Research Protocol

Study Title

Reducing self-harm and suicidality in vulnerable prisoners: Evaluating a new service intervention involving a structured approach to risk assessment and management

Short Title

SLIPS Study

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Background/Introduction

Individuals in contact with the Criminal Justice System (CJS) suffer an enormous burden of health and social disadvantage, including high rates of mental illness, self-harm, suicide attempts, and completed suicide[1]. The World Health Organisation has reported suicide to be the most common cause of death in prison settings[2], with rates internationally estimated to be up to 14 times higher than in comparable community samples[3]. Between 2013 and 2015, a quarter of deaths in custody in Australia were due to suicide or self-inflicted causes[4].

Prisoners are more likely to report a history of suicidal ideation and suicide attempts than the general population[5-7]. A large survey of prisoners conducted in NSW in 2015 found that 17.8% surveyed had attempted suicide and 11.8% had engaged in self-harm in their lifetime. Nearly

a third had experienced suicidal ideation, and of those, 36% had experienced these thoughts in prison[8].

Despite this, to date, suicide prevention strategies and research efforts have largely ignored those in contact with the CJS. In the review of Australian research commissioned by Suicide Prevention Australia (2010 to 2017), only 0.6% of published articles were focused on offender samples and only 1.5% set in prisons[9].

Identifying those who are at risk of suicide or self-harm in prison presents an ongoing challenge. A study in the United Kingdom which examined prison suicides between 2005 and 2008 found that almost half (46%) of prisoners who had died by suicide had never been on a risk management document during their prison term[10]. Another study of completed suicides in custody found that, at the final contact with health care staff prior to their death, 93% of prisoners who committed suicide were considered to have 'low' or 'absent' risk of suicide or self-harm[11].

In NSW, prisoners in the general prison population considered 'at risk' of suicide or self-harm are managed by a Risk Intervention Team (RIT) comprised of senior custodial, offender services and programs (OS&P) and Justice Health staff members. Regular reviews of the prisoner are conducted, recommendations made as to their management, and referrals generated to appropriate services within the prison such as psychology or custodial mental health. Prisoners remain under RIT management until they are deemed by members of the RIT to no longer present a risk of suicide or self-harm. Prisoners who present a more chronic risk of self-harm or suicide may be referred to and managed within a specialised unit such as an Acute Crisis Management Unit (ACMU). The current process of suicide risk assessment and management has not been subject to review or evaluation.

A structured professional judgment (SPJ) approach, often utilised in the area of violence risk assessment, provides an evidence-based framework to guide clinical judgements about risk and increases transparency of decision making. Existing guidelines for an SPJ approach to suicide risk[12] focus on risk factors within the general population and not within the prison environment, despite much evidence to suggest that there are many risk factors for suicide that are unique to the prison population[13].

The current study proposes to trial a new approach to the assessment and management of suicide in prison based on the SPJ approach. The 'SLIPS' documentation guidelines have been developed based on a review of the literature around factors associated with suicide and self-harm both generally and in prison. It is anticipated that introducing an increased level of structure to routine assessments with 'at risk' prisoners will lead to more effective identification, treatment and management of risk factors for suicide and self-harm. This will enable a reduction in unnecessary restrictive practice as well as reduce suicidal and self-harm related behaviours in this high risk group.

This project is funded by a Suicide Prevention Research Fund Innovation Grant awarded to Professor Dean and has been developed in conjunction with the Towards Zero Suicides in Custody Initiative. Towards Zero Suicides is a NSW Ministry of Health program funding new suicide prevention strategies to address priorities in the Strategic Framework for Suicide Prevention in NSW 2018-23, and contribute to the Premier's Priority to reduce the suicide rate by 20 percent by 2023.

Aims

The proposed study seeks to:

1) Evaluate the feasibility of implementing a structured evidence-based approach to preventing self-harm and suicide in a prison setting. The evaluation will reveal any further adaptations that are required to enhance the feasibility of such implementation in the broader prison population.
2) Estimate the efficacy of a structured professional judgment approach in assessing and managing risk of self-harm/suicide in a prison setting, in terms of reducing such risk (i.e. in terms of any reduction in rates of self-harm behaviour, thoughts of self-harm/suicide, and suicide attempts).

