



## Review Article

## Criminal Policy of Netherlands and U.S.A on Decriminalization of Soft Drugs

Seyed Reza Ehsanpour (PhD)<sup>1\*</sup><sup>1</sup> Faculty of Humanities, Shahed University, Tehran, Iran.

## ARTICLE INFORMATION

## Article history:

Received: 18 February 2021

Revised: 26 March 2021

Accepted: 15 April 2021

Available online: 04 May 2021

## Keywords:

Soft Drugs

Cannabis

Decriminalization

Netherlands

The United States

## \* Correspondence

Seyed Reza Ehsanpour (PhD)

Tel: +98 911 1164196

Fax: +98 21 61117846

E-mail: [ehsanpour@shahed.ac.ir](mailto:ehsanpour@shahed.ac.ir)ORCID ID: [0000-0001-9135-3968](https://orcid.org/0000-0001-9135-3968)

## ABSTRACT

**Background and Aim:** Soft drugs are those drugs that are very weak in terms of addiction and the effects are highly treatable. The challenging issue regarding this type of drug is the decriminalization of its use. The criminal policy of some countries such as the Netherlands agrees with the decriminalization and the criminal policy of many others such as the United States of America is against it.

**Materials and Methods:** To review the reasons and justifications of each of parties for and against soft drug decriminalization, ideas of lawyers and scientific studies in the Netherland and the United States have been considered, and criminal poly makers' ideas will be reviewed.

**Ethical Considerations:** Honesty in the literature and citation analysis and reporting were considered.

**Findings** To justify soft drug criminalization, two classifications of legal and health reasons and justifications can be cited. Legally, it has been stated that drug issue is a problem related to the health and treatment domain, and criminal legal intervention in this area must be considered just as the last weapon. In addition, Penologically, punishing soft drug users is unnecessary, ineffective, without favor, and unnecessary. Regarding health, it has been stated that not only using some soft drugs such as cannabis is not the reason for being sick, but also it has an effective role in treating incurable diseases such as multiple sclerosis, AIDS, hepatitis, chronic pain, and ....

**Conclusion:** Decriminalization of soft drugs has a theoretical and practical background in countries such as the Netherlands and the United States. Soft drugs like cannabis not only have a lower degree of addictive rate rather than Hard drugs like heroin, but also it has some therapeutic benefits. Legally, the decriminalization of soft drugs has roots in human rights, penology, and criminological justifications.

Cite this article as: Ehsanpour SR. Criminal Policy of Netherlands and U.S.A on Decriminalization of Soft Drugs. *Bioeth Health Law J.* 2021; 1: 1-10 (e11). <http://doi.org/10.22037/bhl.v1i1.38155>

## Introduction

Historically, the concept of drugs has been expanded, and various types of them, both natural and industrial, have been produced and introduced. By relying upon their experience, human has found some useful effects of such drugs like relieving pain and reducing stress - although temporary, that is why they have maintained using it. However, it could not make others ignore its negative effects. In all countries, drug control policies often cost the threat or use of criminal means. However, criminal acts devoted to this way are not helpful. The traditional view

supports more intense punishments to achieve prevention and maximum control. In contrast with the traditional view, the scientific and modern experienced view has been represented that does not agree with the type and intensity of punishments regarding drug use. The new view has accepted an approach fully different from the typical method and has expressed tolerance to some of the current drug crimes. The two general categories of drugs are distinguished: soft and hard drugs.

According to the division above, some European countries sought to prevent the boundless use of hard drugs by society, especially youth, and

subsequently to keep them from the subsequent terrible effects, in other words, to prevent changing the consumption pattern of low-risk drugs to high-risk ones. They have tried to decriminalize soft drug use so that in this way they can control hard drugs to some extent, too. Holland has been a pioneer in this field and practical experience of the country has been followed immediately in the criminal policy of other European countries such as Italy, Belgium, Germany, and the UK.

### **The Concept of Soft Drug**

A soft drug is a type of drug with specific characteristics and is as opposite of a hard drug. Soft drugs are those having the following three characteristics: their addictive level is low, the negative effects on human health are low, and the possibility of its therapeutic use is possible.

Some of the outstanding examples of soft drugs are marijuana, cannabis, and caffeine. The most important examples of hard drugs are heroin, cocaine, and methamphetamine. In Iran, the Netherlands, and the United States, the soft drug concept is applied to "cannabis".

### **Decriminalization History**

In the Netherlands, cannabis use as one of the light drugs types became apparent after World War II. Following the emergence of a new phenomenon, the drug law of the country in 1953 was reviewed and cannabis was added to the list of banned drugs. On this date, for the first time, cannabis was criminalized in the Netherlands (1).

The use of excessive force by police in Amsterdam in response to the riots and student protests in 1966 led to the implementation of regulations and laws to be largely influenced by the general tendency of the public. Thus, the position of the Netherlands in social issues was going to be adjusted. Some of the issues having more flexibility brought by the government were peaceful protest movements and drug use. After this, the new policy of the Netherlands was set on not being arrested because of carrying cannabis (2).

