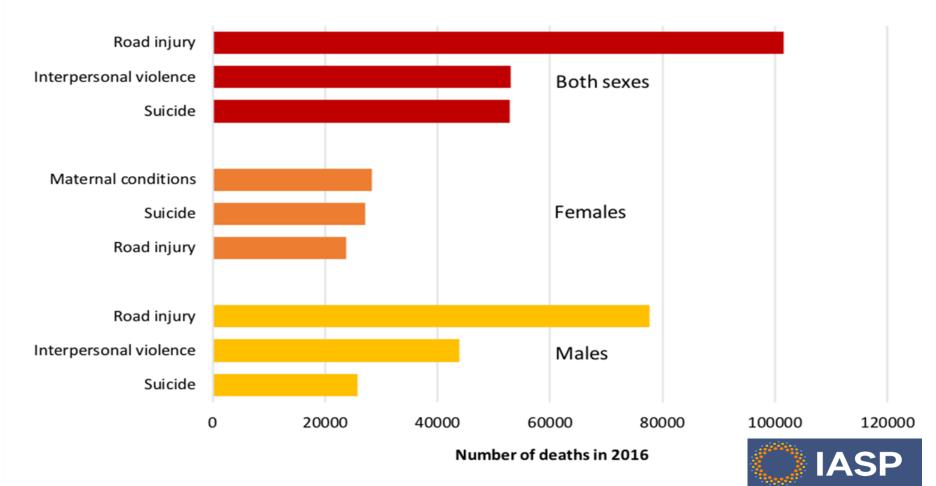






### Leading causes of death among young people aged 15-19 years at global level (WHO, 2020)

#### Leading causes of death, ages 15-19 years



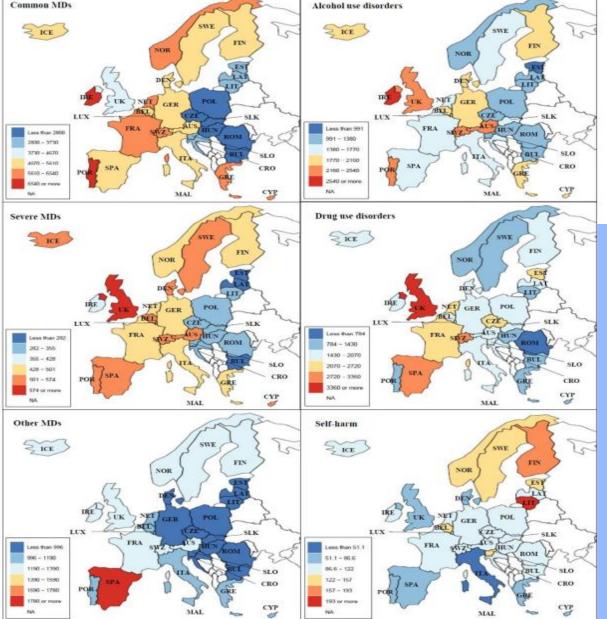


Figure 1. Prevalence per 100,000 population aged 10-24 years of common, severe and other mental disorders (MDs), alcohol and drug use disorders, and incidence rate of self-harm in 31 European countries, both sexes, age 10-24, year 2019.

Common MDs: anxiety and depressive disorders; Severe MDs: schizophrenia and bipolar disorder, Other MDs: eating disorders, attention deficit/hyperactivity disorder, autism spectrum disorder, conduct disorders, idiopathic developmental intellectual disability, other mental disorders.

#### The burden of mental disorders, substance use disorders and self-harm among young people in Europe, 1990—2019: Findings from the Global Burden of Disease Study 2019



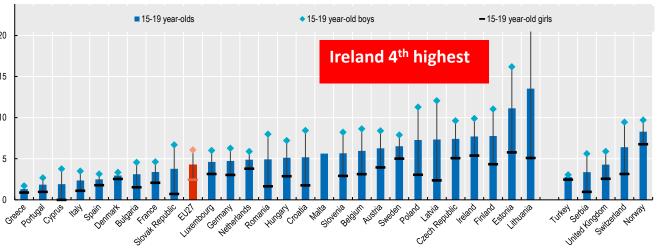
roux, <sup>153</sup> Russell M. Viner, <sup>154</sup> Andrea Werdecker, <sup>155</sup> Andrea Sylvia Winkler, <sup>156</sup>, <sup>157</sup> Simon I. Hay, <sup>8,159</sup> Mohsen Naghavi, <sup>158</sup> Peter Allebeck, <sup>160</sup> and Lorenzo Monasta <sup>130</sup>

