Physicians as Gatekeepers in the Use of Medical Marijuana

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In recent years, the question to many physicians around the United States has morphed from, "How about some Viagra, doc?" to, "How about some medical marijuana, doc?" California exemplifies the bookends of the medical marijuana/legalization movement. The movement's major victory was in November of 1996, when Proposition 215, the Compassionate Use Act, was voted into law,[1] creating a process by which physicians could recommend the use of marijuana for various serious conditions. The Compassionate Use Act was championed as an act of mercy for citizens with chronic serious illnesses that did not respond to conventional medical treatments. The legislation received wide support and has been a model for other states to follow, including 16 states and the District of Colombia. The California law gives physicians the discretion to recommend marijuana for certain listed medical conditions. In addition to those, California physicians may also recommend marijuana for any other conditions that, in their clinical judgment, warrant marijuana use.[2] This methodology places doctors in the gatekeeper role of conferring their blessing on the use of a gateway drug for medical purposes. Law enforcement is often confused when asked to differentiate between criminal laws for marijuana cultivation and the exceptions outlined in the Compassionate Use Act. Attempts to clarify legal issues raised by the Compassionate Use Act have led to court battles that were decided in the highest court in the land. However, the holding by the Supreme Court in *Gonzales v. Raich*[3] did little to resolve the legal uncertainties associated with medical marijuana.

There are compelling arguments both for and against the use of medical cannabis. Those who support its medical use argue that marijuana can be an effective medication to reduce suffering for patients who have exhausted all other means of treating a condition. Those who argue against the medical use of marijuana cite the lack of data on its safety and efficacy, an ever-expanding list of conditions that the drug is purported to treat, and fear that recommendations for medical marijuana are a physician's blessing for drug abuse. Medical organizations have argued for caution due to both the absence of standardization and the lack of research supporting the use of marijuana for various conditions.[4]

Clinical Concerns Surrounding Medical Marijuana Laws

The upregulation or downregulation of various components of the endocannabinoid system may have great promise for future medical treatments once adequately studied. Anti-nausea effects are well documented and are widely used by cancer and HIV patients when standard anti-emetics fail. Various forms of synthetic tetrahydrocannabinol (THC) and other compounds have been rigorously studied and have undergone U.S Food and Drug Administration (FDA) approval, starting with dronabinol in 1985. This medication has been shown to be effective in the treatment of nausea and vomiting associated with chemotherapy and reduces anorexia and weight loss in AIDS and cancer patients.[5] Synthetic cannabinoid analogs such as nabilone and standardized cannabis extracts including nabiximols have been tested. Case reports and studies offer some support for cannabis

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use in conditions including anorexia, nausea, chronic pain, trichotillomania, spasticity, and seizure disorders.[6–8] However, many studies have produced mixed results or no therapeutic benefit for the treatment of other medical conditions.[9,10] Cannabinoids appear to have some clinical utility in the reduction of intraocular pressure in glaucoma. However, when marijuana is smoked for this purpose, patients must use large quantities of cannabis, and treatment benefits are frequently offset by the toxic effects of the drug.[11]

The benefits of cannabis use are often uncertain, and the risks are difficult to assess. Predictable side effects of marijuana use include impaired judgment, cognitive impairment, impaired driving ability, hallucinations, early onset of psychosis in certain individuals, memory impairment, worsening of mood and anxiety disorders, and the risk of dependence.[12–15] Individuals with major mental illnesses are especially vulnerable to the deleterious effects of cannabis.[16] Smoking marijuana includes risks of rapid onset of intoxication as well as exposure to a variety of toxic and carcinogenic combustible products.[17] Vaporization reduces exposure to some potential toxins such as carbon monoxide, but is unable to remove aluminum, ammonia, acetaldehyde, and other substances.[18]

Marijuana varies widely in quality and concentration. The ratio of tetrahydrocannabinol (THC) to cannabidiol (CBD) is not consistent. While CBD has important analgesic, anticonvulsant, and neuroprotective qualities, it has been selectively bred out of marijuana over the years because it does not produce intoxication. The resulting high levels of THC combined with the lack of CBD may have adverse effects for the chronic user.[19]

Quality control is an additional concern. Marijuana may be adulterated with other compounds and may be contaminated with aflatoxins or microbes.[20] In some cases, it has been found to contain pesticides or heavy metals.[21]

Finally, there is no aftermarket surveillance and reporting of the adverse events of cannabis to a central agency. Given the uncertainty associated with composition, dosage, and presence of contaminants, it is hard to determine whether any side effects reported by a patient are from the marijuana, contaminants in the marijuana, or interactions between conventional medications and marijuana.

