Clinical Decision Making by Medical Marijuana Physicians in Florida: A Qualitative Assessment

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PRESENT STUDY

Over 450,000 people have been certified for medical marijuana for treatment in Florida by physicians. These physicians determine what products the patients can purchase and in what doses. We do not know how these physicians decide what to give each patient. The aim of the present pilot study is to understand the physicians clinical decision-making process for MMJ orders and recommendations.

BACKGROUND

- Medical marijuana (MMJ) was legalized by Amendment 2, allowing certified physicians to certify patients for MMJ if the patient had one of the state determined qualifying conditions
- As of 2020
  - 1,487 qualified physicians, created 460,469 certifications for 390,961 patients (avg 310 certifications per physician)
  - Top 9% of physicians created 61% of certifications
- Physicians required to take 2-hour course that focuses on legality and administrative tasks, not dosing and patient care
  - We do not know how physicians are deciding MMJ treatments for patients.

METHODS

Recruitment

- Emails to all major medical marijuana practices in Florida
- Snowball Sampling: Interviewed physicians were encouraged to recommend the study to colleagues
- Inclusion criteria: physicians who actively certify patients for medical marijuana in Florida

Questionnaire Design

- Interview guide was designed and revised with field experts and the Qualitative Research Colloquium.

Data Analysis

- Interviews were transcribed by a transcription service
- Transcribed interviews were organized into categories based on topic of the question and conversation using NVivo
- Interviews were coded, then codes were grouped into themes. The themes were as follows:
  - Medical History
  - Co-Medications
  - Lifestyle
  - Marijuana Experience Level
  - Counter Indications

Study Physician Population

CHARACTERISTIC	COUNT (%)
Gender	
Male	6 (60)
Female	4 (40)
Age	
30-40	3 (30)
40-50	1 (10)
50-60	3 (30)
60-70	3 (30)
Race	
White	9 (90)
Asian	1 (10)
Medical Qualification	
MD	8 (80)
DO	2 (20)
Years in Medicine	
0-10	3 (30)
11-20	2 (20)
21-30	1 (10)
31-40	4 (40)
Medical Specialty	
Pain Management	1 (10)
Internal Medicine	3 (30)
Family Practice	2 (20)
Emergency Medicine	1 (10)
Anesthesiology	2 (20)
Cardiology	1 (10)
Years as MMJ Physician	
0-2 years	3 (30)
2-3 years	2 (20)
3+ years	5 (50)
Time Commitment to MMJ	
Full Time	6 (60)
Part Time	4 (40)

RESULTS

Medical History: Dosing and Routes

- CBD: emotional and cognitive symptoms (PTSD, anxiety)
- THC: pain, movement disorders and insomnia
- Establishing a base with sublingual/oral, using vaping for rapid onset
- "Giving" refers to MMUR order and direct recommendations to patient
- "Discourage" = recommendation, but may still be ordered– patient has final decision

- "If someone has anxiety or osteoarthritis with inflammation, I'm going to counsel them on high CBD, and THC could be there for other things but not for anxiety. If they have chronic pain, opioids, or a movement disorder, a 1:1 is usually the way to go. If you need to stimulate their CNS, nausea or vomiting, increasing their appetite, then eventually more THC because that's the only thing that's going to activate those CB1 receptors." *[F, Pain Management, 3000 patients certified]*
- "With anxiety-depression, I give them oral, sublingual, topical, and max-dose flower. With chronic pain, where they can identify a specific pain site, I throw in topical methods, too… I usually discourage [lung disease] patients [from vaping]. But in the end, it's patient choice. They're the ones that can say, "Yes, I will listen to the physician," or "No. I know my own body. I will do what I want to do." *[M, Internal Medicine, 825 patients certified]*
- "Anxiety-type conditions will do better with indicas, depression with sativa. With marijuana you're going to use different things for different times of day. They'll use more THC at nighttime for sleep and higher CBD product earlier in the day for keeping their head clear, maybe a sativa." *[F, Internal Medicine, 700 patients certified]*
- "If they have pain, I use a high THC, 1:1 or 1:2. If they have cancer, I usually use indica (Rick Simpson Oil)… to calm down your body [with cancer]. And indica is more common calming than sativa. Sativa is more uplifting." *[M, Cardiology, 3000 patients certified]*

Marijuana Experience Level: Tolerance & Dosing

- Use of tolerance breaks to control total milligram usage
  - Heavy users may need more concentrates to adjust for tolerance
- Higher orders to accommodate for experimenting (trusting patients)
- Micro-dosing: separation between medical use and recreational use
- Addition of CBD

