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## Pros and Cons of Medical Cannabis Legalization in Indonesia

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**Abstract.** Medical cannabis legalization policies continue to experience significant developments around the world. The adverse effects resulting from its misuse and the potential benefits that may be achieved from properly using this plant open up space for widespread public debate. Indonesia is one of the countries that consistently does not legalize the use of cannabis for both medical and recreational purposes. However, with the development of society, there are movements that encourage the government to open up space for the discourse on the legalization of medical cannabis. This study aims to describe the pros and cons of the legalization of medical cannabis in Indonesia. This study uses literature studies originating from scientific journals, books, policy documents, and medical reports related to the discourse on the medical cannabis legalization in Indonesia. The problem of the pros and cons of this discourse has not yet found a clear spot because it is still very limited and the difficulty of domestic research related to cannabis. Research is needed to assess the positive and negative impacts of cannabis use as a material consideration in deciding this policy. Specific regulations and technical guidelines from the government are also needed to support the development of cannabis research in Indonesia.

**Keywords.** Medical cannabis legalization; cannabis; pro and cons; regulation; Indonesia.

### 1. Introduction

Cannabis, or known as weed, grass, marijuana, Mary Jane, and others, is a plant that is familiar to people in almost all countries in the world. This plant has a negative stigma as a plant that causes addiction, but on the other hand there are potential benefits in various aspects. Having long historical roots attached to the culture of society for centuries, cannabis has a long evolutionary history of use. Records of the use of the *Cannabis Sativa* plant by humans date back 6,000 years by cultivating it as a raw material for fiber for rope, textiles and even paper in China [1]. Records regarding the use of cannabis for medicinal purposes, spirituality, and raw materials for paper are also found in the history of Mesopotamia, the Persian Empire, India, Japan, the Arabian Peninsula, and the African continent [2]. The use of this plant continued until it slowly began to become a world concern in the early 20th century after considering the negative psychoactive effects contained therein.

Discussion at the international level regarding the use of cannabis has existed since 1925 at The Second Opium Conference and the International Opium Convention, signed in Geneva

on February 19, 1925 where the use of Indian hemp and its derivatives may only be permitted for medical and scientific purposes [3]. Then in 1961, the 1961 Single Convention was held, cannabis, cannabis resin, and extracts and tinctures were listed in schedule I while cannabis and cannabis resin were also listed in schedule IV [4]. Schedule I consists of substances that are highly addictive and highly susceptible to substance use disorders and have very limited therapeutic uses, while schedule IV includes substances that are highly addictive and highly susceptible to abuse and are rarely used in medical practice where the regulations are stricter than schedule I. thus requiring extra control [5]. Many countries have ratified the convention which makes cannabis a plant that is considered dangerous and requires strict regulations for its use.

The movement towards changes in the regulation of the use of cannabis began in 2001 when Canada passed regulations on the use of cannabis for medical purposes. Since then, the use of cannabis for medical purposes began to be considered by other countries. Then in 2013, Uruguay became the first country to legalize the use of cannabis, including for recreational purposes. Several other countries have begun to follow this, but for others this plant is still considered illegal. In December 2020, the United Nations approved recommendations from WHO to eliminate cannabis as a lethal and addictive drug by reclassifying parts and derivatives of the plant from schedule IV and schedule I [6]. With this, the door for opportunities for the use of cannabis is wide open even though the regulation at the state level is still left to the government concerned.

Indonesia is one of the countries that until now still does not allow the use of cannabis and is considered a dangerous plant. Law Number 35 of 2019 concerning Narcotics, cannabis is grouped into group I substances, which have a high potential for abuse and are not used in the context of therapy/health services even in limited quantities. This makes all forms of production, distribution and use of this plant and its derivatives strictly prohibited except for the benefit of scientific development in limited quantities. Even with strict regulations regarding the use of cannabis, its abuse in Indonesia is the highest in Indonesia with a percentage of 41.4 percent in 2021[7].

Regulations related to cannabis in Indonesia are currently experiencing upheaval, especially with the emergence of social movements that demand changes to cannabis-related regulations so that it can be used for medical purposes. Most recently, in November 2020, there was a lawsuit against the Constitutional Court regarding a judicial review of regulations regarding the use of cannabis for medical purposes filed by people with children with *cerebral palsy* as well as social organizations demanding to repeal the prohibition on the use of cannabis so that it is used for the purposes of medical therapy. Even though the results of the case decision were ultimately rejected by the Constitutional Court on July 20, 2022, this did not dampen the discourse. Based on the previous explanation, this article will outline the pros and cons regarding the policy of legalizing medical cannabis in Indonesia. The purpose of this study is to describe the problem of differences in ideas regarding the legalization of medical cannabis in Indonesia and recommendations that must be taken in the future.

