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Medical marijuana: Medical necessity versus political agenda

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Summary

Marijuana is classified by the Drug Enforcement Agency (DEA) as an illegal Schedule I drug which has no accepted medical use. However, recent studies have shown that medical marijuana is effective in controlling chronic non-cancer pain, alleviating nausea and vomiting associated with chemotherapy, treating wasting syndrome associated with AIDS, and controlling muscle spasms due to multiple sclerosis. These studies state that the alleviating benefits of marijuana outweigh the negative effects of the drug, and recommend that marijuana be administered to patients who have failed to respond to other therapies. Despite supporting evidence, the DEA refuses to reclassify marijuana as a Schedule II drug, which would allow physicians to prescribe marijuana to suffering patients. The use of medical marijuana has continued to gain support among states, and is currently legal in 16 states and the District of Columbia. This is in stark contrast to the federal government's stance of zero-tolerance, which has led to a heated legal debate in the United States. After reviewing relevant scientific data and grounding the issue in ethical principles like beneficence and nonmaleficence, there is a strong argument for allowing physicians to prescribe marijuana. Patients have a right to all beneficial treatments and to deny them this right violates their basic human rights.

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Debate about medical marijuana is challenging the basic foundations of the accepted practice in the medical, legal and ethical communities. A major criticism of alternative therapies like medical marijuana is they have not been scientifically tested, leading many to question their safety and efficacy [1]. However, proponents in the medical community argue for medical marijuana use based on its effectiveness in managing debilitating pain, nausea and vomiting associated with chemotherapy, as well as its efficacy in treating severe weight loss commonly experienced by AIDS sufferers. Medical marijuana can be used as a stand-alone treatment for these conditions or as a complement to conventional ones in order to help patients better withstand the conventional treatments' effects and thereby obtain the full benefit, whether a cure or improvement of their condition [2]. In recognition and acceptance of the effectiveness of medical marijuana, sixteen states have approved initiatives to make marijuana legal for medicinal purposes [3], including Alaska, Arizona, California, Colorado, Delaware, Hawaii, Maine, Michigan, Montana, Nevada, New Jersey, New Mexico, Oregon, Rhode Island, Vermont, and Washington, as well as the District of Columbia. However, the leading opponent to legalization is the federal government, which has continued to trump state law rights by threatening patients and physicians with criminal prosecution and closing or obstructing dispensaries in states with medical marijuana legislation in place.

The history of marijuana use for medicinal purposes extends back through millennia. The medical use of marijuana can be traced back to 2737 B.C., when Emperor Shen Neng was prescribing marijuana tea to treat gout, rheumatism, malaria, and even poor memory [4]. The drug's popularity spread throughout Asia to the Middle East and into Africa, and many ancient physicians prescribed marijuana for numerous ailments, from pain relief to childbirth [5]. In Western medicine, between 1840 and 1900, more than 100 articles citing marijuana's therapeutic qualities were published in American and European medical journals. These early American medical journals were recommending hemp seeds and roots for conditions including inflamed skin, incontinence and venereal disease, and in 1851, the United States Pharmacopoeia included hemp in its catalog of medicines. Marijuana was routinely prescribed by American physicians and enjoyed legal status in the United States until 1937 when U.S. legislature passed the first federal law against marijuana – the Marihuana Tax Act. This Act imposed a \$1 per ounce tax on marijuana purchased for medical intention [6]. Later, in the 1950s, Congress passed the Boggs Act and the Narcotics Control Act, which outlined mandatory sentences for drug offenders, including marijuana possessors and distributors [4]. Eventually, the 1970 Uniform Controlled Substance Act classified marijuana as a Schedule I drug, thus making possession of a Schedule I drug like marijuana, heroin, ecstasy, LSD, GHB and peyote illegal [6]. Under this Act, there are five schedules of drugs – Schedule I, II, III, IV, and V. A Schedule I drug has a high potential for abuse, and has no accepted medical use in treatment due to a lack of accepted safety for use of the drug. A Schedule II drug has a high potential for abuse like a Schedule I drug, but it has an accepted medical use for treatment. Schedule III, IV, and V drugs have a low potential for abuse and are accepted for medical treatment. The federal government's basis for threatening prosecution is due to the 1970 classification of marijuana as a Schedule I drug [7].

While the subject of medical marijuana is becoming an increasingly heated medical issue, it also continues to stir the embers of legal arguments. Advocates on both sides continue to battle at federal and state government levels. One such state where legal battles have raged is Montana. Montana's state legislature legalized the medical use of marijuana in 2004 [8], but in the past year, Montana residents have seen increased legal opposition to this ruling. The issue of medical marijuana is now firmly encased in the halls of the judicial system in states like Montana and California. In California, there are now certain cities like Anaheim that have taken their case to ban marijuana dispensaries to the local courts. In August 2011, an Orange County Superior Court Judge ruled that the restriction of distribution of medical-marijuana in Anaheim was not a contradiction to state law. The judge supported his ruling by saying that state legislature allows local laws to “fill in the gaps that exist in state medical-marijuana law” [9].

As certain states seem to be backtracking, other states like Delaware, Pennsylvania, and nine others (Alabama, Connecticut, Idaho, Illinois, Massachusetts, New Hampshire, New York, North Carolina, Ohio) [10] are striving to create a future environment where medical marijuana is legal. Delaware, the most recent state to legalize medical marijuana, signed a bill into law on May 13, 2011 [11]. Pennsylvania has not yet voted on the issue, but in 2009, it proposed a bill for medical marijuana legalization [12].

The ethical dilemma at the core of this debate is whether the federal ban on the use of medical marijuana violates the physician-patient relationship. The argument can be framed by the ethical principles of autonomy and beneficence. Patients have the right to expect full disclosure and discussion of all available treatment options from their physicians. Denying a patient knowledge of and access to a therapy that relieves pain and suffering, especially when the patient has a terminal disease, violates the basic duty of a physician. As a result, physicians find themselves at the center of this controversy, searching for a compromise between medical necessity and government restrictions.

The main objection to the medical use of marijuana by the federal government is largely attributable today to a national policy of zero-tolerance toward illicit drugs. This objection is extended to include a prohibition on legalizing marijuana for medical purposes as well, and is underscored by three suppositions initially outlined during the Clinton Administration. First, marijuana is an illegal drug that remains unproven in terms of safety or efficacy. Second, it is argued that marijuana is a “gateway drug” that leads to more serious drug use. Third, any legalization of marijuana for medical purposes will send the wrong message to the public, and in particular to our children, namely that marijuana is acceptable for recreational use and even beneficial [13].

