
The Usage and Benefits of Narcotic Drugs in Translational Medicine

Cenk Sağlam - Tarsus American College

ABSTRACT

Legalization of marijuana has always been one of the most sensitive issues discussed in the United States. In some states, marijuana is legalized, whereas in some states it's prohibited. Additionally, marijuana usage is only allowed in medical fields. Despite its drug addiction and side effects, its advantages are more than its disadvantages. For instance, the government can gain profit from the marijuana trade, and it can be used in many medical research fields. Furthermore, it can help society to focus on other serious crimes such as murder, abuse, or harassment since we can't find effective solutions to murder, abuse, and harassment when we only focus on the illegalization of cannabis and prioritize the prohibition of marijuana to the other serious crimes. This study indicates that marijuana should be legalized in the United States due to the medical, economic, social, and judicial usage of cannabis.

Keywords: *Economic Trade, Legalization, Marijuana, Medical Field, Society*

Introduction

Nowadays there are lots of people who smoke marijuana. Despite its illegalization, in 2014, a total of 2.5 million people consumed marijuana in the previous 12 months (Azofeifa et al., 2016, p. 10). It is used in many fields of medicine from physical to mental treatments. Although many think that it should stay prohibited as it harms people, its pros outweigh the cons. Also, cannabis has a lot of benefits for the government, society, and medicine. Therefore, instead of decriminalizing it, the government should keep it legal because of its medicinal, social, judicial, and economic purposes.

Discussion

Marijuana's Benefits in Medical Field

Since marijuana has a lot of advantages in medicine, some states in the United States permitted cannabis for health reasons. As seen in Equations 1, 2, and 3; genetic engineers can actually change the two chemical substances (THC, and CBD) in the plant to raise the CBD rate and reduce the THC levels in order to prevent its probable detrimental effects. In other words, THC-CBD levels are modified to fit into patients' treatment, and typically, CBD levels are increased for its counteractant effects against the high sensation (Caulkins et al., 2015).

Concentration of THC, CBD, and CBG

Table 1, From (Quantification of the Concentration, n.d.), Quantification of the Concentration of THC, CBD, CBG, THCA, CBDA, CBGA, THCTotal, CBDTotal, and CBGTOTAL in HPLC.

Scientific Correlation Terms Based on Qualitative Values		
First Pair of Scientifically Correlated Values	Second Pair of Scientifically Correlated Values	Third Pair of Scientifically Correlated Values
THC	CBD	CBG
THCA	CBDA	CBGA
THCTotal	CBDTotal	CBGTOTAL

Table 2, From (Quantification of the Concentration, n.d.), Quantification of the Concentration of THC, CBD, CBG, THCA, CBDA, CBGA, THCTotal, CBDTotal, and CBGTOTAL in HPLC

Scientific Correlation Terms Based on Qualitative Values		
First Pair of Scientifically Correlated Values	Second Pair of Scientifically Correlated Values	Third Pair of Scientifically Correlated Values
THC	THCA	THCTotal
CBD	CBDA	CBDTotal
CBG	CBGA	CBGTOTAL

Equation 1, From (Quantification of the Concentration, n.d.) , Quantification of the Concentration of THC, CBD, CBG, THCA, CBDA, CBGA, THCTOTAL, CBDTOTAL and CBGTOTAL in HPLC

$$\%fTHCTotal = \%fTHC + (\%fTHCA \times 0,877)$$

Equation 2, From (Quantification of the Concentration, n.d.) , Quantification of the Concentration of THC, CBD, CBG, THCA, CBDA, CBGA, THCTOTAL, CBDTOTAL and CBGTOTAL in HPLC

$$\%fCBDTotal = \%fCBD + (\%fCBDA \times 0,877)$$

Equation 3, From (Quantification of the Concentration, n.d.) , Quantification of the Concentration of THC, CBD, CBG, THCA, CBDA, CBGA, THCTOTAL, CBDTOTAL and CBGTOTAL in HPLC

$$\%fCBGTOTAL = \%fCBG + (\%fCBGA \times 0,878)$$

As previously stated, there are a lot of conveniences of marijuana, ranging from physical to mental. Moreover, marijuana helps neurological and mental disorders such as depression, autism, seizures, helps ADHD/ADD, anxiety, Alzheimer’s, PTSD, etc. (Halim, 2019). Likewise, it helps physical

disorders and illnesses such as chronic pain, lung incapacity, obesity, diabetes, cancer, Parkinson's disease, etc. (Halim, 2019). When considered, the aim of legalization is understandable. Some may claim that marijuana which contains THC is harmful, but THC has many positive effects such as healing PTSD and depression, preventing epilepsy, and helping people to eat in a balanced way (Why People, n.d.).

Social and Economic Disadvantages of Cannabis Prohibition

The police give more importance to the crimes related to marijuana due to its demanding labor for investigation. This has negative outcomes as marijuana's illegalization process may alienate its consumers, and the police officers can't concentrate on other crimes such as violence. They're struggling to find properly-paid jobs, guarantee their accommodation, and reintegrate into society (Federal Bureau of Investigation, 2018, p. 2). Cannabis addicts don't have as many rights as other people. As a result, they become lonely, desperate, and depressed. On the other hand, cannabis occupies officers and distracts them from solving other crimes. According to Table 3, There have been 1,632,921 arrests in 2017, making up the %40.7 of all arrests in the United States (Federal Bureau of Investigation, 2018, p. 2). It is inevitable to deduce that marijuana prohibition is distracting and inessential.

