

Why Marijuana Should Be Legalized in the United States

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### Abstract

Marijuana has had several misconceptions as there have been records of it having a negative impact on the users. The users of this drug in most cases end up being addicted and as such, experience hallucinations (Chen, Storr, & Anthony, 2009). Young people have succumbed to those illusions. Some have engaged in dangerous activities leading to injuries and serious accidents. Also, marijuana has in the past brought health complications to the users. Excessive use of marijuana has led to diseases such as cancer and bronchitis (Volkow, Baler, Compton, & Weiss, 2014). Despite the adverse effects of marijuana, it might have several positive impacts on the user. According to the needs of the user, some take medicine as a spiritual herb hence giving it the respect it deserves. Also, marijuana is used for medicinal purposes. Various communities use marijuana to subvert pain and for other medicinal benefits. Lastly, marijuana is used for recreational purposes as many people use it to feel euphoria, - a common case among the youths. Also, the drug is used by some people to feel relaxed during tense moments. Therefore, this paper aims to debate between the negative and positive impacts of marijuana and convince the population of the need to legalize it.

*Keywords:* marijuana, adverse effects, benefits, legalization

### Why Marijuana Should Be Legalized in the United States

The topic that marijuana (better known as cannabis sativa) should be legalized has been contentious. The issue has been discussed for quite some time now. Marijuana is a psychoactive drug and is naturally obtained from a plant called cannabis. The drug is obtained and used by humans mainly for recreation. However, research has proved the possibility that the drug can be used for medical purposes (Swift, Gates, & Dillon, 2005). Several countries have refuted the use of marijuana legally on their territory, mainly because the drug has been realized to have negative side effects on young people. In most cases, youths begin using marijuana at a tender age, which leads to further addiction accompanied with frequent hallucinations. These hallucinations make the addicts engage in hazardous activities which in some cases even lead to death (Chen et al., 2009). Also, they become repulsive towards their instructors. Young addicts cause trouble in school and some end up dropping out.

Notably, marijuana also affects marriages as it causes conflicts. Furthermore, addicts of marijuana engage in physical fights while at work. Despite all this, marijuana has immense importance. For instance, marijuana has been important due to its application in medicine, which is the direction on which this paper is going to focus. Marijuana's main components, THC and cannabinoids, have been scientifically proven to have the capacity to treat several ailments or reduce the side effects associated with other medical drugs, as explained by Hill (2015). However, the use of cannabis as a solution has not been thoroughly and deductively tried, mainly because of general limitations and other government regulations. There is some evidence that marijuana can be utilized to diminish vomiting and nausea during chemotherapy, to enhance hunger in individuals with HIV/AIDS, and to treat ceaseless agony and muscle spasms. Also, there are people who use cannabis simply to feel euphoria or for relaxation. Finally, countries

such as India use marijuana for spiritual significance, which prompts the need to legalize it. The study of cannabis should be a priority and its application legalized due to some of its health benefits, such as serving as a painkiller for patients with arthritis, its effect in increasing lung capacity, its effectiveness in controlling epileptic seizures and in treatment of Hepatitis C, alongside its application in slowing down Alzheimer's disease, which is a mental condition among the elderly. Therefore, despite the adverse effects of marijuana, some people use the drug for positive benefits, hence the need to prompt a discussion about legalization.

### **Health Benefits of Marijuana**

Marijuana is known to relieve pain effectively. Pain is a disconcerting way of causing discomfort to people. It has been noted that people might feel tired and weak just because of pain. Therefore, a person feeling some excruciating pain in most cases asks for painkillers. Doctors use different types of painkillers to relieve a patient of the pain. There have been researches conducted about the medicinal use of marijuana. It is important to note that researchers have found that marijuana could be used as a painkiller. In the past, in different countries across the world, people who had suffered deep wounds and needed to be operated on could be put on marijuana to help in relieving the pain (Hill, 2015). Long before aspirin was invented, marijuana was the primary pain reliever. Hill (2015) explains that up to date, in countries where marijuana has been utilized, epileptic patients are allowed to grow medical marijuana as it eases the pain in the joints, much more efficiently than artificial painkillers could.

