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Original Review Article

Cannabis - Dilemma on Law Amendment.

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Abstract

In Indian society cannabis was used before 1000CE as spiritual and religious occasions. There are 483 identifiable chemical constituents known to exist in the cannabis plant, and at least 85 different cannabinoids have been isolated from the plant. Cultivation of cannabis for industrial purposes such as making industrial hemp or for horticultural use is legal in India. Although NDPS allows consumption of bhang, various states have their own laws banning or restricting its use. In some states, only authorized dealers are allowed to sell bhang. Some states also have rules about the maximum amount of bhang one person can carry and the minimum age of the buyer. The British Parliament enacted a tax on bhang, ganja and chars in 1798 and Attempts at criminalizing cannabis in 1838, 1871, and 1877. Though the NDPS Act doesn't mention anything about Smoking paraphernalia, making it completely legal to buy or sell smoking accessories like Rolling Papers, Smoking Pipes, and more. In all evidence based research from meta-analysis have indeed shown that cannabis is associated to violence and therefore measures should be taken to mitigate the risk. But similar current evidence, it is clear that while legalization does not necessarily eliminate illegal production, distribution, sale and adulterations of cannabis it tends to diminish it dramatically. As a result, it relieves the burden placed on courts, law enforcement and prisons, allowing for greater focus on violent crime. Hence, its create "Cannabis – Law Amendment Dilemma". Our study concluding this dilemma to promote Bio psychosocial research should continue to monitor the association following policy change more thoroughly by examining different type of violent outcomes.

1. Introduction

Many evidence- based studies from meta-analyses have shown that cannabis use is associated with violence and Crime; measures must be taken to mitigate the risks. Violence is a complex and multifactorial issue that has serious

health and social consequences.¹ Legalization might be expected to reduce the number of people involved in illegal activities related to cannabis production, distribution, sale and use. In Indian society, common terms for cannabis preparations

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include charas (resin), ganja (flower), and bhang (seeds and leaves), with Indian drinks, such as bhang lassi and bhang thandai made from bhang being one of the most common legal uses. Bhang is consumed as prasad of Shiva, and is popular between Mahashivaratri and Holi.²

Amidst Sikh Nihangs, bhang is popular, especially during HolaMohalla.³ Muslim Indian Sufis place the spirit of Khidr within the cannabis plant, and consume bhang.⁴ In this review article concluding various aspects of "Cannabis – Law Amendment Dilemma" this dilemma to promote Bio psychosocial research should continue to monitor the association following policy change more thoroughly by examining different type of violent outcomes.

1.1 Biochemistry and Taxonomy

Cannabis plants produce a group of chemicals called cannabinoids, which generate mental and physical effects when consumed. There are 483 identifiable chemical constituents known to exist in the cannabis plant, and at least 85 different cannabinoids have been isolated from the plant.⁵ The two cannabinoids usually produced in greatest abundance are cannabidiol (CBD) and Δ^9 -tetrahydrocannabinol (THC), but only THC is psychoactive and CBD, which has no psychotropic effects by itself⁶ (although sometimes showing a small stimulant effect, similar to caffeine),⁷ attenuates, or reduces⁸ the higher anxiety levels caused by THC alone.⁹

1.2 Cannabis Psychosis

The amount of tetrahydrocannabinol or THC, active principle producing psychoactive sensations determines the addictive factor of cannabis. A 2016 study in the National Centre for Biotechnology Information showed that out of 36,000 samples of illegal cannabis from around the world, THC levels had risen from around 4 per cent in the 1990s to nearly 12 per cent in 2014, shifting the ratio of THC to CBD from 1:14 in 1995 to about 1:80 in 2014.¹⁰ The first clinical pilot study in India on the use of cannabis as a restorative drug for cancer patients was conducted in collaboration with the Gujarat Ayurved University, Jamnagar on cancer patients undertaking treatment at the Tata Memorial Hospital in Mumbai. CCRAS (Central Council for Research in Ayurvedic Sciences) Director General Vaidya K.S. Dhiman stated, It was found in the pilot study performed in earlier part of the year that pain as well as other symptoms

in post chemo and radiotherapy cancer patients were alleviated by cannabis leaves-based drugs."¹¹

