

DOYOU HOW DO PHYSICIANS AND PATIENTS NAVIGATE THE USE OF MEDICAL MARIJUANA? [NAVIGATE THE USE OF MEDICAL MARIJUANA]

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"I have medical marijuana on me right now."

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resolve Crisis Services in Point Breeze and utter any of these statements to medical director John Rozel, it would create a complicated situation—one Rozel is still trying to figure out three years after Governor Tom Wolf legalized medical marijuana in Pennsylvania.

Rozel, an associate professor of psychiatry at Pitt, notes that it gets tricky for clinics to draft policies when medical marijuana is still banned by federal law. For example, resolve Crisis Services urges patients to bring their medication to visits because the facility doesn't have a large formulary. If a patient were to reveal a bag of marijuana to Rozel, should he inspect the packaging to make sure it was bought at a dispensary? What if a patient has a medical history that would justify having medical marijuana under Pennsylvania law but is carrying the drug in a sandwich bag, as though it was bought off the street? Should Rozel request to see the patient's medical marijuana certification? And if the patient has that, should Rozel question where the marijuana in the unmarked bag was purchased? Rozel says he would need to handle these situations in a way that respects the clinical needs of the patient, as well as the liability needs of resolve.

Cost is another issue, says Rozel. To receive a medical marijuana certification, most patients have to see a specialist who will recommend using the drug. Will insurance cover that visit?

Probably not, according to Rozel. That outof-pocket charge is followed by a \$50 bill for
the state's certification card. After that, it's off
to a dispensary, where the price of medical
marijuana is significantly higher than on the
street. When the Commonwealth first legalized
medical marijuana in 2016, the drug was
only sold in heavily processed forms, like pills,
tinctures, and vaporizable concentrates. Last
year, selling dry-leaf marijuana for medicinal
purposes became legal in Pennsylvania. Dry-leaf
is cheaper than other forms, but smoking the
drug, which is a fast and easy way to feel its
effects, remains prohibited.

Medical marijuana creates other issues for practice. We spoke to Rozel and Jessica Merlin, an MD/PhD and associate professor who specializes in chronic pain and addiction, to hash out the dilemmas doctors and patients face.

What do we know about medical marijuana?

MERLIN: The evidence base is really limited. When I tell patients this, they're surprised because there's so much about medical marijuana in the media. On its Web site, the Pennsylvania Department of Health has a list of the conditions for which somebody can be certified to receive medical marijuana. The list includes cancer, chronic pain, spasticity, ALS, and Parkinson's, and it is not based on medical evidence or science. It was developed by legislators with some influence from the medical

field. There's a case for chronic pain, and you'll hear anecdotes about people with PTSD being really helped by medical marijuana. And you know, it's not that there aren't people who can't be helped, but there really is little to no high-quality evidence.

ROZEL: When it comes to the use of medical marijuana for psychiatric illnesses, frankly, the evidence isn't fantastic. As an emergency psychiatrist, I see tons of substance use disorders, including with marijuana. So, it creates a very tricky situation. When folks say, "I need medical marijuana," or, "I use medical marijuana for *blank* psychiatric issue," I'm left scratching my head, wondering: *Is this for legitimate use, related to ongoing recreational use, or part of a substance use issue?*

Now, at the end of the day, I don't begrudge someone who has metastatic osteosarcoma with severe pain to have access to something like medical marijuana. The challenge is making sure that it's used appropriately for chronic and severe conditions, while also recognizing this: Is it really appropriate to turn to a largely untested, highly inconsistently produced substance when there are any number of evidence-based, safe, and effective interventions that are available? Have those been tried first?

Why is there a lack of evidence?

MERLIN: A couple of reasons. One is there are hundreds of chemicals in marijuana. THC and CBD, or tetrahydrocannabinol and cannabidiol, are the most commonly studied.

We think about medicine as one substance, and we can do trials of that one substance. But, it's more difficult when you're dealing with hundreds, and in addition, there are different modes of administration to take into account. People might inhale it like a cigarette, vape it, eat it in a brownie, or rub it on their skin. So, the studies that have been done are very heterogeneous in terms of the mode of delivery, and that makes them harder to interpret. Another reason studying marijuana is complex: In the United States, it's a Schedule-1 substance, which means it's hard to get. The federal government considers it to have no medical role. As a result, there are logistical barriers on doing a randomized trial. The government will only allow researchers [on federal grants] to get it from one source in Mississippi.

