

HEPATITIS C VIRUS TESTING, LIVER DISEASE ASSESSMENT AND TREATMENT UPTAKE AMONG PEOPLE WHO INJECT DRUGS PRE- AND POST-UNIVERSAL ACCESS TO DIRECT-ACTING ANTIVIRAL TREATMENT IN AUSTRALIA: THE LIVERLIFE STUDY

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Background: Gaps in hepatitis C virus (HCV) testing and diagnosis, liver disease assessment and treatment uptake among people who inject drugs (PWID) persist. We aimed to describe the cascade of HCV care among PWID in Australia, prior to and following unrestricted access to direct-acting antiviral (DAA) treatment uptake.

Methods: Participants enrolled in an observational cohort study during liver health campaign days between 2014 and 2018 provided finger-stick whole-blood samples for dried blood spot and Xpert[®] HCV Viral Load, and venepuncture samples. Participants received transient elastography and clinical assessment by a nurse or general practitioner. Clinical follow-up was recommended 2-12 weeks after enrolment.

Results: Among 839 participants (mean age 43 years), 66% were male (n=550), 64% (n=537) injected drugs in the previous month, and 67% (n=560) reported currently receiving opioid substitution therapy. Overall, 45% (n=380) had detectable HCV RNA, of whom 23% (n=86) received HCV treatment within 12 months of enrolment. HCV treatment uptake increased from 2% in pre-DAA era to 38% in DAA era. Significant liver fibrosis (F2–F4) was more common in participants with HCV infection (38%) than those without (19%). Older age (≥ 51 years group: aOR, 3.17; 95% CI, 1.87–5.34), BMI ≥ 30 (aOR, 2.51; 95% CI, 1.66–3.81) and detectable HCV

RNA (aOR, 2.79; 95% CI, 1.95–3.99) were associated with significant fibrosis. Age 50 years or older (aOR, 2.88; 95% CI, 1.18–7.04) and attending a clinical follow-up with nurse (aOR, 3.19; 95% CI, 1.61–6.32) or physician (aOR, 11.83; 95% CI, 4.89–28.59) were associated with HCV treatment uptake.

Conclusion: HCV treatment uptake among PWID in Australia has increased markedly in the DAA era. Innovative models of care that address the social and structural determinants of access to care are required to further enhance treatment uptake.

Disclosure of interest Statement: The Kirby Institute is funded by the Australian Government Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government. SB is supported by an Australian Postgraduate Award from UNSW Sydney. JG is supported by a NHMRC Career Development Fellowship. LM is supported by a NHMRC Senior Research Fellowship. GJD is supported by a NHMRC Practitioner Research Fellowship. GD is a consultant/advisor and has received research grants from Abbvie, Gilead and Merck. JG is a consultant/advisor and has received research grants from Abbvie, Cepheid, Gilead Sciences and Merck/MSD.