Educational efforts around medical marijuana: Thoughts to contemplate for patients and providers

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Medical marijuana is one of the hot topics of our time. Between the political battles, potential financial gain, and controversial effects on health, marijuana use is complicated by agendas, biases, and secondary gain from many parties. Sorting through the growing body of evidence can be overwhelming and confusing, often yielding conflicting conclusions and occasionally utilizing bad science. In struggling to figure out this complex issue, I began searching for a perspective that would be useful to my patients and colleagues. I wanted to keep the attention on the individuals I serve and avoid a hyper-focus on debating the evidence or being swept away by the sociopolitical whirlwind. By being helpful to patients in making a decision about their own marijuana use, the following educational points have been reinforced.

CHRONIC USE OF MARIJUANA IS ASSOCIATED WITH DEVELOPMENT OF DEPENDENCE.

With regular use, persons using cannabis will adapt such that they function more normally on cannabis. Once this occurs, they will function abnormally when you take the cannabis away. To clarify, this is often a perception of the user and not a reflection of actual function. In any case, such withdrawal symptoms tend to be the inverse of the initial effects of this substance.

Initially: Feeling "high"
Withdrawal: Depressed mood

Initially: Anxiolytic
Withdrawal: Anxiety

Initially: Sedation
Withdrawal: Sleep disruptions

Initially: Analgesia
Withdrawal: Hyperalgesia

Withdrawal symptoms will occur as the drug wears off and is cleared from the system. For chronic cannabis use, withdrawal starts within hours and lasts for weeks. Withdrawal symptoms are fully and effectively reversed by cannabis, and may drive substance-seeking behaviors. Return to use of cannabis is extremely effective and the only known treatment for cannabis withdrawal symptoms. Look for Marijuana Withdrawal Syndrome to be added to the DSM-V.

MARIJUANA IS NOT A MEDICATION.

There are no directions, listed side-effects, or quality control measures in place to regulate medical marijuana. To be approved by the U.S. Food and Drug Administration (FDA), such issues must be addressed to determine if and how a medication can be safely used. With marijuana, there is no standardized administration method which means that drug pharmacokinetic data is also variable and largely unknown. There is a lack of standardization of marijuana, as strains vary substantially in content. Levels or ratios of psychoactive compounds, with differing effects, are not consistent across strains offered by distributors. Even within strains, content can vary depending on growth conditions and time of harvest. Overall, the effects of medical marijuana are not likely to be uniform. The potency of medical marijuana will vary, and overall potency has increased substantially over the last few decades. The typical administration methods (smoking and inhalation) do not allow accurate and consistent dosing, and are further complicated by the addictive potential of marijuana. Smoking or other inhalation methods of administration increase the speed of drug uptake, spiking mesolimbic dopamine, and thereby enhancing the effects of the cannabinoids on reward processing. This increases the addictiveness of the substance. It is known that smoking marijuana is carcinogenic and causes lung damage (as does inhaling the particulate from burning most organic matter). A clinician recommending medical marijuana is recommending use of a substance with mixed and variable content at an unknown dose with potentially harmful side-effects.

MARIJUANA CAN BECOME A TROUBLING COPING STRATEGY.

Many patients have the perception that marijuana is helpful. Whether for chronic pain, PTSD, sleep, or any of the conditions that are accepted for a medical license in a given state, every patient has a different reason for using. They may go as far to say that they "need" marijuana and feel very passionately about its beneficial effects. There is truth and deceit in this perception. Cannabis is initially relaxing, even amnestic, and can remove one from the stressful feelings of daily life. However, the stress a person may be experiencing compounds as the initial euphoria wears off, as no resolution to the stress has evolved in the passing time. The origins of the stressful feelings remain. To avoid this growing sense of discomfort, some may use again. This cycle, when repeated time and time again, may result in the features of cannabis dependence described earlier.

Marijuana can become a troubling coping mechanism and resembles the coping oriented use of many other addictive substances such as opiates and benzodiazepines. Many patients who insist that only short-acting agents are tolerated and/or work often have become conditioned to the rapid-onset, rapid-offset, and euphoric effects instead of the desired clinical effect. Such patients become unable to distinguish an effect on their emotional state and mood from the desired clinical effect, and interpret a lack of euphoria as a lack of effect. Patients with this "conditioning" are more challenging to manage, and clinicians often struggle to transition them to long-acting or neuropathic agents. Smoking cannabis could certainly be classified as having a short-acting, dopaminergic effect.

Alcohol is perhaps an even more compelling comparison, especially in the context of chronic pain. Alcohol has significant dose dependent effects on pain tolerance, and a lower conditional dependence rate than marijuana.[1] The relative risk of experiencing marijuana dependence given use of the drug in the past year is estimated to be 7% among adults, which is only slightly lower than that for cocaine (12%) and greater than that observed for alcohol (5%).[2] Some chronic pain patients report supplementing their prescribed pain management plans with alcohol to cope with pain symptoms.[3] Although alcohol use is legal, well understood, and labeled for content (cannabis use is not), would any clinician recommend that their chronic pain patients use some form of alcohol in whatever amount they like to augment their pain management plan? Particularly for patients who already report frequent drinking and drinking to cope?

HOW CAN THIS INFORMATION BE USED TO HELP CREATE CHANGE?

Most people are capable of understanding what is healthy and what is not healthy. The science has been well researched and the educational efforts have been extensive. We know about the dangers of cigarettes, excessive alcohol, junk food, and illicit drugs, though people consume these things nonetheless. But why? If our logic says it is not good for us, why do people still consume these things and in excess? While this is certainly a question beyond the scope of this article, allow me to submit the following example for your consideration. Marijuana is a way of life for many chronic users, whether they have a license or not. Users can be intoxicated, on the scale of years, with very few immediate adverse physical consequences. But the psychological effects in that same period can be profound. Marijuana may be a coping strategy that has been reinforced for a very long time, potentially displacing the ability to sit with uncomfortable feelings. Imagine giving that up! These folks may not only be dependent on cannabis, but may experience significant cannabis withdrawal upon discontinuation. So what do we offer them? Various modalities of psychotherapy seem promising and some medications may mitigate withdrawal symptoms, but more research is needed. But for now, be aware of your judgments, listen, and try to create a safe space where your patients can develop insight around why they use marijuana. There is usually more to it than the box checked on a medical license request form.

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