

THE INTERSECTION OF LAW, HEALTH, AND DRUG USE IN INDONESIA:

A PATH TO REFORM



**THE INTERSECTION OF
LAW, HEALTH, AND
DRUG USE
IN INDONESIA:**

A PATH TO REFORM

Undang-undang Republik Indonesia
Nomor 28 Tahun 2014 tentang Hak Cipta

Sanksi Pelanggaran

Pasal 113:

1. Setiap Orang yang dengan tanpa hak melakukan pelanggaran hak ekonomi sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf i untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 1 (satu) tahun dan/atau pidana denda paling banyak Rp 100.000.000 (seratus juta rupiah).
2. Setiap Orang yang dengan tanpa hak dan/atau tanpa izin Pencipta atau pemegang Hak Cipta melakukan pelanggaran hak ekonomi Pencipta sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf c, huruf d, huruf f, dan/atau huruf h untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 3 (tiga) tahun dan/atau pidana denda paling banyak Rp500.000.000,00 (lima ratus juta rupiah).
3. Setiap Orang yang dengan tanpa hak dan/atau tanpa izin Pencipta atau pemegang Hak Cipta melakukan pelanggaran hak ekonomi Pencipta sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf a, huruf b, huruf e, dan/atau huruf g untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 4 (empat) tahun dan/atau pidana denda paling banyak Rp1.000.000.000,00 (satu miliar rupiah).
4. Setiap Orang yang memenuhi unsur sebagaimana dimaksud pada ayat (3) yang dilakukan dalam bentuk pembajakan, dipidana dengan pidana penjara paling lama 10 (sepuluh) tahun dan/atau pidana denda paling banyak Rp4.000.000.000,00 (empat miliar rupiah).

THE INTERSECTION OF LAW, HEALTH, AND DRUG USE IN INDONESIA: A PATH TO REFORM

Eko Adi Prasetyanto
Pretty Falena Atmanda Kambira
Asmin Fransiska
Erasmus Napitupulu
Girlie Aneira
Meyliana Lukman Djaya
Michael
Enade Perdana Istyastono
Raynov Tumorang Pamintori
Siradj Okta
Yunita



PENERBIT UNIVERSITAS KATOLIK INDONESIA
ATMA JAYA

The Intersection of Law, Health, and Drug Use in Indonesia: A Path To Reform

©Atma Jaya Catholic University of Indonesia Publishers

Atma Jaya Catholic University of Indonesia Publishers
Member of IKAPI–Ikatan Penerbit Indonesia–Jakarta
Member of APPTI–Afiliasi Penerbit Perguruan Tinggi Indonesia

Atma Jaya Catholic University of Indonesia Publishers
Jl. Jend. Sudirman Kav. 51
Jakarta 12930 Indonesia
Phone : (021) 5703306 psw. 631
E-mail : penerbit@atmajaya.ac.id
Website : <http://www.atmajaya.ac.id>

First Printing November 2024

Author : Eko Adi Prasetyanto, Michael, Yunita, Dellvin Sergio, Meyliana Lukman, Asmin Fransiska, Riyona Desvy Pratiwi, Delphi Coppens, Bambang Yulistyo Tedjo, Orin Gusta Andini, Salman Alfarisi, Singgih Tomi Gumilang ST, Aulia Rachmat Sungkar, Viqqi Kurnianda, Nur Aripkah, Khairunnisa Noor Asufie, Siti Ismaya, Matheus Nathanael, Aisyah Assyifa, Alexander Tanri, Ricky Tommy Hasiholan, Aziz Imam Hanafi, Suparji Ahmad, Abel Josafat Manullang, Yosua Saut Marulitua Gultom, Rizky Karo Karo, Andi Rania Risya Zamayya, Ryan Jovan Susanto, Helena Susanto, Dwi Benny Satria, Azaria Rahmadianingrum, Awan Pratama, Rida Zent Nur Robbani, Teguh Widadi, Dela Riadi, Eunike Sri Tyas Suci, Riza Sarasvita, Haryanto, Essi Septia Erza, Steven Arianto, Insani Fitrahulil Jannah, Chabib Fachry Albab, Almas Talida Habibah, Milda Istiqomah, Heru Kurniawan, Putri Mahirah Afladhanti, Yohanes Firmansyah, Widodo, Annisa Nugrahany, Shirly Gunawan, Evi Lusiana, Edwin Destra, Bebbby Namira Nur Muslim, Hurriyah, Arfan Habibi

Editor : Eko Adi Prasetyanto
Pretty Falena Atmanda Kambira
Asmin Fransiska
Erasmus Napitupulu
Girlie Aneira
Meyliana Lukman Djaya
Michael
Enade Perdana Istyastono
Raynov Tumorang Pamintori
Siradj Okta
Yunita

Book Layout : Adi Yuwono

Cover Design : Yunita
Joyce Nidya

x + 278 pages.; 176 x 250 mm

ISBN: 978-634-7009-05-0

ISBN Digital: 978-634-7009-06-7 (PDF)

Copyright protected by law

It is prohibited to quote or reproduce part or all of the contents of this book without permission from the Publisher..

PREFACE

This book was compiled with the aim of providing in-depth insights into drug policy in Indonesia, as well as the challenges and opportunities it faces. This book brings together various perspectives from academics, practitioners, and policymakers. We hope that this book will serve as a valuable reference and make a meaningful contribution to the development of future drug policies.

Inside this book, readers will find a range of topics covering the development of drugs derived from Indonesia's rich biodiversity, gaps in nanomedicine regulations, and the urgent need for reform in the criminal provisions of the Narcotics Law. These topics not only address policy challenges but also propose alternative approaches such as decriminalization, restorative justice, and harm reduction. Each paper is backed by solid research, aiming to enrich the readers' understanding of the complexities of drug policy, both at the national and regional levels.

The publication of this book is the result of the collaboration and hard work of many parties. We would like to express our gratitude to all the authors, contributors, and supporters that served as the foundation for this book. Our appreciation goes out to all stakeholders and experts who participated in the discussions, as well as the speakers who shared valuable insights and experiences.

We are also proud to introduce The Indonesian Center for Drugs Research (ICDR), which was officially launched in conjunction with the release of this book. ICDR is expected to become a leading center for research and a key reference in formulating evidence-based drug policies in Indonesia.

We hope that this book will not only be beneficial for academics and researchers but also serve as a guide for policymakers and practitioners in their efforts to improve drug policies. May this book inspire more positive and humane changes in the field of drug policy, ultimately delivering tangible benefits to society.

Happy reading, and we hope this book makes a significant contribution to the advancement of drug policy in Indonesia.

TABLE OF CONTENTS

Preface	v
Table of Contents	vi
Summary	ix
 Article	
Medicinal Goldmine or Illicit Threat? Mitigating Drug Abuse Risks In Indonesia’s Biodiversity Through Regulation and Drug Development: A Literature Review <i>Michael, Yunita, Eko Adi Prasetyanto</i>	1
Addressing Effects of Drug Policies Towards Standard of Living in Asia <i>Dellvin Sergio, Meyliana Lukman, Asmin Fransiska</i>	13
Regulatory and Scientific Gaps In Nanomedicine <i>Riyona Desvy Pratiwi, Delphi Coppens</i>	27
Client Perspective on Drug Rehabilitation Legal References in Jabodetabek, 2021 <i>Bambang Yulistyo Tedjo</i>	45
Unraveling the Tangled Threads of The Implementation of Narcotics Assessment in Indonesia <i>Orin Gusta Andini, Salman Alfarisi</i>	67
Decriminalizing Approach Towards Shifting Paradigms of Indonesia’s Cannabis Policy <i>Singgih Tomi Gumilang ST, Aulia Rachmat Sungkar dan Viqqi Kurnianda</i>	75
Decriminalization of Drugs Crime From of Criminal Policy Perspective <i>Nur Aripkah, Khairunnisa Noor Asufie</i>	85
The Urgency of Restructuring the Criminal Provisions of The Narcotics Law Number 35 Year 2009 <i>Siti Ismaya, Matheus Nathanael, Aisyah Assyifa, Alexander Tanri</i>	95
Narcotics Law Enforcement in Indonesia is Based on UNTOC 2000 (United Nations Convention Against Transnational Organized Crime) <i>Ricky Tommy Hasiholan</i>	109

Reform of Narcotics Law in Overcoming Overcapacity <i>Aziz Imam Hanafi, Suparji Ahmad</i>	117
Overcoming a Recurring Problem: Delving Into Bakamla Ri's Role and Path for Development Against Drug Trafficking..... <i>Abel Josafat Manullang, Yosua Saut Marulitua Gultom</i>	127
Restorative Justice for the First Drug Addict Based on Indonesia Law (National KUHP, <i>PERJA</i> /Indonesia Attorney General Regulations) <i>Rizky Karo Karo, Andi Rania Risyah Zamayya,</i> <i>Ryan Jovan Susanto, Helena Susanto</i>	137
Narcotics Treatment System as a Reconceptualization Model of Decriminalization of Narcotics User <i>Dwi Benny Satria, Azaria Rahmadianingrum</i>	149
Decriminalization of Drug Addicts: Answer or Threat? Revealing the Pattern of Rehabilitation of Narcotics Addicts in Purbalingga Regency <i>Awan Pratama, Rida Zent Nur Robbani, Teguh Widadi</i>	159
Research Trends in Drugs Abuse Treatment: 2014-2024 <i>Dela Riadi</i>	173
Evaluating Rehabilitation Institutions Through the Measurement of The Rehabilitation Capability Index (IKR): a Preliminary Study <i>Eunike Sri Tyas Suci, Asmin Fransiska, Riza Sarasvita,</i> <i>Haryanto, Essi Septia Erza</i>	185
Potential of Cannabis Sativa Bioactive Compound as <i>PfNR</i> Protein Inhibitor for Antimalarial Drug Candidate: an in-Silico Study <i>Steven Arianto, Insani Fitriahulil Jannah</i>	199
Optimizing Binary Outcome Assessment for The Efficacy and Safety Evaluation of Etripamil Nasal Spray for Acute Paroxysmal Supraventricular Tachycardia <i>Chabib Fachry Albab, Almas Talida Habibah</i>	207
The War on Narcotics and Its Implications for Vulnerable Groups in Indonesia <i>Milda Istiqomah, Heru Kurniawan</i>	221
Legalization of Medical Cannabis in Indonesia, is Indonesia Ready?: a Medical and Legal Perspective <i>Putri Mahirah Afladhanti, Yohanes Firmansyah, Widodo,</i> <i>Annisa Nugrahany, Shirly Gunawan, Evi Lusiana, Edwin Destra</i>	239

The Mothers Movement Advocating Medical Marijuana Legalization for Children with Cerebral Palsy (2020—2022)	
<i>Bebby Namira Nur Muslim , Hurriyah</i>	253
Legal Policy Against Drugs from the Colonial Period to Post-Independence in Indonesia	
<i>Arfan Habibi</i>	271
List Reviewer and Editor	278

SUMMARY

At the “International Conference on Drugs Research and Policy 2024,” various stakeholders, including the Indonesian Center for Drugs Research (ICDR) and the Institute for Criminal Justice Reform (ICJR), gathered to discuss the critical issues surrounding drug laws in Indonesia.

One of the main points raised was the problematic nature of Indonesia’s current Narcotics Law, which has been criticized for its ambiguous definitions that often blur the lines between drug users and traffickers. This has led to overcrowding in prisons and ineffective rehabilitation practices. The conference underscored the need for a revision of this law, emphasizing a shift from a punitive approach to one that prioritizes health and rehabilitation.

The discussions also covered the challenges faced by regulatory bodies in keeping up with the rapid development of new psychoactive substances (NPS). There was a consensus that the government should focus more on health-based approaches, including setting thresholds for drug possession, establishing assessment panels, and improving rehabilitation services.

The global and regional context of drug policy was also a significant topic. It was noted that prohibitionist drug policies, remnants of colonial influence, have negatively impacted people’s rights, particularly in Asia. In Indonesia, the lack of access to rehabilitation services has forced many drug users into incarceration, further exacerbating social and health issues.

Decriminalization was another focal point, with participants agreeing that drug users should not be imprisoned. However, efforts toward decriminalization in Indonesia face significant challenges, including stigma and political resistance. The conference recommended that the revision of the Narcotics Law should balance law enforcement with health approaches, supported by scientific evidence.

The role of harm reduction policies was also discussed, highlighting the need for evidence-based approaches that include diverse perspectives and the active involvement of drug user communities. It was suggested that harm reduction measures could be more successful if they address stigma, improve access to care, and promote human rights.

Research was emphasized as a crucial component of drug policy reform. The conference called for increased collaboration with international researchers and more studies on the medical benefits of substances like kratom and cannabinoids. Additionally, the importance of understanding public perspectives on drugs and law enforcement was noted, as this could feed into more effective policymaking.

Academia was recognized for its vital role in drug law and policy reform. The conference encouraged interdisciplinary studies that could address the multidimensional challenges of drug use and policy, including criminal justice issues and harm reduction practices.

In conclusion, the conference provided several recommendations for various stakeholders, including the government, academics, and civil society organizations. These recommendations included shifting resources toward health-centered approaches, promoting scientific research, and breaking the stigma surrounding drug use. `

MEDICINAL GOLDMINE OR ILLICIT THREAT? MITIGATING DRUG ABUSE RISKS IN INDONESIA'S BIODIVERSITY THROUGH REGULATION AND DRUG DEVELOPMENT: A LITERATURE REVIEW

Michael^{1*}, Yunita², Eko Adi Prasetyanto³

Faculty of Medicine and Health Science,
Atma Jaya Catholic University of Indonesia
Indonesian Center for Drugs Research (ICDR)

*Corresponding author: michaelpeterchen@yahoo.com

ABSTRACT

The Indonesian archipelago contains a very diverse flora species. This diversity leads to a unique use of spices and herbs for traditional food and medicine that has been sought since early colonialism. These herbs come from plant organs containing a distinct substance from their metabolism called the secondary metabolites. Plants' secondary metabolites have been subject to many evaluations in medicinal chemistry, and they can be functionalized to create physiological changes in the body that promote quality of life. Some of these substances target the neurological pathway, which could create analgetic and/or psychedelic effects and is useful in treating certain conditions. However, it produces a high risk of substance abuse by some people, creating illicit drug problems. This literature review employs a comprehensive search across academic, news, and policy databases to analyze new psychoactive substances (NPS) derived from Indonesian plant biodiversity, assessing their medicinal potential, sociocultural impacts, and regulatory frameworks towards it. From the literature, Indonesia's high diversity of plants, mushrooms, and marine products opens a high potential for new psychoactive substances. Instead of kratom (which is already on the shortlist as plant based NPS), we found several Indonesian native plants that possess similar effects and, therefore, the potential to become NPS. We also evaluated the medicinal approach of these substances in treating some physiological conditions. With the risk of abuse over these substances still at large, we also discuss the comparison of regulation in multiple countries with high, moderate, and low restrictions over NPS. Therefore, this research encourages a thorough evaluation of policymaking toward NPS, so it does not limit the potential of medicine nor create unwanted illicit drug problems.

Keywords: Secondary Metabolites, Herbal Medicine, Plant Psychoactive Substances, Drug Regulation

INTRODUCTION

The Indonesian archipelago's geographic position between 2 continents and two oceans gives it a unique standing. Its location at the equator, where the sunlight appears for a whole year, provides it with a tropical climate, contributing to a wide biodiversity of endemic flora and fauna (Soedarsono & Isamu, 2006). This diversity leads to a unique use of spices and herbs for traditional food and medicine. Since the Dutch, British, and Portuguese colonialism, Indonesia has become a focused region in search of sugar and, more importantly, spices. The use of spices or any other plants in food and medicine influences the daily aspects of the Indonesian people. Its traditional medicine and/or supplement called "jamu" is usually sold by Javanese women wearing traditional clothing. This cultural heritage has been acknowledged by UNESCO in 2023 (UNESCO, 2024).

Indonesia has a unique multicultural society that often involves certain kinds of rituals or traditions. These traditions mostly employ the use of some animal or plant's part. For example, the betel chewing tradition in the Indonesian language is called "*menginang*" or "*menyirih*". This tradition still lives in Indonesia and has been known to be connected across Southeast Asian countries since ancient times (Reid, 1985)(Kathlyn D'Souza, 2020). Another example includes the kratom plant, which is traditionally used as pain killer substitute for opium (Farnsworth, 1981).

The diversity of Indonesian flora creates a very wide opportunity for the development of herbal medicine. Indonesia's vast rainforest and sea area left plenty of unexplored terrain that could be the home to unexpected growth of plants, mushrooms, and marine products. However, this opportunity also poses a risk of misuse and is subject to potential harm and lethal effects. Plants' secondary metabolic effects on the body system could help create better availability of medicine and disease treatment (Lal et al., 2023). Secondary metabolites in some species of plants could also have a psychological impact when consumed. (Kennedy & Wightman, 2011)drugs, and dietary supplements that are derived from plants and which modify the functioning of the central nervous system (CNS). These said substances could also emerge from plants that have not been subjected to research, which could create more issues that are starting to rise in Indonesia about the emergence of new psychoactive substances (NPS) (Wasti Samaria Simangunsong, 2023)(BNN, 2023). NPS is defined by the United Nations Office on Drugs and Crime (UNODC) as substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat (UNODC, 2017). NPS could be synthetic or natural depending on the way to produce these substances. However, here we discuss the potential of NPS from natural sources.

Given Indonesian policy and view towards the psychological effects of drugs and substances, these NPS create an uproar in the political view – perspective to forbid the use and acquisition of such substances (Maharani & Prasetyo, 2022). This review aims to explore the potential emerging NPS from vast plant biodiversity in Indonesia and discusses strategies for harnessing this potential towards medicinal development while curbing illegal use.



METHODOLOGY

This literature review employs a comprehensive search strategy to explore several points of NPS derived from Indonesian plant biodiversity, their potential for medicinal development, Indonesian sociocultural perspectives, and comparative international regulations towards NPS. The methodology includes searching both academic databases alongside news and policy databases.

The inclusion criteria include several aspects: academic and scientific articles detailing the isolation and characterization of psychoactive compounds from Indonesian plants, Studies and reports on the traditional and current sociocultural uses of these plants in Indonesia, Articles on the pharmacological evaluation of identified compounds, Regulatory and legal reviews discussing drugs and NPS management within Indonesia and comparative international contexts, News articles reporting recent developments, legal changes, or significant events related to NPS.

This methodological approach ensures a multidimensional analysis that reflects current scientific research, sociocultural understanding, and regulatory frameworks, both locally and globally, to provide a thorough overview of the challenges and opportunities in harnessing Indonesian plant biodiversity for medicinal uses while managing the risks associated with NPS.

RESULT AND DISSCUSION

Pharmacological Effects of Plants Secondary Metabolites

Plants produce substances to survive and thrive as animals and humans use protein, carbohydrates, and lipids to produce more functional substances for our survival. These products have been subject to the process of breaking and building reactions that we call metabolism. Therefore, it is called metabolites. Metabolite substances are classified into primary and secondary metabolites. Primary metabolites refer to the metabolites produced by plants that play an essential role in the plant's cycle (Meyer et al., 1996).

Traditional and herbal research has highlighted the discovery of vast secondary metabolites. Different types of extraction are used until isolation, and each pharmacological mechanism in the body is evaluated (Xie et al., 2012). This prior research provides plenty of insight into how to develop these secondary metabolites into evidence-based herbal medicine for therapy (Rahmatullah et al., 2011).

Potential New Psychoactive Substances from Plants Secondary Metabolites

Drugs abuse from synthetic substances required a basic knowledge of synthetic chemistry to obtain whereas natural occurring secondary metabolites. Indonesia is a country with high biodiversity, reaching more than 30,000 species. This is supported by the abundance of plants that have medicinal properties that address health issues.



Kratom

Kratom (*Mitragyna speciosa* K.) is a tropical plant native to Southeast Asia, including Indonesia (National Institute on Drug Abuse, 2016). It grows in tropical forests, such as those in Kalimantan, Sumatra, and Papua. Kratom thrives in fertile, well-watered soil. Its macroscopic characteristics include a woody tree reaching 10-30 meters in height, elliptical to ovate leaves measuring 10-20 × 7-12 cm, and the presence of flower buds and fruits (Sharma & Barnes, 2022).

Kratom is part of traditional herbal medicine. It is commonly used to manage pain and fatigue and as a natural stimulant. Consumption methods vary, including brewing it as tea, smoking it like a cigarette, or ingesting it in tablet or capsule form. The effects of kratom depend on the dosage. Higher doses can induce sedative effects due to the presence of secondary metabolites.

Kratom contains 57 types of secondary metabolites, with 40 alkaloids forming the primary constituents. Aside from alkaloids, other groups include triterpenoids, flavonoids, steroids, saponins, monoterpenoids, and secoiridoids. The main compounds found in kratom are mitragynine and 7-hydroxy mitragynine. These secondary metabolites have the potential to produce psychoactive effects. However, further exploration of kratom's benefits is ongoing to develop raw materials for analgesic, anti-inflammatory, and antidepressant medications (Sharma & Barnes, 2022).

Kecubung

The Kecubung plant (*Datura metel* L.) is one of the plants that contain various chemical compounds and is used in traditional medicine. Generally, this plant grows in dry climates, lowlands up to 500 meters above sea level. (Mardiana; Supraptini; Aminah, 2009) Parts of the plant used for medicine include the roots, stems, fruits, and flowers. There are chemical compounds found in the kecubung plant, namely atropine, hyoscyamine, scopolamine, hyosine, tannin, metosdine, norhyoscyamine, nor-scopolamine, cuscohygrine, nicotine, alkaloids, flavonoids, steroids, saponins, terpenoids, phytosterols, and phenols (Waqas Alam, Haroon Khan, Sajjad Ali Khan, 2020) Indian apple or devil's trumpet is an annual herb of temperate zones which is distributed all over the world. *D. metel* belongs to the family solanaceae. From a longer period of time (37 A.D This plant can be used to treat back pain, bloating, asthma, rheumatism, act as an antioxidant, and relieve muscle pain (Mardiana; Supraptini; Aminah, 2009).

However, Kecubung (*Datura metel* L.), is among the plants that can be used as psychoactive and anticholinergic agent. The prevalence of its use reaches 2.6% among adolescents (Singh et al., 2019). Misuse of *Datura* plants can result in various effects, such as hallucinations, anxiety, euphoria, and increased energy after consuming *Datura metel* seeds (Igben et al., 2023; Singh et al., 2019) confusion, agitation, aggressiveness, anxiety, and restlessness are reported amongst DM users. Earlier studies suggest that DM induces neurotoxicity and affect brain physiology. However, the exact neurological effects of DM extract in the medial prefrontal cortex (mPFC). Moreover, testing *Datura* extracts can increase oxidative stress, thereby leading to neurotoxic

effects. The emergence of these effects is influenced by various active compounds found within the extract, particularly alkaloid constituents (Igben et al., 2023).

Nutmeg

The nutmeg plant (*Myristica fragrans*), also known as “pala” in Indonesia, is a tropical plant that holds a special place in Indonesian cuisine and culture. It is primarily grown in the Maluku Islands, particularly in the Banda region. The most commonly used part of the nutmeg plant is its seed, which has been utilized in traditional medicine for centuries.

Nutmeg seeds contain a rich array of compounds, including essential oils, fatty oils, saponins, myristicin, elemisin, lipase enzymes, pectin, resins, tannins, linalool, and olenolic acid (Abdulkadir et al., 2023). These constituents contribute to the plant's medicinal properties, which include stimulating the heart system, alleviating diarrhea, easing rheumatic pain, and relieving muscle aches (Agaus & Agaus, 2019).

While nutmeg is generally considered a safe and beneficial spice, its oil, extracted from the seeds through distillation, can induce psychoactive effects. The primary psychoactive compound in nutmeg oil is myristicin, a hallucinogen with a chemical structure similar to amphetamine. This similarity explains why nutmeg oil can produce psychotropic effects comparable to those of MDMA (Ramírez-Alarcón et al., 2023). Although nutmeg may have medicinal benefits, it is important to use it cautiously, especially in high doses.

Palm Nut

Areca catechu, commonly known as the palm nut, is a tropical plant whose seeds contain a variety of psychoactive alkaloids, including arecoline, arecaidine, and guvacoline (Tian et al., 2018). These compounds are known for their stimulant effects, which are similar to those of nicotine. Arecoline, the most studied of these alkaloids, exerts its effects primarily by acting as an agonist at muscarinic acetylcholine receptors, which leads to increased neuronal activity and a sensation of alertness and well-being (Horenstein et al., 2018). The presence of these psychoactive substances in *Areca catechu* positions it as a potential source for new psychoactive substances (NPS), particularly as interest grows in plant-derived secondary metabolites for their diverse pharmacological properties (Myers, 2022).

Secondary metabolites from plants like *Areca catechu* are increasingly being explored for their potential to provide new psychoactive substances with novel mechanisms of action. These compounds can offer alternatives to synthetic drugs, often with unique benefits or reduced side effects. The alkaloids in *Areca catechu*, such as arecoline and arecaidine, have demonstrated potential in modulating neurotransmitter systems in ways that could lead to therapeutic applications or recreational use. For instance, research has suggested that these compounds could have applications in cognitive enhancement or as aids in quitting smoking by providing a nicotine-like effect without the associated risks (Ansari et al., 2021). As such, the exploration of *Areca catechu*'s secondary metabolites exemplifies the broader trend of identifying and utilizing plant-based compounds in the development of new psychoactive substances (Wang et al., 2021).



Table 1. Plants secondary metabolites potential summary table

Plant	Key Properties	Traditional Uses	Potential Psychoactive Effects
Kratom <i>Mitragyna speciosa</i>	Contains 40 alkaloids including mitragynine and 7-hydroxy mitragynine	Pain management, fatigue reduction, natural stimulant	Sedative effects at high doses, potential for addiction, psychoactive properties
Kecubung <i>Datura metel</i>	Contains alkaloids such as atropine, hyoscyamine, and scopolamine	Treats asthma, rheumatism, muscle pain	Hallucinations, anxiety, euphoria, neurotoxic effects
Nutmeg <i>Myristica fragrans</i>	Contains myristicin, elemicin, linalool	Treats diarrhea, rheumatic pain, muscle aches	Hallucinogenic effects, psychoactive properties similar to MDMA
Palm Nut <i>Areca catechu</i>	Contains arecoline, arecaidine, guvacoline	Traditional stimulant, used in betel chewing	Stimulant effects similar to nicotine, potential for psychoactive effects

Indonesian Sociocultural View and Regulation Towards New Psychoactive Substances

Indonesian view towards NPS is shaped by a combination of cultural conservatism, strict legal frameworks, and emerging public health concerns. Indonesian society influenced heavily by religious and cultural norms which generally conservative regarding substance use, particularly those that are psychoactive and lack historical or cultural integration (Slobodin & Crunelle, 2019). However, substances as part of traditional practices tend to be more received positively to be use publicly in society. Despite that fact, the government still indiscriminately implements severe punishment for it. This happens in Aceh as a region with high marijuana-based tradition primarily on the culinary aspect (Akhyar, 2022; CNN, 2020; Sinaga, 2023). The societal perspective in Aceh is increasingly open towards the issue of marijuana, to the point of their calls for the possibility use of medical cannabis (Halim, 2020; Hotli Simanjuntak, 2020; Star, 2020; The Australian, 2021).

Indonesia has strict drug laws toward illicit drugs with severe penalties for drug-related offenses (Fransika, 2022). This later reflects an inclination in law with an emphasis on prohibition and control over substances including NPS (Badan Narkotika Nasional, 2023; Mukaromah, 2019; UNODC, 2020). However, with modern public health issue in mental illness and neurodegenerative diseases, psychoactive substances became a curiosity for research (Hospital, 2024). With the established law of prohibition for psychoactive substances, Indonesian researcher is limited to evaluate the potential of some substances that may be beneficial for treating health problems. Therefore, it limits the possibility of drug development especially in Indonesia, especially for herbal medicine considering some NPS could come from plants (Awuchi et al., 2023; Jelsma, 2021; Van Amsterdam et al., 2023).



Internationally, the approach to NPS is varied, with countries implementing either high or low restrictive legal responses to manage and control their distribution and use. For example, countries with high restriction includes the United Kingdom (British Home Office, 2016) and Japan (Ministry of Health, Labour and Welfare, 2020). While countries like United states and Australia employ a more moderate restrictive law (U.S. Code, 2018). Lastly there are countries that employs low restrictive law towards NPS like South Africa (South African Government, 1965) and Brazil (Drug & In, 2006).

There are risks and benefits for each model of law adaptation towards NPS. Highly restrictive law could control the use of NPS to make sure no misuse that could create harm to the citizens (Schonger & Sele, 2020). However, this could create unnecessary criminalization towards violators which leads to breaches towards human rights without solving the issue (Troy et al., 2007). This also create a gap and restrictions in medicinal research since some law banned NPS to be use as research subject (Carvalho et al., 2013). In the other hand, less restrictive law could help in research development about NPS, which could lead to a better understanding of NPS for medicinal purposes (Ross et al., 2018). Research like that could also help indicating any unsafe danger of NPS that should be address (Fedele et al., 2018). However, under lower restrictions many misuses of NPS that could lead to toxicity and addiction could occur (Tracy et al., 2023). This suggests that law enforcement of NPS is a delicate matter to be deal with. A better understanding of the risk and benefits of NPS based on evidence could help making better decisions towards the law. Which in turns lead to better regulation towards harm reduction and effective medicinal purposes.

CONCLUSION

This review examines the potential of Indonesia's diverse flora, influenced by its unique geography and cultural traditions, for developing new herbal medicines. These plants contain secondary metabolites useful in traditional and modern therapies, enhancing health and well-being. However, the presence of metabolites with analgesic or psychedelic effects raises concerns about substance misuse and the growth of illegal drug markets. Consequently, crafting regulations for these substances requires an evidence-based approach, supported by solid research and a detailed risk-benefit analysis, to ensure their effective and efficient oversight.



REFERENCES

- Abdulkadir, W. S., Djuwarno, E. N., Ramadani Putri Papeo, D., & Marhaba, Z. (2023). Potensi Ekstrak Biji Pala (*Myristica fragrans* L) Terhadap Penyembuhan Luka Bakar pada Mencit (*Mus musculus*). *Journal Syifa Sciences and Clinical Research*, 5(1), 123–131. <https://doi.org/10.37311/jsscr.v5i1.18996>
- Agaus, L. R., & Agaus, R. V. (2019). *Manfaat Kesehatan Tanaman Pala (Myristica fragrans) (Health Benefits of Nutmeg (Myristica fragrans))*. 6, 662–666.
- Akhyar. (2022). *Sejarah Ganja di Aceh, Jadi Alat Pengobatan dan Rempah-rempah Makanan » DIALEKSIS :: Dialektika dan Analisis*. https://dialeksis.com/dialektika/sejarah-ganja-di-aceh-jadi-alat-pengobatan-dan-rempah-rempah-makanan/#google_vignette
- Ansari, A., Mahmood, T., Bagga, P., Ahsan, F., Shamim, A., Ahmad, S., Shariq, M., & Parveen, S. (2021). Areca catechu : A phytopharmacological legwork. *Food Frontiers*, 2(2), 163–183. <https://doi.org/10.1002/fft2.70>
- Awuchi, C. G., Aja, M. P., Mitaki, N. B., Morya, S., Amagwula, I. O., Echeta, C. K., & Igwe, V. S. (2023). New Psychoactive Substances: Major Groups, Laboratory Testing Challenges, Public Health Concerns, and Community-Based Solutions. *Journal of Chemistry*, 2023. <https://doi.org/10.1155/2023/5852315>
- Badan Narkotika Nasional. (2023). Perkembangan NPS Di Indonesia Saat Ini. <https://bengkulu.bnn.go.id/perkembangan-nps-di-indonesia-saat-ini/> . In *Badan Narkotika Nasional*.
- BNN. (2023). *Plant-based substances – EWS*. <https://ews.bnn.go.id/plant-based-substances-khat/>
- British Home Office. (2016). *Psychoactive Substances Act 2016* (Issue Chapter 2, pp. 1–63).
- Carvalho, M. L., Honeycutt, S., Escoffery, C., Glanz, K., Sabbs, D., & Kegler, M. C. (2013). Balancing Fidelity and Adaptation. *Journal of Public Health Management and Practice*, 19(4), 348–356. <https://doi.org/10.1097/PHH.0b013e31826d80eb>
- CNN. (2020). Jejak Ganja dalam Kuliner Aceh. In *CNN Indonesia*. <https://www.cnnindonesia.com/gaya-hidup/20200202143124-262-470886/jejak-ganja-dalam-kuliner-aceh>
- Drug, N. E. W., & In, L. (2006). *INTER-AMERICAN DRUG ABUSE CONTROL COMMISSION Federative Republic of Brazil Institutional Security Cabinet National Antidrug Secretariat - SENAD SENAD INSTITUTIONAL OBJECTIVE : Coordinate the National Policy on Drugs through the integration of Government N. 1–12*.



