Suicide by people in a community justice pathway: population-based nested case–control study

Carlene King, Jane Senior, Roger T. Webb, Tim Millar, Mary Piper, Alison Pearsall, Naomi Humber, Louis Appleby and Jenny Shaw

Summary
The elevated risk of suicide in prison and after release is a well-recognised and serious problem. Despite this, evidence concerning community-based offenders’ suicide risk is sparse. We conducted a population-based nested case–control study of all people in a community justice pathway in England and Wales. Our data show 13% of general population suicides were in community justice pathways before death. Suicide risks were highest among individuals receiving police cautions, and those having recent, or impending prosecution for sexual offences. Findings have implications for the training and practice of clinicians identifying and assessing suicidality, and offering support to those at elevated risk.

Declaration of interest
M.P. was Senior Public Health Consultant in Offender Health at The Department of Health in England at the time of funding.

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For decades, investigators have sought to address the rates of suicide among prisoners. Despite substantial progress, existing research has overlooked community-based offenders who may be more vulnerable to suicide than those held in prison. Recent evidence suggests that people with a criminal history and those in contact with the police are exposed to increased suicide risk. To date no studies have examined suicide risk in a representative sample of all community-based offenders. Consequently, there is no population-based evidence on the prevalence or risk of suicide across all community justice pathways in England and Wales.

Method
The Office for National Statistics (ONS) supplied general population mortality data on all adult deaths (n = 4628) in England and Wales during 2005 with an underlying cause of intentional self-harm (ICD-10 X60-X84) or undetermined intent (ICD-10 Y10-Y34). The UK Police Authority supplied complete criminal record data from the Police National Computer (PNC). The ONS and PNC databases were linked to identify all people who had a police record and died by suicide. Record linkage criteria were gender, date of birth, first name and surname. Cases were eligible for inclusion if an individual had been in a recent community justice pathway before death, with exposure defined as being arrested, charged, convicted or serving either a community sentence or licence in the 12 months before suicide. These criteria enabled the inclusion of all individuals who were in an active or recent community justice pathway and excluded prisoners. Approval to conduct this work was obtained from an NHS Ethics Committee (07/MRE09/34), the National Information Governance Board (ECC: 2-06(o)/2009) and the Ministry of Justice (RQA 591).

Using a nested case–control design, the 596 individuals (the case group) were individually and randomly matched on gender, age, time, postcode area of residence and in an active, or recent community justice pathway to 596 living controls (the control group) selected from the PNC. These criteria enabled adjustment for strong confounders and ensured time comparability for exposure. Differences in exposure prevalence between matched sets were compared formally and relative risks of suicide were estimated by conditional logistic regression analyses to calculate exposure odds ratios (ORs) and their 95% confidence intervals using Stata version 12 for Windows.

Results
During 2005, 1658 (36% of general population suicides) had a history of lifetime justice contact and 596 (13% of general population suicides) had been in an active, or recent community justice pathway in the 12 months preceding death. Of these, the majority were male (86%, n = 513), White (92%, n = 551), aged 25–44 years (56%, n = 336) and employed (62%, n = 369). Hanging, strangulation and suffocation (50%), and self-poisoning (29%) were the most frequently used suicide methods. Table 1 reports our conditional logistic regression analyses. Risk was lower among those with previous criminal convictions and diminished as the number of previous convictions increased, with prolific offenders, having the lowest suicide risk. Sexual or violent offending at last arrest was associated with significantly elevated suicide risk, with an especially large elevation in risk seen among sexual offenders. Impending prosecutions for sexual offences was associated with a four-fold increased risk.

Current legal status classification showed significantly elevated suicide risk among individuals who had: received a police caution, recently been released from prison, recently completed a supervised community sentence, served other community disposals, been remanded as a suspect on police bail and dealt with no further action. Individuals serving a community sentence under the supervision of the Probation Service had a relatively low risk. We fitted additional binary exposure classification models, which showed that receiving a police caution (OR = 1.81, 95% CI 1.16–2.80) and being recently released from prison (OR = 1.50, 95% CI 1.01–2.24) had significantly elevated risk v. all other legal status categories.

