

# Policy and Practice Briefing

Suicide prevention in Northern Ireland: results from studies of suicide and suicidal behaviour

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## Introduction

Suicide is a preventable death, and with around 300 deaths a year, Northern Ireland (NI) has the highest suicide rate of the UK regions. In NI the rate has doubled in the past 20 years, whilst England, Scotland and Wales have experienced a decline (Samaritans, 2017). Suicides happen when people in despair lose the ability to think of solutions, believing wrongly, that they have no other option but to end their lives. Suicide can result from a complex range of societal, community, and individual factors, including mental and physical illness, self-harm, and life events (O'Connor & Nock, 2014). Psychology can help us by providing an understanding of the processes underlying suicidal behaviour, why people think about taking their lives, and also why some people go on to act on those thoughts. Psychologists study how social factors and health inequalities interact with mental health conditions and life events, which can lead to the hopelessness that characterises suicidal thoughts and behaviours. By applying this knowledge we can design interventions and strategies that will change the factors associated with suicide, help identify and treat people who might be thinking about suicide, and therefore reduce the suicide rates.

In order to reduce the rates of suicide in NI, it is important to understand the factors associated with suicide in this region specifically. This policy and practice briefing summarises the main findings from a series of Ulster University studies on suicide in NI, and suicidal behaviour in the NI population. We make recommendations for policies and service provision and delivery, in order to address the issues identified, with the goal of reducing suicide rates here. The recommendations are not exhaustive and relate only to the areas identified in these studies, which refer to particular populations. It is important to note that demographic risk factors refer to the risk of a whole population, but do not predict suicide in an individual at a single time. An over-reliance on the risk factors and assessment scales in the clinical practice setting is unsafe and should not replace psychosocial assessments (Chan et al., 2016; Steeg et al., 2018). For more information on psychological approaches to suicide prevention please see the British Psychological Society's position statement, "Understanding and Preventing Suicide: a psychological perspective."

## Our Research

The research papers discussed in this briefing are based on three major studies:

### 1. The NI study of Health and Stress<sup>1,2,3,4</sup>

This was part of an international study known as the World Mental Health Surveys. The NI study collected data about suicidal thoughts, plans and attempts in 4340 people, representing the general population, and asked about risk factors, including mental illness, trauma and adverse childhood experiences (ACEs).

### 2. NI suicide study<sup>5,6,7,8</sup>

This study analysed coronial files on over 1600 deaths by suicide from 2005-2011. Information about the characteristics of the deceased, how they died, and the life events and mental health problems they had prior to death, was extracted. The findings allowed us to examine gender, age group and area level differences in the characteristics of the deceased.

Studies 1 & 2 were included in a report for the Commission for Victims and Survivors NI: "Towards a Better Future: The Transgenerational Impact of the Troubles on Mental Health" (O'Neill et al., 2015).

### 3. Health service data<sup>9,10</sup>

In this study we analysed anonymised health service data (through the Business Services Organisation's "Honest Broker" service). We compared people who died by suicide with the same data for people of a similar age, who were alive. We examined mental illness and pain medications, hospital admissions, and use of the Emergency Department (ED).

## Key findings

### 1. Suicidal thoughts, plans and attempts in the general population in NI

- 10.6% of women and 7% of men had seriously thought about suicide. There were similar rates of plans for men and women (2.4% and 2.5%). A higher proportion of women (4.3%) than men (2.3%) attempted suicide. At least 1.8% of women had made an unplanned suicide attempt<sup>1</sup>.
- A third of men and 41.4% of women with suicidal thoughts made a suicide attempt. 62.0% of women and 38.7% of men who made a suicide plan also made a suicide attempt<sup>1</sup>.
- Mental illness was the strongest predictor of suicidal thoughts, plans and attempts<sup>1,2</sup>. Trauma exposure generally, Troubles-related trauma, and ACEs (such as abuse, loss or neglect in childhood) were also strongly associated with suicidal behaviour<sup>1,2</sup>.
- 4.3% of the population had multiple risk factors including mental illness, co-occurring Troubles-related traumas and ACEs. This group were 15 times more likely to report suicidal behaviour than the low risk group (71.5% of the population)<sup>2</sup>.
- Another study revealed that those who experienced moderate rates of ACEs were less likely to endorse suicide ideation and behaviour, than those who experienced low levels of adversity when they encountered other stressors, in this case, conflict related traumas. This suggests that some early adversity may help a person become more resilient to future stressors<sup>3</sup>.
- In contrast to other types of trauma, people with Troubles-related trauma, are not likely to have a recorded suicide attempt. This shows that they may be more likely to die on their first suicide attempt<sup>1</sup>.

