



LEGALIZATION OF MARIJUANA FOR MEDICAL PURPOSES

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Introduction

Drug Abuse is the consumption of drug in a quantity which may be self-damaging and addictive. In addition to possible physical, psychological and social harm, it may also lead to criminal penalties. Basically, these drugs include alcohol, cannabis, cocaine, opioids, methaqualone etc. Human Security basically means

protecting the people and promoting peace and socio-economic development of the society and it is more of humanitarian in nature and aims to eliminate human sufferings and ensure human security¹. The security understood in traditional sense means how the state manage threats from external source but nowadays a new concept of human security has come in ambit which means the use of non-military methods for the purpose of achieving security and fulfill the basic needs of the people.² In modern times the concept of human security also covers food security, health security, environmental security and personal security. We have one such increasing threat on human security i.e; Drug abuse.

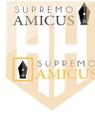
The drugs like the synthetic drugs should be completely banned but non-synthetic drugs can be supplied with checks and balances. Marijuana is one of them it is referred as cannabis or weed but it has a number of names like pot, 420, grass, hemp, hashish, charas etc. Cannabis is also sometimes referred to as a synthetic drug but it is not so because it is developed from the cannabis plant³. Cannabis also referred to as marijuana is legalized for medical purposes in some countries and yet to be done in some countries. A Bill was proposed regarding this in our Indian Parliament last year but was not passed⁴. Lately, Maneka Gandhi

¹<http://www.humansecurityinitiative.org/definition-on-human-security>.

²D.P.K Pillay, Applying Human Security in Indian Context, (Jan.7,2016), <http://www.tandfonline.com/doi/full/10.1080/09700161.2015.1116246?src=recsys%20https://www.youtube.com/watch?v=IgcVQTX86s>.

³ D.P.K Pillay, Applying Human Security in Indian Context, (Jan.7,2016), <http://www.tandfonline.com/doi/full/10.1080/09700161.2015.1116246?src=recsys%20https://www.youtube.com/watch?v=IgcVQTX86s>.

⁴ <http://www.hindustantimes.com/punjab/aap-mp-gandhi-s-bill-seeking-opium-legalisation->



has suggested the legalization of marijuana for medical purposes⁵. We are in favor of legalizing marijuana for medical purpose because it has more health benefits than harms. As the excessive consumption of anything is harmful so we cannot completely ban anything for its harms ignoring the benefits arising from it.

The term medical marijuana means to use the whole unprocessed marijuana plant or its basic extracts to treat the symptoms of illness⁶. Scientific study of the chemicals in marijuana, called cannabinoids, has led to two FDA-approved medications that contain cannabinoid chemicals in pill form as marijuana plant contains chemicals that may help treat a range of illnesses⁷. In ancient times, it was considered as herbal plant and were used as painkillers.

History of Marijuana

Marijuana has a very long history. The first record on cannabis is of a Chinese Emperor Shen Nung in 2727 BC. The Chinese soldiers used it during war for gaining strength and durability and reducing pain. Marijuana was introduced for the first time in America in about 1575 by the Spanish. It wasn't mainly for recreational purposes until 1900's when the Mexican immigrants introduced the

recreational habit of smoking marijuana. It evolved from the Central Asia where a large group of Iranian nomads known as the Scythians started inhaling the smoke from the cannabis seeds and flowers to get high and with the spread of Islam in the region there was a rise in its popularity, although the Quran prohibits the use of alcohol or any kind of intoxicating substances but there is no specific prohibition on cannabis. Later on it evolved in Africa, Europe and America. Although the people in earlier times were aware of the intoxication properties but their focus was on its power of medication rather than for recreational purpose or euphoria. It was used to treat rheumatism, labor pains and tooth aches etc.

In India, cannabis has a long history. In the Atharva Vedas (sacred Hindu texts) chapter 11, Hymn 6, Verse 15, the cannabis plant is regarded as one of the five sacred plants and the guardian angels lived in its leaves⁹. Lord Shiva is mainly associated with cannabis commonly known as bhang (one of the segregated plant under cannabis) in India, it is used in religious ceremonies and festivals like Holi. In our country, cannabis was used for ayurvedic medication as well as for spiritual purpose.

cleared-for-tabling-in-parliament/story-itanKX3vRrhuXJPdgnJD6N.html.