- Farnsworth, N. R. (1981). Plants of the Gods: Origins of Hallucinogenic Use. Richard Evans Schultes, Albert Hofmann. In *The Quarterly Review of Biology* (Vol. 56, Issue 1, pp. 104–104). <https://doi.org/10.1086/412170>
- Fedele, G., Locatelli, B., Djoudi, H., & Colloff, M. J. (2018). Reducing risks by transforming landscapes: Cross-scale effects of land-use changes on ecosystem services. In *PLoS ONE* (Vol. 13, Issue 4). <https://doi.org/10.1371/journal.pone.0195895>
- Fransika, A. (2022). Indonesia's zero tolerance drug laws leave hundreds on death row - Academia - The Jakarta Post. In *The Jakarta Post*. <https://www.thejakartapost.com/opinion/2022/08/31/indonesias-zero-tolerance-drug-laws-leave-hundreds-on-death-row.html>
- Halim, H. (2020). *Cannabis coffee_ Indonesia's sharia stronghold sidesteps drug ban - National - The Jakarta Post*. <https://www.thejakartapost.com/news/2020/02/05/cannabis-coffee-indonesias-sharia-stronghold-sidesteps-drug-ban.html>
- Horenstein, N. A., Quadri, M., Stokes, C., Shoaib, M., & Papke, R. L. (2018). Cracking the betel nut: Cholinergic activity of areca alkaloids and related compounds. In *Nicotine and Tobacco Research* (Vol. 21, Issue 6, pp. 805–812). <https://doi.org/10.1093/ntr/ntx187>
- Hospital, O. U. (2024). *OUH - New Psychoactive Substances (NPS)*. [https://www.ous-research.no/home/neurobiology/New Psychoactive Substances/21860](https://www.ous-research.no/home/neurobiology/New%20Psychoactive%20Substances/21860)
- Hotli Simanjuntak, A. S. (2020). *Conservative Aceh proposes cannabis legalization - National - The Jakarta Post*. <https://www.thejakartapost.com/news/2020/02/02/conservative-aceh-proposes-cannabis-legalization.html>
- Igben, V. O., Iju, W. J., Itivere, O. A., Oyem, J. C., Akpulu, P. S., & Ahama, E. E. (2023). Datura metel stramonium exacerbates behavioral deficits, medial prefrontal cortex, and hippocampal neurotoxicity in mice via redox imbalance. In *Laboratory Animal Research* (Vol. 39, Issue 1). <https://doi.org/10.1186/s42826-023-00162-7>
- Jelsma, E. M. (2021). *Kratom : the creation of a threat* (Issue October, pp. 1–10). <https://www.tni.org/en/publication/kratom-the-creation-of-a-threat>
- Kathlyn D'Souza. (2020). *A Way of Life_ How Betel Connects Southeast Asia*. <https://www.airasia.com/play/assets/blt6bbd638fc70803eb/a-way-of-life-how-betel-connects-southeast-asia>
- Kennedy, D. O., & Wightman, E. L. (2011). Herbal extracts and phytochemicals: Plant secondary metabolites and the enhancement of human brain function. *Advances in Nutrition*, 2(1), 32–50. <https://doi.org/10.3945/an.110.000117>



- Lal, N., Sahu, N., Shirale, A. O., Gurav, P., Rani, K., Meena, B. P., Diwan, G., & Biswas, A. K. (2023). *Plant Secondary Metabolites and Their Impact on Human Health* (pp. 295–321). https://doi.org/10.1007/978-3-031-35147-1_15
- Maharani, A. R., & Prasetyo, H. (2022). *Legality of the Legal Status of Kratom Plants in Indonesia*. 09, 27–38.
- Mardiana; Suprptini; Aminah, S. (2009). *Datura Metel Linnaeus sebagai Insektisida dan Larvasida Botani serta Bahan Baku Obat Tradisional* (pp. S1–S4). Media Penelitian dan Pengembangan Kesehatan, Vol.XIX, No.(Supl. II).
- South African Government, *Medicines and Related Substances Act (previously Drugs Control Act) 101 of 1965*. (1965). <https://www.gov.za/documents/drugs-control-act-7-jul-1965-0000>
- Meyer, K., Fobker, M., Christians, U., Erren, M., Sewing, K. F., Assmann, G., & Benninghoven, A. (1996). Characterization of glucuronidated phase II metabolites of the immunosuppressant cyclosporine in urine of transplant patients using time-of-flight secondary-ion mass spectrometry. In *Drug Metabolism and Disposition* (Vol. 24, Issue 10, pp. 1151–1154).
- Ministry of Health, Labour and Welfare, *Information for those who are bringing medicines for personal use into Japan*. (2020). <https://www.mhlw.go.jp/english/policy/health-medical/pharmaceuticals/01.html>
- Mukaromah, V. F. (2019). Bnn minta waspadai narkoba jenis baru nps, apa bahayanya? In *Kompas*. https://www.kompas.com/tren/read/2019/10/14/155121965/bnn-minta-waspada-narkoba-jenis-baru-nps-apa-bahayanya?page=all&jxconn=1*1odj90j*other_jxampid*OFg0ajVmQXZaX3I4SkxaQ0RnMWRKYkw5SW1saERCNW1GLTgzVThsbWxEeUJxSkhhUkkzcVo0bVdQYWd1MXpFbg..#page2
- Myers, A. L. (2022). Metabolism of the areca alkaloids – toxic and psychoactive constituents of the areca (betel) nut. *Drug Metabolism Reviews*, 54(4), 343–360. <https://doi.org/10.1080/03602532.2022.2075010>
- National Institute on Drug Abuse. (2016). What is kratom? *Drugabuse.Gov*. <https://www.drugabuse.gov/publications/drugfacts/kratom>
- Rahmatullah, M., Chakma, P., Paul, A. K., Nasrin, D., Ahmed, R., Jamal, F., Ferdausi, D., Akber, M., Nahar, N., Ahsan, S., & Jahan, R. (2011). A survey of preventive medicinal plants used by the Chakma residents of Hatimara (south) village of Rangamati district, Bangladesh. In *American-Eurasian Journal of Sustainable Agriculture* (Vol. 5, Issue 1, pp. 92–96).
- Ramírez-Alarcón, K., Martorell, M., Gürer, E. S., Laher, I., Lam, H., Mohieldin, E. A. M., Muddathir, A. M., Akram, M., Iqbal, M., Shafique, H., Leyva-Gómez, G., Shaheen,



- S., Kumar, M., Sharifi-Rad, J., Amarowicz, R., & Butnariu, M. (2023). Myristicin: From its biological effects in traditional medicine in plants to preclinical studies and use as ecological remedy in plant protection. *EFood*, *4*(3), 1–14. <https://doi.org/10.1002/efd2.90>
- Reid, A. (1985). From Betel-Chewing to Tobacco-Smoking in Indonesia. *The Journal of Asian Studies*, *44*(3), 529–547. <https://doi.org/10.2307/2056266>
- Ross, M. M., Arria, A. M., Brown, J. P., Mullins, C. D., Schiffman, J., Simoni-Wastila, L., & DosReis, S. (2018). College students' perceived benefit-to-risk tradeoffs for nonmedical use of prescription stimulants: Implications for intervention designs. *Addictive Behaviors*, *79*, 45–51. <https://doi.org/10.1016/j.addbeh.2017.12.002>
- Schonger, M., & Sele, D. (2020). How to better communicate the exponential growth of infectious diseases. *PLOS ONE*, *15*(12), e0242839. <https://doi.org/10.1371/journal.pone.0242839>
- Sharma, R., & Barnes, J. (2022). Kratom. In *Journal of Primary Health Care* (Vol. 14, Issue 3). <https://doi.org/10.1071/HC22110>
- Sinaga, Y. A. (2023). *Police find five hectares of cannabis plantation in North Aceh - ANTARA News*. <https://en.antaranews.com/news/295506/police-find-five-hectares-of-cannabis-plantation-in-north-aceh>
- Singh, S., Kosana, D., & Lal, R. (2019). Long-term intentional Datura use and its consequences. In *Indian Journal of Psychiatry* (Vol. 61, Issue 5, pp. 543–544). https://doi.org/10.4103/psychiatry.IndianJPsychiatry_276_18
- Slobodin, O., & Crunelle, C. L. (2019). Mini review: Socio-cultural influences on the link between ADHD and SUD. *Frontiers in Public Health*, *7*(JUN), 1–7. <https://doi.org/10.3389/fpubh.2019.00173>
- Soedarsono, R., & Isamu, Y. (2006). A note on the progress of biodiversity research in Indonesia. *Tropics*, *15*(3), 249–258. <https://doi.org/10.3759/tropics.15.249>
- Star, T. (2020). *Aceh may legalise cannabis _ The Star*. <https://www.thestar.com.my/news/regional/2020/02/04/aceh-may-legalise-cannabis>
- The Australian. (2021). Aceh bid to legalise medical marijuana. In *The Australian*. https://www.theaustralian.com.au/subscribe/news/1/?offerset=ta_4for4_premium&sourceCode=TAWEB_WRE170_a_GGL&dest=https%3A%2F%2Fwww.theaustralian.com.au%2Fbusiness%2Fcompanies%2Fthe-buck-stops-with-us-says-7eleven-chairman-russ-withers%2Fnews-story%2Fc446f2
- Tian, L. C., Qin, S. R., Yi, H., Li, C., Ma, H. W., Ren, C. T., Li, Y., Liu, X. Q., & Wang, Z. M. (2018). Comparative study on contents of four alkaloids in homologous herbal medicines-Arecae Pericarpium and Arecae Semen. In *Zhongguo Zhongyao Zazhi* (Vol. 43, Issue 14, pp. 2850–2856).



- Tracy, C., Russell, N. G., Depriest, K., Knestruck, J., D'Aoust, R., & Slade, E. (2023). The impact of full practice authority on nurse practitioner compensation, collaboration, and billing. In *Journal of the American Association of Nurse Practitioners* (Vol. 35, Issue 11, pp. 691–698). <https://doi.org/10.1097/JXX.0000000000000918>
- Twoy, R., Connolly, P. M., & Novak, J. M. (2007). Coping strategies used by parents of children with autism. In *Journal of the American Academy of Nurse Practitioners* (Vol. 19, Issue 5, pp. 251–260). <https://doi.org/10.1111/j.1745-7599.2007.00222.x>
- U.S. Code, U.-F. and D. A. (2018). *21 USC 813: Treatment of controlled substance analogues*. [http://uscode.house.gov/view.xhtml?req=\(title:21 section:813 edition:prelim\)](http://uscode.house.gov/view.xhtml?req=(title:21 section:813 edition:prelim))
- UNESCO. (2024). *Switzerland - intangible heritage - Culture Sector - UNESCO*. <https://ich.unesco.org/en/RL/indonesian-batik-00170>
- UNODC. (2017). *What are NPS?* <https://www.unodc.org/LSS/Page/NPS>
- UNODC. (2020). *Drug Laws/Individual Listing for INDONESIA*. <https://www.unodc.org/LSS/Country/DetailsLegalSystem?code=DLIL&country=ID>
- Van Amsterdam, J., Burgess, N., & Van Den Brink, W. (2023). Legal Approaches to New Psychoactive Substances: First Empirical Findings. In *European Addiction Research* (Vol. 29, Issue 5, pp. 363–372). <https://doi.org/10.1159/000531503>
- Wang, R., Pan, F., He, R., Kuang, F., Wang, L., & Lin, X. (2021). Arecanut (*Areca catechu* L.) seed extracts extracted by conventional and eco-friendly solvents: Relation between phytochemical compositions and biological activities by multivariate analysis. *Journal of Applied Research on Medicinal and Aromatic Plants*, 25, 100336. <https://doi.org/10.1016/j.jarmp.2021.100336>
- Waqas Alam, Haroon Khan, Sajjad Ali Khan, S. N. and E. K. A. (2020). Datura metel: A Review on Chemical Constituents, Traditional Uses and Pharmacological Activities. In *Reactions Weekly* (Issues 22, 2021, pp. 2545–2557). <https://doi.org/10.2174/1381612826666200519113752>
- Wasti Samaria Simangunsong, J. C. (2023). *BNN_ 93 Narkotika Jenis Baru Masuk Indonesia, Paling Banyak dari Meksiko*. <https://megapolitan.kompas.com/read/2023/12/28/19581901/bnn-93-narkotika-jenis-baru-masuk-indonesia-paling-banyak-dari-meksiko>
- Xie, G., Zhao, A., Zhao, L., Chen, T., Chen, H., Qi, X., Zheng, X., Ni, Y., Cheng, Y., Lan, K., Yao, C., Qiu, M., & Jia, W. (2012). Metabolic fate of tea polyphenols in humans. In *Journal of Proteome Research* (Vol. 11, Issue 6, pp. 3449–3457). <https://doi.org/10.1021/pr300318m>



ADDRESSING EFFECTS OF DRUG POLICIES TOWARDS STANDARD OF LIVING IN ASIA

Dellvin Sergio^{1*}, Meyliana Lukman², Asmin Fransiska³
Law Faculty, Atma Jaya Catholic University, Indonesia
Faculty of Pharmacy, Atma Jaya Catholic University, Indonesia
Indonesian Center for Drugs Research (ICDR)
*Corresponding Author: dellvin.lie@gmail.com

ABSTRACT

The correlation between human rights and drug policies around Asia is considered a sparsely topic. Rare discussion of certain Human Rights, inter alia Economic, Social, And Cultural Rights has affected the enjoyment and the infringement of those rights. Drug Policies around Asia Country is known for its meticulous and merciless ruling against drug users and other specific targeted groups. The ruling against cultivating of certain drugs for cultural and medical use towards the limitation of drug research have impeded on various human rights, especially the standard of living of individuals. Standard of living refers to the access to work, health, family life, etc. Therefore, this paper sought out the effort to decriminalize drug policy as a way of answering certain human rights issues that have been under constant pressure. The research in regards to Economic, Social, and Cultural Rights employed normative studies that focuses on the topics of standard of living in Asia. The use of recent regulations, journals, and data will be relevant in supporting claims of human rights violations concerning drug policies around Asia. Hence, dismantling issues concerning the criminalisation of drug use in Asia through human rights approaches is required.

Keywords: *drugs, drug policies, standard of living, decriminalization*

INTRODUCTION

The conversation regarding drug policies in Asia has been closely tied to the notion of “punitive” or even “discriminating” (UNAIDS, 2023). However, such notions could not be thrown thoughtlessly without seeing the harmful implications of such policies towards the society - specifically for those who are thrown into the criminal justice system for drug related crimes. For example, Indonesia’s leading cases of overcrowding issues in prison are caused by majority drug related crimes - to be exact over 54.6% of Indonesia’s detention centers are filled with drug related crimes (Wahyuno, 2023). The lack of public health and human rights approaches may be the leading cause for such problems in different Asian countries. Hence,

drug policies in Asia have to divert from punitive towards a sustainable and public health attitude when facing people who use drugs.

One thing leads to another, the characteristics of punitive laws in Asia have been known to be influenced by different political ideologies, historical, social, and cultural backgrounds related to the use of drugs (Miao and Lai, 2023). Therefore, slogans such as ‘War on Drugs’ have been utilized in preventing drug use or drug related crimes (ASEAN, n.d.). Such notions impacted society’s view for those who use drugs which then lead to further discrimination and stigmatization especially in accessing basic necessities in fulfilling one’s living standard (Transform Drugs, n.d.).

Punitive, harsh, and discrimination has been the foundation in approaching drug related issues even as the building block of Asia’s drug policies (Pardo, et. al, 2019).¹ Issues such as criminalization and mandatory rehabilitation have hindered individuals enjoyment of one human rights. In this study, an ongoing issue in regards to the enjoyment, protection, and fulfillment of one’s standard of living. Enshrined in Article 11 and 12 of the International Covenant of Economic, Social, and Cultural, Rights, the rights to adequate standard of living refers to the basic minimum fulfillment of one’s enjoyment to the basic necessary living requirements which include inter alia, right to food & nutrition, right to clean water, right to clothing, right to housing, working condition, social protection, etc (United Nations, 1999; Fransiska, 2022).

Through such definitions, State parties have the obligation in guaranteeing such requirements to be fulfilled, protected, and respected. However, focus on criminalization has missed the target in sustaining drug policies that prioritize harm reduction, public health, and human rights approaches. This mindset is deemed important in viewing such an ordeal as a societal and structural problem that needs to be carefully delineated. In recent years, Thailand has developed its approach in diverting from harsh punishment towards a harm reduction treatment for drug related crimes (United Nations, 2023). Such an approach is considered revolutionary considering other Asian countries’ unwavering mindset in handling drug crimes through a non-human rights approach.

Problems relating to standard of living are highly intercorrelated with intersectional issues such as poverty, gender inequality, and the rights towards minority groups (Shaw, et. al, 2007), (Malinowska-Sempruch and Rychkova, 2015). Therefore, this paper also seeks to include rights of certain targeted groups affected by punitive drug policies in Asia. inherently, laws and policies revolving around drugs are meant to affect the standard living of a person. However, such laws and policies should prioritize positive changes towards upholding an adequate standard of living. .

This paper will discuss the main causes of human rights infringement with the implementation of various drug policies in Asia. Whereas, such policies have manifested in lowering or even hindering the access towards an adequate standard of living of a person in Asia. On the other hand, this paper will discuss such problems through a harm reduction and human rights perspective in an effort of maintaining social equality without acts of

¹ Mass killing in the Philippines related to drug crime. See Amnesty International (n.d.), Drug Policy Reform, accessed through <https://www.amnesty.org/en/what-we-do/drug-policy-reform/>



discrimination and stigmatization (United Nations, 2024). Lastly, the objective of this paper is to help start and continue the conversation concerning drug policies and its effects towards standard of living.

METHODOLOGY

This study employs a descriptive research design to analyze the effects of drug policies on the standard of living in Asia. The research will involve a detailed examination of national and international regulations, academic literature, news sources, and additional relevant documents. The aim is to provide a comprehensive overview of how drug policies influence standard of living in Asian countries. The analysis will be descriptive, focusing on summarizing and categorizing the collected data. Organize data into thematic categories such as types of drug policies, effects on public health, socio-economic impacts, and regional variations within Asia.

This study will also sought out historical, political, and cultural factors that influence drug policies and their outcomes - specifically the notion of ‘War on Drugs’ in Asia. Therefore, to collect data around Asian countries, the use of regional meetings with reliable sources such as Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) will be the main key in detecting various human rights violations (Standard of Living) in Asia.

This paper also discusses the implications of the findings for policymakers, stakeholders, and affected communities. Highlight potential areas for policy improvement or further research based on the observed impacts. The use of the human rights approach will also help delineate various human rights problems. This study also acknowledges the limitations upon completing data, issues regarding language barriers has limited local sources that may hinder the completion of this paper.

RESULT AND DISCUSSION

The right to an adequate standard of living is intricately connected to drug policy, particularly when considering the additional challenges faces by individuals who use drugs These challenges often include poverty, gender bias, and violence, which can exacerbate their situation (UNDP, 2020). In numerous Asian countries, the approach in determining an adequate standard of living has been heavily influenced by moral and religious values (Fidh, 2015; Huong, et al., 2018). This has led to the development of certain programs, such as rehabilitation initiatives that are framed as charitable efforts but adopt an abstinence-based model (Windle, 2021). Unfortunately, this approach has often resulted in further oppression and discrimination against people who use drugs (Harm Reduction International, 2019).

In humanitarian crises, individuals who use drugs frequently find themselves marginalized and neglected. This neglect is largely due to the stigma associated with drug use, discriminatory policies and practices, and the criminalization of such acts (UNODC, 2018). To address these issues effectively, it is crucial to consider decriminalization of drug



use, along with implementing alternative non-penal mechanisms (Global Commission on Drug Policy, 2016). These mechanism should aim to eliminate discrimination and ensure that individuals have equal access to essential social and labor rights. This includes access to social protection, adequate housing, sanitation, food, water, healthcare, etc (UN General Assembly, 2016). Such measures would contribute significantly in improving the standard of living for people who use drugs and help integrate them more fully into our society.

In attaining an adequate standard of living, these requirements will be the benchmark in assessing either violations nor fulfillment of such rights in Asia. Drug policies have been known to infringe different areas of life, in which the correlation of those rights made up the minimum requirement of an adequate standard of living (International Drug Policy Consortium, 2019). This analysis will not be limited to those who are incarcerated but society as a whole.

Access to Work and Education

The complexities of the right to work lies within the structural system of employment itself. Whereas, good grades, good CVs, academic achievements, and great track record will be taken to an account of employment. These factors influence drug users to be excluded from the conversation as a whole. Those with criminal record, especially with the close relation to drug related crime experience further discrimination and stigmatization in accessing work - especially for those who are trying to be civil servants (EUDA, 2022).

Asian countries commonly employed a system where future employee has to fulfill the requirement of a 'clean' state. This requirement based on stigmatization cultivated an exclusive environment in the working force (Human Rights Watch, 2019). Besides issues of criminalization and its effect of accessing jobs, forced/mandatory rehabilitation is an issue of its own. Forced rehabilitation which employs an undisclosed amount fo time a person needs to serve expedites the higher chance of unemployment (Open Society Foundation, 2011). Unemployment caused of drug use, criminalization, or through mandatory rehabilitation is not supported by a system which may prevent a precarious living conditions.

This argument goes with the precarious living conditions of former convicts which may not have the full support from the criminal justice system in preventing discrimination in the work force. In Indonesia, former convicts have a lesser chance in accessing jobs or work in order to earn income through the mandatory rehabilitation system. In the Duterte administration, a person could be admitted to rehabilitation centers without the consent of their family (ICC, 2021). The issue arises from unemployment may also hinders the access of fulfilling rehabilitation which are commonly expensive and are not covered by government or private insurance companies.

In China, "enforced drug rehabilitation" or also known as *qianzhi jiedu* are a specific form of administrative detention (UNODC, 2022), (Amnesty International, 2013). Reports done by the United Nations has also found acts of discrimination, abused and ill-treated (United Nations, 2015; Lai, et al., 2013). Such acts have constitutes as infringement of human rights or further more, human rights abuses in detention and rehabilitation centers.



On the other hand, education systems are designed by drug laws and policies which normally ignored the views of children. Children's rights enshrined in the ESCR are mostly neglected due to societal and political views that deemed drug use is a male adult dominated areas. Children who use drugs or live with a family member who uses drugs or those with IV/AIDS status are still being labeled which led to further discrimination from the system itself (Clark and Coster, 2020).

The harm reduction and drug-use prevention programs are limited and most of the time absent. To those who are undocumented children, migrants or children in refugee camps/communities who are involved in drug use or market, their right to education is denied (Rashid and Tikly, 2016). Children with HIV are excluded from the right to education from elementary school to higher education institutions (Bhana and Mthethwa-Sommers, 2019). The status of children or children with HIV/AIDS is not considered in the criminal justice process, leaving those in conflict with the law receiving harsh punishment. This was caused by the war on drugs narrative which impacted all regardless of the priority of the human rights protection for some cases (Dwyer and Moore, 2017). This happens in most Asia Countries, especially in Indonesia, Thailand, and Malaysia (Windle, 2018).

Access to Clean Water, Food, Sanitation, and Shelter

The 'War on Drugs' has precipitated a range of severe consequences, one of the most pressing being the issues of prison overcrowding. This phenomenon arises when the number of inmates exceeds the prison's designed capacity, resulting in significantly diminished living conditions for those incarcerated. Overcrowded prisons often face critical shortages in essential resources such as adequate nutrition, clean water, and sanitary clothing (Walmsley, 2018). As a result, prisoners frequently endure substandard living conditions that undermine their health and well-being (McLoughlin, 2018). Additionally, the strain on facilities and resources can be exacerbated when there is a shortage of guards or wardens, further compromising the safety and security of both inmates and staffs (UNODC, 2013).

The problem of prison overcrowding is closely linked to the broader issue of drug trafficking, which is often driven by economic desperation. Many individuals involved in the drug trafficking businesses are often driven by economic desperation. Many individuals involved in drug trafficking are compelled by dire financial circumstances, seeking to improve their living conditions or support their families. This is particularly evident in regions where entire communities, including villages in Southeast Asian countries, become entangled in drug-related activities. In these contexts, participation in drug trafficking is often a last resort for economic survival rather than a choice made out of criminal intent (Bourgois, 2018).

Despite the intention behind the 'War on Drugs' to combat drug-related crime and trafficking, it has failed to address the root causes of these issues. Instead of resolving the underlying socio-economic hindrance that may contribute to drug trafficking activities, the aggressive enforcement strategies have often aggravated them (Youngers and Walsh, 2017). This approach has led to a cycle where poverty and desperation continue to drive individuals

into the drug-related crime. On the other hand, punitive measures further entrench them in a cycle of crime and incarceration. Thus, the ‘War on Drugs’ has, in many cases, pushed the very issues it sought to eliminate (Global Commission on Drug Policy, 2018).

To effectively address the challenges tied with the drug trafficking and related criminal acts it is essential to adopt a more nuanced and comprehensive approach - human rights approach. This should include addressing socio-economic factors, in this context access to food, water, sanitation, and shelter (Csete and Tomasini-Joshi, 2016).

Access to the Highest Attainable Standard of Healthcare

The introduction of the ‘War on Drugs’ has significantly impacted drug policies worldwide, including those regulating narcotics and psychotropic substances in both recreational and medicinal contexts. This campaign has led to the implementation of stricter policies aimed at ensuring patient safety through the scheduling of drugs. Drug scheduling is designed to balance the benefits and risks associated with various substances, but it also has substantial implications for the accessibility, availability, and affordability of these medications (Hall and Lynskey, 2016). While the primary goal of these policies is to protect patients from potential harm, they have inadvertently introduced limitations that affect both patients and healthcare providers.

The international debate surrounding drug scheduling highlights the complexities of balancing safety with accessibility. On one hand, scheduling is intended to prevent drug abuse, such as with ketamine, which, despite its widespread use as an anesthetic, faces restrictions that can limit access for legitimate medical purposes (WHO, 2019). Similar issues arise with other essential medications, such as analgesics like tramadol and various sedative drugs (UNODC, 1995). These restrictions can hinder healthcare professionals from providing optimal care and make it difficult for patients to access safe and affordable treatments. Thus, while drug scheduling aims to mitigate abuse, it can also restrict essential medical care (Babor, et al., 2018).

Moreover, the concept of ‘health’ extends beyond physical well-being to encompass mental health, which is profoundly affected by drug policies. Psychiatric medications, which are crucial for managing mental health conditions, are often subject to stringent drug scheduling regulations (UNODC, 2016). This can result in significant barriers to obtaining necessary psychiatric treatments, particularly in some Asian countries where strict enforcement of these policies can lead to patients being mistakenly accused of drug abuse. Such misconceptions and the resulting legal complications can deter individuals from seeking the mental health care they need, further compromising their overall health (Sharan, et al., 2017).

The negative impacts of drug policies extend beyond individual medical contexts to broader systemic issues, such as those observed in prison systems affected by the ‘War on Drugs.’ Overcrowded prisons, a common issue in many Asian countries, often suffer from inadequate facilities, including insufficient access to basic necessities such as clean water, hygiene products, and nutritious food (Human Rights Watch, 2015). The strain on prison resources and the lack of adequate healthcare infrastructure exacerbate these problems, leading to significant health issues among inmates (Canada, et al., 2022). The poor living conditions



and limited medical care available in these environments contribute to a decline in overall health and well-being.

In conclusion, while the ‘War on Drugs’ aims to protect public health and safety, its implementation has resulted in several unintended consequences that undermine the highest attainable standard of health as a human right. The restrictions imposed by drug scheduling can limit access to essential medical treatments, particularly for those requiring psychiatric care. Furthermore, the adverse effects are also evident in overcrowded prison systems, where inadequate facilities and healthcare exacerbate health disparities. Addressing these issues requires a reevaluation of drug policies to ensure they effectively balance safety with the need for accessible and comprehensive healthcare for all individuals (Fransiska, 2021).

Access to Social Security

Social security refers to a comprehensive system of protection measures designed to safeguard individuals and households by ensuring their access to essential services and economic stability. This protection encompasses various forms of support, including health care, income security, and financial aid during times of need. Such needs may arise from old age, unemployment, illness, disability, workplace injuries, maternity, or the death of a primary breadwinner (United Nations, n.d.). According to United Nations instruments, social security is recognized as a fundamental human right, underscoring its importance in maintaining human dignity and well-being (OHCHR, n.d.). Essentially, social security acts as a safety net that provides income support when individuals experience disruptions or loss of their regular sources of income, or when faced with extraordinary expenses.

A critical component of social security is Universal Health Coverage (UHC), which guarantees that all individuals can access a comprehensive range of high-quality health services as needed, without experiencing financial hardship (WHO, 2010). UHC aims to provide continuous care across the full spectrum of health services, including health promotion, disease prevention, treatment, rehabilitation, and palliative care. To realize effective and equitable UHC, countries must develop robust, efficient, and community-centered health systems. This responsibility lies with the government to ensure that health care services are both accessible and affordable, thereby fulfilling its obligation to protect public health and welfare (McIntyre et al., 2018).

In many Asian countries, the concept of social security is not widely discussed or fully recognized (Suci, et al., 2013). Often, social security is perceived more as a charitable gesture from the government rather than an inherent right of individuals. Particularly concerning is the situation for people who use drugs, who frequently find themselves excluded from social security protections. Intersectional groups, such as LGBTQAI+ individuals who use drugs, face even greater barriers, as they are often denied access to social security benefits (AIDS Accountability International, 2016). Currently, many social security initiatives are managed at the community level rather than being integrated into state or government obligations related to social and economic rights. Furthermore, these community-based programs often fail to provide equal access due to regional cultural and language barriers, which hinder individuals’ access to education, employment opportunities, and treatment services (World Bank, 2015).



The marginalized status of people who use drugs often results in significant obstacles to securing employment, housing, and adequate nutrition, leading to persistent poverty (Beyrer et al., 2016). This situation is exacerbated by stigma, discrimination, and criminalization associated with drug use, which are reinforced by national laws and policies in many Asian countries (UNODC, 2019). The systemic barriers faced by this group highlight the urgent need for more inclusive and equitable social security frameworks that can address these disparities and support the most vulnerable populations effectively (Degenhardt et al., 2014).

CONCLUSION

The implementation of drug policies across Asia reveals a persistent reliance on punitive approaches, which led to many cases of human rights violations that severely impact the standard of living for individuals, particularly those who use drugs. The focus on criminalizing people rather than giving them a proper access to public health and harm reduction facilities, has escalated issues such as overcrowded prisons, inadequate access to healthcare, and lack of social security, resulting in individuals' inability to attain a dignified and adequate standard of living.

The findings of this study highlights the urgent needs for a shift about how drug-related issues are addressed in Asia. Decriminalization of drug use and harm reduction strategies are essential to addressing these challenges. By focusing on adequate access to public health and human rights, rather than punishment, it can ensure the access to essential services, protect the dignity of individuals, and also reduce the stigma on those who use drugs. This transformation is not only necessary to address the immediate harms caused by existing policies but also to build more inclusive and unprejudiced societies, where all individuals can have the opportunity to make a living and have a good quality of life. In this way, Asian countries may also take significant strides towards rectifying past injustices and creating a more just and humane future.

This paper is expected to influence any further discussions or even actions regarding the intersection of drug policies and human rights. The final goal is to achieve a more informed and compassionate approach to drug-related issues—one that prioritizes the health, dignity, and well-being of all individuals, regardless of their circumstances. Once again, it is essential to continue advocating for policies that uphold human rights and contribute to the attainment of a decent standard of living for everyone in society.

ACKNOWLEDGEMENT

This paper would like to acknowledge Dr. iur Asmin Fransiska, S.H., LL.M. as the Dean of Law Faculty in Atma Jaya University of Indonesia for the guidance in writing this paper.



REFERENCES

- AIDS Accountability International (2016), Global AIDS Response Progress Reporting 2016: Social Protection and Access to Health Services.
- Amnesty International (2013), “Changing the Soup but not the Medicine”: Abolishing Re-Education Through Labour in China, Amnesty International Publications, p. 8.
- Amnesty International (n.d.), Drug Policy Reform, accessed through <https://www.amnesty.org/en/what-we-do/drug-policy-reform/>
- ASEAN (n.d.), Illicit Drugs: Overview, accessed through <https://asean.org/our-communities/asean-political-security-community/peaceful-secure-and-stable-region/illicit-drugs/>
- Babor, T.F. (2018), Drug Policy and the Public Good, *Oxford University Press*, accessed through <https://global.oup.com/academic/product/drug-policy-and-the-public-good-9780198818014>
- Beyrer, C., Poznyak, V., and Strebler, A. (2016), The Global Fund and Harm Reduction for People who Inject Drugs: An Assessment, *International Journal of Drug Policy*, Vol. 31, pp. 34-39.
- Bhana, D., & Mthethwa-Sommers, S. (2019), Children’s Rights and Educational Exclusion in the Context of HIV/AIDS in South Africa, *Childhood Education*, 95(1), pp. 24-31.
- Bourgeois, P. (2018), Poverty, Human Rights and the “War on Drugs”, *Journal of Social Policy*, Vol. 47, No. 3, pp. 511-531.
- Canada, K., Barrenger, S., Bohram, C., Banks, A., and Peketi, P. (2022), “Multi-Level Barriers to Prison Mental Health and Physical Health Care for Individuals with Mental Illness”, *Front Psychiatry*, Vol. 13, p. 2.
- Csete, J. and Tomasini-Joshi, D. (2016), Drug Courts: Equivocal Evidence on a Popular Intervention, *Harvard Law ASchool Petrie-flom Center for Health Law Policy, Biotechnology, and Bioethics*.
- Clark, M. and Coster, C. (2020), Stigmatization of Children in Drug-Involved Families, *Journal of Child and Family Studies*, Vol. 29, No. 5, pp. 1270-1281.
- Degenhardt, L., Whiteford, H.A., and Ferrari, A. J. (2014), Global Burden of Disease attribute to Illicit Drug Use and Dependence: Findings from the Global Burden of Disease Study 2010. *The Lancet*, pp. 1564-1574.
- Dwyer, R. and Moore, D. (2017). The Unintended Consequences of the War on Drugs, *International Journal of Drug Policy*, 43, pp. 16-24.



- European Union Drugs Agency (EUDA) (2022), Workplaces and Drugs: Health and Social Responses, p. 2, accessed through https://www.euda.europa.eu/sites/default/files/pdf/14415_en.pdf?867463
- Fidh (2015), Demystifying Human Rights Protection in Asia, p. 7, accessed through <https://www.fidh.org/IMG/pdf/asie669anglaisbassdef.pdf>
- Fransiska, A. (2021), The Right to Health Assessment on Indonesian Policy on Releasing Incarcerated People, *Atlantis Press*, p. 555.
- Fransiska, A. (2022), Right to Health on Access to Clean Water in Indonesia, *IJRBS*, Vol. 11, No. 6, p. 524.
- Global Commission on Drug Policy (2016), Advancing Drug Policy Reform: A New Approach to Decriminalization, pp. 18-21, accessed through <https://globalinitiative.net/wp-content/uploads/2017/12/GCDP-Report-2016-ENGLISH.pdf>
- Global Commission on Drug Policy (2018), Regulation: The Responsible Control of Drugs, accessed through <https://www.globalcommissionondrugs.org/reports/regulation-the-responsible-control-of-drugs>
- Harm Reduction International (2019), The Global State of Harm Reduction 2019.
- Hall W. and Lynskey, M. (2016), Evaluating the Impact of 'War on Drugs' on Public Health, *The Lancet*, 367(9515), pp. 112-121.
- Human Rights Watch (2015), World Report 2015: Events of 2014, Human Rights Watch, accessed through <https://www.hrw.org/report/2015/01/29/world-report-2015/events-2014>
- Human Rights Watch (2019), World Report 2019: Events of 2018, p. 242, accessed through https://www.hrw.org/sites/default/files/world_report_download/hrw_world_report_2019.pdf
- Huong, N. T. M., Giao, V. C., and Tam, N. M. (2018), Asian Values and Human Rights: A Vietnamese Perspective, *Journal of Southeast Asian Human Rights*, Vol. 2, No. 1, p. 302, doi: 10.19184/jseahr.v2i1.7541
- International Drug Policy Consortium (2019), Drug Policy and the Right to Health.
- International Criminal Court (ICC) (2021), Situation in the Republic of The Philippines, ICC-01/21.
- Lai, G., Fransiska, A., Birgin, R. (2013), Drug Policy in Indonesia, *International Drug Policy Consortium*, p. 2.
- Malinowska-Sempruch, K. and Rychkova, O. (2015), The Impact of Drug Policy on Women, Open Society Foundations, p. 2.



- McLoughlin, A. (2018), The Impacts of Prison Overcrowding on Health, *The Lancet Public Health*, Vol. 3, No. 1, pp. 14-15.
- McIntyre, D., Thiede, M., and Birch, S. (2008), What are the Equity Implications of Health System Reforms?, *The Lancet*, pp. 400-401.
- Michelle Miao and Gloria Lai (2023), Debunking the Three Myths About Reforming Asian Drug Policies, Harvard-Yenching Institute Working Paper Series, p. 3.
- OHCHR (n.d.), OHCHR and the Right to Social Security, accessed through <https://www.ohchr.org/en/social-security>
- Open Society Foundations (2011), Treatment or Torture?: Applying International Human Rights Standards to Drugs Detention Centers, *International Harm Reduction Development Program*, p. 41.
- Pardo, B., Kilmer, B., and Huang, W. (2019), Contemporary Asian Drug Policy: Insights and Opportunity for Change, RAND, p. 72.
- Rashid, M. and Tikly, L. (2016), Inequality, Education and the Socialization of Youth in Asia, *International Journal of Educational Development*, No. 46, pp. 43-52.
- Sharan, P., Sagar, R. and Kumar, S. (2017), Mental Health policies in South-East Asia and the Public Health Role of Screening Instruments for Depression, *WHO South-East Asia Journal of Public Health*, Vol. 6, No. 1, p. 6.
- Shaw, A., Egan, J., and Gillespie, M. (2007), Drugs and Poverty: A Literature Review, Glasgow Caledonian University, p. 7.
- Suci, E. S. T., Fransiska, A., and Tampubolon, L. H. (2013), Drug Addiction Policies and Practices: Access to Health Services in Indonesia, *International Society for the study of Drug Policy*, p. 11.
- Transform Drug Policy Foundation (n.d.), The War on Drugs: Promoting Stigma and Discrimination, p. 1, accessed through <https://transformdrugs.org/assets/files/PDFs/count-the-costs-stigma.pdf>
- UNAIDS (2023). “How Harsh Drug Laws Undermine Health and Human Rights in Asia Pacific”, accessed through https://www.unaids.org/en/resources/presscentre/featurestories/2023/march/20230301_drug-laws-asia-pacific
- United Nations (1999), CESCR General Comment No. 12: The Right to Adequate Food (Art. 11), E/C.12/1999/5, para. 1.
- United Nations (2015), Study on the Impact of the World Drug Problem on the Enjoyment of Human Rights, A/HRC/30/65, para. 47.

- United Nations (2023), Thailand: Moving from Punishment to Treatment of People Who Use Drugs, accessed through <https://news.un.org/en/story/2023/06/1137927>
- United Nations (2024), Shift from Punitive Approach on Drug Policies Towards Harm Reduction, Statement by UN Human Rights Expert, p. 1-3.
- United Nations (n.d.), Promoting Inclusion Through Social Protection, p. 5. accessed through <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2018/07/Chapter-ISocial-protection-and-social-progress.pdf>
- UN General Assembly (2016), Outcome Document of the 2016 United Nations General Assembly Special Session on the World Drug Problem.
- UNODC (1995), The Social Impact of Drug Abuse, *UNDCP*, p. 27, accessed through https://www.unodc.org/pdf/technical_series_1995-03-01_1.pdf
- UNODC (2013), Handbook on Strategies to Reduce Overcrowding in Prisons, United Nations Office on Drugs and Crime.
- UNODC (2016), The Impact of Drug Control on Mental Healthcare: Implications and Recommendations, United Nations Office on Drugs and Crime.
- UNODC (2018), World Drug Report 2018, United Nations Office on Drugs and Crime.
- UNODC (2019), World Drug Report 2019, United Nations Office on Drugs and Crime.
- UNODC (2022), Regional Report on Compulsory Treatment and Rehabilitation in East and Southeast Asia”, Booklet 1, p. 3. accessed through <https://www.unodc.org/roseap/en/2022/01/compulsory-treatment-rehabilitation-east-southeast-asia.html>
- UNODP (2020), International Guidelines on Human Rights and Drug Policy, *United Nations*.
- Wahyuno, F.T. (2023), Relevansi Penjatuhan Sanksi Pidana Penjara Terhadap Penyalahguna Narkotika (Analisis Teori Relatif dalam Tujuan Pemidanaan), *DJHPI*, Vol. 2, No. 2, p. 3.
- Walmsley, R. (2018), World Prison Population List (12th edition), *International Centre for Prison Studies*. WHO (2010), Health System Financing: The Path to Universal Coverage, accessed through <https://iris.who.int/handle/10665/44371>
- WHO (2019), Review of Ketamine’s Control Status, *WHO Experts Committee on Drug Dependence*.
- Windle, J. (2018), A Slow March From Social Evil to Harm Reduction: Drugs and Drug Policy in Thailand, *Journal of Illicit Economies and Development*, Vol. 1, No. 3, pp. 255-268.