Hypothesis

We hypothesise that the implementation of the SLIPS guidelines as a structured approach to risk assessment and management will lead to a reduction in rates of self-harm behaviour, reported thoughts of self-harm/suicide, and suicide attempts over a 12-month period in a prison mental health unit.

Methods and Data Collection

The focus of the study is a pilot implementation of new documentation guidelines based on the structured professional judgment approach to risk assessment and management. The pilot will be based in the Mental Health Screening Unit (MHSU) at the Metropolitan Remand and Reception Centre (MRRC) – a 43-bed unit for male prisoners identified as requiring mental health assessment and treatment. This will allow us to test the feasibility of the approach in an environment that is less transient than other areas of the centre and which has a multidisciplinary team to assist with implementation.

The 'SLIPS' documentation guidelines (21_03_02 SLIPS Guidelines v1) have been developed in consultation with Justice Health and CSNSW staff. In line with an SPJ approach, the guidelines allow for both clinical judgement and the identification of empirically-derived risk factors specific to an offending population or within a custodial environment. It is intended as an additional resource to aid clinical decision making around prisoners at risk of suicide or self-harm.

SLIPS is an acronym of *Suicide, Legal, Individual, Psychiatric, Safety plan* and represents evidence-based risk factors that should be considered during a prison suicide risk assessment and a guide to safety planning with at-risk prisoners. Justice Health staff in the MHSU will receive further training on the approach prior to implementation. The guidelines will be displayed in the MHSU staff station and be available on the Justice Health Intranet. The guidelines will be used during all staff/patient interactions where a suicide risk assessment would usually occur and will be documented in the clinical notes as per the SLIPS acronym.

Methodology

This study will utilise a quasi-experimental design to test the effects of the implementation of the SLIPS guidelines in the unit: an Interrupted Time Series (ITS) analysis. ITS is frequently used in the evaluation of health interventions, including in suicide research[15-16]. Routinely collected data on self-harm incidents (reported thoughts of self-harm and self-harming behaviours) is available through the Justice Health electronic incident reporting system (IIMS+) and the Corrective Services incident reporting system (IRM). As a long pre-

intervention phase is recommended to increase power to detect secular trends[17], monthly baseline data will be obtained retrospectively for a period of 24 months pre-implementation. 12 months of post-implementation data will be collected, resulting in a total of 36 data points for analysis. No change to routine data reporting will be required.

The data extraction process will be as follows: a spreadsheet will be created with separate sheets for each month of the data collection period. A list of patients who were housed in the MHSU each month will be obtained from PAS and each new participant will be allocated a study ID which will be entered into this spreadsheet. Incidents for the month will be manually extracted from IIMS+ and IRM by a researcher; all incidents will be reviewed and those incidents involving self-harm will be recorded on the spreadsheet next to the MIN of the patient involved. Incidents will be recorded as "self-harm actual" or "reported thoughts/intention to self-harm" along with the date of the incident. A second spreadsheet will be created to record identifying and basic demographic data (Name, MIN number, DOB, ATSI status, legal status) of each participant (obtained via the Justice Health Patient Administration System; PAS) and their Study ID. This will be the only link between the Study ID and identifying information.

Outcome measures will be the rate of self-harm (number of self-harm incidents in the MHSU per month) and the proportion of self-harm (number of MHSU patients engaging in self-harm per month).

Data Analysis

Descriptive statistics will be obtained for baseline demographic data from all individuals managed in the MHSU during the 3-year time period. Incident data will be subject to a segmented regression analysis to examine if any trends are observed in rates and proportion of self-harm over the data collection period and whether there has been any significant effect of the intervention.

