The development and pilot testing of a systematic recording system for deaths by suicide in Northern Ireland to enhance the validity of the NI suicide database

1. Why did we start? (the need for the research and/or the reason why the work was commissioned)

NI currently has high and rising suicide rates and the trend was that the rates/ numbers were rising. It is important to have an understanding of the characteristics of the deceased in NI, and contributory factors in order to prevent these deaths. A previous study by Bunting, O'Neill, Corry and others analysed coronial data on suicide and whilst this data was useful, there was much important information missing. The same group examined found as association between suicidal behaviour and Troubles related trauma exposure in the NI study of health and stress. This project was commissioned to examine ways of systematically collecting more valid data on suicide deaths and to facilitate further research on suicide data collection.

2. What did we do? (Methods)

Systematic reviews were conducted to examine the evidence base for data collection after a death by suicide. Honest Broker data were analysed to examine associations between deaths and use of services, and prescribed medication in suicide deaths compared with a control group.

Siobhan engaged with service providers and key stakeholders in Future Search, a three-day suicide strategy event. She subsequently led a group to examine the sources of data and the ways of providing accurate data for postvention and research. Siobhan also contributed to a workshop with the Public Health Agency on revising the current suicide data collection procedures.

2. What answer did we get? (Findings)

The findings showed that pain medication, as well as mental health medication is predictive of death by suicide. There were stark differences in the ED and other medical presentation patterns prior to suicide, compared with the control group. There were strong area effects, that are linked with deprivation. Two academic papers have been prepared, and published based on this work^{1.2.}.

3. What should be done now? (Practice/Policy Implications/Recommendations)

The work supports the need to use currently available strategies to manage suicidal behaviour for those with health service contact who are vulnerable (based on their presentation pattern and their medication use). For example, the Zero Suicide approach advocates the use of interventions that are showing promise in the treatment of suicidal thoughts and behaviours, to be implemented alongside and in addition to, mental health treatments. This will require the (evidence informed) training of all those in contact with potentially vulnerable individuals. The regional Towards Zero Suicide collaborative group are currently working to implement the Zero Suicide approach in NI.

Work needs to continue on the facilitation of the systematic collection of suicide data. The PHA are currently taking this forward and revising the data collection procedures. Professor O'Neill used the award to attend the Regional meetings to develop the SD1 form that is used to collect data following a suspected suicide.

Area level deprivation is a legacy of the Troubles, and resources to prevent suicide need to be targeted at areas of deprivation and communities that have witnessed traumatic events (in recognition of the transgenerational impact). Trauma informed mental health and suicide prevention care needs to be implemented for those who are vulnerable.

The award also provided funding for three briefing documents summarising the evidence from Ulster PHA R&D funded studies described in the pathways to impact below.

4. Pathway to Impact

- 1. Professor O'Neill and Professor Brandon Hamber provided a response to the consultation on dealing with the past (to target deprived areas and trauma exposure).
- 2. Professor O'Neill worked with PHA, the NSPCC and other agencies to support trauma informed care for the vulnerable, and training for health care providers in suicide prevention .
- 3. Professor O'Neill worked with PHA to support data collection following a death and to facilitate research and postvention.
- 4. Professor O'Neill attended the British Isles Suicide prevention workshop in Oxford to advance knowledge on best practice and disseminate to UK suicide experts.
- 5. The research teams developed and launched three "clear language" policy and practice/ evidence briefs summarising the research and outlining the implications for their practice.
 - Childhood adversities in Northern Ireland: the impact on mental health and suicidal behaviour. This policy and practice briefing summarises the main findings from a series of analyses, of the childhood and trauma sections of the NI Study of Health and Stress (NISHS) and the Ulster University Student Well-Being Study. https://docs.wixstatic.com/ugd/198ed6 f5d6a964d595490f8bd9bc842036d1d0.pdf
 - Suicide prevention in Northern Ireland: results from studies of suicide and suicidal behavior. 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. https://docs.wixstatic.com/ugd/198ed6 e939d3bfce0346029d3fa6f43f957e1f.pdf
 - A review of mental health and suicide prevention policies in NI (to be launched June 2019). Available after the launch from Research section at www.profsiobhanoneill.com.