The Indian Institute of Integrative Medicine (IIIM) of the CSIR announced that it was developing three cannabis-based medicines to treat cancer, epilepsy, and sickle-cell anaemia.¹² The first medical cannabis clinic in India was opened in Koramangala, Bangalore on 1 February 2020.^{13,14} The clinic, operated by Odisha-based Hemp Cann Solutions, sells cannabis infused tablets and oils under the brand name Vedi Herbals.¹⁵

1.3 Indian statistics

As of 2000, per the UNODC the "prevalence of usage" of cannabis in India was 3.2%.¹⁶ According to the UNODC's World Drug report 2016, the retail price of cannabis in India was US\$0.10 per gram, the lowest of any country in the world.¹⁶ Within last year, about 7.2 million Indians had consumed cannabis as per the 2019 study performed by the All India Institutes of Medical Sciences. The Ministry of Social Justice and Empowerment's "Magnitude of Substance Use in India 2019" survey found that 2.83% of Indians aged 10-75 years (or 31 million people) were current users of cannabis products, with 0.66% of the population considered to be using cannabis "in a dependent pattern".¹⁷ Naxalites are heavily invested in illegal production of Ganja.¹⁸ The International Narcotics Control Board's 2019 annual report noted that "India is among those countries worldwide with the greatest extent of illicit cannabis cultivation and production."¹⁹

In India permission for cultivation of cannabis is for industrial purposes such as making industrial hemp or for horticultural use. The National Policy on Narcotic Drugs and Psychotropic Substances recognizes cannabis as a source of biomass, fiber, and high-value oil. The Government of India encourages the research and cultivation of cannabis with low THC content.²⁰ There is variation in the laws related to ban or restricted use of bhang consumption in spite of NDPS had permitted the consumption of bhang. In some states, permission to sell bhang is provided to only authorized dealers. Some states also have rules about the maximum amount of bhang one person can carry and the minimum age of the buyer.²¹

2. History

Bhanga is mentioned in several Indian texts dated before 1000 CE. Cannabis Sativa identify as one of the plant that was used to prepare soma in Vedic period.²² Soma was an intoxicating ritual drink that has been highly praised in the Rigveda (c. 1700–1100

BCE). Atharvaveda (c. 1500–1000 BCE) mentions bhanga as one of the five (the darbha, hemp, barley, saha) sacred plants that relieve anxiety. Sushruta Samhita (c. 600 BCE) mentions bhanga, as a medicinal plant, and recommends it for treating catarrh, phlegm and diarrhea. Chikitsa-sara-sangraha (c. late 11th century) mentions bhanga as an appetiser and a digestive, and suggests it in two recipes for a long and happy life. Sharngadhara Samhita (13th century), mentions it as one of the drugs which act very quickly in the body.²³ In Ayurveda or Sanskrit text mention cannabis as *vijayaand* as an ingredient in various recipes of pain relievers and aphrodisiacs, but in small quantities. It is noted that large quantity or long time consumption can be addictive and that it is more dangerous than tobacco for lungs and liver.²⁴

2.1 In British India

In 1978, the British Parliament had imposed a tax on bhang, ganja and charas, stating that the purpose of the tax was to minimize the consumption of cannabis "for the sake of the natives' good health and sanity".²⁵ Attempts at criminalizing cannabis in British India were made, and mooted, in 1838, 1871, and 1877. In 1894, the British Indian government completed a wide-ranging study of cannabis in India.²⁵

2.2 Legal status

The NDPS definition of "cannabis", excluding bhang from its purview:

"Cannabis (hemp)" means:

- a. charas, that is, the separated resin, in whatever form, whether crude or purified, obtained from the cannabis plant and also includes concentrated preparation and resin known as hashish oil or liquid hashish;
 - b. ganja, that is, the flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops), by whatever name they may be known or designated; and
 - c. any mixture, with or without any neutral material, of any of the above forms of cannabis or any drink prepared therefrom;
- **Narcotic Drugs and Psychotropic Substances Act (India), Chapter I, Section 2.iii.**

NDPS banned the production and sale of cannabis resin and flowers, but permitted the use of the leaves and seeds, allowing the states to regulate the latter. Though the NDPS Act doesn't mention anything about Smoking paraphernalia, making it

completely legal to buy or sell smoking accessories like Rolling Papers, Smoking Pipes, and more.