- According to the GBD study, mental health conditions in Europe represented a major health burden for younger people (10-24 years) in the period 1990 to 2019, in terms of both disability and premature deaths.
- Given that these conditions often predict same or worse conditions in adulthood, these findings underline the need for policies to strengthen mental health in future years, with a specific focus on young people.
- disorders and alcohol use disorders, and average in relation to suicide, among young people. The real rates of suicide in young people in Ireland may be higher while since 2013, late registered suicide deaths are not included in the official suicide figures sent to WHO & Eurostat by the CSO. There are indications of under reporting of at least 15%.



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

Suicide rates per 100,000 among 15-19 year olds for 2017 or most recent available year (OECD, 2020)





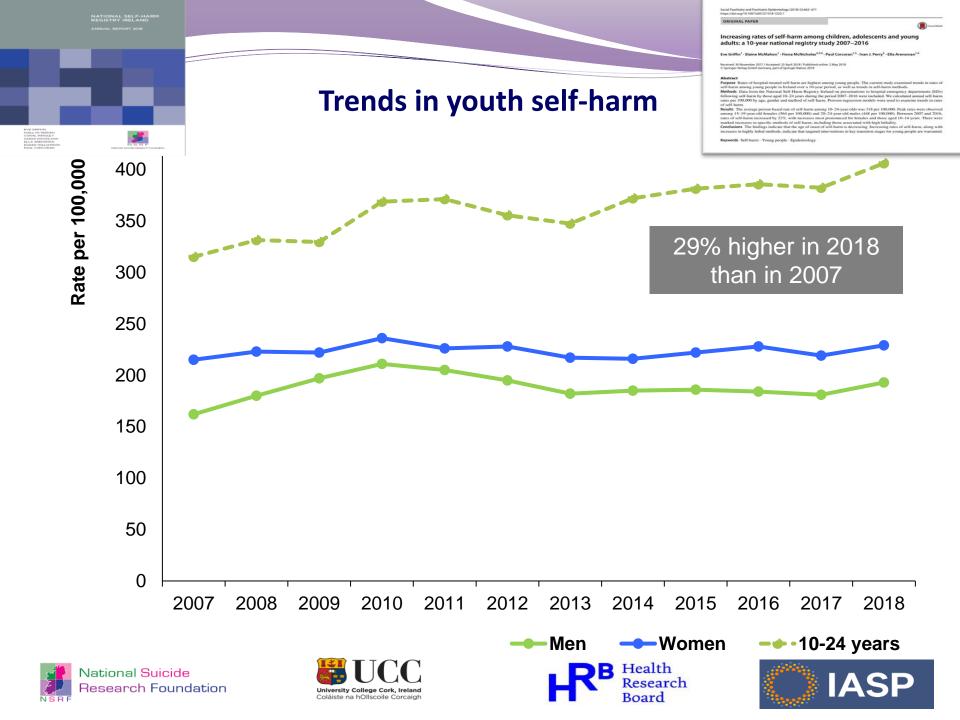
Suicide approx. 550 p.a.

Self-harm medically treated approx. 12,000 p.a.

"Hidden" cases of self-harm: approx. 60,000 p.a.

### Public Mental Health Interventions

- Suicide prevention and mental illness
- Improving lives, recovery and inclusion
- Early identification and referral
- Mental health promotion



#### Can we rely on the media?

COVID-19 a tsunami of destruction causing irreversible damage to young adults mental health

Covid stress leads to spike in suicide cases in India

Experts warn Britain faces a mental health 'ticking time bomb' with a 'significant' and 'long term' impact as country is plunged into winter lockdown that could last months



Number of Britons seeking help for suicidal thoughts 'has TRIPLED since the first lockdown' as psychiatrists warn the UK faces a 'mental health pandemic'

The silent COVID-19 death toll: Far more Australians will kill themselves because of coronavirus lockdown than those who die of the virus,



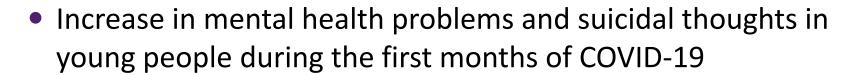








## Self-harm and suicide trends among young people during COVID-19



 No consistent pattern of increased rates of self-harm and suicide within this period, in particular in high income countries

#### SYSTEMATIC REVIEW

reservations]

