

# Marijuana and Opiates

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## Medical Marijuana Today

Twenty-five states and the District of Columbia, have passed laws since 1996 legalizing the use of medical marijuana for qualifying patients under state law. While state medical marijuana programs differ from one another in significant ways, most allow medical marijuana for the treatment of severe, intractable pain. Opioids remain the most commonly prescribed medicine to treat severe, chronic pain and are an important tool in the medical arsenal. However, many people do not want to take opioids given the side effects and risks associated with their use. Marijuana, effective in treating certain kinds of pain, affords new options.

## Safety and Efficacy of Medical Marijuana

Marijuana's medical safety and efficacy is well supported – particularly for the treatment of various types of severe and chronic pain.<sup>i</sup>

In February 2010, the University of California Center for Medicinal Cannabis Research released a report of its findings after a decade of randomized, double-blind, placebo-controlled clinical trials on the medical utility of inhaled marijuana. The studies concluded that marijuana should be a "first line treatment" for patients with painful neuropathy and other serious and debilitating symptoms, who often do not respond to other available medications.

Another trial assessed the use of marijuana as a treatment for patients suffering from multiple sclerosis. That study determined that "smoked marijuana was superior to placebo in reducing spasticity and pain in patients with MS, and provided some benefit beyond currently prescribed treatments."<sup>ii</sup>

This evidence is supported by previous research. A literature review of 38 studies evaluating medical

marijuana's efficacy for treating pain found that "71 percent concluded that cannabinoids had empirically demonstrable and statistically significant pain relieving effects, whereas 29 percent did not." The review found that marijuana may be helpful for difficult to treat pain conditions such as HIV neuropathy. And, that for some conditions, marijuana was the only treatment that provided relief. More recently, a 2015 meta-analysis of 79 studies found a 30 percent or greater reduction of pain with the use of cannabinoids compared to placebos.<sup>iii</sup> A third authoritative review article summarizing the state of the research found that smoked marijuana reduces symptoms of chronic/neuropathic pain, spasticity associated with multiple sclerosis, and other conditions – and does so with an acceptable safety profile.

Despite the growing evidence, many doctors are still wary of recommending marijuana as an alternative to opiate based therapies. It is recommended that doctors be allowed to weigh the benefits against risks of medical marijuana therapy – just as they do with any other medicine. Authors of the research suggest that this hesitation is related to the Schedule I status of marijuana, saying, "The classification of marijuana as a Schedule I drug as well as the continuing controversy as to whether or not marijuana is of medical value are obstacles to medical progress in this area."

## Opiate Overdose in the United States

Accidental overdose deaths are now the leading cause of accidental death in the United States, exceeding even motor vehicle accidents among people ages 25 to 64. In 2014, there were 14,000 overdose deaths due to opiates in the United States with about 78 people impacted per day. The United States holds about 25% of the world's population but ingests 99% of the world's hydrcodone.<sup>iv</sup> With several high profile deaths

recently stemming from accidental opiate overdose, the conversation has shifted to alternative treatments not only for the condition for which pain medication is needed, but to help those dependent on pain medication reduce or eliminate their use. Research has suggested that some medical marijuana patients are looking to marijuana as a safer alternative.<sup>v</sup>

### Medical Marijuana & Prescription Opioids

Not only is medical marijuana effective for treating chronic and intractable pain, but inhaled marijuana has also been found to complement prescription opioid pain medicines well, enhancing the efficacy of (and safely interacting with) these more powerful narcotic medications and easing withdrawal symptoms.