With regard to documenting the effectiveness of medical marijuana, the most comprehensive analysis to date in medical literature was issued on March 17, 1999, by a White House-commissioned committee of 11 independent scientists appointed by the Institute of Medicine. The researchers concluded that, “the benefits of smoking marijuana were limited by the toxic effects of the smoke, but nonetheless recommended that the drug be given under close

supervision to patients who do not respond to other therapies" [14]. The report continues that, "there was no evidence that giving the drug to sick people would increase illicit drug use in the general population. Nor is marijuana a 'gateway drug' that prompts patients to use harder drugs like cocaine and heroin" [15]. This government-sponsored study presented solid scientific data that indicates the potential therapeutic value of marijuana in controlling some forms of pain, alleviating nausea and vomiting, treating wasting due to AIDS, and combating muscle spasms associated with multiple sclerosis (MS). Neither does it increase drug usage or lead to harder drugs [16]. Despite their own findings, the federal government continues to prohibit this effective drug from being prescribed by physicians for patients suffering from specific treatment side-effects, which have led to strong objections to the government's stance by medical researchers, physicians, legal experts, and ethicists, not to mention the patients that rely on marijuana to improve their medical condition.

Attempts to reassign marijuana to a Schedule II drug classification have been rejected by the Drug Enforcement Administration (DEA). The basis for rejection is the assertion that, "there was no scientific evidence showing that marijuana was better than other approved drugs for any specific medical condition" [17]. The federal government's argument is further asserted to have logical grounding, to wit: marijuana is an illegal drug; no one should ever use illegal drugs; therefore, no one should ever use marijuana for any reason [13]. Other opponents of the legalization of medical marijuana, such as certain members of the medical community and anti-marijuana organizations, assert that marijuana is too dangerous for medical use, it lacks FDA approval, and that several legal drugs make marijuana use unnecessary [18]. Today, the DEA maintains this position outlined under the Clinton Administration and, in July 2011, ruled that marijuana has "no accepted medical use" and should therefore remain illegal under federal law, in spite of differing state legislation allowing medical marijuana [19]. However, with scientific evidence pointing to the contrary, some perceive the government's treatment of this issue as more of a political matter than a medical issue.

The purpose of this article, therefore, is fourfold: first, to explore the medical aspect of marijuana by examining pertinent scientific research; second, to study the legal issues related to medical marijuana legalization; third, to provide an ethical analysis of the arguments for and against medical marijuana legalization; and fourth, to conclude with specific recommendations.

MEDICAL PERSPECTIVE

Marijuana is taken from the leaves and flowering tops of the hemp plant, *Cannabis sativa*, which grows in most regions of the world. *C. sativa* contains over 460 known compounds, of which 60 are cannabinoids, or compounds unique to cannabis. The main psychoactive compound of marijuana is delta-9-tetrahydrocannabinol (THC) [20].

The harmful effects of marijuana include rapid heartbeat, some loss of coordination, and impaired immediate memory. In addition, the drug can adversely affect one's critical skills, including those skills necessary to operate vehicles

safely, such as judgment of distance and reaction time [21]. As reported by a 2010 Harvard Medical Study, marijuana seems to induce psychotic symptoms and worsen conditions in patients already diagnosed with schizophrenia or other psychotic disorders. One such study of more than 50,000 young Swedish soldiers found that those who had smoked marijuana at least once were more than twice as likely to develop schizophrenia as those nonsmokers. For those who said they had used marijuana more than 50 times, research showed that they were six times more likely to develop schizophrenia as the nonsmokers. More evidence is being gathered demonstrating early or heavy marijuana use might not only trigger psychosis in people who are already susceptible, but might also cause psychosis in some people who might not otherwise have developed it; however, direct cause and effect cannot be asserted with absolute certainty from that individual study [22].

Further risks associated with marijuana found in the 2010 study include addiction, anxiety and mood disorders. Observational studies suggest that every one out of nine people who regularly smoke marijuana become dependent on it, especially when smoked for an extended amount of time. One such contributing factor may be the THC concentration in the herbal form of marijuana. In the United States, as well as Europe, THC concentration in marijuana sold used to range from 1% to 4%, but it appears that this number has risen to 7%. Even though many marijuana users state that marijuana calms them down, for others, this is not the case. The most commonly reported side effects of smoking marijuana are intense anxiety and panic attacks. Studies show that 20% to 30% of marijuana users experience said side effects, and that a higher dose of THC has also proven to increase anxiety episodes. Marijuana may also induce manic episodes and increase rapid cycling between manic and depressive moods in patients with bipolar disorder, but it is not fully understood if marijuana users are at an increased risk of developing bipolar disorder. Several observational studies have also revealed that, for some users, marijuana may increase symptoms of depression and increase the risk of developing depression. Also, the government's assertion that marijuana is a gateway drug that may lead to harder drugs has not been proven and is less conclusive than any of the above mentioned medical risks [22].

There are also a number of other medical risks associated with marijuana. First, it is difficult to determine the effective dosage of smoked marijuana, since the concentration of the active ingredient, THC, varies according to the particular plant and how it is grown. Second, nonconclusive studies have shown that THC both suppresses macrophages and human T-lymphocytes and enhances macrophage secretion of interleukin-I [23]. These are critical components of the immune system and could seriously jeopardize AIDS patients who use marijuana. Other studies emphasize the potential for toxic compounds in marijuana smoke, which include harmful cannabinoids, gases, and other particulates. Studies have shown that marijuana tar contains 50% more phenols than tobacco tar [24]. Finally, marijuana can also be contaminated by microorganisms and fungi, which can cause possible infections by pathogenic organisms. There have been reported cases of marijuana smokers contracting pulmonary fungal infections. In addition, adulterants such as pesticides and fertilizers can compromise the purity of

the marijuana [25]. To combat these risks, various methods, such as filtering marijuana in water pipes and vaporizing the marijuana, have been shown to remove certain toxins and to deliver a higher cannabinoid-to-tar ratio than do cigarettes or pipes. Also, sterilizing the marijuana by dry heat (300°F) kills spores and fungi [26]. These risks can be minimized further if the supply of marijuana is grown under government-regulated conditions rather than illicit sources.

Although there are some medical concerns, from a clinical standpoint, in controlled situations such as ones being recommended by proponents of medical use, the positive effects would seem to greatly outweigh the negative ones. Several clinical findings have documented marijuana's efficacy in treating pain, neurological and movement disorders, nausea of patients undergoing chemotherapy for cancer, loss of appetite and weight (cachexia) related to AIDS, and glaucoma [27]. Despite clinical findings in support of medical marijuana, the DEA has classified marijuana as an illegal Schedule I drug which has "no accepted medical use." The DEA will not reschedule marijuana without an official determination of the safety and efficacy from the Food and Drug Administration (FDA).

In order to reschedule marijuana, the FDA requires controlled, double-blind clinical trials. However, there is a major obstacle preventing these trials. Like all other herbal medicines, marijuana faces a major roadblock that inhibits conducting sophisticated clinical trials: a lack of patentable product [28]. Without the financial incentive of being able to patent the substance as a commercial product, few have pursued the path of carrying out research using the sophisticated, difficult, and expensive procedures prescribed by best practice.

