

A cross-sectional survey of prevalence and correlates of suicidal ideation and suicide attempts among prisoners in New South Wales, Australia

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Background: We aimed to estimate the prevalence of suicidal ideation and suicide attempt among prisoners in New South Wales, Australia; and, among prisoners reporting suicidal ideation, to identify factors associated with suicide attempt.

Methods: A cross-sectional design was used. Participants were a random, stratified sample of 996 inmates who completed a telephone survey. The estimated population prevalence of suicidal ideation and suicide attempt were calculated and differences by sex and Aboriginality were tested using χ^2 tests. Correlates of suicidal ideation and suicide attempt were tested using logistic regression.

Results: One-third of inmates reported lifetime suicidal ideation and one-fifth had attempted suicide. Women and Aboriginal participants were significantly more likely than men and non-Aboriginal participants, respectively, to report attempting suicide. Correlates of suicidal ideation included violent offending, traumatic brain injury, depression, self-harm, and psychiatric hospitalisation. Univariate correlates of suicide attempt among ideators were childhood out-of-home care, parental incarceration and psychiatric hospitalization; however, none of these remained significant in a multivariate model.

Conclusions: Suicidal ideation and attempts are highly prevalent among prisoners compared to the general community. Assessment of suicide risk is a critical task for mental health clinicians in prisons. Attention should be given to ensuring assessments are gender- and culturally sensitive. Indicators of mental illness may not be accurate predictors of suicide attempt. Indicators of childhood trauma appear to be particularly relevant to risk of suicide attempt among prisoners and should be given attention as part of risk assessments.

Comment

Main findings: Suicide is a serious problem in Australian prisons, with self-inflicted deaths being the most common cause of death in male and female prisoners since 1980¹. The high prevalence of suicide in prisons is found across the world. A previous paper including male prison suicides in 12 countries showed rates as high as 147 per 100,000 in Denmark compared to 27 per 100,000 in the general population². Australia had the lowest rate of the 12 countries analysed (58 suicides per 100,000 prisoners), however this was still much higher than the general population (16 suicides per 100,000)².

Prisoners experience many risk factors for suicide that are observed in the general population, but also a number of factors which are unique to the prison environment³. The current study had three main aims: to estimate the

12-month and lifetime prevalence of suicidal ideation and attempt among NSW prisoners, to identify risk factors associated with suicidal ideation, and to identify the risk factors for suicide attempt in those prisoners reporting lifetime suicidal ideation. In total, 996 prisoners agreed to participate in a telephone survey; 20% of participants were females, while 31% were of Aboriginal descent. Results showed that the overall lifetime prevalence of suicidal ideation in the NSW sample of prisoners was 33.7%, with 20.5% having a previous suicide attempt. While there was no gender or race difference in the presence of suicidal ideation, women were significantly more likely than men to have attempted suicide, and Aboriginal prisoners were significantly more likely than non-Aboriginal prisoners to have attempted suicide both in their lifetime and in the past 12 months. More than half of the prisoners reporting lifetime suicidal ideation had a previous suicide attempt.

The current study identified a number of risk factors for lifetime suicidal ideation; the most important ones (which remained significant in the multivariate analysis) included older age, having a violent offence, a history of traumatic brain injury, moderate to severe depression, and self-harm without suicidal intent. Surprisingly, no risk factors for suicide attempt maintained significance in the multivariate analysis.

Implications: The development of preventative programs for suicide in prisons should be reliant on the identification of risk factors for suicidal ideation and attempts. Research has shown that the most effective suicide prevention programs in prisons are multi-factored programs addressing all categories of risk, with studies reporting vast reductions in suicide numbers after implementation^{4,5}. The current study showed a number of risk factors for suicidal ideation in New South Wales prisons, which may be transferrable to prisons across the country. Women make up a small percentage of the total population of prisoners, thereby facing the risk of being neglected as a separate population in research and the development of programs. This study indicated that women were at a high risk of suicidal behaviours, suggesting the need for gender-specific suicide prevention programs to be developed and implemented.

The finding of increased risk for suicide attempt in Aboriginal prisoners contrasted with previous findings from a study in the same prison, which found no increased risk in this population⁶. These conflicting results suggest the critical need for further investigation for this population, which is highly overrepresented in Australian prisons and generally understood to be at a higher risk of suicide than non-Indigenous Australians.

Endnotes

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5. Cox, JF, Morschauser, PC (1997). A solution to the problem of jail suicide. *Crisis*, 18, 178-184.
6. Butler T, Allnutt S, Kariminia A, Cain D (2007). Mental health status of Aboriginal and non-Aboriginal Australian prisoners. *Australian and New Zealand Journal of Psychiatry* 41, 429–435.