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**CANNABIS: THE NEW MIRACLE CURE?** 

\* The Research Debate \*

By: Deborah Forté

## THESIS STATEMENT

Could medical cannabis possibly be a "miracle cure" that the medical industry and the U.S. want to ignore? Does medical cannabis hold the key to possibly cure or alleviate certain chronic illnesses, diseases and ailments? Why is the U.S. not allowing more Cannabis research to allow people other alternative health care treatment options?

#### **INTRODUCTION**

This is not an argument on the pros and cons of legalizing cannabis for recreational use. We only want to focus on why there should be more clinical research, on the medicinal benefits of cannabis, whether it is legalized or not, and why our society should have the right to choose this alternative health care option, without fear of criminal prosecution. We understand there is a lot to learn from Cannabis research and the reasons why there is strong opposition as well.

#### **ARGUMENT**

My argument on this topic relates to the lack of clinical and scientific research that explores the possibilities of Cannabis, as an alternative treatment to debilitating diseases and ailments that people suffer with. More clinical research should be conducted, since there is evidence right in front of our nose. Currently there is scientific proof, that Cannabis has safely been effective in treating many types of Cancers, Multiple Sclerosis, Seizures from Epilepsy, Nausea from chemotherapy, Chronic Pain and AIDS. There are also reports, that other diseases such as Alzheimer's, Crohn's Disease, Arthritis, Glaucoma, Asthma, Touretts

Syndrome, Parkinson's Disease, Hepatitis, Migraines and people suffering from terminal illnesses.

Pharmaceutical companies release new prescription drugs almost every month, with harmful (and sometimes even fatal) side effects, but yet, research for medicinal Cannabis is overlooked and still being treated as an illegal substance with no medicinal value.

## 1. REASONS WHY THERE IS VERY LITTLE RESEARCH IN THE U.S.

## A. <u>Legalization and the Current Laws</u>

The Controlled Substances Act (CSA),<sup>1</sup> was passed by Congress as Title II of the *Comprehensive Drug Abuse Prevention and Control Act of 1970* and signed into law by President Nixon. This Federal legislation is what regulates the manufacturing, importing, possession, use and distribution of all drug substances. Inside this legislation, there are five "Schedules" created to classify each substance, and the Drug Enforcement Administration (DEA), along with the Food and Drug Administration (FDA), were given the task to "classify" each substance. These classifications are the reason why citizens and physicians are banned from recommending, prescribing and using medical Cannabis. *Gonzales v. Oregon*, <sup>2</sup> 546 U.S. 243 (2006); *Gonzales v. Raich*, 545 U.S. 1 (2005) *and Raich v. Ashcroft* 248 F.Supp.2d 918 (2003) <sup>3</sup>

Scientific research is difficult to accomplish in the U.S. due to the Federal classification. Cannabis has been classified as a "Schedule I" substance, which means it has no medicinal value with a high potential for abuse. Cannabis is being compared with other drugs such as Heroin, LSD, Ecstasy, Meth, Bath Salts and GHB (date rape drug), which are

also under the Schedule I classification. This classification makes it very difficult for scientific research or studies to be approved. The FDA and the Department of Health and Human Services will not grant permission for research with a Schedule I classification.

Below are the current definitions of each Schedule under the Controlled Substance Act: 4

- **"Schedule 1:** The drug has a high potential for abuse. The drug has no currently accepted medical use in treatment in the United States. There is a lack of accepted safety for use of the drug under medical supervision.
- **Schedule 2:** The drug has a high potential for abuse. The drug has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions. Abuse of the drug may lead to severe psychological or physical dependence.
- **Schedule 3:** The drug has a potential for abuse less than the drugs in schedules 1 and 2. The drug has a currently accepted medical use in treatment in the United States. Abuse of the drug may lead to moderate or low physical dependence or high psychological dependence.
- **Schedule 4:** The drug has a low potential for abuse relative to the drugs in schedule 3. The drug has a currently accepted medical use in treatment in the United States. Abuse of the drug may lead to limited physical dependence or psychological dependence relative to the drugs in schedule 3.
- **Schedule 5:** The drug has a low potential for abuse relative to the drugs in schedule 4. The drug has a currently accepted medical use in treatment in the United States. Abuse of the drug may lead to limited physical dependence or psychological dependence relative to the drugs in schedule 4."