In 1968, the National Federation of mental health organizations formed the Commission aiming to "explore the factors associated with drug use" and "suggesting reasonable policy". The final report of the Commission was presented in 1971. This report presents an analysis of drug use in the Netherlands and then proposes new approaches to drug abuse: First, cannabis use and carrying small amounts of it should be removed immediately from the area of

criminal law. Second, transportation and use of other drugs should be following misdemeanor temporarily in the realm of criminal law, but in the not too distant future, this will also be decriminalized. Third, those drug users who have encountered difficulties in this path should be given adequate treatment facilities (3).

As the Commission, the State Commission under the Ministry of Health was established in 1968 and the final report of the commission was presented in 1972. The report emphasized the distinction between acceptable and unacceptable risks of drugs and placed cannabis among drugs with no significant health risk. The recommendations issued by the commission were largely effective in determining drug policy in the Netherlands and resulted in a change in the country's drug law in 1976 (4).

In the United States, the first signs of cannabis use emerged in North America in the 17th century. In the years after 1800, cannabis was legal in nearly every state, the therapeutic use of this drug was common, and they were freely purchased from the pharmacy. In 1910 and after the Mexican Revolution in the southern fields of the United States, a great group of Mexicans migrated to the United States and brought recreational use of the drug for the residents of the country. From this time onwards, attempts began to ban the use of this material at the state level. On December 19, 1914, Harrison Narcotics Act was passed which was the first anti-drug law in the US at the federal level. According to the law, carrying drugs such as cannabis was prohibited throughout the United States, except in therapeutic cases prescribed by a doctor.

Between 1938 and 1951 and after the adoption of the law on cannabis taxes, most states unified under the law on drugs and announced cannabis to be illegal. Cannabis was along with other types of drug and its consumption did not grow much. Between 1952 and 1962 in the United States, the addiction aspect of cannabis was emphasized, and its use was the gateway to heroin use and subsequently, heavy penalties were devised for it.

In 1955, a Senate subcommittee listened to expert witnesses on drug abuse. After being convinced on this issue that the appropriate response to the problem of the sale and consumption of cannabis is imposing harsher penalties. In addition, it attempted to determine the minimum mandatory penalty and eliminate the possibility of the perpetrator using the suspension of punishment and probation. Moreover,

a fine of up to 20 thousand dollars was set for selling drugs, including cannabis according to the discretion of the judge. Many states follow the federal government's new laws to increase punishments imposed on cannabis. In some states, even Sentenced to selling cannabis to children were considered to deserve the death penalty (5).

From 1962 to 1972 can be considered in general as the years of reducing the penalties for cannabis use in the United States. In this era, the debate over cannabis use and its health effects reached its peak. With the advancement of science, therapeutic characteristics and properties of cannabis use were more evident and studies yielded the result that at least, harmful health and social effects of this drug use have been vastly overstated. In this period, several social movements were formed aimed at protecting personal consumption of drugs, including cannabis such as protecting the movement of free cannabis use, The Committee against marijuana prohibition, associations of citizens supporting enacting cannabis, a community of acceptance of cannabis, and organization of reforming regulations related to cannabis NORML.<sup>6</sup> By the end of 1972, in addition to the eight states, all states descended simple carrying of less than one ounce of cannabis as misdemeanors. In March of the same year, the National Commission was reported on Marijuana and Drug Abuse in which, it was proposed that offenses related to cannabis use should be exposed to decriminalization. Since then, several states of America began decriminalization of marijuana use.

## Ethical Considerations

Honesty in the literature and citation analysis and reporting were considered.

## Materials and Methods

In the present review study, using keywords such as decriminalization, criminology as well as soft and hard drugs, we searched for the published articles and resources regarding this topic in both legal and medical domains, and then they were analyzed.

## Findings

Those agreeing with decriminalization of cannabis use, use some reasons and justifications to prove their view, that some of them are pointed as the following:

### 1. Legal justifications

#### 1.1. Penological Justifications

Often, to justify decriminalization of soft drug use, two popular Penological schools could be mentioned the first school of absolute justice and the second, social utilitarian school.

##### 1.1.1. School of Absolute Justice

According to the teachings of this school, if behavior is morally unacceptable, punishing the act is necessary by itself. According to the view of supporters of absolute justice school, with Immanuel Kant as its pioneer “, if the criminal act of the criminal has returned to himself, he cannot claim injustice against him as a result of the execution of punishment. It is because of violation of ethical rules by the offender in a criminal offense”. According to the view, even if the crime would not harm other people, but for violating ethical rules, the perpetrator will be entitled to impose penalties. Therefore, the penalty should never merely be as a means to react against losses caused by the perpetrator's interests, but also a violation of ethical rules per se is punishable respectively. Since drug use of any kind is evil, so consumers would be liable to capital punishment (7).

However, this vision is now faced with problems. First, in the view, using drugs is considered evil, but according to scientific studies and researches, soft drug use has no negative effect even on the consume. Second, immorality is a follow-up of the culture and tradition dominating the society. If society tries to use many soft drugs, in another word, using the mentioned drugs such as cannabis does not have moral and social evil, then the immorality of such behaviors would be seriously doubted (8).

