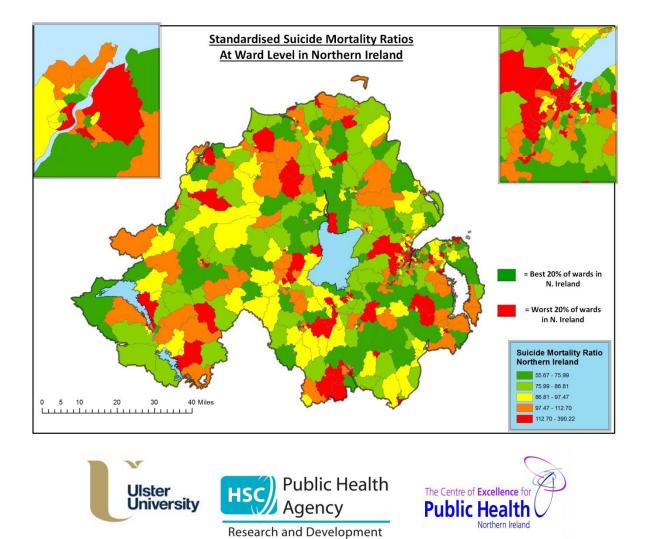
# Death by Suicide: A Report Based on the Northern

# Ireland Coroner's Database



Report prepared by

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## **Evidence Brief**

#### Why did we start?

Potentially new information, especially relating to the characteristics of those who had died by suicide was made available through the Coroner's Office. The information made available to us covered deaths that occurred in the years 2005 to the end of 2011.

#### What did we do?

First we addressed the descriptive characteristics associated with this group of individuals. These descriptive characteristics included information relating to (1) means by which the death occurred (2) gender, age and employment status of the person (3) prior attempts (4) alcohol and prescription use around time of death (5) adverse events (6) use of health services and (7) mental and physical health problems. Second we examined area level residential location in terms of Local Government Districts, and Wards within Northern Ireland. To address this area level of analysis, standardised mortality ratios (SMRs) were used.

#### What answers did we get?

Results included the following. (1) Around 50% of the sample had either a recorded prior suicide attempt or a record of suicidal thoughts. (2) Over 80% of the sample had a recorded medical prescription. (3) The major adverse event recorded before death was relationship problems. (4) Over 50% of the individuals in this sample were recorded as having been unemployed at the time of death. (5) Approximately 22% of the sample had a recorded mental and physical health condition (comorbidity); with 36% presenting with recorded mental health problems only. (6) Amongst the adult population, over the seven years of the data examined in this report, approximately 1 in every 1000 citizens has taken his or her own life. (7) After adjusting for the residential population within each LGD, deaths from suicide were 40% higher in Belfast than the Northern Ireland average. (8) Differences between Wards indicated that a significant number of Wards had between two and four times the expected number of deaths, and an association with deprivation was evident. (9) In terms of the raw statistics, 82% of deaths which occurred in the 16 to 39 year age group were amongst males. Seventy-four percent of the deaths within the age group 40 to 64+ were males. (10) Stratified age structure (four age groups) within Wards, when adjusted for number of individuals, indicated no difference in the expected number of deaths in the 16 – 39 year old age band and those within the 40 - 64 year old age group.

#### What should be done now?

There is a need to record better, and to link and standardise information. Deaths by suicide in NI are far from random events, as is evident from the analysis in this report; and the search for a better understanding of the systematic element in these deaths should be maintained. Efforts should more closely target those areas, identified in this report, where suicide rates are much higher. At this point we don't have sufficient information regarding the very young and older age groups who take their own lives, but there is evidence in this report to show that their characteristics may well be different from those in other age groups. More emphasis should be placed on the trends within locations over many years. The co-occurrence of mental health, deprivation, unemployment and relationship stressors are often a common characteristic; and while they are probably the most evident categories, a reason to live also implies that social and psychological capital requires both a societal and an individual response, and this in turn requires us to establish and maintain social norms that can enhance the lived experience. For further recommendations based both on the current analysis and on current knowledge, please consult the full report.