In order for Cannabis research to move forward, this classification will have to be challenged and changed to a Schedule 3, 4 or 5. Schedule I classification has complicated the Federal approval process for research, which has also made it impossible to obtain the research-grade Cannabis needed for research. The controversial debate over legalization also plays a significant role in hindering research progress. *United States v. Oakland Cannabis*Buyers' Cooperative, 532 U.S. 483 (2001).<sup>5</sup>

One case in particular that touches this subject is <u>Seeley v. State</u>, <sup>6</sup> 940 P. 2d 604 (1997) in which the Schedule I classification is the main issue at hand. Mr. Seeley was

diagnosed with terminal cancer and asked the State of Washington for declaratory judgment, finding The Uniform Controlled Substances Act,<sup>7</sup> unconstitutional. He was seeking to have the Board of Pharmacy, reclassify Cannabis, in order for it to be lawfully prescribed by a physician. The Supreme Court ruled in favor of the state, and held that the law was not unconstitutional.

Another example, Lyle Craker, a Horticulturist at the University of Massachusetts, has been trying for over a decade, to cultivate a farm to grow research-grade Cannabis strictly for medical research. His application to obtain a license has been denied repeatedly by the government because of the Schedule I classification. <sup>8</sup>

In California, *The Compassionate Use Act of 1996* was passed on November 5, 1996 through the passage of Proposition 215. This measure created Section 11362.5 of the Health & Safety Code, which allows California residents the right to obtain and use Cannabis for medicinal purposes, when recommended and prescribed by a physician. The Federal Controlled Substances Act, continues to conflict with these types of state laws throughout the U.S.

#### B. Pharmaceutical Companies

Just imagine a miracle drug that would be able to provide relief and/or healing for many illnesses, and it was easy to grow, dispense, ingest and was very inexpensive to produce. Imagine after years of testing, there was no evidence of fatalities or adverse side effects, but proof that it helped in alleviating pain along with numerous healing properties. That would be a slam dunk for the medical industry right? Cannabis could "possibly" have the ability to replace a host of many prescription medications currently being used.

This is exactly the reason that "Big Pharma" wants to keep Cannabis illegal and why they spend millions of dollars for anti-marijuana lobbying. Big Pharma is one of the biggest opponents on Capitol Hill to sway Congress to not legalize marijuana under the current Federal law. Even with all the lobbying, Big Pharma currently is producing an FDA approved Cannabis medicine (Marinol) in an attempt to undercut the growing market.

## C. Special Interest Groups

Special interest groups are another factor in the fight for research in the U.S. With the pharmaceutical corporations being at the top, there are other influential groups that spend millions to keep marijuana illegal. The Republic Report is a nonpartisan group dedicated to the cause of exposing corrupt politics in the U.S. Here is an excerpt quoted from an article written in *The Republic Report* (*April 2012*) on special interests groups:

- "Police Unions: Police departments across the country have become dependent on federal drug war grants to finance their budget. In March, we published a story revealing that a police union lobbyist in California coordinated the effort to defeat Prop 19, a ballot measure in 2010 to legalize marijuana, while helping his police department clients collect tens of millions in federal marijuana-eradication grants. And it's not just in California. Federal lobbying disclosures show that other police union lobbyists have pushed for stiffer penalties for marijuana-related crimes nationwide.
- <u>Private Prisons Corporations</u>: Private prison corporations make millions by incarcerating people who have been imprisoned for drug crimes, including marijuana. As Republic Report's Matt Stoller noted last year, Corrections Corporation of America, one of the largest for-profit prison companies, revealed in a regulatory filing that continuing the drug war is part in parcel to their business strategy. Prison companies have spent millions bankrolling pro-drug war politicians and have used secretive front groups, like the American Legislative Exchange Council, to pass harsh sentencing requirements for drug crimes.

