Relationship Between Marijuana and Opioids

Cannabis access is associated with reduced rates of opioid use and abuse, opioid-related hospitalizations, opioid-related traffic fatalities, opioid-related drug treatment admissions, and opioid-related overdose deaths

“The aim of this study was to evaluate the short-term and long-term effects of plant-based medical cannabis (MC) on outcomes of interest related to pain, quality of life, tolerability, and opioid medication use in a large cohort of chronic pain patients using medical cannabis over the course of one year. … Medical cannabis treatment was associated with improvements in pain severity and interference. … In patients who reported opioid medication use at baseline, there were significant reductions in oral morphine equivalent doses. … Taken together, the results of this study add to the cumulative evidence in support of plant-based MC as a safe and effective treatment option and potential opioid substitute or augmentation therapy for the management of chronic pain symptomatology and quality of life.”

Medical cannabis for the management of pain and quality of life in chronic pain patients: A prospective observational study, Pain Medicine, 2020

“In this study, we observed an association between state-level legalization of medical cannabis and opioid prescribing by orthopedic surgeons in the Medicare Part D cohort. We found that overall opioid prescribing by orthopedic surgeons in this cohort was reduced in states permitting patient access to medical cannabis, compared with those who do not. … On examination of prescription data of different opioid classes, we found that prescriptions for hydrocodone, the most commonly prescribed opioid medication, by orthopedic surgeons had a statistically significant negative association with state MCLs.”

State medical cannabis laws associated with reduction in opioid prescriptions by orthopedic surgeons in Medicare Part D cohort, Journal of the American Academy of Orthopedic Surgeons, 2020

“We examined the association between the legalization of recreational marijuana and prescription opioid distribution in Colorado. Utah and Maryland, two states that had not legalized recreational marijuana, were selected for comparison. … There was a larger reduction from 2012 to 2017 in Colorado (-31.5%) than the other states. Colorado had a significantly greater decrease in codeine and oxymorphone than the comparison states.”

Prescription opioid distribution after the legalization of recreational marijuana in Colorado, International Journal of Environmental Research and Public Health, 2020

Cannabis access is associated with reductions in overall prescription drug spending

“Findings from this systematic review show that MMLs are associated with a modest reduction in opioid prescriptions. Specifically, implementation of MMLs (medical marijuana laws) is associated with a 7% reduction in opioid prescriptions.”

State marijuana laws and opioid overdose mortality, Injury Epidemiology, 2019

The adjunctive use of cannabis augments the analgesic properties of opioids

“In this exploratory CEA (cost effective analysis) of smoked cannabis for neuropathic pain, we found augmentation of standard therapy agents for neuropathic pain with smoked cannabis to be cost-effective over the short- and long-term. … Judicious use of medicinal cannabis alongside standard therapy agents may be particularly beneficial to patients with refractory pain and to active cannabis users.”

A cost-effective model for adjunctive smoked cannabis in the treatment of chronic neuropathic pain, Cannabis and Cannabinoid Research, 2019
Patients often use cannabis as a substitute for other controlled substances, including prescription medications, alcohol, and tobacco

“RCLs (recreational cannabis laws) and, to a lesser extent, MCLs (medical cannabis laws) reduce the total days supply of NSAIDs, the number of different patients to whom providers prescribe NSAIDs, and the likelihood that a provider prescribes any NSAIDs.”

The impact of cannabis access laws on opioid prescribing, Journal of Health Economics, 2019

Chronic pain patients are less likely to abuse medicinal cannabis as compared to opioids

"Generally, rates of problematic use of MC (medicinal cannabis) among MC users seem lower than rates of problematic use of opioids among those prescribed opioids,"

Problematic use of prescription opioids and medicinal cannabis among patients suffering from chronic pain, Pain Medicine, 2016

Chronic pain patients are less likely to become depressed using medical cannabis

"Prevalence of depression among patients in the OP (opioids), MM (medical marijuana) and OPMM groups was 57.1%, 22.3% and 51.4%, respectively and rates of anxiety were 48.4%, 21.5% and 38.7%, respectively. ... Levels of depression and anxiety are higher among chronic pain patients receiving prescription opioids compared to those receiving MM. Findings should be taken into consideration when deciding on the most appropriate treatment modality for chronic pain, particularly among those at risk for depression and anxiety."

Depression and anxiety among chronic pain patients receiving prescription opioids and medical marijuana, Journal of Affective Disorders, 2017

Cannabis use is associated with greater rates of opioid use treatment retention and may mitigate opioid-related cravings

“Many chronic pain patients are prescribed opioids at doses exceeding the current Guideline. Tapering the dose can be difficult, as patients fear a return to a state of overwhelming pain. Several factors can increase the likelihood of success: the patient’s readiness for change, psychological support, pharmacological support and careful monitoring. This pilot study addressed these four factors. Six hundred patients took part. Each was taking daily opioid doses ranging from 90-240 mg morphine equivalent dose (MED). All indicated they were prepared to reduce their opioid dose. Over a six-month period, opioid doses were tapered according to individual needs, usually 10% every 1-2 weeks. ... After 6 months, 156 patients (26%) had ceased taking opioids. An additional 329 patients (55%) had reduced their opioid use by an average of 30%. ... Medical cannabis provided pharmacological support throughout the tapering process ... [and] was very helpful to many patients. ... The positive results justify further investigation.

A pilot study of a medical cannabis – opioid reduction program, American Journal of Psychiatry and Neuroscience, 2019