## Preface and Acknowledgements

The common perception is that deaths from suicide are largely preventable. The silent 'but how?' in the sentence is more problematic. This report sets out to address the issue of suicide by a search for those things that are associated with deaths by suicide. Few adults in society will have been fortunate enough not to have known someone who has taken his or her own life. On an individual level a wide variety of explanations are possible, and often these are framed by what our relationship has been with the person. With hindsight it is often possible to see the sad circumstances that led to the death, and with the same hindsight it is often apparent that the emotional burden presumed to be involved in the final act was evidence of a sensitivity little understood by others.

Certainly an analysis at the individual and emotional level is required, both for understanding and illumination of how the 'heart' deals with all too concrete events. While death is experienced as a unique event for those directly involved, it also has a social reality which binds it to the life and death of others. In order to see this social reality and its implications for relationships we need to stand outside the death of a unique and irreproducible individual and search for possible commonalities between the deaths of individuals frequently unknown to one another.

In part one of the report recorded events associated with the deaths of individuals are examined in a search for patterns of commonalities. These patterns tell us about the social characteristics of those for whom the data is available, and their presence indicates that deaths by suicide are not isolated or random events. They speak to underlying concepts that link the events. This can be clearly seen in the presentation of frequencies and cross-tabulations where factors of gender, age, occupation etc all indicate that the burden of suicide is borne more heavily by some sections of society, and yet the uniqueness of the event has its own unique source of explanation.

Individual characteristics are seldom if ever sufficient as descriptions, since they never occur in isolation and are themselves dependent on the frequency of the characteristics in the society. This report attempts to deal with this problem through the use of a range of multivariate statistical models, where numerous measures can be included within the one analysis to help elucidate some aspect of the problem. However, numbers are slippery things and without controlling for other possible factors can be misleading and may not have much generalisation to the wider society where societal characteristics are ignored. In the current report, when we come to examine possible neighbourhood effects in

part 2 of the report, the level of area aggregation and population characteristics are then adjusted for these background factors.

Much remains to be done, and no report or research project answers all the potential questions. Some are addressed while others are sidestepped for now. We hope that the information provided within this report will allow us to clarify and rethink some of our current understandings and assist us in our search for better solutions to one of society's most urgent public health issues.

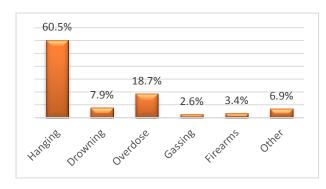
The information contained in this report provides a description of numbers and rates of suicide in Northern Ireland, using data derived from the Coroner's database. We are appreciative of the assistance provided to us by staff in the Coroner's Office in Belfast, and we thank the Senior Coroner Mr John Leckey and his colleagues for their advice and assistance. Our thanks also go to the then Head of the Coronial Service Lord Justice Weir. Finally, our thanks to staff within the Public Health Agency for their support and to the reviewers of the report for their feedback.

## **Executive Summary**

#### Recommendations following from the current analysis

#### Means by which the deaths occurred

In Northern Ireland hanging was the most common method of suicide, particularly among



males, and among the younger age groups; this was followed by overdoses.

These findings offer few obvious options for suicide prevention interventions. However they highlight the need for continued vigilance of very high risk individuals and consideration of the ways in which to restrict access to items that may be used as

ligatures. As a result, there is a need to understand and identify the factors that may precipitate suicidal behaviours.

The low proportion of deaths by firearms in comparison with other Western cultures (for example the US) may reflect the restrictions on the ownership of these weapons in the UK. In addition, the reduced rates of suicide, following the restriction of a particular means, suggest that substitution of an alternative method is not common (Barber & Miller, 2014). This also suggests that efforts to restrict access to detailed information about hanging and other methods remains important, and that the media have a central role to play in this regard.

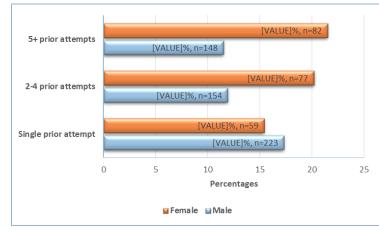
In addition there is evidence that restricting access to detailed information about means of suicide, such as information from the internet about specific methods of hanging, may influence rates and methods used. Therefore efforts to ensure that the media reporting of suicide is monitored and that reporters are trained in methods for the appropriate reporting of deaths by suicide are to be encouraged.