- Alcohol and Beer Companies: Fearing competition for the dollars Americans spend on leisure, alcohol and tobacco interests have lobbied to keep marijuana out of reach. For instance, the California Beer & Beverage Distributors contributed campaign contributions to a committee set up to prevent marijuana from being legalized and taxed.
- <u>Prison Guard Unions</u>: Prison guard unions have a vested interest in keeping people behind bars just like for-profit prison companies. In 2008, the California Correctional Peace Officers Association spent a whopping \$1 million to defeat a measure that would have "reduced sentences and parole times for nonviolent drug offenders while emphasizing drug treatment over prison."

# 2. EVIDENCE THAT MEDICAL CANNABIS HAS AIDED IN THE HEALING OF CERTAIN ILLNESSES AND DISEASES.

## A. CNN Documentary<sup>10</sup>

The triggering factor for this topic, came to me after watching a documentary on CNN, entitled "WEED" hosted by Sanjay Gupta, Neurosurgeon and Chief Medical Correspondent, on the issue of marijuana, recreational and medicinal use. It brought light to the issue of marijuana and the medicinal benefits that have been proven to help certain illnesses. His primary focus was on the research and medical studies of Cannabis. He found that only 6% of the research conducted was to find the potential benefits rather than the harm in Cannabis.

In this documentary there was a case with a 5 year old girl named Charlotte Figi, who suffered from a rare form of epilepsy called Dravet Syndrome (also known as Myoclonic epilepsy) starting at the age of 3 months. These were life threatening grand mal seizures she endured on a daily basis (about 300 a week). A typical day for Charlotte was enduring anywhere from 30-50 seizures a day. She eventually lost the ability to walk, talk and even

eat. Doctors had her on many heavy medications that did little to nothing for her. They were even considering putting her into an induced coma to give her body a chance to rest.

Charlotte's condition was so bleak, her parents signed a DNR to allow her to die with dignity.

Her father, witnessed a story about a boy in California, who also had Dravet Syndrome and was being treated with a tincture made from the CBD content of the Cannabis plant. After much research, her parents decided they wanted to try this remedy for Charlotte. Unfortunately, the state of Colorado did not legalize marijuana and their doctors were against the treatment for a child. They could not find a doctor to prescribe the treatment.

The Figi's persevered and they found a large dispensary in Denver, where they grew the strain of Cannabis they needed called R4 which is very low in tetrahydrocannabinol or THC (the compound that generates the feeling of being high) and very high in cannabidiol or CBD which carries the medicinal properties. A tincture oil was made and administered to Charlotte in a small dose placed under her tongue. To the parent's surprise, that one single dose eliminated Charlotte's seizures for the next seven days. Charlotte is now age 6 and takes the oil twice daily with food. She has only a few seizures a month (usually in her sleep) and is walking, talking and playing like a normal 6 year old. Charlotte's Cannabis treatment has been so successful; she no longer takes any pharmaceutical medications for her epilepsy.

Charlotte's story also aired November 25, 2013 on the TV show called "The Doctors." In this episode they spoke to Dr. Orrin Devinsky, Director of the Comprehensive Epilepsy Center at New York University. He was recently awarded FDA approval to conduct a clinical trial that will study the safety and tolerability of cannabidiol (CBD) in children with epilepsy. This case alone has drawn a lot of attention in the medical industry, to consider the medical

and therapeutic benefits of the cannabidiol substance. Dr. Devinsky stated that regulatory barriers are still intense in the U.S. but the "game is changing" to loosen up these restrictions to allow more research.