Another federal restriction is the requirement that clinical studies be funded from scarce grant money controlled by the National Institutes of Health (NIH) [28]. These restrictions have discouraged researchers from studying the medical benefits of marijuana. For example, the 2012 estimate for clinical research on cancer accounts for approximately six billion dollars of the NIH budget, which totals 31.2 billion dollars [29]. The 2011 NIH budget allocated the following funds available for marijuana research for qualified organizations: \$2 million in 4-5 awards. According to NIH Grant guidelines on marijuana, applicants may request budgets with direct costs up to \$500,000 per year for a maximum period of 5 years. Therefore, the total budget would be \$10 million over the 5 year period [30]. Of the yearly NIH budget of approximately \$31.2 billion, the \$2 million going toward marijuana research can be calculated as comprising 0.006% of the yearly budget, thus illustrating how marijuana research is vastly underfunded.

Controlled clinical studies would need to manage medical testing of marijuana and its various forms. Today, smoked marijuana is not the only form in circulation. There are a number of forms of marijuana that are used for medical purposes, including a synthetic form, Marinol (dronabinol), which is taken orally [31]. Marinol, manufactured by Unimed Pharmaceuticals, Inc., is a Schedule III prescription drug [19], approved by the FDA in 1985 for treatment of nausea and vomiting of cancer chemotherapy patients who have not responded to the conventional antiemetic

therapy. In 1992, the FDA also approved it for use in loss of appetite and weight loss related to AIDS. However, there are three major concerns associated with Marinol [32]. First, some patients complained that the effects of the pill were too strong at first, and then wore off quickly [33]. Second, it is very expensive, costing patients anywhere from \$200-\$800 monthly [34]. Third, Marinol can be difficult for nauseous patients to consume; some patients fail to keep the pill down long enough for it to be effective [35].

Another synthetic marijuana-based drug is Nabilone, a Schedule II drug, similar to Marinol, used to treat nausea and vomiting. Nabilone uses a moderately different preparation of synthetic THC, which makes it more completely absorbed into the bloodstream as compared to Marinol [22]. Nabilone is now a controlled drug; however, Nabilone is perceived to produce more undesirable side effects, have a longer onset of action and to be more expensive than smoked cannabis [36]. The cost associated with Nabilone is \$20 for a 1-mg capsule, and the estimated cost per year is \$4000 [37].

Another form used in Canada is a spray alternative called Sativex [38]. In 2006, the Food and Drug Administration (FDA) issued an investigational new drug (IND) application for Sativex. The IND allows a drug to be studied with the goal of approving it for marketing if it is deemed safe and effective [19]. More recently, in 2010, the efficacy of Sativex for bladder dysfunction as a symptom of multiple sclerosis (MS) was tested. It was a 10 week, double-blind, randomized, placebo-controlled, parallel-group trial in 135 subjects with MS and overactive bladder. Researchers concluded that Sativex did have an impact on MS patients with overactive bladder, citing some improvement in symptoms associated with the patients' bladder dysfunction [39]. Sativex is now a controlled drug, and has recently been licensed for managing MS [40]. One of the biggest problems with Sativex is the cost. A vial of Sativex that lasts 10 days costs \$124.95 in Canada, which amounts to about \$375 monthly [38]. More recently legalized in Britain, a 10 milliliter vial (enough for 11 days) costs £125 [41], or approximately 205 U.S. dollars.

In relation to smoked marijuana, all of these alternatives are just that – alternatives, and are not necessarily as effective. It has been argued that smoked marijuana is substantially more effective than these alternatives. The THC in the inhaled smoke is absorbed within seconds and is delivered to the brain rapidly and efficiently, as would be expected of a highly lipid-soluble drug. Maximum blood concentrations are reached about the time smoking is finished and then rapidly dissipate. Psychopharmacologic effects peak at 30 to 60 minutes. The clear advantage of smoked marijuana is the rapid onset and dissipation of effects, because the patient is able to self-titrate the dose. In addition, the plant contains many other compounds (including about 60 cannabinoids) that may produce some additional benefits [42].

Looking to the future, there may be safer alternatives on the horizon, including a medical marijuana patch. Medical Marijuana Delivery Systems (MMDS) LLC announced in February 2011 that it had obtained U.S. patent rights to a medical marijuana patch. MMDS will market the patch under the name Tetracan, and is hopeful that the patch will be available at dispensaries in approved states across the US by the end of 2011. The company continues to work on other delivery systems like creams,

gels and oils [43]. Another alternative to smoking marijuana is ingesting the drug directly. Baking marijuana directly into foods is another way to reap the benefits of marijuana while avoiding the toxic effects of smoking the drug.

Oncologists were among the first medical professionals to advocate for the medical use of smoked marijuana. Reacting to a DEA suggestion that only a "fringe group" of oncologists accepted marijuana as an antiemetic agent, a random survey of the members of the American Society of Oncology was conducted in 1990. More than 1000 oncologists responded to the survey; 44% reported that they had recommended marijuana to at least one patient. Smoked marijuana was believed to be more effective than oral Marinol by the respondents. Of those who believed they had sufficient information to compare the two drugs directly, 44% believed smoked marijuana was more effective and 13% that Marinol was more effective [44]. In addition, the cost of smoked marijuana is considerably cheaper. "The cost of producing cannabis is about a dollar an ounce, and medical distribution would add at most a few more dollars. There are about 60 marijuana cigarettes in an ounce, and the average dose is one cigarette or less" [45].

A 2003 survey of 400 physicians, both general practitioners and specialists in the Netherlands, was performed just before the legal introduction of medicinal cannabis. Only 6% said that, under no condition, were they willing to prescribe medicinal marijuana, while 60% to 70% regarded medicinal cannabis sufficiently socially accepted and would prescribe it if asked for by a patient [46].

Scientific research on the medical effects of marijuana has been limited due to the stipulation that all studies must be funded by the National Institutes of Health. However, since 1978, the federal government has provided 20 patients with medical marijuana under a compassionate investigation new drug program. The Institute of Drug Abuse pays the University of Mississippi to grow a consistent, reliable source of research-grade cannabis. This is a pure (unadulterated and standardized) form of marijuana without contaminants or pesticides. A North Carolina manufacturer receives \$62,000 a year from the federal government to roll the marijuana cigarettes and ship them in sealed tins of 300 cigarettes, to the patients' doctors and pharmacists. Each participant was given a letter from the FDA authorizing them to use this illegal substance that can bring a federal prison term of five years. In 1991, the federal government terminated this program, which was the only legal way to obtain access to marijuana. This program was terminated because, in the government's opinion, too many people became aware of the program and were asking for access to medical marijuana supplies. Twelve individuals were receiving marijuana cigarettes in 1991 and they were "grandfathered" when the program was terminated. Since that time, four individuals have died from AIDS and the remaining eight continue to receive their supply of marijuana cigarettes [47]. While the federal government at one time appeared to be moving toward acceptance and perhaps legalization of medical marijuana, it has instead decided to allow this program to disappear through attrition.