## **1. Method**

The method used in this study is a qualitative method by conducting a literature study of data from various sources related to medical cannabis legalization policies. The data is obtained through scientific journals, books, regulatory documents and media reports related to the legalization of medical cannabis. Scientific journal data is obtained online which is collected

through online databases such as Scopus, Research Gate and Google Scholar. The scientific journals included in the research were published from 2001 to 2023 with limited language in English and Indonesian. Meanwhile, data regarding views on the legalization of medical cannabis from experts, stakeholders and activists was obtained from online media coverage regarding the legalization of cannabis. Reporting on the discourse on the legalization of cannabis in Indonesia is focused on the range of 2020 to 2023 following the ruling on a lawsuit against the Constitutional Court regarding the judicial review of the use of cannabis for medical purposes in 2020.

## **2. Cannabis and its regulation for medical purposes**

WHO defines Cannabis as a general term used to denote several psychoactive preparations (the main psychoactive substance  $\Delta$ -9 *tetrahydrocannabinol* (THC)) from the Cannabis sativa plant [8]. These substances have addictive properties that lead to high rates of abuse. As of 2022, cannabis is still the most abused substance in the world, with an estimated 209 million people (four percent of the world's population) using cannabis in 2020 [9]. Substance abuse is considered to have a negative impact, especially from a health perspective. Cannabis use is often associated with an increased frequency of depression, anxiety, cognitive impairment, other drug abuse problems, and accidents [10] and is associated with causing physical and mental health disorders [11].

In another view, besides THC (*Tetrahydrocannabinol*), cannabis also contains the main content CBD (*Cannabidiol*) which is a non-psychoactive cannabinoid whose activity is believed to be able to fight epilepsy in children and has many important therapeutic effects such as analgesic, antispasmodic, antitumor, anti-inflammatory, antioxidant, neuroprotective, appetite stimulant [12], sleep disorders, multiple sclerosis, schizophrenia, and cancer [13]. Since 2018, CBD has even been approved for use in the United States (US) and is even currently being considered for approval in the European Union [14]. It is this CBD substance that is currently being used by many countries as a drug in health therapy and is an important consideration for the use of cannabis for medical purposes amidst its large potential for dependence.

Policies regarding the use of cannabis for medical purposes or the medical cannabis legalization in each country vary by looking at the needs and characteristics of that country. UNODC describes the context of legalization that is usually associated with the regulation and commercialization of regulated drugs, for example cannabis, for non-medical and non-scientific purposes with the aim of ensuring impunity [9]. In the context of the medical cannabis legalization, the government regulates the use of cannabis for medical purposes with strict supervision so that the drug becomes effective. Medical cannabis legalization is defined as the use of cannabis by qualified patients with certain medical conditions based on the recommendation of a qualified physician [15]. This policy will provide legal protection, especially for patients who need medical treatment with cannabis-based ingredients without having to fear legal consequences. This means that the use of cannabis other than what was previously mentioned is still an illegal act which can have implications for lawsuits.

## **3. Cannabis use policy in Indonesia**

Policies relating to the use of cannabis in Indonesia have been carried out since the Dutch East Indies occupation of Indonesia. Indonesia at that time as part of the Dutch East Indies adopted the *Verdovende Middellen Ordonnantie* (Decree on Narcotics) in 1927 which was a follow-up to the ratification of The Second Opium Conference and the International

Opium Convention. After Indonesia's independence, the government ratified the 1961 Single Convention through Law Number 8 of 1976 concerning Ratification of the 1961 Narcotics Single Convention and the Protocols Changing It. In its development, Indonesia also ratified the United Nations Convention Against Illicit Traffic in Narcotic Drugs And Psychotropic Substances, 1988 through the Law of the Republic of Indonesia Number 7 of 1997 concerning Ratification [16]. This law became the forerunner to the birth of Law Number 35 of 2009 concerning Narcotics which is still valid today. Until now, the cultivation, distribution, and use of cannabis is illegal and subject to legal sanctions.