Medically, marijuana can help reverse the carcinogenic effects of tobacco and increase lung health. According to Swift et al. (2005), as per publication in the Journal of the American Medical Association, the drug increases the lung capacity. To arrive at this conclusion, the research involved a survey of 5115 subjects over a span of 20 years as from 1985, when they

were between 18 to 30 years of age. In this case study, the use of marijuana was almost as frequent as that for tobacco. In the study, the marijuana users smoked two to three times a month, while the tobacco users smoked an average of eight cigarettes per day. The reason as to why the results of this study could be deemed credible is that it was monitored for a more extended period than any other research on the same topic and that it included a large number of participants. Tobacco users showed a drop in lung function over time, but marijuana smokers had unexpected positive effects (Swift et al., 2005). Moderate users showed an increase in lung capacity as compared to individuals who did not smoke marijuana at all. It is thought that the lung capacity increased due to taking deep breaths while smoking the drug.

Also, marijuana can be used in controlling seizures that result from epilepsy. Epilepsy, a common neurological condition, is characterized by spontaneous seizures that repeatedly occur to the patient (Keck, McElroy, & Strakowski, 1998). About 1% of Americans suffer from epilepsy, and about 30% of this population is resistant to treatment with anti-seizure drugs. Despite anti-seizure purpose of the drug in preventing the spread of seizure to the brain, it has been proven to reduce IQ when used in children subjects significantly (Loring & Meador, 2004). For thousands of years, cannabinoids have been used as a natural remedy for seizures and studies in the past have shown that the primary active compound in the drug displays anti-seizure properties. For this study, a team of scientists injected a group of chronically epileptic rats with the common anti-seizure medicines and an extract from marijuana. Injection of the marijuana extract stopped the seizure entirely over a period of ten hours. In this light, the study indicates that marijuana could offer a unique advantage over the currently prescribed anti-seizure drugs in the treatment of epilepsy (Swift et al., 2005). Therefore, if ample time and resources could be

dedicated to the study of marijuana and its medical benefits, better work may be done in treating epileptic seizures.

Another reason as to why marijuana ought to be legalized is because it is applicable in the treatment of inflammatory bowel diseases. The two major inflammatory bowel diseases include Crohn's disease and ulcerative colitis. Confirmed by laboratory tests, the two compounds found in the marijuana plant, the cannabidiol and cannabinoids THC, interact with the body to control body functions. In both diseases, researchers believe that stress, bacterial imbalance, and generic susceptibility lead to a defective immune system. Marks, Rahman, Sewell, and Segal (2009) explain that intestinal linings provide a barrier against the contents of the food canal. In people living with Crohn's disease, however, the wall becomes passive, and bacteria can escape into the intestinal tissue, which results in an inappropriate immune response. If there was a way to restore the barrier, there might be a possibility of curbing the inflammatory immune response that results into Crohn's disease and ulcerative colitis (Marks et al., 2009). The body produces its cannabinoid molecules which are shown to increase the permeability of the intestinal walls during inflammation, implying that overproduction may be harmful. However, this process can be reversed using plant-derived cannabinoids (active components of marijuana), which make the epithelium cells form tighter bonds hence restoring the membrane barrier (Swift et al., 2005).

Marijuana also reduces side effects from treating hepatitis C and increases the effectiveness of the treatment. Hepatitis C is a deadly virus that affects more than 3 million Americans, according to the study by Hill (2015). The study adds weight to the perception that marijuana can offer some health benefits in the treatment of hepatitis C. The treatment of this disease involves six months of therapy with two powerful drugs, ribavirin and interferon. These drugs have numerous side effects that include nausea, muscle aches, extreme fatigue, depression,

and loss of appetite, which cause many people not to finish their medication for hepatitis C (Hill, 2015). A case study by the University of California involved tracking the progress of 71 hepatitis C patients undergoing treatment with the drugs. Twenty-two of the test participants smoked marijuana while forty-nine did not smoke marijuana during the treatment. After the six-month treatment, 86% of the participants who used marijuana had completed the treatment successfully, whereas only 29% of the non-smokers were able to complete therapy (Hill, 2015). Additionally, 54% of the marijuana smokers did not have any sign of the virus in their system as compared to 18% who did not smoke marijuana. It is possible that marijuana reduced depression among the test subjects, increased their appetite and helped them endure the side effects of the drugs.

Marijuana is also known to slow down the progress of the Alzheimer's disease. Alzheimer's disease is one that starts slowly but progressively gets worse. The earliest symptoms of the disease include short-term memory loss and confusion. Eventually, the patient loses memory of things and people they might have known in the past. Forbes, Thiessen, Blake, Forbes, & Forbes (2014) expound that the disease accounts for 60-70% of dementia cases, and it is estimated that 4.5 million Americans suffer from this illness. If nothing is done to fight this disease, the estimated number of patients could reach 25 million by 2050 (Forbes et al., 2014). The Scripps Research Institute scientists proved that the formation of amyloid plaque in the brain which causes Alzheimer's is inhibited by THC, the main active ingredient of marijuana. According to the research, THC inhibits acetylcholinesterase (AChE), an enzyme in the brain of people living with Alzheimer's that speeds the formation of amyloid plaque. Notably, THC has inhibitory characteristics that are not possessed by the AChE inhibitors available to patients currently. Hence, if a treatment or control for Alzheimer could be found in marijuana, this would significantly reduce the health costs associated with the treatment of the disease.