## Recommendations

Suicidal thoughts, plans and attempts occur prior to suicide. Self-harm without a wish to die is also associated with suicide. These findings support the routine assessment of suicidal ideation in high risk populations, and in NI this group includes:

People with a mental health condition,  
People presenting to services after self-harm,  
Those who experienced traumatic events relating to the NI conflict,  
People who have experienced ACEs.

These groups should be targeted in activities to encourage people with suicidal thoughts to seek help, and offered evidence-based, trauma informed, treatments for mental illness. "Suicide-specific" treatments including co-producing Safety Plans, should be provided where there are reports of distress, thoughts, plans, or attempts.

A public health approach of building community resilience could be considered to ensure that vulnerable people and all at risk know how they can help themselves, and those around them, to be safer from suicide.

The research provides support for initiatives in schools and early years settings, to address the intergenerational transmission of trauma (i.e. the impact of parental trauma on the mental health of their offspring). It highlights the need to target interventions and services towards those with multiple traumas.

Unplanned suicide attempts are evidence of impulsive suicides, which are influenced by how suicides are reported. This highlights the importance of reporting suicide in a responsible manner without glamourising the death or giving details of the method or location of suicide.

## Key findings

### 2. Characteristics of those who died by suicide, and the circumstances surrounding their deaths

- 57.1% of women and 40.7% of men had a recorded suicide attempt, with a fifth of women and one in 10 men having 5 or more attempts<sup>7</sup>.
- There was evidence of alcohol in the systems of 41% of those who died<sup>5</sup>.
- There is considerable area level variation in suicide rates in NI, and this variation is accounted for by deprivation<sup>4</sup>. Almost twice the proportion of those who died by suicide lived in deprived areas, compared with people who were similar who had not died<sup>9</sup>.
- A higher proportion of those who died by suicide lived in urban, compared with rural areas (72.8% compared with 63%)<sup>9</sup>.
- The most common life events and problems in younger people were relationship breakup/ crisis and employment/ financial crisis. In older people they were bereavement, a loved one's illness and physical illness<sup>5</sup>.
- One third of those who died by suicide were employed and half were not in employment (we had no data for the remaining cases)<sup>5</sup>. In the under 20s, males were more likely to be unemployed (47.5% males; 17.5% females). Females in this age group were more likely to be students (47.5% females; 28.5% males)<sup>6</sup>.
- Based on data in coronial files, physical health and life events were more relevant than mental illness, in males aged over 61 years<sup>6</sup>.

## Recommendations

Media discussions of suicides (including social media) detailing methods and circumstances of the death (location, recent life events, etc.) can influence suicidal behaviour. Adherence to Samaritans' media guidelines for the reporting of suicide should be adopted.

Population suicide prevention strategies need to address economic deprivation as this causes many of the life events associated with suicide. They also need to recognize substance use as a crucial element of suicide prevention.

People who have difficult life experiences should be targeted in suicide prevention work, notably men, people with employment, financial and relationship crises, those with mental illness and those identified in other studies (such as people who are homosexual, or transgender). Staff working in services that have contact with these groups should receive training in intervention skills.

## Recommendations Continued

Improvements in social connections and the importance of social context should be recognised and integrated in suicide prevention treatments. Support should be available for the bereaved, for those facing divorce or separation and people experiencing debt, unemployment and other situational crises.

Schools and colleges should be supported to adopt suicide prevention initiatives and provide support for students who struggle with mental health difficulties and suicidal behaviour.

## The role of health and health services

### Mental illness and substances

- Whilst studies show that the rates of mental illness in people who die by suicide is over 90%, in NI only 57.6% of those who died had a recorded mental illness<sup>7</sup>. Therefore many people who go on to die by suicide in NI have an undiagnosed, or unreported, mental illness.
- Women who die by suicide are more likely to have a known mental illness than men (69% compared with 54.5%)<sup>5</sup>. The proportions of those known to have a mental illness increases with age group. However, there is a decrease in the oldest group reflecting perhaps a reduced willingness to disclose symptoms or increased prominence of life events in suicide risk for this group<sup>6</sup>.
- Alcohol and drug problems were recorded in many of the deaths, in a higher proportion of women (7.8% of men and 9.7% of women)<sup>5</sup>, particularly in the 21-40 age group (10.4% of men and 15.4% of women)<sup>5</sup>.

