**THE EFFECT OF SEX ON THE INCIDENCE OF AMBULANCE ATTENDANCES AMONG PEOPLE WHO INJECT DRUGS IN VICTORIA, AUSTRALIA**

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Background

People who inject drugs are frequently attended by paramedics, but data on these episodes are rarely stratified by sex. We determined variations in incidence of ambulance attendances by sex in a cohort of people who inject drugs.

Methods

Data come from SuperMIX, a community-based cohort of people who inject drugs in Victoria (established 2008–ongoing). Demographics and drug use data were linked to statewide ambulance attendances, Jan 2008–Aug 2019. We selected participants who had at least one ambulance attendance during this period. Person-years at-risk (PY) began from the start of linkage (for those initiating injecting ≤2008) or the year participants reported initiating injecting (for those initiating >2008). Follow-up ended at date of death or Aug 31, 2019. Incidence rate (IR) was defined as number of attendances per 100 PY with 95% confidence intervals (CI), stratified by calendar year and participant sex. To assess differences by sex, IR ratio (IRR) and 95% CIs were calculated.

Results

A total of 1035 (82%) participants had at least one ambulance attendance over the study period (median=7, SD=13.5). One-third (33%) were female, most (66%) were born 1970–1984, and most reported heroin as their preferred drug (68%). Participants contributed 13,577 PYs and 9045 ambulance attendances between 2008–2019, and 35% were among females. The overall IR was 65.3/100 PY (95%CI, 63.9–66.6), ranging 50.1/100 PY (95%CI, 46.0–54.2) in 2008 to 91.1/100 PY (95%CI, 85.7–96.5) in 2018. The overall IR for females was 71.3/100 PY (95%CI, 68.8–73.7) and 62.4/100 PY (95%CI, 60.8–64.0) for males (IRR = 1.1; 95%CI, 1.1–1.2).

Conclusion

Ambulance attendance rates among SuperMIX participants almost doubled, 2008–2019; females had a higher rate (vs males). Understanding drivers of sex differences requires more research given evidence suggesting women and men who inject drugs have heterogenous harms.