⁵ <http://www.firstpost.com/india/watch-maneka-gandhi-suggests-legalising-marijuana-for-medical-purposes-in-india-3872711.html>.

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<https://www.drugabuse.gov/publications/drugfacts/marijuana-medicine>.

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<https://www.drugabuse.gov/publications/drugfacts/marijuana-medicine>.

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<https://www.deamuseum.org/ccp/cannabis/history.html>.

⁹<http://titus.uni-frankfurt.de/texte/etcs/ind/aind/ved/av/avs/avs.htm>



Adverse effects of excessive consumption of marijuana

After consuming marijuana, for a short span of time the person will feel relaxed, experience mood swings, heightened sensory perception, increase in appetite and euphoria but there is more negative effect if a person consumes it in excess as cannabis is highly potent and in recent decades the chemical potency has comparatively increased which has increased the instances of short term memory loss, hallucinations, psychosis, panic, etc¹⁰. There is risk of sexual problems in male, etc¹¹. While some of the long term effects are lower life satisfaction, depression, relationship problems, antisocial behavior etc².

Benefits arising from Legalization of Marijuana

There are two main active chemicals in marijuana that researchers found to have medicinal application. These are, cannabidiol (CBD) - which seems to impact the brain without a high and tetrahydrocannabinol (THC) - which has pain relieving properties. The term *medical marijuana* refers to using the whole, unprocessed marijuana plant or its basic extracts.

However, scientific study of the chemicals in marijuana, called *cannabinoids*. Cannabinoids are chemicals related to delta-9-tetrahydrocannabinol (THC),

marijuana's main mind-altering ingredient that makes people "high." The marijuana plant contains more than 100 cannabinoids.

There are different types of cannabinoids, they are:

- **Phytocannabinoids** – plant leaves, flowers, stems, and seeds collected from the *Cannabis sativa* plant and ingested in some form (cigarettes, vapor).
- **Endogenous** – cannabinoids made by the body: examples include *N*-arachidonylethanolamine or anandamide (AE) or 2-arachidonoylglycerol (2-AG). AE and 2-AG activity can be manipulated by inhibiting their corresponding hydrolases FAAH or MAGL, preventing their degradation.
- **Purified** naturally occurring cannabinoids purified from plant sources: examples include cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC)
- **Synthetic** cannabinoids synthesized in a laboratory: examples include CB1 agonists (CPP-55, ACPA), CB2 agonists (JWH-133, NMP7, AM1241), CB1/CB2 nonselective agonist (CP55940), ajulemic acid (AJA), nabilone, and dronabinol.

Cannabinoids are useful as medicine because of the two main essentials from the marijuana plant that are of medical interest are THC and CBD. THC can

¹⁰
<http://www.drugfreeworld.org/drugfacts/marijuana/short-and-long-term-effects.html>

¹¹
<http://www.drugfreeworld.org/drugfacts/marijuana/short-and-long-term-effects.html>

¹²
<http://www.drugfreeworld.org/drugfacts/marijuana/short-and-long-term-effects.html>



increase appetite and reduce nausea and also decrease pain, inflammation (swelling and redness), and muscle control problems. CBD doesn't make people high. It may be useful in reducing inflammation, controlling epileptic seizures and possibly treat mental illness and addictions.

There are some Scientific research going on marijuana and its extracts to treat symptoms of illness and other conditions like diseases that affect the immune system, including HIV/AIDS and multiple sclerosis (MS), which causes gradual loss of muscle control. There is also growing interest in the marijuana chemical *cannabidiol* (CBD) to treat certain conditions such as childhood epilepsy, a disorder that causes a child to have violent seizures. Therefore, scientists have been specially breeding marijuana plants and making CBD in oil form for treatment purposes. These drugs aren't popular for recreational use because they aren't intoxicating.

