Self-harm among people who died by suicide in Cork
Findings from the Suicide Support and Information System (SSIS)

Celine Larkin\textsuperscript{1}, Amanda Wall\textsuperscript{1}, Carmel McAuliffe\textsuperscript{1}, Paul Corcoran\textsuperscript{1}, Eileen Williamson\textsuperscript{1}, Jacklyn McCarthy\textsuperscript{1}, Aine Duggan\textsuperscript{1}, Ivan Perry\textsuperscript{2}, Ella Arensman\textsuperscript{1}.

\textsuperscript{1}National Suicide Research Foundation, Cork, Ireland
\textsuperscript{2}Dept of Epidemiology & Public Health University College Cork, Ireland

Symposium: Deliberate Self-Harm and Suicidality in Ireland
Identifying Trends and Intervention Strategies
Who we are

Our Aims

To Examine: By monitoring trends, risk factors and protective factors associated with suicide and self-harm

To Intervene: By applying evidence-based interventions at a local, national and international level.

To Translate: By translating and disseminating research in order to inform and impact on policy and practice.
An overview of terminology

- Self-harm
- Suicide
- Self-poisoning
- Suicidal act
- Suicidal behaviour
- Self-injury
- Intentional overdose
- Attempted suicide
- Deliberate self-harm
- Parasuicide
- Self-cutting
- Non-suicidal self-injury
- Suicide attempt
An overview of terminology

- **Deliberate self-harm**
  - ‘an act with **non-fatal** outcome, in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes which the subject desired via the actual or expected physical consequences’ (Platt et al., 1992)

- **Suicide**
  - “Self-inflicted death with evidence (either explicit or implicit) of intent to die” (Silverman et al., 2010)
What is the relationship between self-harm and suicide?

*People who self-harm are just attention-seeking, they’re not actually suicidal*

*If a person really wanted to take their own life, they would do it*
What is the relationship between self-harm and suicide?

People who self-harm are just attention-seeking, they’re not actually suicidal

- Many of those who die by suicide engage in non-fatal self-harm during their lifetime
  - Between a half and a third of those who die by suicide have previous self-harm (Foster et al., 1999; Appleby et al., 1999)
  - Far higher than expected (pooled OR: 16.33, 95% CI 7.51–35.52) (Yoshimasu et al., 2008)

- A significant proportion of people presenting with self-harm will go on to die by suicide (Carroll et al, 2014)
  - 1.6% (95% CI 1.2–2.1) at 1 year
  - 4.2% (95% CI 3.1–5.6%) at 10 years

- There is not a one-to-one relationship
  - Not all those who self-harm will die by suicide
  - Not all those who die by suicide engaged in self-harm during their lifetime

*Previous self-harm is one of the strongest predictors of suicide*  (Yoshimasu et al., 2008)
What is the relationship between self-harm and suicide?

Suicide intent is more complex than wanting to die or not
- Fluid construct
  - Varies within the same person over time, across and even within acts of self-harm
- Occurs on a continuum
  - E.g. Beck Suicide Intent Scale examines objective and subjective aspects
- Is a poor predictor of repetition of self-harm (Larkin et al., 2014)
- Method used in self-harm can belie risk of suicide (Cooper et al., 2005)

If a person really wanted to take their own life, they would do it
What could explain the increased risk of suicide among those who engage in self-harm?

- Higher pre-existing vulnerability
  - Those who repeat self-harm are more likely to have:
    - personality disorder, hopelessness, history of psychiatric treatment, schizophrenia, alcohol abuse/dependence, drug abuse/dependence (Larkin et al., 2014)

- Acquired capability (Joiner, 2005)
  - Decreasing inhibition across repeated acts of self-harm
  - “Acquired capability is a condition involving a heightened degree of fearlessness and pain insensitivity such that the actions and ideas involved in suicide are no longer alarming...results from repeated exposure to painful and provocative life events, which, over time, habituate an individual to the fear and pain involved in suicide” (Smith and Cukrowicz, 2010)
Objective

The current study aimed to explore the frequency and characteristics of previous self-harm among people who died by suicide in Cork between 2008-2012.
Method
Suicide Support and Information System

- Information on suicides in Cork city and county between 2008 and 2012 were obtained from the SSIS
- The system contains information from coroners’ records and a subgroup of healthcare practitioners and family informants.

