ADDICTION
SSA SOCIETY FOR THE STUDY OF ADDICTION
COMMENTARY

Commentary on Victor *et al.* : Preventing overdose deaths following release from incarceration—context is crucial

Overdose is a common, yet preventable, cause of death following release from incarceration. Investing in alternatives to incarceration and providing continuous, coordinated care to those who are incarcerated—particularly those with co-occurring mental illness and substance use disorders—will not only reduce overdose deaths, but also improve public health and improve public safety and reduce health-care and criminal justice system costs.

Overdose is a common cause of preventable death following release from incarceration [1,2] and preventing such deaths is a priority for the World Health Organization [3]. In their retrospective cohort study of 27 940 adults released from jail in Marion County, IN, USA in 2017 and followed for up to 3 years [4], Victor and colleagues examined the association between (a) repeated jail incarceration and (b) being charged with a syringe-related offence and fatal overdose. Each additional jail booking was associated with a 20% increase in the hazard of fatal overdose and, among those charged with a syringe-related offence, the hazard was 247% higher. The cohort accounted for 21% of accidental overdose deaths in Marion County during the observation period.

Like most studies in this literature [5–7], Victor *et al.*'s sampling frame comprised people released from custody. As such, they had limited capacity to consider whether release from incarceration causes fatal overdose or is simply a marker for pre-existing overdose risk. Decisively answering this critical policy question will require data linkage studies with a population sampling frame, in which incarceration is treated as an exposure. Nevertheless, this study adds to a growing body of evidence suggestive of a dose–response relationship between incarceration and adverse health outcomes, including preventable death [8,9]. To the extent that incarceration causes overdose, decriminalizing substance dependence (e.g. through decriminalization of syringe possession) may reduce overdose risk by keeping people with an opioid use disorder (OUD) out of custody. However, decriminalization alone is insufficient to mitigate this risk: equally important is evidence-based treatment for OUD, both in the community and in custody.

Linked administrative data provide exceptional opportunities to study rare and stigmatized outcomes such as overdose [10]. However, they also impose external methodological constraints related to sampling, measurement and ascertainment. For example, Victor *et al.* were unable to identify overdose deaths outside Marion County (one of > 3000 counties in the United States) or identify incarceration in state or federal prisons during follow-up. Therefore, their estimate of the fatal overdose rate is conservative. Caution must also be exercised with respect to the generalizability of these findings; at least one US study [11] has observed very low rates of overdose death after release from prison in a state with low levels of heroin use. Furthermore, consistent with the findings of an Australian study [12], which observed a spike in overdose deaths after prison release only among non-Indigenous people, the hazard of fatal overdose in Victor *et al.*'s study was 51% lower for people of colour. These novel and important findings will require replication both within and beyond the United States, ideally accounting for key censoring events including reincarceration and death outside of the study jurisdiction.

Previous studies have documented an increase in risk of overdose death among people released from custody [5], but few have been able to identify modifiable risk factors for these deaths. An important strength of Victor *et al.*'s study is the finding that people booked on syringe-related charges—a proxy for injection drug use—were at markedly increased risk. This finding highlights the extreme concentration of risk among people who both inject drugs and experience incarceration. As such, the authors' recommendations to make medications for opioid use disorder (MOUD) available in custody, and naloxone available at release, are sensible and evidence-informed [13]. However, retention in MOUD after release from custody also appears crucial to preventing overdose deaths: one Australian study found that people who cycled in and out of such treatment after release from custody had a higher mortality rate than both those retained in treatment and those who never commenced treatment [14]. Simply making MOUD available, without wrap-around supports to maximize treatment retention, may do more harm than good.

OUD is an important driver of harm among people who experience incarceration [7]. However, complex multi-morbidity is normative in this population [9] and people released from prison are at an increased risk of diverse harms, including fatal and non-fatal overdose, suicide and self-harm, unintentional injury and violence victimization [15–18]. Meaningfully improving the health of people who experience incarceration will require a sustained, multi-faceted response within which MOUD is only one

element. Given the high prevalence of mental illness in custodial settings [19], and evidence that overdose deaths are concentrated among those with co-occurring mental illness and substance use disorders (i.e. dual diagnosis) [20], a coordinated, evidence-informed response must include dual-diagnosis treatment that continues uninterrupted from custody into the community.

The burden of disease is borne disproportionately by people who experience incarceration [21] and, irrespective of whether this association is causal, more must be done to improve health outcomes for these profoundly marginalized individuals. Investing in alternatives to incarceration and improving the health of those already incarcerated can improve public health, reduce crime and save scarce public resources [22]. Realizing these gains will require coordinated, continuous care that addresses not only OUD, but also the myriad other (often syndemic) health issues faced by people who experience incarceration.

Declaration of interests

None.

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