HEPATITIS C VIRUS CASCADE OF CARE AMONG PEOPLE WHO INJECT DRUGS IN AUSTRALIA: FACTORS ASSOCIATED WITH TESTING AND TREATMENT IN A UNIVERSAL HEALTHCARE SYSTEM

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Background:
Determining the hepatitis C virus (HCV) cascade of care among people who inject drugs (PWID) is critical to measuring progress towards World Health Organization elimination targets. This study describes the care cascade among a sample of PWID in Australia, and identifies sociodemographic, drug use, and clinical factors associated with engagement at each stage.

Methods:
Sentinel samples of Australians who regularly inject drugs recruited in 2018 (n=905) and 2019 (n=904) were interviewed about lifetime HCV antibody and RNA testing, treatment uptake and treatment completion. Multivariable logistic regression identified characteristics associated with these outcomes.

Results:
Of 1512 participants included in analyses, 87% reported lifetime HCV antibody testing. Of those, 70% had received RNA testing, of whom 60% reported being RNA positive. Seventy-six percent reported initiating treatment, 78% of whom completed treatment. Lifetime incarceration history (AOR 1.90; 95% CI 1.28-2.82), current opioid agonist treatment (OAT) (AOR 1.99; 95% CI 1.14-3.47), and attending alcohol and other drug (AOD) counselling in the past 6 months (AOR 2.22; 95% CI 1.27-3.88) were all associated with increased odds of antibody testing. Incarceration history (AOR 1.42; 95% CI 1.07-1.87), and current OAT (2.07; 95% CI 1.51-2.86) were associated with RNA testing. Current OAT (AOR 1.92; 95% CI 1.22-3.03) and attending an AOD counsellor (AOR 1.91; 95% CI 1.16-3.13) were both associated with treatment uptake. Methamphetamine as drug injected most often in the last month was associated with reduced odds of antibody (AOR 0.41; 95% CI 0.25-0.66) and RNA testing (AOR 0.54; 95% CI 0.40-0.74), compared to heroin.

Conclusion:
Engagement in the cascade of care amongst PWID in Australia is encouraging, with AOD service engagement associated with testing and treatment uptake. Increased efforts to reach those not engaged with services, particularly those not receiving OAT, or who predominantly inject methamphetamine is needed to achieve HCV elimination targets.

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