2.3 Reform

In the past few years, there has been a growing clamour by non-governmental organizations' to legalize the recreational use of cannabis, as other countries have done. In 2015, the first organised efforts to re-legalise cannabis in India appeared, with the holding of medical marijuana conferences in Bangalore, Pune, Mumbai and Delhi by the Great Legalisation Movement India.²⁶ In July 2019, the Delhi High Court agreed to hear a petition, filed by the Great Legalisation Movement Trust, challenging the ban on cannabis. The public interest litigation argues that grouping cannabis with other chemical drugs under the NDPS Act is "arbitrary, unscientific and unreasonable".²⁷

India voted in favor of removing cannabis and cannabis resin from Schedule IV of the 1961 Single Convention on Narcotic Drugs at the United Nations Commission on Narcotic Drugs (CND) on 9 December 2020. The resolution was passed with 27 member countries voting in favour, 25 against, and one abstention.²⁸

Why India needs to legalize the use of cannabis or not.....

The pros

- Will eliminate illegal Trade and associated crimes.
- Taxing cannabis will increase government's revenue.
- Will reduce drug stigma and open up discussion on responsible use
- Cannabis has both medicinal and industrial benefit; hemp makes for great fibers.
- Will help create jobs for local producers.
- Will enable quality control law to be enacted for cannabis, preventing its adulteration with more harmful chemicals
- Prohibition has failed to control the use of domestic production of cannabis.

The cons

- Could lead to increased usage; cannabis is not entirely free of risks and studies have shown repeated use mimic the pattern of addiction to other drugs.
- Cannabis psychosis is a growing medical problem and without laws to regulate over consumption its prevalence could further increase

- The black market for cannabis, especially of low-grade products, is so well-established that a simple decriminalization won't eradicate poor quality goods.
- There have been recorded instances of cannabis dependency to cope with stress; cannabis use has also become a stepping stone to refine drugs sometimes.

3. Discussion

Recently June 2022, the first Asian country Thailand legalized the growing of marijuana and its consumption in food and drinks, with the aim of boosting its agriculture and tourism sectors, but smoking pot is still against the law. In 2019 study by the Vidhi Centre for Legal Policy noted that most people arrested for cannabis possession are the poor and marginalized, while bigger sellers escape unscathed. "Usually, more seizures are made where cannabis is cultivated and not sold," says Romesh Bhattacharjee, a former Narcotics Commissioner of India. "It is the small and medium farmers who get harassed, not the larger sellers and buyers in big towns and cities." He points out; cannabis is cultivated in nearly 60 per cent, or 400, of India's 670 districts. It is considered a medicinal plant that has benefited humans and animals over the centuries. "Since we criminalized cannabis in India [in 1985]," he says, "We haven't curbed production or consumption. The law is redundant and has become a tool to harass small-time or poor buyers and sellers. Bhang is already legal in some states. There are millions of weed and hash users in major cities. You might as well legalize cannabis, and follow it with drug awareness outreach if you are worried about addiction. Sensitization and dialogue are more effective in curbing addiction than half-hearted criminalization." As to how to legalize cannabis, he has a simple answer: "Just remove it from the Narcotics Act. It is already 'legal' on the streets given its availability, only 'illegal' on paper."

According to Dr. Rahul Luther, psychologist and founder of the Hope Trust, a DE addiction center and rehab clinic in Hyderabad; "Cannabis is no longer the milk drink had at a festival or a substance smoked in a chillum—there is a bewilderingly wide range of creative products," like, 'weed pizza sauce', 'weed wine' 'weed coffee' Cannabis-spiked paan, brownies, chocolates and beers. The young can now look forward to cannabis bath products, lip balm, toffee, cheese and dried noodles. The ABCD report shows

Delhi to be among the top 10 cities in the world for cheap weed, second only to Latin American countries. Cheap 'weed dust' can be bought for as little as Rs 50, while 10 grams of average quality weed can cost anything between Rs 100 and Rs 250 in Delhi.

4. Conclusions

Today, there is a booming market for cannabis and related products, particularly among the youth. The legalization of cannabis, the organization believes, can help create jobs, battle stress, improve human concentration, resolve medical problems and provide sustainable agricultural incomes, among other things. Cannabis, the petition argued, is integral to the country's cultural fabric; its criminalization leads to needless harassment and stigma. The Narcotics Drugs and Psychotropic substances Act, 1985, define cannabis as the flower or fruit of the cannabis plant out of which the resin has not been extracted. Seeds and leaves are not been included. The act deems 'production, manufacture, possession, sale, purchase, transport, inter-state import or export or use' of cannabis as illegal and punishable depending upon quantity and product.

