

Dual-harm, complex needs, and the challenges of multisectoral service coordination



The risk of premature death from suicide and other causes is elevated in people with a history of self-harm¹ and people with a history of violence against others.² Despite overlap in these two populations,³ the study by Sarah Steeg and colleagues⁴ in *The Lancet Public Health* is the first to examine the risk of unnatural death in people who have engaged in both behaviours—ie, those with a history of so-called dual-harm. By using linked administrative data (an important method for examining health outcomes in marginalised, inclusion health populations),⁵ the authors found that although the risk of unnatural death is elevated among people with a history of violence (incidence rate ratio [IRR] 5.19, 95% CI 4.45–6.06) or self-harm (12.65, 10.84–14.77), the risk is considerably higher among people with both behaviours (29.37, 23.08–37.38). Although this outcome might be expected, the magnitude of the elevation in risk of unnatural death in the dual-harm group is marked, and highlights a need for targeted, multisectoral responses for this complex group.

More than a quarter (26.9%) of the 2246 observed deaths in Steeg and colleagues' study, and more than half (52.3%; 150/287) of deaths in the self-harm only group, were due to suicide. Preventing both suicide and subsequent self-harm episodes among people who present to the hospital for self-harm is contingent on appropriate psychiatric assessment and referral in the hospital setting, and ongoing mental health and psychosocial support after discharge. Previous research has shown that the incidence of self-harm following an emergency department presentation for self-harm is significantly higher among those who do not receive a psychiatric assessment.⁷ A data linkage study from Australia found that, among people released from prison who presented to the emergency department after self-harm, only 29% received a mental health assessment during their stay, and 39% had no record of contact with mental health services within 30 days of their emergency department presentation.⁸ The strong association between hospital-treated self-harm and subsequent death by suicide in Steeg and colleagues' study is consistent with previous research⁶ and indicates an unmet need for assessment, referral, and treatment for this high-risk population.

Although only 14.0% (314/2246) of deaths in the cohort were due to unintentional self-poisoning (ie, overdose), this was the underlying cause of 52.4% of deaths in the dual-harm group, and these individuals were almost 200 times (IRR 195.50, 95% CI 110.23–346.74) more likely than controls matched for age and sex to die by overdose. Overdose appears to be a key driver of preventable death among people with dual-harm histories and, as such, should be a priority for prevention. Two-thirds of cases with a dual-harm history had a history of treatment for a substance use disorder, and two-thirds of those with a dual-harm history who died by overdose had a history of treatment for multiple substances. The most common drugs of concern in the latter group were alcohol (38.2%) and cannabis (34.2%), with around one in five (21.1%) having a history of treatment for opioid use. Most cases with a dual-harm history (87.6%) had received treatment for at least one mental disorder. Particularly among justice-involved populations, efforts to prevent acute drug-related death have tended to focus on opioid overdose.⁹ However, polydrug use is a key driver of overdose death,¹⁰ and dual diagnosis of mental illness and substance use disorder is associated with increased risk of both non-fatal injury¹¹ and preventable mortality¹² in people released from prison. As such, the findings by Steeg and colleagues further underscore the importance of ensuring that people with a dual-harm history receive coordinated treatment for mental illness and all substances of concern, in addition to therapeutic input to address issues relating to anger and impulsivity.

Steeg and colleagues note that individuals in their study with a dual-harm history had previous contact with both health and criminal justice agencies, providing "multiple opportunities for enhanced monitoring, assessment, and intervention".⁴ Although undoubtedly true, seizing these opportunities will require systemic reform. For example, although people convicted of violent offences have, by definition, been identified as such by the criminal justice system, self-harm history is markedly under-ascertained in criminal justice settings,¹³ due in part to the inherent limitations associated with how self-harm is assessed. Similarly, screening for history

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of violence in hospital settings is not routine, might not be feasible in some settings, and would probably under-ascertain a history of violence. One partial solution to this challenge might be to improve routine sharing of information between health and criminal justice agencies. For example, given that dual-harm history is such a strong risk factor for unnatural death, routine sharing of basic information regarding history of violent offending with health agencies would facilitate identification of people with a dual-harm history in health settings. Conversely, routine use of linked administrative health data would increase ascertainment of self-harm history in criminal justice settings.¹³

Finally, adequate ascertainment of dual-harm history is a necessary, but not sufficient, condition for preventing unnatural deaths in this group. Cases with a dual-harm history in Steeg and colleagues' study were distinguished by a high prevalence of mental disorder, polydrug use, and socioeconomic disadvantage, in addition to self-harm and violence perpetration. Effective responses to these complex and probably syndemic needs will require coordination across multiple sectors including the criminal justice system, mental health services, alcohol and other drug treatment services, and welfare services. Unfortunately, it is often precisely these highly stigmatised individuals who have low engagement with such services, or fall in the cracks between service silos. Increased investment in more targeted approaches, including multisectoral case management, will be required to improve morbidity and mortality outcomes for people with a dual-harm history.

**Stuart A Kinner, Rohan Borschmann*

Centre for Adolescent Health, Murdoch Children's Research Institute, Melbourne, VIC, Australia (SAK, RB); Justice Health Unit, Centre for Health Equity, Melbourne School of Population and Global Health (SAK, RB) and Melbourne School of Psychological Sciences (RB), University of Melbourne, Melbourne, VIC 3010,

Australia (SAK, RB); Mater Research Institute-UQ, University of Queensland, Brisbane, QLD, Australia (SAK); Griffith Criminology Institute, Griffith University, Brisbane, QLD, Australia (SAK); School of Public Health and Preventive Medicine, Monash University, Melbourne, VIC, Australia (SAK); and Health Services and Population Research Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK (RB)
s.kinner@unimelb.edu.au

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