

Researching Marijuana's Medical Potential Responsibly:

A Six Point Plan

What is marijuana?

Marijuana is a plant with hundreds of components. Some of those components are called cannabinoids, and affect the brain in different ways. CBD (cannabidiol) and THC (tetrahydrocannabinol) are two cannabinoids produced by the cannabis (marijuana) plant. Unlike THC, CBD does not have psychoactivity and does not produce a state of intoxication. CBD has been bred out of modern recreational cannabis, but there has been recent interest in its therapeutic potential.

Is marijuana medicine?

Unfortunately, the issue of marijuana as medicine is highly politicized. In the early 1980s, THC was synthesized into a pill form (Marinol) and there has long been interest in the medical potential of marijuana and its components. In 1999, the Institute of Medicine undertook the most exhaustive review of marijuana's medical potential to date, concluding that smoked marijuana was unlikely the way of the future regarding medical potential, but that components of marijuana indeed held promise. Since then, there has been interest in how different cannabinoids work together, not only in isolation.

There are currently two FDA-approved medications based on marijuana (Marinol and Cesamet). These are both based off of THC. Other potential medications, based on complex plant extracts or purified CBD, are currently undergoing FDA investigation.

How do medical marijuana programs work?

absence of the medication development. legalization advocates have waged political campaigns to deem marijuana as medicine in various states. Some states have small, highly regulated regimes for a limited number of very sick individuals. But the vast majority of medical marijuana users in the US are not seriously ill. Most studies have found less than 5% of people with cards have cancer, AIDS, MS, or other serious illnesses.1



What is the legal status of marijuana?

Marijuana is a Schedule I substance under the federal Controlled Substances Act (CSA). The FDA has recently confirmed that CBD is, indeed, also a Schedule I substance.

Why not just reschedule marijuana or get it out of the Food, Drug, and Cosmetic Act?

Neither of those proposed solutions would solve the problem of the need for more research, and instead would illegal likely encourage operators to continue manufacture inferior products. Rescheduling is a red herring in this discussion since many better options exist to expedite research. Rescheduling would effect have any not specific marijuana penalties and would not permit doctors to prescribe it.2

What can be done to facilitate research on marijuana's medical potential?

RECOMMENDATION: ALLOW DEA/NIDA TO ISSUE MULTIPLE AUTHORIZATIONS FOR GROWING MARIJUANA FOR RESEARCH PURPOSES

RECOMMENDATION: WAIVE DEA REGISTRATION REQUIREMENTS FOR RESEARCHING/HANDLING PROPERLY TESTED CBD PRODUCTS

RECOMMENDATION: ELIMINATE THE PUBLIC HEALTH SERVICE (PHS) REVIEW FOR MARIJUANA RESEARCH APPLICATIONS

RECOMMENDATION: ESTABLISH COMPASSIONATE RESEARCH PROGRAMS FOR THE SERIOUSLY ILL

RECOMMENDATION: BEGIN FEDERAL-STATE
PARTNERSHIPS TO ALLOW A PURE CBD PRODUCT
TO BE DISPENSED/EXPLORED FOR US BY BOARDCERTIFIED NEUROLOGISTS AND/OR
EPILEPTOLOGISTS TO APPROPRIATE PATIENTS AS
PART OF A RESEARCH PROGRAM

RECOMMENDATION: SHUT DOWN ROGUE
"MEDICAL MARIJUANA" COMPANIES THAT DO NOT
PLAY BY THE RULES

ALLOW DEA/NIDA TO ISSUE MULTIPLE AUTHORIZATIONS FOR GROWING MARIJUANA FOR RESEARCH PURPOSES

Under international agreements, the US (NIDA – the National Institute on Drug Abuse) is the sole source for research marijuana, which NIDA procures by contract from the University of Mississippi. According to NIDA, demand for marijuana for research purposes is "generally low at this time." Still, multiple states have set up their own marijuana grow operations because of a purported need for marijuana rich in certain components, like CBD. Though the University of Mississippi is now growing marijuana rich in CBD, it is not unreasonable for other NIDA-approved sites to be able to grow different strains of marijuana. Therefore, we endorse the idea of NIDA (or other NIH-entities) to be able to grant multiple contracts for research purposes under strict supervision, in coordination with DEA.