In all evidence-based research from meta-analysis have indeed shown that cannabis is associated to violence and therefore measures should be taken to mitigate the risk. But similar current evidence, it is clear that while legalization does not necessarily eliminate illegal production, distribution, sale and adulterations of cannabis it tends to diminish it dramatically. As a result, it relieves the burden placed on courts, law enforcement and prisons, allowing for greater focus on violent crime. Hence, Bio psychosocial research should continue to monitor the association following policy change more thoroughly by examining different type of violent outcomes. Research should account for trends before legalization and consider the profiles of individuals using cannabis before and after legalization. Future research should investigate in more detail crime-related consequences of cannabis use under different legal jurisdictions.

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References

1. Global status report on violence prevention 2014 [Internet]. [cited 2022 Jun 20]. Available from:

- <https://www.who.int/publications-detail-redirect/9789241564793>
2. Mahashivaratri: Bhang, thandai market booms | Varanasi News - Times of India [Internet]. [cited 2022 Jun 23]. Available from: <https://timesofindia.indiatimes.com/city/varanasi/bhang-thandai-market-booms/articleshow/31119697.cms>
 3. Hola Mohalla: United colours of celebrations | Chandigarh News - Times of India [Internet]. [cited 2022 Jun 23]. Available from: <https://timesofindia.indiatimes.com/city/chandigarh/hola-mohalla-united-colours-of-celebrations/articleshow/40701351.cms>
 4. Knight MM. Journey to the End of Islam. Original edition. Soft Skull; 2009. 384 p.
 5. El-Alfy AT, Ivey K, Robinson K, Ahmed S, Radwan M, Slade D, et al. Antidepressant-like effect of delta9-tetrahydrocannabinol and other cannabinoids isolated from Cannabis sativa L. *Pharmacol Biochem Behav.* 2010;95(4):434–42. -
 6. Ahrens J, Demir R, Leuwer M, de la Roche J, Krampfl K, Foadi N, et al. The nonpsychotropic cannabinoid cannabidiol modulates and directly activates alpha-1 and alpha-1-Beta glycine receptor function. *Pharmacology.* 2009;83(4):217–22.
 7. Block RI, Erwin WJ, Farinpour R, Braverman K. Sedative, stimulant, and other subjective effects of marijuana: relationships to smoking techniques. *Pharmacol Biochem Behav.* 1998; 59(2):405–12.
 8. Zuardi AW, Shirakawa I, Finkelfarb E, Karniol IG. Action of cannabidiol on the anxiety and other effects produced by delta 9-THC in normal subjects. *Psychopharmacology (Berl).* 1982;76(3):245–50.
 9. Fusar-Poli P, Crippa JA, Bhattacharyya S, Borgwardt SJ, Allen P, Martin-Santos R, et al. Distinct effects of {delta}9-tetrahydrocannabinol and cannabidiol on neural activation during emotional processing. *Arch Gen Psychiatry.* 2009 Jan;66(1):95–105.
 10. Should India make Cannabis legal? - Cover Story News - Issue Date: Sep 28, 2020 [Internet]. [cited 2022 Jun 23]. Available from: <https://www.indiatoday.in/magazine/cover-story/story/20200928-should-india-make-cannabis-legal-1723088-2020-09-19>
 11. Study finds cannabis-based drugs help alleviate side-effects post-chemo AIIMS to research further - The Week [Internet]. [cited 2022 Jun 23]. Available from: <https://www.theweek.in/wire-updates/national/2018/11/25/des7-ayush-cannabis-cancer-aiims.html>
 12. CSIR-IIIM, BOHECO to develop cannabis based drugs for cancer, epilepsy, sickle cell anemia | Business Standard News [Internet]. [cited 2022 Jun 23]. Available from: https://www.business-standard.com/article/pti-stories/csir-iiim-boheco-to-develop-cannabis-based-drugs-for-cancer-epilepsy-sickle-cell-anemia-118112300749_1.html
 13. Gupta H. Is it Legal to Get High on Bhang in India? [Internet]. Kith & Kin Attorneys. 2019 [cited 2022 Jun 23]. Available from: <https://www.kithandkinattorneys.in/post/is-it-legal-to-get-high-on-bhang-in-india>
 14. Bennett C. Cannabis and the Soma Solution. Illustrated edition. Trine Day; 2010. 480 p.
 15. Feb 9 BK/ U, 2020, Ist 07:40. India's first cannabis clinic in Koramangala has benefited several Bengalureans [Internet]. Bangalore Mirror. [cited 2022 Jul 3]. Available from: <https://bangaloremirror.indiatimes.com/bangalore/cover-story/dr-cannabis-will-see-you-now/articleshow/74035813.cms>
 16. International Narcotics Control Board, editor. Report of the International Narcotics Control Board for 2009. New York: United Nations; 2010. 149 p. (Report of the International Narcotics Control Board).
 17. NDDTC, AIIMS submits report "Magnitude of Substance use in India" to M/O Social Justice & Empowerment [Internet]. [cited 2022 Jun 23]. Available from: <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1565001>
 18. Maoists into cultivation of ganja now, say Vizag cops. The Times of India [Internet]. 2020 Aug 7 [cited 2022 Jun 23]; Available from: <https://timesofindia.indiatimes.com/city/visakhapatnam/maoists-into-cultivation-of-ganja-now-say-vizag-cops/articleshow/77407859.cms>
 19. Annual Report 2019 [Internet]. [cited 2022 Jul 3]. Available from: <https://www.incb.org/incb/en/publications/annual-reports/annual-report-2019.html>
 20. Tandon S. India's cannabis economy has a new hope—Patanjali [Internet]. Quartz. [cited 2022 Jun 23]. Available from: <https://qz.com/india/1191203/patanjali-the-indian-cannabis-economys-new-hope/>
 21. Russo E. Cannabis in India: ancient lore and modern medicine. In: Mechoulam R, editor. *Cannabinoids as Therapeutics* [Internet]. Basel: Birkhäuser; 2005 [cited 2022 Jun 23]. p. 1–22. (Milestones in Drug Therapy MDT). Available from: https://doi.org/10.1007/3-7643-7358-X_1
 22. Soma in Yoga and Ayurveda: The Power of Rejuvenation and Immortality eBook : David Frawley: Amazon.in: Kindle Store [Internet]. [cited 2022 Jun 23]. Available from: <https://www.amazon.in/Soma-Yoga-Ayurveda-Rejuvenation-Immortality-ebook/dp/B0085TJYAK>