#### **4. Narration of the Pros and Cons of Medical Cannabis Legalization Policy in Indonesia**

##### *4.1. Narratives that reject the discourse on the medical cannabis legalization*

The National Narcotics Agency (read: *Badan Narkotika Nasional* or BNN) as a government agency dealing with drug problems has become an agency that balks at the discourse on the policy of legalizing cannabis [17]. On several occasions BNN explained its reasons for rejecting the discourse. Some of the reasons put forward by the National Narcotics Agency and several experts who are against the legalization of medical cannabis are guided by the bad effects and the lack of urgency to use this plant. The economic reasons behind the policy of legalizing cannabis are considered to be wrong because if it is legalized, there will be an increase in use and cause accidents that will incur medical and rehabilitation costs [18]. The Head of BNN also revealed that he prioritized saving Indonesia's young generation rather than legalizing cannabis [19] [20] [21]. Cannabis is one of the most abused substances by teenagers compared to other drugs [7] [22]. In addition, there is an increase in crime rates in certain countries that have legalized medical cannabis and there are alternative medicines other than the use of cannabis that can be used for medicinal purposes [23]. BNN also reasoned, although it has lowered the status of cannabis as a dangerous drug by removing it from schedule IV and schedule I, the United Nations fully surrenders its position on the use of this plant to each country [19] [21].

Solid pharmacological evidence for the benefits of using cannabis for medical therapy is still lacking, on the other hand there is very real evidence that cannabis is a dangerous drug [24]. Although many have shown positive results in the treatment of chronic diseases, in fact definitive conclusions about the efficacy of this plant cannot be drawn [25]. Professor from Faculty of Medicine University of Indonesia, dr. Frans D. Suyatna stated that the benefits of cannabis as a medicine are only symptomatic, not curative, so that its use is more psychoactive which can affect the psychological aspects [26]. In addition, even though cannabis has been allowed to be used for epilepsy therapy in the United States, this still cannot justify this discourse because there are still alternative drugs for this disease [27]. Pharmacist from Gajah Mada University, Prof. Dr. Zullies Ikawati, also believes that cannabis should not be legalized for medical purposes because it has the potential to cause misuse of cannabis products [28].

##### *4.2. Narratives that support the policy discourse on the medical cannabis legalization*

Movements seeking to legalize medical cannabis in Indonesia are carried out by people who need medical cannabis, supported by non-governmental organizations and social organizations concerned with cannabis issues. Several institutions participating in the advocacy movement for the legalization of medical cannabis include the Cannabis Circle of the

Archipelago (read: *Lingkar Ganja Nusantara* or LGN), the Sativa Nusantara Foundation (read: *Yayasan Sativa Nusantara* or YSN). *Rumah Cemara*, Institute for Criminal Justice Reform (ICJR), and other institutions. Those who are pro with this discourse argue that in several countries the use of cannabis for medical purposes has been legalized. Then based on data collected from these countries (such as the United States, Canada, the Netherlands, Israel and Australia), there are very few adverse effects or problems arising from the use of cannabis as a treatment and many patients need to get a prescription for cannabis medicine [29].

Cannabis has benefits especially as a medicinal plant and treatment of several chronic diseases. Studies conducted abroad have found the benefits of cannabis for medical purposes. Research conducted in the US from 2010 to 2011 on patients with chronic illnesses showed that cannabis is safe and effective for patients because it can reduce pain, insomnia, and can help relieve anxiety [30]. In addition, drugs based on cannabis have been found to be effective in other diseases such as multiple sclerosis, chronic neuropathic pain, nausea and vomiting due to chemotherapy and epilepsy [31] [32] antiemetics, appetite stimulants in cancer and AIDS, treatment of spinal cord injuries, Tourette's syndrome, to glaucoma [33].

Another narrative that is no less important that is echoed by these non-governmental organizations is the cultural closeness of the cannabis plant to Indonesia. Traces of the utilization of the cannabis plant were recorded by a German-Dutch botanist, G.E. Rumphius in 1741 who stated that cannabis plants have been used for recreational and medicinal purposes by people in Maluku [34]. In his book entitled *Herbarium Amboinese*, it is written that cannabis plants are used by the people of Maluku to treat fatigue and treat gonorrhea, diarrhea, hernias, and asthma [35]. In Aceh, cannabis has been known since the 16th century which is recorded in the *Tajul Muluk* book as a diabetes medicine and is used as a spice for everyday cooking [36] such as Acehnese noodles and goat curry, mixed coffee drinks, and herbal medicines [37]. Evidence of its use on the islands of Java and Bali was also recorded several centuries ago from the reliefs of cannabis leaves found on the second level of the *Kendalisodo* Temple on Mount *Penanggungan*, Mojokerto which signifies the function of cannabis for community spiritual activities in the past [38]. In Bali, cannabis is written in *Lontar Usada* which contains medical teachings, types of diseases, and plants used as medicine [39].