The impact of the COVID-19 pandemic on self-harm and suicidal behaviour: update of living systematic review
[version 2; peer review: 1 approved, 2 approved with

Previously titled: "The impact of the COVID-19 pandemic on self-harm and suicidal behaviour: a living systematic review"

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(John et al, 2021; Living systematic review)





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REVIEW Open Access

#### Registered psychiatric service use, self-harm and suicides of children and young people aged 0–24 before and during the COVID-19 pandemic: a systematic review



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#### Abstract

**Background:** The COVID-19 pandemic has impacted on psychiatric symptoms of children and young people, but many psychiatric services have been disrupted. It is unclear how service use, self-harm and suicide has changed since the pandemic started. To gain timely information, this systematic review focused on studies based on administrative data that compared psychiatric service use, self-harm and suicide before and during the pandemic among children and young people.

Methods and finding: A systematic review of studies published in English from 1 January 2020 to 22 March 2021 was conducted, using the Web of Science, PubMed, Embase and PsycINFO databases. Increases or reductions in service use were calculated and compared using percentages. Of the 2,676 papers retrieved, 18 were eligible for the review and they provided data from 19 countries and regions. Most studies assessed changes during the early phase of the COVID-19 pandemic, from March to July 2020, and three assessed the changes until October 2020. Fifteen studies reported a total of 21 service use outcomes that were quantitively examined. More than three-quarters of the 21 outcomes (81%) fell by 5–80% (mean reduction = 27.9%, SD = 35%). Ten of the 20 outcomes for psychiatric emergency department (ED) services reduced by 5% to 80% (mean = 40.1%, SD = 34.9%) during the pandemic. Reductions in service use were also recorded for ED visits due to suicide ideation and self-harm, referrals to secondary mental health services, psychiatric inpatient unit admissions and patients receiving treatment for eating disorders. However, there were also some increases. Suicide rate and the number of ED visits due to suicide attempts have increased, and there was an increase in the number of treatment sessions in a service that provided telemedicine.

**Conclusion:** Most of the studies showed reductions in the use of psychiatric services by children and young people during the early phase of the pandemic and this highlighted potential delays or unmet needs. Suicide rate has increased during the second wave of the pandemic. Further studies are needed to assess the pattern of service use in the later phases of the COVID-19 pandemic.

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- Systematic review including 18 studies providing data from 19 countries and regions.
- Most of the studies showed reductions in the use of psychiatric services by children and young people during the early phase of the pandemic, and this highlighted potential delays or unmet needs.
- Suicide rate and the number of ED visits due to suicide attempts/self-harm increased during the second wave of the Covid-19 pandemic.
- During the second Covid wave, there was an increase in the number of treatment sessions in services providing telemedicine.

Wan Mohd Azam Wan Mohd Yunus and Laura Kauhanen contributed equally to this work



#### Risk of repeated self-harm in young people and selfharm method escalation

- Young people with the highest risk for repeated self-harm were 15–19year-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 children and adolescents in recent years











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### 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 and Cyberbullying
- Difficulties in making keeping friends
- High levels of depressive symptoms
- Sleep problems

#### 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 and Cyberbullying
- Problems with school work
- Sleep problems