With death by drowning at 8%, i.e., over 130 by this means, place may well be important. This again points to the importance of having accurate recording systems so that place of death is recorded accurately. This will allow contagion effects to be monitored and addressed. Again, there is some evidence that media reporting influences choice of location so the guidance regarding this should be promoted and the impacts assessed. Careful consideration should be given to how we can influence and change behaviour around the locations where deaths by suicide are common. Some strategies which aim to reduce

suicidal behaviour, including efforts to "raise awareness" may actually draw attention to the issue and may be associated with an increase in deaths at particular sites.

#### Characteristics and prior suicidal behaviour

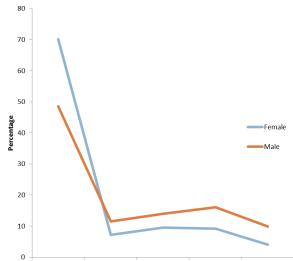
Around 50% of the sample had either a recorded prior suicide attempt or a record of suicidal thoughts.



This group in particular needs to be targeted for assistance, since they are known within the health system. However, this also requires the accurate linking of information, e.g., self-harm, health records, and cases where suicide has occurred. It is therefore necessary to explore

the factors predicting future attempts among people who self-harm through the linkage of suicide and self-harm databases.

Hand written notes remain the most common means of communication of suicidal intent. The increasing use of electronic means of communication of intent reflects changes in the ways in which people communicate generally and the increased use of text messaging and other electronic communications among younger people. Electronic communications, particularly public posts on social media may offer opportunities for analysis to establish linguistic markers and predictors of suicide. These should be examined to identify possible areas for suicide prevention interventions.



Alcohol intoxication at the time of death

While alcohol is a contributory factor in a lot of deaths, it is also evident that nearly half the sample had no significant amounts of alcohol in their body. Nevertheless the role of substances (both legal and illegal) and their interaction

Zero Alcohol At Driving Limit Driving Limit x 2 Driving limit x 3 Driving Limit x 4

with cognitive states and life events needs to be better understood.

Alcohol, above the legal limit, was present in 41% of cases, and was more common among males and young people. These figures reflect the patterns of alcohol use in NI generally and as such suicide prevention in NI is linked with alcohol and drug harm reduction strategies The rate for mental disorders, as defined by DSM/ICD criteria, is high in Northern Ireland, with a lifetime prevalence of around 40%; with 14% of the population showing evidence of suffering from the effects of substance disorders (Bunting et al., 2012).

A proportion of the deceased would therefore have had substance disorders including alcohol addiction. Many would have used alcohol to deal with stress or manage mental health problems. In certain cases the impulsivity associated with the effects of alcohol intoxication may have contributed to the suicide. Alternatively, individuals may have taken alcohol to reduce the fear or pain associated with the suicidal act. The associations between alcohol use, abuse and the effects of intoxication on suicidal behaviour require further research. However efforts to address cultural patterns or use and abuse are to be welcomed.

#### Prescription medication at the time of death

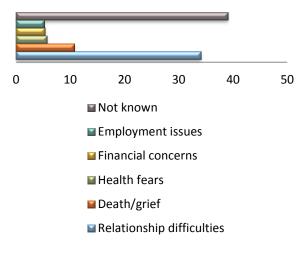
Over 80% of the sample had a recorded prescription. Of those with prescriptions, nearly 40% were being prescribed anti-depressants. The need for a greater therapeutic input within doctors' surgeries would probably be the easiest point of contact, and could also be the most efficient. The risks from deaths by suicide need to be given a higher priority within the context of clinics. Screening should be considered, within the context of the intervention sought by the person, and within this, suicide prevention could play a role.