In February 1997, the National Institutes of Health released its report on the results of an expert panel that was convened

to investigate the therapeutic potential of marijuana and to identify future research avenues that would be most productive. The panel of experts identified five areas where there was at least a suggestion of therapeutic value of marijuana and for which further study was indicated. The five areas were: (1) stimulates appetite and alleviates cachexia (severe weight loss), (2) controls nausea and vomiting associated with cancer chemotherapy, (3) decreases intraocular pressure for those suffering from glaucoma, (4) analgesia (pain reliever), and (5) neurologic and movement disorders are relieved. The group also concluded that more extensive studies were needed to fully evaluate the potential of marijuana as supportive care for cancer patients. Suggested areas of study were a smoke-free delivery system of marijuana's active ingredient THC, effects of marijuana on the lungs and immune system, and the dangerous byproducts of smoked marijuana [48].

On March 17, 1999, a panel of 11 independent experts at the Institute of Medicine released an extensive analysis of the medical uses of marijuana. This two-year study was ordered and financed by the White House Office of National Drug Control Policy. The report cautioned that the benefits of smoking marijuana were limited because the smoke in itself is so toxic. Yet at the same time, the panel of experts recommended that marijuana be given, on a short-term basis under close supervision, to patients who did not respond to other therapies. The panel believed that because of the toxicity of the smoke, the true benefits of marijuana would only be realized when alternative methods like capsules, patches and bronchial inhalers were developed to deliver more active components, called cannabinoids, without the harmful carcinogens of the smoke. The researchers recommended that the government should take the lead in developing more effective cannabinoid drugs. However, realizing this would take years to develop, the panel recommended that people, who do not respond to other therapy, be permitted to smoke marijuana in the interim. In addition to these recommendations, the report also contained new findings about the effects of marijuana on various medical conditions. In addition to the usefulness of medical marijuana in treating pain, nausea, and weight loss associated with AIDS, the report concluded that despite popular belief, marijuana was not useful in treating glaucoma. Marijuana does reduce some eye pressure associated with glaucoma; however, the effects were short-term, and did not outweigh the long-term hazards of using the drug. In addition, the study found there was little evidence that marijuana had any effect on movement disorders such as Parkinson's disease or Huntington's disease, but it was effective in combating the muscle spasms associated with MS [49].

Following the release of the Institute of Medicine's report on medical marijuana in 1999, evidence supporting medical marijuana has increased. In the last three years, cannabinoids have been found to help kill breast cancer cells [50], fight liver cancer [51], reduce inflammation [52], have antipsychotic effects [53] and even potentially help stave off the development of Alzheimer's disease [54] and reduce progression of Huntington's disease [55].

Most recently in 2011, cannabinoids' treatment of chronic non-cancer pain was examined using a randomized controlled trial. The cannabinoids studied were smoked

cannabis, oromucosal extracts of cannabis based medicine, nabilone, Marinol and a novel THC analog. The non-cancer pain conditions were neuropathic pain, fibromyalgia, rheumatoid arthritis, and mixed chronic pain. Of the eighteen trials, fifteen showed a significant analgesic effect of cannabinoid compared to the placebo, and more importantly, there were no serious adverse effects. The overall results of the study stated that cannabinoids are safe and modestly effective in the treatment of the above mentioned non-cancer pain [56].

In October of 2009, the Office of the Deputy U.S. Attorney General issued a memorandum titled, "Investigation and Prosecutions in States Authorizing the Medical Use of Marijuana." The memorandum stated that the federal government would abstain from prosecuting individuals who are in compliance with state laws that allowed for the medical use of marijuana, but clearly stated that the government did not "legalize marijuana or provide a legal defense to a violation of federal law" [57].

However, once again, the government seems to be contradicting itself. While states increased regulation to protect and improve the structure of the medical marijuana industry in their states, despite guidelines set forth in the memorandum, federal prosecutors continued to assert themselves in these states, with acts like raids and strongly worded letters to governors. As of May 2011, letters have been sent to governors in Arizona, Colorado, Montana, Rhode Island, Vermont and Washington, which has made some states like Rhode Island, Montana and Washington revise or shift away from their plans to make a more mainstream medical marijuana industry. In Washington, Governor Christine Gregoire responded to a letter she received on the matter by asking for clarification from Washington's two United States attorneys. They responded to the governor's request by stating that the government would prosecute "vigorously against individuals and organizations that participate in unlawful manufacturing and distribution activity involving marijuana, even if such activities are permitted under state law" [58]. Supporters of medical marijuana believe that the federal government is sending mixed signals, but as a spokeswoman for the Justice Department said, "This is not a change in policy. It's a reiteration of the guidance that was handed down in 2009 by the deputy attorney general" [58].

The original state to legalize medical marijuana, California, has seen its share of crackdowns in the past few years. As federal enforcement was relaxed in 2009, the number of dispensaries skyrocketed. Cities like San Diego, San Francisco, and Los Angeles have now begun to raid and close several dispensaries. In Los Angeles, for example, one series of raids closed approximately 40 dispensaries [59].

As stated earlier, the DEA ruled in July 2011 that marijuana has "no accepted medical use" and should therefore remain illegal under federal law [12]. This ruling came in response to a 2002 petition filed by medical marijuana advocates asking for a reclassification of marijuana as a Schedule III, IV, or V drug. This may seem like a setback to advocates, however, it may in fact be an advance. The petition was filed in 2002, and after much delay, the government has finally ruled, which now allows advocates to appeal the government's ruling in federal court. This is not the first time a petition to

reclassify marijuana has been rejected. Twice before has such a petition been rejected – the first in 1972 (denied 17 years later) and the second in 1995 (denied six years later) [60]. Both decisions were appealed by advocates, but the courts upheld the rejections and sided with the federal government.

As a result of this medical research, 16 states, as well as the District of Columbia, have approved ballot initiatives making marijuana legal for medical purposes [3]. One of the first states to do so was Arizona. In the November 1996 elections, Arizona voters passed Proposition 200 by a vote of 65% to 35%. Arizona law mandated that the prescribing physician must: document that scientific research exists which supports the use of a Schedule I substance for this purpose, receive written consent from the patient, and obtain the written opinion of a second medical doctor that the prescription is appropriate. The major concern of the Arizona proposition was that it allowed physicians to prescribe any Schedule I drug. To rectify this, the Arizona legislature amended the law to apply to only FDA-approved drugs in April 1997 [61]. A more recent state to approve medical marijuana was New Jersey in 2010. This legislation easily passed in both houses: 48-14 in the General Assembly and 25-13 in the State Senate [62]. New Jersey is one of the few states on the East Coast to approve legislation for medical marijuana, and has implemented more restrictive measures than original states like Arizona and California. According to New Jersey law, doctors are only allowed to prescribe marijuana for a set list of serious illnesses. Patients are forbidden from growing marijuana and using it in public, and are limited to two ounces of marijuana per month. These restrictive laws have attempted to eliminate the loopholes seen in other states where marijuana crackdowns have occurred. Ever since the implementation of the guidelines set forth by states like Arizona and California, there has been a movement toward increasingly strict laws. As more states continue to legalize the medicinal use of marijuana, it would appear that the issue has become less about the medical issues, and more about the political implications.