Estimated Number of Arrests in 2017 in USA

Table 3, From (Table 29, n.d.) , Estimated Number of Arrests - United States, 2017

Reason of Arresting	Number of People Arrested
Murder and nonnegligent manslaughter	12,208
Rape ²	23,436
Robbery	94,046
Aggravated assault	388,927
Burglary	199,266
Larceny-theft	950,357
Motor vehicle theft	91,023
Arson	9,111
Violent crime ³	518,617
Property crime ³	1,249,757
Other assaults	1,062,370
Forgery and counterfeiting	55,604
Fraud	124,232

Embezzlement	15,967
Stolen property; buying, receiving, possessing	98,660
Vandalism	188,350
Weapons; carrying, possessing, etc.	164,984
Prostitution and commercialized vice	36,247
Sex offenses	48,525
Drug abuse violations	1,632,921
Gambling	3,237
Offenses against the family and children	94,062
Driving under the influence	90,678
Liquor laws	207,332
Drunkenness	366,824
Disorderly conduct	353,151
Vagrancy	23,321
All other offenses	3,290,051
Suspicion	885
Curfew and loitering law violations	30,131
Total ¹	10,554,985

¹Does not include suspicion.

²The rape figure in this table is an aggregate total of the data submitted based on both the legacy and revised Uniform Crime Reporting definitions.

³Violent crimes are offenses of murder and nonnegligent manslaughter, rape, robbery, and aggravated assault. Property crimes are offenses of burglary, larceny-theft, motor vehicle theft, and arson.

Moreover, enforcement is costly. Many economists have predicted that expenditure on enforcement is \$ 7.7 billion every year (Edwards & McCray, 2012), and an assumed number of \$1.7 billion was spent implementing the interdiction against marijuana usage in 2001 (Beckett & Herbert, 2009, p. 27). Banning marijuana is going to restrict the government's budget and influence the government's economy negatively. That might cause an economic crisis throughout the country. The opposing public might dispute that cannabis causes dropout schools, but a zero-tolerance school policy that separates the students from their teachers is more possible to cause students to drop out the school than drug usage (Canadian Institute for Substance Use Research, n.d.).

Marijuana Trade and Government Profit

The government can financially take advantage of decriminalization. Governments and states can levy taxes and increase revenue on cannabis products (Marijuana Laws, n.d.). The marijuana market could generate up to \$28 billion in taxes for local and federal governments. It can be used for international trade as well. As an example, \$8 billion was earned in 2017, with sales assumed to achieve \$11 billion in 2019 and \$23 billion by 2022 (United States Congress Joint Economic Committee, 2018, p.1). These funds might support the government to spend the money on more helpful things. Also, the market can create new opportunities for people, and help economic growth. Some available positions are being a budtender, the marijuana delivery driver, trimmer, dispensary management, marijuana cultivator, seed broker, cannabis product tester, packaging specialist, inventory specialist, consultant, accountant, security officer, marketer, laboratory tester, baker, salesperson, attorney, and physician, and so on (Stanley, n.d.). Once there will be a lot of jobs in the marijuana industry, marketing will develop around the world. As seen in Table 4, despite some advocates' claims about how expensive it is (1.13 billion) to legalize marijuana, it's safe to say that it is not as costly (\$7.7 billion) as prohibition and enforcement (Centennial Institute, 2018, p. 3).

Economic and Social Costs of Legalized Marijuana

Table 4, From (Centennial Institute, 2018, p. 3) , Costs Summary

Notes	Costs
Hospitalizations	\$381,915,043
Treatment for cannabis use disorder	\$31,448,906
Burn treatments	\$593,924
Low weight babies	\$697,036
Cost of businesses for policy development	\$54,883,218
Cost to employer for rehabilitation	\$3,782,625
Employees costs for rehabilitation	\$481,600
K-12 drop-outs	\$423,362,337
Arrests	\$7,194,600
DUI court-costs	\$18,565,226
Juvenile court filings	\$1,170,126
Adult court filings	\$3,484,282
Denver-only marijuana-related crime	\$3,111,114
Probationers going back for THC violation	\$87,014,326
Fatal car accidents	\$5,362,620

DUIs	\$18,565,226
Car accidents from impaired drivers	\$83,732,717
Evictions due to the pot, cost to landlord	\$1,837,500
Arrests crossing the border to Colorado	\$130,500
Total	\$1,130,684,227

Conclusion

This study and research demonstrate the necessity of the legalization of marijuana in the USA with the numerical data shown in tables, empirical values, equations, and supportive evidence stated in the body paragraphs. In the first body paragraph, it is found that it is possible to reduce marijuana's harmful effects by increasing the CBD percentage and decreasing the THC percentage. In the second body paragraph, it is concluded that the illegalization of marijuana makes the process difficult for the addicts' reintegration into society, and creates a big obstacle for the police department to focus on other serious crimes with the statistical table shown in Table 3. Lastly, in the third body paragraph, it is concluded that the government can gain profit and reduce the costs of the trade of cannabis by legalizing marijuana as shown in Table 4.

Marijuana legalization is an important task as it will change the world's marketing and social structure. Cannabis should be legalized for its benefits to health, the government and its budget, the society. Regardless of the counter-arguments, the positives of legalized marijuana outweigh the negatives. Therefore, it is imperative that marijuana be legalized.

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