	Any (%)		Gend er (%)			Aç	je (%)			
		Fem	Male	<b>X</b> 1 <sup>2</sup>	<25	25-34	35-49	50-64	65+	X 4 <sup>2</sup>
п	1,371	298	1,073		277	288	436	256	114	
Any medication	65.1	78.2	61.5	27.8** *	35.7	60.1	68.6	85.2	91.2	190.3 ***
Antidepressant	37.3	53.7	32.8	42.6** *	16.6	32.3	44.3	52.7	39.5	89.1** *
Hypnotic/anxiolytic	28.2	40.9	24.6	30.0** *	6.9	18.1	35.3	42.6	45.6	131.2 ***
Cardiovascular	17.7	23.8	16.0	9.2**	0.7	4.5	16.7	32.4	63.2	289.0 ***
Analgesic	15.2	22.1	13.2	13.7** *	2.9	9.0	17.7	28.5	21.1	81.5** *
Gastrointestinal	14.8	19.5	13.5	6.1*	2.2	6.6	16.3	26.2	35.1	114.6 ***
Antipsychotic	14.4	23.2	11.9	23.0** *	6.9	13.9	15.8	19.5	16.7	19.5** *

**Note:** \**p* < .05; \*\**p* < .01; \*\*\* *p* < .001

#### Adverse event prior to death

The recording of adverse events is difficult, and in the present database these are recorded for only 60% of the respondents.



Nevertheless, this is likely to be a key factor in the decision, impulsive or otherwise, to take one's own life. A higher priority needs to be given in clinical and other types of interactions to the causes of negative feelings and to a closer examination of reactions to particular sets of events. Many of these interactions will be based on learned experiences, and are strongly influenced by patterns of

attachment in early childhood, hence the role of family and education cannot be ignored.

The largest category of adverse events, experienced by a third of those who died by suicide, is that of relationship breakdown or discord. Efforts to support people with relationship difficulties and to help people manage conflict in relationships are therefore to be encouraged in terms of suicide prevention. Finally, one in ten (10.7%) of those who died by suicide have recorded events relating to experiences of death and grief, again emphasising the need to support people in coping with loss.

#### Diagnosis prior to suicide

Under a third (31%) of the deceased had no recorded condition at time of death (n=510). Combined physical and mental health conditions were recorded for 22% of the sample (n=365), mental disorder only was recorded for 36% (n=599) while 12% (n=199) had recorded physical health condition only (Table 4.3). Overall, 69% of all those who died by suicide had a diagnosed health condition.

Gender specific rates of mental, physical and combined conditions are also presented in Table 4.3. Women were significantly more likely than men to have a recorded health condition (75% vs. 67.8%, N= 1253) ( $\chi^2$ = 27.80, p = <.001). Women were more likely than men to have mental health condition only, however the difference was not statistically significant, (39.1% vs.34.8%, respectively). Almost twice as many men had physical condition only (n = 173) ( $\chi^2$  = 11.47, p <.001). In contrast, women were significantly more likely to have a combined mental and physical health disorders at point of suicide (n = 109) ( $\chi^2$  = 14.62, p <.001).

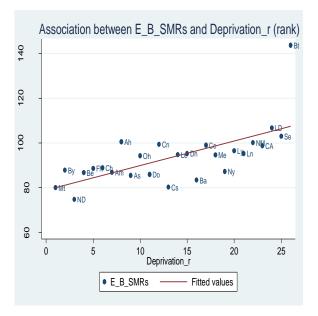
Diagnosis	Total %	Ν	Men	Ν	Women	n	X <sup>2</sup>
Mental	35.8	599	34.8	452	39.1	147	2.29
Physical	11.9	199	13.3	173	6.9	26	11.47**
Combined	21.8	365	19.7	256	29.9	109	14.62**
None	30.5	510	32.1	416	25	94	6.88*

Table 4.3. Prevalence of	mental, physical	and combined diag	noses prior to death

\*\**p*<.001 \**p*<.05

#### Employment status and occupation

It is difficult to judge the extent to which any given occupational groups are under or overrepresented in the general population. However, at the area level, there is significant evidence to show that deprivation is closely associated with the number of deaths in a particular area.



