

Medical marijuana and the risk of painkiller overdose

By Keith Humphreys

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After a study published this fall showed that that opioid overdoses (e.g., with painkillers such as Oxycontin) occur at lower rates in states with legalized medical marijuana, many people interpreted the results as proof that using medical marijuana lowers an individual's risk of overdose. For example, some speculated that marijuana allows people in pain to forgo using opioids or at least use them in lower doses. Other suggested that medical marijuana reduces users' consumption of alcohol and anti-anxiety medications, both of which make opioid use more likely to lead to overdose. Still others hypothesized that medical marijuana improves mental health, reducing the risk of intentional opioid overdose (i.e., suicide attempts),

However, all of this speculation was premature. Many things that are associated when geographic areas are compared are not associated in the lives of the individuals who reside in those areas. For example, geographic areas with higher rates of cigarette smoking and higher radon exposure have lower cancer rates, even though individuals who smoke and/or get exposed to radon have higher rather than lower risk of cancer.

The only way to understand the influence of medical marijuana on individuals' risk of opioid overdose is to actually research individuals, and that is what an Australian team has done. In a recently published study of more than 1,500 people who were on prescribed opioids for pain, they examined experiences with medical marijuana.

Seeking pain relief from medical marijuana was common in the sample, with 1 in 6 participants doing so and 1 in 4 saying they would do so if they had ready access to it. The results did not support the idea that medical marijuana users are at relatively low risk of opioid overdose. Indeed, on every dimension they appeared to be at *higher* risk than those individuals who did not use medical marijuana for pain.

Specifically, relative to individuals who only used opioids for pain, the medical marijuana users were on higher doses of opioids, were more likely to take opioids in ways not recommended by their doctor, were over twice as likely to have an alcohol use disorder and four times as likely to have a heroin use disorder. Medical marijuana users were also over 50 percent more likely to be taking anti-anxiety medications (benzodiazepines), which when combined with opioids are particularly likely to cause an overdose.

Neither did the medical marijuana users have better mental health. Almost two-thirds were depressed and about 30 percent had an anxiety disorder. These rates were half again as high as those for non-medical marijuana users.

Medical marijuana thus appears to be commonly sought for pain relief among people who are taking prescribed opioids for pain. But in this population, it's a marker for much higher rather than lower risk for opioid overdose.

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