Medical Benefits

Marijuana helps in the treatment of a number of diseases from its chemical properties, some of them are as follows:

1. Marijuana slows and stops cancer cells from spreading- One of the main reasons for legalization of marijuana for medical purpose is because of its ability to treat cancer. According to a research, published in the journal *Molecular Cancer Therapeutics*, that Cannabidiol has the ability to stop

cancer by turning off a gene called Id-1. Researchers at California Pacific Medical Center in San Francisco, reported that CBD may prevent cancer from spreading. The researchers experimented on breast cancer cells in the lab that had high level of Id-1 and treated them with cannabidiol. The outcome was positive, the cells had decreased Id-1 expression, and were less aggressive spreaders. In fact, the American Association for Cancer Research has found that marijuana actually works to slow down tumor growth in brain, breast, and lungs considerably.¹³

2. Prevents Alzheimer's- THC, the active ingredient present in marijuana slows the progression of Alzheimer's disease, a 2006 study led by Kim Janda of the Scripps Research Institute found out. THC slows the formation of amyloid plaques by blocking the enzyme in the brain that makes them. These plaques kill the brain cells, and potentially lead to Alzheimer's disease.¹⁴

3. Relieves Arthritis- Cannabis reduces pain and inflammation, and promotes sleep, which may help relieve pain and discomfort for people with rheumatoid arthritis. Researchers at several hospitals gave their patients Sativex, a cannabinoid-based pain-relieving medicine. After two weeks, patients on Sativex had a significant reduction in pain, and improved better sleep quality compared to placebo users.

5. Eases the pain of multiple sclerosis- Weed works to stop the negative

¹³California Pacific Medical Center, Research Institute, 475 Brannan Street, San Francisco, CA 94107, USA.

¹⁴<http://www.scripps.edu/news/press/2006/080906.html>.



neurological effects and muscle spasms caused by multiple sclerosis. Jody Cory Bloom studied 30 multiple sclerosis patients with painful contractions in their muscles. These patients didn't respond to other medications, but after smoking marijuana for few days, they reported that they were in less pain. The THC in the pot binds the receptors in the nerves and muscles to relieve pain.¹⁵

6. Soothes tremors for people with Parkinson's disease- Smoking marijuana remarkably reduces pains and tremors and improves sleep for Parkinson's disease patients. What was impressive about the research was the improvement of the fine motor skills among patients. Israel has made medical marijuana legal, and a lot of research into the medical uses of weed is done there, supported by the Israeli Government.

7. Decreases the symptoms of Dravet's Syndrome- Dravet Syndrome causes seizures and severe developmental delays. Dr. Sanjay Gupta, renowned chief medical correspondent for CNN, is treating a five years old girl, Charlotte Figi, who has Dravet's Syndrome, with medical marijuana strain high in cannabidiol and low in THC. During the research for his documentary "WEED", Gupta interviewed the Figi family, and according to the film, the

drug decreased her seizures from 300 a week to just one every seven days. Forty other children are using the same medication, and it has helped them too. The doctors who are recommending this medication say that the cannabidiol in the plant interacts with the brain cells to quiet the excessive activities in the brain that causes the seizures.¹⁶

8. Lessens side effects from treating Hepatitis C, and increases treatment effectiveness- Treating Hepatitis C infection has severe side effects, so severe that many people are unable to continue their treatment. Side effects range from fatigue, nausea, muscle pains, loss of appetite, and depression- and they last for months. But, pot to the rescue: A 2006 study in the European Journal of Gastroenterology and Hepatology discovered that 86% of patients using marijuana successfully finished their therapies, while only 29% of the non-smokers completed their treatments, maybe because marijuana helps to lessen the treatments' side effects. Cannabis also helps to improve the treatment's effectiveness. 54% of the Hep C patients smoking marijuana got their viral levels low, and kept them low, compared to the only 8% of the non-smokers.¹⁷

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<https://neurosciences.ucsd.edu/faculty/Pages/jody-corey-bloom.aspx>.

¹⁶Dr. Sanjay Gupta, Why I changed my mind on weed, (Aug. 9, 2013), <http://edition.cnn.com/2013/08/08/health/gupta-changed-mind-marijuana/index.html>.