##### 1.1.2. School of Social Utilitarianism

According to the utilitarianism view of Bentham, punishment is considered evil, by itself; therefore, it should only be used to prevent a greater evil. As a result, applying penalties that are useless, ineffective, without the benefit, and unnecessary is a great wickedness, itself, should be avoided. According to this view, punishment is unnecessary, when no evil can be avoided by applying punishment. It is ineffective when it cannot lead to prevention or repeat of crime. It has no benefit when the detriment of the evil caused by the punishment is more than the benefit derived from its implementation. Finally, it is unnecessary when the evil (crime) prevention is feasible or more cost-effective without resorting to punishment. Regarding soft drugs, paying attention to the four

points is very important (9). First, it is the criminalization of soft drug use is unnecessary, because drug use (especially soft drug) belongs to one's personal space and it is not an evil that the law would prevent it. Second, it is ineffective. Numerous research and studies conducted on the role of penalty in the prevention of soft drug use indicate that imposition of criminal sanctions has not been able to prevent drug use by addicts. Third, it has no benefit, because according to various studies and researches, the harm of soft drug criminal prohibition is more than the harms of using the drug. Fourth, it is unnecessary because experience has shown that prolonged punishment is the slowest device while it is the most expensive tool to fight soft Drug Abuse Control, there are better alternative methods such as the establishment of therapeutic-oriented courts, and recreation of consumers of these products will have higher efficiency (10,11).

## 1.2. Criminological justification

### 1.2.1. Non-criminal nature

According to this reasoning, the problem of drug use, before being in the context of criminal law, is related to public health. The imposition of criminal sanctions for the first time was only to augment the position of health and treatment associated with these types of drugs, and it should be replaced with it. Use of the weapon of legal penalty is justified only as of the last tool and in limited circumstances. Policymakers are required to change the criminal look at this problem, at least on some types of less risky drugs known as soft or light. In addition, given the nature of the matter, they must adopt policies in the context of public health (12, 13).

This change of view clearly has shown its importance in countries such as the Netherlands. Drug policies (related to illicit drugs, and narcotic drugs) of the country are based on the "separation of soft from hard drugs" and "implement of a plan to reduce the social harm". In this method, it is being attempted to deal with drug-related problems by applying health and treatment methods such as providing free condoms and injection needles, legal distribution of opium syrup, and opening offices to quit an addiction. The project performance was so extensive and impressive that has been copied by many countries, including Iran, even with the same pattern (14).

### 1.2.2. Increasing respect for the law

According to soft Drug fans, if the law declares soft drug use to be free, then who will allow themselves

to violate the law? In the world today, the government makes most offenses, but a plethora of citizens do not commit them. By banning soft drug use, the government has only increased potential criminals. By decriminalization of the use of these substances, the crime risk of many citizens will be decreased and greater respect for the law will be provided (15).

### 1.2.3. Tendency to commit prohibited acts

In psychology, it has been truly accepted that human tends to do some acts that are prevented and using illegal drugs is not an exception. Therefore, according to proponents of decriminalization, any attempt to persuade people not to consume soft drugs will be counterproductive. In this regard, there is a famous example: "Adam and Eve did not eat the forbidden fruit because of hunger but because they were prohibited from eating It." There are such words in the religious literature of Muslims, too. A Hadith narrated by the Prophet said: "human is greedy and eager to what has been prohibited for him (16).

### 1.2.4. Preventing smuggling and black market of consumption

Decriminalization of soft drug use will decrease the number of profits of a smuggler of this type of drug. Illegal drugs and illegal drug trade along with price increase have become a very profitable profession. When there is a huge demand in society for a certain product, and the government has banned its trade, surely, to meet the needs of the community, there will be a black market of the goods (17).

The effect on the black market of consumption on criminal behavior is from several directions. First, consumers of cannabis in any way possible and at any price will try to satisfy their daily intake, so the rise in prices as a result of the black market has no effect on reducing the tendency to cannabis use, and just motivates consumers of this drug to seek financing. This attempt is not criminal, but it could take criminal direction to (18).

Second, the existence of a black market means there is a large demand for consumption of goods available in the market on one hand and high profitability of selling the goods on the other hand. Having three factors of lack, demand and profitability will increase their smuggling that this will include a wide range of criminal behavior in the future. In the US, drug and illegal drug smuggling estimated annual revenue of \$ 60 billion that this amount, sometimes, reaches \$ 100 billion. In 10 states, the cannabis trade is one of the most profitable trades; it has allocated the highest

profitability to itself in the United States after the trade of grains (19).

Revenues from smuggling illegal drugs in the city of "Miami" are more of the proceeds from the sectors of tourism, exports, health care, and all other legal businesses. The soft drug market in the United States has allocated 1.8 percent of the total global market of drugs to itself, and therefore, it has first place. M.s 'Just Christie', a member of the Bureau of national policy on drugs, associated with the White House says: "Every effort made to control the consumption of illicit drugs has no direct effect on price and even the easy availability of drugs such as cannabis" (20).

Third, the indirect effect of such a prohibition is the result of its criminalization that the suppliers of these drugs wrap their post goods inexpensive foil and sell them to youth at the price same as jewelry. Some of the young people who wish to earn a huge income without doing any constructive activity instigate this turbulent market. Of course, selling shoddy goods causes severe physical harm to consumers and will have serious criminal consequences. Decriminalization of soft drug use can be a bit efficient in this regard (21).

