

The impact of frequent cannabis use on injection drug use patterns among people who use drugs in a Canadian setting

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Introduction:

People who inject drugs (PWID) are 22 times more likely to acquire HIV than the general population and an estimated 25% of new HIV infections outside of sub-Saharan Africa are attributed to injection drug use. Preliminary evidence suggests that cannabis use may have the potential to reduce drug-related harm among PWID, including the frequency of illicit drug use and accidental overdose. We sought to expand this evidence by evaluating the impact of frequent cannabis use on the frequency of injection drug use and injection cessation among PWID in Vancouver, Canada.

Objectives:

The data for this analysis were collected from three prospective cohorts of PWID in Vancouver, Canada, between September 2005 and May 2018. At baseline and semi-annually, participants completed an interviewer-administered questionnaire that collected data including socio-demographic information, substance use patterns, HIV risk behaviors and engagement with health and social services.

Results:

Generalized linear mixed-effects models and extended Cox regression with time-updated covariates were used to analyze the impact of daily cannabis use on injection frequency and injection cessation. Among the 2,390 participants included in the analysis, daily cannabis use was associated with decreased frequency of injection drugs use (Adjusted Odds Ratio [AOR]=0.81, 95% confidence interval [CI]: 0.73-0.89), and increased rates of injection cessation (adjusted hazard ratio [AHR]=1.17, 95% CI 1.04-1.33).

Conclusion:

In both sub-analyses, the effect of cannabis use on frequency of injecting and injection cessation was restricted to opioid use and the association between cannabis use and stimulant use was not significant. Our findings describe longitudinal reductions in the frequency of illicit opioid injection associated with high-intensity cannabis use. Evidence linking cannabis use to reduced use of illicit opioids also supports calls for further evaluation of the therapeutic benefits of cannabis and specific cannabinoids for opioid use disorder.