Ethical Considerations

Consent

We are seeking ethical approval for a waiver of consent for this study. We will carry out the ITS analysis using routinely collected data obtained from electronic incident management systems. We would like to collect two years' worth of retrospective data on self-harm

incidents in the MHSU pre-intervention, and for one year post-intervention. Our reasons for requesting a waiver are:

- Use of retrospective data and lack of feasibility of obtaining retrospective consent
- Requirement to collect data on all incidents of relevance during the time period for meaningful analysis; we will not be able to get an accurate picture of self-harm rates if we are not able to access all individuals' data.
- Data is already routinely collected and analysed for clinical and governance purposes
- Privacy of the participants will be protected: Only the researchers will have access to data and any identifying information. Data will be securely stored on UNSW servers to protect confidentiality. The data analysis will be conducted on a dataset that contains no identifying information, by a member of the research team who does not have access to the identifiers.
- We do not anticipate that any harm or inconvenience will be caused to the participants by the use of their data in this analysis.

Confidentiality

Data extraction will require access to identifying information, and will be conducted by two members of the research team: Ms Browne and Dr Marr. All data will be recorded in two spreadsheets as outlined in the methodology section. These spreadsheets will be password protected and stored securely on the UNSW OneDrive with only access available to the researchers extracting data. When data collection is complete, the one spreadsheet containing identifiers and demographic information will become accessible only to Prof Dean (via password protection); hence those researchers with access to incident data will not have access to identifiers and vice versa. In the dissemination of findings, individual level data will not be reported.

Risk of Harm

We consider that the risk of harm to participants in this study is low but not absent. In terms of a new intervention being introduced, there will be some impact on how the individuals in the MHSU are managed and a more sensitive risk assessment may lead to a higher level of restriction in some cases. Conversely, a lower level of restriction may be the outcome which would be positive. Overall, we believe that more accurate identification of differing levels of

risk can only be beneficial. Additionally the intervention allows patients to work with clinicians in the assessment and safety planning process and therefore move towards a more collaborative model of the management of suicide risk.

Research Involving Aboriginal and/or Torres Strait Islander Participants

In the development of this project we have considered the NHMRC's six core principles of ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities and are committed to engaging in this research with ***Spirit and Integrity***. The research team recognise the overrepresentation of Aboriginal and/ or Torres Strait Islander peoples in Australian prisons as a result of complex historical and social trauma and inequality and are committed to improving this situation through research that can translate into actual clinical outcomes. We will conduct all aspects of this research in a way that is culturally sensitive and informed, through engagement with Aboriginal stakeholders.

We aim to achieve ***Cultural Continuity*** through the involvement of our Network Aboriginal Strategy and Culture Unit (ASCU) and have completed an Aboriginal Health Impact Statement and Declaration prior to the commencement of the project. We have engaged two Aboriginal Stakeholders from the local community for consultation on the project – one from La Perouse Aboriginal Land Council and the other from South Eastern Sydney Local Health District. Both have a professional background in mental health and working with justice-involved individuals. Their ongoing involvement in the project along with ongoing oversight by the JHFMHN Network Aboriginal Community Reference Group (NACRG) will ensure that all research is conducted with a cultural lens, ensuring that the principle of ***Equity*** is achieved in terms of the outcomes of this study for Aboriginal and Torres Strait Islander participants.

The researchers hope to achieve ***Reciprocity*** through the improvement of the processes around the assessment and management of self-harm in prisons, which we anticipate will be of great benefit to our Aboriginal participants who are both overrepresented in the system but underrepresented in research and policy, and whom we know experience a great burden of mental ill health.

The research team demonstrate ***Respect*** through ongoing involvement of the Aboriginal people and communities in the project through our stakeholders and NACRG. The research

project plan, outcomes and any changes to the research project will be discussed with them to ensure the active participation of Aboriginal people in the decision-making process.

Finally, we recognise the great ***Responsibility*** that we have as researchers to ensure that the research is conducted in a way that is culturally sensitive, informed and in collaboration with Aboriginal stakeholders. We acknowledge the great harms that have been perpetrated in the name of research with indigenous peoples in the past and as such are committed to ensuring that no such harm will result from our research.

Conclusion

The proposed study examining the feasibility and efficacy of the SLIP model in reducing self-harm and suicidality in a NSW prison sample will be conducted over two years. We seek to determine whether the introduction of a structured professional judgment approach to the assessment of risk will reduce the rates of suicidal behaviour in a prison mental health unit. We also seek to evaluate the feasibility of the approach with a view to wider implementation within the custodial environment.

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