### 1.3. Justifications of Human Rights

#### 1.3.1. Respect for Privacy

Based on the first justification, drug abuse is a personal problem. The consumer is caught in the trap of addiction and puts his health at risk because of momentary pleasure. Therefore, the issue of drug use, rather than being a social problem, is a personal problem. It cannot be denied that government intervention to control the production and distribution of drugs, especially hard drugs, is necessary and even desirable, but it should be noted that the imposition of a penal sanction for some styles of drugs, particularly partial and for personal use drugs is, in fact, intrusion of legislator privacy of individuals and their privacy violation. In countries supporting freedom and respect for individual rights and privacy of people, this will be more evident. Perhaps, that is why some countries have ignored and decriminalized transportation or consumption of small amounts of some drugs (often soft drugs such as marijuana and cannabis) or even at home cultivation for personal use. Countries such as Austria, Belgium, Denmark, Germany, Italy, Netherlands, Spain, Sweden, and Switzerland are included (22).

#### 1.3.2. Avoid labeling

Undoubtedly, you know some people who have started their addiction from the recreational use of drugs. Although this group has a normal and common appearance, they are severely addicted to specific kinds of drugs, particularly light drugs. Imagine that this group is not willing to do any tests to avoid being labeled as an addict, because of which their addiction will be determined. If special kinds of drugs would be decriminalized, it will be possible to not only motivate these people to do tests, but also the criminal labeling can be thrown away from them, and also their fear to refer to medical and cure centers will be removed. In total, decriminalization can be considered as a tool to exclude addicts from margins and include them in society (23).

#### 1.3.3. Respect to Popularity

In democracies, governments are elected by the citizens to implement the best programs to achieve human happiness. No doubt, since the governments are established by the people's vote, they should reflect their desires and demands. In our assumption, if a large number of citizens attempt to use some types of soft drugs, so fighting and criminalizing it will be barren. For example, citizens of more than 10 states, today more than a decade ago, are calling for the decriminalization of soft drugs. Fraser institution in Canada stating that the anti-drug policies have failed in general is calling for the legalization of drugs. Many Canadians demanded the release of opium and 90 percent of them believe that the therapeutic use of the soft drug should prevail (24).

In the United States, particularly in recent years, a significant increase in cannabis use and a tendency toward decriminalization of personal consumption has been observed. Many statistical agencies in this regard have made national surveys and have demonstrated growth in the popularity of the item. For example, according to the Gallup poll, about 44 percent of Americans agree with the decriminalization of cannabis use and 54 percent are the opposite of this. Supporters of decriminalization, based on the claim of the Institute, have allocated a fixed figure 25% to themselves since the 70s to mid-90s, but that number reached 31 percent in 2000, and in the first decade of the third century AD, it has been still growing. The latest statistics show 44% agree with the decriminalization of cannabis consumption.<sup>25</sup>

## 2. Medical justification

### 2.1. Justifications of Denying Pathogenicity

Many scientific studies and articles emphasize the validity of the claim that cannabis use does not lead to physical and mental illness in individual consumers.

### 2.1.1. Negation of Physical Diseases

Some of the most important diseases that are likely to arise as a result of cannabis use in an individual are types of cancer, infertility, increased mortality, and damage to the brain and memory effects. However, recent studies have shown that there is no association between regular consumption of cannabis and cancer (26).

One of the state studies on the long-term effects of Marijuana on the lung concluded that recreational use of cannabis does not make any impairment in lung function.<sup>27</sup> The systematic review based on data from 19 studies from 1966 to 2006 (27) found out that there is no significant relationship between smoking cannabis and lung cancer. The research was published in 2012 as a result of 20 years of research on pulmonary function and its relationship with cannabis use. The study noted, "Our findings indicate that recreational use of cannabis (smoking one cigarette per day for 7 years or 1 per week for 49 years) does not make any problem for pulmonary function. However, this study was able to estimate the effects of cannabis use on those whose consumption is not more than the amount stated" (27).

The idea of the national science academy of America about the relationship between cannabis and infertility is that "the capacity of sperms present in testicles to fertilize female ovule has a reverse relation with cannabis use, but this amount of effect does not make any serious medical problems for reproduction". In addition, the studies conducted in Jamaica have shown that it does not seem marijuana use impairs birth or delays growth among newborn children (28). The results of studies that have tried to show that cannabis use during pregnancy has a negative influence on the development of the child after birth are a bit integrated. Tennes et al investigated the effects of cannabis use during pregnancy on infant growth after birth and 756 women, a third of them admit to cannabis use during pregnancy, were examined, and in the end they concluded that the appeared effects have been eliminated shortly after the infants' birth during their first year of life (29) Recently Day et al found that there is a relation between cannabis use by the mother during pregnancy and the mental and physical activities of the three-year-old children. His evaluated three-old- children of 655 women

who admitted to cannabis use during pregnancy (30). Another study in this respect was conducted on the 6-year-old children confirmed findings of the first study (31). After studying other researches, Fried and Smith concluded that cannabis use by mothers during pregnancy has a little impact (if any effect) on the growth of the fetus and the baby's central nervous system (32).

Many studies have been done on the impact of cannabis use on human intelligence and the brain cortex. For example, according to a study conducted in 2002 in the Journal of the Canadian Medical Foundation "cannabis does not have negative long-term effects on general intelligence". (33)

### 2.1.2. Negation of Mental Diseases

Regarding the relationship between cannabis use and mental illnesses such as schizophrenia, many studies have been conducted. Analysis in 2005 investigated several hypotheses about the correlation of these two and found that there is no support for the hypothesis that cannabis can cause psychosis so that if it were not consumed, psychosis would not have occurred. However, to understand the relationship between cannabis and other types of psychotic patients, more studies are needed. (34) Dr. Stanley Zamit from Bristol and Cardiff universities also reported, "Even if cannabis increases the risk of psychosis, most people using the drug do not get sick" (34).