McMahon et al, 2013; Hysing et al, 2015

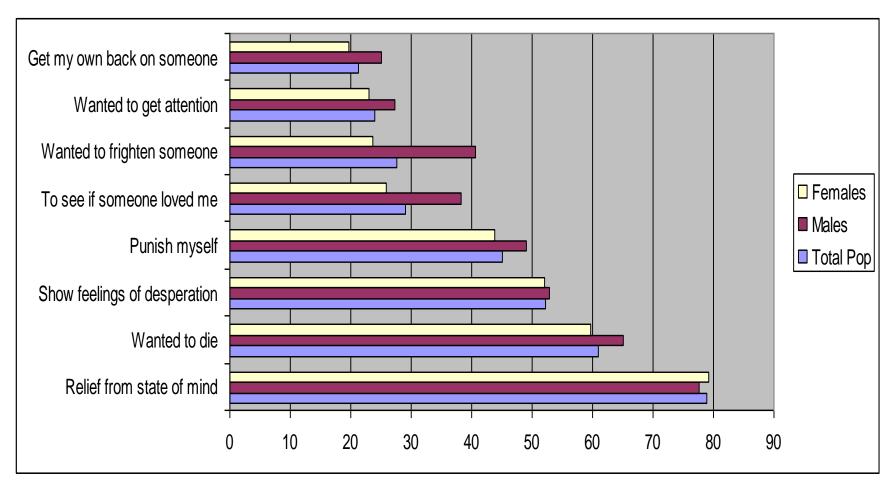








## Motives related to self-harm by gender among adolescents



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











## 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"

#### 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**

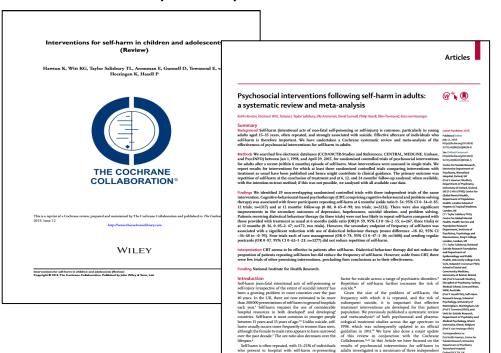
"Write down problems privately and a teacher can discuss them in front of the class"

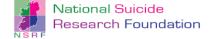




## Psychotherapeutic interventions for self-harm in adolescents and young adults

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







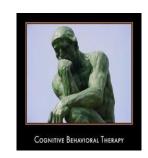






### What is known about CBT as a therapeutic intervention for adolescents and young adults

- 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; Hawton et al, 2016)
- 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)

















## cross-cutting foundations

Multisectoral collaboration

**Awareness raising** 

**Situation analysis** 

**Capacity building** 

**Financing** 

Surveillance, monitoring and evaluation

#### **Key effective evidence-based interventions**

World Health Organization

Limit access to means of suicide

Interact with the media on responsible reporting

Foster life skills of young people affected

Early identify everyone affected









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

 National Clinical Programme for the Assessment and Management of Patients Presenting to Emergency Departments following Self-Harm



 Connecting for Life, Ireland's National Strategy to Reduce Suicide, 2015-2024











#### 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

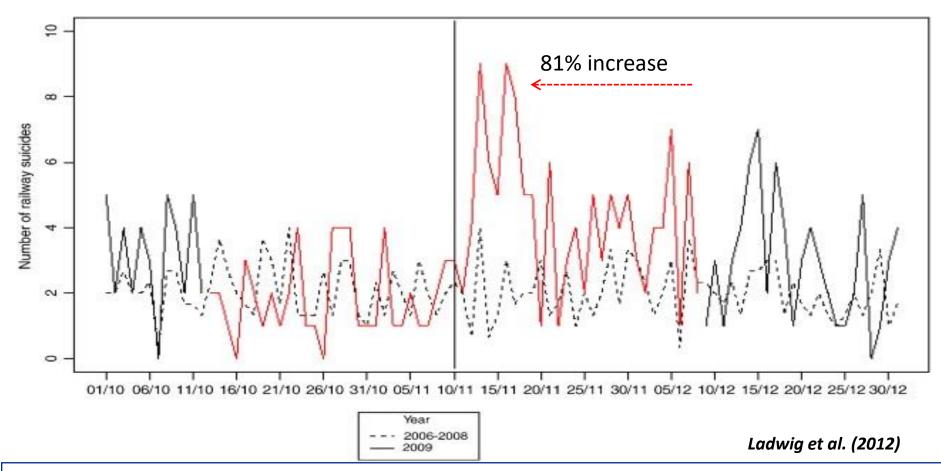








### Significant increase of railway suicides after the suicide of German goal keeper, Robert Enke on 10<sup>th</sup> November 2009



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









#### 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









#### 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.









#### 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









### People who attempt suicide don't want to die, what they want is a different life



"I have now lived 16 years past the day I should have died"

Bermans et al, 2017; Rasmussen et al, 2016; Bermans et al, 2009; Scoliers et al, 2009.











https://vimeo.com/293985609











## MHAINTAIN - Early Identification of Suicide and Self-Harm Risk and Comorbid Mental and Physical Disorders: An Interdisciplinary Training, Research and Intervention Programme

- MHAINTAIN provides a unique research through training programme to enhance self-harm assessment, intervention and prevention among adults and young people
- Consortium members have longstanding experience in patientfocused research, teaching and PhD supervision, with over 150 completed PhD dissertations
- Consortium members include researchers, scientist practitioners and people with lived experience in mental health, self-harm and suicide prevention
- ➤ MHAINTAIN provides an outstanding infrastructure and environment that will inspire and generate highly-skilled scientist practitioners
- MHAINTAIN's network will facilitate national and international internships





































#### Thank you!

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