¹⁷Diana L Sylvestre Cannabis use improves retention and virological outcomes in patients treated for hepatitis C (Jan. 26, 2016) , <http://journals.lww.com/eurojgh/pages/articleviewer.aspx?year=2006&issue=10000&article=00005&type=abstract>.



9. Helps reverse the carcinogen effects of tobacco, and improve lung health-

In January 2012, a study published in Journal of the American Medical Association showed that marijuana improved lung functions, and even increased lung capacity. Researchers looking for risks factors of heart disease, tested on 5,115 young adults, over the period of 20 years, and found out that only pot users showed an increase in lung capacity, compared to the tobacco smokers who lost lung function over time.¹⁸

incorporates smoked or vaporised marijuana. Naturally occurring cannabinoids, similar to THC, help control the system that causes fear and anxiety in the body and brain.

Revenue Generation

There is a huge market of illegal production, processing and supply of marijuana in India which is growing rapidly. This black market can be acquired by the government by legalizing marijuana, this would dose up our country's economy and would help many sectors of occupation specially farming(cultivation).

10. Protects brain after a stroke-

Research (done on rats, mice, and monkeys) from University of Nottingham shows that cannabis may help protect the brain from damage caused by a stroke by reducing the size of the area affected by the stroke. This isn't the only research that has shown neuroprotective effects from cannabis. Some research shows that the plant may help protect the brain after other traumatic events like concussions.

1. Creating Job opportunities-

Legalization of marijuana for medical purposes will definitely open new doors in different industries like cultivation, processing, transporting, processing, package, distribution, licensing and selling. There are plethora of jobs that can be created by the marijuana industry and help reduce India's unemployment rate¹⁹.

11. Helps veterans suffering from Post Traumatic Stress Disorder-

Marijuana is approved to treat PTSD in some states in America. In New Mexico, PTSD is the number one reason for people to get a license for medical marijuana, but this is the first time U.S. Government's The Department of Health and Human Services has approved a proposal that

2. Licensing System- The marijuana if would be legalized for medical purpose then a controlled mechanism could be developed by licensing it at every step to prevent the misuse. Licensing could be set up at (1) Cultivation, (2) Processing Industry, (3) Medicinal Products etc. The tax slabs could be set up according to its need among the

¹⁸Maia Szalavitz, study-smoking marijuana not linked with lung damage, (Jan. 10,2012), <http://healthland.time.com/2012/01/10/study->

smoking-marijuana-not-linked-with-lung-damage/.

¹⁹ Surya Solanki, 10 reasons why marijuana should be legalized in India, (Nov. 19, 2014),



society by the government. As the tax revenue is very important in today's economy this would prove to be ideal step towards controlling and earning while providing health benefits to the public at large.

Uttarakhand is the first state in India to allow the cultivation of cannabis in the state but only for industrial purpose as there is a dying need for cash crops²⁰. However, the government has cleared that only those people who possess a license will be able to cultivate and the produce can be sold only to the government and not to any private buyers²¹.

3. **Medical Tourism-** Nowadays, people are aware of the health benefits arising from marijuana, so if our government legalize marijuana it would definitely attract a lot of foreigners (as marijuana has got a lot of medical benefits as explained before in this research paper) for their treatment, this would definitely increase income of country as medical tourism is a very strong economical resource in India which will further increase if marijuana is legalised for medical purposes.

Changes required in Law

²⁰ Bobins Abraham, Uttarakhand to be the first Indian State to legalise cannabis cultivation, (Nov. 27, 2015), <http://www.indiatimes.com/news/india/uttarakhand-to-become-first-indian-state-to-legalise-cannabis-cultivation-247769.html>.

²¹ Bobins Abraham, Uttarakhand to be the first Indian State to legalise cannabis cultivation, (Nov. 27, 2015), <http://www.indiatimes.com/news/india/uttarakhand-to-become-first-indian-state-to-legalise-cannabis-cultivation-247769.html>.