One of the studies has recently shown that Cannabidiol (the main component of cannabis) can be effective as atypical antipsychotics abnormal in the treatment of schizophrenia (35). Other studies also supported the results (36). They concluded that Cannabidiol in severe paranoid schizophrenia has antipsychotics properties.

The series of studies on long-term use of cannabis in the United States showed that Avolition syndrome is very rare among chronic consumers of the drug. Halika et al evaluated the symptoms of avolition syndrome among 100 consumers of cannabis having experienced using the drug for 6 to 8 years. They found out that only 3 people in the sample were suffering from avolition syndrome. Experimental research on the long-term use of cannabis could also prove clearly that this substance does not have an incentive effect on the consumer (37).

Recently, by reviewing the arguments and evidence relating to the relationship between cannabis use and job performance in laboratory studies, stated field studies, Schwenk concluded that the relationship between cannabis use and job

performance is very low. He believed that before being aligned with the assumption of “a relationship between cannabis use and weak job performance”, the results are compatible with the assumption of “a relation between the personality of cannabis consumers and poor job performance” (38).

## 2.2. Therapeutic Effects of Cannabis Use

### 2.2.1. Treatment of Cancer

In one study, conducted in 1988, 56 patients who were being treated by chemotherapy due to cancer were using cannabis treatment, out of which 78 percent of them have reacted positively to the mentioned treatment and symptoms of recovery were observed. In addition, according to medical staff, any negative consequences did not emerge as a result of cannabis use in this group of patients (39).

A study in 1975 was conducted on a group of cancer patients who had chemotherapy. Some patients stopped the treatment voluntarily and started using cannabis by preparing it from the black market. Interestingly, the Therapeutic effects of cannabis use in these patients were much higher than the other patients (40).

Doctor Nelson, in an article entitled "The role of cannabis in appetite stimulation in cancer patients without appetite", with several experiments on patients with incurable cancer that the mentioned illness has advanced greatly in them destroying their appetite concluded that: «THC in cannabis has an effective role in this group of patients to stimulate food intake and consuming a small amount of the drug causes natural appetite of these people to be normal again" (41).

### 2.2.2. Treatment of HIV and Hepatitis

One of the researchers in Hawaii in 1996 conducted a study on a group of people with AIDS. According to his research, 98 percent of AIDS patients were aware of the therapeutic effects of cannabis, and 37 percent of them use cannabis as a pain medication and preferred it more than other drugs available market (42).

Dr. Abran et al, in their scientific research, concluded that there is no concern for damaging effects of cannabis use on the subjects. And according to the researchers, “ our findings of investigating the effects of short-term cannabis use on patients with immunodeficiency disease showed a positive effect of taking the drug, of course, in this experiment, both groups taking THC and cannabis have gained weight gain as a result of the prescribed drugs. "(43) The findings of this study were

confirmed by De Jong et al in 2005. According to the findings of the researchers, cannabis use can not only reduce or stop the growth of the disease in AIDS patients, but also can decrease painful side effects in patients taking this drug, and if it is inhaled (smoked), it will increase appetite and reduce nausea in the person (44).

In 2007, Dr. Haney et al conducted other reviews in this regard. The findings of the study confirmed the accuracy of the results of previous studies. According to the mentioned study, cannabis use can increase the appetite and weight of patients suffering from AIDS. In addition, using the drug can improve the sleeping condition of the patients (45).

According to one of the studies regarding the role of cannabis use in the treatment of Hepatitis C, 71 patients with the disease were selected. These patients were divided into two groups, the first group took the conventional treatments and the second group left the common treatment and started using cannabis. The results of this experiment were surprising. For those patients who were attempting cannabis consumption, improvement symptoms were three times higher than in the other groups. Based on this study, researchers concluded that increasing the duration of treatment with cannabis would lead to recovery and health of the patients.<sup>46</sup> Doctor Fisher et al, in the same year, conducted a similar study. The results of the study entitled "Treatment of hepatitis c and cannabis use among patients using illicit drugs" were released, in which the positive effects of cannabis use in the treatment of these patients has been possible (47).

### 2.2.3. Treatment of Glaucoma

Regarding the effect of glaucoma, some researches have been conducted indicating that cannabis use decreases eyestrain and its consumers are less likely to get this disease. Based on these studies, cannabis use may protect the eyesight of patients suffering from Glaucoma (48).

