

EMERGENCY DEPARTMENT PRESENTATIONS FOR INJURIES TO THE HEAD AMONG PEOPLE WHO INJECT DRUGS IN VICTORIA, AUSTRALIA

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Background:

Traumatic brain injuries (TBI) are a leading cause of morbidity, with TBI emergency department (ED) presentations previously estimated at 0.1/100PY among the general population. TBIs are overrepresented among people who inject drugs, however, the incidence of TBI ED presentations among these groups is unknown. We estimate the incidence of ED presentations for head injuries among two samples, community-recruited people who inject drugs (SuperMIX study) and prison-recruited men who inject drugs (Prison and Transition Health study [PATH]).

Methods:

State-wide ED presentations data were linked to SuperMIX (N=1205) and PATH (N=347) cohorts. Crude incidence rates (IR) per 100 person-years (PY) were calculated overall for ED presentations with head injury diagnoses (primary and non-primary diagnoses) for SuperMIX (January 2008–March 2019) and PATH (January 2014–March 2019) participants. Incidence was calculated as the total events/total time-at-risk; stratified by sex for SuperMIX. Most common diagnoses, triage level, and injuries occurring in prison were summarized.

Results:

Among 451 SuperMIX participants, there were 820 head injury ED presentations (37.4% of participants, n=451/1205; 4.5% of all presentations). Overall IR was 6.25/100PY (95%CI=5.84–6.70); 4.64/100PY (95%CI=4.03–5.34) for women and 7.71/100PY (95%CI=7.13–8.34) for men. Most presentations were for an open wound (29.8%), with 16% triaged as emergency or more urgent. Among 121 PATH participants, there were 154 presentations (34.9% of participants, n=121/347; 6.3% of all presentations). The IR was 8.46/100PY (95%CI=7.2–9.9). Most presentations were for an open wound (26.9%) and intracranial injury (16.9%), 26% triaged as emergency or more urgent and 16.8% occurred in prison.

Conclusion:

Incidence of TBI ED presentations in both cohorts was high. Men in SuperMIX had almost twice the IR compared to women, but a lower IR compared to men in PATH. Further work is needed to understand the severity and ongoing impact of this neglected health issue among these populations.

Disclosures of interest:

None to declare.