Title

Cannabis Use and its Impact on Prescription Opioid Use

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Intro

Can medical cannabis reduce or replace prescription opioids for patients dealing with chronic pain? Cannabis is potentially a valuable tool in reducing the number of opioid overdoses, and related deaths.

Methods

We de-identified and matched, on an individual level, sales data from eight dispensaries with prescription data. The study focused on 208 patients who either started or stopped using cannabis during the years 2019-2021. We calculated the average opioid prescription (in MME/Month) during the periods before the first cannabis purchase, between the first and last purchase, and after the last cannabis purchase.

Results

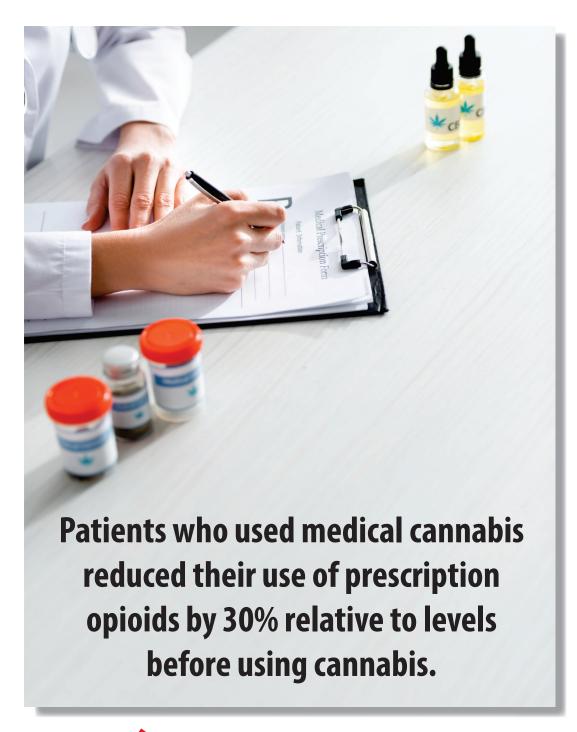
Average Opioid Usage (in MME/Month)

Before Using Cannabis: 115.1

While Using Cannabis: 80.0

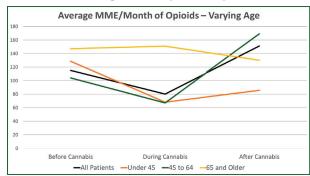
After Using Cannabis: 151.1

Patients who were most successful in reducing opioid use tended to be younger and female. They spent more of their cannabis budget on tablets and products with a high THC:CBD ratio. Total THC consumed (in mg/month) does not correlate with successful reduction of opioids.

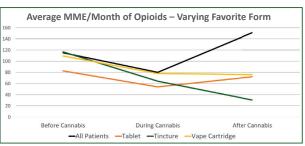


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Older Patients were less Successful in Reducing Prescription Opioids

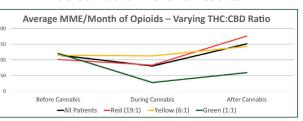


Patients who Favored Different Forms of Cannabis had Different Results



Small sample size limits the significance of the finding for most "favorite form" groups.

Patients who Favored Different THC:CBD Ratios had Different Results



There are other THC:CBD ratios, but they suffer from small sample size, like the favored forms

Patients' Percentage Spend on Different Forms Varied with Age and Gender

Demographic Group	Capsule	Flower	Tablet	Vape - Cartridge
Female, Under 45	4.4%	8.8%	12.4%	53.4%
Female, 45 - 64	8.9%	3.9%	20.2%	39.3%
Female, 65 and older	13.9%	1.4%	37.3%	15.8%
Male, Under 45	3.1%	12.4%	8.1%	50.0%
Male, 45 - 64	5.9%	7.8%	16.4%	39.5%
Male, 65 and older	11.3%	3.7%	28.3%	27.9%

This table is based on all dispensary customers, not just those who also used prescription opioids.