### 2.2.4. Suffering and Pain Relief

Studies show that cannabis use, in particular, plays an effective role in relieving nerve pain resulted from AIDS, spasms, and cramps, and other pains and physical sufferings. It also decreases the adverse effects of drugs for the treatment of incurable diseases. (49). Dr. Ellis et al organized research titled “Smoking cannabis to treat pain in patients with AIDS” focusing on AIDS patients. According to him, "In conducted tests, cannabis use in patients with AIDS could reduce pain and discomfort. Cannabis not only relieves pain but also

reduces the psychological effects of pain in the patient. Totally, as the result of cannabis use, both pains of the patient and his mental condition will be relieved" (50). Dr. Wilsey et al, in 2008, published an article about the effects of cannabis use on reduction of severe pains related to Multiple sclerosis, spinal cord injury, diabetes, and complex regional pain syndrome. They concluded, "Cannabis use can have an important role in relieving nerve pain and it is a good alternative to use of other types of drugs. Those patients that taking prescribed drugs has not to effect to allay their suffering, or the physical structures of their bodies are not compatible with the mentioned drugs, can use cannabis instead of drugs" (51). In addition to the mentioned samples, a study was done by Lynch, Yung, and Clark on the incurable patients using cannabis concluded that many of them experienced a reduction of symptoms such as cramps, sleeplessness, and nausea. About 70 percent of the patients reported that they could reduce taking other medicines causing side effects (52).

#### 2.2.5. Muscle Cramps

Several studies indicate the effect of cannabis on muscle cramps and their treatment. For example, according to Zajicek studies, regular use of cannabis is effective in the treatment of pain caused by multiple sclerosis and muscle cramps for 61 to 95 percent (53).

#### 2.2.6. MS.

Many formal studies are conducted on the effects of cannabis on improving MS, prevention of stroke and heart attack, muscle cramps, and multiple hardening indicating the role of cannabis use on recovery of patients suffering from the diseases. Findings of Dr. Wade et al show that long-term use of cannabis in 82 weeks can decrease pain and side effects associated with MS, without making any other side effects for the patient (54).

#### 2.2.7. Nausea Reduction

According to research carried out in the treatment of patients suffering from nausea, it was observed that 72% of cannabis users witnessed mitigation of their disease. Researches by Layeegue et al in 2006, ended with publishing an article entitled "Prevention of nausea after Breast surgery in women" indicating that the consumption of cannabis or THC capsules can significantly reduce the number and the severity of the mentioned condition after chest surgery" (55).

#### 2.2.8. Weight Loss

Some studies indicate weight loss, loss of appetite in obese patients as a result of cannabis use (56). According to a survey by Foltin et al entitled "The effect of inhaled cannabis on an increase of appetite and weight gain of Man" published in 1988, it was stated that several normal volunteers without the disease attempted to use cannabis to investigate the effects of cannabis use on the increase of appetite and weight. According to the obtained results, fumigation of cigarettes containing cannabis with a very low dose of (2.3 percent of THC) in regular time intervals could increase daily appetite up to 40% (57).

#### 2.2.9. Reduction of Alzheimer.

Research has shown that compounds in cannabis, especially THC, can reduce the severity and progression of Alzheimer's in patients. Dr. Walther et al in their studies have proven it correctly (58). Some of the researchers such as Esposito have had a seal of approval on previous findings in their study (59).

## Conclusions

The issue of decriminalization of the use of certain types of drugs known as light or soft drugs has a theoretical and practical background to a length of more than 50 years in countries such as the Netherlands and the United States. Some, by making a distinction between types of drugs with an addictive degree and potential therapeutic use, believe that soft drugs cannot be compared with some drugs such as heroin and crack because they not only have a lower degree of addictive rate rather than heroin and crack but also using it has some therapeutic benefits. Legally, decriminalization of soft drugs is proven by reasons and justification of human rights and criminology and penology, so that by considering the total medical and legal reasons and justifications, a tendency can be shown toward the issue of decriminalization in the mentioned manner.

## Acknowledgements

This study was funded by the faculty of humanities, Shahed University, Tehran, Iran.

## Conflict of Interest Statement

The author declares that they have no conflicts of interest.