Providing informed consent regarding the risks and benefits of medical marijuana is rarely possible. Theoretically, a physician could recommend and prescribe standardized and tested THC preparations or synthetic cannabinoids for conditions in an informed manner. However, this is not possible when recommending the use of medical marijuana purchased at a dispensary or on the street. These concerns, combined with the lack of information about quality, purity, and potential contaminants, make an assessment of the risks of medical marijuana extremely difficult if not impossible. While it can be argued that a standardized system of medical cannabis would alleviate some of these problems, such a system has been tried and has largely failed in Canada. Health Canada provides marijuana with standardized THC content that is subject to rigid quality control. Fewer than 14% of medical cannabis users in Canada obtain their drug through Health Canada, preferring to purchase it from so-called compassion clubs and illicit suppliers.[22] From a professional liability standpoint, recommending medical marijuana is not unlike advising a patient to "go buy some pain pills somewhere."

Legal Issues Surrounding Medical Marijuana Laws

The possession, manufacture, and distribution of marijuana are prohibited by the Federal Controlled Substances Act of 1970.[23] Proponents of the legalization of marijuana have argued that it is a relatively benign and commonly used drug for which rigorous prosecution makes poor economic sense. The legalization movement has not been successful in its attempts to change federal law. It has been far more successful at the state level, particularly in advocating for the legalization of marijuana for medical purposes.

The medical marijuana movement is a classic example of popular opinion driving medicine. The compassionate use acts were written to usurp the law by placing physicians in a gatekeeper function. The process was supported by testimonials from physicians who were often chronic medical marijuana users themselves. The physicians who participate in recommending medical marijuana are immune from prosecution under the act.

The State of California passed the first medical marijuana law in 1996 through the state initiative process. California's Compassionate Use Act pro-

vides that seriously ill Californians have the right to obtain and use marijuana for medical purposes when the drug is recommended by a physician. Patients, growers, and caregivers are exempt from prosecution under California's laws. Sixteen states and the District of Columbia have followed suit. These laws allow the patient the right to the personal, medical use of marijuana as an affirmative defense against prosecution under state laws pertaining to cannabis.

State laws conflict with the federal Controlled Substances Act, which classifies marijuana as a Schedule I drug. At times, federal authorities have threatened providers with prosecution, the revocation of Drug Enforcement Administration (DEA) licenses, and exclusion from federally funded health care programs such as Medicare and Medicaid. The Obama Administration has adopted a somewhat more permissive approach and has instructed federal authorities not to focus on the prosecution of patients and providers.[24]

Several legal cases have challenged the right of the federal government to prohibit the use of marijuana for medical purposes. The most notable one is *Gonzales v. Raich* which was ultimately decided by the United States Supreme Court.[3] Angel Raich had an inoperable brain tumor and was cultivating marijuana to treat her condition. She argued that the federal Controlled Substances Act was unconstitutional with regard to persons who cultivated and used cannabis to alleviate individual suffering. The district court denied Raich's motion for a preliminary injunction, stating that she had not met the burden of likelihood of success on the merits. The Ninth Circuit Court of Appeals reversed the district court's decision and made a distinction between the federal government's regulation of drug activity and the use of marijuana for medical purposes. The Ninth Circuit opined that the Controlled Substances Act was unconstitutional as it applied to Raich's use of marijuana for medical purposes. The U.S. Supreme Court disagreed and held that the federal Commerce Clause gives Congress the power to prohibit the cultivation and use of marijuana.

The *Raich* decision did little to rectify the conflict between federal drug laws and state medical marijuana laws. After the decision was announced, federal agents raided several marijuana dispensaries in California and charged numerous individuals with drug smuggling. Several attorneys general in states that authorize the use of medical marijuana responded by asserting that medical marijuana remained legal in their states, regardless of the Court's ruling.[25] Despite the reportedly more permissive stance of the Obama Administration on prosecution of medical marijuana, there have been numerous raids on marijuana dispensaries within the past year.[26] Washington Governor Gregoire cited the risk of federal prosecution of state officials managing the state medical marijuana programs as a reason for vetoing the State Legislature's latest effort to regulate medical marijuana.[27]

The Slippery Slope of the Evolving List of Medical Conditions

The number of illnesses that cannabis purports to treat continues to proliferate. Various websites describe marijuana as a treatment for cancer, HIV, autism, attention deficit disorder, arthritis, anxiety, insomnia, muscle spasms, headaches, menstrual symptoms, depression, epilepsy, and gliomas, among others.[28] Some authors have made the questionable claim that clinical endocannabinoid deficiency is responsible for a variety of conditions, including migraines, fibromyalgia, and irritable bowel syndrome.[29] These individuals hypothesize that patients with a heterogeneous group of disorders are unified by the fact that they do not smoke enough marijuana. Unfortunately, the use of cannabis as a cure for any imaginable ailment has increasingly become the norm in California and other states where medical marijuana can be recommended "for any other illness for which marijuana provides relief."[2]