Response rate: 100%
- Coroners’ verdict records & Post mortem reports

Response rate: 77%
- GP/Psychiatrist/Psychologist

Response rate: 66%
- Close family members/friends

Coroner’s inquest concluded involving cases of suicide/open verdicts

Step 1: SRP facilitates support for families bereaved by suicide/other sudden deaths after conclusion of inquest

Step 2: Research: SRP approaches next of kin and health care professional(s) after conclusion of inquest
Results

- In the study period, 307 consecutive cases of suicide were recorded as part of the Suicide Support and Information System
  - 80.1% male
  - Average age: 40.8 years (SD=16.1)
  - 51.0% were single
  - 33.1% were unemployed
  - 63.8% died by hanging

![Chart showing percentage of deaths by age group and gender]
Results- Prevalence of self-harm

- Depended on the source of information

- Of 60 suicide cases for whom family informants were interviewed, 45% had engaged in self-harm in their lifetime

- Across all 307 cases where coroner’s files were reviewed, self-harm was mentioned in 132 cases, of which there was evidence of self-harm in 86 cases
Results - Characteristics of self-harm

Among those who had previously engaged in self-harm (n=86)

- Number of episodes
  - 32.6% had engaged in self-harm once
  - 14.0% had engaged in self-harm twice
  - 10.5% had engaged in self-harm three times or more

- Methods of self-harm
  - 41.9% engaged in intentional overdose and 23.2% had attempted hanging or drowning

- Timing of self-harm
  - 26.7% engaged in self-harm more than 12 months before death
  - 14.0% engaged in self-harm in the week before death

- Seeking treatment of self-harm
  - Almost 40% had received no treatment following self-harm
  - 40% had received inpatient psychiatric treatment
Characteristics of suicide cases who had a history of self-harm versus none
Characteristics of suicide cases who had a history of self-harm versus none

- **Sociodemographic characteristics**
  - Less likely to be married (18.6% versus 50.0%)
  - More likely to be living alone (25.6% versus 10.5%)
  - More likely to be unemployed (48.1% versus 20.5%)

- **Details of suicide**
  - More likely to use hanging as a method of completed suicide (74.4% versus 65.2%)
  - More likely to have combined drugs and alcohol in their toxicology (30.1% versus 15.4%)
  - More likely to leave a suicide note (38.4% versus 28.3%)

- **Psychiatric history**
  - More likely to have evidence of a psychiatric diagnosis (66.3% versus 43.5%)
  - More likely to have received inpatient psychiatric treatment (40.7% versus 10.9%)
Interpretation of findings

- A significant proportion of those who died by suicide had previously self-harmed
  - Many received no treatment for these episodes
  - Previous community-based studies show much self-harm is not treated (Bertolote et al., 2005; Ystgaard et al., 2009)

- Previous self-harm was disproportionally likely to be with high-lethality methods
  - Attempted hanging was involved in 7% of all self-harm presentations in Ireland in 2013 (NRDSH, 2014)
  - In a long-term follow-up study in Sweden (Runeson et al 2010), over half of those who presented with hanging, strangulation, or suffocation went on to die by suicide

- Higher proportion of deaths by hanging among those with previous self-harm
  - Supports Smith and Cukrowicz’s (2010) assertion that “the degree to which an individual maintains a sense of fear and lower tolerance for pain may influence the specific methods chosen”
Recommendations

- Improved assessment and treatment of self-harm is a key strategy for suicide prevention (Mann et al., 2005)

- Those assessing suicide risk should bear in mind that:
  - Self-harm (particularly using high-risk methods such as attempted hanging) is strongly associated with suicide
  - Risk of suicide is elevated immediately after a self-harm episode, in particular among men
Future steps in research

- Inclusion of control group to examine specificity of factors like self-harm
  - SSIS-ACE study (2014-2016)

- Larger studies are required to examine clustering of risk factors and distinct pathways to suicide

- Closer investigation into factors associated with suicide occurring in close proximity to a previous non-fatal self-harm act
  - Mapping the “suicidal process”
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Contact:

c.larkin@ucc.ie

4.28 Western Gateway Building, Western Road, Cork.