Windle, J. (2021), The Relevance of Drug Policy to an Adequate Standard of Living, *Journal of Drug Policy*.

World Bank (2015), The Role of Social Protection in Reducing Poverty, accessed through <https://documents1.worldbank.org/curated/en/473421467986306455/pdf/97957-WP-P146376-Box391499B-PUBLIC-Myanmar-Social-Protection-Notes-Series-Note-5-July-7-2015.pdf>

Youngers, C. and Walsh, J. (2017), Drug Policy Reform in Latin America: Discourse and Agenda in the Context of War on Drugs, *Global Drug Policy Observatory*.

REGULATORY AND SCIENTIFIC GAPS IN NANOMEDICINE

Riyona Desvy Pratiwi^{1*}, Delphi Coppens²

¹Research Center for Vaccine and Drugs, The National Research and Innovation Agency, Republic of Indonesia

²Department of Utrecht Centre for Pharmaceutical Policy and Regulation, Utrecht University, The Netherlands

*Corresponding author: riyona.desvy.pratiwi@brin.go.id

ABSTRACT

Nanomedicine is a class of applications of nanotechnology for medical purposes. It is subdivided into drug delivery, theranostics, tissue engineering and magnetofection. Drug delivery nanomedicine is the most widely studied and the most commonly found on the market among those categories. It provides better efficacy and safety than conventional medicine. On one hand, it has unique characteristics, such as smaller size and more flexible for modifications compared to conventional medicine, so it acts more specific, not only at organ and tissue level, but also until cellular level. This capability is not met by the conventional medicine. However, on the other hand, it can be more toxic because its fate in the biological system or in the human body is hard to predict. In addition, particularly for pre-clinical researches (eg. pharmacokinetics/pharmacodynamics), drug nanomedicine cannot be assessed as conventional medicine. The issue is that regulation related to nanomedicine is still limited. Therefore, in this review, the important of specifics regulation related to nanomedicine assessment and the scientific aspects were discussed.

Keywords: Nanomedicine, Regulatory, Scientific Assessment

INTRODUCTION

Nanomedicine is a class of applications of nanotechnology for medical purposes including prevention, diagnosis and treatment of various diseases (Tinkle et al., 2014)). It is an interdisciplinary field of nanotechnology, nanomaterials, and molecular medicine (Krukemeyer et al., 2015). There are various ways by which nanomedicine are divided into product categories. The European Technology Platform for Nanomedicine (Tomellini et al., 2005), a network initiated by industry and set up with the European Commission for application of nanotechnology in healthcare, subdivides nanomedicine into diagnostics-imaging tools and drug delivery nanomedicine. Krukemeyer, *et al* classifies nanomedicine into four product

categories: drug delivery, theranostic (a combination of therapy and diagnostic, for example an isotope labeled-drug loaded nanomedicine), tissue engineering, and magnetofection nanomedicine (an effective method to transfect nucleic acid into target cells by using a magnetic field) (Krukemeyer et al., 2015; *Theranostic*, 2010). Of all of these subcategories, the focus of this review is only on drug delivery nanomedicine as drug delivery nanomedicine showed most progression in research and development among other categories (Tomellini et al., 2005). More than 70% of all nanomedicine scientific publications focus on drug delivery nanomedicine and around 80% of nanomedicines that are available on the market are also from this category (Hafner et al., 2014).

The main goals of drug delivery nanomedicine are to improve safety and efficacy of conventional medicine (Krukemeyer et al., 2015). Drug delivery nanomedicines are expected to be the best and suitable solution for diseases with a complex pathogenesis at cellular level because of their small size design, which has the potential to reach a cellular level and to cross biological barriers (Nikalje, 2015). These advantages are commonly not provided by conventional medicines, which are larger in size and act only until tissue level (Sonal et al., 2007).

In general, nanomedicine has several characteristics. The primary characteristic is a single component or a composite with at least one component produced in nanosize. The range of 'nanosize' depends on characteristics of each type of nanomedicine. The ETPN mentioned that nanomedicine is not more than 100 nm, but Wagner described that materials with 1000 nm in size can also be considered as nanomedicine because it is commonly equipped with additional properties for a better cellular interaction (Tomellini et al., 2005; Wagner & Husing BAK, 2008). The small size of nanomedicine enhances its solubility, so bioavailability is improved. Nanomedicine also has better permeability compared to conventional medicine which is important to cross biological barriers, such as the blood brain barrier. As a consequence of its small size, nanomedicine has high surface-to-volume (SA:V) ratio. This is known as its second characteristic (Wagner & Husing BAK, 2008). Surface to volume ratio is a proportion of area outside of a particle (in square unit) to space inside of the particle (in cubic unit). Higher surface to volume ratio increases the reactivity of nanomedicine. Therefore, to achieve a similar effect with conventional medicine, a lower dose is needed. The third characteristic is produced in various shapes (eg. nanospheres, nanoshells, nanosplates, and nanorods), which allows to be formed in an appropriate shape leading for better interaction with cellular compartments (Ventola, 2012).

Drug delivery nanomedicines are typically modified using many strategies either for protection towards drug destructive conditions or for targeted drug delivery. For protection, physical or chemical modification can be applied on drug delivery nanomedicine to prevent premature drug release. Therefore, the drug is only released in certain condition depending on hydrophobicity, pH, temperature, and biological reduction-induced release, such as glutathione level inside the cell (Kabanov & Vinogradov, 2009). For targeted drug delivery, it can also be equipped with a specific targeting ligand (Sanna et al., 2014). The specific targeting ligand or also known as active targeting ligand is a substance (antibodies, fragment antibody, or peptides) that binds to a certain biomolecule presented at target site. It is



commonly used to improve biodistribution and accumulation of nanomedicine at the target site (Lammers et al., 2008).

Unfortunately, for some cases, the advantages offered by nanomedicine compared to conventional medicine are not linearly correlated with improved safety and toxicity profiles in pre-clinical (Kohli & Desai, 2012). On one hand, as previously mentioned, those characteristics of drug delivery nanomedicine improve its safety and efficacy. On another hand, the characteristics of drug delivery nanomedicine alter the way it interacts with biological system or the human body compared to how conventional medicine. It means that the fate of drug delivery nanomedicine in the biological system or in the human body (pharmacokinetics/PK) and its influence to the biological system or in the human body (pharmacodynamics/PD) changes (Ventola, 2012). However, thus far, PK/PD studies are designed only for conventional medicine (Spyridoula, 2013). Therefore, it is more difficult to investigate PK/PD profile of nanomedicine. This becomes complicated because validated standards and methods to assess PK/PD of nanomedicine do not exist yet. Consequently, regulations and scientific guidelines for nanomedicine are difficult to formulate (WHO Expert Meeting, 2012). Given the challenges to establish safety and toxicity profiles, the regulatory gaps and scientific challenges on drug delivery nanomedicine are discussed.

METHODOLOGY

A systematic literature review was performed in July 2016. A peer-reviewed database (PubMed) and Google Scholar were used to find scientific publications, grey literature and other documentation. For the search in PubMed and Google Scholar, the terms 'nanomedicine' and 'regulatory', or 'nanomedicine' and 'pre-clinical research' were used. Websites of the relevant regulatory authority (EMA) and international organizations (World Health Organization or WHO and the International Council for Harmonization or ICH) were used to find regulatory documentation on nanomedicine. Several findings from PubMed and Google Scholar were overlapping. A scheme for selection of references is depicted in Figure 2. The updated regulations of nanomedicine were accessed in May 2024 using the similar search engines.

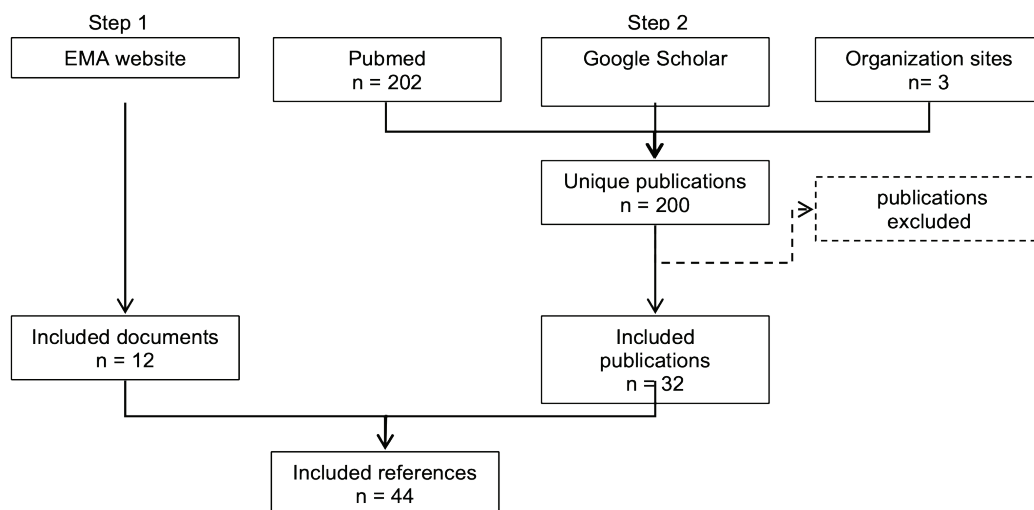


Figure 1. A schematic representation of the structured literature review. In total 44 publications were selected for the analysis.

RESULT AND DISCUSSION

Regulatory framework for the nanomedicine in the European Union (EU)

In the European Union (EU) regulatory framework there are no specific regulations for nanomedicine. Instead, regulations for conventional medicines and devices apply (van Calster & D'Silva, 2009), which are regulated under separate Directives and Regulations. Medicines are regulated under the Medicinal Products for Human Use Directive 2001/83/EC (Medicinal Products Directive) and under the Authorization and Supervision of Medical Products Regulation (EC) No.726/2004 (EMA webs). Devices are regulated under Medical Device Directive 2007/47/EC, which amended the Medical Device Directive 93/42/EEC and the Active Implantable Medical Devices Directive 90/385/EEC. Directive 2007/47/EC also amended Biocidal Products Directive 98/8/EC. In addition to Directive 2007/47/EC, devices are regulated under the In vitro Diagnostic Medical Devices Directive 98/79/EC (Nanomedicine: What's in a Definition?, 2006; van Calster & D'Silva, 2009). All of these Directives and Regulations can be applicable to nanomedicine depending on product characteristics, except for Directive 98/8/EC (van Calster & D'Silva, 2009).

Nanomedicine typically consists of a combination of a particle and a drug/biologic, which are also known as borderline products. According to Spyridoula (Spyridoula, 2013), BioSilicon is an obvious example of such borderline products. This product is designed as biodegradable silicon to deliver a certain drug or vaccine deposited in it. Since this product also contains active pharmaceutical ingredients (API) it is regulated under the Medicinal Products Directive, but the standard specification and safety study of the biodegradable silicon itself are regulated under the Medical Device Directive. Such a regulatory framework can complicate classification of nanomedicine (Spyridoula, 2013; Tinkle et al., 2014).

In addition to classification issues with nanomedicine there are also problems related to its evaluation, in particular for tailored standards and protocols (Dorbeck-Jung & Chowdhury, 2011; van Calster & D'Silva, 2009). As mentioned earlier, a lack of validated standards and protocols becomes an obstacle to formulate appropriate regulations for nanomedicine. Concurrently, specific guidance and supporting instruments that are needed for developers of nanomedicine do not exist yet. Absence of nanomedicine regulatory guidance hampers the development of those standards and protocols (Sainz et al., 2015). Hence, the EMA has made several efforts to overcome such problems, such as the establishment of an internal body (the EMA Task Force on Innovation or ITF) and scientific meetings to guide the applicant, and the launch of a series of reflective papers (Sainz et al., 2015; *The EMA Reflective Paper*, n.d.).

The ITF was founded by the EMA and Committee for Human Medicinal Products (CHMP) to focus on emerging therapies (e.g. gene and cell therapies, tissue engineering, targeted delivery systems) and emerging technologies (e.g. genomic and proteomics technology, transgenic organisms), and borderline therapies (combination of pharmaceuticals and devices). According to those terms, nanomedicines are included in emerging products and borderline therapies. The main task of ITF is to assist the applicants on regulatory and technical guidance at the early stage of their product development (*Mandate of EMA-ITF*, n.d.).

Besides, since 2009, the CHMP and the EMA organize international scientific meetings to discuss guidance and standards protocols related to nanomedicine characterization and biological interaction studies. In addition to regulatory agencies, industries and other private sectors also actively participate in this field. Together with all stakeholders, they founded European Society for Nanomedicine and The European Technology Platform on Nanomedicine (ETPN) to support standardization of nanomedicine both on scientific and regulatory aspects (Hafner et al., 2014; Tinkle et al., 2014; Tomellini et al., 2005).

In lack of specific regulations for nanomedicine, the requirements for pre-clinical research for both medicinal products and devices is discussed. Since formulating guidance and standard protocols for nanomedicine is taking longer than the development of nanomedicine itself, for current needs, the EMA provides a series of reflective papers on selected nanomedicine, covering intravenous iron-based nanomedicine, parenteral coated nanomedicine, liposomal nanomedicine and block copolymer-micelle nanomedicine (*The EMA Reflective Paper*, n.d.). These reflective papers are used here to illustrate different requirements for pre-clinical research with nanomedicine compared to conventional medicine.

How pre-clinical research of medical products is regulated in the EU regulatory framework

The main aim of pre-clinical researches on medicinal products are to ensure safety and toxicity before clinical trial initiation. Guidance for pre-clinical research on conventional medicine is adopted from the Safety section of ICH Guidelines by the EMA. In general, pre-clinical researches consist of pharmacology (primary pharmacodynamics; secondary



pharmacodynamics and safety pharmacology); toxicokinetics and pharmacokinetics; and acute and chronic toxicity studies (*ICH Safety Guidelines*, n.d.).

Primary pharmacodynamics studies are performed to evaluate expected therapeutic effects and secondary pharmacodynamics is intended to measure effects that are not related to the expected therapeutic one. Safety pharmacology studies are useful to investigate adverse effects. Pharmacokinetics and toxicokinetics are also an important part in the ICH pre-clinical guidelines. The difference between these two studies is at dose level. Pharmacokinetics studies are performed with a therapeutic dose and the toxicokinetics studies are performed using a toxic level dose. However, they focus on the same factors; absorption, distribution, metabolism and excretion (ADME) (*ICH Safety Guidelines*, n.d.; Welling, n.d.).

In conclusion, pre-clinical researches for conventional medicine focus more on systemic effects (eg. drug-protein binding, drug interaction) than on local effects. It means that the fate of the drug in the blood is being more considered than other compartments of the biological system (Welling, n.d.).

How pre-clinical research of devices is regulated in the EU regulatory framework

Requirements for pre-clinical research on devices are explained in Guideline for Medical Devices – MEDDEV 2.1/3 rev 3. Three main pre-clinical sections (pharmacodynamics, pharmacokinetics, and toxicology) are required for medical devices, but only under specific conditions: (1) Pharmacodynamics studies are only needed if the medical devices contain medical substances or human blood derivatives. (2) Pharmacokinetics is not mentioned as detailed compared to guidelines for medical products. It is required to describe local or systemic profiles of the medical substance or human blood derivatives contained in the medical device. Individual variability towards the maximum tolerance exposure is the main consideration for the pharmacokinetic studies. Moreover, if the release profile of medical substance or human blood derivatives from the medical device is critical, then a release study needs to be performed, followed by studies for its ADME. (3) Similar to medicinal products, toxicity studies for medical devices include single-dose, repeat-dose, geno-, and carcinotoxicity studies. In addition, biocompatibility of the medical substance or human blood derivative with the materials of the medical device is also needed (MEDDEV 2.1/3 rev 3) (*Regulatory Framework of Medical Devices*, n.d.).

How pre-clinical research of nanomedicine is regulated in the EU regulatory framework

A series of specific pre-clinical scientific guidance was published for biotechnology-derived products, fixed combination of medical products, chiral active substance, vaccine, anticancer products, and pre-clinical research before ‘first in human’, but there is no pre-clinical guidance for nanomedicine yet (*Nanomedicine*, n.d.). The EMA did publish a series of reflective papers, which are used here to illustrate requirements for pre-clinical research on nanomedicines in lack of scientific guidelines (*The EMA Reflective Paper*, n.d.).

In the nanomedicine reflective papers, requirements for pre-clinical research of drug delivery nanomedicine (liposomal and block copolymer-micelle products) were also referred to the same ICH Guidelines as for conventional medicines, particularly Toxicokinetics and Pharmacokinetics (S3A and S3B); ICH Duration of Chronic Toxicity Testing in Animals (S4)



and ICH Pre-clinical Safety Evaluation of Biotechnology-Derived Pharmaceuticals S6(R1) (*The EMA Reflective Paper*, n.d.).

However, even though in the reflective papers the EMA uses similar requirement for drug delivery nanomedicine and conventional medicine, they distinguish between medicines related to the influences of excipient/carrier to performance of drug substances. For conventional medicine, the excipient/carrier does not significantly affect the bioactivity of drug substance. Therefore, pre-clinical researches only focus on drug substance. This is not applicable for drug delivery nanomedicine because the carrier significantly alters performance of drug substance in biological system and in the human body. Consequently, a crucial requirement for drug delivery nanomedicine is added in the reflective papers; drug delivery nanomedicine has to be assessed as encapsulated and non-encapsulated substances (*The EMA Reflective Paper*, n.d.).

For instance, clearance studies of liposomal products have to be performed for the liposomal carrier and for the drug substance that is released from the liposomal carrier. In addition, the rate and location of drug release is also required for efficacy and toxicity studies (*The EMA Reflective Paper*, n.d.).

This additional requirement is more complex for block-copolymer micelle-products. Three aspects have to be considered from this system: (1) the drug substance itself, (2) the unimers as forming material of the micelle, and (3) the micelle as the intact carrier. In a biological system or in the human body, block-copolymer micelle degrades to its unimers. In addition to clearance of drug substance, degradation of block-copolymer micelle and dissociation of block-copolymer micelles becoming unimers have to be assessed as well. Moreover, some unimers contain drug substance and others do not (*The EMA Reflective Paper*, n.d.). Therefore, the rate of drug release from the block-copolymer micelle and from the unimers is also required. This indicates that there are several differences between nanomedicine and conventional medicine that leads to differences in pharmacokinetics studies, which is described in the next section.

Differences between nanomedicine and conventional medicine in pharmacokinetics studies

Even though the EMA has considered those differences between drug delivery nanomedicine and conventional medicine as discussed above, other dissimilarities still remain. Physicochemical characteristics of drug delivery nanomedicine leads to changes in PK profile.

Absorption. After oral administration, conventional medicine diffuses through epithelium of the gastrointestinal (GI) tract, after which they enter the blood. On the contrary, drug delivery nanomedicine has to cross mucus of the epithelium prior to be internalized by the intestinal cells via endocytosis or other intracellular trafficking. Therefore, regular in vitro models including the intestinal barrier might not applicable for drug delivery nanomedicine (Mingguang et al., 2010; Moss & Siccardi, 2014). Another example is drug delivery nanomedicine for neurodegenerative diseases. Even though these are designed to cross the blood brain barrier, monitoring control is highly needed because it enters parts of body which should be protected from exogenous materials (Ventola, 2012). Since the physiology of the blood brain barrier of humans and animals is different, selection of proper animal models is challenging (Mingguang et al., 2010; Moss & Siccardi, 2014).

Distribution. Distribution of conventional medicine can be presented by volume of distribution because they circulate in the blood and then occupy receptors or other targets before showing efficacy. The fate of drug delivery nanomedicine is not the same with conventional medicine. Drug delivery nanomedicine tends to accumulate in certain organ/tissue with large pores at its endothelium, such as in the liver, spleen, bone marrow and tumor tissue. This process is known as enhanced permeability and retention effect (EPR). Drug delivery nanomedicine that utilizes EPR for accumulation are also called passive targeting nanomedicine. Other drug delivery nanomedicines can be degraded in blood circulation by macrophages or by extracellular fluid. Therefore, they are designed to be protected towards extracellular fluid or equipped with an active targeting ligand so they accumulate in certain organ/tissue/cells. In addition, they also might undergo longer distribution compared to conventional medicine (Mingguang et al., 2010; Moss & Siccardi, 2014).

Metabolism. Conventional medicine and drug delivery nanomedicine which target the liver are commonly metabolized in this organ. However, other drug delivery nanomedicines are metabolized in their target sites. For instance, intracellular delivery nanomedicine is degraded in the target cells, either by macrophages or by lysosomes. Some synthetic materials that are used in nanomedicine are not easily degraded by biological system or by the human body, hence their metabolism remains unclear (Mingguang et al., 2010; Moss & Siccardi, 2014).

Elimination. In general, elimination of conventional medicine and drug delivery nanomedicine is through urine, which is excreted by tubular of the renal and by hepatocytes of the liver. But the 'difficult-metabolized' materials of drug delivery nanomedicine are also hard to eliminate. They could potentially cause serious adverse effects such hypersensitivity, immunogenicity, and oxidative stress (Mingguang et al., 2010; Moss & Siccardi, 2014; Ventola, 2012).

In conclusion, PK profile of nanomedicine is quite different from conventional medicine, but this is not included in the regulations and only shortly described in the reflective papers (Mingguang et al., 2010; Moss & Siccardi, 2014; *The EMA Reflective Paper*, n.d.).

Marketed drug delivery nanomedicine products and how they are regulated

To illustrate how regulations have been applied to nanomedicine, categorization and regulation of marketed drug delivery nanomedicine is discussed here. Drug delivery nanomedicines are mainly categorized based on their forming substances and preparation methods, for example dendrimers, polymeric micelles, liposomes, nanospheres, aquasomes, polyplexes, and protein or polymer conjugated products. Most of nanomedicines which are currently marketed are liposomal and pegylated-products (*Nanomedicine*, n.d.).

Liposomal products consist of a spherical drug carrier with an aqueous core, which is surrounded by a lipid bilayer to facilitate the drug crossing biological membranes, for example the cell membrane. Liposomal products can be used for delivery of hydrophilic drugs which are encapsulated in the aqueous core or for hydrophobic drugs which are entrapped in the lipid



bilayer (Akbarzadeh, 2013). AmBisome (amphotericin B-liposomes), Diprivan (propofol liposomes), and Myocet (Doxorubicin-citrate liposomes) are the liposomal-nanomedicine approved by Food Drug Administration (FDA) and EMA since the early 2000s (Tinkle et al., 2014).

Pegylated-products are nanomedicine conjugated with polyethylene glycol (PEG), a water-soluble synthetic polymer. The main aim of PEG-conjugation is to reduce dosing frequency compared to conventional medicines. PEG can be conjugated with the drug itself or with its carrier to improve drug stability, to prolong drug distribution and to decrease renal excretion (Ferruti et al., n.d.). Some of the approved pegylated-products are PEGASYS (peginterferone alpha-2a), Neulasta (Peg-GCSF), and Oncaspar (pegasparginase). A combination of liposomal and pegylated product has been also approved and marketed, eg. Doxil (pegylated doxorubicin in liposomes) (Tinkle et al., 2014). These marketed products were regulated and approved as medical products (*Abraxane Assessment Report*, n.d.; *Caelyx Assessment Report*, n.d.; *Neulasta Summary for The Public*, n.d.; *Propofol Assessment Report*, n.d.).

Doxil was the first nanomedicine approved by the FDA in 1995, which was sold in the EU with brand name Caelyx since 1996. The latest authorization of Caelyx was regulated in 2006 under Directive 2001/83/EC. Doxil is designed by encapsulation of doxorubicin, a broad-spectrum anticancer agent, in a liposomal-system. It was developed to reduce adverse effect of free doxorubicin, such as cardiotoxicity, and to improve the efficacy on tumor tissue. It prefers to accumulate in tumor tissue, which has leaky endothelium (also known as enhanced permeability and retention effect or EPR) because of the nanosize of approximately 100 nm (Barenholz, 2012; *Caelyx Assessment Report*, n.d.).

In pre-clinical research, Doxil was compared with free doxorubicin as standard care for cancer therapy by using methods which were established by the applicant (Horowitz et al., 1992). Two main pre-clinical researches for Doxil were a release study and a cytotoxicity study. In the release study, drug release in blood plasma and tumor tissue was investigated. This study proved that Doxil had better distribution and more specific accumulation than free doxorubicin (Barenholz, 2012). Related to efficacy, Doxil showed a 2x-magnitude lower of IC₅₀ than free doxorubicin in an ovarian carcinoma cell line (OV-1063) (Horowitz et al., 1992). Those superior properties compared to free doxorubicin resulted in considerations for clinical studies and eventually has been nanomedicine innovator for liposomal based-nanomedicines and successful on the market.

In 2005, Abraxane was approved by the EMA under Directive 2001/83/EC. It is a protein (albumin)-conjugated product containing paclitaxel, an anti-metastatic breast cancer agent. The albumin conjugation functions to improve solubility of paclitaxel and to decrease its hypersensitivity reactions. Pre-clinical studies performed on Abraxane were also established by the applicant. Pharmacodynamic studies of Abraxane were performed in several in vitro studies on many types of cancer cells and in in vivo studies by using human xenograph mice and rabbits. The efficacy of Abraxane was compared to free paclitaxel. In pharmacokinetics studies, absorption was not investigated because it is administered intravenously, while distribution was performed to measure concentration of paclitaxel in blood by using conventional methods and in tissue by using radioactivity labeling. Radioactive-labeled Abraxane was also used in



a metabolism and excretion study. Metabolite and excrete of paclitaxel were measured from urine and faecal samples (*Abraxane Assessment Report*, n.d.).

Both marketed nanomedicines above were classified as medical products. Pre-clinical researches show that not all regulations for medicines can be adhered to drug delivery nanomedicine. Therefore, a number of additional pre-clinical researches were established by applicant (*Abraxane Assessment Report*, n.d.; *Caelyx Assessment Report*, n.d.). In order to help the applicant to develop additional pre-clinical researchers, the following initiatives are discussed.

Initiatives to address scientific gaps

Two possible solutions are discussed in the following sections to fill the gaps between regulations and scientific challenges. First, the existence of European Nano-Characterization Laboratory (EU-NCL), which is expected to help research institutes and small to medium entrepreneurs (SME) in performing the entire pre-clinical part of research and development. Second, following the PK characteristics of drug delivery nanomedicine, a mathematical method called physiologically based pharmacokinetics (PBPK) modeling is introduced (*ETP Nanomedicine White Paper Horizon 2020*, n.d.; Li et al., 2014; Mingguang et al., 2010; Moss & Siccardi, 2014).

European Nano-Characterization Laboratory (EU-NCL): assists to fill the gaps between regulations and scientific challenges

According to Hafner (2014), the applicable and relevant current methods for characterization and biodistribution that are related to biological performance are the major challenge in the nanomedicine field from the EU regulatory point of view (Hafner et al., 2014). A number of new nanomedicine applications were rejected by the EMA due to lack of appropriate data on physicochemical and biological analysis (*ETP Nanomedicine White Paper Horizon 2020*, n.d.). However, it is suggested that nanomedicine research cannot wait for the development of specific nanomedicine regulation, guidelines, or standards (Hafner et al., 2014).

In order to overcome the gaps, the ETPN proposed an infrastructure called European Nano-Characterization Laboratory (EU-NCL) which has been launched on the 1st of June 2015. This project is a five-year project included as one of new infrastructures proposed by the ETPN as contribution on Horizon 2020, the biggest EU research and innovation funding program in 2014-2020. In addition to EU-NCL, other proposed infrastructures are Nanomedicine Translational Advisory Board (TAB) which functions to select research and development proposals from academia and SME. Good Manufacturing Practice (GMP) Pilot Lines assists SMEs in process validation in clinical trials, and European clinical networks/organizations enhance efficiency in the early clinical trials (*ETP Nanomedicine White Paper Horizon 2020*, n.d.).

The existence of EU-NCL is expected to resolve pre-clinical research issues of drug delivery nanomedicine. The objective of EU-NCL is to facilitate research institutes and SMEs in conducting physicochemical and biological assays. Therefore, their clients (research institutes and SMEs) understand PK/PD, safety-toxicity profiles and immunological effects of their nanomedicines. It also aims to develop standard operating procedures (SOP) for each physicochemical and biological characterization. Currently, EU-NCL has issued



characterization for nanomedicine on physicochemical analysis which has been available on its website. In addition, it is expected to help the EMA to formulate regulation, guideline, and standard for nanomedicine based on its data collection and experiences (*ETP Nanomedicine White Paper Horizon 2020*, n.d.).

The EU-NCL also facilitates biology and cell culture, in vitro - in vivo toxicology, immunology assays for biological characterization related to safety-toxicity analysis. The EU-NCL estimates that a full characterization from product of nanomedicines submission until in vivo study will take approximately one year. Submitted nanomedicines will be selected according to their benefits on health care, specifically on clinical cancer application. The selected nanomedicine will be characterized without being charged (*ETP Nanomedicine White Paper Horizon 2020*, n.d.).

In practice, the ETPN uses the existing laboratories and built-up facilities which are managed by an independent center. The management independent center functions to coordinate logistic, supervise analytical process and assure the quality of characterization process. As a decentralized network, the nine partner-laboratories of EU-NCL spread in eight countries. They are CEA-Tech in France; the Joint Research Centre (JRC) of the European Commission in Italy; European Research Services GmbH in Germany; Leidos Biomedical Research, in USA; Trinity College Dublin in Ireland (TCD); SINTEF in Norway; the University of Liverpool in the UK; Empain Switzerland; Westfälische Wilhelms-Universität (WWU) and Gesellschaft für Bioanalytik, both in Münster, Germany. Among those nine-partner laboratories, only SINTEF, JRC and ULP are responsible for pre-clinical research, meanwhile the others work on chemical characterizations of the nanomedicine (*ETP Nanomedicine White Paper Horizon 2020*, n.d.).

Physiologically based Pharmacokinetics Modelling: predict nanomedicines' fate in the human body

Physiologically based pharmacokinetics (PBPK) modeling is a mathematical model to predict pharmacokinetic parameters obtained from pre-clinical research. This model is an improvement compared to the conventional pharmacokinetics model. The old model is only used to calculate drug related data which is obtained in pre-clinical experiments, but the PBPK model can be used to predict various parameters from a set of experimental data, which are beneficial in pre-clinical research of nanomedicine (Espíe et al., 2009; Li et al., 2014).

PBPK modelling provides a flexible application to predict a number of pharmacokinetics parameters with limited number of experimental data. In the early days of its application, PBPK modeling was used to extrapolate pharmacokinetic data among species. For instance, clearance in humans is predicted by multiplying an allometric coefficient with clearance in animal (from pre-clinical researches) (Espíe et al., 2009). Allometric coefficient is a ratio presenting the relationship between body size and shape (White & Gould, 2009). Currently PBPK modelling is also used to estimate pharmacokinetic profiles in different physiological conditions, for different ages, disease states, tissues and organs. Therefore, PBPK modelling is proposed to overcome limitation of pharmacokinetics study on drug delivery nanomedicine (Moss & Siccardi, 2014).



Drug delivery nanomedicine tends to accumulate in tissues and are not only metabolized by the metabolizing organ (eg. liver), but also in their target site. Since standards and methods for those studies are not available yet, PBPK modelling can be applied to predict the required pharmacokinetics parameters from the experimental data that are obtained by using conventional pharmacokinetics assays. Moreover, the fate of pharmacokinetic profiles of drug delivery nanomedicine in the human body can be predicted before clinical trial is performed (Mingguang et al., 2010; Moss & Siccardi, 2014).

In March 2014, FDA held a workshop to discuss the application of physiologically based pharmacokinetics (PBPK) modelling in regulatory-decision making. This workshop was attended by delegations from FDA Center for Drug Evaluation and Research (CDER); EMA; industries and research institutes (Wagner & Husing BAK, 2008). The workshop focused on (1) application of the PBPK model in drug-drug interactions; pharmacokinetics prediction in human or first in human clinical trial; and specific populations and conditions (eg. organ impairment, pediatric and geriatric, various race groups, pregnancy, food intake, new formulation, tissues and intracellular concentrations) and (2) validation of the mathematical method and verification of the obtained data (Wagner & Husing BAK, 2008). Particularly for drug delivery nanomedicine, the application of PBPK is beneficial for tissues, organs and intracellular concentrations (Espíe et al., 2009).

Li, et al (37) used the PBPK model to determine pharmacokinetics parameter of PEG-coated polyacrilamide nanomedicine (Li et al., 2014). In all laboratory experiments, only five groups of rats (3 rats per group) were used. They were treated with a single intravenous dose of labeled PEG-coated polyacrilamide nanomedicine. From the experiment pharmacokinetics parameters in the blood were obtained. Interestingly, pharmacokinetics parameters in liver, lungs, heart, kidneys, spleen, bone marrow, and the rest of body were able to be accurately calculated using the PBPK model. PBPK also was used to estimate distribution of charge and size dependent-drug delivery nanomedicine in various tissues and organs (Mager et al., 2012). However, the challenging in PBPK model is to decide relevant coefficients and to determine mathematical formula for every parameter (Espíe et al., 2009).

In 26 June 2014, a concept paper for PBPK qualification and reporting was launched by the EMA. Four days after the concept paper was launched, the Association of the British Pharmaceutical Industry (ABPI) and Medicines and Healthcare products Regulatory Agency (MHRA) held a forum discussing four main topics of the PBPK model i.e: (1) Standardization for drug input data (2) verification of data input parameters (3) standardization for software, statistical and mathematical model used for PBPK (4) guidance report for PBPK model analysis (*Concept Paper of PBPK*, n.d.).

Currently, PBPK has been included in several EMA Guidelines (eg. Evaluation of Pharmacokinetics of Medical Products in Patients with Impaired Hepatic Function; Guideline on the use of Pharmacogenetic Methodologies, and Guideline for Drug-Drug Interaction). It is also planned to include PBPK in a guideline for new chemical entities) (*Concept Paper of PBPK*, n.d.).

Research and development on nanomedicine massively rise in the current era. But, thus far, no specific regulatory and guidance for nanomedicine exist. It creates issues for classification and evaluation of nanomedicine (van Calster & D'Silva, 2009). (Drug delivery)



nanomedicines are regulated by a combination of relevant existing regulations and guidance for medical products and medical devices (Spyridoula, 2013). Previously, some simple-formulated nanomedicine such as Abraxene could fall under regulation of medical products (30). But recently developed-drug delivery nanomedicines are not limited to liposomal-products or conjugated-products that are available on the market (Tinkle et al., 2014).

Eventhough a number of drug delivery nanomedicines have been approved as a novel invention, validated standards and methods for pre-clinical researches are still limited. This becomes an obstacle for regulatory agencies to formulate standards for nanomedicine assessment (1)(WHO Expert Meeting, 2012).

The conventional methods to evaluate safety and toxicity using dose-response analysis are not entirely suitable for drug delivery nanomedicine. The safety and toxicity of drug delivery nanomedicine does not only depend on dose or mass, but also on surface area-to-volume ratio (WHO Expert Meeting, 2012). In addition, it is commonly used in low dose, so it is questionable if the current available method is sensitive enough to be applied on nanomedicine (WHO Expert Meeting, 2012). PK/PD properties of drug delivery nanomedicine are not similar with those of conventional medicine. They are altered by the unique characteristics such as nanosize, delivered to specific target, accumulates in certain cells/tissues/organs and able to cross biological barrier. Thus, more specific assessments, particularly in pre-clinical research, need to be applied in drug delivery nanomedicine (Mingguang et al., 2010; Moss & Siccardi, 2014; The Nanomedicine Revolution, Part 3, n.d.).

