

Epidemiological survey of suicide ideation and acts and other deliberate self-harm among offenders in the community under supervision of the Probation Service in England and Wales

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ABSTRACT

Background *There is a dearth of information on suicidal thoughts and acts or other acts of deliberate self-harm by offenders under community supervision.*

Aims *The objective of this study is to estimate lifetime and one month prevalence of deliberate self-harm and to determine ongoing risk among offenders in the community under probation supervision.*

Methods *One hundred and seventy-three randomly selected offenders under supervision by the probation service in one county in England were screened for mental illness. All 88 screened cases and a one-in-five sample of non-cases were interviewed according to the Mini International Neuropsychiatric Inventory Module-B. False negatives (n = 17) were used to weight calculations and estimate prevalence for the whole group.*

Results *A third of the interviewed sample (n = 56) had a lifetime history of suicide attempts, and 9 (5%) had self-harmed in the month prior to interview. Lifetime suicide history was associated with suicidal ideation and deliberate self-harm in the prior month.*

Conclusions and implications *Our adjusted findings indicate that 25-40% of offenders serving all or part of their sentence in the community have a lifetime history of self-harm, which is similar to the rate among prisoners, and are at very much higher risk of further such acts or completed suicide than the general population. At a time of change in delivery of probation services the implications are that*

- rates of suicide and other forms of deliberate self-harm should be continually assessed in all probation areas, particularly with reference to service changes;
 - the relationship between deliberate acts of self-harm, suicidal ideation and completion of suicide should be investigated prospectively in larger studies;
 - probation services are likely to need mental health expertise to manage these risks
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Introduction

Despite the recognition of higher rates of suicide and other forms of deliberate self-harm among prisoners than in the general population (e.g. WHO, 2007), there is limited information on those serving community sentences (Mackenzie et al., 2013). Old studies suggest that probationers in England and Wales are nine to 12 times more likely to die by suicide than the general population (Pritchard et al., 1997, Sattar, 2001). Within one year of release from prison, men are eight times more likely to die from suicide than the general population, and women are 36 times more likely to do so (Pratt et al. 2006). Furthermore, among such people, those who die by suicide are significantly less likely to be in active contact with probation services (Pratt et al., 2010). A study of all deaths by suicide in England and Wales found that nearly 3% had been in contact with probation services in the preceding 12 months (King, 2011; cited in Mackenzie et al., 2013). A survey of probationers in West Yorkshire (UK) revealed a lifetime deliberate self-harm prevalence of 31%; the majority of these acts were 'serious suicide attempts' (Wessely et al. 1996). These few studies represent the sum of those available about suicide and other forms of deliberate self-harm among probation supervised offenders. Our aim, therefore, was to estimate lifetime and 1 month prevalence of deliberate self-harm and to determine ongoing risk among offenders in the community under probation supervision.

Method

Design

The data reported here were collected as part of a larger study of the prevalence of mental illness in a representative sample of people on probation in one English county, Lincolnshire, an area with a total population of 703 000 and a predominantly agrarian economy (Brooker et al. 2011, Brooker et al. 2012). We used a two-stage epidemiological survey (Dunn et al. 1999). In the first stage, a stratified sampling procedure was employed including all probation offices in Lincolnshire. We have previously demonstrated that the sample is demographically representative of the overall Lincolnshire probation population (Brooker et al. 2012). The

offenders selected were serving community sentences, suspended prison sentences or on parole but under probation supervision between April 2009 and February 2010. They were screened for any mental illness with the Prison Screening Questionnaire (Shaw et al., 2003). In the second stage, those who screened positive (i.e., scoring 3 or more on the Prison Screening Questionnaire, or who reported ever having been formally assessed for or diagnosed with a mental illness) were interviewed according to the Mini-International Neuropsychiatric Inventory (MINI; Sheehan et al. 1998), as were one-in-five of those whose screen was negative; the latter allowed us to estimate false negatives, which were used to correct prevalence estimates.

Clinical interview

The MINI (v 6.0.0) Module B is a structured clinical interview with 11 main items and additional probing questions covering different aspects of deliberate self-harm. It yields a 'suicidality' score, which has been validated as a suicide risk predictor (Roaldset et al., 2012). In addition, we derived three binary yes/no variables: (1) lifetime history of suicide attempts ('In your lifetime did you ever make a suicide attempt?'); (2) deliberate self-harm in the past month (positive for 'In the past month did you injure yourself without intending to kill yourself?' or '... did you attempt suicide?'); (3) thoughts of self-harming in the past month (positive for any of the five MINI items probing thoughts/plans to kill or hurt oneself).

Results

The total screened sample comprised 173 individuals, 88 of whom scored positive for probable past or present mental illness on screening. All but two were ethnically 'white' (98%) and 77/88 (88%) were male; the mean age was 35.4 (SD = 13.4).

