

Should *Cannabis* as Medicine be Specifically Regulated?

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Abstract

In 2017, a patient case in Sangau, West Kalimantan, involving a women with syringomyelia has drawn public attention. The case ended with the arrest of her husband who cultivated *Cannabis* to treat her disease. Currently, Indonesian regulation classifies *Cannabis* as the first group of narcotics which are prohibited to be used as medicine. This research aimed to ellaborate whether *Cannabis* as medicine should be specifically regulated. Data source was national and international regulation on narcotics and scientific evidence regarding medical benefit of *Cannabis* The data was obtained from literature search with following keywords; regulation of *Cannabis*, medical use of *Cannabis*, *Cannabis* medicine. Analysis was conducted using qualitative approach. The results of this study showed that Indonesian regulation regarding *Cannabis* is associated with International Convention on narcotics. Evidence-based data on *Cannabis* application in medical treatment have been extensively studied. Given beneficial effect of *Cannabis* to treat many diseases, several countries have already regulated the use of *Cannabis* for medical purpose. In conclusion, it is worth to consider a specific regulation for medical *Cannabis* in Indonesia, given its beneficial utilization to treat certain diseases.

Key words: Regulation, *Cannabis*, medical *Cannabis*, syringomelia

Introduction

In 2017, a patient case in Sangau, West Kalimantan, involving a women with syringomyelia drew public attention. Husband of the patient was arrested, trialed and sentenced for cultivation of *Cannabis* at his home grounds. Based on data from the case file No.111/Pid. Sus/2017/PN.Sag at Sangau Court of First Instance, it was clear that the cultivation of *Cannabis* by this man was only for the medical purpose, specifically to treat his wife.¹

The wife had been in severe pain due to

syringomyelia for many years. Once every two weeks, she needed to be hospitalized. The patient was introduced with *Cannabis* treatment in 2016. After consuming cannabis, she felt better and could sleep without pain. She confessed that consumption of *Cannabis* never made her lost of consciousness. Eventually, she died not long after her husband was arrested and trialed.^{1,2}

Current Indonesian regulation on *Cannabis* can be found in the Law No. 35/2009. All

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genus of *Cannabis* and all part of the plant, including the resin, tetrahydrocannabinol (THC), all its isomer, all its chemical stereoisomers, delta-9 THC, and cannabidiol (CBD) are classified as narcotic group I.³ The aim of this study was to examine whether there was a need to formulate a specific regulation on the use of cannabis for medical purpose.

Methods

This is an explanatory research using qualitative approach. Data source was national and international regulation on narcotics and scientific evidence regarding medical benefit of cannabis. The data was obtained from literature search with following keywords; regulation of *Cannabis*, medical use of *Cannabis*, *Cannabis* medicine.

Results and Discussion

Legal aspect

Indonesian regulation on narcotics is associated with International Convention on Narcotics/1961. Indonesia was one of the 73 countries that become first member of the convention. Indonesian law regarding narcotics shall comply the international convention. Currently, legal statement regarding narcotics is provided in Law No. 35/2009, which state that all genus of *Cannabis* and all part of the plants, including its derivatives are classified as narcotics group I. Article 8 paragraph (1) of Law No. 35/2009 stated that narcotics listed in the group I are prohibited to be used for medical purpose.³

This law replaced Law No. 22/1997, and Law No. 9/1976. Nevertheless, under the Law No. 9/1976, *Cannabis* can be used for medical and scientific purposes. However, change was conducted in Law No. 22/1997, implying that narcotics listed in group I can only be used for scientific purpose. The use

for other purposes are prohibited, including medical purpose.^{3,4}

In 2015, the Ministry of Health issued a document No.LB.02.01/III.03/885/2015 regarding permission to use *Cannabis* in medical research as a response to a private research institute that intended to conduct a study on *Cannabis* as potential drug candidate for type 2 diabetes mellitus. This document stated that this research should be performed by a team, involving researchers from that institute and Ministry of Health. Nevertheless, the research team from Ministry of Health still yet to be appointed, resulting in the delay of the research on medical application of *Cannabis* in Indonesia.

Medical aspect

Cannabinoids isolated from *Cannabis* plant has been extensively studied in medical research. The most frequent used cannabinoids are THC and CBD. Previous clinical trials suggested potential benefits of cannabinoids for alzheimer, dementia, Huntington disease, and other nervous system disorders.^{4,5} Other studies revealed that cannabinoids could reduce tumor growth in animal model of cancer by modulating signalling pathway in cell proliferation.⁶ Cannabinoids can also be used for palliative care, particularly in chemotherapy-induced nausea and vomiting due to its anti-emetic effect.⁷ In addition, CBD also exhibited anti-convulsant activity that can be used for epilepsy treatment. Compared to THC, CBD has better safety profile.⁷⁻¹¹ Previous study also showed that cannabinoids exhibited modest effect in multiple sclerosis patients, particularly to treat spasticity. Further research are encouraged to compare the effectiveness of *Cannabis* compared to standard drugs.

Regulation of medical Cannabis worldwide

With development of scientific research related to medical use of *Cannabis*, there had been a changes in *Cannabis* regulation worldwide. In United States, although Controlled Substance Act (ACT), a legal statement that regulate drugs that has high potential for abuse, remained active, several states has regulated the possibility of using *Cannabis* for medical purpose. in 1996, California was the first state that legalize medical *Cannabis*. Previous study by Kilmer *et al* identified a 11 countries that legally allowed the use of cannabis for medical purpose, including Netherlands, Canada, Chile, United Kingdom, Czech Republic, Uruguay, Jamaica, Colombia, Australia and Germany.¹³ Australia enacted the law in 2016, while Germany did in 2017. THC and CBD were among the most frrequent used medical *Cannabis*.¹³⁻²²

Our finding showed that there were enough evidence-based data that proved *Cannabis* can be used for medical purpose. There were also several on-going clinical trials related to the use of cannabis in medical therapy. For that reason, the regulations of medical cannabis should be considered. Document No. LB.02.01/III.03/885/2015 permitted a research using *Cannabis* in Indonesia. However, this study has never been performed. Many scientific researches can be perfomed with respect to the medical use of *Cannabis* in Indonesia. Pharmacoeconomic evaluation of the use of medicinal cannabis can also be performed to support the evidence on the clinical and economic benefit on the use of this product. It is worthwile to have a specific regulation on medical *Cannabis*, that would allow at least the registration of CBD and THC, which are benfecial to improve for patient care.

Conclusion

It is worth to consider a specific regulation for cannabis to be used for medical purpose, given its beneficial application.

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Conflicts of Interest

None declared.

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