Currently, the EMA suggests nanomedicine assessment needs to be conducted on a case-by-case basis because of the uniqueness of individual nanomedicines. As an example, the reflective paper for liposomal products is based on the success of Doxil, the originator of liposomal based-nanomedicine. Doxil was approved more than 20 years ago, long before safety and toxicity issues for the use of nanomedicine arised (Jain KK, 2008). Doxil is a passive delivery system, meaning that it circulates naturally in the biological system or in the human body and do accumulates only in liver and spleen, instead of in other specific targets. It has successfully showed efficacy in liver tumor therapy, even though in the first clinical trial, adverse effects such hand-foot syndrome and complement activation were found (Tinkle et al., 2014). However, nanomedicines in development are nowadays more advanced than existing marketed nanomedicine. Active targeting delivery becomes more preferable than passive targeting delivery. Besides, more elaborated delivery system are developed for diseases with more complicated mechanism. Hence, the Doxil-based reflective paper might be not suitable anymore.

No particular standards are actually mentioned in those reflective papers, only references to accepted specifications of initiator nanomedicine are included (*The EMA Reflective Paper*, n.d.). In some cases, it causes uncertainty for industry and research institutes to select and use appropriate standards and methods (*ETP Nanomedicine White Paper Horizon 2020*, n.d.; WHO Expert Meeting, 2012). Therefore, a specific regulatory and guidance are urgently needed to ensure that assessment for the upcoming nanomedicine products will be more appropriate.

Formulating standards and methods in regulations and guidance may not be the most optimal and effective way. Consequently, shortcuts solutions are considered to overcome this



limitation following the rapid and progressive research and development of drug delivery nanomedicine. The existence of EU-NCL is considered as a comprehensive action for nanomedicine pre-clinical research issues (*ETP Nanomedicine White Paper Horizon 2020*, n.d.). It provides benefits for both the research institutes and the SMEs or for the regulatory agency. Pre-clinical data collected by the EU-NCL is used to assist regulatory agencies to formulate regulations and guidance for (drug delivery) nanomedicine. However, it is only a five-year project, it is not permanent yet (*ETP Nanomedicine White Paper Horizon 2020*, n.d.). Another solution is to use a mathematical model to solve issues around pharmacokinetic studies, such as PBPK model. This model has resolved limitations of experimental pharmacokinetics studies in specific populations and conditions (eg. race, disease stage, pregnancy, age). It could also provide a solution for pre-clinical researches on drug delivery nanomedicine (Espíe et al., 2009; Mager et al., 2012; Mingguang et al., 2010; Moss & Siccardi, 2014). Such methodological advancements can facilitate the formulation of regulatory requirements in the nanomedicine field.

Updated Regulations for Nanomedicine

A new classification of drug, namely non biological drug complex or NBCD was proposed to overcome regulation of nanomedicine that could not be categorized to any conventional drug regulations (Schellekens et al., 2014). To be characterized as NBCD the drug should meet some requirements such as not a bioproduct medicines; not homo-molecular yet commonly nanoparticulate; could not fully characterized by physicochemical analysis; the process of manufacturing determines the quality, safety, and efficacy of the product (Gaspar et al., 2020).

In 2018, the FDA released Guidance for Industry of Liposome Drug Products. This is the first comprehensive guidance for a nanomedicine, specifically liposome. The regulation includes (1) description and composition of the liposomal product (drug substance, lipid, nonlipid component, inactive component; and buffers); (2) critical attributes (particle size and distribution, morphology of particles); (3) in process control (drug loading and removal of unencapsulated drug); (4) control of lipid components (specification of lipid components); (5) drug product specifications (total drug substance; residual solvent; lipid degradation related products); (6) stability; (7) post-manufacturing changes; and bioavailability and bioequivalence; pharmacokinetics profile (absorption, distribution, metabolism, and excretion); biopharmaceutics (drug release, *in vitro* – *in vivo* correlation; other substances – lipid interaction) (Liposome Drug Products Chemistry, Manufacturing, and Controls; Human Pharmacokinetics and Bioavailability; and Labeling Documentation Guidance for Industry, 2018).

In 2022, FDA then release the subsequent regulation related to nanomedicine products, the Guidance for Industry: Drug Products, Including Biological Products, that Contain Nanomaterials. In general, this guidance focuses on risk-based strategies and the other general regulations, for examples (1) risks by products (characterization of nanoparticles; intended use and application; product quality, safety, and efficacy; degradation and elimination; well characterized excipients); quality assessment (well developed and validated assay method); clinical studies (sufficient and appropriate data); manufacturing controls (robust process; in process control; prevention of cross contamination); drug release profile; environmental impact



(solid and liquid wastes; epigenetic modifications) (Drug Products, Including Biological Products, That Contain Nanomaterials Guidance for Industry Contains Nonbinding Recommendations, 2022).

The release of the updated regulations in nanomedicine rises better anticipation in new nanomedicine products. Therefore, it is expected that potential risks could be significantly avoid and reduced leading to higher safety and efficacy for the patients.

CONCLUSION

Drug delivery nanomedicine have unique properties which influence the way it interacts with biological system or with the human body. Consequently, the interaction needs to be assessed by specific methods and standards. Since the specific and methods and standards are not available yet, drug delivery nanomedicines are assessed on a case-by-case basis. This also complicates the formulation of regulations and guidance for pre-clinical researches on nanomedicines. Hence, other initiatives were found that can provide shortcuts to bridge gaps between regulations and scientific challenges in the nanomedicine field. The EU-NCL is actively participating in formulating standards and regulations for nanomedicine. Furthermore, the development of new methodologies can resolve limitations of laboratory experiments, such as the PBPK modelling. Such mathematical model might be useful to explore drug delivery nanomedicine and standardize pharmacokinetic studies. By facilitating the collection of complete data in pre-clinical researches, it is expected that nanomedicine specific regulations can be formulated in the future.

ACKNOWLEDGEMENT

The authors would like to thank to Indonesia Endowment Fund for Education Agency (2014 – 2016).

REFERENCES

- Abraxane Assessment Report. (n.d.).
- Akbarzadeh, A. (2013). Liposome, classification, preparation, and application. *Nanoscale Research Letter*, 8(1), 102.
- Barenholz, Y. (2012). The first FDA-approved nano-drug: Lessons learned. *Journal of Controlled Release*, 160, 117–134.
- Caelyx Assessment Report. (n.d.).
- Concept paper of PBPK. (n.d.).
- Dorbeck-Jung, B. R., & Chowdhury, N. (2011). Is the European Medical Products Authorisation Regulation Equipped to Cope with the Challenges of Nanomedicines? *Law and Policy*, 33(2), 276–303. <https://doi.org/10.1111/j.1467-9930.2011.00339.x>
- Drug Products, Including Biological Products, that Contain Nanomaterials Guidance for Industry Contains Nonbinding Recommendations. (2022). <https://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm#and/or>
- Espié, P., Tytgat, D., Sargentini-Maier, M.-L., Poggesi, I., & Watelet, J.-B. (2009). Physiologically based pharmacokinetics (PBPK). *Drug Metabolism Reviews*, 41(3), 391–407. <https://doi.org/10.1080/10837450902891360>
- ETP Nanomedicine White Paper Horizon 2020. (n.d.).
- Ferruti, P., Emilietri, E., Veronese, F. M., Pasut, G., Schiavon, O., & Mero, A. (n.d.). A Biodegradable polymeric carrier based on PEG for Drug Delivery. *Medical Chemistry*.
- Gaspar, R. S., Silva-Lima, B., Magro, F., Alcobia, A., da Costa, F. L., & Feio, J. (2020). Non-biological Complex Drugs (NBCDs): Complex Pharmaceuticals in Need of Individual Robust Clinical Assessment Before Any Therapeutic Equivalence Decision. In *Frontiers in Medicine* (Vol. 7). Frontiers Media S.A. <https://doi.org/10.3389/fmed.2020.590527>
- Hafner, A., Lovrić, J., Lak, G. P., & Pepić, I. (2014). Nanotherapeutics in the EU: An overview on current state and future directions. In *International Journal of Nanomedicine* (Vol. 9, Issue 1, pp. 1005–1023). <https://doi.org/10.2147/IJN.S55359>
- Horowitz, A., Barenholz, Y., & Gabizon, A. (1992). In vitro cytotoxicity of liposome-encapsulated doxorubicin: dependence on liposome composition and drug release. *Biochimica et Biophysica Acta*, 1109, 203–209.
- ICH Safety Guidelines. (n.d.).
- Jain KK. (2008). Ethical, Safety, and Regulatory Issues of Nanomedicine. In K. Jain (Ed.), *The Handbook of Nanomedicine*. Homana Press.



- Kabanov, A. V., & Vinogradov, S. V. (2009). Nanogels as pharmaceutical carriers: Finite networks of infinite capabilities. In *Angewandte Chemie - International Edition* (Vol. 48, Issue 30, pp. 5418–5429). <https://doi.org/10.1002/anie.200900441>
- Kohli, A., & Desai, S. (2012). Nanomedicine: Current regulatory scenario and prophylactic regulatory strategies, *Regulatory Focus*.
- Krukemeyer, M., Krenn, V., Huebner, F., Wagner, W., & Resch, R. (2015). History and Possible Uses of Nanomedicine Based on Nanoparticles and Nanotechnological Progress. *Journal of Nanomedicine and Nanotechnology*, 6(6).
- Lammers, T., Hennink, W. E., & Storm, G. (2008). Tumour-targeted nanomedicines: Principles and practice. In *British Journal of Cancer* (Vol. 99, Issue 3, pp. 392–397). <https://doi.org/10.1038/sj.bjc.6604483>
- Li, D., Carlander, U., Philbert, M., Jolliet O, Johanson, G., & Emond, C. (2014). Physiologically based pharmacokinetics modeling of polyethylene glycol-coated polyacrylamide nanoparticles in rats. *Nanotoxicology*, 8, 128–137.
- Liposome Drug Products Chemistry, Manufacturing, and Controls; Human Pharmacokinetics and Bioavailability; and Labeling Documentation Guidance for Industry. (2018). <http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm>
- Mager, D. E., Mody, V., Xu, C., Forrest, A., Lesniak, W. G., Nigavekar, S. S., Kariapper, M. T., Minc, L., Khan, M. K., & Balogh, L. P. (2012). Physiologically Based Pharmacokinetic Model for Composite Nanodevices: Effect of Charge and Size on In Vivo Disposition. *Pharmaceutical Research*, 29(9), 2534–2542. <https://doi.org/10.1007/s11095-012-0784-7>
- Mandate of EMA-ITF. (n.d.).
- Mingguang, L., Al-Jamal K, T., Reineke, J., & Kostarelos, K. (2010). Physiologically Based Pharmacokinetic Modeling of Nanoparticles . *ACS Nano*, 4(11), 6303–6317.
- Moss, D., & Siccardi, M. (2014). Optimizing nanomedicine pharmacokinetics using physiologically based pharmacokinetics modeling. *British Journal of Pharmacology*, 171, 3963–3979.
- Nanomedicine. (n.d.).
- Nanomedicine: what's in a definition? (2006). <http://nihroadmap.nih.gov/nanomedicine/>.
- Neulasta Summary for The Public . (n.d.).
- Nikalje, A. P. (2015). Nanotechnology and its Applications in Medicine. *Medicinal Chemistry*, 5(2). <https://doi.org/10.4172/2161-0444.1000247>
- Propofol Assessment Report . (n.d.).
- Regulatory Framework of Medical Devices. (n.d.).



- Sainz, V., Connot, J., Matos, A. I., Peres, C., Zupančič, E., Moura, L., Silva, L. C., Florindo, H. F., & Gaspar, R. S. (2015). Regulatory aspects on nanomedicines. *Biochemical and Biophysical Research Communications*, 468(3), 504–510. <https://doi.org/10.1016/J.BBRC.2015.08.023>
- Sanna, V., Pala, N., & Sechi, M. (2014). Targeted therapy using nanotechnology: Focus on cancer. In *International Journal of Nanomedicine* (Vol. 9, Issue 1, pp. 467–483). <https://doi.org/10.2147/IJN.S36654>
- Schellekens, H., Stegemann, S., Weinstein, V., De Vlieger, J. S. B., Flühmann, B., Mühlebach, S., Gaspar, R., Shah, V. P., & Crommelin, D. J. A. (2014). How to regulate nonbiological complex drugs (NBCD) and their follow-on versions: Points to consider. In *AAPS Journal* (Vol. 16, Issue 1, pp. 15–21). <https://doi.org/10.1208/s12248-013-9533-z>
- Sonal, S., Prabhakar, V., Aneesh, T., & Sabitha, M. (2007). Nanomedicine: Promise Of The Future In Disease Management. In *The Internet Journal of Nanotechnology* (Vol. 2).
- Spyridoula, P. (2013). *Nanomedicine in Europe: Regulating under Uncertainty*. Tilburg University.
- The EMA reflective paper. (n.d.).
- The Nanomedicine Revolution, Part 3. (n.d.).
- Theranostic. (2010).
- Tinkle, L., Mc Neil, S. E., Muhlebach, S., Bawa, R., Bochar, G., Barenholz, Y., Tamarkin, L., & Desai, N. (2014). Nanomedicine: addressing the scientific and regulatory gap. *Annals of the New York Academy of Sciences*, 1313, 35–56.
- Tomellini, R., Faure, U., & Panzer, O. (2005). Vision Paper and Basis for a Strategic Research Agenda for NanMedicine (Vision Paper. European Technology Platform on NanoMedicine–Nanotechnology for Health.).
- van Calster, G., & D’Silva, J. (2009). Taking Temperature — A Review of European Union Regulation in Nanomedicine. *European Journal of Health Law*. 16(3), 249–269.
- Ventola, C. (2012). The Nanomedicine Revolution Part 3: Regulatory and Safety Challenges. *P&T*, 631–639.
- Wagner, V., & Husing BAK. (2008). Nanomedicine: Drivers for development and possible impacts.
- Welling, P. G. (n.d.). Differences Between Pharmacokinetics and Toxicokinetics*.
- White, J., & Gould, S. (2009). Interpretation of The Coefficient in the Allometric Equation. *Poggesi & Jean-Baptiste Watelet*.
- WHO Expert Meeting. (2012). *Nanotechnology and human health: Scientific evidence and risk governance*.



CLIENT PERSPECTIVE ON DRUG REHABILITATION LEGAL REFERENCES IN JABODETABEK, 2021

Bambang Yulistyo Tedjo*

AKSI Keadilan Indonesia

*Corresponding author: bambang.yulistodyodm@aksikeadilan.org

ABSTRACT

An evaluation of AKSI's legal assistance activities was conducted through a quick survey that analyzed client perspectives on drug rehabilitation referred through legal processes in the Jabodetabek area. These legal processes include arrest, investigation, prosecution, trial, and legal remedies. The purpose of this quick survey is to obtain reflective information from AKSI's paralegal clients who have undergone drug rehabilitation in drug dependency treatment centers (rehabilitation centers) after being arrested and/or undergoing legal processes. This quick survey utilized a quantitative, cross-sectional approach, where the information gathered from respondents reflects their situation at the time of data collection. The quick survey was conducted through interviews using structured questionnaires with selected respondents. The sampling method used was purposive sampling, with the assistance of a sample framework containing anonymized encrypted data from AKSI clients from 2020-2021. Ethical Clearance approval for this quick survey was obtained from the Ethics Committee of Research at the Institute for Research and Community Service, Atma Jaya University, through letter number: 0032K/III/LPPM-PM.10.05/12/2021, dated December 18, 2021. The findings of this quick survey include the following: Through AKSI's assistance, respondents' need for therapeutic drugs were met, both in the legal process and during rehabilitation; For inpatient facilities at rehabilitation institutions, more than half of the respondents who stayed in the rehabilitation centers rated the facilities as "poor" and "very poor." Approximately 17% of respondents rated the facilities as "good" and "very good"; Verbal and physical violence experienced by respondents were uncontrollable events as they occurred spontaneously and without AKSI's assistance at the time of the incident. Economic violence, however, was a controllable event because there were stages of negotiation and consultation conducted with AKSI. All AKSI clients who needed continuous therapeutic medication (ARV and Methadone) had their needs met. AKSI's legal assistance also helped respondents/families obtain cost-free rehabilitation services and reduce the impact of economic violence or extortion attempts.

Keywords: *Legal Assistance, Drug Rehabilitation, Legal Referral, Jabodetabek, Client Perspective, Quick Survey, Evaluation*

INTRODUCTION

In 2015, Indonesia declared a war on narcotics under President Jokowi's administration and considered this a strong commitment to tackling the narcotics problem. This is accompanied by a policy that forces users to report themselves to institutions appointed by the government called mandatory reporting recipient institutions (IPWL), as well as the implementation of mandatory narcotics dependency treatment (rehabilitation) for users. Efforts to encourage users to undergo therapy and rehabilitation are often targeted to increase exponentially.²

Narcotics policy activists initially welcomed this policy as a concrete step in implementing Narcotics Law no. 35 of 2009. This policy could be a more humane alternative compared to repressive behavior that places drug users in prison. In practice, implementation of Narcotics Law No. 35 is inconsistent and undermined by systemic corruption in the police and in the criminal justice system.³ When looking at the implementation of this policy in the field, it is clear that the policy still has not had an optimal impact, both in terms of reducing demand (*demand reduction*), reducing supply (*supply reduction*) and reducing bad impacts (*harm reduction*).

The number of arrests of narcotics users is still increasing in various regions in Indonesia. This has not changed at all since before the mandatory reporting policy was introduced. In most cases, extortion involves a request for money by law enforcement officers in exchange for a lesser charge, a dismissal of the case, or a referral for drug addiction treatment, most of which is referred to a police partner rehabilitation institution. Some users were reportedly forced by authorities to "snitch" their drug-using friends in order to reduce or drop charges.⁴

What seems to indicate a change when viewed from the correctional database is the reduction in the number of detainees and convicts who are categorized as 'dealers'. What is currently unfortunate is the closure of public access to sites in the correctional database system belonging to the Director General of Corrections, Ministry of Law and Human Rights. Previously, this site was very easy to access and became a reference for activists and academics in reviewing developments in criminal cases, especially those related to narcotics.⁵

The Indonesian Justice Action Foundation (AKSI) is a community-based organization that was formed in 2018 with the aim of providing support to narcotics users and vulnerable communities seeking justice. AKSI provides legal education and assistance, both in litigation and non-litigation. In implementing its program, AKSI recorded public complaints from various regions in Indonesia which progressively increased in number, namely 52 complaints in 2018 and then continued to increase to 109 (2019) and 186 (2020).

Most of the complaints received came from families who reported that their family members were in police custody after being arrested. From the data for the three years, it was also found that there was an increasing trend in the number of AKSI clients who went

2 <https://setkab.go.id/tidak-ada-ampun-presiden-jokowi-kejar-dan-tangkap-bandar-dan-pengedar-drug>

3 Indonesia's mandatory reporting program for drug users and its compliance with the International Human Rights Standards. Jakarta, Indonesia: Community Legal Aid Institute; 2016

4 Soicescu, Claudia; Women Speak: Understanding women who inject drugs in Indonesia; University of Oxford; 2017; p.12

5 http://sdp.ditjenpas.go.id/sdp_website



through a series of assistance processes and were then released from detention or referred to drug addiction rehabilitation treatment, namely 29.5% (2018), 44.6% (2019) and 54.2% (2020). This achievement cannot be separated from the assistance provided by AKSI involving not only paralegals, but also legal advisors.

As part of the evaluation of the activities carried out by AKSI, evaluative information collection activities were carried out through rapid assessments that analyzed client perspectives on drug rehabilitation from legal process references in the Jabodetabek area. The legal process includes several stages, namely starting from arrest, investigation, investigation, prosecution, trial and legal action.

METHODOLOGY

In general, the aim of this rapid assessment is to obtain reflective information from AKSI clients who have undergone drug rehabilitation at a drug addiction treatment center (rehabilitation home) after they were arrested and/or underwent legal proceedings.

This rapid assessment specifically aims to obtain:

1. Socio-demographic description of AKSI clients who were referred to rehabilitation through the legal process;
2. Description of general health-related services received;
3. Description of services related to HIV testing and/or treatment
4. Description of services related to drug recovery received from rehabilitation services;
5. Description of the treatment model and service facilities (place and consumption) while undergoing rehabilitation;
6. An overview of the potential for verbal/non-verbal violence in rehabilitation institutions

This rapid assessment was carried out to answer research questions as below.

1. What is the socio-demographic picture of AKSI clients who are referred to rehabilitation through legal process referrals?
2. How do AKSI clients receive general health services?
3. How do health services relate to HIV testing and/or treatment?
4. What are the services related to drug addiction received from rehabilitation services?
5. What is the model of care and service facilities (place and food) obtained when undergoing rehabilitation?
6. What is the potential for verbal/non-verbal violence in the legal and rehabilitation process?



RESULTS AND DISCUSSION

Data Collection Stage

The field data collection stage of this rapid assessment activity was carried out for 10 (ten days) with a total of 41 (forty one) respondents interviewed. The interview process was carried out by 6 (six) interviewers who used the Google Form application as a data collection tool. Thus there is no need for a data input stage. Monitoring of incoming data from day to day is carried out by the Principal Researcher and Research Coordinator. Communication and confirmation to the interviewer is carried out immediately if there are answers to the questionnaire that are unclear or inconsistent. Routine coordination of the data collection team is facilitated by the Field Coordinator.

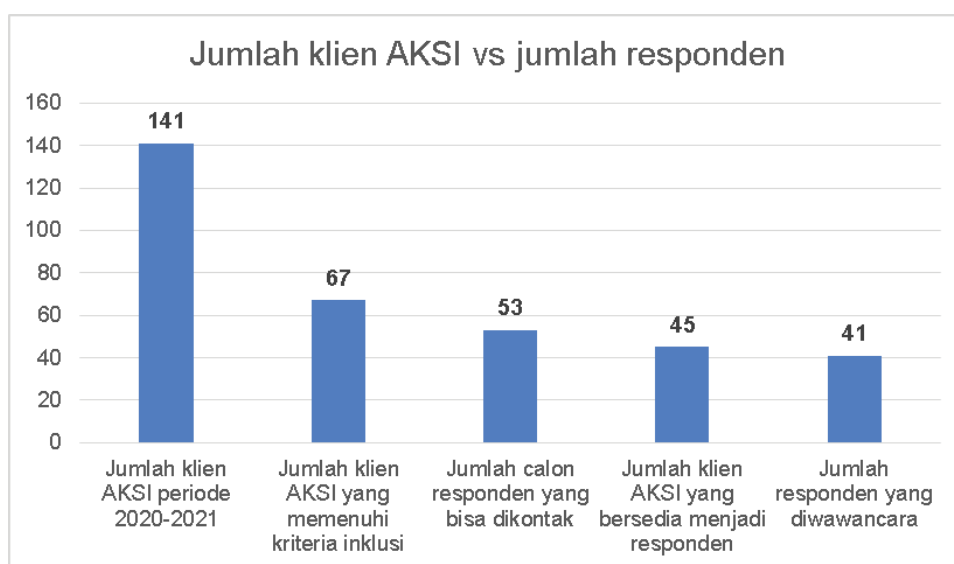


Figure 1: Number of AKSI clients vs Number of Respondents

The sample frame containing AKSI client data for the 2020-2021 period was processed to obtain a number of respondents to be interviewed. The image above explains the stages carried out by the Field Coordinator before obtaining the number of potential respondents who are willing to be interviewed.

There were 8 (eight) people who met the inclusion criteria but refused to be involved as respondents for various personal reasons. Of the 45 (forty-five) prospective respondents, only 41 (forty-one) people were successfully interviewed because the prospective respondents were out of town, it was difficult to determine the time for the interview due to work or other activities and because the time period for collecting field data was limited to only a week. third in December 2021.

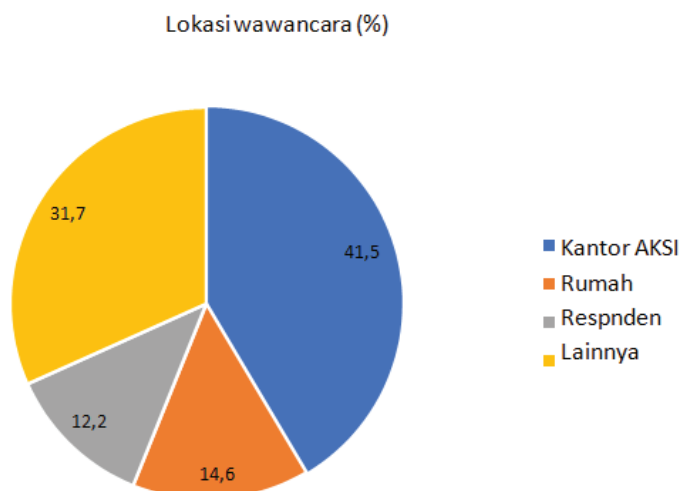


Figure 2: Interview Location

Interviews were conducted face-to-face at the AKSI office, the respondent's home and others according to the respondent's convenience or choice. There were around 32% of respondents or 13 (thirteen) people who chose to conduct virtual interviews via *video call*.

Social – Respondent Demographics

The coverage area of this research is Jakarta Metropolitan Area. This is the work area of the AKSI paralegal program. In practice, not all respondents carry out rehabilitation in the city where the respondent lives. This depends on the location of the arrest when the respondent is faced with a legal case related to narcotics. From the questionnaire, information was obtained on the areas where respondents carried out rehabilitation from legal process referrals, namely in Jakarta, Bogor, Tangerang and Bekasi. There is no rehabilitation center in the city of Depok that is a rehabilitation location for legal process referrals. Based on the observations of the AKSI paralegal team who usually accompany clients, most of these rehabilitation institutions are used to receiving referrals from individuals who are in conflict with the law from the police.



Lokasi tempat rehabilitasi responden dari rujukan proses hukum (%)

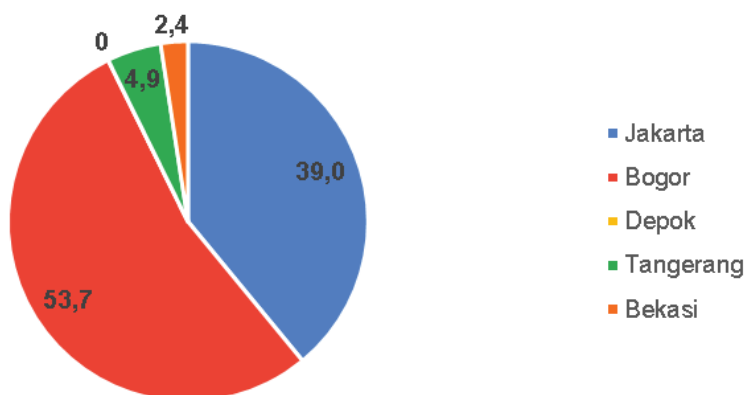


Figure 3: Interview Location

Some respondents carry out drug rehabilitation from legal process referrals at rehabilitation institutions located in Jakarta (39%) and Bogor (54%). There were 5% of respondents undergoing rehabilitation in Tangerang and a small number in Bekasi (2.4%).

Gender (%)

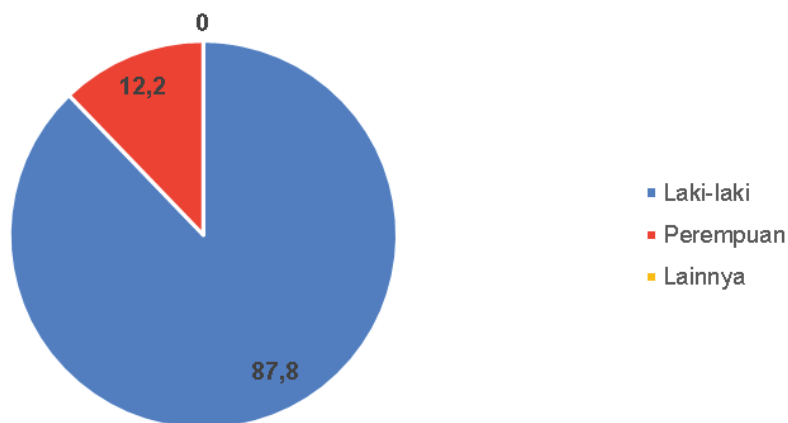


Figure 4: Gender

Most of the respondents were men (87.8%) and the rest were women (12.2%). There are no clients of the AKSI paralegal program yet who come from the Transgender group.



Kategori usia responden (%)

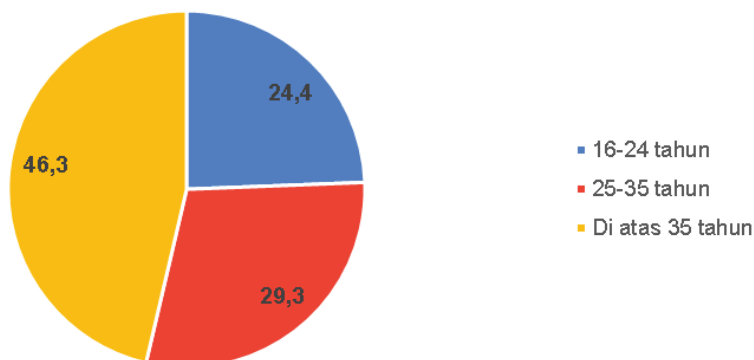


Figure 5: Respondent Age Categories

The age range of respondents was between 16 and 51 years. With an average (median) age of 34 years. There were 2 (two) respondents under 18 years of age whose consent to the respondent's involvement was requested from the respondent's parents or guardians. Most respondents (46.3%) were over 35 years old. One third of respondents were in the 25-35 year age range. One in four respondents is in the youth category (24 years and under).

Status pernikahan responden (%)

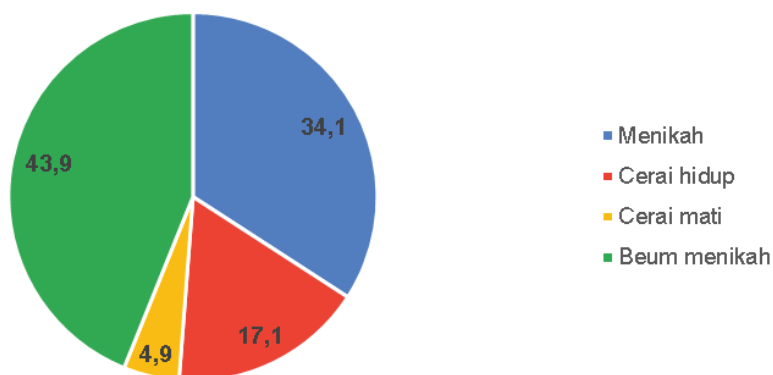


Figure 6: Marital Status of Respondents

Around 44% of respondents said they were not married and one third of respondents were married. One in five respondents stated that they were divorced alive and a small percentage (5%) stated that they were divorced by death.



Pendidikan terakhir responden (%)

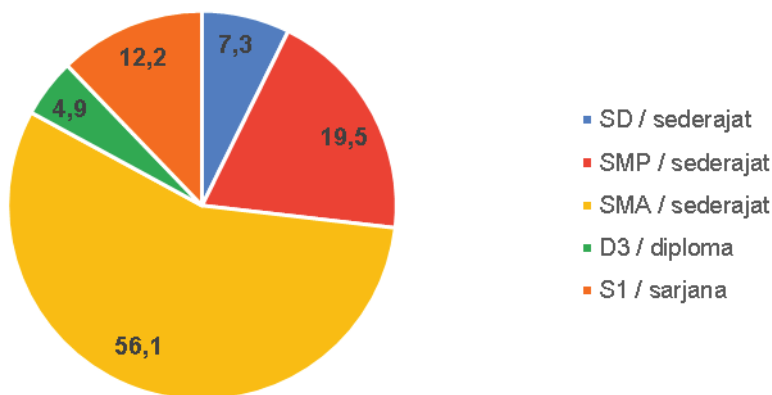


Figure 7: Respondent's Last Education

More than half of the respondents (56%) had a high school education. Followed by a number of respondents with junior high school education, namely 1 in 5 respondents (19.5%). There was a small proportion of respondents with elementary school education (7.3%). Only 12.2% of respondents had a bachelor's degree and 5% of respondents had a diploma.

Pekerjaan utama responden (%)

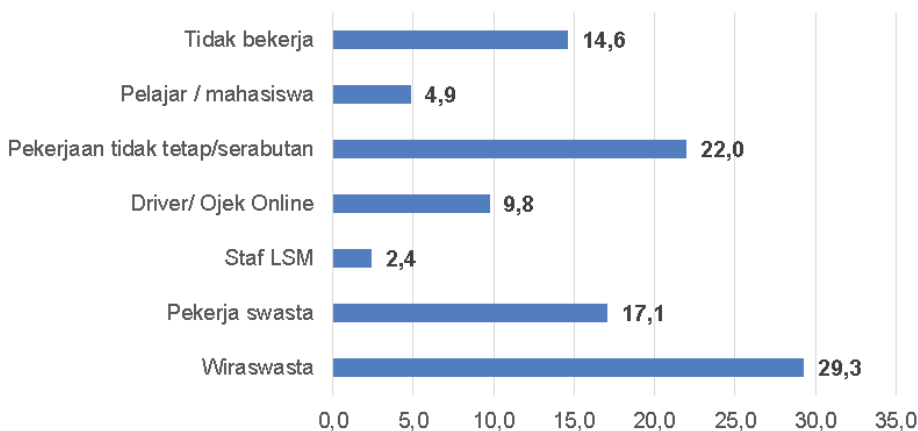


Figure 8: Main Jobs

Most respondents have jobs, ranging from self-employed (29.3%), temporary jobs (22%), private workers (17.1%), online motorcycle taxi drivers (9.8%), and NGO staff (2.4%). 14.6% of respondents did not have work and 4.9% still had student status.



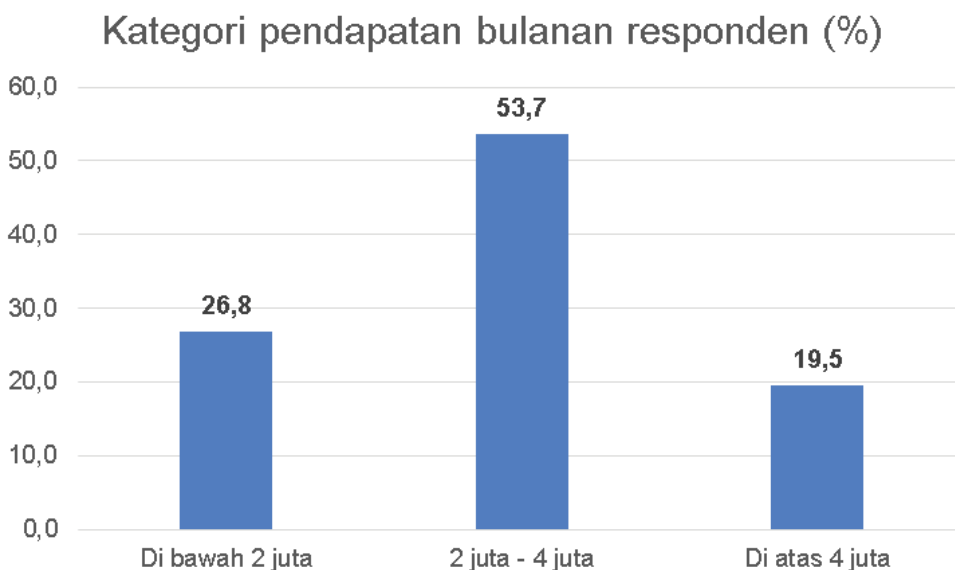


Figure 9: Monthly Income

Monthly income for those who do not work and students can come from parents, family or partners. Overall monthly income of respondents, minimum: IDR 50,000 (fifty thousand rupiah), maximum: IDR 60,000,000 (sixty million rupiah) with an average (median) of IDR 2,000,000 (two million rupiah). If you look at the figure above, almost 75% of respondents have a monthly income above the average.

Kepemilikan KTP / kartu BPJS Kesehatan yang berlaku (%)

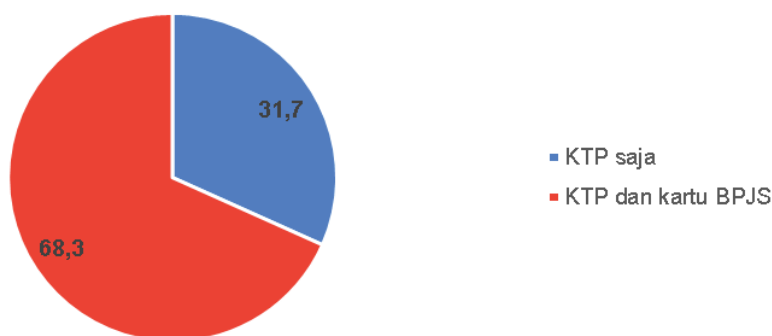
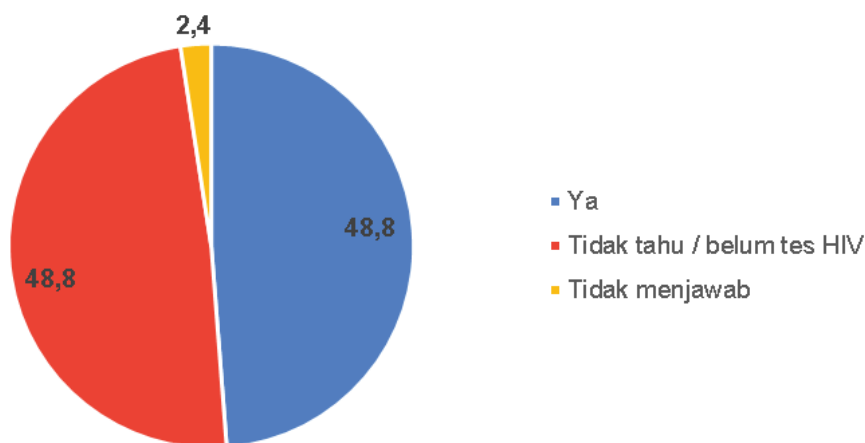


Figure 10: Ownership of Identity Cards and Health Insurance

Nearly 70% of respondents have a valid or active BPJS Health card. All respondents have KTPs which are valid as personal identity cards.