Discussion
Our findings provide new evidence highlighting elevated suicide risk among people in community justice pathways. We found that 13% of the national population dying by suicide were in contact with the criminal justice system in the year preceding death, a proportion greater than official sources suggest. For decades, investigators have sought to address the rates of suicide among prisoners. Despite substantial progress, existing research has overlooked community-based offenders who may be more vulnerable to suicide than those held in prison. Recent evidence suggests that people with a criminal history and those in contact with the police are exposed to increased suicide risk. To date no studies have examined suicide risk in a representative sample of all community-based offenders. Consequently, there is no population-based evidence on the prevalence or risk of suicide across all community justice pathways in England and Wales.

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Suicide risk associated with sexual offences is higher than previously reported. This may in part be as a result of the recency of the alleged sexual violence disclosure and the fear of real, or perceived outcome of prosecution. The implication is that opportunities for signposting and targeting interventions for vulnerable people are being lost. It may be that appropriately tailored and validated brief screening methods are indicated for all vulnerable people who may be at increased risk of suicide when in contact with the justice system.

Further work should examine risk in this group, to help police, and community health professionals identify and manage opportunities for signposting and targeting interventions for vulnerable people at elevated risk of suicide. Training in identification and management of suicide risk should be improved to allow the CJMHLD programme to be effective in diminishing suicide rates among this vulnerable population.

Table 1  Conditional logistic regression: relative suicide risk among individuals in recent contact with the criminal justice system in England and Wales

|                          | Case group, n (%) | Control group, n (%) | OR (95% CI) |
|--------------------------|------------------|----------------------|-------------|
|                           | (n = 596)        | (n = 596)            |             |
| Number of convictions     |                  |                      |             |
| Non-offender             | 113 (19)         | 79 (13)              | Reference   |
| One-time offender (1)    | 93 (16)          | 91 (15)              | 0.68 (0.45–1.04) |
| Occasional offender (2–3)| 107 (18)         | 74 (12)              | 0.98 (0.64–1.49) |
| Repeat offender (4–9)    | 137 (23)         | 130 (22)             | 0.67 (0.46–0.98)** |
| Prolific offender (≥10)  | 146 (25)         | 222 (37)             | 0.42 (0.28–0.61)*** |

Last arrest offence:

|                          | Case group, n (%) | Control group, n (%) | OR (95% CI) |
|--------------------------|------------------|----------------------|-------------|
|                          | (n = 596)        | (n = 596)            |             |
| Sexual                   | 43 (7)           | 9 (2)                | 4.48 (2.16–9.28)** |
| Violence                 | 262 (44)         | 222 (37)             | 1.92 (1.43–2.58)** |
| Drugs                    | 32 (5)           | 29 (5)               | 1.70 (0.96–3.01) |
| Motoring                 | 100 (17)         | 113 (19)             | 1.37 (0.96–1.96) |

Impending prosecution offence:

|                          | Case group, n (%) | Control group, n (%) | OR (95% CI) |
|--------------------------|------------------|----------------------|-------------|
|                          | (n = 596)        | (n = 596)            |             |
| Financial penalty        | 30 (5)           | 75 (13)              | Reference   |
| Mental Health Act detained | <5 (0)*         | 5 (0)                | 5.16 (0.44–60.04) |
| Police caution           | 59 (10)          | 34 (6)               | 4.68 (2.50–8.67)** |
| Recently released prisoner | 61 (13)         | 43 (7)               | 3.81 (2.11–6.87)** |
| Served community sentence | 16 (3)           | 15 (3)               | 3.12 (1.34–7.25) |
| Not guilty               | <5 (0)†          | 8 (1)                | 0.57 (0.11–2.89) |

Legal status at death:

- Financial penalty
- Mental Health Act detained
- Police caution
- Recently released prisoner
- Served community sentence
- Not guilty

*P<0.05, **P<0.01, ***P<0.001.

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