LEGAL PERSPECTIVE

While a strong case may be made for the medical and ethical bases in support of the legalization of medical marijuana, the United States' strong anti-drug stance [63] makes it impossible to view the issue without considering its legal effects. The legalization of medical marijuana invokes various fields of law. First and perhaps most obviously, is criminal law. As a Schedule I drug [64], the most serious classification under the current federal regime, marijuana is heavily regulated at the federal, state, and local levels. Second, issues of administrative law are raised by the rights of states to engage in rulemaking and pass legislation that is adverse to well-established federal criminal law precedent. Finally, health law is implicated. While overshadowed by the criminal and administrative law effects, medical marijuana raises important issues concerning doctors' and patients' rights, specifically medical autonomy, as well as medical malpractice issues such as overuse by patients, over-prescription by doctors for monetary gain, and use by non-patients, including second-hand consumption.

At its core, the legalization of medical marijuana presents a centuries-old struggle between federal and state rights. As

explored in considerable detail herein, since the founding of this Nation, states have sought to govern their residents in a manner appropriate to the circumstances of that particular state and without interference from the federal government. For example, recollecting the discontent that ultimately gave rise to the Civil War, the southern states felt that the federal government was out of touch with their mainly agriculturally-based society compared to the northern states' mainly industrially-based society, and therefore believed that they ought to be able to govern themselves.

Even today, the distinction exists. Take for instance, Delaware and its pro-corporate laws which attract countless Fortune 500 companies to incorporate there [65]. While all but a few of the companies are headquartered in other states, they come to Delaware for its generous tax structure and well-established corporate case law. If Congress were to federalize corporate law, Delaware would certainly argue that the government was infringing on its rights as a state. Similarly, more than a dozen states have to some extent passed legislation legalizing medical marijuana, arguing in part that the individual medical needs of their residents is separate and distinct right from the federal government's right to regulate the use of marijuana.

To date, sixteen states and the District of Columbia have passed legislation legalizing medical marijuana; however, marijuana is a Schedule I drug under the Controlled Substances Act (CSA), 21 U.S.C. § 801, *et seq.* Congress, in enacting the CSA, recognized that although many controlled substances have a beneficial medical purpose, such purpose does not outweigh the important societal concern of conquering drug abuse and the legitimate and illegitimate trafficking of controlled substances. In particular, Congress made the following finding: "Many of the drugs included within [the CSA] have a useful and legitimate medicinal purpose and are necessary to maintain the health and general welfare of the American people." 21 U.S.C. § 801(1). So how are states permitted to enact legislation that so clearly runs afoul of established federal law? The answer to that question is complex and developed herein.

The United States Supreme Court, the final arbiter of legal matters in the Nation, has taken on the issue of medical marijuana only once. In 2005, the case of *Gonzalez v. Raich* (referred to herein as "*Raich*") dealt directly with whether the federal government could criminalize the use of medical marijuana that was legal under California's medical marijuana laws [66]. In 1996, California voters passed Proposition 215, now codified as the Compassionate Use Act of 1996 [67], to "create an exemption from criminal prosecution for physicians, as well as for patients and primary caregivers who possess or cultivate marijuana for medicinal purposes with the recommendation of approval of a physician" [68].

Angel Raich and another woman named Diane Monson were California residents who were prescribed marijuana by their licensed, board-certified family practitioners to alleviate pain associated with a myriad of medical conditions. Monson grew her own marijuana, while Raich relied on caregivers to provide hers. In 2002, county sheriffs and federal agents from the Drug Enforcement Agency came to Monson's home. After a three-hour standoff, county officials determined that Monson's marijuana use and cultivation was entirely lawful.

Nonetheless, federal agents seized and destroyed all six of her marijuana plants as a violation of the CSA.

Monson joined with Raich to bring an action against the Attorney General of the United States [69] prohibiting the enforcement of the CSA for personal medicinal use provided by state law. At the District Court level [70], the District Court denied their motion for an injunction (a legal action effectively halting, in this case, government conduct). Raich and Monson appealed to the Federal Court of Appeals for the Ninth Circuit [71]. The Ninth Circuit reversed the District Court's ruling, holding that the use of medical marijuana pursuant to the Compassionate Use Act is a "separate and distinct" activity and sufficiently "different in kind from drug trafficking" prohibited by the CSA. The Department of Justice, on behalf of the Attorney General, then appealed the Ninth Circuit's decision to the Supreme Court.

The Supreme Court, in a divided 6-3 decision, reversed the Ninth Circuit and held that the federal government is acting squarely within its rights to criminalize the manufacture and possession of marijuana even where states approve its use for medicinal purposes. In support of its position, the Supreme Court cited an enumerate power of the Constitution, adopted in 1787, which provides that the federal government may "regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes" [72]. That power is known as the Commerce Clause.

Raich and Monson argued that the Commerce Clause was intended to apply only to the regulation of *interstate* commerce, not *intrastate* commerce, especially when done in the privacy of one's own home. The Supreme Court, citing a 1942 opinion [73], held that the federal government may regulate any activity that has a *substantial effect* on interstate commerce. The Supreme Court acknowledged that the federal government had to satisfy only the most-minimal burden of proof to determine that an activity has a substantial effect on interstate commerce. In the case of medical marijuana, the Supreme Court held that difficulties in distinguishing locally-cultivated and marijuana grown elsewhere, coupled with concerns of diversion into illicit channels, that the federal government met its burden for believing that the failure to regulate the *intrastate* manufacture and possession of marijuana would frustrate the Congressional intent of the CSA. Finally, the Supreme Court made clear that the fact that Raich and Monson used marijuana medically made no difference. Citing to what is known as the Constitution's Supremacy Clause [74], the Supreme Court unambiguously stated that when there is a conflict between federal and state law, federal law prevails.

The Supreme Court's ruling in *Raich* would seem to effectively abolish all state laws legalizing the use of medical marijuana. Nonetheless, states continue to pass such laws. Thus, the tension between state and federal rights is ever-apparent. What many people do not realize, and it is unclear to what extent even prescribing physicians are aware, while a state law may legalize medical marijuana within a particular state, federal regulations – including criminal and civil penalties – still apply. Moreover, prescribing physicians must be cognizant of patients who reside, or even frequently travel to, a state other than that in which the physician practices or is licensed.