In India, any quantity of cannabis derivative was pretty much legal until 1985, when the Narcotics Drugs and Psychotropic Substances Act came into existence in India under pressure of UN convention which reclassified the cannabis product as much more dangerous chemical drug²². After the legalization of marijuana for medical purposes in Canada we got to know about a loophole in the 1971 Convention on Psychotropic Substances which considers the Constitution of any country as supreme law of the land, therefore if any country is willing to legalize any substance which is prohibited by the UN conventions, it wouldn't violate the UN convention. So this strategy could adopted to legalize marijuana and at the same time not being a defaulter of UN convention²³.

Legalization of marijuana can be linked with Article 47 of The Constitution of India which states that, "The state shall regard the raising of the level of nutrition and the standard of living of its people and to improvement of public health as among the primary duties, in particular, the state shall endeavor to bring about the prohibition of the consumption except for medicinal purpose of intoxicating drinks

²²Lisa Kush, New Bill could legalise cannabis and opium in India, (Dec.12, 10:35 AM), <https://www.livts.org/cannabis/new-bill-legalize-cannabis-opium-across-india/>.

²³ Patrick Cain, Canada seems likely to legalize pot while ignoring UN treaties, (July 19, 2017, 3:58 PM), <http://globalnews.ca/news/3606927/after-blowing-july-1-deadline-canada-seems-likely-to-legalize-pot-while-ignoring-un-treaties/>



and of drugs which are injurious to health²⁴. Which can make marijuana which is stated as an injurious drugs to be used for medicinal purpose and hence to be decriminalized for the improvement of health of the people of India.

Presently in India selling of cannabis comes under the category of prohibited drugs under the Narcotics Drugs and Psychotropic Substances Act, 1985 and so cultivation, possession or sale is an offense punishable with rigorous imprisonment upto 10 years fine upto Rs 2 lakh²⁵.

Last year, Dr Dharamvira Gandhi, MP of Patiala introduced a Bill seeking legalization of opium and marijuana which was rejected in the legislative branch of Parliament claiming to be against UN convention²⁶. This year, The Women and Child Development Minister Maneka Gandhi said Marijuana should be legalized for medical purposes especially because it serves a purpose in cancer and would reduce the rapid growing consumption of Heroin(chemical drug) among the youth²⁷. So to legalize marijuana for medical purposes the NDPS Act, 1985 should be amended by changing the category of marijuana from

prohibited drug to controlled substance leading to its legalization under the control of government.

Comparative Study on Legalization of Marijuana

Marijuana is the most commonly used illegal drug in the world with an estimated 125 million people consuming it in some form or the other. In around 40 countries marijuana is legal. Recently in USA, marijuana has been legalized for medical purposes in most parts of the country and in some states even for recreational purpose including the capital i.e. Washington D.C. itself²⁸. Uruguay was the first country to decriminalize it for both medical and recreational purposes and later joined by major countries like USA, Netherlands and Canada and many others²⁹. Mexico's Supreme Court ruled that growing, possessing and smoking marijuana for recreation is legal under the right to freedom³⁰. According to Switzerland laws, growing marijuana on private property for personal consumption by adults is legal, however, buying or selling marijuana is a strict criminal offence and punishable by a fine. Bolivia put a right to chew coca leaves, an ancient practice in that society, in their

²⁴ Article 21 of The Constitution of India.

²⁵Section 16, 18(C), 20 of Narcotic Drugs and Psychotropic Act, 1985.

²⁶<http://www.hindustantimes.com/punjab/aap-mp-gandhi-s-bill-seeking-opium-legalisation-cleared-for-tabling-in-parliament/story-itanKX3vRrhuXJPdgnJD6N.html>.

²⁷ <http://indianexpress.com/article/india/maneka-gandhi-suggests-legalising-marijuana-for-medical-purposes-4773915/>.

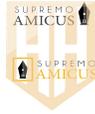
²⁸Elisabeth Ponsot, Where in the world can you get(legally) high on4/20, (Apr. 19, 2017),

<https://qz.com/961240/where-is-marijuana-legal/>.