In addition to benefits in the field of medicine, cannabis has potential benefits in the industrial and economic fields. Cannabis has uses in the industrial sector including lighting, rigging, ship anchors, paint or varnish, building materials, jersey materials, cosmetics, skin care, and paint or varnish [40]. The cannabis plant also produces fiber which has great potential as a sustainable source of textile fiber [41]. Cannabis fiber is also one of the raw materials for *hemcrete* as an alternative to concrete which is seven times stronger, twice lighter, more elastic and more resistant to cracking than ordinary concrete [42]. Studies conducted in Canada found that the cannabis industry can compete with other energy-producing crops in the global market for bioenergy raw materials so that it becomes more economical [43]. This explanation makes the cannabis plant a more profitable industrial potential and has an impact on increasing sources of state income if it can be managed properly.

#### 4.3. *Analysis of the pros and cons of medical cannabis legalization in Indonesia*

In the narrative previously presented, there are several aspects that until now there has been no agreement between the parties who support and reject the discourse on the legalization of medical cannabis. Some of the aspects that are the main debate are the benefits and negative impacts for the people of Indonesia. Where at this time these two things are still difficult to measure because the legalization of medical cannabis in Indonesia is still only a discourse. In

Indonesia, research on the positive and negative impacts of cannabis use is still very minimal due to conflicts with applicable regulations. On the other hand, most of the studies regarding the positive and negative effects obtained from this policy still come from other countries that have passed legalization policies.

These studies obtained from abroad also produced different impact results depending on the type of policy specifications, the level of use and the background of the norms that were in force before the legalization policy was taken [44]. For example, research on the relationship between cannabis legalization and the prevalence of cannabis abuse in adolescents and adults. Several studies have shown a relationship between cannabis abuse and an increase in cannabis abuse in adolescents [45] and adults [46], but found no influence in other studies [47][48][44]. The same thing can be seen in research on the relationship between legalization of cannabis and accident rates in the US. Research in several US states found this policy to be associated with an average 10 percent increase in deaths from vehicle crashes [49], but other studies found a link between the legalization of medical cannabis and a decrease in fatal traffic accidents [50], with a decrease in 8 to 11 percent in traffic fatalities [51]. In addition, several other studies have found no link between the legalization of medical cannabis and driving under the influence of cannabis [52] [53].

Therefore, until now there is still no agreement agreed upon by both parties regarding the discourse on the legalization of cannabis. Specific and specific research related to the use of cannabis in Indonesia needs to be carried out to uphold the best recommendations related to this policy discourse. The Indonesian government has actually taken more advanced steps in this regard. After the rejection of a lawsuit against the judicial review of Law Number 35 of 2009 concerning Narcotics related to the use of cannabis in 2022, several steps have been taken by the government to review the benefits of this plant. The Ministry of Health opened up opportunities and has conducted research related to the use of cannabis for medical purposes [54] and the Vice President of the Republic of Indonesia, also asked the Indonesian Ulema Council (MUI) to issue a fatwa (opinion in Islamic law) regarding the discourse on the legalization of cannabis for medical purposes [55]. In 2022, the Regulation of the Minister of Health of the Republic of Indonesia Number 16 of 2022 was finally issued concerning Procedures for Organizing the Production and/or Use of Narcotics for the Interest of Science and Technology Development. Although not specifically for cannabis, this step is a breath of fresh air for researchers who wish to research cannabis in the country.

## **5. Conclusion**

The pros and cons of the policy of legalizing medical cannabis in Indonesia have occurred over the last few years. Community movements pushing for judicial review of the law for the medicinal use of cannabis are ongoing. On the other hand, the Indonesian government remains consistent by continuing to include cannabis in schedule I Narcotics which prohibits its use for medical purposes. One year since the regulation regarding research for schedule I Narcotics was issued, there is still no visible movement towards cannabis research, so more specific technical guidelines are needed that can make it easier for researchers to carry out their research on cannabis. This problem will not find common ground until comprehensive research is carried out regarding the use of cannabis. Research should not only focus on the benefits and potential of cannabis, but also study the risk of adverse effects it will have on people's lives if this policy is eventually passed. Viewing the policy of legalizing medical cannabis must be carried out by looking at various aspects such as public health, social, economic, cultural and

security because both directly and indirectly the policies taken by the government will affect the lives of many people.

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