- "[I ask them] how sensitive they are to THC. If they don't know, we start from the beginning. And if they do know, then I counsel them on the facts of tolerance, taking breaks, and not relying on concentrates." *[F, Pain Management, 3000 patients certified]*
- "[Heavy Users] are more comfortable with [concentrates], especially older folks, because high-THC concentrates are the same thing as hash oil. Concentrates are better for [heavy users]. [New users] have no business going near any concentrates. Some of the biggest dispensaries push concentrates and that has created issues." *[M, Internal Medicine, 3000 patients certified]*
- "But [heavy users] needs the freedom to go to the different dispensaries to try the different products." *[M, Emergency Medicine, 5000 patients certified]*
- "I ask them what their current regimen is and most say, "I smoke a little after work and before bedtime." No one comes in and says, "Yeah, I smoke 18 times a day." I've seen people, they use tons of it and function amazingly well. I'm pretty open-minded about high dosing, even though intuitively, it seems like it shouldn't be." *[F, Internal Medicine, 700 patients certified]*

Co-Medications: Lack of Direct Interaction

- Avoiding oral (bypassing 1st pass metabolism)
  - "Encourage": recommendation based, but may still be ordered
- Interaction with primary care physician/prescribing physician
- Starting MMJ at lower doses while other medications were involved

- "Depending upon psychiatric and opiate medications, I usually start at a lower dose around 100mg because that's getting already involved in a process started by another physician." *[F, Pain Management, 3000 patients certified]*
- "If we have any concerns about polypharmacy, we encourage them to use methods that skip liver first-pass metabolism. Sublingual if they're not getting the effects they need and starting low, going slow. Low doses, even in oral methods, you're not going to have the interactions with other medications… just advising that they follow up with the [liver tests] if they're going to be doing oral methods." *[F, Family Practice, 3000 patients certified]*
- "I don't feel that there's a lot of direct interactions. I think that high amounts of CBD have more potential interactions than THC products." *[M, Family Practice, 2500 patients certified]*
- "If they're on blood thinners or seizure medicines, I recommend their physicians watch anticonvulsant levels or something like that. They might not be as effective. You need to follow your patients more closely because CBD may impact on the metabolism of some of the anticonvulsants, blood thinners and clotting factors." *[F, Anesthesiology, 500 patients certified]*

Co-Medications: Drug Weaning

- No specific drug weaning schedules, but has seen anecdotally patients successfully reduce or stop taking opioids
- Managing expectations of drug weaning through education
- Must involve primary care because MMJ dose not see patient long enough for weaning

- "I don't do anything in a strict way because I feel [patients] reject that, it'll give them anxiety and too much pressure. I give them an idea about how we could decrease [medications]. I set expectations, but I'm very lenient… I email them, they'll tell me, "Oh, I decreased my Lexapro or Ambien, what should I do now to get off the rest of it?" There's not a true right answer, but they just want some guidance because it's new for them." *[F, Pain Management, 3000 patients certified]*
- "I've seen a huge reduction in the use of opiates, benzodiazepines, narcotics in general and other medications, specifically because we know that those are so dangerous and undesirable for society and individuals." *[M, Family Practice, 2500 patients certified]*
- "They ask me, "When I should stop my Dilantin or Keppra?" and I say, "I cannot give you the answer. You have to discuss it with your neurologist because I see you every seven months, and you need to be seen every two months." I will be willing to talk to the neurologist if they have a question, but I don't have an algorithm." *[M, Cardiology, 3000 patients certified]*

Lifestyle: Responsible Use

- Up to patient to convey marijuana use to employer
- Timing of Use: CBD heavy during day, THC at night
- Concern for diversion if have children
- Important to keep away from children

- "I counsel [patients] on not using THC during the day, even if they are cannabis users. I talk to [chronic pain patients] about using CBD to take away the [THC] intoxication but still being able to use THC during the day." *[F, Pain Management, 3000 patients certified]*
- "For jobs, we make sure that they understand that in the statute it does say that it is at the employer's discretion…And I tell them, that's their responsibility to weigh those risks and benefits with their employment." *[F, Family Practice, 3000 patients certified]*
- "People who are interested and requesting this treatment have something to do during the day and are responsible, really don't want to get high during the daytime when they have to be productive, take care of their kids or drive around." *[M, Anesthesiology, 50 patients certified]*
- "There's a trade-off between decrease in psychoactivity and an increase in clarity and functionality. It is inversely proportional to pain control." *[M, Family Practice, 2500 patients certified]*
- "Patients with children are very aware of wanting to keep it separate, particularly as far as smoking flower. They don't want the smell. They don't want the kids to see it, so seem to be quite responsible about that." *[F, Internal Medicine, 700 patients certified]*

CONCLUSIONS

- Similar to traditional medicine, MMJ physicians use a combination of patient factors, including medical history, marijuana experience level, other medications they are taking and the patient's lifestyle to guide their recommendations and ordering.
  - What physicians enter into the registry ("the orders") is different from what the physician recommends the patient purchases and tries ("recommendations")
- Some physicians will have specific doses that they recommend for patients based off their characteristics, where others will recommend the same starting dose but educate differently based on the patient characteristics.
- Unlike traditional medicine, all MMJ physician interviews emphasized the importance of patient autonomy, and therefore, the importance of educating the patients.
- Limitations: small sample size, most physicians were ranked among physicians who certify the most patients by the OMMU

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