Some states, including Washington, have more restrictions on the conditions for which medical marijuana can be used. In reality, this limitation has proven to be an insignificant one to obtaining medical cannabis. From the perspective of the co-author, who has conducted thousands of psychiatric evaluations in the Evergreen State, marijuana is commonly recommended to individuals with depression, anxiety disorders, character disorders, and substance abuse problems. During the course of a typical day of psychiatric evaluations for Social Security Disability, it is not uncommon for every examinee to have a medical marijuana card or so called green card; and the data support this observation. Studies have revealed that a large percentage of individuals seeking marijuana do so for the treatment of anxiety, depression, and other psychiatric conditions. In many cases, individuals seeking medical marijuana have a

history of alcohol and drug abuse since adolescence and continue to use illicit substances.[30]

Physician tolerance of the use of medical marijuana among patients with substance abuse problems is a serious concern. Teenagers frequently obtain medical marijuana for purposes of treating psychiatric problems commonly associated with adolescence.[31] The fact that teenagers can smoke marijuana (because it is medicine) complicates substance abuse treatment in this vulnerable population. The use of marijuana is also tolerated in some methadone programs. While patients are subject to drug screening and are found to be noncompliant if using alcohol or even prescribed benzodiazepines, medical marijuana is acceptable. The co-author has evaluated patients who presented to the clinic too intoxicated on medical marijuana to engage in meaningful treatment.

The commercialization of medical marijuana recommendations is rapidly expanding. Numerous web portals advertise directly to the consumer and help the consumer to contact marijuana doctors (e.g., www.marijuanadoctors.com), who, for a fee, will make the necessary recommendations for the patient to obtain a medical evaluation. The co-author has frequently asked his patients how they obtained a green card. A common scenario involves a brief history and cursory examination that may include only vital signs, along with filling out some forms and payment of fees. While there are undoubtedly practitioners who perform adequate assessments in good faith, there are others who essentially sell protection from arrest and facilitate drug use in an at-risk population.

Conclusions

Promoting medical marijuana for questionable indications as a means of legalizing the drug is unfortunate but should not obscure the potential for legitimate uses of cannabis or its active ingredients to alleviate suffering. Present medical uses of THC derivatives have been useful in patients with HIV and cancer where anorexia, nausea, and vomiting can be life-threatening conditions. Conversely, the use of cannabis for conditions where there is little research to support its efficacy, such as in psychiatric conditions, should be strongly discouraged. Further research is needed on the administration, dosage, and predictable treatment response for many disorders.

Placing individual physicians in the position of gatekeeper in the dispensing of medical marijuana is likely to result in an ever-expanding list of unsupported indications for the drug, the proliferation of dispensaries, and many of the same problems encountered with so called pain medicine clinics. The 2010 American Society of Addiction Medicine (ASAM) position paper on the use of medical marijuana notes that: "Without exception, all of the state laws make physicians the 'gatekeepers,' that is, a patient cannot qualify to use cannabis for medical purposes unless a physician has, 'recommended' the use of cannabis for that person." The physician-as-gatekeeper model has expanded to many states, despite the fact that marijuana remains a Schedule I substance, which a physician cannot prescribe and a pharmacy cannot dispense under federal law. Furthermore, it is difficult for a doctor or patient to assess the risks and benefits of treating many conditions with marijuana.[32]

The evolution of the medical marijuana controversy is likely to continue as research progresses and more data become available. As forensic psychiatrists, we will surely be asked to opine on various aspects of addiction, dependence, abuse, and standards of practice as the cannabis saga continues. In an ironic turnabout, in 2010, 15 years after the enactment of California's Compassionate Use Act, Californians voted against legalization of marijuana for all citizens of the state. Some of the most vehement opponents to the proposed legalization of cannabis were the medical marijuana growers themselves.[33]

References

1. California Health and Safety Code § 11362.5 (1996)
2. California Health and Safety Code § 11362.5(A) (1996)
3. *Gonzales v. Raich*, 545 U.S. 1 (2005)
4. American Society of Addiction Medicine: The Role of the Physician in "Medical" Marijuana. Bethesda, MD: ASAM, September 2010
5. Meiri E, Jhangiani H, Vredenburgh JJ, *et al*: Dronabinol treatment of delayed chemotherapy-induced nausea and vomiting (CINV). J Clin Oncol 23:8018, 2005
6. Lynch ME, Campbell F: Cannabinoids for treatment of chronic non-cancer pain: a systematic review of randomized trials. Br J Clin Pharmacol 72:734–44, 2011
7. Grant JE, Odlaug BL, Chamberlin SR, *et al*: Dronabinol, a cannabinoid agonist, reduces trichotillomania: a pilot study. Psychopharmacology (Berl), in press
8. Sastre-Garriga J, Vila C, Clissold S, *et al*: THC and CBD oromucosal spray in the management of spasticity associated with multiple sclerosis. Expert Rev Neurother 11:627–37, 2011
9. Strasser F, Luftner D, Possinger K, *et al*: Comparison of orally administered cannabis extract and delta-9 tetrahydrocannabinol in treating patients with cancer-related anorexia-cachexia syndrome: a multicenter, phase III randomized double blind-pla-

