

INCIDENCE OF NON-FATAL AND FATAL OPIOID OVERDOSE FOLLOWING RELEASE FROM PRISON AMONG MEN WHO REGULARLY INJECTED DRUGS PRE-IMPRISONMENT: A PROSPECTIVE COHORT STUDY

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Background:

Opioid overdose is a leading cause of preventable morbidity and mortality among people released from prison. Previous Australian estimates of non-fatal and fatal opioid overdose post-prison release potentially underestimate overdose risk among people engaging in injecting drug use (IDU) pre-imprisonment, as these cohorts included people who may not have drug use histories (i.e., at low or no risk of overdose). Among a cohort of men who reported regular IDU pre-imprisonment, we determined non-fatal and fatal opioid overdose incidence post-release.

Methods:

Participant data were linked to ambulance and National Death Index data. We defined non-fatal opioid overdose as an ambulance contact including naloxone administration and subsequent improvement in Glasgow Coma Scale. Fatal opioid overdose was a poisoning death (using ICD-10 codes) with opioids recorded as a contributing cause. Person-years (PY) at-risk commenced from prison release (Sept2014–Dec2016) and ended at death or 31 December 2018. Separate crude incidence rates (IR) for multiple-event non-fatal opioid overdoses and fatal opioid overdoses were calculated overall, and at 30, 180, 365 days post-release, reported per 1000PY with 95% confidence intervals (95%CI).

Results:

Participants (N=400) contributed 1222.3PY. Participants had 70 non-fatal (range: 0–4, IR: 57.3/1000PY, 95%CI: 45.3–72.4) and 14 fatal opioid overdoses (IR: 11.5/1000PY, 95%CI: 6.8–19.3). Incidence was approximately seven (non-fatal opioid overdose IR: 396.8, 95%CI: 230.4–683.4) and five (fatal opioid overdose IR: 61.1, 95%CI: 15.3–244.1) times greater in the first 30 days post-release, tapering off and stabilising thereafter.

Conclusion:

Among men reporting regular IDU pre-imprisonment, we found high rates of non-fatal and fatal opioid overdose, particularly in the first 30 days. Expanded access to evidence-based interventions such as opioid agonist treatment and take-home-naloxone may reduce overdose risk. Ongoing surveillance of overdose incidence post-release is required to monitor overdose trends and measure the effectiveness of such interventions.

Disclosure of Interest Statement:

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