Further complicating this legal quagmire of state versus federal rights concerning the legalization of medical marijuana is that in October 2009, Attorney General Eric Holder issued a memorandum that the Department of Justice would stop enforcing the federal marijuana ban under the CSA against people who act in compliance with state medical marijuana laws. While this may at first appear as a victory for state rights, it should be carefully noted that a government memorandum has absolutely no legal precedence and would certainly not trump the Supreme Court's holding in *Raich*. The practical effect of the memorandum is only to delay the unresolved tension between state and federal rights in this area, as absent enforcement, the Supreme Court will not have another attempt to further develop its holding in *Raich*. In other words, it is just another hurdle in clearing the way to a decisive legal position in the matter.

Finally, the dispute between state and federal governments is not the only obstacle to a clear understanding of the legal status of medical marijuana. As discussed in the previous section, some local governments (cities, counties, etc.) in states that have legalized medical marijuana, now seek to impose their own regulations. Such is the case in the City of Anaheim, California, where on August 15, 2011 the Superior Court ruled in the case *Qualified Patients Association (QPA) v. City of Anaheim* that the City has the legal right to ban all medical marijuana dispensaries within the boundaries of the City. In short, the Court upheld a City Ordinance (Ordinance No. 6067), banning medical marijuana dispensaries as a public nuisance. The Court's decision, however, does not affect the use of medical marijuana or distribution through other legal means.

The Court in *QPA v. Anaheim* noted that Art. IX, § 7 of the California Constitution provides that "[a] county or city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws" of California. One such permitted ordinance is that which abates a public nuisance." California law defines a public nuisance as "one which affects at the same time an entire community or neighborhood, or a considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal." The Court reasoned that mass distribution of medical marijuana through dispensaries, which are become largely unregulated, constitutes a public nuisance.

It is important to note that this is a decision at the trial court level which has no precedential value on anyone except the parties involved. It is likely that the proponents of the dispensaries will appeal to the appellate court and, if necessary, supreme court, where a decision would have a more widespread effect. Nonetheless, the decision is significant as indicative of another avenue in which governments can use legal measures to defeat what was otherwise thought to be a "legal" state action.

From a health law perspective, physicians must carefully balance their medical and ethical responsibilities to their patients, with their own moral and legal responsibilities in following the law of the land. Although plausible after *Raich*, it is currently unclear to what extent a prescribing physician could be criminally charged with drug trafficking under the CSA or to what extent medical malpractice is implicated if

a physician prescribes medical marijuana to a patient without explaining the possible legal consequences. Further, while that may not be the prescribing physician's legal duty to convey such information, it may be his or her medical or ethical duty in obtaining a patient's informed consent. If this analysis has shown anything, it is the paramount importance that prescribing physicians and patients alike are aware that the legal status of medical marijuana, despite the laws of sixteen states and the District of Columbia, is entirely unresolved.

ETHICAL PERSPECTIVE

Society, in general, has always recognized that in our complex world there is the possibility that we may be faced with a situation that has two consequences – one good and the other evil. The time-honored ethical principle that has been applied to these situations is called the principle of double effect. As the name itself implies, the human action has two distinct effects. One effect is the intended good; the other is unintended evil. As an ethical principle, it was never intended to be an inflexible rule or a mathematical formula, but rather it is to be used as an efficient guide to prudent moral judgment in solving difficult moral dilemmas [75]. The principle of double effect specifies four conditions which must be fulfilled for an action with both a good and an evil effect to be ethically justified:

1. The action, considered by itself and independently of its effects, must not be morally evil. The object of the action must be good or indifferent.
2. The evil effect must not be the means of producing the good effect.
3. The evil effect is sincerely not intended, but merely tolerated.
4. There must be a proportionate reason for performing the action, in spite of the evil consequences [76].

The principle of double effect is applicable to the issue of whether it is ethical for a physician to prescribe marijuana for medical reasons because it has two effects, one good and the other evil. The good effect is that smoked marijuana is more effective than conventional therapies in helping patients withstand the effects of accepted, traditional treatments which can bring about a cure or the amelioration of their condition. The evil effect is that marijuana smoke has toxic effects and as a Schedule I illegal drug it has been argued it could lead to more serious drug abuse and send a wrong message that illegal drug use is safe and even condoned. To determine if it is ethical for physicians to prescribe medical marijuana for patients as a medical therapy, this issue will be examined in light of the four conditions of the principle of double effect.

The first condition allows for the medical use of marijuana because the object of the action, in and of itself, is good. The moral object is the precise good that is freely willed in this action. The moral good of this action is to help treat pain, nausea, severe weight loss associated with AIDS and to combat muscle spasms associated with multiple sclerosis that cannot be treated adequately by traditional medicines. The immediate goal is not to endorse, encourage or promote illegal drug use. Rather, the direct goal is to relieve patients of their unnecessary pain and suffering [77]. The second condition permits the medical use of marijuana

because the good effect of relieving pain and suffering is not produced by means of the evil effect. The two effects happen simultaneously and independently. The third condition is met because the direct intention of medical marijuana is to give patients suffering from life-threatening illnesses relief from the effects of accepted treatments that could cure their medical condition. Recent studies have shown that medical marijuana is more effective in controlling pain and nausea from chemotherapy treatments and in boosting the appetites of AIDS patients so as to combat wasting than any of the traditional FDA approved medications. To deny a physician the right to discuss, recommend, and prescribe marijuana to patients is a direct violation of the physician-patient relationship. To make an informed decision about their treatment, patients have the right to expect full disclosure and discussion of all available treatment options from their physicians. Failure to do this violates the patient's right of informed consent [78].

The hypothesized foreseen but unintended consequences of legalizing medical marijuana are two-fold. First, the smoke from marijuana is highly toxic and can cause lung damage. The intention of smoked marijuana is not to cause more health problems but to remedy the effects of existing treatments. Second, some members of the federal government believe that legalizing medical marijuana may lead to harder drug usage and may be seen as condoning and encouraging recreational drug use. Nevertheless, this has not been proven to be true. The March 17, 1999 report by the Institute of Medicine found no evidence that the medical use of marijuana would increase illicit use in the general population, nor was it a "gateway drug" that would lead to the use of harder drugs like cocaine or heroin [49]. According to bioethicist William Stempsey, M.D., the government's belief that "the availability of drugs on the street is a function of the availability of prescription drugs is wrong. Morphine and other narcotics are available at present only by prescription, and there is no widespread abuse of these drugs" [79]. In addition, a 1994 survey in *The New York Times* found that 17% of current marijuana users said they had tried cocaine, and only 0.2% of those who had not used marijuana had tried cocaine. Ethicist George Annas points out that there are two ways to interpret this study. One way is to conclude that those who smoke marijuana are 85 times as likely as others to try cocaine; another way is that 83% of pot smokers, or five out of six, never try cocaine [80]. A 2003 study by Jan van Ours of Tilburg University in the Netherlands, cannabis users typically start using the drug between the ages of 18 and 20, while cocaine use usually starts between 20 and 25. But it concludes that cannabis is not a stepping stone to using cocaine or heroin. Four surveys, covering nearly 17,000 people, were carried out in Amsterdam in 1987, 1990, 1994 and 1997. The study found that there was little difference in the probability of an individual taking up cocaine as to whether or not he or she had used cannabis. Although significant numbers of people in the survey did use soft and hard drugs, this was linked with personal characteristics and a predilection to experimentation [81]. If officials in the federal government are worried that the legalization of medical marijuana will send the wrong message to our children about drugs, then *Boston Globe* columnist Ellen Goodman asks a good question: "What is the infamous signal being sent to [children]... if you hurry up and get cancer, you, too, can get high?" [82]. Will some people

