

CHANGES IN HOUSING STATUS AND HCV INCIDENCE AMONG PEOPLE WHO INJECT DRUGS IN MONTREAL, CANADA: LONGITUDINAL COHORT STUDY, 2011-2024

Authors:

Vakili F^{1,2}, Larney S^{1,2,3}, Meconnen M¹, Bruneau J^{1,2}

¹Centre de recherche du Centre hospitalier de l'Université de Montréal, Montréal, Canada, ²Département de médecine de famille et de médecine d'urgence, Université de Montréal, Montréal, Canada, ³Burnet Institute, Melbourne, Australia.

Background:

Housing is an important social determinant of health. People who inject drugs (PWID) often experience housing instability and frequent changes in their housing status, which contribute to harm and poor health outcomes. We aimed to estimate HCV incidence in relation to recent changes in housing status among PWID in Montréal, Canada.

Methods:

We used longitudinal data from the Hepatitis Cohort (HEPCO) of PWID in Montréal, Canada (2011-2024). Changes in housing were identified among those who had at least one follow-up visit and defined as consistently housed, consistently unhoused, newly housed, and newly unhoused. HCV testing was performed at each follow-up visit (every three months). We used a Poisson regression to estimate incidence of new and recurrent HCV infections in housing groups. A time-dependent Cox model was used to estimate the association between recent changes in housing status and HCV infection.

Results:

691 participants (median age 42 years, 81.9% male) were included. Overall, 155 events were observed over 2372.12 person-years of follow-up, corresponding to an incidence rate of 6.53 per 100 person-years (95%CI:5.47–7.08). HCV incidence was highest among newly unhoused PWID (incidence 16.44/100 person-years, 95%CI:10.48–25.81) and lowest among consistently housed PWID (incidence 5.10/100 person-years, 95%CI:4.06–6.40). In the adjusted time-dependent Cox model and relative to being consistently housed, being newly unhoused was associated with the highest hazard of HCV infection (aHR:2.25, 95%CI:1.35-3.78, p=0.001). Adjusted hazard ratios in consistently unhoused and newly housed groups were 1.23 (95%CI:0.75–1.99, p=0.40) and 1.05 (95%CI:0.61–1.82, p=0.08), respectively.

Conclusion:

Recent declines in housing affordability and loss of stable housing in Montreal may be associated with an increased risk of HCV infection among PWID. Our findings highlight the importance of considering evolving structural context among this population and support targeting precariously housed PWID in homelessness prevention initiatives to advance public health.

Disclosure of Interest Statement:

FV receives a doctoral research scholarship from Fonds de Recherche du Québec-Santé (Grant: 363938). JB has received advisory fees from Gilead Sciences and Abbvie, and grant funding from Gilead Sciences.