Responden tahu status HIV (%)

**Figure 11:** Known HIV Status

Because drug use behavior is related to the risk of exposure to HIV, either from the way it is used or from loss of control over safe sexual behavior, knowing HIV status is one of the variables collected. Without providing the results of their HIV test, half of the respondents already knew their HIV status and the other half did not know or had never been tested for HIV. Of the 48.8% (20 respondents) who knew their HIV status, 17 respondents stated that there were family/partners/colleagues who knew their HIV status. The remainder (3 respondents) stated that no one else knew their HIV status except themselves.

Health services and tests, as well as drug dependency conditions

The health services and health tests that respondents were asked about were activities to fulfill needs assessments, access to needed medicines, offer HIV testing and access to ARVs. Meanwhile, services related to the condition of drug dependence in question are assessing the condition of drug dependence, experiencing withdrawal symptoms during the legal and rehabilitation process, as well as fulfilling treatment.

Jumlah responden yang mendapatkan asesmen dan tes HIV dalam proses hukum / rehabilitasi

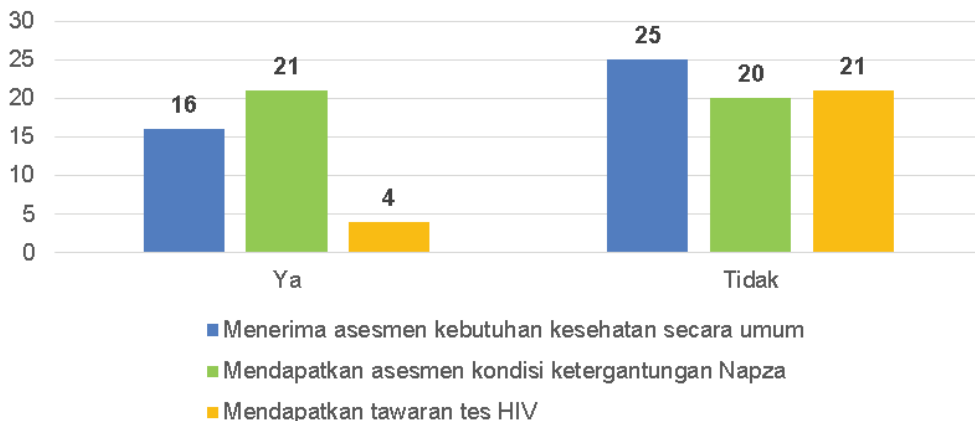


Figure 12: Health Assessment, Drug Dependence and Offer of HIV Testing

There were 39% or 16 out of 41 respondents who received a general health needs assessment. More than half of the respondents (21 people) received an assessment of their drug dependency condition. A number of respondents who did not receive a drug dependency assessment stated the reasons for not carrying out an assessment, including because the respondents were directed to make peace with the police, because they were offered assistance so they could be released immediately (so no assessment was needed), and because they were immediately picked up by the police referral rehabilitation party, because it was offered directly referred to rehabilitation, because there was no evidence and only ransom money was demanded from the family. Then there were 4 (four) respondents who stated that they had been offered an HIV test during the legal/rehabilitation process.

Jumlah responden yang sedang ART dan PTRM

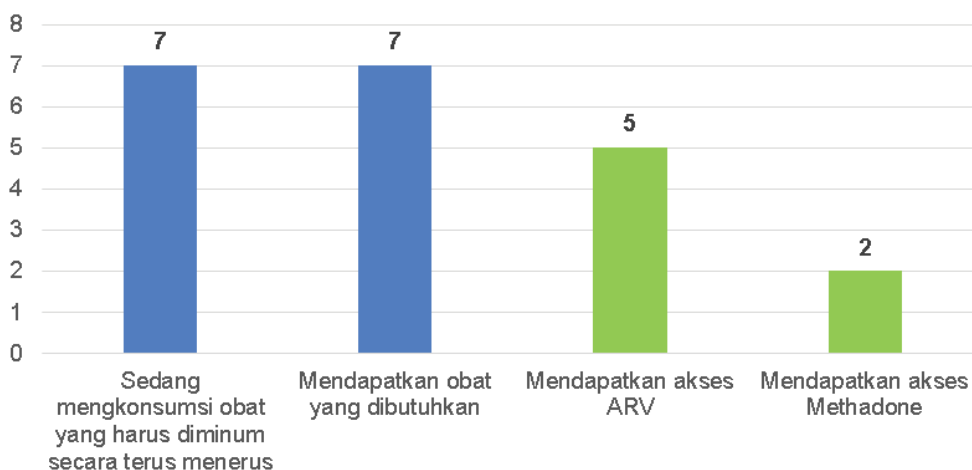


Figure 13: Respondents who are currently consuming ARVs and Methadone



Of the total respondents, there were 17.1% or 7 (seven) people who were in the legal or rehabilitation process who stated that they were taking medication that had to be taken continuously. Namely 5 (five) people who are currently undergoing ARV (anti-retroviral HIV) therapy and 2 (two) people who are undergoing PTRM (Methadone Maintenance Therapy Program). Everyone can get access to the medicine they each need. ARVs are obtained from family, wife, office friends, or rehabilitation staff. Meanwhile, Methadone was fulfilled because it was brought by the parents and the respondent was already carrying the maintenance therapy drug when he was arrested by the police. The need for these medicines was fulfilled because the respondents or their families were accompanied by AKSI.

Jumlah responden yang alami gejala putus zat dalam proses hukum / rehabilitasi

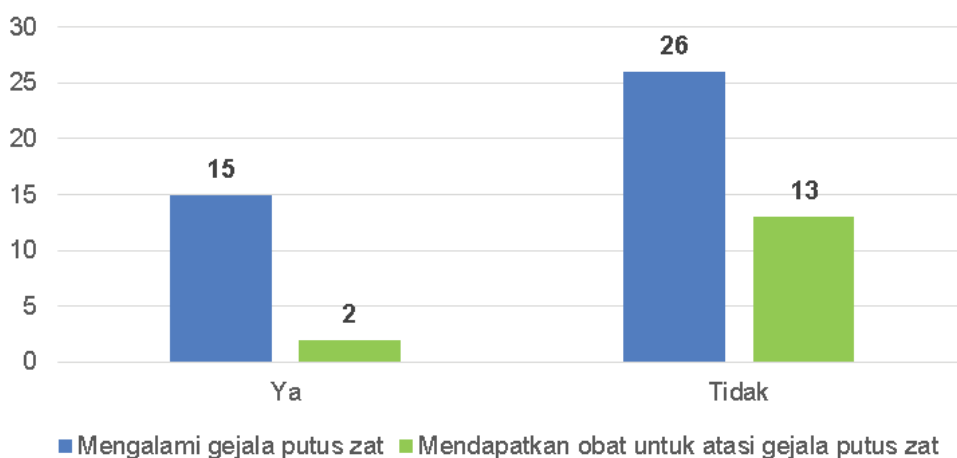


Figure 14: Withdrawal symptoms in the legal/rehabilitation process

Of the total 41 (forty-one) respondents, there were 15 (fifteen) respondents who stated that they experienced withdrawal symptoms during the legal/rehabilitation process. Only two of them received medication to treat withdrawal symptoms, namely respondents who were PTRM clients.

Drug Rehabilitation Program Services

This section will provide an overview of the types of drug rehabilitation referrals from the legal process, the level of satisfaction of respondents with rehabilitation referrals and their financing, as well as respondents' perceptions of service facilities in the form of overnight facilities and food/consumption facilities while in rehabilitation institutions.

Jenis rujukan rehabilitasi Napza dari proses hukum

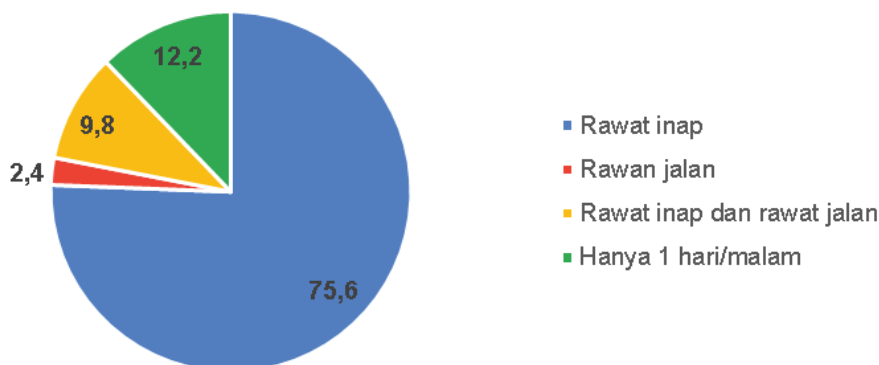


Figure 15: Types of rehabilitation referrals from the legal process

More than 75% of respondents received referrals for this treatment for drug rehabilitation which had to be carried out. Only 2.4% or one person was referred for outpatient treatment and 9.8% of respondents had to receive inpatient and outpatient rehabilitation. There were 12.2% or five respondents who were only one day/night in a rehabilitation institution and then sent home after paying the amount of money requested by the rehabilitation authority.

Table 1. Types of rehabilitation referrals, the minimum and maximum number of days for each type of rehabilitation carried out and how much it costs

Type reference rehabilitation Drugs Which executed	Amount	Percentage	Number of days minimum	Amount day maximum	Amount cost minimum	Amount cost maximum	Average cost
Treat stay	31	75.6	3	60	-	17,000,000	3,300,000
Prone road	1	2,4	24	24	-	-	-
Treat stay And take care road	4	9.8	5	14	-	750,000	500,000
Only 1 day/night	5	12.2	1	1	3,000,000	9,000,000	5,600,000

The inpatient rehabilitation undertaken by 31 (three to one) respondents lasted between 3 (three) days to 60 (sixty) days with funding varying from zero rupiah to IDR 17,000,000 (seventeen million rupiah). If the average cost for inpatient treatment is taken, it is around IDR 3,300,000 (three million three hundred thousand rupiah). The outpatient rehabilitation undertaken by a respondent was carried out for 24 (twenty-four days) with zero-rupiah funding. Inpatient rehabilitation followed by outpatient hearing was undertaken by 4 (four) respondents with a duration of between 5 (five) to 14 (fourteen) days with funding ranging from zero rupiah to Rp. 750,000 (seven hundred and fifty thousand rupiah). The average financing is IDR 500,000, five hundred thousand rupiah). There were 5 (five) respondents who were in the rehabilitation center for only a few hours or only stayed overnight. The financing that must be paid is between IDR 3,000,000 (three million rupiah) to IDR

9,000,000 (nine million rupiah) with an average of IDR 5,600,000 (five million six hundred thousand rupiah).

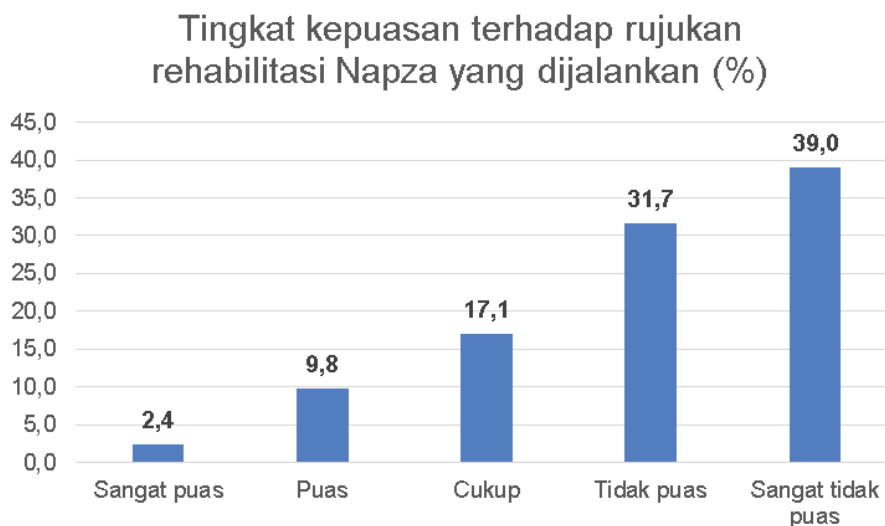


Figure 16: Level satisfaction with rehabilitation referrals

The level of satisfaction of respondents with the program undertaken during referral rehabilitation from this legal process shows that more than 70% of respondents stated, “not satisfied” and “very dissatisfied”. Only 12.2% of respondents said they were satisfied and very satisfied. Respondents who answered “very satisfied” gave reasons like; “Because I learned a lot in rehab. Lessons about life values, addiction, and being reminded to pray. The family only spent money on food because they were accompanied by AKSI.” Respondents who answered “satisfied” gave reasons including; “Services and programs are good, understandable and easy to understand”, “Good facilities and free of charge because they are accompanied by ACTION”.

Respondents who answered “enough” gave reasons including; “Because the program is very well structured, there is only a shortage of human resources,” “I think all needs are met, food, medicine and toiletries. The costs are affordable.” Respondents who answered “not satisfied” gave reasons including; “Rehab that I know has several phases that should be given to clients. But there is no activity in this place,” “I feel like a housemaid and there are punishments for making mistakes. For example, sitting facing the wall for 2-3 hours”, “Because there is no program to go through, so I just do household chores.”

Respondents who answered “very dissatisfied” gave reasons including; “Because while I was in rehabilitation, I felt like I was being blackmailed by the rehabilitation staff, and I only received communication with my family once”, “Because the costs paid did not match what I got”, “Because I felt lied to by the investigator who at the beginning said there was no costs, program sessions are also unclear and the rehab is threatening from an economic perspective.”

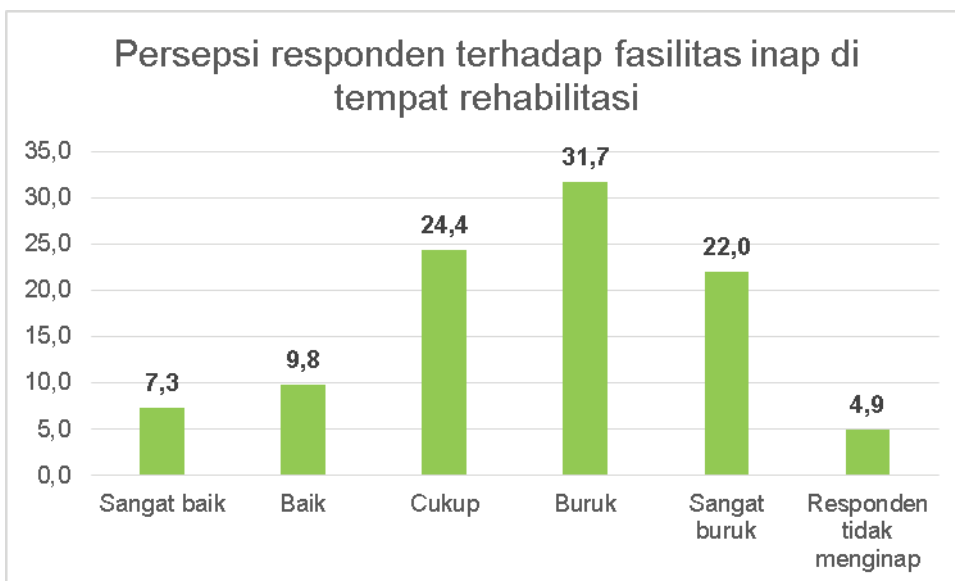


Figure 17: Perception of in-patient facilities

More than half of respondents who stayed in rehabilitation centers answered “bad” and “very bad”. There were around 17% of respondents who answered “good” and “very good”. Respondents who answered “very well” gave reasons including; “Very decent starting from the bed facilities, linen uniforms, etc.”, “Clean, spacious, like your own home, the view is good”, “Very humane place”. Respondents who answered “good” gave reasons including; “Clean location, spacious area, comfortable, separate bedroom, air conditioning, good food, afternoon snacks, evening snacks and one pack of cigarettes per day”, “Sleep on a bed, enough food, there is entertainment, you can watch TV”, “The existing facilities are quite good and can be freely used. Apart from that, you don’t experience withdrawal because you can still access methadone.”

Respondents who answered “enough” gave reasons including; “Because the bed uses a floor mattress, the bathroom is quite clean”, “Because it only sleeps on a bed-cover with 8 other clients in one room”, “Respondents feel that it is sufficient because facilities such as mattresses, water are still provided even though the room is very small, with a 5x5 meter room occupied by 30 to 40 people,” “This is because a 3 x 4 room is occupied by 12 people and even though the beds use mattresses.” Respondents who answered “bad” gave reasons including; “Because the room is not suitable for living in and there is no privacy for women because the camera can look at it”, “There are no mattresses to sleep on, with a 3 x 5 room containing 30 people, there are no toiletries, and the conditions are dirty”, “Because the facilities are not suitable , with a 6 x 4 room filled with 8 people and no sleeping mats. Everyone has a seniority system,” “Because during the 7 days I was hospitalized there, I was only locked up in a germ cell room.” Respondents who answered “very bad” gave reasons including; “The cleanliness of the bed or mattress is rarely dried in the sun, especially the detox area”, “Sleeping outside, in the side yard with a plastic carpet so that the body gets sore or scabbed, the family is told to bring their own food”, “Because there are 27 people in the room, there are no bedding, room



like in a cell. The facilities for undergoing the program were inadequate,” “For 7 days I was in an isolation room, numbering 43 people. There were no pillows,” “Because I wasn’t told at the beginning that my family would pay for the rehab, so I was treated like any other client who didn’t pay.”

Persepsi responden terhadap makanan/konsumsi di tempat rehabilitasi

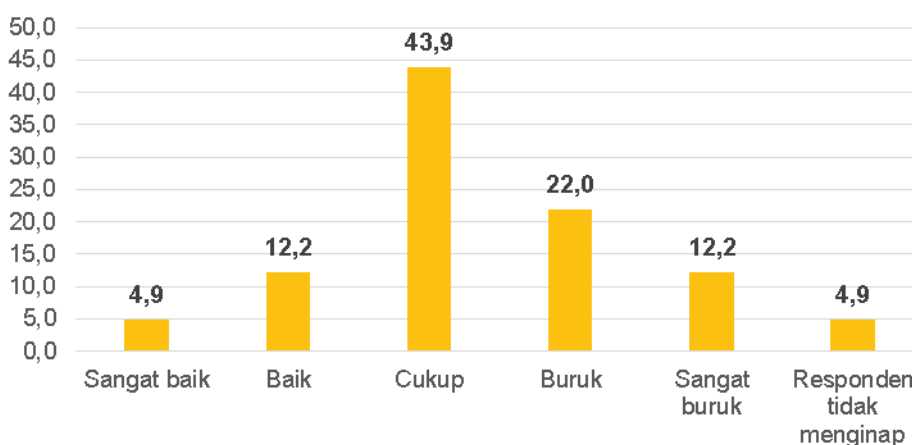


Figure 18: Perception of food/consumption

Almost half of the respondents who stayed overnight answered “enough” for the food or consumption provided during rehabilitation. One in three respondents answered “bad” and “very bad”. Respondents who answered “very well” gave reasons like; “Healthy food is provided 3x a day. Very tasty”.

Respondents who answered “good” gave reasons including; “Eat 3 x 1 day, the menu changes, but when I get a shipment of cigarettes from the family, it only reaches the client’s hands from 4 packs to 2 packs”, “The food is delicious, there are snacks outside of the basic food, and I happen to not be visited, so when I came in, the family had already left pocket money”, “Apart from being able to cook meals together which are quite varied, I can buy food from outside”, “Because I still get food 3 x 1 day and cook it myself. But for family visits, the family is usually asked for a deposit and it doesn’t reach the client.”

Respondents who answered “enough” gave reasons including; “Because they get 3 meals a day, and the food is worth eating, “Feeling that they are satisfied with the food provided and can buy the food they want at any time after the respondent is allowed to keep their own money,” “Because that’s the only food on the menu. No snacks.” “I get boxed rice 3 times a day, because I know the staff, sometimes I am offered different food from other clients”, “Because the food given is the same as at home”, “I am given food that is quite appropriate when I know that I will be free by giving a certain amount of money”, “For food I feel that enough side dishes, even though they are small, are still worth it. In the room you can still store food such as biscuits, coffee, even though 1 piece of biscuit is shared by 7 people and 1 sachet of coffee is drunk by 10 people,” “Packaged rice food which only has eggs on the menu

every day,” “Because the food I get in There every day is rice with tuna, tamarind vegetables or oyong vegetables.”

Respondents who answered “bad” gave reasons including; “The food is inadequate, inadequate, and the number of food portions is limited, 2 x 1 day”, “Because I only get chicken meat once a week, and the shipment from those who visit never reaches me”, “The food portions are not adequate and the menu is 1 egg divided into 4 portions. Once received a delivery of food and cigarettes from the family but the delivery from the family had been reduced by the rehabilitation officers,” “For 4 days they were only given instant boiled noodles and no rice,” “Food was given not on time, they just did whatever they wanted.”

Respondents who answered “very bad” gave reasons including; “In providing food with very small portions (side dishes and rice). The food/consumption/cigarettes sent from the family never reached the client”, “The meal was not adequate, both the menu and the portion, and the goods and food the family brought did not reach the client”, “The side dishes provided were very small, for example fish salty as big as a thumbnail and only 3 bites of rice,” “Because at that place every day the only side dish is an omelet for 11 days, and the size is only 1 juring (slice).”

Violence Verbal And Non-verbal in the Legal Process and Rehabilitation

This section will provide an overview of verbal and non-verbal violence which accepted respondents or his family, Good in process law nor when the client is in a rehabilitation institution. Non-verbal violence is what is meant here consists physical and psychological violence, as well as economic violence or extortion.

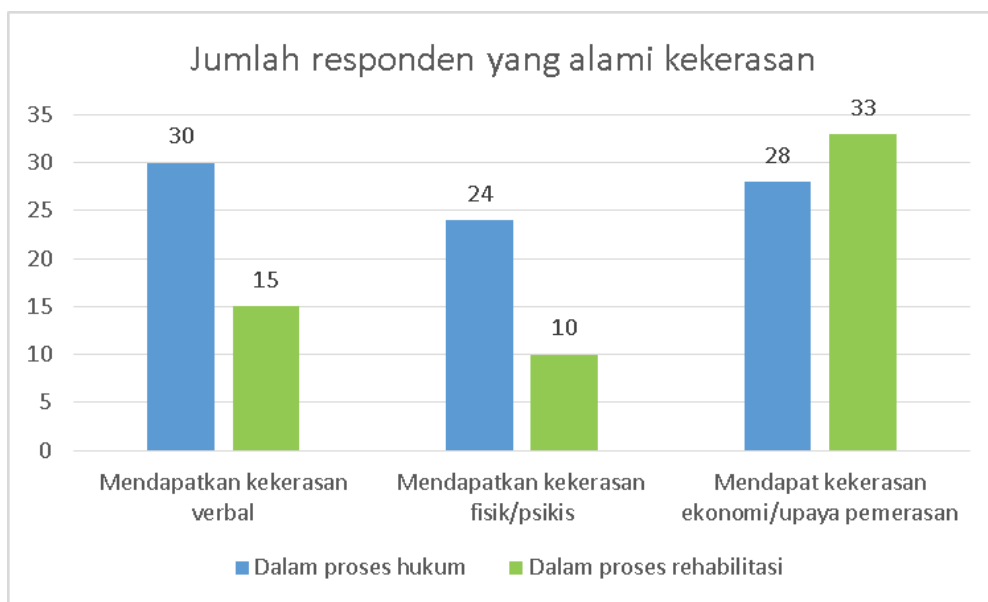


Figure 19: Internal verbal and non-verbal violence legal process and rehabilitation

Verbal violence and physical or psychological violence occur more often when respondents are in the legal process. Meanwhile, economic violence or attempts to extort clients or families



occurred more often when respondents were in rehabilitation institutions. Verbal violence received by respondents, partners or families is carried out by police officers during arrest, during interrogation or making a BAP (Arrest Minute), when they are known to have HIV status and by rehabilitation staff and rehabilitation owners when they have just entered, when they are deemed to have made a mistake while inside. rehabilitation and when respondents are asked for certainty of payment of rehabilitation costs.

The physical and psychological violence received by respondents was carried out by police officers during arrest, interrogation or making a BAP and when in cells by other detainees on orders from officers. Also carried out by rehabilitation staff, by fellow more senior rehabilitation clients and by rehabilitation owners. Economic violence or attempts at extortion were carried out against respondents, their partners and families by police officers and rehabilitation staff when they asked to provide a certain amount of money for ransom or rehabilitation costs.

The table below provides a brief overview of requests for money as economic violence or attempts at extortion when respondents are at the police station.

Violence economy/effort extortion in office police	Min:	7,500,000	Max:	90,000,000	Average:	28,700,000
Cost Which issued family Which accompanied ACTION	Min:	0	Max:	12,000,000	Average:	2,600,000

The value of the amount of money requested is a minimum of IDR 7,500,000 (seven million five hundred thousand rupiah), a maximum of IDR 90,000,000 (ninety million rupiah) with an average of IDR. 28,700,000 (twenty-eight million seven hundred thousand rupiah). Meanwhile, the fees paid by respondents or families range from a minimum of Rp. 0 (zero rupiah), to a maximum of Rp. 12,000,000 (twelve million rupiah). The number “0” in the bottom row indicates that there are respondents or families who did not spend any money at all in the legal process at the police station.

Violence economy/effort extortion in rehabilitation	Min:	0	Max:	60,000,000	Average:	14,130,000
Cost Which issued family Which accompanied ACTION	Min:	0	Max:	17,000,000	Average:	3,670,000

Table 2. Brief overview of requests for money as economic violence or attempts at extortion when respondents are in rehabilitation.

The value of the amount of money requested is a minimum of IDR 0 (zero rupiah), a maximum of IDR 60,000,000 (sixty million rupiah) with an average of IDR. 14,130,000 (fourteen million one hundred thirty thousand rupiah). The number “0” in the top row indicates that there is a rehabilitation institution that does not ask for a certain amount of money in an attempt to extort money.

Meanwhile, the fees paid by respondents or their families range from a minimum of Rp. 0 (zero rupiah), to a maximum of Rp. 17,000,000 (seventeen million rupiah). The number “0” in the bottom row indicates that there are respondents or families who did not spend any money at all in the rehabilitation process at a rehabilitation institution.



The two tables above can provide an illustration that legal assistance by AKSI can help respondents and their families to reduce the impact of economic violence or attempts at extortion both in the legal process and in the rehabilitation process.

CONCLUSION

AKSI clients who are respondents to this rapid assessment are aged between 16 (six twelve) years to 51 (fifty one) years. One in four respondents entered category teenager (24 year to lower). Proportion between man And Woman is 87.8% compare 12.2%. Almost half (44%) respondents' status Not yet Marry And majority (56%) educated senior high school. Part big respondents have a job, with the most common job category being self-employed (29.3%). Part small (4.9%) Still status students/students. Range The respondent's monthly income starts from IDR 50,000 (fifty thousand rupiah) up to IDR 60,000,000 (sixty million rupiah), with an average (median) IDR 2,000,000 (two million rupiahs). All respondents have a personal identity card (KTP) and 70% among them own card guarantee health (BPJS) Which applies. Part respondents (48.8%) had ever tested for HIV. 17 (seventeen) respondents stated There is family/partner/colleagues who know their HIV status.

Health Services and Conditions of Drug Dependence

There were 39% or 16 (sixteen) of the 41 (forty one) respondents who received an assessment of their general health needs and 21 (twenty one) respondents received an assessment of their conditions of drug dependence. Of the 7 (seven) respondents who were taking medication for therapy, namely ARVs or Methadone, all received the medication they needed. Of the 15 (fifteen) people who experienced withdrawal symptoms during the legal and rehabilitation process, only two people received medication to treat withdrawal symptoms, namely respondents who were PTRM clients. Through assistance from AKSI, respondents' needs for therapeutic drugs can be met, both in the legal process and in rehabilitation.

Rehabilitation Program Services, Financing and Level of Satisfaction

Drug rehabilitation referrals from the legal process that respondents underwent at police referral rehabilitation institutions, consisting of referrals for inpatient rehabilitation (duration 3 to 60 days), outpatient (duration 24 days), inpatient and outpatient (duration 5-14 days) and one day/night treatment (duration several hours to 1 night stay).

The majority (75.6%) of respondents underwent inpatient treatment with costs ranging from zero rupiah to IDR 17,000.00. There were 2.4% of respondents who underwent outpatient treatment at a cost of zero rupiah. Then 9.8% underwent inpatient and outpatient treatment with costs ranging from zero rupiah to IDR 750,000.

And 12.2% underwent short treatment one day/night at a cost of between IDR 3,000,000 to IDR 9,000,000. The level of satisfaction of respondents with the referral process and programs undertaken shows that more than 70% of respondents stated they were "not satisfied" and "very dissatisfied" and only 12.2% of respondents stated they were satisfied and very satisfied. The remainder (17.1%) answered "enough". For inpatient facilities in



rehabilitation institutions, more than half of respondents who stayed in rehabilitation facilities answered “bad” and “very bad”. There were around 17% of respondents who answered “good” and “very good”. Almost half of the respondents who stayed overnight answered “enough” for the food or consumption provided during rehabilitation. One in three respondents answered “bad” and “very bad”.

Violence in the Legal Process and Rehabilitation

Verbal violence and physical or psychological violence occurred more often when respondents were in the legal process. Meanwhile, economic violence or attempts to extort clients or families occurred more often when respondents were in rehabilitation institutions. Economic violence or attempts at extortion are carried out against respondents, their partners and families by police officers or rehabilitation staff to provide a certain amount of money for ransom or rehabilitation costs. In the legal process at the police station, the amount of money requested is between Rp. 7,500,000 (seven million five hundred thousand rupiah) to Rp. 90,000,000 (ninety million rupiah). Because they were accompanied by AKSI, the fees paid by respondents or their families ranged from IDR 0 (zero rupiah) to IDR 12,000,000 (twelve million rupiah). In rehabilitation institutions the amount of money requested is between Rp. 0 (zero rupiah) to Rp. 60,000,000 (sixty million rupiah). There are rehabilitation institutions that do not ask for a certain amount of money for the program the client receives. Through assistance by AKSI, the costs paid by respondents or their families range from Rp. 0 (zero rupiah), to Rp. 17,000,000 (seventeen million rupiah). The verbal and physical violence experienced by the respondent was an incident that could not be controlled because it occurred spontaneously and at the time of the incident the respondent was not accompanied by ACTION. Economic violence is an event that can be controlled because there is a negotiation and consultation stage carried out with AKSI.

AKSI'S LEGAL ASSISTANCE CONTRIBUTION.

Legal assistance provided by AKSI does not impose any financial costs on clients or families, so that the services provided by AKSI can be targeted at various socio-economic groups. Accompanying AKSI clients who require continuous consumption of therapeutic drugs (ARVs and Methadone) can all be provided, both in the legal process and in rehabilitation. AKSI's legal assistance also helps respondents/families to obtain rehabilitation services at no cost and also reduces the impact of economic violence or attempts at extortion, both in the legal process and in the rehabilitation process.

RECOMMENDATIONS

For Policy Stakeholders

Monitoring, evaluation and standardization of rehabilitation institutions that accept clients from legal process referrals by the National Narcotics Agency, Ministry of Health, Ministry



of Social Affairs is needed. This must be accompanied by binding rules/policies to regulate performance and improve the quality of rehabilitation services and minimize the potential for violence and extortion that may be experienced by clients and families.

There is a need for standard flows and procedures whose implementation is supervised by the National Police Commission, to maintain the law enforcement process related to narcotics which prioritizes the fulfillment of suspects' human rights and can minimize the potential for violence and extortion.

Share the Community

It is recommended that clients or suspects in narcotics cases and their families increase their knowledge and understanding of the legal flow and process, as well as the standards of a good rehabilitation program as a program aimed at recovering from drug addiction.

Expansion of community-to-community legal assistance programs (such as those carried out by AKSI), so that they can serve more clients and are equipped with documentation of good practices or lessons learned from the field as a process evaluation.

For the Development of Science

Further research is needed to explore the findings of this research, in the form of case studies (qualitative) on several selected respondents. Further research is needed that captures the perspective of drug rehabilitation institutions in the acceptance and implementation of drug rehabilitation programs that originate from legal process referrals.

Additional products for information dissemination from the results of this research are being considered through the production of short films as an educational channel and public campaign.



UNRAVELING THE TANGLED THREADS OF THE IMPLEMENTATION OF NARCOTICS ASSESSMENT IN INDONESIA

Orin Gusta Andini^{1*}, Salman Alfarisi²

Faculty of Law, Mulawarman University, Indonesia

*Corresponding author: oringsuta@fb.unmul.ac.id

ABSTRACT

Even though Indonesia has the most punishing drugs laws in the world, it is still the largest drug market in Asia. So far, legal regulations have not been fully oriented toward public health, making Indonesia still trapped in the habit of punishing narcotics users even though the legal regulations allow for other efforts in the form of rehabilitation. This article will describe why the implementation assessment is still experiencing several obstacles and provide policy recommendations that the Indonesian government can implement to address these problems. The research method is a normative method and supported by empirical data. The results of the research show that the implementation of assessment does not have a clear legal basis because it is only regulated in a circular from the Supreme Court and a circular from the Chief of Police. This causes assessment for narcotics abusers to be considered not an obligation for law enforcement officials, nor the responsibility of the state, but rather as an option for narcotics abusers. On the other hand, the expensive cost of the assessment means that the assessment can only be carried out by financially capable people, while those who are not financially secure will end up in prison. In reality, the Women's and Children's Correctional Institution in East Kalimantan is dominated by people who are caught in cases as drug abusers who are unable to obtain an assessment and end up in prison. Therefore, this article allows implementation assessments in Indonesia to be regulated in law as a form of state responsibility for public health, including providing justice and legal certainty for the community.

Keywords: *Assesment, Narcotics, Prisons, Rehabilitation*

INTRODUCTION

Indonesia is a country that imposes harsh penalties for narcotics cases, ranging from prison sentences to the death penalty. Despite having a fairly strict legal rule, in fact Indonesia is still a fertile ground for narcotics trafficking in Asia. Various good examples of the success of public health approaches in handling narcotics in several countries (Klein, 2020), has not

been able to fully influence Indonesia to change the direction or at least balance the evaluation of the practice of handling narcotics cases that is relevant to the deterioration of the condition of correctional institutions as the final coaching place of the criminal justice system process (Fatahillah Akbar, 2021).

Previous research (Usman et al., 2020) (Hermiyanty et al., 2017) has shown *overcrowded* Prisons occur almost evenly in prisons throughout Indonesia, including the Class II A Adult Prison in Tenggarong, East Kalimantan and the Tenggarong Women's and Children's Prison whose inmates are dominated by narcotics abusers. The number of inmates in the Class II A Narcotics Correctional Institution (Prison) Samarinda is 1,231 people, even though the capacity of the prison is ideally only able to accommodate 352 people so the *overcrowded* capacity have reach to 349% (Editorial Team, 2024). The total number of prisons and detention centers (Rutan) in Indonesia is 526 with a housing capacity of only 140,424 people, while in 2023 alone the number has reached 269,263. Of these, 131,843 were prisoners in narcotics cases and 47,968 people were drug abusers (Iskandar, 2019). Prisons in Indonesia are often used as "dumping grounds", especially for those who have the status of narcotics abusers. To overcome *overcrowded* prisons, the Indonesia government has made various efforts, starting from the direction of policies based on *restorative justice* (Andini et al., 2023) to the assimilation of prisoners. In the context of handling narcotics, the rule of law in Indonesia refers to Law Number 35 of 2009 concerning Narcotics (Narcotics Law) and various other sectoral regulations, such as the Supreme Court Circular Letter Number 6 of 2010 concerning Placement of Abuse Victims, Victims of Abuse and Drug Addicts into the Medical Rehabilitation and Social Rehabilitation Context (SEMA 4/2010), Circular Letter of the Chief of the National Narcotics Agency of the Republic of Indonesia Number SE/01/II/2018/Bareskrim concerning Rehabilitation Guidelines for Narcotics Addicts and Victims of Narcotics Abuse that apply at the Investigation level (SE Bareskrim 2018), Regulation of the Head of the National Narcotics Agency of the Republic of Indonesia Number 11 of 2014 concerning Procedures for Handling Suspects and/or Defendants of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions (Perka BNN 11/2014).