ROZEL: There is actually some interesting research out there looking at CBD, which is one part of medical marijuana that may be effective for some psychological disorders, including possibly schizophrenia. But we have

to figure out how to interpret that data knowing that the marijuana plant itself, often much higher in THC, can actually be a significant exacerbator, possibly even a precipitant of, a lot of these same psychological disorders.

researched, and a lot of the regulations around researching medical marijuana [make it] almost impossible to actually engage in [the research]. One of the things that was really novel and unusual about Pennsylvania's medical marijuana laws is that we created a passage to say, "Hey, look, academic medical centers should be able to do organized research around medical marijuana." Fantastic, wonderful, absolutely. We need to build the evidence base. However, then when Pitt Med and any number of other major reputable academic medical centers put their names in and said, "Hey, we want to apply for this," they were summarily rejected. It makes it really tough. At the federal level, there's a small amount of federally produced medical marijuana that can be used for research. But it's incredibly limited and, quite frankly, the word on the street is their marijuana is not so great. It's not very potent, not very effective for studying.

What are some negative side effects doctors should know about?

MERLIN: Worsening of mood symptoms. Depression, anxiety.

Marijuana is probably not as impairing as alcohol, but it is impairing and is highly associated with motor vehicle accidents. This is especially a problem because people don't necessarily think about it.

Another physical manifestation is marijuana-induced hyperemesis. A lot of people use marijuana extensively for nausea, and then they keep going to their doctor because they can't keep anything down. It can become a chicken-or-the-egg kind of thing. And it can be very hard to persuade people that their vomiting is actually from the marijuana that they're using to help with the vomiting.

ROZEL: We certainly know, clinically, lots of folks living with trauma and the symptoms of PTSD who turn to medical marijuana; and a lot of them do seem to subjectively report that this helps. They say

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CBD has promise, but it needs to be it takes the edge off their anger, the edge off the flashbacks, what have you. But, we also have some observational research that says when you look at people with PTSD who are also using marijuana, they are most likely to be physically violent. Well, that's concerning too. Now, it's a correlation, and we don't know whether or not it's causation. It could simply be a particular patient's PTSD was that bad, they'd blown through all traditional treatment interventions, had turned to medical marijuana, and were going to be violent with or without medical marijuana.

> Now, we do have really good data indicating that if someone's living with a severe mental illness—like schizophrenia or bipolar disorder with psychotic symptoms—and they use recreational marijuana, high THC marijuana, there's a significant increased risk for violence. But that's a small subset of the broad swath of people living with psychiatric illness, so there are a lot of unknowns.

How do doctors navigate this issue with patients?

MERLIN: There are a few ways. I think if clinicians are interested in this, they should call a dispensary and ask for a visit. I've done this. It was incredibly helpful. Now I know what they are likely to experience at a dispensary and whether or not it's something I'd recommend.

When you certify somebody for medical marijuana, you're saying, Yes, they have a condition that's on this list, and I think marijuana would help. So, could I say that for some patients? Sure. But the thing that I'm concerned about is what comes next. They go to the dispensary. It's not a pharmacy. Not a health-care facility. It's a business. And I've seen two people who have lost substantial amounts of money at the dispensary.

It varies by state, but to certify patients for medical marijuana in Pennsylvania, you are required to go through a course. From my experience, and from talking to my colleagues,

> the course is not scientifically rigorous. In the course I took, there was a lot of inaccurate information about the role of marijuana for treating opioid addictions. It was actually stated, "They say there's no evidence for

this." The course actually endorsed the use of marijuana as being safer than buprenorphine for the treatment of opioid use disorder, which is a very dangerous approach. I mean buprenorphine is an evidence-based treatment with lots and lots of evidence in terms of mortality and other key outcomes. And here's somebody giving a webinar to people getting certified for medical marijuana saying, "You know, marijuana is better"—despite the fact that there's absolutely no evidence.

To understand this more, clinicians should familiarize themselves with the medical literature. There are excellent conferences that focus on substance use broadly but have a lot of content about marijuana.

Anyone with a medical license can get certified. It takes almost no time at all. But if you really want to learn more about it, I recommend connecting with some of those resources to really understand the implications.

—Interview by Gavin Jenkins