### **Health Effects of Marijuana**

Despite the debate on the legalization of marijuana, most of the administrative bodies and governments of many countries consider marijuana illegal, and possession of the drug could result into fining or even imprisonment. There have been researches conducted on how addictive marijuana can be in comparison to alcohol. However one may want to look at it, long-term use of marijuana leads to addiction. Approximately 9% of the people who experiment with marijuana become addicts and can no longer do without the drug (Volkow et al., 2014). The use of marijuana, especially among young adults, is troublesome. The increased likelihood of long-term effects is conditioned by the fact that adolescent brain is still under development during (Chen et al., 2009). Regular and early use of the drug translates into an increased risk of addiction which might lead the individual using other drugs. Also, it has been established that cannabis withdrawal symptoms exist, which may include anxiety, craving, irritability and sleeping difficulty, which makes it difficult for an individual to stop using the drug (Gorelick et al., 2012). Also, smoking cannabis increases the heart rate by as much as twice, which can last up to three hours. Hence, the chance of having a heart attack right after the use of marijuana is high particularly in the elderly and those who have been diagnosed with heart problems in the past.

Cannabis also affects the brain development process. The brain is supposed to remain in a state of continuous development that is induced by experience through adulthood and adolescence until an individual is 21 years of age. During this time, the brain is more vulnerable to environmental factors as compared to an adult brain. Exposure to THC for instance, the active component of marijuana may have detrimental effects in the long run. This conclusion has been proven through animal studies that explain that exposure to THC at an early age can alter the sensitivity of the reward system to other drugs (Gorelick et al., 2012). It also interferes with



cytoskeletal dynamics, which are crucial for axonal connections between neurons. Exposure to cannabis at an early age may cause one experience problems in alertness, awareness, learning, memory, and self-consciousness during their adult life. Volkow et al. (2014) explain that massive marijuana use results in brain abnormalities and the effects on the brain are similar to those of other major drugs. Also, studies have shown that there is a connection between psychosis and the continued use of marijuana, a mental condition in which thoughts and emotions are so damaged that an individual loses contact with reality.

Still, in terms of the physical effects, the smoke from marijuana irritates the lungs and people who use marijuana in large quantities over an extended period have the same respiratory problems experienced by tobacco smokers. Some of these effects include phlegm and cough. In most cases, there is a high risk of lung infection. Also, marijuana use among expectant mothers might result in adverse effects on the child before and after birth. The baby is likely to have a brain and behavioral abnormalities, mainly because exposure to THC dramatically affects some of the parts of a developing brain (Volkow et al., 2014). The child will most likely have problems with attention, memory, and problem-solving skills as compared to a child who has not been exposed to the drug. Continuous use of marijuana could lead to traces of THC in the breast milk, which has adverse effects on the baby's developing brain and immune system. For this reason, expectant and lactating mothers should abstain from marijuana as much as possible, whether they are active smokers or passive smokers in case someone in their immediate vicinity smokes marijuana.

### **Conclusion**

This paper aimed at supporting the legalization of marijuana in the United States of America, by outlining some of its most prominent health benefits and how it could be applied in

the field of medicine. At the same time, it shed some light on the adverse effects that may be suffered by an individual as a result of long-term use of marijuana. Many argue that the legalization of medical marijuana is just a way of allowing people to use the drug for recreational purposes. Indeed, the main reason as to why the drug is prohibited in the first place is because its effects on an individual's health are detrimental. However, this might not be the case since if time and resources are dedicated to the study of marijuana, some good might come out of it. Therefore, the government should lift the ban on the study of the drug, especially regarding its health benefits. Stakeholders should take into account that the medical benefits of marijuana are observed only when used in mild quantities. A clear boundary should be drawn between medical marijuana and the non-medical marijuana, which is mostly for commercial and recreational purposes. It has been established that people are bound to reject and misinterpret what they do not know and understand. In this case, marijuana has been shunned in the past since people do not fully understand how vital its applications could be in the medical profession. They have fought marijuana for way too long, and perhaps this is the time to embrace and put its therapeutic value to use.

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