Used in combination with opioid pain medications, marijuana can lower opioid side-effects, cravings and withdrawal severity as well as enhance the analgesic effects of opioids, thereby allowing for lower doses and less risk of overdose.<sup>vi,vii</sup> An important recent study reported that their subjects' pain "was significantly decreased after the addition of vaporized marijuana", and suggested that marijuana treatment "may allow for opioid treatment at lower doses with fewer [patient] side effects." The authors concluded that their results "demonstrate that inhaled marijuana safely augments the analgesic effects of opioids."<sup>viii</sup> Research published last year found 80 percent of medical marijuana users reported substituting marijuana for prescribed medications, particularly among patients with pain-related conditions.<sup>ix</sup>

How has access to medical marijuana impacted the use of opiates? A 2014 study published in the *Journal of the American Medical Association* found that states with medical marijuana laws are associated with a significant reduction in mortality from opioid abuse; these states saw a 25 percent reduction in opioid overdose deaths, compared to states without such laws, resulting in 1,700 fewer deaths in 2010 alone.<sup>x</sup> Another working paper from the RAND BING Center for Health Economics notes that "states permitting medical marijuana dispensaries experienced a 15 to 35 percent decrease in substance abuse admissions and opiate overdose deaths."<sup>xi</sup> Similarly, another recent report by Castlight Health, an employee health benefits platform provider, found almost double the rate of opioid abuse in states that did not permit access to medical marijuana. Specifically, in those states, 5.4

percent of individuals with an opioid prescription qualified as abusers of the drug, whereas only half or 2.8 percent of individuals with an opioid prescription living in medical marijuana states qualified as opioid abusers.<sup>xii</sup>

Elected officials, including Senator Elizabeth Warren<sup>xiii</sup> and Congressman Earl Blumenauer<sup>xiv</sup>, have recently expressed their support for the use of medical marijuana to treat chronic pain as a way to help address the opioid crisis. Given medical marijuana's pain-relieving benefits, it presents a promising solution to reducing the morbidity and mortality associated with prescription opioid use in the United States.

### Policy Implications

There are several policy changes at the state and Federal level that can support the use of marijuana in conjunction with opiate therapy. First, states with medical marijuana laws can ensure that opiate dependence is a qualifying condition for becoming a patient. This would allow doctors to recommend marijuana for patients who are or are at risk of becoming dependent on opiate pain medication. Secondly, the Schedule I status of marijuana should be lifted so that more rigorous research can be done and doctors can more freely learn about and recommend marijuana for their pain patients. Finally, marijuana should be viewed as a viable treatment alternative for pain by the insurance companies and should be utilized in substance dependence treatment to assist those experiencing withdrawals from opiates or other substances.

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<sup>i</sup> Ware, M.A., Doyle, C.R., Woods, R., Lynch, M.E., Clark, A.J. (2003). Marijuana use for chronic non-cancer pain: results of a prospective survey. *Pain*, 102(1-2):211-6.

<sup>ii</sup> Jody Corey-Bloom et al., "Smoked Marijuana for Spasticity in Multiple Sclerosis: A Randomized, Placebo-Controlled Trial," *Canadian Medical Association Journal* 184, no. 10 (2012).

<sup>iii</sup> Whiting, P. F., Wolff, R. F., Deshpande, S., Di Nisio, M., Duffy, S., Hernandez, A. V., & Schmidtkofer, S. (2015). Cannabinoids for medical use: a systematic review and meta-analysis. *Jama*, 313(24), 2456-2473.

<sup>iv</sup> Centers for Disease Control and Prevention, "Injury Prevention and Control: Opioid Overdose". Available at: <http://www.cdc.gov/drugoverdose/data/overdose.html>

<sup>v</sup> Harm Reduction Journal, "Cannabis as a substitute for other drugs". Available at: <https://harmreductionjournal.biomedcentral.com/articles/10.1186/1477-7517-6-35>

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- <sup>viii</sup> D I Abrams, et al. "Cannabinoid-Opioid interaction in chronic pain," *Clinical Pharmacology & Therapeutics* (2011); 90 6, 844–851.
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- <sup>xi</sup> Powell, D., Pacula, R. L., & Jacobson, M. (2015). Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers? (No. w21345). National Bureau of Economic Research.
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- <sup>xiv</sup> C-SPAN. (2016, February 24). Blumenauer on Opioid Abuse Epidemic. [Video File]. Retrieved from: <http://www.c-span.org/video/?c4582196/blumenauer-opioid-abuse-epidemic>