

Study: Cannabis-related hospital visits on the rise, linked to mental health disorders

ASU psychologist talks about the research and its implications

By Joe Rojas-Burke, ASU News

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The rate of cannabis-related hospital visits in Arizona rose by 20% between 2016 and 2021. In an increasing share of those visits, the patient was diagnosed with a mental health condition, Arizona State University Associate Professor of psychology [Madeline Meier](#) has found in a new study.

Cannabis-related visits were nearly eight times as likely as visits unrelated to cannabis to have a mental health condition as the primary diagnosis, Meier and co-authors reported in the [Journal of Studies on Alcohol and Drugs](#).

The association between cannabis-related visits and mental health diagnoses increased each year, most prominently among people age 65 or older.

ASU News talked with Meier about the research and its implications.

Question: Is it possible to explain why these visits are becoming more common? Is it related to legalization?

Answer: In Arizona, legalization of non-medical cannabis didn't happen until late 2020, with sales starting in dispensaries in 2021. Our study covers a period earlier than that, so we can say without a doubt that the increase in these visits was not caused by recreational legalization. It's possible that medical use contributed to the trends we observed, but we can't say for sure.

Q: The link between the cannabis-related hospital visits and mental health diagnoses grew stronger over the five-year study period. Do you know what is driving this, or why the

trends are more pronounced among older adults?

A: Our study doesn't address mechanisms. It was observational; it documents the correlation and its increase but can't address why. The increasing potency of cannabis might be a factor. The concentration of THC, the psychoactive constituent of cannabis, has increased a lot. In the 1990s, the THC concentration of cannabis products was about 4%, and today the average THC concentration of cannabis products in dispensaries across the country is about 20%, and you can find products called concentrates that contain upwards of 80% or 90% THC.

Another possibility is that an increasing number of people with mental health problems are turning to cannabis thinking it might be useful for treating anxiety or treating depression. It may be the case that more people are doing that. We know that depression and anxiety are among the top three reasons that people give for using medical marijuana.

Q: How pronounced is the problem among retirement-age people?

A: It's important to point out that the rate of cannabis-related hospital visits remains much higher among younger adults than those age 65 and older. For 10- to 17-year-olds, the rate is more than 2,400 per 100,000 hospital visits, compared with 435 per 100,000 visits for those 65 and older. But older adults are showing the steepest increase in cannabis-related hospital visits and increase in the risk of a primary diagnosis of a mental health condition, given a cannabis-related hospital visit.

Q: What are the implications for people who use cannabis? Any words of advice for them or for health care providers?

A: I think that health care providers have an opportunity, if they find out a person is using cannabis, to educate them that the THC content has increased a lot in recent years. I think that we have to warn people that this more potent cannabis could potentially be associated with more acute harms as well as potentially longer-term mental health risks.

We have to educate people, also, that even though many states list mental health disorders among the qualifying conditions for medical cannabis, studies have not been done that show it's beneficial for mental health. In fact, existing studies have found that if you quit using cannabis, your mental health will improve. Physicians should probably know that, and we need to do a better job getting that message out.

This story originally appeared on [ASU News](#).

Main image



Madeline Meier is an associate professor of psychology at Arizona State University. A new study by Meier and co-authors found that cannabis-related hospital visits were nearly eight times as likely as visits unrelated to cannabis to have a mental health condition as the primary diagnosis. Photo by Charlie Leight/ASU News