# Standardised Mortality Ratios by Deprivation for 26 Local Government Districts

By inference, changes, or potential changes in status, need to be given close attention. The findings for occupation re-affirm that particular groups are likely to have a higher risk of suicide, the results also support a possible skill level gradient in risk, with lowermiddle skilled occupations encountering the greatest threat (Milner, Spittal, Pirkis, La Montagne, 2013).

Over 50% of the individuals in this sample were recorded as having

been unemployed at the time of death. This is a surprising number and requires much closer examination. Much of the previous research has ignored this group, when examining occupation (see for example, the meta-analytic review on suicide by occupational group by Milner, Spittal, Pirkis, La Montagne, (2013) for an overview.

#### Service use

In the current dataset, we had a medication record for 80% of the sample; however, this number is much less when it comes to recording service use. Nevertheless, the data indicates that many individuals have used health services in the weeks before their death; and as such, ways should be explored to identify those who are in need of greater assistance.

#### Diagnosis prior to suicide

With close to 70% of the current sample having had a diagnosed health related condition at the time of death, this presents a clear point of contact. However since we are looking at a small number in the context of the overall number of patients, computerised screening, and possibly better still, getting professionals to ask clients about suicidal thoughts, plans and intentions should be considered. Further, given the widespread use of smart phones and other computerised means of communications there is likely to be a role for textual interventions.

#### Health services

Contact with services is obviously related to condition and symptoms. Approximately 22% of the sample had a recorded mental and physical health condition (comorbidity); with 36% presenting with recorded mental health problems only.

	Total %	n	Men	n	Women	n	X <sup>2</sup>
1-2 weeks	19.5	326	18.2	236	23.9	90	6.12*
2 wks-2 months	9.9	165	9.7	126	10.4	39	0.14
2-6 months	6.8	113	7.2	93	5.3	20	1.58
6 months – 1 year	2.8	47	3.3	43	1.1	4	5.41*
1 year >	3.2	53	3.5	46	1.9	7	2.69
None/Not known	57.9	969	58.1	753	57.4	216	0.05
Primary	50.1	839	52.6	682	41.8	157	13.67**
Secondary	24.3	406	23	298	28.7	108	5.24**
Tertiary	5.9	98	5.2	67	8.2	31	5.01*
	2 wks-2 months 2-6 months 6 months – 1 year 1 year > None/Not known Primary Secondary	1-2 weeks 19.5   2 wks-2 months 9.9   2-6 months 6.8   6 months – 1 year 2.8   1 year > 3.2   None/Not known 57.9   Primary 50.1   Secondary 24.3	2 wks-2 months 9.9 165   2-6 months 6.8 113   6 months - 1 year 2.8 47   1 year > 3.2 53   None/Not known 57.9 969   Primary 50.1 839   Secondary 24.3 406	1-2 weeks 19.5 326 18.2   2 wks-2 months 9.9 165 9.7   2-6 months 6.8 113 7.2   6 months – 1 year 2.8 47 3.3   1 year > 3.2 53 3.5   None/Not known 57.9 969 58.1   Primary 50.1 839 52.6   Secondary 24.3 406 23	1-2 weeks 19.5 326 18.2 236   2 wks-2 months 9.9 165 9.7 126   2-6 months 6.8 113 7.2 93   6 months - 1 year 2.8 47 3.3 43   1 year > 3.2 53 3.5 46   None/Not known 57.9 969 58.1 753   Primary 50.1 839 52.6 682   Secondary 24.3 406 23 298	1-2 weeks 19.5 326 18.2 236 23.9   2 wks-2 months 9.9 165 9.7 126 10.4   2-6 months 6.8 113 7.2 93 5.3   6 months – 1 year 2.8 47 3.3 43 1.1   1 year > 3.2 53 3.5 46 1.9   None/Not known 57.9 969 58.1 753 57.4   Primary 50.1 839 52.6 682 41.8   Secondary 24.3 406 23 298 28.7	1-2 weeks19.532618.223623.9902 wks-2 months9.91659.712610.4392-6 months6.81137.2935.3206 months – 1 year2.8473.3431.141 year >3.2533.5461.97None/Not known57.996958.175357.4216Primary50.183952.668241.8157Secondary24.34062329828.7108