23. How cannabis was criminalized | SaltWire [Internet]. [cited 2022 Jun 23]. Available from: <https://www.saltwire.com/newfoundland-labrador/lifestyles/how-cannabis-was-criminalized-260749/>
24. Faisal F, Apr 29 BMB |, 2015, 1st 04 00 Am. City to host country's first 'legalise marijuana' meet - Mumbai Mirror - [Internet]. Mumbai Mirror. [cited 2022 Jul 3]. Available from: <http://www.mumbaimirror.com/bangalore/cover-story/marijuana-legalise-marijuana-cannabis-medical-cannabis-conferences-rick-simpson-phoenix-tears/articleshow/47088114.cms>
25. Delhi HC to examine plea to legalise cannabis use | Delhi News - Times of India [Internet]. [cited 2022 Jul 3]. Available from: <https://timesofindia.indiatimes.com/city/delhi/hc-to-examine-plea-to-legalise-cannabis-use/articleshow/70299584.cms>
26. Explained: The implications as UN removes cannabis from its 'most dangerous drug' category | Explained News, The Indian Express [Internet]. [cited 2022 Jul 3]. Available from: <https://indianexpress.com/article/explained/un-removes-cannabis-from-most-dangerous-drug-category-what-this-means-7092072/>
27. September 19 SAND, September 28 2020 ISSUE DATE: September 22 2020UPDATED:, 1st 2020 10:25. Should India make Cannabis legal? [Internet]. India Today. [cited 2022 Jul 3]. Available from: <https://www.indiatoday.in/magazine/cover-story/story/20200928-should-india-make-cannabis-legal-1723088-2020-09-19>
28. 1st in Asia: Thailand legalises marijuana but smoking pot still illegal. The Times of India [Internet]. 2022 Jun 10 [cited 2022 Jul 3]; Available from: <https://timesofindia.indiatimes.com/world/south-asia/1st-in-asia-thailand-legalises-marijuana/articleshow/92115102.cms>