Prevalence of substance use in non-transport injury events

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Introduction and Aims: Substance use is a key modifiable risk factor for serious injury. Except for road traffic injuries, research on the prevalence of substance use in injury events remains limited. This study aims to measure the prevalence of substance use in non-transport injuries.

Design and Methods: Patients admitted to the trauma service at The Alfred Hospital (an adult major trauma centre) with non-transport injuries between July 1, 2021 and April 31, 2022 were included. Demographics, injury characteristics, and prescription medication data were extracted to enable removal of drug detections resulting from pre-existing and inpatient prescriptions.

Results: Included patients (n=972) were most commonly injured from low falls (n=364, 37%), high falls (n=237, 24%) and being struck by/colliding with an object/person (n=120, 12%). Blood alcohol concentrations (BAC) >0 were detected in 132/703 (19%) patients who were tested for alcohol (median=0.19%, range=0.01%-0.48%). Other drugs were detected in 167/424 (39%) urine samples and included cannabinoids (n=88, 21%), amphetamine-type substances (n=58, 14%), benzodiazepines (n=55, 13%), opiates (n=34, 8%) and cocaine (n=13, 3%). Of those who tested positive for other drugs, 47 (28%) had a BAC >0.

Discussions and Conclusions: Substances were commonly detected in patients with non-transport injuries. However, prevalence estimates may be limited by the number of patients who were not tested for substances. Further research is needed to explore the role and level of substance use involved in these injury events, as well as opportunities for identifying people with substance use disorders who may benefit from brief intervention and referral to treatment.

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