Cannabis legalization possibilities and special populations: The case of opioid using people who inject drugs

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Scientists, scholars and champions of health equity for all people
Overview

• Cannabis use in the context of chronic opioid use disorder among people who inject drugs

• Cannabis possibilities from the perspective of self-selected cannabis consumers

• What policies/regulatory approaches would work for PWID
Three Waves of the Rise in Opioid Overdose Deaths

Wave 1: Rise in Prescription Opioid Overdose Deaths Started in 1999
Wave 2: Rise in Heroin Overdose Deaths Started in 2010
Wave 3: Rise in Synthetic Opioid Overdose Deaths Started in 2013


https://www.cdc.gov/opioids/basics/epidemic.html
Other health challenges for PWID

• National epidemic of HCV particularly for millennials
• Growing bacterial infections – sepsis, infective endocarditis – throughout the US
• HIV outbreaks continue to occur
• Changing drug use patterns may increase risk for all of the above
• Material conditions for PWID are worsening (i.e., more homelessness)
Cannabis options for people with opioid use disorder

No current cannabis use
- Offer for opioid withdrawal
- Offer for opioid reduction

Ongoing medicinal use
- Vary potencies and properties of cannabis to improve outcomes

Only recreational use
- Vary potencies and properties to promote medicinal outcomes
Cannabis use is associated with reduced risk of exposure to fentanyl among people on opioid agonist therapy during a community-wide overdose crisis

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ABSTRACT

Background: The ongoing opioid overdose crisis is driven largely by exposure to illicitly manufactured fentanyl. Preliminary observational and experimental research suggests that cannabis could potentially play a role in reducing use of prescription opioids among individuals with chronic pain. However, there is limited data on the effects of cannabis on illicit opioid consumption, particularly fentanyl, especially among individuals on opioid agonist therapy (OAT). We sought to assess the longitudinal associations between cannabis use and exposure to fentanyl among people on OAT.

Methods: Data were drawn from two community-recruited prospective cohorts of people who use drugs in Vancouver, Canada. We used generalized linear mixed-effects modeling, adjusted by relevant confounders, to investigate the relationship between cannabis use and recent fentanyl exposure (both assessed by urine drug testing) among participants on OAT between 2016 and 2018. Results: Among the 819 participants on OAT who contributed 1099 observations over the study period, fentanyl exposure was common. At the baseline interview, fentanyl was detected in a majority of participants (42%, 53%), with lower prevalence among individuals with entire drug use with the biomarker (47% vs. 56%, p = 0.088). Over all study interviews, cannabis use was independently associated with reduced likelihood of being exposed to fentanyl (Adjusted Prevalence Ratio = 0.51, 95% Confidence Interval: 0.31-0.83, p = 0.001). Conclusions: Participants on OAT using cannabis had significantly lower risk of being exposed to fentanyl. Our findings reinforce the need for experimental trials to investigate the potential benefits and risks of controlled cannabis-based administration for people on OAT.
What did the researchers do and find?

- Using data from 2 large studies of PWUD in Vancouver, Canada, we analyzed information from 1,152 PWUD who were interviewed at least once and reported chronic pain at some point between June 2014 and December 2017.
- We used statistical modelling to estimate the odds of daily opioid use for (1) daily and (2) occasional users of cannabis relative to non-users of cannabis, holding other factors (e.g., sex, race, age, use of other drugs, pain severity) equal.
- For participants who reported cannabis use, we also analyzed their responses to a question about why they were using cannabis (e.g., for intoxication, for pain relief).

We found that people who used cannabis every day had about 50% lower odds of using illicit opioids every day compared to cannabis non-users. People who reported occasional use of cannabis were not more or less likely than non-users to use illicit opioids on a daily basis. Daily cannabis users were more likely than occasional cannabis users to report a number of therapeutic uses of cannabis including for pain, nausea, and sleep.

What do these findings mean?

- Although more experimental research (e.g., randomized controlled trial of cannabis coupled with low-dose opioids to treat chronic pain among PWUD) is needed, these findings suggest that some PWUD with pain might be using cannabis as a strategy to alleviate pain and/or reduce opioid use.
Health-related motivations for cannabis use are common

Factors associated with health-related cannabis use intentions among a community sample of people who inject drugs in Los Angeles and San Francisco, CA 2016 to 2018

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Abstract

Background

Cannabis use is common among marginalized people who use illicit drugs (PWUD) but remains understudied. We sought to explore factors associated with health-related cannabis use in a sample of PWUD.

Methods

We used data from a large, UK-based sample of PWUD to examine factors associated with health-related cannabis use in PWUD. We used logistic regression models to examine factors associated with cannabis use.

Results

The most common factors associated with health-related cannabis use in PWUD were personal use and medical conditions.

Conclusions

Our findings demonstrate a wide spectrum of cannabis use for PWUD. We observed important health-related differences between latet classes, demonstrating possible unmet healthcare needs among PWUD reporting therapeutic cannabis use, which may inform ongoing policies to address cannabis use for harm reduction purposes and applications of medical cannabis for PWUD.
The impact of non-medical cannabis legalization and other exposures on retention in longitudinal cannabis research: a survival analysis of a prospective study of Canadian medical cannabis patients

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Abstract

Background: Despite repeated calls by medical associations to gather evidence on the harms and benefits of cannabis, there are ongoing methodological challenges to conducting observational and clinical studies on cannabis, including a high rate of patients who are lost to follow-up (LTU). This study explores factors potentially associated with retention in a large prospective study of Canadian medical cannabis patients, with the goal of reducing the probability that patients will be lost to follow-up in future cannabis research.

Methods: The Tilly�Covariance Patient Study (TOPS) was a multi-site, prospective study assessing the impact of medical cannabis over 6 months in a broad population of authorized Canadian cannabis patients. The study took place from 2016 to 19, and we conducted a series of exploratory analyses including a Kaplan-Meier survival analysis and logistic regressions to assess the potential association between study retention and variables including patient characteristics, cannabis and prescription drug use, quality of life, and the legalization of non-medical cannabis.

Results: Overall, 1,011 participants were included in this analysis, contributing 287 patient-years of data. Retention was 728 (72%) at 3 months, and 419 (41%) at 6 months. Our analyses found significantly lower adjusted odds of retention following legalization (AOR 0.28, 95% CI 0.18–0.41), and in patients that used prescription opioids at baseline (AOR 0.62, 95% CI 0.46–0.85), while increased odds of retention were found in patients with a higher baseline psychological score (AOR 1.43, 95% CI 1.08–1.90) or that used anti-seizure medications at baseline (AOR 1.91, 95% CI 1.30–2.81).

Discussion: TOPS provided a unique opportunity to examine patient characteristics and other variables that may be associated with retention in prospective medical cannabis studies. Our findings highlight some of the challenges of conducting medical cannabis research at a time when patients have a multitude of cannabis access options, including legal adult dispensaries and a robust illicit market. High LTU rates can impact the validity of studies, and potentially lead to misestimations of the harms and benefits of medical cannabis use. Despite being a multi-site prospective...
Limitations of the current approach in California

- GNC model – loosely regulated with unsubstantiated claims
  - Probably will not generate evidence to support new medical uses for PWID
  - If effective for sub-populations, unlikely to be taken to scale
Cannabis policy goals for PWID

• We need protections to ensure safe supply

• We need resources to establish efficacy of cannabis for medical purposes, although there may be little incentive for this now

• We need systems of cannabis distribution to PWID if effectiveness is shown