#### Last point of service use and service level prior to death

Females were more likely to have had a recorded mental health condition with or without a diagnosed physical condition. The time taken by individuals to report either or both mental or physical health symptoms is too long. For example, within Northern Ireland it takes well over 10 years on average, from the onset of mental health symptoms (such as depression, which is reported in the literature as having a strong association with suicide), to the reporting of these symptoms to personnel within the health service, for many mental health conditions (Bunting et al., 2012). This has consequences for individual functioning and the treatment of any given condition. This is particularly the case for males. More information needs to be available to everyone and in particular to males about the symptoms that can and should be responded to, and to knowledge that interventions are available and successful, particularly as they relate to suicidal thoughts and intentions.

Services, especially in areas where the standardised mortality ratios (SMRs) are substantially higher, should be targeted for greater awareness of the problem. The role of Applied Suicide Intervention Skills Training, within the general public, and especially targeted in areas with high recorded numbers of deaths by suicide, is likely to repay dividends. A greater use of services in these areas needs to be considered. Indeed the use of services within these areas may provide useful strategic information. Are more or fewer individuals within certain Wards accessing services? Have individuals who are delivering the services been appropriately trained, and is this training ongoing?

#### Overall trajectory in the number of deaths

The upward trajectory of deaths calls for a societal level response in order to reduce the overall number of deaths, which evidently affects all sections and classes of society. Potentially different strategies may be usefully focused on these different strata.

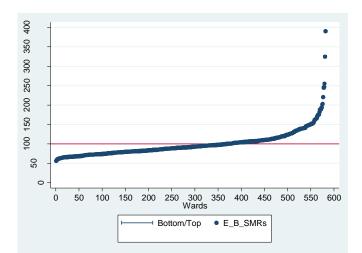
There is certainly good evidence for a societal level strategy for suicide prevention given the number of deaths by suicide; however, the current analysis indicates that target interventions at the Ward level may be a useful strategy, given the greater preponderance of deaths by suicide in some locations.

While suicide and mental health are strongly associated, as indeed are many other factors as the report indicates, it is not helpful to conflate these groups of individuals. As many as 50% of the population are likely to have, at some stage during their life, symptoms that could be classified within a DSM/ICD mental health classification, and since the numbers of deaths by suicide are much lower, there is a clear lack of focus when they are both conflated.

#### Age and location

There is some evidence, within the current analysis, that deaths within Wards may be higher in specific age bands. However, given the present sample number this is a preliminary result. However, at a societal level, once an adjustment has been made for the number of individuals in a specific age band, no evidence was found that deaths were more likely in the 16 - 39 age group when compared with the those in the 35 -64 age group. For now there are not sufficient grounds to target specific age cohorts, at the societal level; however, at the Ward level this could be an option.

#### Standardized Mortality Ratios by Wards ranked by deaths



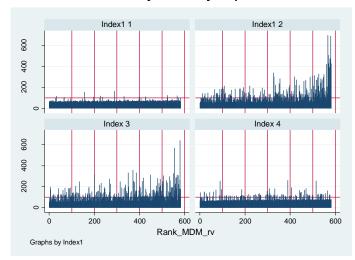
There are clearly area effects. How much of this is contagion, and how much is due to random effects that may themselves be related to other factors has not been addressed in this report. These issues need to be examined with possibly more appropriate techniques.

#### Gender and age

Many more deaths from suicide occur amongst males – approaching 80% of deaths. As a percentage, more males are likely to have died from suicide in the age group 16 to 34 years; while as a percentage value, more females are likely to die in the age category 35 to 64 years. Whether or not the same stressors are involved for females as for males is not clear, but what is evident is that, on average, age is an important differentiator as to the likelihood of taking one's own life. However, this potential interaction between gender and age provides some evidence for a more targeted focus on women in the 35 to 64 age group. In the current analysis we found little evidence for a straightforward effect for age; however, in the context of gender, there may be a differential effect depending on age. This requires closer examination.