WAIVE DEA REGISTRATION REQUIREMENTS FOR CBD RESEARCH

Under the CSA, the DEA has the authority to issue a regulation waiving the registration requirement for certain manufacturers, distributors or dispensers, if the DEA determines that it is "consistent with the public health and safety." 21 USC sec. 822(d). In theory, DEA could waive the Schedule I research registration requirement for physician researchers working under FDAapproved INDs and using products that have met FDA quality standards. Currently, Epidiolex® (a botanically-derived CBD drug) is currently being fast-tracked by FDA and is showing initial positive data in children with epilepsy being treated in FDA-approved compassionate access IND programs. Each of the physicians with such a program had to go through a burdensome and time-consuming process to secure a Schedule I research registration. Alternatively, since the issuance of a regulation would necessitate publication in the Federal Register, 30 day comment period, and a final rule, perhaps DOJ/DEA could take the route of the recent Cole memo and issue a statement that DEA would issue Schedule I research registrations to all teaching hospitals and clinics with pediatric neurologists and epileptologists, allowing them to possess and dispense purified CBD that has passed some FDA standards. Such registrations could be time-limited, e.g., one year, with a possibility of renewal. If the FDA approves a CBD drug, it then has an "accepted medical use" and must be moved out of Schedule I. At that point, there would no longer be a need for such special registrations for that product.

ELIMINATE THE PUBLIC HEALTH SERVICE (PHS) REVIEW FOR MARIJUANA RESEARCH APPLICATIONS

In 1999, the Department of Health and Human Services (HHS) announced that it intended to establish new procedures "to make available a sufficient amount of research-grade marijuana to support those studies that are the most likely to yield usable, essential data." Marijuana is the only drug that had this new procedure attached to it. HHS explained that "the scientific merits of each protocol will be evaluated through a Public Health Service (PHS) interdisciplinary review process [which] will take into consideration a number of factors, including the scientific quality of the proposed study, the quality of the organization's peer-review process, and the objective of the proposed research." The intention was to streamline and increase research, but the general consensus is that it has had the unintended consequence of stalling research. Since research proposals still have to go through FDA and individual Institutional Review Board (IRB) protocols, many have questioned the wisdom of the PHS process, since it seemingly adds an extra step for no reason. Given that research protocols would still need to go through the FDA and other entities, we endorse eliminating the PHS review process for marijuana research applications.

DOJ AND HHS SHOULD ESTABLISH A SPECIAL FEDERAL RESEARCH PROGRAM FOR CHILDREN WITH EPILEPSY AND PERHAPS OTHER VERY SERIOUSLY ILL INDIVIDUALS

The CSA authorizes the DOJ/DEA to carry out educational and research programs "directly related to enforcement of the laws...concerning drugs, which may include... (2) studies or special projects to compare the deterrent effects of various enforcement strategies on drug use and abuse; ...and (5) studies or special projects to develop more effective methods to prevent diversion of controlled substances into illegal channels....." 21 USC sec. 872 (a).

DOJ/DEA could collaborate with the National Institute for Neurological Diseases and Stroke (NINDS) on a program similar to NCI's Group C program for Marinol. In that program, over 20,000 patients received the drug over a period of four years under a "Group C" program. The Group C program was closed when Marinol was approved. Here's how such a program was described in the 1980s:

"The National Cancer Institute (NCI) is initiating a national THC distribution program by applying to the FDA for its classification as a Group C investigational agent. Since THC is also a Schedule I drug, the distribution system requires strict adherence to Drug Enforcement Agency (DEA) security and safety regulations. Contrary to the usual distribution of Group C drugs, THC will not be available directly to physicians. THC will be made available to hospital pharmacies which are: (1) an NCI recognized Cancer Center (P-30 grant supported), (2) an NCI designated New Drug Study Group, (3) a member of the Council of Teaching Hospitals. Hospital pharmacies that are located in inadequately represented geographic areas when certain criteria are met by them will also be considered. Physicians desiring to prescribe THC need not have Schedule I registration, but should (1) have experience in cancer chemotherapy, (2) have a current DEA registration number, (3) agree to abide by the Guidelines for Use of THC, and (4) be registered with a participating pharmacy. A registered physician may prescribe THC by writing a Research Order for Medication on a usual prescription blank, including, in addition to normal required information, confirmation that patient consent has been obtained and the name of the hospital at which the physician is registered to prescribe THC."

DOJ/DEA COULD ENTER INTO AGREEMENTS WITH INTERESTED STATE AND LOCAL AGENCIES TO ALLOW A PURE CBD PRODUCT, TO BE DISPENSED/EXPLORED BY BOARD-CERTIFIED NEUROLOGISTS AND/OR EPILEPTOLOGISTS TO APPROPRIATE PATIENTS AS PART OF A RESEARCH PROGRAM

The federal government could (without the need for changing the CSA) enter into a cooperative agreement with the states. The CSA, 21 USC sec. 873(a), provides:

"The Attorney General **shall cooperate** with local, State, and Federal agencies concerning traffic in controlled substances and in suppressing the abuse of controlled substances. To this end, he is **authorized** to....**notwithstanding any other provision of law,** enter into contractual agreements with State and local law enforcement agencies to provide for cooperative enforcement and regulatory activities under this chapter."

Under this section, the Attorney General is mandated to cooperate and permitted to enter into contractual cooperation agreements "notwithstanding any other provision of law."

