DIVERSITY OF DETENTION PATTERNS AMONG PEOPLE WHO INJECT DRUGS AND THE ASSOCIATED RISK WITH INCIDENT HEPATITIS C VIRUS (HCV) INFECTION: IMPLICATIONS FOR HCV PREVENTION

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Background: Recent incarceration has been linked to a high risk of hepatitis C virus (HCV) infection among people who inject drugs (PWID). In view of the diversity of detention patterns in this population, our aim was to examine associations between recent detention type and duration and risk of HCV infection among PWID.

Methods: 651 HCV RNA- (Ab+/-) PWID were enrolled in a prospective cohort study in Montreal (11.2004-12.2017). At 6- or 3-month intervals, participants were tested for HCV Ab or RNA and completed behavioral questionnaires, self-reporting any recent (past 6/3-month) detention, including the setting (jail or prison) and duration. Time-updated Cox regression analyses were fit adjusting for gender, injecting duration, past-month cocaine and opioids injection, opioid agonist treatment (OAT) and previous HCV infection.

Results: At baseline, the median age was 37 and 81% were male. 476 detention episodes were reported over 4593 study visits [19.3% jail, 80.7% prison; median past 6-month detention duration: 14 days (interquartile range: 4-60)]. 194 participants acquired HCV over 1898.3 person-years [incidence: 10.2/100 person-years (95% CI: 8.8-11.8)]. Compared to those reporting no recent detention, the relative risk of HCV infection was similar for PWID detained in prisons [aHR: 1.66 (1.16-2.36)] and jails [1.38 (0.70-2.73)], though results were imprecise for the latter category. Compared to no recent detention, HCV infection risk was relatively higher among PWID detained <14 days [(aHR: 1.91 (1.22-3.01)] than PWID detained longer [(aHR: 1.38 (0.89-2.14)]. Injection drug use during detention was uncommon (<3% of all detention episodes).

Conclusion: Any recent detention appears to raise the risk of HCV infection among PWID, regardless of setting and duration. Detention under 14 days appears particularly detrimental, possibly reflecting limited access to harm reduction and OAT during short-term incarceration. Overall, findings point to the period surrounding release from jails and prisons as critical targets for HCV prevention.

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