The Narcotics Law has actually stipulated that for abusers and/or users of narcotics are victims who can be given rehabilitation, but making prisons the final destination of the criminal justice system for narcotics abusers is still ongoing. Judges through their rulings often make prison the end of the trial examination process, on the grounds that they cannot provide rehabilitation because there is no basis for assessment included by both investigators and public prosecutors at the trial. Some examples of such decisions are in Court Decision Number 1045/Pid.Sus/2019/PN and Court Decision Number 683/Pid.Sus/2023/PN. In that condition, the judge still in the end still sentenced him to prison, even though in his decision the judge decided that the prison sentence was much lower than the prosecutor's demand (Debby Aulia Hakim et al., 2021).

Various sectoral rules that are scattered are like a thread that is sewn together to produce rehabilitation, the process of sewing a thread is likened to a narcotics assessment process. Although it has a good goal in the form of rehabilitation, the tangled application of assessment as a process in the procedure that must be taken often results in the failure of the goal of achieving rehabilitation. This article will outline the tangled threads of the implementation



of narcotics assessment by outlining the realities and legal substance that play a role in the failure to implement rehabilitation rehabilitation, as well as recommend several things that aim to influence the Indonesian government's policies in the future in the context of narcotics handling policies.

Methodology

The research method used is a normative research method supported by field data. How much field data was taken from the East Kalimantan Class II A Correctional Institution and the Women's and Children's Correctional Institution. Through relevant legislative approaches, including the Narcotics Law, SEMA 4/2010, SE Bareskrim 2018, and Oerka BNN 11/2014 and conceptual approaches, namely the community health approach and legal approach, and supported by field data that have been obtained from the research location, materials and data are collected and then analyzed and described qualitatively to answer research questions and formulate recommendations.

Results and Discussion

Criminalization of Narcotics Abusers

Criminalization of narcotics abusers in Indonesia refers to the Narcotics Law. The Narcotics Law adheres to a *double track system* with a legal approach manifested in criminal sanctions and a health approach manifested in the form of action sanctions, namely rehabilitation. Although the Narcotics Law adheres to a *double track system*, the fact is that the mandate of the law has not been effective in reducing the number of narcotics abusers in prisons. Since 2014, Indonesia has regulated an integrated assessment mechanism for narcotics abusers with the issuance of Joint Regulation Number 1 of 2014 concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions, but its implementation is still not optimal. Based on data from *the 2023 Indonesia Drugs Report*, in the last interval of 2022 there were 131,843 prison inmates with narcotics cases, 83,875 people equivalent to 63.6% were dealers, 47,968 people equivalent to 36.4% were abusers. This number continues to increase in 2023, where the number of inmates in prisons and correctional facilities reaches 269,263, even though 526 prisons and correctional facilities throughout Indonesia can only accommodate 140,424 people. Criminalization of abusers is almost evenly distributed in all prisons in Indonesia, as a research sample, in Class II A Tenggarong Prison, East Kalimantan, which is also *overcrowded*.

Diagram 1. Number of Narcotics Abusers in Class IIA Tenggarong Prison, East Kalimantan

Referring to diagram 1, there is a downward trend in the period from 2020 to 2023. Based on data from the Tenggarong Class IIA Prison, prison inmates are still dominated by narcotics abusers. In 2020 there were 1300 residents with 1170 being narcotics convicts, in 2021 there were 1228 inmates with 1105 being narcotics convicts, in 2022 there were 1242 inmates with 828 being narcotics convicts, in 2023 there were 1059 with 571 being narcotics convicts, which means that 53% of inmates came from narcotics cases. This number is quite high considering the capacity of the Tenggarong Class IIA Prison which is still *overcrowded*. Likewise, what happened in the Women's and Children's Prison in East Kalimantan, narcotics abusers still dominate the prison, even though according to the Head of the East Kalimantan Women's and Children's Prison during his visit to the Faculty of Law, Mulawarman University, there are many factors why women and children eventually become drug abusers, including economic factors, depression, and environmental influences. The phenomenon of *overcrowding*, which is still dominated by narcotics abusers, shows that prison is still the main choice of law enforcement compared to sanctions in the form of rehabilitation.

This condition, if left unchecked and not a priority for the government to evaluate law enforcement, will become an iceberg phenomenon that will eventually result in other negative impacts. Various studies have found that imprisonment-oriented criminalization does not really rehabilitate drug abusers, and even has the potential to become recidivists after serving their sentences in prisons. *labelling* from the community. In addition, women who are targeted by narcotics law enforcement are more likely to experience the adverse effects of these narcotics. Based on research *Women Speak Out*, published in 2022, The Vulnerability of Women Who Are Targeted by Narcotics Arrest or Detention Often Become Victims of Police Violence (C & Pantelic, 2022). Unfortunately, this condition has not yet found a solution through balancing a conceptual approach based on public health and law enforcement which should be a consideration for evaluating the substance and structure of the law in Indonesia.

Application of Narcotics Assessment: Unraveling Tangled Threads

This section will outline the tangled threads of various rules that ultimately make rehabilitation goals not realize as they should. First, this section will outline each of the normative regulations that govern the application of assessment as a condition for obtaining rehabilitation.

First, the Narcotics Law. The legal definition related to rehabilitation arrangements in Article 56 states that Narcotics Addicts and Victims of Narcotics Abuse are obliged to undergo medical rehabilitation and social rehabilitation. Article 56 uses mandatory terminology, while Article 103 of the Narcotics Law is a guideline for judges (Irmawanti & Arief, 2021) In providing rehabilitation, it is stated that the judge who examines the case of a narcotics addict can decide to order the person concerned to undergo treatment and/or treatment through rehabilitation if the narcotics addict is proven guilty of committing a narcotics crime. The existence of the word “may” in the regulation of Article 103 makes the choice of treatment and/or treatment not a mandatory thing. The weakness of the rehabilitation regulation in the Narcotics Law only mentions treatment/treatment as a rehabilitation effort as an obligation, followed by the regulation of judges’ guidelines as an option because the terminology “can”. Furthermore, the Narcotics Law does not affirm the legal standing for the assessment process which is a requirement for abusers to get rehabilitation.

Second, SEMA 4/2010, regulates the conditions for the Judge to impose rehabilitation, namely in the state of being caught, certain weight details for the type of narcotics used, the existence of a positive lab test certificate, a psychiatrist/psychiatrist’s certificate, and no evidence of involvement in the illicit circulation of narcotics.

Third, the 2018 Circular Letter of the Criminal Investigation Branch of the National Police to explain rehabilitation procedures to abusers, addicts and victims of narcotics abuse, this rule refers to Article 127 of Law Number 35 of 2009 concerning Narcotics. SE/01/II/2018/Bareskrim is a regulation at the Investigation level that is the basis for Investigators. The process of implementing the Circular Letter of the National Police Criminal Investigation Branch Number SE/01/II/2018/Bareskrim can be seen in the following scheme:



Figure 1. *Scheme for the Implementation of Assessment by the Indonesian Police*

The application of assessment by Police Investigators based on the 2018 SE Bareskrim through two schemes, namely Abusers, Addicts and Victims of Narcotics Abuse Against, No investigation is carried out, assessment and rehabilitation are carried out. Other schemes, namely Caught/Caught by Hand, Positive Urine, Evidence of one-day use under SEMA



Number 4/2010, Investigation is still carried out, rehabilitation and assessment can be carried out.

Fourth, Perka BNN Number 11 of 2014 PERKA BNNI 11/2014 was made as a technical guideline for the implementation of integrated assessment in BNN RI, but its implementation is also used by the prosecutor's office. The implementation of assessments for narcotics abusers can be understood practically through the following flow diagram:



Figure 2. Assessment Implementation Scheme based on Perka BNN 2014

The review of various legal rules as the basis for assessment for the provision of rehabilitation, still contains a number of problems, in each rule. Different implementations, including procedures that must be taken by narcotogenic abusers in each agency that handles them, are also different, there is no similarity and certainty about the standard scheme. This results in the amount of discretion (Vanderveen, 2022) which is greatly influenced by the perspective of the regulation of legal assessments and technical regulations that are sectoral. Such a large and non-uniform authority also has the potential to cause abuse that leads to unfair access to rehabilitation, apart from the limited number of rehabilitation homes and the suboptimal rehabilitation pattern carried out (Rumkel, Nam & Arsyad, 2018).

The provisions in Law 35/2009, SEMA 4/2010, SE POLRI SE/01/II/2018 AND PERKA BNN 11/2014, which result in the reduction of perceptions and perspectives by law enforcement officials in implementing assessments as an option (optional). There are no law-level regulations in Indonesia that regulate the assessment of narcotics abusers and cost constraints are also a problem in its implementation. This is because it is an easy choice for law enforcers in dealing with the crime of narcotics abuse, rather than having to go through a long process of law enforcement to place a suspected abuser into the rehabilitation system, this results in more and more prison inmates exceeding capacity. As a result, law enforcement officials will be very subjective in their efforts to assess narcotics abusers. The ambiguity of the obligation also results in the unclear who is actually financially responsible for the implementation of assessments for victims of narcotics abuse, including access to narcotics abusers who do not have adequate economic capacity to access independent rehabilitation. The inability to access this independent rehabilitation further results in inequality based on financial ability, that only those who have adequate financial ability can access rehabilitation,

while those who do not have the ability to access independent rehabilitation will end up in prison and cause prisons *to be overcrowded*.

The state must balance the law enforcement approach and the public health approach in handling narcotics crimes. The option is still optional and is not an obligation for law enforcement officials. From the aspect of legal substance, the government should immediately revise the Narcotics Law/Draft Narcotics Law to regulate assessment as a procedure that must be carried out and allocate an adequate amount of budget to rehabilitate narcotics abusers as a form of state responsibility to the community.

CONCLUSION

The implementation of the assessment does not have a clear legal basis because it is only regulated in technical and sectoral regulations institutionally, in this case it is spread out in SEMA 4/2010, SE Bareskrim 2018, Perka BNN 11/2014. The distribution of these sectoral rules results in an uneven perception of assessments for narcotics abusers which in the end is only used as an option, not an obligation as mandated by the Narcotics Law. Such a situation also confirms that the concept of a public health approach has not fully become the responsibility of the state in dealing with narcotics. On the other hand, the high cost of self-assessment causes assessments to only be carried out by drug abusers who are financially capable, while those who are financially unable and do not get the opportunity to access state rehabilitation centers, which are limited in number, will end up in prison. This article recommends several things, namely, the need to revise the regulations in the Narcotics Law so that the implementation of assessment as a process is regulated in *an expressive verbal manner*, improving the quality and increasing the number of rehabilitation homes as a form of state responsibility to the community, including providing justice and legal certainty for the community in accessing it. In addition, as an effort to evaluate the regulation of the assessment process that has been *expressively verbally* stated in the Narcotics Law, every law enforcement officer who ignores the assessment procedure can be sanctioned in the implementation of their duties and authority as an effort to control the implementation of the enforcement of narcotics in Indonesia.

ACKNOWLEDGMENTS

We would like to express our gratitude to the Regional Office of the Ministry of Law and Human Rights of East Kalimantan Province, the Class II A Correctional Institution and the Women's and Children's Prison in East Kalimantan for providing the materials and data needed by the research team, as well as to the Faculty of Law, Mulawarman University for providing support for the implementation of this research.



REFERENCE

- Andini, O. G., Nilasari, N., & Eurian, A. A. (2023). Restorative Justice in Indonesia Corruption Crime : a Utopia. *Legality of Legal Scientific Journal*, 31(1), 72–90. <https://ejournal.umm.ac.id/index.php/legality/article/view/24247/12233>
- C, S., & Pantelic, M. (2022). Women who use drugs in Indonesia: The harmful impacts of drug control.
- Debby Aulia Hakim, D., Zairani Lisi, I., & Gusta Andini, O. (2021). The application of the principle of the binding persuasive of precedent under the special minimum provisions in narcotics crimes. *Legal Treatise*, 17(2), 85–97.
- Fatahillah Akbar, M. (2021). Restorative Justice in the Criminal Justice System as a Manifestation of Pancasila Values. *Justicia et Pax*, 37(1). <https://doi.org/https://doi.org/10.24002/jep.v37i1.3821>
- Hermiyanty, Bertin, W. A., & Sinta, D. (2017). The Phenomenon of Overcapacity of Correctional Institutions The Study of Criminal Law Policy on the Causes and Efforts to Counter It. *Journal of Chemical Information and Modeling*, 8(9), 1–58.
- Irmawanti, N. D., & Arief, B. N. (2021). The urgency of the purpose and guidelines of the Criminal Code in the context of reforming the criminal law criminal system. *Journal of Legal Development Indonesia*, 3(2), 217–227. <https://doi.org/10.14710/jphi.v3i2.217-227>
- Iskandar, A. (2019). Narcotics law enforcement (rehabilitative against abusers and addicts, repressive against dealers. PT. Elex Media Komputindo.
- Klein, A. (2020). Klein, Alana. "Harm Reduction Works: Evidence and Inclusion in Drug Policy and Advocacy. *National Library of Medicine: National Center for Biotechnology Information*, 28. <https://doi.org/>" National Library of Medicine: National Center for Biotechnology Information, (2020). <https://doi.org/10.1007/s10728-020-00406-w>
- Rumkel, Nam & Arsyad, J. (2018). LEGAL IMPACT ON NARCOTICS USE AMONG STUDENTS IN TERNATE CITY. *Journal of Legal Sciences "THE JURIS," II(2)*, 187–195.
- Editorial Team. (2024). *Samarinda Class IIA Prison Transfers 160 WBP to Other Prisons to Overcome Over Crowded – Sekaltim*. <https://sekaltim.co/rutan-kelas-ia-samarinda-pindahkan-160-wbp-ke-lapas-lain-atasi-over-crowded/>
- Usman, U., Nasution, B. J., & Seregar, E. (2020). Over the Capacity of Correctional Institutions in the Perspective of Criminal Law Policy. *The Face of Law*, 4(2), 436. <https://doi.org/10.33087/wjh.v4i2.256>
- Vanderveen, G. (2022). Remote justice: a visual essay on the response of the Dutch justice system to the COVID-19 pandemic. *De Rechtspreek*, 0(0), 1–4. <https://doi.org/10.1080/1472586X.2022.2050941>



DECRIMINALIZING APPROACH TOWARDS SHIFTING PARADIGMS OF INDONESIA'S CANNABIS POLICY

Singgih Tomi Gumilang ST^{1*}, Aulia Rachmat Sungkar² and Viqqi Kurnianda³

¹Faculty of Law, Universitas Sebelas Maret, Surakarta, Central Java, Indonesia

²Medical Cannabis: THC & CBD Specialization Program, University of Colorado Boulder (via Coursera), U.S.

³Department of Chemistry, Biology and Marine Science, University of the Ryukyus, Nishihara, Okinawa, Japan

*Corresponding author: sitomgum@gmail.com

ABSTRACT

The Indonesia's current narcotics law classifies that the meroterpenoid class of molecule, an active secondary metabolite from the plant of genus Cannabis in class I, effectively prohibiting their use for healthcare and scientific purposes. This classification also significantly limits their potential applications, despite substantial scientific evidence supporting their medical benefits. Unfortunately, the use of cannabis for urgent medical needs becomes critical when commercial drugs fail to provide effective treatment for certain conditions. As a result, patients are often forced to seek illegal access to the Cannabis, leading to penalties for possession or use. This situation negatively impacts the survival rates of patients who rely on this treatment. Therefore, we would like to provide insights into how the classification of these compounds significantly limits access to healthcare and scientific research. Additionally, we review the urgent need for policy reform, advocating for the decriminalization and regulatory control of cannabis. As a result from the perspective of Indonesian law, we argue for the necessity of revising the National Narcotics Law by reclassifying Cannabis compounds from class I to class II, allowing their use as a last-resort treatment, or to class III, enabling their use as a first-line alternative from commercial drugs. Moreover, we propose several qualitative policy recommendations for consideration in drafting the revised National Narcotics Law. These include advocating for clinical research on herbal, plant-based, and synthetic cannabis to inform evidence-based policies, ensuring that relevant government bodies take on regulatory roles for safe and effective cannabis use, implementing a proposed pilot project in Aceh Province to establish research and industry standards, and collaborating with universities to foster knowledge exchange and innovation. These points will be discussed in detail herein.

Keywords: cannabis, decriminalization, drug policy reform, public health benefits, scientific research

INTRODUCTION

Indonesia's narcotics law classifies cannabis as a Class I substance, despite its medical properties. This has limited healthcare access and impeded scientific research. The paper advocates for decriminalization and regulatory control of cannabis, hence recommending revising the National Narcotics Law to Class III. Recommendations include clinical research on herbal, plant-based, and synthetic cannabis, government agency regulation, a pilot project in Aceh Province, and collaboration with universities for knowledge exchange and innovation.

RESULT AND DISCUSSION

The Development of Cannabis Regulations in Indonesia

During the 1920s, the Dutch Colonial Government implemented strict regulations regarding the production, use, and distribution of cannabis as an international effort to control cannabis. From 1927 to 1976, the law status on cannabis highly restricted import, export, possession, preparation, and use. Offences in relation to import, export, possession, preparation, and use were subject to various ranges of fines, such as a fine of 3,000 guilders or a three-month prison sentence. There was a maximum of six months imprisonment or a maximum fine of 1,000 guilders for cultivation and transport-related offences.

In 1976, Indonesian government issued Law No. 9 of 1976 on Narcotics, which continued to be enforced until 1997. The law restricted the use of cannabis for medical and research purposes only. Personal use is subject to a maximum of two-year prison sentence. Cultivation or other means of production, possession and small-scale distribution could result in a six-year prison sentence and a fine of IDR 10 million while trafficking could lead to 20 years of imprisonment and a maximum fine of IDR 30 million.

In 1997, the government amended the law. Under Law No. 22 of 1997 on Narcotics, personal use was subject to a maximum of four-year prison sentence. Small and large amount of possession and cultivation was subject to 10-15-year imprisonment as well as a fine between IDR 25 million and IDR 5 billion. Meanwhile, production and distribution could result in 40 to 20 years of imprisonment or life sentence or even death penalty, with a fine between IDR 200 million and IDR 5 billion. As for the trafficking, penalties ranged from two to 20 years of imprisonment or life sentence or death penalty, with a fine between IDR 100 million and IDR 5 billion. For import, export and sales, penalties were four to 40 years of imprisonment or life sentence or death penalty, with a fine ranging from IDR 1 billion to IDR 7 billion.

In 2009, the government amended new law, which is still enforced until the present. Law No. 35 of 2009 on Narcotics not only maintains cannabis on the list of Class I, but also imposes harsher penalties. Article 127 of the current law states that personal use of cannabis is subject to a maximum of four years of imprisonment and/or mandatory rehabilitation. Possession, cultivation, and sales could result in four to 12 years of imprisonment, with a fine ranging from IDR 800 million to IDR 8

billion. Under Article 111 of the current law, cultivation of more than 1 kilogram or five plants is subject to five-20 years of prison sentence or life sentence, with a higher amount of fines than the fines stated in Article 127. Meanwhile, Article 113 states that production, import, export, and distribution are subject to five-15 years of imprisonment, with a fine ranging from IDR 1 billion to IDR 10 billion. In the event that the amount exceeds 1 kilogram or five plants, the penalties range from five to 20 years and life imprisonment to death penalty, with a fine more than IDR 10 billion.

(1)

Law No. 35 of 2009 states the implementation of mandatory rehabilitation. Unfortunately, Indonesian government still favors law enforcement instead. Quoted from an article published on October 18, 2013 at United Nations Office on Drugs and Crime (UNODC) website titled [*Indonesia prosecutors urged to send people who use drugs to rehabilitation, not prison*](#), “Despite a recommendation in Indonesia’s 2009 Anti-Narcotics Law that people who use drugs be rehabilitated rather than sent to prison, Indonesian law enforcement continues to favor a tough approach on all drug offenders that has led to a rise in arrests - and to over-crowded prisons... The National Narcotics Agency (BNN) reports that jails are ‘overflowing’ with drug offenders, the vast majority of them recreational or dependent people who use drugs. While in prison, most receive little or no effective treatment for their drug dependence, and may be exposed to high risk injecting drug use behaviors.”

In short, as quoted from UNODC website, “Indonesian law enforcement continues to favor a tough approach on all drug offenders that has led to a rise in arrests - and to over-crowded prisons, as quoted by United Nations Office on Drugs and Crime.” (2)

The Latest Development

In March 2024, the Indonesian Constitutional Court (MKRI) dismissed a case (number: 13/PUU-XXII/2024) concerning the revision of laws on medical cannabis, following a hearing on February 26, 2024. Despite ongoing debates, medical cannabis remains illegal in Indonesia, although there is growing support for its legalization due to its potential benefits for conditions like cerebral palsy, as highlighted in the case of Shita Aske Paramitha. The hearing involved petitioners Pipit Sri Hartanti and Supardji, represented by Singgih Tomi Gumilang, Elly Susanti, and Heru Iskhan Noor. (3)

The legality of medical cannabis in Indonesia has been a subject of ongoing debate and struggle. Currently, the use of cannabis, including for medical purposes, is strictly prohibited under Indonesian law. However, there has been growing advocacy for the legalization of medical cannabis due to its potential therapeutic benefits for certain medical conditions, including cerebral palsy.

The hearing addressed the needs of Shita Aske Paramitha, who suffers from cerebral palsy and requires medical cannabis. This treatment is renowned for its potent therapeutic benefits for this condition. The hearing was attended by Pipit Sri Hartanti and Supardji as petitioners,

along with Singgih Tomi Gumilang, Elly Susanti, and Heru Iskhan Noor as representatives of the petitioners' legal team.

Previously, Pika Sasikirana, the daughter of Santi Warastuti, needs medical cannabis for the treatment of cerebral palsy and has called on the Constitutional Court of the Republic of Indonesia to continue examining the petition for a judicial review of Narcotics Law No. 35/2009. (4) In June 2022, the concerns of Santi Warastuti (mother of Pika Sasikirana) were supported by more than 40,000 followers on Twitter. Seeing this, the Vice President of the Republic of Indonesia, Prof. Dr. (H.C.) K.H. Ma'ruf Amin, who is also the former Chairman of the Indonesian Ulema Council (MUI), supported the legalization of medical cannabis. The same month and year, June 2022, Ms. Warastuti pleaded with the House of Representatives to legalize medical cannabis, as her 12-year-old son has cerebral palsy. Mrs. Santi is also very concerned for others who are facing health issues and need medical cannabis. The hearing was received directly by the Deputy Speaker of the House of Representatives, Prof. Dr. Ir. Sufmi Dasco Ahmad, S.H., M.H., who also urged Commission III to accelerate the revision of the Narcotics Law. (5)

In 2020, (the late) Musa Ibn Hassan Pedersen, the son of Ibu Dwi Pertiwi, passed away on December 26, 2020, after a 16-year battle with cerebral palsy. He needed medical cannabis for his illness. Sadly, he passed away during a trip to the Constitutional Court, when his mother filed a judicial review of Narcotics Law No. 35 of 2009. (6)

In 2017, Fidelis Arie Sudewarto, the husband of (deceased) Yeni Riawati, was imprisoned for growing cannabis and making Rick Simpson Oil for the treatment of his deceased wife's spinal cord cancer (fibromyalgia). She died tragically while he was serving his sentence in prison. (7)

Aceh as Indonesia's Medical Cannabis Hub Potential

The Aceh region of Sumatra has a deep-rooted cultural association with cannabis, which locals have utilized for centuries for various purposes ranging from culinary uses to herbal remedies for illnesses such as diabetes. This cultural affinity with cannabis dates back to the Dutch colonial era and has evolved alongside public awareness of the potential medical benefits of cannabis.

The region's rich Islamic heritage in Aceh is summarized in the "Tajul Muluk", a significant manuscript that provides guidance on Islamic teachings, including law, ethics, and daily routine. While primarily focused on religious and moral guidance, the "Tajul Muluk" also narrates on the permissibility of cannabis use for medicinal purposes. In 2023, the People's Representative Council of Aceh (DPR Aceh) took a significant step towards legalization by issuing the Minutes of Meeting of the Consultative Body approving the Qanun Draft on the Legalization of Medical Cannabis. This move, signed by Dr. T.R. Keumangan, S.H., M.H. as Deputy Speaker of DPR Aceh, reflects Aceh's readiness to embrace medical cannabis legalization, considering its historical and cultural ties to the plant. (8)



Benefits of Medical Cannabis

The health benefits of Δ 9-THC and CBD from Cannabis sativa are confirmed by their approval for medical use. Viqqi Kurnianda, Ph.D., also one of the authors of this research paper, was an assistant professor at Ryukyus University in Japan when he was involved in research that found both THC and CBD have significant healing potential that can greatly impact medicine and pharmaceuticals. Interestingly, the way THC and CBD work in the body to produce effects is different from other drugs.

Medical cannabis has been helpful for conditions like chronic pain, multiple sclerosis, nausea and vomiting, epilepsy, glaucoma, PTSD, sleep disorders, cancer symptoms, and more.

The Use of THC and CBD in Various Human Disorders:

Disorder	Phytocannabinoids
Pain	Δ 9-THC, CBD
Multiple sclerosis	Δ 9-THC, CBD
Anorexia	Δ 9-THC, CBD
Nausea and vomiting	Δ 9-THC, CBD
Colitis	Δ 9-THC, CBD
Sleep disorders	Δ 9-THC, CBD
Tourette's syndrome	Δ 9-THC, CBD
Anxiety	Δ 9-THC, CBD
Epilepsy	Δ 9-THC, CBD
Schizophrenia	Δ 9-THC, CBD
Alzheimer's disease	Δ 9-THC, CBD
Parkinson's disease	Δ 9-THC, CBD

Source: Bonini et al., 2018. (9)

Maureen Leehey, MD, Professor Emerita of Neurology at the School of Medicine at the University of Colorado, focuses her research on Parkinson's disease and tremor, including CBD and medical cannabis. Prior to legalization, she was uncertain about the potential of medical cannabis due to its psychoactive effects. Currently, she is at the forefront of clinical research into the use of cannabis for treating Parkinson's disease, with over \$1 million in funding. She recommends medical cannabis for Parkinson's patients and plays a vital role in the Michael J. Fox Foundation. Her advice, "Take CBD during the day and a combination of THC and CBD at night for better sleep." (10)

An article written by Markham Heid, recently (in the second quarter of 2024) published in the special edition of *TIME Magazine*, titled *The Promise and Reality of the New Wonder Drug* further explains about the benefit of medical cannabis. In the article, the writer quotes assertion of Margaret Haney, Ph.D, professor of neurobiology and director of the Cannabis Research Laboratory at Columbia University in New York, U.S. As quoted from the article, Haney reports, "There are three indications for which there is substantial evidence that cannabis can be helpful. Cannabis can calm muscle spasticity in adults with multiple

sclerosis. It can also relieve chronic pain. For chronic or neuropathic pain, we don't have a lot of good treatments, so there's a lot of potential for cannabis to fill that void." (11)

Proposed Policy Reforms

More and more countries have changed their policy on the use of cannabis, especially nations that have legalized cannabis for medical purposes, or both medical and recreational use. The shift of this paradigm also led to historic moment on December 2, 2020, when United Nations Commission on Narcotic Drugs (UNCND) reclassified cannabis, officially acknowledging the plant's therapeutical properties. (12) Despite such international developments, Indonesia continues to classify cannabis as a Class I substance. This classification strictly prohibits its use in healthcare settings and poses substantial obstacles to scientific research. Consequently, individuals using cannabis for personal health reasons face criminal charges, which often result in prison sentences, thereby contributing to the already critical issue of prison overcrowding. (13)

Given these circumstances, there is an urgent need for immediate reform of narcotics policies in Indonesia. Correspondingly, the country needs to revise its legislative framework to address challenges on regulations concerning the use of cannabis. In other words, cannabis should be reclassified from Class I to Class III substance. The reclassification will not only align Indonesia's policies with evolving international standards but also pave the way for the development of a regulated medical cannabis in the country. This reform is vital for conducting scientific research and improving patient access to alternative medical treatments (medical cannabis).

Regulations on medicinal cannabis requires a comprehensive review carried out through a qualitative policy analysis approach. This approach is important for developing an inclusive and thorough conceptual framework for the country's cannabis policy. The framework should encompass such critical aspects as determining whether medical cannabis should be treated as a pharmaceutical product or an herbal preparation. Thus, the framework can pave the way for patient access to medical cannabis programs. No less important are other aspects, such as designing effective mechanisms for the dispensing or distribution of cannabis, managing the domestic supply chain, and considering provisions for home-growing. (14)

There are two primary dimensions in formulating medical cannabis policies in Indonesia, namely cannabis supply (production) and patient authorization (including patient access). In order to meet patient needs and maintain regulatory control of medical cannabis, it is essential to ensure a stable and safe supply chain.

All in all, the primary goal of the proposed policy reforms is to establish a comprehensive and regulated framework for the use of medical cannabis in Indonesia. This involves conducting clinical research on three types of medical cannabis: herbal (directly from the plants), plant-based extracts (such as oils), and synthetic forms (chemically produced). Each type should be studied thoroughly for its medical efficacy and safety.



Regulatory Framework and Oversight

The regulatory framework will involve key government institutions to ensure proper oversight and control, as described below.

Ministry of Health: This government body will be responsible for issuing licenses to cannabis producers. The ministry will grant the licenses based on strict criteria to ensure that cultivation meets the required standards for medical use.

National Narcotics Agency (BNN): This institution will be in charge of supervising the cultivation process, overseeing both government-owned and private pharmaceutical companies involved in growing and distributing medical cannabis. The role of BNN will be crucial in ensuring that cultivation practices are in accordance with legal and safety standards.

Food and Drug Monitoring Agency (BPOM): This government agency will be tasked with ensuring the proper distribution of medical cannabis. They will monitor the entire supply chain to ensure that cannabis products are safe, effective, and reach only authorized medical facilities and patients.

National Police: The police will play a vital role in preventing the illegal sale and distribution of cannabis. They will also work on initiatives to educate and prevent young people from misusing cannabis.

Learning from International Models: The U.S. Example

The United States provides a valuable model for how cannabis regulation can evolve. At the federal level, cannabis has been classified as a Class I substance, indicating a high potential for abuse and no approval for the plant's medical use. However, recent developments indicate a shift towards reclassifying cannabis as a Class III drug, which acknowledges its medical potential and reduces the regulatory burdens associated with research.

At the state level, over 40 states have legalized cannabis for medical and/or recreational use. This decentralized approach allows for diverse research and regulatory strategies, which can inform best practices. The National Institute on Drug Abuse (NIDA) has significantly contributed to cannabis research in the U.S., supporting studies that explore its medical benefits and potential risks.

The primary goal of cannabis legalization in the U.S. has been to redirect the focus of the Drug Enforcement Administration (DEA) from cannabis to more dangerous illegal drugs such as heroin and cocaine. This reallocation of resources aims to improve public health outcomes by prioritizing the fight against more harmful substances. (15)

The Importance of Cannabis Research Studies

With the increasing number of countries legalizing cannabis for medical and recreational use, the need for extensive cannabis research studies is also rising. These studies are crucial for creating public awareness of not only the benefits of cannabis, particularly its medical properties, but also the potential risks and ways to mitigate them. This includes addressing the possibility of cannabis abuse and providing guidance for safer consumption patterns.



Understanding the impacts of cannabis is vital for formulating public policies, especially concerning public health and cannabis's role in healthcare.

Extensive research can provide deeper insights into the therapeutic potential of cannabis. Many anecdotal beliefs and preliminary studies suggest cannabis can alleviate various conditions, such as chronic pain, epilepsy, anxiety, post-traumatic stress disorder, and seizures. However, the cannabis industry still lacks sufficient evidence to validate these claims. Comprehensive clinical trials are needed to confirm the benefits of medical cannabis.

It is crucial for cannabis research and related studies to emphasize public health aspects. Research should address issues such as dependency, impaired driving, and the impact on vulnerable populations, like adolescents. (16)

Equally important is the economic aspect. Cannabis research and related studies can unlock socio-economic benefits, including job creation and tax revenues.

In Indonesia, where cannabis is classified as a Class I substance, it is difficult for scientists and medical practitioners to procure cannabis for research studies. This issue is similar to the situation in the United States, as discussed in the section "Learning from International Models: The U.S. Example." An article by Scott C. Martin, recently published in a special edition of TIME Magazine titled "A Brief History of Marijuana Law in America," narrates this adversity and highlights the need to reclassify cannabis. At the federal level, cannabis is listed as a Class I substance, yet the majority of U.S. states have legalized cannabis for medical or both medical and recreational use. As Martin states, "...calls for medical marijuana did not originate in the pharmaceutical or medical communities. Largely, they have come from citizen support at the state level for medical access and decriminalization, through lobbying, activism, and ballot initiatives." (17)

With more states in the U.S. legalizing cannabis, ballot initiatives have proven effective, demonstrating public support where the majority of American citizens favor legalization. In Indonesia, implementing ballot initiatives may be challenging due to educational gaps and the long-standing negative stigma on cannabis. However, optimism is growing with increasing support from the public and government officials, as highlighted in "The Latest Development" section of this research paper.

RECOMMENDATION

Legalizing medical cannabis in Indonesia presents a significant opportunity. By acknowledging its benefits and addressing legal issues, we can implement smart, evidence-based policies. Decriminalizing personal use can help alleviate prison overcrowding and reduce corruption. In addition, supporting research and fostering collaboration is crucial for enhancing healthcare.

A well-thought-out plan is also essential. The primary focus of the plan should be on developing a robust medical cannabis industry within Indonesia, taking care not to hastily rush into the commercial sale of cannabis. Preparing experts and educating the public are crucial steps to ensure a cohesive and effective implementation. This approach can pave the way for new economic opportunities and providing safe herbal treatments for the public.



Key initiatives should be considered to achieve these goals are:

- 1. Revising the Classification of Cannabis:** Reclassify cannabis from a Class I to a Class III substance – it is a reflection of acknowledging the plant's medical benefits and lower its potential for abuse.
- 2. Implementing a Pilot Project:** Launch a pilot project called the Cannabis Utilization Industry in Aceh Province to explore the practical applications and benefits of medical cannabis.
- 3. Promoting Herbal Production:** Encourage the cultivation and production of herbal medicines, with cannabis being a focal point.
- 4. Conducting Clinical Trials:** Carry out clinical trials involving patients to gather data on the efficacy and safety of medical cannabis treatments.
- 5. Collaborating with Universities:** Partner with reputable universities to establish and conduct research centers dedicated to studying medical cannabis.

By pursuing these initiatives, Indonesia can pave the way for a thriving medical cannabis sector that benefits both the economy and public health.

CONCLUSION

Decriminalizing and regulating cannabis in Indonesia offer a substantial opportunity for positive change. In addition, Indonesian government should consider implementing proposed policy reforms, which will require careful planning and collaboration among various government institutions. This move can enhance public health, alleviate prison overcrowding, and support scientific research. By adopting a health-focused and fair approach to drug policy, Indonesia can set a precedent in crafting progressive and effective regulations that benefit all people across the country.