Using the reports of suicide attempts in the subsample that were interviewed with the MINI ($n = 88$), weighted for false negatives, we estimate that 56 of the whole sample of 173 (32.4%; 95% CI = 25.6-40.0) had attempted suicide over their lifetime. Using the same statistical approach, we estimated that 9 (5.2%) had deliberately self-harmed in the past month, whereas a rather larger number 25 (14.5%) reported having ideas of self-harm during that month. People with a lifetime history of attempted suicide were significantly more likely than those without to have had recent self-harm ideation or attempts (Table 1).

The estimated mean MINI suicidality score for the sample was 8.1 (SD = 10.5). Using the MINI's qualitative categories, 15/173 (8.7%; 95%CI = 9.4-25.0) were estimated as being 'high' risk for suicidality. Significantly more people with past suicide histories than those without scored in the moderate or high range for

Table 1: Prevalence estimates for the Lincolnshire probation population, and for those with or without suicide histories, for past month deliberate self-harm acts and thoughts.

| | Estimated population prevalence | 95%CI | With suicide history | 95%CI | Without suicide history | 95%CI | Significance |
|--|---------------------------------|------------|----------------------|-------------|-------------------------|-----------|-------------------------------|
| <i>n</i> ^a | 173 | | 56 | | 117 | | |
| DSH acts | 5.2% (9) | (2.6-10.0) | 16.1% (9) | (8.1-28.8) | 0% (0) | 0.0-4.0 | <i>p</i> = 0.007 ^b |
| DSH ideation | 14.5% (25) | (9.7-20.8) | 39.3 (22) | (26.8-53.3) | 2.6 (3) | (0.1-7.9) | <i>p</i> = 0.001 ^c |
| MINI Suicidality ^d (Moderate or High) | 13.9 (24) | (9.3-20.1) | 39.3 (22) | (26.8-53.3) | 1.7 (2) | (0.0-6.7) | <i>p</i> < 0.001 ^c |

MINI, Mini International Neuropsychiatric Interview.

Percentages (+estimated counts) and 95% confidence intervals are shown.

^a*n* values and counts weighted for false negatives on suicide history.

^{b,c}Comparison of those with and those without suicide history, *DF* = 1.

^bFischer's exact test.

^cChi squared test.

^dAlthough based on past month DSH acts and ideations, this index includes one item for ever having attempted suicide. For the data and statistical analysis given in this table, the index was recalculated without including the lifetime suicide contribution.

current suicidality (see also Table 1). Finally, analyses were repeated for all of the deliberate self-harm variables for the sex and age groups (median-split at age 32 years). Younger people were significantly more likely to report deliberate self-harm in the past month than were the older (7/48, 14.6% v. 1/47, 2.1%, Fischer's Exact, $p = 0.022$). There were no sex differences.

Discussion

We found that a third of our sample of people under probation supervision had attempted suicide at some point. Extrapolated to the whole probation service population of England and Wales, this leads us to estimate that 25-40% of all being seen in the service would be vulnerable in this way, which would be about 54 000-90 000 people at any one time. These findings are consistent with lifetime prevalence estimates of suicide attempts by UK prisoners ranging from 20 to 44% (Jenkins et al., 2005). Using the MINI suicidality scale, around 9% of our sample would be considered to be 'high' risk. This is comparable with the 7% considered to be at the same level of risk with a sample of prisoners in the USA, according to the same scale (Black et al., 2004). The fact that younger individuals were more likely to report recent self-harm than older ones is consistent with general population findings that suggests risk of deliberate self-harm reduces with age (Fliege et al. 2009).

Our finding that those with histories of attempting suicide had significantly higher frequencies of all three current measures of self-harm indicates substantial ongoing risk of self-harm, including suicide, in this population. Nevertheless, the little previous evidence in this field suggests that engagement with probation services is associated with reduced risk of completed suicide (Pratt et al. 2010). Public sector reform in the UK is leading to major changes in the way that probation services will be delivered in the future. The private sector are poised to manage 70% of current services targeting those at least risk of serious re-offending, not necessarily with staff trained in social or clinical work. Nevertheless, in this new world, probation staff will need the skills to recognise the risks of various forms of self-harm and manage them effectively.

Our study used a self-report retrospective approach to examine the various forms of deliberate self-harm, and our interpretations are necessarily limited by this design. Nevertheless, we have added weight to the very small amount of previous research in the field to evidence that offenders in the community are at least as high risk of self-harm or suicide as those in prison. If, to date, probation supervision has offered at least some protection against suicide in such a high risk group, then it is an urgent necessity to establish sound baseline data on suicide and other actually self-inflicted harm among offenders under community sentences or community phases of their sentences and to monitor trends alongside the changes in delivery of probation services. The National

Confidential Inquiry into Suicide and Homicide collects data annually on all suicides throughout the whole of the UK and has monitored trends in prisons and health services. It is time to attend to community supervised offenders too.

Acknowledgments

This report presents independent research commissioned by the National Institute for Health Research (NIHR) under the Research for Patient Benefit Programme [grant number PB-PG-0807-14022]. The views expressed in this report are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health. We acknowledge the support of the Mental Health Research Network and of Ms Coral Sirdifield who worked as a research assistant on the project.

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