OPPORTUNITY FOR TARGETED HEPATITIS C HEALTH MESSAGING FOR SUB-POPULATIONS OF PEOPLE WHO INJECT DRUGS IN MELBOURNE: A LATENT CLASS ANALYSIS

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Background: Australia introduced universal access to direct-acting antivirals for the treatment of hepatitis C virus (HCV) in 2016, refocusing efforts towards HCV elimination. People who inject drugs experience the highest incidence of HCV in Australia and accordingly are a priority population for reducing transmission and acquisition. Targeted HCV testing and treatment messaging could aid in achieving HCV elimination; however, we cannot assume people who inject drugs are a homogenous population. We aim to understand sub-populations among people who inject drugs to inform tailoring HCV messaging.

Methods: Data come from the SuperMIX prospective cohort study of community-recruited people who inject drugs in Melbourne, Australia. Latent class analysis was used to analyse the most recent annual questionnaire data of participants. Socio-demographic, drug use, criminal justice, and healthcare attendance variables were included as indicator variables. We report number of classes from the best fitting model, class prevalence, and describe the classes using probabilities of class membership.

Results: A total of 750 participants who completed a behavioural survey between 2014–2019 were included. The sample was mostly aged 31–40 years, had a moderate level of education, were unemployed, and lived alone. One-third injected heroin, methamphetamine and/or other drugs, one-quarter injected heroin only and one in five no longer used drugs. The best model was a three-class model. Class one used heroin-only (0.43) and injected <1 day (0.56). Class two were most likely to use heroin, methamphetamine, and other drugs (0.52) and inject <1 day (0.39) or >3/day (0.27). Those in Class three reported no drug use (0.92).

Conclusion: Latent class analysis identified three distinct sup-populations. This may assist in tailoring HCV health promotion messaging to increase testing and treatment among people who inject drugs in Melbourne.

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