²⁹ Elisabeth Ponsot, Where in the world can you get(legally) high on4/20, (Apr. 19, 2017), <https://qz.com/961240/where-is-marijuana-legal/>.

³⁰Express Web Desk, Six countries where Marijuana consumption is legal, (Nov.5, 2015, 3:39PM),

<http://indianexpress.com/article/world/world-news/six-countries-where-marijuana-consumption-is-legal/>.



constitution after a referendum in 2009 for this reason³¹. Possession of Cannabis is illegal in Argentina, but decriminalized. It is legal for personal consumption in small quantities inside a private property, while consumption for medical reasons is acceptable within a private property, sale, transportation and cultivation is illegal by law³². The point here is that in almost every major country marijuana is either legally available for recreational purpose or only for medical purpose. But in India, although marijuana cultivation and possession has been declared as illegal and punishable still it is easily available in almost any part of the country because of the great hold of black market.

Measures that can be taken by the government while Legalizing Marijuana

The Government of India has taken steps to curb this issue but it backfired. We do have a Narcotics Drugs and Psychotropic substances Act, 1985 but it is only deterrent in nature and not reformative.

Government should take measures to make the people aware of the harmful effects of excessive consumption by:

1. Should make the children aware of its harmful effects by educating them in

this regard. Putting down these things in course books³³.

2. Government should help in funding the non-governmental organizations dealing with this.
3. Make treatment services widely available by opening sufficient de-addiction centers³⁴.
4. Providing the Youth accurate information.
5. The government should make it mandatory to provide a card to every purchaser and the quantity upto which he can purchase within a time period.

Conclusion

India is a country which majorly works upon the belief of majority of people. And the marijuana is historically connected with the faith of people which is easily depicted in even NDPS Act, 1985 which was incapable to criminalize Bhang which is said to be a family plant of marijuana just because of great significance as “bhole ka parshad”. But unfortunately NDPS Act under the influence of UN Convention on narcotic drug and psychotropic substances kept the marijuana under prohibited drugs ignoring its multiple health benefits and very less adverse effect in comparison with alcohol and tobacco which are under controlled drugs. With the upcoming new research upon the marijuana and it is

³¹ Patrick Cain, Canada seems likely to legalize pot while ignoring UN treaties, (July 19, 2017, 3:58

PM),<http://globalnews.ca/news/3606927/after-blowing-july-1-deadline-canada-seems-likely-to-legalize-pot-while-ignoring-un-treaties/>

³² Express Web Desk, Six countries where Marijuana consumption is legal, (Nov.5, 2015, 3:39PM),

<http://indianexpress.com/article/world/world-news/six-countries-where-marijuana-consumption-is-legal/>.

³³ Article 47 of The Constitution of India.

³⁴National coalition for effective drug policies Washington, D.C, Eight steps to effectively controlling drug abuse and drug market, (Sept.1, 2017)

<http://www.csdp.org/news/news/8steps.html>.



found to eliminate and cure many harmful diseases which are threat to the human society and whose cure is either not found or is very expensive, in such cases marijuana can be helpful in a very less cost. Legalizing marijuana will also boost the Indian Economy through various methods of income by the government like tax and increase the medical tourism for India, whereas simultaneously it will benefit the poor farmers as this cash crop can be easily grown and don't require much efforts or any particular weather. However the result of legalization of marijuana would also curb the rapid increase in consumption of synthetic drugs, specially by the young generation of the county. The marijuana can be legalised through article 47 of the Constitution of India and this would also not hamper the UN treaties. The legalization can be controlled by licensing system at different stages preventing the negative use of the substance.

Human security – broadly defined by the United Nations as “the right of people to live in freedom and dignity, free from poverty and despair” so we believe a person can be free from poverty and despair if he is working hard and putting all his effort in his work which will help a person become independent, free and lead a dignified life. Lastly, we believe its supply should be controlled to an extent that only the people who require it for medical purpose are able to purchase or keep it as its medical benefits would certainly help towards the human security while providing assistance in treatment of certain diseases with low cost medication and the rest depends on how the

government wants to see the use marijuana in one's life and the economy of the state.

