

## Declining prevalence of current HCV infection and increased treatment uptake among people who inject drugs: The ETHOS Engage Study

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**Background:** Evaluating trends in HCV treatment and prevalence is crucial for monitoring elimination. We evaluated the change in current infection and treatment among people who inject drugs (PWID) between 2018-2019 and 2019-2021.

**Methods:** ETHOS Engage is an observational cohort study of PWID attending drug treatment clinics and needle and syringe programs in Australia. Participant enrolment occurred over two periods, Wave 1 (May 2018-September 2019, 25 sites) and Wave 2 (November 2019-June 2021, 21 sites), with baseline questionnaire completion and point-of-care HCV RNA testing (Xpert<sup>®</sup> HCV Viral Load Fingerstick). Logistic regression was used to identify factors associated with current HCV infection and historic HCV treatment.

**Results:** 2,395 individuals were enrolled across the two recruitment waves (55% male, median age 44, 72% current opioid agonist therapy, and 66% injecting in the previous month). HCV prevalence decreased from 24% to 17% between 2018-2019 and 2019-2021, respectively ( $p=0.003$ ). HCV treatment increased from 66% to 74% between 2018-2019 and 2019-2021, respectively ( $p<0.001$ ). After adjusting, there was a reduction in current HCV infection in 2019-2021 (adjusted odds ratio [aOR] 0.62; 95% CI, 0.50-0.77) compared to 2018-2019. Other factors associated with current infection included homelessness (aOR, 1.70; 1.26, 2.30), incarceration (vs. never; historic: aOR 1.69, 1.31, 2.19; recent: aOR 1.85, 1.35, 2.54), and recently injecting drugs (vs. >12 months ago; previous month <daily: aOR 2.03; 1.37, 3.02;  $\geq$ daily: aOR 2.90; 1.94, 4.32).

**Conclusion:** The increase in HCV treatment and decrease in prevalence among PWID provides evidence of further progress towards HCV elimination; however, sub-populations may require additional support to enhance elimination.

**Disclosure of interest:** Nil to disclose