### Medication

- Health service data revealed rates of 70% of mental health medication in the suicide group, in the previous 2 years, compared with under a quarter in the group who were alive<sup>8</sup>. People who have been prescribed mental health medication any time within the past two years were more at risk of suicide, even if the medication was most recently prescribed over a year ago. Nonetheless, 57% of those who died by suicide had received their most recent prescription in the three months prior to death<sup>9</sup>.
- Females and older people were more likely to use mental health medication than males and younger people<sup>9</sup>.
- Among the deceased who had a toxicology screen, the mental health medication non-adherence rates (those who had neither a partial nor full medication match) were 62.1% and 56.3% respectively. The non-adherence rate for antipsychotic medication was 82.9%<sup>8</sup>.

- One in three (30.7%) of the deceased and under half (46.3%) of females, had been prescribed three or more medications<sup>8</sup>. This is higher than in other countries.
- Half of those who died by suicide received prescriptions for pain medication within the two years prior to death, compared to 27.7% of the comparison group who were alive<sup>9</sup>.

### Health service use

- Half of those who died had received primary care, and no secondary care services. Primary care was the most common service used prior to death by suicide. Only 30% of those who died by suicide were in receipt of mental health services beyond primary care<sup>7</sup>.
- 1 in 5 had presented to services (mostly primary care) in the fortnight before death (18.2% of men and 23.9% of women)<sup>7</sup>.
- Males tended to disengage with services prior to taking their own lives. People aged over 40 had more contact with health services prior to death<sup>7</sup>.
- In the study of coronial records, around a third of those who died by suicide had a recorded physical disorder, and 45.2% had received medication for a physical health difficulty. Physical health problems were more common in the older age groups and men (11.9% men and 6.9% of women)<sup>7</sup>.
- The majority of the deceased had not attended the ED (67.5%), and had not had a hospital admission (58.1%)<sup>10</sup>.
- Four times as many of those in the deceased group had attended the ED in the three months leading up to the death (12.9% compared with 3.3%)<sup>10</sup>.
- There is an elevated risk in the six-month period after hospital admission<sup>10</sup>.

## Recommendations

Help seeking needs to be destigmatised, and the disclosure of suicidal thoughts recognised as indicative of a mental health condition that could benefit from treatment. The benefits of treatment should be promoted particularly among younger people and males.

Substances, particularly alcohol, are linked to suicides in a number of ways. Population level initiatives to reduce substance abuse and harm are an important element of any suicide prevention strategy.

Suicidal individuals could be suffering from both mental and/or physical health conditions. Physical problems including pain, could be manifestations of mental health concerns. Individuals in suicidal pain may present to health care providers with pain, which may be related to a chronic physical condition. Alternatively, they may use pain medication for their mental health symptoms, or have a dependence

on pain medications. Contact with clinicians, regardless of the presenting issue, provides an opportunity for the compassionate assessment of suicidal thoughts.

Psychological therapies should be widely available as an alternative to, or along with, medication treatments. The NI Psychological Therapies Strategy (DHSSPS, 2010) should be fully implemented.

People who are prescribed mental health or pain medications should be asked about suicidal thoughts and behaviour regularly. Those who have contact with this group (staff in primary care, pharmacists, staff in mental health services) should receive suicide intervention training. Suicide-specific interventions should be available for all those who report suicidal thoughts across all care settings. Safety Planning should include explicit reference to removal or mitigation of means of suicide, including prescribed medication.



## Recommendations Continued

The importance of mental health medication adherence should be promoted and adherence should be monitored. Medication non-adherence was common in the deceased group, it may lead to the exacerbation of symptoms and therefore increase the possibility of suicide.

Staff in EDs should be aware of the risk of suicide following attendance (especially for suicide attempt or self-harm) and

should have undergone suicide intervention training. Mental health treatments and suicide-specific interventions should be available to all those who attend the ED with suicidal behaviour.

The number of medications needed should be balanced with the potential for medications to be used in overdose. Access to medication that could be used for overdose should be carefully monitored in the pharmacy or primary care setting.

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## Acknowledgements

These research studies, and this policy and practice briefing, were funded by the Northern Ireland Public Health Agency, Research and Development Division.

**With grateful thanks to the study investigators and researchers:**

Professor Cherie Armour, Dr Tony Benson, Professor Brendan Bunting, Dr Colette Corry, Dr Edel Ennis, Dr Finola Ferry, Dr Byron Graham, Dr Danielle McFeeters, Dr Margaret McLafferty, Professor Adrian Moore, and Dr Sam Murphy.