cebo, controlled clinical trial from the Cannabis-In-Cachexia-Study Group. J Clin Oncol 24:3394–400, 2006
10. Buggy DJ, Toogood L, Maric S, *et al*: Lack of analgesic efficacy of oral delta-9-tetrahydrocannabinol in postoperative pain. Pain 106:169–72, 2003
11. Green K: Marijuana smoking vs. cannabinoids for glaucoma therapy. Arch Ophthalmol 116:1433–7, 1998
12. Wang T, Collet JP, Shapiro S, *et al*: Adverse effects of medical cannabinoids: a systematic review. CMAJ 178:1669–78, 2008
13. Schweinsburg AD, Brown SA, Tapert SF: The influence of marijuana use on neurocognitive functioning in adolescents. Curr Drug Abuse Rev 1:99–111, 2008
14. Joy JE, Watson SJ, Benson JA, eds: Marijuana and Medicine: Assessing the Science Base. Washington, DC: National Academy Press, 1999
15. Peralta V, Cuesta MJ: Influence of cannabis abuse on schizophrenic psychopathology. Acta Scand Psychiatr 85:127–30, 1992
16. Jons A: Psychiatric effects of cannabis. Br J Psychiatry 178:116–22, 2001
17. Wu TC, Tashkin DP, Djahed B, *et al*: Pulmonary hazards of smoking marijuana as compared with tobacco. N Engl J Med 318:347–51, 1988
18. Bloor RN, Wang TS, Spanel P, *et al*: Ammonia release from heated 'street' cannabis leaf and its potential toxic effects on cannabis users. Addiction 103:1671–7, 2008
19. Di Forti M, Morgan C, Dazzan P, *et al*: High-potency cannabis and the risk of psychosis. Br J Psychiatry 195:488–91, 2009
20. McPartland JM. Contaminants and adulterants in herbal cannabis, in Cannabis and Cannabinoids: Pharmacology, Toxicology and Therapeutic Potential. New York: Hayworth Press, 2002
21. Judge orders Eagle Rock dispensary to stop selling medical marijuana. Los Angeles Times. January 30, 2010. Available at www.latimesblogs.latimes.com/lanow/2010/01/judge-orders-eagle-rock-dispensary-to-stop-selling-medical-marijuana.html. Accessed September 7, 2011
22. Belle-Isle L, Hathaway A: Barriers to access to medical cannabis for Canadians living with HIV/AIDS. AIDS Care 19:500–6, 2007
23. 21 U.S. Code § 13 (2010)
24. American Society of Addiction Medicine. The Role of the Physician in "Medical" Marijuana. Bethesda, MD: ASAM, September 16, 2010
25. Okie S: Medical marijuana and the Supreme Court. N Engl J Med 353:648–51, 2005
26. Johnson G: Agents raid Wash. medical marijuana dispensaries. Seattle Times. April 28, 2011. Available at http://www.seattletimes.com. Accessed September 7, 2011
27. Veto message by Governor Gregoire dated April 29, 2011 regarding an act relating to medical use of cannabis. Available at http://www.governor.wa.gov/billaction/2011/veto/5073.pdf. Accessed September 8, 2011
28. http://www.letfreedomgrow.com/. Arch Cape, OR: American Alliance for Medical Cannabis. Accessed September 8, 2011
29. Russo EB: Clinical endocannabinoid deficiency (CECD): can this concept explain therapeutic benefits of cannabis in migraine, fibromyalgia, irritable bowel syndrome and other treatment resistant conditions? Neuro Endocrinol Lett 29:192–200, 2008
30. O'Connell TJ, Bou-Matar CB: Long term marijuana users seeking medical cannabis in California (2001–2007): demographics, social characteristics, patterns of cannabis and other drug use of 4117 applicants. Harm Red J 4:16, 2007
31. Thurstone C, Lieberman SA, Schmiege SJ: Medical marijuana diversion and associated problems in adolescent substance treatment. Drug Alcohol Depend 118:489–92, 2011
32. American Society of Addiction Medicine. The Role of the Physician in "Medical" Marijuana. Bethesda, MD: ASAM, September 4–5, 2010
33. Study: marijuana prices to crater if legalized. Cannabis News. Available at http://www.cannabisnews.org/united-states-cannabis-news/study-marijuana-prices-to-crater-if-legalized/. Accessed September 8, 2011