REFERENCES

- Dania Putri; Tom Blickman (2016). Cannabis in Indonesia: Patterns in consumption, production, and policies. P. 4, 11. Drug Policy Briefing. Translationalinstitute.
- United Nations Office on Drugs and Crime (UNODC) (October 18, 2013); [Indonesia prosecutors urged to send people who use drugs to rehabilitation, not prison](#)
- Indonesian Constitutional Court (Mahkamah Konstitusi Republik Indonesia) (March 20, 2024); Uji UU [Narkotika Menyoal Ganja Medis Ditolak](#)
- Pijar Anugerah (2022), [Ganja medis: Perjuangan Santi Warastuti demi mencari pengobatan untuk anaknya](#), BBC News Indonesia.
- News on the website of Dewan Perwakilan Rakyat Republik Indonesia (2022), [Sufmi Dasco Dorong Komisi III Percepat Pembahasan Revisi UU Narkotika](#) on June 28, 2020.
- Ikhwan Hasto (2021), Vice, [Ngobrol Bersama Ibu Penggugat UU Narkotika agar Ganja Medis Legal di Indonesia](#)



- Editorial (July 8, 2022). [Legalizing marijuana](#). The Jakarta Post.
- Boorsma, W. G. (1917); Boorsma, W. G. (1918); and based on interviews conducted by Lingkar Ganja Nusantara.
- Bonini SA, Premoli M, Tambaro S, Kumar A, Maccarinelli G, Memo M, Mastinu A. Cannabis sativa: A comprehensive ethnopharmacological review of a medicinal plant with a long history. *Journal of Ethnopharmacology*. 2018;227:300- 315.
- Kent Hutchison, Ph.D., Professor of Psychology and Neuroscience; an interview with Maureen Leehey, MD, Professor Emerita of Neurology; CBD and THC Specialization Program at the University of Colorado.
- Heid, Markham (2024); TIME Magazine; The Promise and Reality of the New Wonder Drug.
- World Health Organization news (December 4, 2022). [UN Commission on Narcotic Drugs reclassifies cannabis to recognize its therapeutic uses](#)
- Asmin Fransiska (2022). Weighing of the criminalization of cannabis in Indonesia narcotic law with international human rights law perspective. *International Journal of Research in Business and Social Science* Vol. 11 no. 6. ISSN: 2147-4478.
- Vendula Belackova¹ BA(Hons), M.Eco, MA (Media), PhD, Visiting Research Fellow; Marian Shanahan¹ Dip(Nursing), BA(Hons), M.Eco, PhD, Senior Research Fellow; Alison Ritter^{1,2} BA(Hons), MA(Clin Psych), PhD, Professor (2018). Mapping regulatory models for medicinal cannabis: a matrix of options. *Australian Health Review*, 42, 403–411.
- Wayne Hall, Ph.D., The costs and benefits of cannabis control policies; National Library of Medicine.
- A Report of The National Academies of Sciences, Engineering, Medicine (2017); *The Health Effects of Cannabis and Cannabinoids – The Current State of Evidence and Recommendations for Research*; The National Academies Press, Washington, D.C. SBN-13: 978-0-309-45304-2
- Martin, Scott C. (2024); TIME Magazine; A Brief History of Marijuana Law in America.



DECRIMINALIZATION OF DRUGS CRIME FROM OF CRIMINAL POLICY PERSPECTIVE

Nur Aripkah^{1*}, Khairunnisa Noor Asufie²

Faculty of Law, Mulawarman University, Indonesia

*Corresponding author: nuraripkab@fb.unmul.ac.id

ABSTRACT

Drugs crime is a crime that knows no boundaries, this crime is categorized as a transnational crime because it can be controlled by from several countries. This crime also knows no age or background, or in other words, this crime reaches all groups. The phenomenon of drugs crime that we see is that the death penalty that has been implemented does not reduce the number of drugs traffickers or their users. This certainly illustrates that punishments such as the death penalty are no longer effective in the current era of technological development. Based on this, the focus of the discussion in this article is to find out how the decriminalization of drugs crime from of criminal policy perspective, especially in Indonesia. The research method used in this article is normative juridical with a conceptual, statutory and comparative approach.

Keywords: criminal policy, decriminalization, drugs

INTRODUCTION

Until now, drugs are still a big problem that cannot be resolved properly because of the various things that accompany it. The circulation of drugs is very unlimited and difficult to control, although when compared with the past, the spread of drugs can now be suppressed with various efforts made. Prevention of the spread of drugs is carried out by related parties in the hope of reducing the number of drug users. The drug problem is a global problem that must be sought for the best way to reduce the spread and use of drugs. The spread of drugs is global and borderless, making it difficult to control. Advances in digital technology also make it easier to spread drugs. The spread and use of drugs is a big homework for all countries in the world, including Indonesia.

The spread of drugs and high drug use in a country has an impact on the number of narcotics crimes in a country. The phenomenon of narcotics crime in Indonesia is caused by several things, namely: geographical conditions, geopolitical conditions, socio-economic conditions, information flow and globalization, modernization social changes, and changes in lifestyle (Indonesia, 2021). Indonesia, with its strategic geographical location, makes the

flow of drug trafficking easier, geopolitical conditions related to the government system which regulates how the legal system regulates drug trafficking can be minimized so as to reduce narcotics crime, economic conditions also influence it because when viewed from the dealer's side Drugs promise large incomes, the flow of information and globalization are also very influential considering that in the flow of globalization everything becomes unlimited, and modern social changes and changes in lifestyle for several groups that normalize drug use are also the cause of increasing narcotics crimes in Indonesia.

Based on data from 2009 to 2022, there were 7,773 narcotics cases in Indonesia, throughout 2022 there were 879 cases, which was an increase of 14.76% compared to the previous year which amounted to 766 cases (databoks, databoks, 2023). Based on the National Narcotics Agency Research, Data and Information Center (PUSLITDATIN BNN), in 2022 the number of cases and suspects for drug crimes was 53,405 (BNN, 2022). Based on this data, it can be seen that narcotics crime cases in Indonesia can be considered to be still high and still increasing. Such conditions should be used as material in discussions to find solutions on how efforts should be made to suppress the distribution and use of narcotics so that it has an impact on reducing narcotics crimes in Indonesia.

So far, all narcotics abuse is regulated in Law Number 35 of 2009 concerning Narcotics, all prohibitions and sanctions are contained in this law. Several things are regulated, such as: criteria for narcotics dealers, narcotics users, narcotics addicts and narcotics abusers. So far, what has happened in the field is that every narcotics crime committed will result in imprisonment, a fine or even the death penalty. Imprisonment sentences with varying lengths of time up to a maximum of life, fines of varying amounts up to the death penalty. However, even though such punishment does not reduce the number of narcotics crimes, a discussion is needed to find an effective solution to this so that concrete steps can be taken to prevent the increase in narcotics crimes in Indonesia.

According to 2021 data relating to the number of convicts and detainees in special narcotics prisons in Indonesia, it was found that several prisons were found to exceed the capacity of the narcotics prisons to accommodate prisoners (RI, Directorate General of Corrections, Ministry of Law and Human Rights of the Republic of Indonesia, n.d.). Based on the Indonesia Drugs Report 2022 from the National Narcotics Agency (BNN), it shows that there are at least 13 prisons that have excess capacity to accommodate convicts and narcotics detainees (databoks, databoks, 2023). Based on this data, it can be understood that imprisonment is ineffective as a sanction for criminal offenses committed.

Punishment in the form of fines for narcotics crimes. The reality in the field is that the implementation of fine criminal decisions has not been implemented properly, most prisoners do not pay fines and choose to replace them with prison sentences due to various factors, such as: the high amount of fines set by the government, the prisoner's economic factors. , there are alternatives to fines (Subroto, 2022).

Based on data from the Directorate General of Corrections in 2021, the number of people sentenced to death by foreigners and Indonesian citizens for narcotics and psychotropic substances cases is a total of 140 people, with details of 111 Indonesian citizens and 29 foreigners. The number of people sentenced to death for narcotics crimes in Indonesia is high,



but in reality the number of narcotics crimes has not decreased with the threat of the death penalty.

It is hoped that the criminalization of narcotics abuse will be an effective effort to prevent drug crimes considering the increasing increase in narcotics abuse in Indonesia. Criminal threats are considered as a deterrent effort with the threat of imprisonment, fines and the death penalty. The reality that is happening in the field currently is that criminalization is not the most effective solution, even though the threat of the death penalty has not been able to have a big effect in reducing the number of narcotics crimes.

After criminalization, the discourse of decriminalizing narcotics abuse emerged. This decriminalization does not make illegal and illegal narcotics abuse legal. Decriminalization of narcotics abuse in the Indonesian legal system does not remove the prohibition on possessing narcotics for one's own purposes. The government must still regulate prohibitions on the act of cultivating, cultivating, possessing, storing, controlling or providing narcotics, even for personal use, and administrative sanctions for anyone found to be abusing narcotics. The administrative sanctions referred to are the loss of certain rights such as extending a driving permit and other administrative sanctions.

Decriminalization is actually not something new, especially for narcotics crimes, this is because several other countries have implemented decriminalization for narcotics crimes and it has proven to be effective in their countries. Indonesia is currently also making efforts so that some narcotics crimes are not criminalized but instead decriminalized by means such as carrying out rehabilitation for those who abuse narcotics.

Based on several things that have been published above, the author will discuss the decriminalization of narcotics crimes in Indonesia. The current policy of decriminalization of narcotics crimes in Indonesia and the decriminalization policy when viewed from a criminal policy perspective.

METHODOLOGY

The research method used in this article is normative juridical with a statutory approach, a conceptual approach and a comparative approach. The normative juridical research method is library legal research carried out by examining library materials or secondary data.

RESULT AND DISSCUSION

Current Decriminalization Policy for Narcotics Crimes in Indonesia

So far, every time a narcotics crime occurs, it will be criminalized with the threat of imprisonment, a fine or the death penalty. However, it turns out that as time goes by the criminalization of narcotics criminals is not effective in reducing the number of narcotics criminals.

The prison sentence that has been imposed in Indonesia to overcome the problem of narcotics abuse has apparently not been able to overcome the problem of narcotics crimes in Indonesia. In narcotics abuse, an alternative solution is needed to overcome this problem by



carrying out rehabilitation, not being subject to imprisonment but being given the opportunity to carry out rehabilitation. This rehabilitation is a form of decriminalization of narcotics crimes. Decriminalization with rehabilitation is also able to help solve the problem of prison overcrowding in Indonesia because 30% of prison inmates in Indonesia are convicts of criminal narcotics abuse (Latifah, 2019). Criminalization of narcotics crimes is one of the causes of overcapacity in prisons in Indonesia, namely criminal law policy, where in material criminal law there is over-criminalization using prison sentences (Usman, 2020).

In connection with the implementation of the decriminalization of narcotics crimes in Indonesia, in September 2023, President Joko Widodo chaired a limited meeting (*ratas*) related to the eradication and handling of narcotics cases. This meeting discussed the increasing number of narcotics cases in Indonesia, where based on the BNN report, the number of narcotics abusers was around 1.95 percent or 3.6 million people. So the President also emphasized the overcrowding condition of detention centers and prisons in Indonesia. In this meeting, President Joko Widodo invited his staff to look for breakthroughs to overcome this problem. Several things that are considered to be solutions are: first, making breakthroughs that the government must think about regarding safe use of narcotics and second, introducing decriminalization (eliminating criminal legal responses) for narcotics users (IJRS, 2023).

The decriminalization policy as an embodiment of the spirit of reforming legislation and regulations regarding narcotics in order to resolve the increasingly massive problem of narcotics abuse in Indonesia is in line with the International anti-narcotics movement under the UNDOC initiative and is considered to bring great benefits, various benefits include reducing pure legal criminal charges and tendencies *over capacity* in prison for narcotics cases, breaking the chain of narcotics trafficking, providing recovery for addicts to overcome economic and social losses and encouraging community independence to recover themselves (empowerment aspect) (Herindrasti, 2018)

In the Indonesian legal system, criminalization and decriminalization regulations cannot be separated from criminal policy. The future regulation of criminalization and decriminalization in the legal system in Indonesia requires selective steps to determine the classification of an act as a criminal act. This will be optimal if it is supported by synchronizing and harmonizing laws and regulations and mechanisms *judicial review* as a decriminalization effort. However, to realize this right there are challenges, namely Indonesia, with its many islands which have cultural diversity, thus influencing the values that exist in society (Situmeang, 2022).

The concept of decriminalization is regulated in Article 54 of Law Number 35 of 2009 concerning Narcotics. Based on the provisions of the article contained in the law, it is stated that “narcotics addicts are required to receive rehabilitation services”. Article 103 states that “judges can decide and assign addicts and victims of narcotics abuse to undergo treatment”. In Article 127 paragraph (3) it is explained that “in deciding cases involving Narcotics Abuse, judges are obliged to pay attention to the provisions as intended in Article 54, Article 55 and Article 103”.

The journey of decriminalization in Indonesia is reflected in the authority of Judges as regulated in the following statutory regulations:

Article 41 of Law Number 5 of 1997 concerning Psychotropic Substances; Psychotropic users who suffer from dependency syndrome related to criminal offenses in the field of



psychotropic substances can be ordered by the judge deciding the case to undergo medication and/or treatment;

Article 47 of Law Number 22 of 1997 concerning Narcotics.

Decide to order the person concerned to undergo treatment and/or treatment, if the narcotics addict is proven guilty of committing a narcotics crime; or

Determine to order the person concerned to undergo treatment and/or treatment, if the narcotics addict is not proven guilty of committing a narcotics crime

Article 47 of Law Number 22 of 1997 concerning Narcotics remains in effect as stated in Article 103 of Law Number 35 of 2009 concerning Narcotics.

Implicitly, the judge's authority shows that narcotics addicts are perpetrators of criminal acts and at the same time victims of the crime itself (*Self Victimization* or *Victimless Crime*). So that under these conditions, decriminalization can be carried out for the conditions that concern the user or those who are harmed. The application of decriminalization to narcotics crimes is not applied to all narcotics crimes.

The decriminalization framework has also been actualized in Article 13 Paragraph 4 of Government Regulation Number 25 of 2011 concerning Mandatory Reporting for Narcotics Addicts. Based on the provisions of this article, even from the stages of investigation, prosecution and trial, the Narcotics abuser has the right to be placed in a rehabilitation center to undergo recovery, based on the results of recommendations from the Integrated Assessment Team which ensures that the person is a genuine Narcotics Addict or Abuser. Based on the decriminalization framework, Narcotics Users are still declared to have violated the law, but at the stages of investigation, prosecution and trial, law enforcers can take steps so that in the end the Narcotics Abuser is sentenced to rehabilitation according to the level of their dependence. The lack of judge's decisions giving decisions in the form of rehabilitation for Narcotics addicts is due to several influencing factors, namely: first, judges must look at case by case when applying Article 127 of Law Number 35 of 2009 concerning Narcotics on the grounds that the construction of sentences in Narcotics cases carries high criminal penalties. . Second, apart from the Narcotics Law, the Supreme Court (MA) issued Circular Letter Number 1 of 2000 concerning punishment so that it is commensurate with the severity and nature of the crime. Third, the judge's perspective in deciding the case (Saikhu, ~~Decriminalization of Narcotics Abusers, Victims of Abuse and Addicts According to Law Number 35 of 2009 concerning Narcotics~~, 2020).

Handling narcotics crime cases through decriminalization in Indonesia is important considering that decriminalization can be an alternative solution to several things such as prisons being full due to narcotics crime convicts, then for abuse carried out as an addict or pure abuse, rehabilitation is needed in the hope that they can recover without being dependent. again with narcotics. The decriminalization of narcotics crimes in Indonesia needs to be discussed properly so that the existing concept can be implemented properly. Criminalization of narcotics crimes can be transferred to decriminalization in certain cases of narcotics crimes.



The Decriminalization Policy for Narcotics Crimes is viewed from a Criminal Policy Perspective

G. Peter Hoefnagels stated that criminal policy is the rational organization of social reactions to crime (Arief, 2016). This theory is a reformulation of Marc Ancel's theory which states that criminal policy is the rational organization of the control of crime by society (rational efforts by society to overcome crime) (Arief, 2016). Hoefnagels formulates it in more detail: (Ruben Achmad, 2020)

- a. Criminal policy as a science of responses;
- b. Criminal policy as a science of crime prevention;
- c. Criminal policy is a policy of designating human behavior as crime;
- d. Criminal policy is rational total of the responses to crime.

Based on the above thinking, the response to narcotics abuse will be pursued through two aspects, namely the penal aspect (criminal law) and the non-penal aspect (prevention). Criminal policy is part of social policy or national development policy. Confirmation that crime prevention efforts and social planning need to be integrated into overall social policy and development planning. As in Barda Nawawi Arief's book, Sudarto states that if criminal law is to be involved in efforts to overcome the negative aspects of societal development (modernization), then it should be seen in the overall relationship of criminal politics or social defense planning, and must be an integral part of national development planning. (Arief, 2016).

The use of penal means to tackle narcotics crimes cannot be the only effort to prevent and overcome these crimes. Especially for narcotics crimes, the crime trend has never decreased. If you look at the crime trend in 2008-2017, it can be seen that narcotics crimes are the only crimes that have increased, compared to other crimes which have generally decreased (Ardhany Suryadarma, Erasmus A. T. Napitupulu, 2022). Based on data from the Directorate General of PAS as of September 15 2022, the total number of inmates in detention centers and prisons in Indonesia is 276,474 people, of that number, 138,856 people are for narcotics crimes, this number even beats the total number of general crimes which is 131,864 people (Ardhany Suryadarma, Erasmus A. T. Napitupulu, 2022). Of the 138,856 inmates in detention centers and prisons with narcotics crimes, 104,822 of them are narcotics users and addicts in prison, and 19,562 of them are narcotics users and addicts in prison. In other words, almost 90% of the inmates of detention centers and prisons in Indonesia for narcotics cases are narcotics users and addicts (Ardhany Suryadarma, Erasmus A. T. Napitupulu, 2022). This has resulted in almost all prisons in Indonesia experiencing overcapacity and overcrowding. This condition of overcapacity prisons in turn gives rise to further problems, such as increasing maintenance and upkeep costs in prisons, decreasing the effectiveness of supervision, increasing criminal careers, as well as the occurrence of drug abuse in prisons and even riots in prisons.

Based on these data, it can be said that so far approaches to combating narcotics in Indonesia have not achieved success. The criminalization approach or approach using criminal law clearly results in more focus on imprisonment which suppresses government investment in health, resulting in a higher prison population compared to care or people who need treatment handled by the state.



UU no. 35 of 2009 concerning Narcotics regulates two types of rehabilitation, namely medical rehabilitation and social rehabilitation. Both can be done through inpatient or outpatient care. Medical rehabilitation, according to Law no. 35 of 2009 was organized by the Ministry of Health, and is regulated more clearly in Minister of Health Regulation No. 50 of 2015 concerning technical instructions for implementing mandatory reporting and medical rehabilitation for addicts, abusers and victims of narcotics abuse. Meanwhile, social rehabilitation is organized by the Ministry of Social Affairs, which is regulated more clearly in Permensos No. 16 of 2019, concerning Social Rehabilitation Standards.

Rehabilitation can be provided through two methods, namely voluntary or forced. Article 55 Law no. 35 of 2009 stipulates the obligation for narcotics addicts to report themselves to medical and social rehabilitation institutions appointed by the government to receive treatment and/or care. Meanwhile, Article 103 states that the judge examining the case of a narcotics addict can decide to order the person concerned to undergo rehabilitation if the addict is proven guilty of committing a narcotics crime; or decide to order the person concerned to undergo rehabilitation if the narcotics addict is not proven guilty (Ramdlonaning et al., 2022).

Criminal policies in law enforcement for criminal acts of narcotics trafficking in the digital era do not always have to prioritize legal processes related to the Criminal Justice System (Panggabean et al., 2024). Criminalization of narcotics in Law no. 35 of 2009 the enforcement process will be carried out through the Criminal Justice System mechanism. The justice that we want to achieve through SPP is Retributive Justice and the Just Desert Model (equitable retribution). Indonesian context Criminal Law Enforcement must pay attention to the National Law guidelines which function as Legal Framework as regulated in the 1945 Constitution and the Basic Law on Judicial Power. Therefore, criminal law enforcement is not only interpreted as legal certainty but also substantive certainty (Rahman, 2021).

A health approach in treating drug addicts and victims becomes increasingly important when it is known that the problem of drug abuse has contributed to the transmission of HIV and Aids. This condition has given rise to a risk reduction approach (harm reduction). The concept of harm reduction in narcotics cases for addicts does not mean forgiving the perpetrator and stating that the action is not a criminal act or releasing the element of guilt. This harm reduction concept is needed by considering that the perpetrator is a victim who must be protected and must be cured of his illness. Placing the perpetrator in prison even though the perpetrator has been declared cured by the medical team is also not the right solution because the perpetrator still needs a phase of assistance, both physically and mentally so that he can truly escape the trap of narcotics (Gunawan, 2016).

Some of the discussions above further illustrate that the criminal (prison) approach has not been effective in dealing with the problem of narcotics abuse and its impacts. The experience of the United Nation General Assembly will hold a Special Session (UNGASS) for the World Narcotics Problem, last held in 1998, the focus was on the total eradication of narcotics from the world, which has failed to suppress the growth rate of world narcotics abuse. Now the leaders of member countries and their citizens are required to rethink this ineffective and dangerous approach (Indonesian Cannabis news and Movements, n.d).

If in the past a repressive (law enforcement) approach to handling drug problems was considered better because it could take direct firm action against drug dealers and syndicates,



however, as time goes by, this approach is no longer the main priority for many countries in the world. including in Indonesia. In this case, a preventive approach is the choice of countries in the world to overcome the drug problem in their respective regions. This can be seen in the implementation of the 62nd Session of the Commission on Narcotics Drugs (CND) in Vienna, Austria, which shows the attitude of 19 most developed countries and Latin America who are of the view that tough law enforcement is not always effective in resolving the drug problem. An approach through prevention and rehabilitation efforts based on the principles of public health and human rights is considered more appropriate for overcoming drug problems.

One of the fundamental reasons why it is necessary to rely on non-penal policies is the limited ability of criminal law to control criminal acts that occur in society. The limitations of criminal law policy were conveyed by the United Nations (UN) at the 8th UN Congress. It is stated that The formal processes of criminal justice-apprehension, prosecution, sentencing, punishment and rehabilitation of offenders-have in recent years been shown to have only a limited effect in controlling crime. United Nations, Crime Prevention and Criminal Justice in the Context of Development: Realities and Perspectives of International Cooperation (Priamsari, 2022).

Indonesia can learn from the Dutch and Portugal, which is already moved to decriminalization in narcotics paradigm. Dutch drug policy, once considered pragmatic and lenient and rooted in a generally tolerant attitude toward drug use, has slowly but surely shifted from a primarily public health focus to an increasing focus on law enforcement. The “coffee shop” policy and the policy toward MDMA/ecstasy are illustrations. Both were initiated from a public health perspective but were attacked because of unintended side effects relating to supply markets, crime, and nuisance. Coffee shops became the subject of increasing restrictions and MDMA/ecstasy production became the target of a comprehensive enforcement program. It took some time before the tougher strategies were applied. The health-oriented approach and the conviction that drug problems can be contained, but not eradicated, are deeply rooted (Houben & Kleemans, 2015).

Portugal decriminalized public and private use, acquisition and possession of all illegal drugs in 2000 adopting an approach focused on public health rather than public order priorities. With the argument that the Drug Policy Model in Portugal has not proven influential enough to free drug use from the stigma that associates it with crime or pathology (Rego, et.al, 2021).

CONCLUSION

Based on the discussion above, the current policy of decriminalizing narcotics crimes in Indonesia in Law no. 35 of 2009 concerning Narcotics is implicitly regulated, but in fact decriminalization in Indonesia has not yet been fully implemented based on the field data previously explained which illustrates that the criminalization approach has clearly resulted in more focus on imprisonment which puts pressure on government investment in health, resulting in higher prison population rates compared to treatment. or people who need care handled by the state. Indonesia can learn from other countries how they deal with the narcotics problem by strengthening interventions in health services, one of the most important mechanisms is by strengthening and mainstreaming harm reduction.



REFERENCES

- Ardhany Suryadarma, Erasmus A. T. Napitupulu, M. R. (2022). *Situasi Dampak Kebijakan Narkotika dan Rekomendasi Dekriminalisasi di Indonesia*.
- Arief, B. N. (2016). *Bunga Rampai Kebijakan Hukum Pidana (Perkembangan Penyusunan Konsep KU P Baru)*. Prenadamedia Group.
- BNN, P. (2022). Puslitdatin BNN. Taken back from <https://puslitdatin.bnn.go.id/konten/unggah/2022/07/IDR-2022.pdf>
- Databoks. (2022). databoks. Taken back from [https://databoks.katadata.co.id/datapublish/2023/12/19/kasus-narkotika-yang-ditangani-bnn-meningkat-pada-2022#:~:text=Badan%20Narkotika%20Nasional%20\(BNN\)%20menangani,sebelumnya%20yang%20sebanyak%20766%20kasus](https://databoks.katadata.co.id/datapublish/2023/12/19/kasus-narkotika-yang-ditangani-bnn-meningkat-pada-2022#:~:text=Badan%20Narkotika%20Nasional%20(BNN)%20menangani,sebelumnya%20yang%20sebanyak%20766%20kasus).
- Databoks. (2023). databoks. Taken back from [https://databoks.katadata.co.id/datapublish/2023/12/19/kasus-narkotika-yang-ditangani-bnn-meningkat-pada-2022#:~:text=Badan%20Narkotika%20Nasional%20\(BNN\)%20menangani,sebelumnya%20yang%20sebanyak%20766%20kasus](https://databoks.katadata.co.id/datapublish/2023/12/19/kasus-narkotika-yang-ditangani-bnn-meningkat-pada-2022#:~:text=Badan%20Narkotika%20Nasional%20(BNN)%20menangani,sebelumnya%20yang%20sebanyak%20766%20kasus).
- Databoks. (2023). Taken back from <https://databoks.katadata.co.id/datapublish/2023/05/04/ini-jumlah-narapidana-dan-tahanan-narkotika-banyak-lapas-kelebihan-kapasitas>.
- Databoks. (2023). databoks. Taken back from <https://databoks.katadata.co.id/datapublish/2023/05/04/ini-jumlah-narapidana-dan-tahanan-narkotika-banyak-lapas-kelebihan-kapasitas>
- Gunawan, G. (2016). Dekriminalisasi Pecandu Narkotika: Pergeseran Pendekatan Dan Implikasi Kebijakan Penanganan Pecandu Narkotika Di Indonesia. *Sosio Informa*, 2(3), 239–258. <https://doi.org/10.33007/inf.v2i3.339>
- Herindrasti, V. S. (2018). Drug-Free ASEAN 2025: Tantangan Indonesia dalam Penanggulangan Penyalahgunaan Narkobs. *Jurnal Hubungan Internasional*, 14-15.
- Houben Marianne van Ooyen and Edward Kleemans. (2015). Drug Policy: The “Dutch Model”. *Crime and Justic*, 44, <https://doi.org/10.1086/681551>
- Indonesia. B. N. (2021). BNN Surakarta. Taken back from <https://surakartakota.bnn.go.id/kenapa-narkoba-bisa-sampai-indonesia/>
- IJRS. (2023). Indonesia Judicial Research Society. Taken back from <https://ijrs.or.id/2023/09/13/jkrm-menanggapi-ratas-presiden-tentang-narkotika-dengan-dekriminalisasi-pada-revisi-uu-narkotika-beban-lapas-akan-hilang-40/>
- Latifah, M. (2019). Dekriminalisasi Penyalahgunaan Narkotika di Indonesia. *Bidang Hukum INFO Kajian Singkat Terhadap Isu Aktual dan Strategis*, 5.

- Panggabean, F., Ediwarman, E., Sunarmi, S., & Marlina, M. (2024). Kebijakan Kriminal Dalam Penegakan Hukum Tindak Pidana Peredaran Narkotika Era Digital di Kota Medan. *Locus Journal of Academic Literature Review*, 3(2), 173–183. <https://doi.org/10.56128/ljoalr.v3i2.287>
- Priamsari, R. R. P. A. (2022). Kebijakan Integral Penanggulangan Tindak Pidana. *Jurnal Hukum Progresif*, 10(2), 99–111. <https://doi.org/10.33007/inf.v16i1.42>. Jurnal
- Rahman, D. (2021). Perspektif Kebijakan Kriminal Dalam Upaya Penanggulangan Tindak Pidana Narkotika Di Indonesia. *Swara Justisia*, 3(1), 1689–1699. <http://journal.unilak.ac.id/index.php/JIEB/article/view/3845%0Ahttp://dspace.uc.ac.id/handle/123456789/1288>
- Ramdlonaning, A., Natalud, C., Istyawan, M., & Ayuningtyas, V. (2022). Pemetaan Masalah Dalam Implementasi Kebijakan Rehabilitasi Penyalahguna Narkotika Di Indonesia. *Jurnal Kajian Strategik Ketahanan Nasional*, 5(1), 37–42. <https://scholarhub.ui.ac.id/jkskn/vol5/iss1/4>
- RI, D. P. (t.thn.). Taken back from dari <https://sada.kemenkumham.go.id/ditjenpas>
- RI, D. P. (t.thn.). Ditjen Perasyarakatan Kementerian Hukum dan HAM RI. Taken back from <https://sada.kemenkumham.go.id/ditjenpas>
- Ruben Achmad, N. A. A. (2020). Kebijakan Kriminal Dalam Pencegahan Dan Penanggulangan Narkotika Di Kota Palembang. *Legalitas: Jurnal Hukum*, 12(1), 38–64. <https://doi.org/10.33087/legalitas.v12i1.193>
- Saikhu, M. (2020). Dekriminalisasi Bagi Penyalahguna, Korban Penyalahgunaan dan Pecandu Narkotika Menurut Undang-Undang Nomor 35 Tahun 2009 Tentang Narkotika. Dekriminalisasi Bagi Penyalahguna, Korban Penyalahgunaan dan Pecandu Narkotika Menurut Undang-Undang Nomor 35 Tahun 2009 Tentang Narkotika. Indonesia: Universitas Islam Malang.
- Situmeang, S. M. (2022). Politik Hukum Pidana Terhadap Kebijakan Kriminalisasi dan Dekriminalisasi dalam Sistem Hukum Indonesia. *Res Nullius Law Journak*, 208.
- Subroto, D. W. (2022). Efektifitas Pemberian Denda Terhadap Kasus Tindak Pidana Narkotika. *Jurnal Pendidikan Kewarganegaraan Undiksha*, 2.
- Usman, B. J. (2020). Over Kapasitas Lembaga Perasyarakatan Dalam Persepektif Kebijakan Hukum Pidana. *Wajah Hukum Fakultas Hukum Universitas Batanghari Jambi*, 443.
- Ximene RÊGO, et. al. (2021). 20 years of Portuguese drug policy - developments, challenges and the quest for human rights. <https://substanceabusepolicy.biomedcentral.com/articles/10.1186/s13011-021-00394-7>



THE URGENCY OF RESTRUCTURING THE CRIMINAL PROVISIONS OF THE NARCOTICS LAW NUMBER 35 YEAR 2009

Siti Ismaya^{1*}, Matheus Nathanael^{2*}, Aisyah Assyifa^{3*}, Alexander Tanri^{4*}
Indonesia Judicial Research Society (IJRS), Indonesia
*Corresponding author : ismaya@ijrs.or.id, siagian.matheus@ijrs.or.id,
aisyah@ijrs.or.id, aderyardhan@ijrs.or.id

ABSTRACT

The criminal provisions of drug related crimes in Law Number 35 Year 2009 concerning Narcotics (Narcotics Law) lacks a clear distinction between the criminal offenses of drug trafficking and the use of drugs. This lack of distinction results in unclear formulation of article elements and overlaps between articles regarding drug trafficking and the use of drugs. This condition reflects the ambiguity in the conception of the criminal law approach and objectives used in the Narcotics Law that results in over-criminalization in drug cases and implies the emergence of negative perceptions and stigma from both society and law enforcement agencies towards drug users. Therefore, this study will focus on the reformulation of the direction of criminalization policy in the Narcotics Law as well as the restructuring of articles on drug offenses in the Narcotics Law. The restructuring of these articles refers to the evaluation results of the interventions that have been used in the Narcotics Law to address the problems of drug trafficking and the use of drugs in Indonesia. This study uses a qualitative method with a normative juridical approach. The discussion in this study includes an explanation of the elements of articles on drug trafficking and the use of drugs offenses in Indonesia and their compatibility with the theory of criminalization, as well as the need for restructuring these articles.

Keywords: *drug trafficking, use of drugs, restructuring of articles, criminalization policy*

INTRODUCTION

Law Number 35 of the Year 2009 regarding Narcotics (Indonesian Narcotics Law) is Indonesia's principal legal instrument of drug law enforcement. Several acts that qualify as narcotics crimes have been regulated in the Indonesian Narcotics Law. However, there are still issues concerning the formulation of some articles that overlap and have been understood to cause misinterpretation due to multiple understandings. An example can be seen in Article

127 of the Narcotics Law, which regulates drug abuse. But at the same time, there are also Article 111 and Article 112 of the Narcotics Law which regulates the ownership, storage, possession, and supply of narcotics. In practice, articles that are used to charge subjects who abuse drugs are articles 111 and 112, since it is easier to prove that a person is carrying, in possession, or has bought narcotics rather than trying to prove whether a person intended to acquire narcotics for personal use, or commercial purpose. It is important to understand that to abuse narcotics, one must first have said narcotics since it would be impossible to use narcotics without first having them in possession, which is mostly acquired through purchase. The formulation in the Narcotics Law separates each action as a separate crime, with different criminal punishments. For example, Article 127 of the Narcotics Law regarding drug abuse is punishable by up to 4 years of imprisonment. Meanwhile, the possession of narcotics as regulated in Article 111 and 112 is punishable by at least 4 years to 20 years of imprisonment, and the purchase of narcotics is regulated in Article 114, and is punishable by at least 5 years to 20 years of imprisonment. This is a major issue since these actions (drug abuse, possession, and purchase) are directly related to each other, especially in relation to drug abuse. The overlapping and multi-interpretative formulation of similar acts in various articles of the Narcotics Law, along with different punishments caused two major issues: legal uncertainty regarding the aspects of several articles in the Narcotics Law and disproportionate sentencing.

Issues regarding legal uncertainty and disproportionate sentencing in the Narcotics Law warrant a restructuration of several articles regarding narcotics crime in Indonesia. In practice, the Indonesian Supreme Court often deviates from the Narcotics Law itself. For example, the Supreme Court has published Supreme Court Circular Letter Number 3 of the Year 2015 regarding The Implementation of the Supreme Court Plenary Meeting Formulation Result as a Performance Guideline (SEMA 3/2015)⁶ and Supreme Court Circular Letter Number 3 of the Year 2023 regarding The Implementation of the Supreme Court Plenary Meeting Formulation Result as a Performance Guideline (SEMA 3/2023). SEMA 3/2015 provides legal justification for judges to give out sentences regarding drug trafficking that deviate from the minimum criminal sentences as stated in the indictment. However, this can only be done after sufficient consideration. In the event that the prosecutor charges Article 111 or Article 112 (drug possession) of the Narcotics Law, but it is proven in court that the defendant has abused drugs and is found with a relatively small amount of narcotics, the judges may sentence the defendant below the mandatory minimum criminal sentence (*vide SEMA 4/2010*).⁷ Meanwhile, SEMA 3/2023 expands SEMA 3/2015, enabling the judge's discretion of sentencing below the mandatory minimum sentence in cases where the prosecutor indicts with article 114 (Purchase of narcotics) of the Narcotics Law. Based on research conducted by the Indonesian Judicial Research Society (IJRS) titled "Research on Sentencing Disparity and Policies for Handling Narcotics Crime Cases in Indonesia: Study of Class 1 Narcotics Crime Cases from the Year 2016-2020 (Article 111-116 and Article 127 of the Narcotics Law)", it was found that 147 of the 616 defendants of illicit drug trafficking (23.8%) was

6 The Indonesian Supreme Court renews several Circular Letters every few years in accordance with the needs of the legal system

7 Supreme Court of Republic Indonesia, Surat Edaran tentang Pemberlakuan Rumusan Hasil Rapat Pleno Kamar Mahkamah Agung 2015 sebagai Pedoman Pelaksanaan Tugas, Circular Letter Number 3 of the Year 2015, Letter A



sentenced below the minimum criminal sentence.⁸ However, as explained in the discussion and the result section, there are still practices that disregard both SEMA 3/2015 and SEMA 3/2023. In some cases where it has been legally proven that the defendant is a drug abuser, they are still charged and sentenced with Article 111 or Article 112, some prosecutors even use Article 114 of the Narcotics Law which regulates the act of offering for sale, selling, buying, receiving, becoming an intermediary in buying and selling, exchanging or handing over Class I narcotics.

There have been several consequences that arise from the current criminal provisions regarding drug trafficking which is detrimental to the suspect, defendant, and the convicts of narcotics crime. An example would be that a drug abuser would be charged and sentenced with provisions that are meant for drug trafficking, which in turn would result in a drug user being stigmatized as a ‘drug trafficker’ as well as a criminal record that shows the person as a drug trafficker. This results in the drug abuser losing certain rights, such as political rights or working rights, which should not have happened in the first place if the drug abuser was charged with drug abuse. This shows that other than the issues relating to disproportionate sentencing, the current provisions regulating narcotics also play a role in causing overcriminalization.

METHODOLOGY

This research is conducted using the qualitative method, which is done by reviewing various literature, comparing and contrasting with other countries, and reviewing several district court decisions (*judex factie*).