## i. Charlotte's Web

The Stanley brothers are the owners of one of the largest Cannabis growers of the state of Colorado. They worked for many years cross-breeding a strain of Cannabis that has medicinal properties but does not trigger psychoactivity or induce a "high." This is the strain of Cannabis that healed Charlotte Figi, and is now known as "Charlottes Web."

The Stanley brothers also started a nonprofit organization called the *Realm of Caring Foundation*. This foundation provides Cannabis to children and adults who suffer from epilepsy, cancer, multiple sclerosis and many other diseases who cannot afford the tincture.

## B. Center for Medicinal Cannabis Research (CMCR)<sup>11</sup>

This center was created in 2000, after Governor Gray Davis signed the *California*State Legislature Medical Marijuana Research Act (SB847), due to the passage of "The

Compassionate Use Act" on the ballot as Proposition 215 in 1996. The center is located at the

University of California known as the California Marijuana Research Program<sup>12</sup> and is now at
the forefront to answer the question "does Cannabis have therapeutic value?" The center

conducts scientific studies to examine safe, efficient and alternative forms of Cannabis

products and Cannabis administration. To date there are fifteen clinical studies with seven

clinical trials in progress. The center is also on the cutting edge of development of "Cannabis

as medicine." If this is successful, the leading pharmaceutical companies would be involved in the production of new prescription medications containing Cannabis compounds.

## C. The American College of Physicians (ACP)<sup>13</sup>

The American College of Physicians is a nationwide organization made up of internal medicine physicians that use scientific knowledge along with clinical experience to diagnose and treat all health issues in our society. It is currently the largest medical and physician run organization in the U.S.

ACP is a strong advocate for medicinal Cannabis and supports increased research for its therapeutic benefits. ACP is behind a nationwide review of the Schedule I classification of marijuana to have it "reclassified" in order for more research to be conducted. They also support exemption of criminal prosecution, civil liability, sanctioning and loss of license for physicians who prescribe marijuana according to state law. *Conant v. Walters* 309 F.3d 629 (2002)

### D. Research in Israel

Israel has been a leader in cutting edge Cannabis research for years with the help of Professor Raphael Mechoulam at the Hebrew University of Jerusalem. He is considered the father of research of Cannabis and an expert on medicinal chemistry and natural Cannabis products. Much of what we know about cannabinoids and medical Cannabis stems from the groundbreaking work of Professor Mechoulam. Professor Mechoulam was the first person to synthesize the active ingredient in Cannabis, tetrahydrocannabinol (THC) back in 1964. His discovery is what opened the door for scientific study of Cannabis all over the world.

Through his dedication to research, he has made tremendous progression by discovering that isolating the psychoactive components, "THC" from the medicinally viable component, cannabidiol or "CBD" can provide significant medical capabilities.

## E. Pharmaceutical Drugs Based on Cannabis<sup>15</sup>

To date, there are currently two prescription drugs that have been developed using the cannabidiols in Cannabis.

- <u>SATIVEX</u> Manufactured by GW Pharmaceuticals in the UK in 2010, making it the first Cannabis-based prescription in the world to treat neuropathic pain and spasticity for patients with MS and cancer. It comes in the form of a mouth spray and contains the THC and CBD cannabidiols.
- MARINOL Manufactured by Unimed Pharmaceuticals and FDA approved in the US, Denmark and Canada for the treatment of nausea and vomiting for cancer patients; as an appetite stimulant for AIDS patients; and neuropathic pain in MS patients. It is a synthetic version of THC available as a pill or as an inhaler.

#### CONCLUSION

The research on the medicinal benefits of Cannabis should not be obscured or hindered by the debate surrounding the legalization of Cannabis for recreational use. Cases like Charlotte Figi's are a catalyst for the reasons why the research needs to be made a top priority. It is obvious that there is enough evidence to show that the substance holds a multitude of positive effects in regards to maintenance and relief of major health disorders.