## References

1. Abbasi M, Rezaee R, Dehghani G. Concept and situation of the right to health in Iran legal system.

- Iranian Journal of Medical Law. 2014 Oct 10;8(30):183-99.
2. Abbasi M, Petoft A. Citizenship rights, from Principles to social Platform. Tehran: Legal Publishers. 2017:85.
  3. Weldy EW, Stanley J, Koduri VA, McCourt EA, Patnaik JL, Kahook MY, Seibold LK. Perceptions of Marijuana Use for Glaucoma from Patients, Cannabis Retailers, and Glaucoma Specialists. *Ophthalmology Glaucoma*. 2020 Nov 1;3(6):453-9.
  4. Dukes AJ, Fowler JP, Lallai V, Pushkin AN, Fowler CD. Adolescent cannabinoid and nicotine exposure differentially alters adult nicotine self-administration in males and females. *Nicotine and Tobacco Research*. 2020 Aug;22(8):1364-73.
  5. Abassi M, Petoft A. *Fundamentals of Neurolaw*. Tehran: Medical Ethics and Law Research Center, Shahid Beheshti University of Medical Sciences. 2019.
  6. Engelsman, E.L. *Drug Policy in the Netherlands*. Paper prepared for the American Embassy in the Netherlands, the Ministry of Welfare, Health and Cultural Affairs; Alcohol, Drugs and Tobacco Branch; 1988. P. 37
  7. Abbasian L, Abbasi M, SHAMSI GE, NASERI RM, Memariani Z. Survey on the scientific position of the spiritual health and its role in preventing from diseases: A preliminary study. 2011.
  8. Fergusson, D. M. & Horwood, L. J. Does cannabis use encourage other forms of illicit drug use?, *Addiction*; 2000.p. 95.
  9. Van Ours, J. C. Is Cannabis A Stepping-Stone For Cocaine? *Journal of Health Economics*; 2003. P. 22.
  10. Coffey, C., Lynskey, M., Wolfe, R. & Patton, G. C. Initiation and progression of cannabis use in a population-based Australian adolescent study, *Addiction*; 2000.p. 95.
  11. Petoft A. The Validation Requirments of Neurscientific Evidences before Courts. *Iranian Journal of Medical Law*. 2021 Apr 10;15(56):431-43.
  12. Petoft A, Abasi M. *Citizenship Rights: from the Government Protection to Monitoring on it*. Tehran: Justice Publication. 2017:59-65.
  13. Hajiesmaeili MR, Abbasi M, Jafari NJ, Abdoljabari M, Fani M, Mesri M, Baghernezhad F, Shahosseini AA, Azimi AV. Spiritual health concept: A hybridized study. *Medical History Journal*. 2016;6(21):15-49.
  14. Lopez MJ, Nataneli N. Cannabis Use For Glaucoma And Associated Pain. *StatPearls [Internet]*. 2021 Jun 21.
  15. Merritt, J. Effects of Topical Delta-9-Tetrahydrocannabinol On Intraocular Pressure In Dogs. *Glaucoma*; 1981. P.21.
  16. Merritt, J., Olsen J., Armstrong, J. and McKinnon, S. Topical Delta-9-Tetrahydrocannabinol in hypertensive glaucomas. *J. Phar. Pharmacol*; 1981. P. 33.
  17. Passani A, Posarelli C, Sframeli AT, Perciballi L, Pellegrini M, Guidi G, Figus M. Cannabinoids in Glaucoma Patients: The Never-Ending Story. *Journal of clinical medicine*. 2020 Dec;9(12):3978.
  18. Merritt, J., Cook, C. and Davis, K. Orthostatic Hypotension after Delta-9- Tetrahydrocannabinol Marihuana Inhalation. *Ophthalmic Res*; 1982. P. 14.
  19. Abbasi M, Rezaee R, Dehghani G. Concept and situation of the right to health in Iran legal system. *Iranian Journal of Medical Law*. 2014 Oct 10;8(30):183-99.
  20. Merritt, J. Outpatient Cannabinoid Therapy For Heterogenous Glaucomas: Guidelines for institution and maintenance of therapy. *Marijuana 84: Proceedings of the Oxford Symposium on Cannabis*; 1984. P.87.
  21. Petoft A, Abbasi M. Current limits of neurolaw: A brief overview. *Médecine & Droit*. 2020 Apr 1;2020(161):29-34.
  22. Goldberg, I., Kass, M. and Becker, B. Marijuana as a Treatment for Glaucoma. *Sightsaving Review*, winter issue; 1979. P.54.
  23. Petoft A. An Overview of the Technical Limitations of Applying the fMRI Method in Neurolaw. *Bioethics Journal*. 2019;9(34):95-107.
  24. Petoft A. Neurolaw: A brief introduction. *Iranian journal of neurology*. 2015 Jan 5;14(1):53.
  25. Petoft A. The Use of Neuroscientific Evidence in the Modern Criminal Law with Emphasizing on the UK and Canadian Neurolitigation. *Iranian Journal of Medical Law*. 2021 Apr 10;15(56):241-59.
  26. Donald Tashkin, M.D. Study Finds No Link between Marijuana Use and Lung Cancer., *Science Daily*; 2006.p.12.
  27. Petoft A, Momeni-Rad A. Toward Human Behavior Sciences from the Perspective of Neurolaw. *International Journal of Public Mental Health and Neuroscience*. 2015;2(2):29-33.
  28. Hayes JS, Lampart R, Dreher MC, Morgan L. Five-Year Follow-Up Of Rural Jamaican Children Whose Mothers Used Marijuana During Pregnancy. *The West Indian Medical Journal*; 1991.p. 40.
  29. Petoft A, Abbasi M. A historical overview of law and neuroscience: From the emergence of medico-legal discourses to developed neurolaw. *Archivio Penale*. 2019;1(2):1-48.
  30. Day, N. L., Richardson, G. A., Goldschmidt, L., Robles, N., Taylor, P. M., Stoffer, D. S., Cornelius, M. D. & Geva, D. Effect of prenatal marijuana exposure on the cognitive development of offspring at age three, *Neurotoxicology & Teratology*; 1994.p. 16.
  31. Petoft A. Concept and scope of the general principles of administrative law and referring possibility in the judicial procedure. *The Judiciary Research Institute Publishing Center*.2016.
  32. Fried P, Watkinson B, James D, Gray R. Current and former marijuana use: preliminary findings of a longitudinal study of effects on IQ in young adults. *CMAJ* ; 2002.p.166.
  33. Fried PA, Watkinson B, Gray R. Differential effects on cognitive functioning in 13- to 16-year-olds prenatally exposed to cigarettes and marihuana. *Neurotoxicology and Teratology*; 2003.p 25.
  34. Degenhardt L, Hall W, Lynskey M. Comorbidity between cannabis use and psychosis: Modelling some possible relationships. *Technical Report No.*