DOJ could in theory enter into such agreements with state and local agencies in order to expand current research protocols. The argument would be that, by making CBD (that meets FDA quality standards) more available, patients would not have to resort to federally-unlawful channels, such as dispensaries and other purveyors, where they might purchase cannabis with significant amounts of THC; such agreements would thereby "suppress the abuse of controlled substances."

CRACK DOWN ON ILLEGAL OPERATORS

While commencing or facilitating a research program for pure prescription-quality CBD products, DOJ could make it clear that those products not meeting this research definition are Schedule I substances and will be subject to enforcement action. Currently, illegal purveyors of THC and CBD products are making rich profits off of Schedule I drugs, which they falsely promote to patients and other consumers as "legal dietary supplements," resulting in public health hazards. DOJ and FDA should work together to take these products off the online "shelf." It is encouraging that FDA recently stated that CBD products are not "dietary supplements."

While the FDA has recently sent warning letters to some companies manufacturing CBD products illegally,⁵ FDA has traditionally resisted taking enforcement action in the area of medical marijuana, claiming that since marijuana (and its components, including THC and CBD) are Schedule I drugs, jurisdiction is left solely to DEA. However, several medical marijuana companies routinely and blatantly violate the Food, Drug and Cosmetic Act by selling foods and/or "medicines" that are <u>dangerous, contain illegal components, and have not been reviewed by FDA.</u> Virtually none of these purveyors is complying with FDA requirements for proper manufacturing (GMP, registration with FDA), labeling and advertising/promotion. Manufacturers and other purveyors of marijuana products make many therapeutic claims that bring those products within the scope of the Food, Drug, and Cosmetic Act (FDCA).

MEDICAL ASSOCIATION POSITIONS ON MARIJUANA

American Society of Addiction Medicine:

"ASAM asserts that cannabis, cannabis-based products, and cannabis delivery devices should be subject to the same standards that are applicable to other prescription medications and medical devices and that these products should not be distributed or otherwise provided to patients unless and until such products or devices have received marketing approval from the Food and Drug Administration. ASAM rejects smoking as a means of drug delivery since it is not safe. ASAM rejects a process whereby State and local ballot initiatives approve medicines because these initiatives are being decided by individuals not qualified to make such decisions."

American Cancer Society:

"The ACS is supportive of more research into the benefits of cannabinoids. Better and more effective treatments are needed to overcome the side effects of cancer and its treatment. The ACS does not advocate the use of inhaled marijuana or the legalization of marijuana."

American Glaucoma Foundation:

"Marijuana, or its components administered systemically, cannot be recommended without a long term trial which evaluates the health of the optic nerve," said the editorial. "Although marijuana can lower IOP, its side effects and short duration of action, coupled with a lack of evidence that its use alters the course of glaucoma, preclude recommending this drug in any form for the treatment of glaucoma at the present time."

National Multiple Sclerosis Society:

"Although it is clear that cannabinoids have potential both for the management of MS symptoms such as pain and spasticity, as well as for neuroprotection, the Society cannot at this time recommend that medical marijuana be made widely available to people with MS for symptom management. This decision was not only based on existing legal barriers to its use but, even more importantly, because studies to date do not demonstrate a clear benefit compared to existing symptomatic therapies and because issues of side effects, systemic effects, and long-term effects are not yet clear."

The American Academy of Pediatrics (AAP) opposes "medical marijuana" outside the regulatory process of the US Food and Drug Administration. Notwithstanding this opposition to use, the AAP recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate. The AAP strongly supports research and development of pharmaceutical cannabinoids and supports a review of policies promoting research on the medical use of these compounds.

The American Medical Association (AMA) has called for more research on the subject, with the caveat that this "should not be viewed as an endorsement of state-based medical cannabis programs, the legalization of marijuana, or that scientific evidence on the therapeutic use of cannabis meets the current standards for a prescription drug product." Furthermore, AMA believes (1) cannabis is a dangerous drug and as such is a public health concern; (2) sale of cannabis should not be legalized

The American Psychiatric Association (APA) states:

(1) There is no current scientific evidence that marijuana is in any way beneficial for the treatment of any psychiatric disorder. Current evidence supports...a strong association of cannabis use with the onset of psychiatric disorders. (2) Further research on the use of cannabis-derived substances as medicine should be encouraged and facilitated by the federal government. The adverse effects of marijuana...must be simultaneously studied. (3) No medication approved by the FDA is smoked.

Learn more at

www.learnaboutsam.org

Sources

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- 2. See Sabet, K. (2014). Should Marijuana Be Rescheduled? *Huffington Post.* See http://www.huffingtonpost.com/kevin-a-sabet-phd/should-marijuana-be-resch_b_3745354.html
- 3. Information on Marijuana Farm Contract, NIDA. See: http://www.drugabuse.gov/drugs-abuse/marijuana/nidas-role-in-providing-marijuana-research/information-marijuana-farm-contract
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