CORRELATES OF HCV REINFECTION AMONG ACTIVE DRUG USERS

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Background:
To achieve HCV elimination by 2030, strategies will be required to address all priority populations, including active drug users. Some are still reluctant to initiate treatment due to the perceived risk of recurrent viremia. It may be that this risk could be mitigated by identifying factors associated with this outcome and designing approaches to reduce their impact

Methods:
We have reviewed the database of the Vancouver Infectious Diseases Centre from 2014-2022, among patients receiving HCV therapy within the context of a comprehensive, multidisciplinary model of care, and identified all the cases of HCV reinfection that we have documented among active drug users. We have compared key demographic characteristics among those with and without reinfection, with an emphasis on those that, by literature review, have been associated with a higher incidence of HCV reinfection. We have identified factors of interest for particular attention, based on previous case series: active opiate/fentanyl use; housing status; engagement in care(defined as active prescriptions over the month preceding the reinfection event).

Results:
Among 393 patients with active drug use successfully treated for HCV infection at our centre over the period of intervention, we have identified 24 cases of reinfection(4.42% of the total population including active and nonactive drug users, 81 cases per 100 person years). Key characteristics include: male 21(88.5%); active opiate/fentanyl use 23(95.8%); indigenous 4(20.8%); Caucasian 20(87.5%); unstable housing status 14(58.3%); median age 48(range 32-81); and engagement in care 19(83.3%).

Conclusion:
At our centre, rate of reinfection is quite low, possibly attributed to the context in which care is delivered. Active fentanyl use is major correlates of this outcome. A major driver also appears to be unstable housing, which is key variables on which interventions could be designed to reduce the occurrence of reinfection and increase the positive impact of HCV treatment in this population.

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