121. Sydney: National Drug and Alcohol Research Centre;2001. p.128.
35. Zuardi, A.W; J.A.S. Crippa, J.E.C. Hallak, F.A. Moreira, F.S. Guimarães. Cannabidiol as an antipsychotic drug. *Brazilian Journal of Medical and Biological Research*; 2006. P. 39.
  36. Leweke, F. M. ; Koethe, D. ; Pahlisch, F. ; Schreiber, D. ; Gerth, C. W. ; Nolden, B. M. ; Klosterkötter, J. ; Hellmich, M. Antipsychotic Effects of Cannabidiol". *European Psychiatry* ;2009. P.27.
  37. Groh CJ. Medical Cannabis and Psychiatric Disorders: Implications for Psychiatric Nurses. *Journal of the American Psychiatric Nurses Association*. 2020 Aug 8;1078390320945791.
  38. Schwenk, C. R. Marijuana and job performance: Comparing the major streams of research, *Journal of Drug Issues*; 1998. P. 28.
  39. Vinciguerra, V. Inhalation Marijuana as an Antiemetic for Cancer Chemotherapy, *New York State Journal of Medicine*; 1988. P.82.
  40. Vijhe MR, Petoft A. A Foucauldian Analysis of Post-Modern Concept of Sovereignty in the Light of Public Law. *The Quarterly Journal of Public Law*. 2016;18(52):9-32.
  41. Nelson, K. A Phase II Study of Delta-9-Tetrahydrocannabinol for Appetite Stimulation in Cancer-Associated Anorexia, *Journal of Palliative Care*; 1994. P. 10.
  42. Abbasi M, Petoft A. *Citizenship Rights: from Good Governance to Administrative Procedures*. Tehran: Justice Publication. 2017:205-6.
  43. Abrams DI, Vizoso HP, Shade SB, Jay C, Kelly ME, Benowitz NL . Vaporization as a Smokeless Cannabis Delivery System: A Pilot Study. *Clinical Pharmacology and Therapeutics*. 2007.p. 82.
  44. De Jong, B.D. Marijuana Use and Its Association with Adherence to Antiretroviral Therapy among HIV-Infected Persons With Moderate to Severe Nausea, *Journal of Acquired Immune Deficiency Syndromes*; 2005.p. 38.
  45. Haney, M. e. Dronabinol and Marijuana in HIV-Positive Marijuana Smokers. Caloric Intake, Mood, and Sleep, *Journal of Acquired Immune Deficiency Syndromes*; 2007.p. 45.
  46. Sylvestre, D.L., Clements, B.J. and Malibu, Y. Cannabis Use Improves Retention and Virological Outcomes in Patients Treated For Hepatitis C, *European Journal of Gastroenterology and Hematology*; 2006. P. 18.
  47. Fischer, B. Treatment For Hepatitis C Virus and Cannabis use in Illicit Drug User Patients: Implications and Questions," *European Journal of Gastroenterology and Hepatology*; 2006.p. 18.
  48. Petoft A, Vijeh M. The evolution of government intervention in the economy from the perspective of public law, welfare to post regulatory governments. *The quarterly journal of public law research*. 2015;17(47):190-8.
  49. Abrams D, Cannabis in Painful HIV-Associated Sensory Neuropathy: a Randomized Placebo-Controlled Trial, *Neurology*; 2007.p. 68
  50. Ellis, . R.J. Smoked Medicinal Cannabis For Neuropathic Pain in HIV: a Randomized, Crossover Clinical Trial, *Neuropsychopharmacology*; 2009.p. 34.
  51. Wilsey, B. A Randomized, Placebo-Controlled, Crossover Trial of Cannabis Cigarettes in Neuropathic Pain," *Journal of Pain*; 2008. P. 9.
  52. Lynch, M.E. Young, J. Clark, A.J. A Case Series of Patients Using Medicinal Marijuana for Management of Chronic Pain Under the Canadian Marijuana Medical Access Regulations, *Journal of Pain and Symptom Management*; 2006. P. 32.
  53. Zajicek, J. Cannabinoids for Treatment of Spasticity and Other Symptoms Related to Multiple Sclerosis (CAMS Study): Multicentre Randomised Placebo-Controlled Trial, *The Lancet*; 2003. P. 362.
  54. Wade, D.T. Long-Term Use of a Cannabis-Based Medicine in the Treatment of Spasticity and Other Symptoms in Multiple Sclerosis. *Multiple Sclerosis*; 2006. P. 12.
  55. Layeeque, R. Prevention of Nausea and Vomiting Following Breast Surgery, *American Journal of Surgery*; 2006. P. 191.
  56. Petoft A. Controversial Brain Imaging as a Terrorism Emergency Measure in Neurolaw Discourse. *Journal of Neurology & Neurotherapy*. 2017;2(2):1-9.
  57. Hajiesmaeili MR, Abbasi M, Safaiepour L, Fani M, Abdoljabari M, Hosseini SM, Baghernezhad F, Shahosseini A, Akrami F, VAHEDIAN AA. Spiritual health concept in Iranian society: Evolutionary concept analysis and narrative review. 2016.
  58. Walther, S. Delta-9-Tetrahydrocannabinol for Nighttime Agitation in Severe Dementia, *Psychopharmacology (Berl)*; 2006. P. 185.
  59. Esposito, G. The Marijuana Component Cannabidiol Inhibits Beta-Amyloid-Induced Tau Protein Hyperphosphorylation Through Wnt/beta-catenin Pathway Rescue in PC12 Cells," *Journal of Molecular Medicine*; 2006.p. 84.