view the legalization of medical marijuana as the condoning and encouraging of marijuana for recreational drug use? The answer is "yes." But this is not the direct intention of legalizing medical marijuana. The direct intention is to relieve pain and suffering that cannot be relieved by presently approved medications. This misinterpretation of the legalization of medical marijuana can be corrected through public education. Finally, the argument for the ethical justification of marijuana for medical use by the principle of double effect focuses on whether there is a proportionately grave reason for allowing the foreseen but unintended possible consequences. Proportionate reason is the linchpin that holds this complex moral principle together.

Proportionate reason refers to a specific value and its relation to all elements (including premoral evils) in the action [83]. The specific value in legalizing medical marijuana is to relieve pain and suffering associated with treatment for life-threatening illnesses. The premoral evil, which can come about by trying to achieve this value, is the foreseen but unintended possibility of the potential harmful effects of the smoke and the possibility that some may view this as condoning and even encouraging illegal drug use. The ethical question is: does the value of relieving pain and suffering outweigh the premoral evil of the potential harmful effects of the smoke and the possibility of scandal? To determine if a proper relationship exists between the specific value and the other elements of the act, ethicist Richard McCormick proposes three criteria for the establishment of proportionate reason:

1. The means used will not cause more harm than necessary to achieve the value.
2. No less harmful way exists to protect the value.
3. The means used to achieve the value will not undermine it. [84]

The application of McCormick's criteria to the legalization of medical marijuana supports the argument that there is a proportionate reason for allowing physicians to prescribe marijuana. First, the most comprehensive scientific analysis to date by the Institute of Medicine cautioned that the benefits of smoking marijuana were limited because the smoke itself is toxic, but recommended that it be given, on a short-term basis under close supervision, to patients who do not respond to other therapies. The possible damage to an individual's lungs is a legitimate health concern; however, the patients who would benefit from smoked marijuana are suffering from cancer, AIDS, MS, etc. Many of these conditions are terminal and the treatments they are undergoing also have toxic effects – chemotherapy, radiation, the AIDS cocktail, etc. The point is that the benefit of the treatments outweighs the burdens. The focus should be on encouraging the federal government to direct its research resources toward the development of alternative methods of delivering cannabinoids in the form of patches, capsules and bronchial inhalers. In this way the toxicity could be eliminated. The Institute of Medicine study also reported that there was no evidence that prescribing medical marijuana would increase illicit drug use or that it is a "gateway drug" that prompts patients to use harder drugs like cocaine or heroin. Second, at present, there does not seem to be an alternative medication that is as effective as smoked marijuana. Thousands of patients who have smoked marijuana illegally for medical purposes have attested to its effectiveness.

Those patients who were and are involved in the government sponsored compassionate care program also attest to smoked marijuana's effectiveness. In addition, scientific studies have shown that Marinol, Nabilone and Sativex are less effective, more difficult for nauseous patients to consume, and more expensive than smoked marijuana. There are also other approved antiemetic drugs or combinations of these drugs which have been shown to be effective in relieving pain and suffering in some cancer patients [85]. However, for others these medications have proven ineffective. To date, the only therapy that relieves their nausea and vomiting is smoking marijuana. Third, smoking marijuana for medical reasons does not undermine the value, which is the relief of pain and suffering. Many of the patients who would use medical marijuana are suffering from terminal conditions and are undergoing therapies that have serious side-effects. Since this seems to be the only therapy to date that relieves the pain and suffering of these patients, one can argue convincingly that it is a medical necessity. The federal government's concern that legalizing medical marijuana could lead to the possibility of the slippery slope in regards to drug use is a real fear. But, this has not occurred with other prescription psychoactive drugs (e.g., morphine, codeine, cocaine, etc.) and there is no evidence it would occur with marijuana. Therefore, it is ethically justified under the principle of double effect for the federal government to legalize marijuana for patients who do not respond to traditional therapies. Seriously ill patients have the right to effective therapies. To deny them access to such therapies is to deny them the dignity and respect all persons deserve. The greater good is promoted in spite of the potential evil consequences.

CONCLUSIONS

After reviewing pertinent scientific data, it is evident that there is ample evidence to warrant the Obama Administration to authorize the DEA to reclassify marijuana as a Schedule II drug, which would allow the drug to be used for medical purposes. As a candidate, President Obama promised to maintain a hands-off approach in the this matter and Attorney General Eric Holder also stated that federal prosecutors would not prosecute patients or providers in accordance with state law; however, recent crackdowns suggest otherwise [86]. In order to ensure the proper regulation of medical marijuana and the issues currently surrounding the topic, the following recommendations are proposed:

1. Government rescheduling of marijuana

The top priority of the government, in regards to medical marijuana, should be to reclassify the drug as a Schedule II drug. This would enable dispensaries, clinics, pharmacies and physicians to provide patients with standardized, unadulterated forms of marijuana. If marijuana continues to be unregulated, patients will be forced to seek black-market marijuana, and risk possible legal repercussions to alleviate their condition. This argument is grounded in harm reduction, both legally and medically. Utilizing the proper legal and medical controls can provide an effective strategy to identify and reduce health hazards associated with smoked marijuana, as well as help to reduce legal prosecution faced with unregulated marijuana. [87]

2. FDA regulation of medical marijuana growth

Marijuana contains over 460 known compounds, sixty of which are cannabinoids. There are also a number of carcinogens present in smoked marijuana. The main psychoactive compound in the drug is THC, which controls the strength or potency. THC concentration in black-market marijuana can vary greatly, which can lead to adverse effects for patients who may seek alleviating effects for their condition. To minimize such health risks, the federal government, specifically the FDA, must monitor marijuana produced for medical purposes. Recently, there have been numerous crackdowns on people who grow marijuana for medical uses. This problem is therefore two-fold, with medical and legal aspects. If the FDA was to intervene and oversee the production of marijuana, this would reduce the number of questions surrounding the growing of marijuana and the arrests that follow, as well as control the hazardous aspects of marijuana. If FDA regulation is present in medical marijuana production, the THC concentration and concentration of other hazardous compounds in marijuana can be controlled, thus reducing the harmful effects that impact the health of numerous patients.