The first thing that needs to happen, in order for research to thrive, is for Congress to reclassify Cannabis. I propose that the Schedule I classification be changed to a Schedule 3 or 4 to lift the inhibitory regulations for research. This change would also "even the playing

field" between State and Federal laws on this issue. A new proposition should be put on the ballot for voters to decide whether there should be more scientific research for Cannabis.

<sup>1</sup> Title II of The Comprehensive Drug Abuse Prevention and Control Act of 1970; 21 USC § 801 *et seq.*;21 CFR Part 1300 to end.

<sup>&</sup>lt;sup>2</sup> <u>Gonzales v. Oregon</u>, 546 U.S. 243 (2006): Oregon case in which the Controlled Substance Act authorized Attorney General Gonzalez to prohibit doctors from prescribing lethal drugs for physician assisted suicide. The Attorney General did not support Oregon's "Death with Dignity" Act and ruled that drugs to cause death are not a "legitimate medical purpose."

<sup>&</sup>lt;sup>3</sup> <u>Gonzales v. Raich</u>, 545 U.S. 1 (2005) and <u>Raich v. Ashcroft</u> 248 F.Supp.2d 918 (2003): Cases in which the Federal Controlled Substance Act (CSA), conflicted with California's "Compassionate Use Act" which legalized cannabis for medical use. Defendant, Raich used homegrown medical marijuana legally under California law, but illegal under the federal DEA law. Defendant sued the Attorney General, arguing that Congress had exceeded their interstate commerce clause authority by legislating the behavior of local citizens who consume locally grown cannabis in their own home.

<sup>&</sup>lt;sup>4</sup> United States Drug Enforcement Administration (DEA) - <u>www.justice.gov/dea/druginfo/ds.shtml</u>

<sup>&</sup>lt;sup>5</sup> <u>United States v. Oakland Cannabis Buyers' Cooperative</u>, 532 U.S. 483 (2001): 1998 case in which a large cannabis group (grower), was sued by the U.S. Government to stop growing and distributing marijuana in violation of the Controlled Substances Act. The court granted an injunction and the group violated it, and continued to grow and distribute medical marijuana to patients and caregivers.

<sup>&</sup>lt;sup>6</sup> Seeley v. State, 940 P. 2d 604 (1997)

<sup>&</sup>lt;sup>7</sup> RCW 69.50.204(c)(14); 21 C.F.R. §1308.11(d)(19) (1996)

<sup>&</sup>lt;sup>8</sup> The Huffington Post - www.huffingtonpost.com/2011/03/04/lyle-craker-umass-profess

<sup>&</sup>lt;sup>9</sup> The Republic Report - www.republicreport.org/2012/marijuana-lobby-illegal

<sup>&</sup>lt;sup>10</sup> CNN documentary entitled "Weed" aired August 8, 2013, hosted by Dr. Sanjay Gupta

<sup>&</sup>lt;sup>11</sup> Center for Medicinal Cannabis Research - www.CMCR.UCSD.edu

<sup>&</sup>lt;sup>12</sup> Cal Health & Saf Code § 11362.9, (2013), Health and Safety Code, Division 10. Uniform Controlled Substances Act, Chapter 6. Offenses and Penalties, Article 2. Marijuana, § 11362.9. Marijuana Research Program, Deering's California Codes Annotated.

<sup>&</sup>lt;sup>13</sup> The American College of Physicians: Health and Public Policy Committee - Article/Supporting Research Into the Therapeutic Role of Marijuana; an addendum by the Health and Public Policy Committee <a href="https://www.acponline.org">www.acponline.org</a>

<sup>&</sup>lt;sup>14</sup> <u>Conant v. Walters<sup>14</sup></u> 309 F.3d 629 (2002): Court of Appeals case that secured physicians First Amendment Right to recommend and prescribe medical cannabis to their seriously ill patients without fear of having their license revoked.

<sup>&</sup>lt;sup>15</sup> Medical Marijuana at <u>www.PROCON.org</u>