#### Location

Deaths by suicide are far from random events. Location is an important corollary of these premature events. A key location indicator is deprivation, and this is particularly marked in those locations (Wards) where levels of deprivation are highest. In order effectively to tackle deaths by suicide, the characteristics of the lived location must be addressed. Area specific targeting of a suicide prevention programme is required.



#### Standardised mortality ratios by deprivation within Wards

Targeting deprivation is certainly important, since the role of social and personal stressors is evident throughout this document, and indeed in the wider research literature. More consideration should be given to what is loosely described as 'social (community) capital'. Strategies for the development and enhancement

Note: Index1 1 = birth to 15 years; Index1 2 = 16 to 39 years; Index 3 = 40 = 64 years; Index 4 = 65+ years

of the role of an active civic society should continue to be supported and developed, especially within areas that are under stress in terms of poverty, high numbers of deaths from suicide, ill health, unemployment, etc. The availability of support for relationships, job seeking, health and wellbeing, debt management, etc., are obviously all important. Continuous professional development need not be the preserve of middle class occupations but could potentially be available within a community setting. Those delivering services, in a voluntary or paid capacity within a community, should be given the opportunity to develop a greater awareness of the problems that are common within an area/community. Organisations, including churches, frequently have deep roots within the community and have the potential, and some would add the motivation, to raise awareness of the problems that are encountered by the wider community within which they exist. Our choices (rational and otherwise) frequently lie in how we are able to relate to others within our community of wellbeing. Having a reason to live is the important therapy.

#### Information and data

A much more systematic approach is needed for the recording of information, so that key

1000100100101 11110100101110 10000100101010 00111001010011 010101010101000 individual and social characteristics, and the interactions between them, can be better understood.

Data linkage has assisted the current analysis, and this should be extended to include more health and social data, and in particular information relating

to self-harm and suicide.

Much better pathways need to be established for the development and recording of accurate information relating to deaths by suicide. Too much of the reporting is at such a high level of generality that it is more likely to obscure facts rather than to disclose them. Consideration should be given to the reporting of real time data, with appropriate steps taken to ensure confidentiality.

Given the extent to which yearly data fluctuates, it is important that aggregated data is available, as it is only then that trends, clustering, 'contagion' and contextual effects can be identified. Hence, the need to continue with the work commenced in this project, in collaboration with staff in the Coroner's Office.

### Recommendations based on current knowledge

The above points, based on the current data, are here considered within the wider framework of knowledge under three subheadings: **Policy and Principles, Services and further Research**.

#### **Policy and Principles**

#### Adoption of a strategic approach to suicide prevention

The findings of this research support the adoption of a dedicated suicide prevention strategy. This strategy should adopt a comprehensive and broad approach in keeping with the contemporary theories of suicide. The strategy should consider the background or contextual factors that increase the likelihood of suicidal thoughts; the supports and treatments available for people who have suicidal thoughts, as well as the factors affecting engagement and access to services; and finally the factors which increase the likelihood of behaviour in response to suicidal thoughts.

#### Examine the mental health and suicide prevention implications of policy decisions

Suicide in Northern Ireland appears to be associated with mental health difficulties, exposure to the conflict and also exposure to stress; particularly economic deprivation. The interactions between these factors and the link with suicidal behaviour should be considered when deliberating social and economic policies in Northern Ireland. In order to address the high suicide rates in Northern Ireland policy decisions should be reviewed to examine their impact on those at high risk. In NI these groups include those who have mental health difficulties, people who live in areas of deprivation, populations who have been exposed to violence and people who are unemployed.

The literature demonstrates that people who are LGBT and Travellers are at particularly high risk of suicide. Whilst it was not possible to identify these subgroups in the current study, it is important that policy decisions relating to these groups are scrutinised for their impact on mental health and suicide prevention.

#### Alcohol and other substances of abuse

This study has demonstrated the association between substance use and suicide. The high proportion of people who have consumed alcohol prior to death and the associations

between alcohol use, mental disorders and suicidal behaviour mean that harm reduction strategies have a role to play in suicide prevention in NI. All policies relating to alcohol and substances should be consistent with a suicide prevention ethos.