3. Advance research into more pure forms of smoked marijuana and cost effective alternatives

The medical community has provided studies proving the efficacy of marijuana in treatment of patients who have not responded to other treatments. Specifically, these studies have shown the therapeutic value of marijuana in controlling pain, alleviating nausea and vomiting, as well as alleviating symptoms of multiple sclerosis (MS) and AIDS. In 2011, a randomized controlled trial of cannabinoids' treatment of chronic non-cancer pain also demonstrated positive outcomes [56]. Significant analgesic effects were seen in treating neuropathic pain, fibromyalgia, and rheumatoid arthritis. The most effective cannabinoid available to patients is smoked marijuana, however due to varying THC concentrations and the fact that the mode of ingestion is inhaled smoke, there are also adverse effects. Two options that may help to reduce these adverse effects are more pure forms of smoked marijuana and cost effective alternatives. A more pure form of smoked marijuana (i.e. less toxic compounds) would reduce the harmful effects of smoked marijuana, and therefore increase the benefits. Cannabinoid alternatives reduce the amount of these harmful compounds in marijuana. Such alternatives like Marinol, Nabilone, and Sativex do exist, however the two concerns that these alternatives pose are efficacy and cost. Smoked marijuana continues to be substantially more effective than these alternatives, and the cost of smoked marijuana is significantly less. In order to improve these alternatives and create new options, more research is needed.

4. Increased funding enabling agencies to accomplish this research

Medical marijuana research is contingent upon National Institutes of Health (NIH) funding. For 2011, the NIH has allocated only \$2 million in the form of 4-5 grants for research in marijuana [30]. In order to properly research safer and cost effective alternatives, more NIH funding is necessary, and must be done to provide suffering patients with a beneficial treatment.

5. Increased pharmaceutical research into new medical marijuana alternatives (i.e. marijuana patch, inhaler, etc.)

To advance the development of new marijuana treatment alternatives, pharmaceutical companies should be given incentives to continue to explore new avenues for suffering patients. One such company that has begun development on a medical marijuana patch is Medical Marijuana Delivery Systems (MMDS) LLC. In February 2011, MMDS announced that they had acquired United States Patent rights to develop a marijuana patch for medical use. Walter Cristobal, the patch inventor, is working with MMDS to develop the patch-based delivery, as well as other delivery systems like creams and gels [43]. Another recent development in the marijuana industry has come from the pharmaceutical company Medicinal Genomics. As of August 2011, the company has successfully sequenced the entire genome of the cannabis plant, a breakthrough which has the potential to grow the number of treatment options available to patients [89].

Ethically speaking, denying physicians the right to prescribe a therapy that relieves pain and suffering to their patients is a violation of the physician-patient relationship. Patients are entitled to full disclosure of all possible treatment options from their physician in order to make an informed medical decision regarding their health. It is the medical responsibility of a physician to offer adequate relief from pain for their patients so that the patient may have an acceptable quality of life. Failure to provide an available therapy that has been proven effective would violate the basic ethical principle of beneficence, which is the obligation of physicians to seek the well-being or benefit of the patient. Under beneficence, a physician's duties include preventing and removing harm, as well as promoting the good of their patient. To allow a patient to suffer when an effective treatment is available is to directly harm the patient, and therefore a violation of beneficence. Scientific research has shown that the benefits of medical marijuana greatly outweigh the burdens.

Overall, all people, especially in the federal government and the medical field, should be concerned over the quality of life of those suffering from neurological and movement disorders, cancer, wasting syndrome attributable to AIDS, etc. A 2010 Gallup poll of Americans has shown significant support for making marijuana legally available for doctors to prescribe for patients. The poll found that seventy percent of Americans are in favor, as negative feelings continue to decline [89]. Medical marijuana has proven invaluable in the battle against terminal illnesses; however, unless the federal government publically acknowledges this fact, numerous terminal patients will continue to suffer needlessly.

The fight against drug abuse is important because many lives are lost to drug addiction, but the effects of devastating illnesses impacts a substantially greater number of Americans. Medical marijuana can be an important treatment for physicians to confront the challenges of patients' pain and suffering. The apparent political motivations present in the federal government must be eliminated because the quality of numerous American lives hangs in the balance. The dignity and respect of all persons must be a priority for the Obama Administration. It is time to voice support for the most vulnerable and reclassify medical marijuana as a Schedule II drug, because for many patients it is truly a medical necessity.

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63. Beginning in 1969 with President Nixon, the United States engaged in a national “war on drugs” culminating in the enactment of the Controlled Substances Act, discussed herein
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65. See Delaware Division of Corporations, <http://www.corp.delaware.gov/aboutagency.shtml>, noting that 63% of the Fortune 500 have chosen Delaware as their legal home
66. See generally, *Gonzalez v. Raich*, 545 U.S. 1 (2005). Unless otherwise cited, all factual and legal citations concerning that case are derived from the Supreme Court’s opinion
67. Cal. Health & Safety Code Ann. § 11362.5 (West Supp. 2005)
68. *Raich*, 545 U.S. at 6 (citing the Compassionate Use Act)
69. At the time the case commenced, John Ashcroft was the Attorney General. By the time the case reached the Supreme Court, Alberto Gonzalez was the Attorney General and, thus, the named party in the lawsuit
70. *Raich v. Ashcroft*, 248 F. Supp. 2d 918 (N.D. Cal. 2003)
71. *Raich v. Ashcroft*, 352 F.3d 1222 (9th Cir. 2003)
72. Article I, Section 8, Clause 3
73. That case, *Wickard v. Filburn*, involved a farmer who grew 23 acres of wheat at a time when government regulations permitted each farmer to grow only 11.1 acres, in an effort to avoid surpluses and abnormally low prices. The farmer, Filburn, argued that he intended to personally consume the surplus and it therefore did not affect interstate commerce, but the Supreme Court rejected his argument, holding that while his personal use may have been trivial, the aggregate affect of others similarly situated, was far from trivial and has a substantial affect on interstate commerce. See 317 U.S. 111 (1942)
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So unqualified actions can only be called "pre-moral actions." For a more detailed analysis, see Gula RM. Reason Informed By Faith: Foundations Of Catholic Morality. New York: Paulist Press; 1989: 270-71. Pre-moral evil refers to the lack of perfection in anything whatsoever. As pertaining to human actions, it is that aspect that we experience as regrettable, harmful, or detrimental to the full actualization of the well-being of persons and of their social relationships. For a more detailed description, see Janssens L. Ontic Evil And Moral Evil. Readings In Moral Theology, No. 1: Moral Norms And Catholic Tradition, ed. Curran CF and McCormick RA. Ramsey (NJ): Paulist Press; 1979: 60

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