#### Means of death and the communication and reporting of suicides

The examination of the methods of suicides used in NI demonstrates the need to develop safety strategies for any particular sites where people have taken their own lives. Information and communication about suicide, particularly method of suicide, should be a priority in terms of reducing access to means. Safe communication regarding suicide and adherence to the guidelines for the reporting of suicide should be promoted.

#### Services

#### Public understanding of mental health and stigma surrounding mental illness and suicidal

#### ideation

The rates of undiagnosed mental health disorders in the population of people who died by suicide are a cause for concern. The low levels of recorded mental disorders and disengagement from services, particularly among men in this study, may be a consequence of a reluctance to disclose mental health difficulties or may reflect the importance of somatic symptoms in men's suicidal ideation. These findings support the need for increased public awareness of the symptoms of mental health disorders and the ways in which support and services can be accessed. In particular, efforts should be made to address the stigma surrounding the disclosure of suicidal feelings, the feelings that are associated with suicidal behaviour and/ or the symptoms of mental health disorders. Continued attention needs to be given to the provision of a range of support services for people who are suicidal. These services need to target the diverse needs of the different sub populations of people who die by suicide in terms of age, gender, occupation, social class and location. This means that different high risk groups may require different types of services.

#### Suicide prevention helplines

The seasonal patterns and days/ times of deaths by suicide in NI support the provision of a dedicated 24 hour helpline service for people who are suicidal, or for people who are concerned about someone who is suicidal. Such a service gives people who are suicidal and

those who are concerned, a clear pathway for referral at the times of the day, night and weekends when the risk of death is highest, as such this is an important element of a suicide prevention strategy, though the effectiveness of such services requires monitored evidence.

#### Suicide prevention among non-health care professionals

Suicide remains a rare behaviour and many of those who die may not disclose their feelings to health care providers or do not have contact with health care professionals. It is therefore recommended that the providers of other goods and services to people from the high risk groups listed earlier should receive training in communicating about suicide and suicide prevention work with people who are at risk.

#### Treatments and services for people with mental health disorders

The findings from this study demonstrate the importance of continued investment in mental health services in NI. People with mental disorders should have timely access to evidence based treatments for mental disorders.

#### Primary care

Primary care remains the main gatekeeper to mental health services and is the main source of care prior to death by suicide. Efforts should continue to ensure the adequate resourcing of primary care, clear referral pathways to secondary mental health care services and training of practitioners in primary care in ways of facilitating the disclosure of suicidal thoughts.

#### Research

#### The recording of information about suicides in NI

The suicide database and self-harm register provide a unique and important opportunity to examine the impact of societal events and structures on suicide and suicidal behaviour. The database of deaths from suicide should therefore be retained and kept up to date. There is however, a need for revised data collection procedures to ensure that the circumstances surrounding each death are recorded appropriately in order to examine patterns and trends. This should include the routine systematic collection and analysis of data on conflict

exposure and deprivation, as well as the data required for the completion of psychological autopsy and international comparisons. It is also important that existing data, such as that contained within health and social care databases and the self-harm registry, is linked with the data on deaths by suicide. This would allow any patterns, risk factors and opportunities for intervention prior to death to be examined.

#### Service evaluation

Services for people with mental health disorders and/ or suicidal thoughts should have a theoretical basis and should be subjected to ongoing evaluation to establish their effects and impact.

#### Understanding depression, mental health and suicide

Further research is required into suicidal behaviour and into the associations between suicidal behaviour, mental health disorders and the impact of exposure to trauma or violence. The history of conflict and the associations between conflict exposure and suicidal behaviour make NI an appropriate place to examine these associations and the impact of interventions, treatments and broader social and health policies on mental health outcomes and suicidal behaviour.

#### Research into the impact of community services

There is a wide range of organisations in NI which provide services for people with suicidal thoughts. In addition, there are campaigns to destigmatise mental illness and promote the disclosure of suicidal thoughts. Given the impact of media portrayal of suicide it is important that this should be subjected to rigorous evaluation. Note: reference citations are provided in the full report.

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