RESULT AND DISCUSSION

In analyzing criminal provisions regulated in the Narcotics Law, this research will use the theory of overcriminalization. Sanford H. Kadish, who introduced the concept of overcriminalization, defines it as the use of criminal laws to actualize the goals of public policies by criminalizing actions that are completely inappropriate to criminalize, or unjustly prohibited.⁹ In other literature it is also stated that overcriminalization is a misuse, or overuse of the criminal law to handle every social issue.¹⁰ Douglas Husak in his book titled “Overcriminalization: The Limit of the Criminal Law”, states that more criminal provisions lead to more criminal

8 An interesting finding regarding the implementation of Supreme Court Circular Letter 3/2015 can be found in the research, where it was found that 15.6% of the defendants who were proven guilty of article 114 of the Narcotics Law were also sentenced under the minimum criminal sentence, even though the Circular Letter stated that the deviation may only apply to article 111 and 112 of the Narcotics Law. It was also found that 2.1% of defendants charged with Article 112 paragraph (2) were also sentenced under the minimum threat, even when the amount of evidence exceeded the threshold for 1-day use set by the Supreme Court Regulation Number 4/2010. For further details, see Matheus Nathanael, et.al, Penelitian Disparitas Pemidanaan dan Kebijakan Penanganan Perkara Tindak Pidana Narkotika Di Indonesia: Studi Perkara Tindak Pidana Narkotika Golongan 1 Tahun 2016-2020 (Pasal 111-116 dan Pasal 127 UU Narkotika 35 Tahun 2009, (Jakarta: Indonesia Judicial Research Society, 2022), page 73-74.

9 Sanford H. Kadish, “The Crisis of Overcriminalization,” American Criminal Law (1968), as cited in Mahrus Ali, Overcriminalization (Teori, Dampak, & Pencegahan) (Yogyakarta: FH UII Press, 2019), page. 15.

10 “Overcriminalization,” The Heritage Foundation, accessed May 5, 2024, <https://www.heritage.org/crime-and-justice/heritage-explains/overcriminalization>.



punishments,¹¹ and more criminalization leads to unfair punishment for those indicted and/or sentenced for actions that are not supposed to be held criminally accountable in the first place.¹²

According to Douglas Husak, there are 3 types of overcriminalization, which are: (a) overlapping crimes; (b) offenses of risk-prevention; and (c) ancillary offenses. **First, overlapping crimes, or “re-criminalizing”**, is when the state criminalizes actions that have been regulated repeatedly.¹³ The same thought can be found in Darryl K. Brown’s article, titled “Prosecutor and Overcriminalization: Thoughts on Political Dynamics and a Doctrinal Response”, which mentions that a form of overcriminalization is overlapping crimes, where an act is criminalized even when said act has been regulated as a criminal act in other regulations.¹⁴ Overlapping of provisions which regulate the same criminal act does not result in a confusing overcriminalization if both are regulated the same way. However, suppose an act of crime is regulated in multiple regulations with different elements and even sanctions, it would enable the prosecution to stack charges which threatens the defendants with a more severe punishment for the same act. This led to many scholars agreeing that removing or simplifying overlapping and conflicting provisions is a crucial step in criminal law reform.¹⁵

Second, offenses of risk prevention, which criminalize actions that have yet to cause, or have the potential to cause damages.¹⁶ Husak claims that offenses of risk prevention are inchoate offenses since not every instance of it causes harm. Offenses of risk prevention, or as R. A. Duff calls it, the crime of endangerment may be composed of consummate¹⁷ or non-consummate¹⁸, general or specific¹⁹, direct or indirect, and explicit or implicit crimes.²⁰ Husak then emphasizes further on direct and indirect offenses of risk prevention, as well as explicit and implicit offenses of risk prevention, which will be further discussed below:²¹

Offenses of risk prevention are direct if the relevant harm would ensue from the criminalized conduct without any intervening wrongful human action, while it would be considered indirect if the harm would ensue only after further wrongful action by the agent

11 Douglas Husak, *Overcriminalization: The Limit of the Criminal Law*, (New York: Oxford University Press, 2008), page. 3.

12 *Ibid*, page. 14.

13 *Ibid*, page. 36.

14 Darryl K. Brown, “Prosecutors and Overcriminalization: Thoughts on Political Dynamics and a Doctrinal Response,” *Ohio State Journal of Criminal Law* 6 (2009): 461-463.

15 *Ibid*, page. 38.

16 Compare with *Burgelike Wetboek* (Indonesian Civil Code), Article 1365 which states that a tangible loss is required in tort.

17 If their commission requires the actualization of the relevant risk. See more in R. A. Duff: “Criminalising Endangerment,” in Duff and Green, eds, *Defining Crimes: Essays on the Special Part of the Criminal Law*, (Oxford: Oxford University Press, 2005), page. 55. As referred by Douglas Husak, *Overcriminalization: (...)*, page. 39.

18 If they do not require the actualisation of the risk. See more in R. A. Duff: “Criminalising Endangerment,” in Duff and Green, eds, *Defining Crimes: Essays on the Special Part of the Criminal Law*, (Oxford: Oxford University Press, 2005), page. 57. As referred by Douglas Husak, *Overcriminalization: (...)*, page. 39.

19 An offense of risk prevention may be general or specific “as to the interest that is threatened, or as to the way in which it is threatened. As referred by Douglas Husak, *Overcriminalization: (...)*, page. 39. 15 Douglas Husak, *Overcriminalization: (...)*, page. 39.

20 Douglas Husak, *Overcriminalization: (...)*, page. 39.

21 *Ibid*, page. 40.



or others.²² An example would be if a person causes an explosion that endangers the livelihood of people, then it is categorized as a direct endangerment offense, while a person leaving a gun unattended in public would be categorized as an indirect offense since it would only be dangerous if another person decided to use the gun.²³

Offenses of risk prevention are considered explicit when their commission requires the actual creation of the relevant risk, which is specified in the offense definitions. Meanwhile, offenses of risk prevention are considered implicit if their definition does not specify the relevant risk which acts as the grounds for criminalization. This meant that it was possible to commit an implicit offense without creating the risk.²⁴ An example of an explicit endangerment offense would be reckless driving since the risk would immediately present itself once committed, while an example of an implicit endangerment offense would be ownership of drugs.²⁵

The third type of overcriminalization is through criminalizing ancillary offenses. This meant that other actions relating to a crime are also criminalized, in a sense that ancillary offenses then function as a surrogate for the prosecution of the primary crimes whilst bearing an indirect relation to said crimes.²⁶ These additional crimes tend to happen in a condition where the state is unable to prove the guilt of a person, due to failure to find evidence, or said evidence being acquired unlawfully, but is sure that said person has committed a crime. Since the primary crime cannot be proven, the state then used these additional offenses to be able to prosecute said person.²⁷ Husak quoted Abrams, stating that there are 2 types of ancillary offenses: derivative crimes and enforcement and information-gathering offenses. Derivative crimes prove that another primary crime has been conducted, or that there is an intention conduct a crime²⁸, while enforcement and information-gathering offenses are crimes that happen during an investigation process of a primary crime, or not giving important information which will be used to prosecute the primary crime.²⁹

Overcriminalization empowers law enforcement, especially police officers, to conduct arrests which may lead to abuse of power and human rights violations at least, and a high crime rate which breaks the supremacy of the law itself at worst.³⁰ On the other hand, potential criminal might also not receive enough information regarding which acts constitute a crime, and what are their legal obligation.³¹ The absence of a concrete notification will affect criminal

22 R. A. Duff: "Criminalising Endangerment," in Duff and Green, eds, *Defining Crimes: Essays on the Special Part of the Criminal Law*, (Oxford: Oxford University Press, 2005), page. 57. As referred by Douglas Husak, *Overcriminalization: (...)*, page. 40.

23 Douglas Husak, *Overcriminalization: (...)*, page. 40.

24 R. A. Duff: "Criminalising Endangerment," in Duff and Green, eds, *Defining Crimes: Essays on the Special Part of the Criminal Law*, (Oxford: Oxford University Press, 2005), page. 59. As referred by Douglas Husak, *Overcriminalization: (...)*, page. 40.

25 *Ibid.*

26 *Ibid.*, page. 40.

27 *Ibid.*, page. 40.

28 *Ibid.*, page. 41.

29 *Ibid.*, page. 41.

30 *Ibid.*, page 13.

31 Susan Pilcher, "Ignorance, Discretion and the Fairness of Notice: Confronting 'Apparent Innocence' in the Criminal Law," *American Criminal Law Review* 33 (1995): 32, as cited in Douglas Husak, *Overcriminalization*, page. 11.



regulations which include a single endangerment offense, which forbids actions with great risk and cannot be justified by serious harm.³²

If contextualized unto the criminal provisions in the Narcotics Law, there are criminal acts that can be indicted with multiple provisions, with different sanctions. This kind of regulation is what Husak deems as overlapping crimes, or ‘re-criminalizing’ in his theory of overcriminalization because the state has criminalized the same action multiple times.

To provide examples of the overlapping and multi-interpretation problems in the criminal provisions of the Narcotics Law, below is the comparison between criminal actions and the penalty regulated by those articles.³³

Table 1. Criminal Provisions (Criminal Acts and Penalties) Article 111 – Article 116, and Article 127 of the Narcotics Law

Article	Paragraph	Criminal Acts	Penalty	
			Imprisonment	Fines
111	1	cultivate (<i>menanam</i>), maintain (<i>memelihara</i>), posses (<i>memiliki</i>), store (<i>menyimpan</i>), control (<i>menguasai</i>), or provide (<i>menyediakan</i>) Narcotics Group I in form of vegetation	4 years - 12 years	Rp800 million - Rp8 billion (50,000 USD-500,000 USD)
111	2	cultivate (<i>menanam</i>), maintain (<i>memelihara</i>), posses (<i>memiliki</i>), store (<i>menyimpan</i>), control (<i>menguasai</i>), or provide (<i>menyediakan</i>) Narcotics Group I in form of vegetation has weight of more than 1 (one) kilogram or more than 5 (five) trees,	5 years - 20 years or life imprisonment	as referred to in paragraph (1) plus 1 / 3
112	1	posses (<i>memiliki</i>), store (<i>menyimpan</i>), control (<i>menguasai</i>) or provide (<i>menyediakan</i>) Narcotics Group I not a vegetation	4 years - 12 years	Rp800 million - Rp8 billion (50,000 USD-500,000 USD)
	2	posses (<i>memiliki</i>), store (<i>menyimpan</i>), control (<i>menguasai</i>) or provide (<i>menyediakan</i>) Narcotics Group I not a vegetation weight exceeding 5 (five) grams	5 years - 20 years or life imprisonment	as referred to in paragraph (1) plus 1 / 3
113	1	produce (<i>memproduksi</i>), import (<i>mengimpor</i>), export (<i>mengekspor</i>), or distribute (<i>menyalurkan</i>) the Narcotics Group I	5 years - 15 years	Rp1 billion - Rp10 billion (62,000 USD-620,000 USD)

³² Ibid, page. 39.

³³ This research will only discuss criminal provisions regarding class 1 narcotics trafficking as regulated in Articles 111 to 116 of the Narcotics Law, and narcotics abuse as regulated in Article 127



	2	produce (<i>memproduksi</i>), import (<i>mengimpor</i>), export(<i>mengekspor</i>), or distribute (<i>menyalurkan</i>) Narcotics Group I in form of plant weight exceeds 1 (One) kilogram or more than 5 (five) in form of a tree trunk or not a vegetation at weight of more than 5 (five) grams	5 years - 20 years or life imprisonment or death sentence	as referred to in paragraph (1) plus 1 / 3
	1	offer to sale (<i>menawarkan untuk dijual</i>), sell (<i>menjual</i>), purchase (<i>membeli</i>), receive (<i>menerima</i>), becoming an intermediary in trafficking, exchange, or hand over (<i>menjadi perantara dalam jual beli, menukar atau menyerahkan</i>) Narcotics Group I	5 years - 20 years	Rp1 billion - Rp10 billion (62,000 USD-620,000 USD)
114	2	offer to sale (<i>menawarkan untuk dijual</i>), sell (<i>menjual</i>), purchase (<i>membeli</i>), receive (<i>menerima</i>), becoming an intermediary in trafficking, exchange, or hand over (<i>menjadi perantara dalam jual beli, menukar atau menyerahkan</i>) the Narcotics Group I is in form of plants weighing more than 1 (one) kilogram or exceeding 5 (five) in form of trees or vegetation are not weighed 5 (five) grams	6 years - 20 years or life imprisonment or death sentence	as referred to in paragraph (1) plus 1 / 3
	1	carry (<i>membawa</i>), deliver (<i>mengirim</i>), transport(<i>mengangkut</i>), or transit (<i>mentransito</i>) Narcotics Group I	4 years - 12 years	Rp800 million - Rp8 billion (50,000 USD-500,000 USD)
115	2	carry (<i>membawa</i>), deliver (<i>mengirim</i>), transport(<i>mengangkut</i>), or transit (<i>mentransito</i>) the Narcotics Group I in form of plants at weight of more than 1 (one) kilograms or more than 5 (five) tree trunk weighing more than 5 (five) grams	5 years - 20 years or life imprisonment	as referred to in paragraph (1) plus 1 / 3
	1	hand over the Narcotics Group I to others (menggunakan Narkotika Golongan I terhadap orang lain atau memberikan Narkotika Golongan I untuk digunakan orang lain)	5 years - 15 years	Rp1 billion - Rp10 billion (62,000 USD-620,000 USD)
116	2	hand over the Narcotics Group I to others (menggunakan Narkotika Golongan I terhadap orang lain atau memberikan Narkotika Golongan I untuk digunakan orang lain), causing another death or permanent disability	5 years - 20 years or life imprisonment or death penalty	as referred to in paragraph (1) plus 1 / 3



127	1 (a)	Unlawful use Narcotics Group I (Penyalah Guna Narkotika Golongan I bagi diri sendiri)	max 4 years	-
-----	-------	---	-------------	---

To provide a concrete view of the problems regarding the current criminal provisions in the Narcotics Law, these are a few comparisons of court decisions that contain several similar characteristics based on the legal facts but end up with being sentenced with different articles and punishment, which cause disparity in criminal penalties.

a. Court Decision Number 619/Pid.Sus/2022/PN.Jkt.Brt.

Legal fact found in the court decision shows that the police conducted a search in the defendant's house, and found 1 packet of meth, net weighing 0,0315 grams. The defendant bought the methamphetamine for Rp.100.000,00 (one hundred thousand rupiah), with the intention of using it. Based on said fact, the defendant is proven guilty of abusing drugs, as regulated in Article 127 paragraph (1) letter a of the Narcotics Law, and is sentenced to 1 year and 6 months of prison.

b. Court Decision Number 682/Pid.Sus/2022/PN.Jkt.Sel.

Legal fact found in the court decisions shows that the defendant purchased narcotics from witness Abdul Malik. Witness Abdul Malik left the narcotics in a pot, and the defendant took it, keeping something he found in his pocket. The defendant was reported to the police, and police took evidence in the form of 1 plastic bag containing crystal, which was thought to be meth. Police then came after receiving a report from witness Jamaluddin, and apprehended the defendant along with the evidence, 0,0773 grams of meth. In the court decision, the defendant stated that the aim of purchasing methamphetamine was to be used. However, the court deems that the defendant is guilty of class 1 narcotics possession as regulated in Article 112 paragraph (1) of the Narcotics Law, sentencing the defendant to 4 years in prison and a fine of Rp.800.000.000,00 (eight hundred million rupiahs), with the terms that if the fine is not paid, then an additional 4 months of imprisonment is imposed.

c. Court Decision Number 58/Pid.Sus/2016/PN.Jkt.Utr.

Legal fact found in the court decision shows that the defendant ordered 2 packages of meth, costing Rp.200.000,00 (two hundred thousand rupiahs) each, to a person named Bodong (missing). The defendant then meets Bodong in Kelapa Gading, North Jakarta. Bodong then handed over 2 packages of methamphetamine ordered by the defendant, and the defendant paid Bodong Rp.400.000,00 (four hundred thousand rupiah). Police received information from locals, and proceeded to apprehend and search the defendant who at the time was in a food stall. Police found evidence in the form of 2 plastic packages, each containing 0,0964 grams of meth, on the defendant's right hand. The defendant stated that the purchase was made with the intention of using it, but the court stated that the defendant is guilty of purchasing class 1 narcotics, as regulated in Article 114 paragraph (1) of the Narcotics Law. The defendant is then sentenced to 6 years and 6 months of imprisonment, with a fine of Rp.1.000.000.000,00 (one billion rupiahs), with the terms that if the fine is not paid, then an additional 6 months of imprisonment is imposed.

The three cases above illustrate a similar picture. First, the defendant purchased methamphetamine from another person. Second, the amount of methamphetamine was



below the threshold for personal use of drugs as stipulated in SEMA 4/2010 (which for methamphetamine is below 1 gram). Third, the defendant's intention for purchase was for personal consumption, which we can infer from the amount in the defendant's possession. Fourth, when investigators arrested the defendant, the bought methamphetamine was already in his possession. The three cases above also illustrate that the act of using drugs consists of a series of closely related activities, namely the activity of buying narcotics, which also includes the activity of possessing narcotics so that the narcotics can then be used.

Unfortunately, the defendants in the three cases above were convicted under different criminal articles and sentenced to far different criminal sanctions. The defendant in court decision number 619/Pid.Sus/2022/PN.Jkt.Brt was proven to have committed drug abuse (Article 127 of the Narcotics Law) and was sentenced to imprisonment for 1 (one) year and 6 (six) months. While the defendant in court decision number 682/Pid.Sus/2022/PN.Jkt.Sel was proven guilty of narcotics possession (Article 112 of the Narcotics Law) and was sentenced to imprisonment for 4 (four) years and a fine of Rp.800,000,000.00 (eight hundred million rupiah). Lastly, the defendant in court decision number 58/Pid.Sus/2016/PN.Jkt.Utr was proven to have committed the crime of buying narcotics (Article 114 of the Narcotics Law) and was sentenced to imprisonment for 6 (six) years and 6 (six) months and a fine of Rp.1,000,000,000.00 (one billion rupiah).

In addition to the uncertain nature of Article 127 (drug abuse), Article 111/112 (possession), and Article 114 (purchase), overcriminalization through overlapping crimes or 're-criminalizing' can also be found in the formulation of Article 114 (buying and selling) and Article 113 (import and export). By the wording of these two articles, it seems that the drafters of the Narcotics Law wanted to distinguish between domestic narcotics transactions (domestic crimes), and transnational narcotics transactions (transnational crimes). In fact, the characteristics of the acts regulated by the two articles are actually the same, namely punishing a person who distributes or supplies drugs with the intention of obtaining commercial profits (transactions or trafficking of narcotics). It is even stranger that while Article 113 (imports and exports) is aimed at transnational crimes, the criminal penalty is lower than Article 114 (buying and selling) which aims to punish domestic crimes. The threat of imprisonment in Article 113 (import and export) is a minimum of 5 (five) years and a maximum of 15 (fifteen) years, while Article 114 (buying and selling) is threatened with a minimum prison sentence of 5 (five) years and a maximum of 20 (twenty) years.

Other than the issue of overlapping crimes or 're-criminalizing' as mentioned above, the Narcotics Law also punishes actions related to narcotics that are very ambiguous. For example, the act of providing drugs in Article 111/112 has unclear meaning; the act of receiving drugs in Article 114 does not have any clear distinction with the act of owning narcotics in Article 111/112; and the act of handing over the narcotics to others (forcing others to use narcotics against their will or giving narcotics for others to use) in Article 116. In fact, the last mentioned article is very rarely used because it is very unclear what action is prohibited.

By identifying the problems in criminal provisions in the Indonesian Narcotics Law, restructuration of the criminal provisions becomes a very urgent matter. In order to restructure the criminal provisions in the Narcotics Law, it is important to choose a formulation model for determining what actions need to be criminalized, and what will be the punishment.



This research will compare other countries' regulations to view their criminal provisions and sentence formulation models, namely the United Kingdom and the Netherlands. Below is a table on how they regulate criminal offenses;

Table 2. Comparison Between Criminal Act Classification and Maximum Penalty in the United Kingdom

United Kingdom ¹	
Criminal Act Classification	Maximum Penalty*
Production (manufacture, cultivation, etc.) ²	Life imprisonment
Supply ³	Life imprisonment
Possession with intent to supply ⁴	Life imprisonment
Possess ⁵	7 years imprisonment

*) The maximum penalty for Class A drugs

Table 3. Comparison Between Criminal Act Classification and Maximum Penalty in the Netherlands

Netherlands ⁶	
Criminal Act Classification	Maximum Penalty*
Bring into or outside territory of the Netherlands	12 years imprisonment or fifth category fine
Grow, prepare, treat, process, sell, supply, provide, or transport	8 years imprisonment or fifth category fine
Manufacture	8 years imprisonment or fifth category fine
Possess	4 years imprisonment or fifth category fine

*) The maximum penalty for List I drugs

The United Kingdom classifies criminal acts and punishment into 4 (four) different categories, namely; 1) Production; 2) Supply; 3) possession with the intent to supply; and 4) possession. Of the 4 types of criminal actions, possession has the lowest maximum punishment, which is 7 years imprisonment, while other actions can be punished with life imprisonment. The United Kingdom does not have a provision regulating drug abuse, per Article 127 of the Indonesian Narcotics Law, because a person using narcotics can already be charged with the article regarding drug possession. Other than that, the UK government also differentiates between possession for self and possession with the intent to supply. Possession with clear intent to supply is sentenced similarly to the crime of supplying because the characteristics of the actions and the severity of the crime are similar, and more severe than the act of possession.

Meanwhile, the Netherlands also classifies criminal actions and maximum punishment into 4 different types of actions. 3 (three) Parts of the classification of criminal acts in the Netherlands are similar to the United Kingdom, namely supply, manufacture, and possession. However, the Netherlands also regulates the act of bringing into or outside the territory of



the Netherlands which is considered a transnational crime, with the highest sentence of up to 12 (twelve) years of imprisonment or the fifth category fine. Other than that, the ranking of crimes from the most severe to the least serious is clearly seen in the existing hierarchy of punishment.³⁴

There are several differences in the criminal provisions of the Indonesian Narcotics Law, the United Kingdom Misuse of Drugs Act 1971 (Amendment), and the Netherlands Opiumwet van 12 mei 1928, tot vaststelling van bepalingen betreffende het opium en andere verdoovende middelen (Opiumwet 2003). First, the United Kingdom and the Netherlands do not impose the death penalty and a mandatory minimum penalty for drug-related criminal offenses. Second, the United Kingdom and the Netherlands do not regulate the criminal act of using narcotics as a separate criminal offense, as regulated in Article 127 of the Indonesian Narcotics Law. Third, the classification of drug-related criminal acts in the United Kingdom and the Netherlands illustrates the progression of actions from the most serious to the least serious crimes and is reflected in the existing hierarchy of punishment.³⁵ Lastly, the Netherlands uses an alternative sanction system between imprisonment and fines that differs from the Indonesian Narcotics Law which simultaneously imposes imprisonment and fines through a cumulative sanctioning system.

Determining criminal sanctions is in principle intended to provide a clear hierarchy of punishment based on the severity of a criminal offense.³⁶ As mentioned above, one of the most crucial issues related to criminal provisions in the Indonesian Narcotics Law is the regulation of mandatory minimum punishment for drug-related offenses. There are currently three ways of determining criminal punishment, which are maximum punishment, mandatory punishment, and mandatory minimum punishment. What differentiates Indonesia from both the United Kingdom and the Netherlands is that Indonesia applies mandatory minimum punishment, which exists in almost all criminal provisions.

Regarding mandatory minimum punishment, most advocates view that mandatory minimum punishment aims to deter and incapacitate offenders.³⁷ However, several criticisms state there are no empirical findings that support the claim. Those critics are used as the basis to state that mandatory minimum punishment does not lower the chances of crime in the future through incapacitation,³⁸ and on the other hand might cause a more severe crime rather than provide deterrence.³⁹ An example of the ineffectiveness of mandatory minimum punishment implementation can be seen in the United States, specifically New York, Michigan, and Florida, which used to apply harsh mandatory punishment as a “new solution”, aiming to cause a deterrence effect to drug users and prevent drug trafficking by imprisoning the main actors involved in the drug trafficking.⁴⁰ However, more than 40 years

34 Gabriel Hallevy, *The Right to be Punished*, (Heidelberg: Springer Berlin, 2013), page. 113.

35 *Ibid.*

36 *Ibid.*

37 Erik Luna, “Mandatory Minimums,” in *Reforming Criminal Justice: A Report of the Academy for Justice on Bridging the Gap Between Scholarship and Reform* 4 (2017): 117-146, 128.

38 *Ibid.*, page 130.

39 *Ibid.*, page 128.

40 Greg Newburn and Sal Nuzzo, “Mandatory Minimums, Crime, and Drug Abuse: Lessons Learned, Paths Ahead,” Tallahassee, FL: James Madison Institute. https://www.jamesmadison.org/wpcontent/uploads/2019/02/PolicyBrief_MandatoryMinimums_Feb2019_v04.pdf (2019), Page 8.



later, all 3 states realize that implementing mandatory minimum punishment is ineffective, and cannot be justified by any proof, data, or experiences. Therefore laws regarding mandatory minimum punishment in narcotics crime are repealed in several states as a concession of its ineffectiveness.⁴¹ Moreover, for the last 15 years, many states in the United States have reformed or repealed laws regarding mandatory minimum punishment.⁴² This is later used as a reference for drafting law at the federal level, where even though regulations regarding mandatory punishment for narcotics crime still exist, judges are able to deviate from the minimum punishment in certain conditions,⁴³ just as implemented by the Indonesian Supreme Court through SEMA 3/2015 and SEMA 3/2023. Furthermore, other than the evidence that mandatory minimum sentences are ineffective, several scholars such as Nir and Liu also view that mandatory minimum sentences are destructive to the imposition of sensible, custom-designed sentences that take important case-specific variables into account.⁴⁴ Just as Judge Gleeson criticizes mandatory minimum sentences because it ignores the personal characteristics of the offender, mandatory minimums also prevent judges from imposing individualized sentences.

CONCLUSION

Criminal provisions in the Indonesian Narcotics Law, especially Article 111 through Article 116 regarding drug trafficking, as well as Article 127 regarding drug abuse, are still unclear and ambiguous. Some articles, such as Articles 111 and 112 regarding drug possession, Article 114 regarding the purchase of drugs, and Article 127 regarding drug abuse, can all be used to charge the same action, which is usually part of a series of actions done by a person with the aim of using narcotics. This series of actions usually begins with the purchase of narcotics as a means of acquiring, followed by possession of narcotics, before being able to use it. Regulations such as these are what Husak claims as overcriminalization, the kind where criminal provisions overlap or recriminalize, which is detrimental to suspects, defendants, and convicts of narcotics crime since it causes legal uncertainty. The consequences of such legal uncertainty among others are a negative stigma towards drug abusers, as well as loss of rights due to a wrongful criminal record.

Therefore, criminal provisions in the Indonesian Narcotics Law need to be restructured to ensure that the principles of legal certainty, criminal proportionality, as well as a hierarchy of severity of criminal acts and criminal sanctions, are applied correctly. Based on the results acquired by this study, several things need to be considered when restructuring criminal provisions of the Narcotics Law. First, it is necessary to formulate prohibited acts clearly and unambiguously, by avoiding the formulation of criminal acts that overlap between provisions in existing regulations. For example, criminal acts such as buying, receiving, carrying, sending,

41 Ibid, page 9.

42 Ibid.

43 Ibid.

44 Esther Nir and Siyu Liu, "The Challenge of Imposing Just Sentences Under Mandatory Minimum Statutes: A Qualitative Study of Judicial Perceptions," *Criminal Justice Policy Review* 33, no. 2 (2022): 177-205, 197.



transporting, and using narcotics can all be summarized as acts of drug possession. Similarly, the acts of selling, giving, exporting, smuggling, and distributing can also be rounded up into one article, which is an article on supplying narcotics. Second, there needs to be a proportional penalty for each criminal act, so that there is a clear progression of sanctions from less severe acts to the most severe acts. Lastly, it is necessary to eliminate mandatory minimum sentences because they have been proven ineffective in reducing crime and instead hinder the judge's discretion in considering the personal characteristics in concrete cases.

REFERENCES

- Ali, M. (2019). *Overcriminalization (Teori, Dampak, & Pencegahan)*. FH UII Press.
- Brown, D. K. (2009). Prosecutors and overcriminalization: Thoughts on political dynamics and a doctrinal response. *Ohio State Journal of Criminal Law*, 6.
- Duff, R. A. (2005). Criminalising endangerment. In R. A. Duff & S. P. Green (Eds.), *Defining crimes: Essays on the special part of the criminal law* (pp. 40, 55, 57). Oxford University Press. As cited in D. Husak, *Overcriminalization: The limit of the criminal law*.
- Hallevy, G. (2013). *The right to be punished*. Springer Berlin.
- Husak, D. (2008). *Overcriminalization: The limit of the criminal law*. Oxford University Press.
- Kadish, S. H. (1968). *The crisis of overcriminalization*. *American Criminal Law*. As cited in
- M. Ali, *Overcriminalization (Teori, Dampak, & Pencegahan)* (p. 55). Yogyakarta: FHUII Press.
- Luna, E. (2017). Mandatory minimums. In *Reforming criminal justice: A report of the academy for justice on bridging the gap between scholarship and reform* (Vol. 4, pp. 117-146).
- Nir, E., & Liu, S. (2022). The challenge of imposing just sentences under mandatory minimum statutes: A qualitative study of judicial perceptions. *Criminal Justice Policy Review*, 33(2), 177-205.
- Newburn, G., & Nuzzo, S. (2019). *Mandatory minimums, crime, and drug abuse: Lessons learned, paths ahead*. James Madison Institute. https://www.jamesmadison.org/wp-content/uploads/2019/02/PolicyBrief_Mandatory_Minimums_Feb2019_v04.pdf
- Opiumwet van 12 mei 1928, tot vaststelling van bepalingen betreffende het opium en andereverdoovende middelen (Opiumwet 2003).



Overcriminalization. (2024, ~~May 5~~). The Heritage Foundation <https://www.heritage.org/crime-and-justice/heritage-explains/overcriminalization>

Pilcher, S. (1995). Ignorance, discretion and the fairness of notice: Confronting 'apparent innocence' in the criminal law. *American Criminal Law Review*, 33. As cited in D. Husak, *Overcriminalization: The limit of the criminal law*.

Supreme Court of Indonesia. (2015). Surat Edaran Tentang Pemberlakuan Rumusan Hasil Rapat Pleno Kamar Mahkamah Agung 2015 sebagai Pedoman Pelaksanaan Tugas (Circular Letter Number 3 of 2015).

United Kingdom Misuse of Drugs Act 1971, c. 38.

NARCOTICS LAW ENFORCEMENT IN INDONESIA IS BASED ON UNTOC 2000 (UNITED NATIONS CONVENTION AGAINST TRANSNATIONAL ORGANIZED CRIME)

Ricky Tommy Hasiholan*

Padjadjaran University Law Doctoral Study Program

*Corresponding author: rickytommyhasiholan@gmail.com

ABSTRACT

The enforcement of laws against narcotics crimes in Indonesia encounters significant obstacles, primarily due to the transnational nature of these crimes and their association with organized criminal networks. The objective of this study is to assess and appraise the efficacy of Indonesian criminal legislation in detecting and prosecuting organized narcotics offenses, as well as the implementation of principles of criminal complicity and conspiracy. Indonesia has established a sufficient legal structure by enacting Law Number 5 of 2009 and Law Number 35 of 2009 to ratify the United Nations Convention against Transnational Organized Crime (UNTOC) 2000. Nevertheless, law enforcement continues to prioritize individual wrongdoers and has not been fully effective in revealing the intricate connections and resources of criminal enterprises. This study employs a doctrinal and socio-legal methodology to assess the implementation of this legislation in real-world scenarios. The research findings indicate that it is necessary to improve the accuracy of legal definitions and provisions, as well as enhance law enforcement policy instruments, in order to enhance the efficacy of efforts to eliminate organized narcotics crime in Indonesia.

Keywords: *law enforcement, narcotics, organized crime*

INTRODUCTION

Crimes related to narcotics and illegal drug abuse usually cross national borders, because they involve individuals from several countries, including producers, couriers and victims. In Indonesia, drug crimes are categorized as high-risk offenses, and to overcome them requires special measures.

Law enforcement in Indonesia has not fully paid attention to the perpetrators' schemes, actions and consequences, as well as legal accountability. This problem not only includes actions that violate narcotics laws, but also includes aspects such as money laundering, corruption and banking. Even though Indonesian criminal law adheres to the principle of “

daad, dader, strafrecht “ (deed, perpetrator and punishment),⁴⁵ the law enforcement system in Indonesia is still inadequate.

On the other hand, the Indonesian Government has ratified UNTOC 2000 with Law Number 5 of 2006, where Article 5 mandates that countries participating in the convention determine as a criminal offense the actions of a person or several people who involve themselves in these activities as a crime. organized group.

Despite the presence of large dealers or couriers transporting substantial quantities of drugs, law enforcement continues to concentrate on individual perpetrators.⁴⁶ This approach is reminiscent of a severed connection with the role of other perpetrators, particularly those who violate the narcotics law. This includes parties that profit from narcotics crimes through the financial and banking system, as well as the secondary sector, such as the trade in goods and services, such as property and the entertainment industry.⁴⁷

The absence of law enforcement on this side has resulted in suboptimal prevention and eradication of criminal acts related to narcotics and illegal drug abuse in Indonesia. There are 3 (three) main issues in this matter, namely: first, regarding the ability of Indonesian criminal law to uncover criminal acts related to narcotics in an organized manner; secondly, the application of the doctrine of criminal involvement⁴⁸ and conspiracy to organized crimes and thirdly, criminal policy towards organized crime groups related to narcotics.

In light of the information presented above, the following research questions have been identified as being of interest: 1. To what extent is it possible for Indonesian criminal law to serve as an efficient tool for identifying narcotics-related offenses that have been committed in a structured manner? 2. Why does the inclusion of criminal activity and conspiracy in allegations of narcotics offenses frequently focus on the actions of individual offenders rather than the disclosure of their connections to organized groups? 3. In order to improve the efficiency of the disclosure of crimes related to organized narcotics, what kinds of future policies could be developed?

An investigation and evaluation are going to be carried out in order to determine whether or not the provisions of UNTOC have been incorporated into the laws and regulations of Indonesia. The purpose of this study is to investigate the manner in which this law is employed in practice and to determine the influence that it has on the administration of justice in Indonesia.

45 Bambang Poernomo Implementation Criminal Prison With System Corrections, Jogjakarta: Liberty, 1986 p. 143.

46 <https://metro.tempo.co/read/1871484/bareskrim-polri-dan-polisi-thailand-sepakat-buru-bandar-narkoba-fredy-pratama-diduga-masih-hiding-in-hutan>

47 Regulation Government Number 43 of 2015 concerning Party Reporters in Prevention and Eradication Act Criminal Money laundering. In settings This introduced the concept of “gate keeper” ie vulnerable professionals fall into and fall into other parties in follow criminal Money laundering includes lawyers, bankers, notaries, PPAT, brokers shares, advisor investment, accountant, capital market practitioner and so on.

48 Andi Hamzah Shapes Special Embodiment Offense (Trial, Inclusion, and Combined Offense) and Penitentiary Law. Jakarta: Source Ilmu Jaya, 2002, p. 225.



METHODOLOGY

The research conducted can be categorized into two types: doctrinal and socio-legal. Doctrinal research involves analyzing legal texts to understand what is governed by the law and how legal norms are applied in theory and practice. Socio-legal research, on the other hand, focuses on evaluating the enforcement of these regulations by examining the relationship between established laws and their implementation in society. These methods are employed to thoroughly analyze legal aspects and their practical implementation, particularly by comparing international and national legal norms and their application in wider social and legal contexts. This study employs secondary data, which refers to pre-existing data that is not directly collected by the researcher. The data comprises legal materials that are categorized into: a. Primary Legal Material: Refers to a primary legal source that possesses authoritative legal power. Examples include statutory regulations, such as Laws (UU) and Government Regulations (PP), as well as international conventions like the United Nations Conventions Against Transnational Organized Crime (UNTOC); b. Secondary and Tertiary Legal Materials: These encompass legal literature and expert commentaries that aid in comprehending and evaluating primary legal materials.

RESULTS & DISCUSSION

Criminal Law as an Instrument for Revealing Organized Narcotics Crime

The typology of organized crime includes: *Trans Organized Crimes* encompass a wide range of criminal activities carried out for profit by organized criminal groups; This poses significant harm and threats to good people around the world; It empowers criminals and corrupt officials; This eliminates stability, security and good governance; This undermines legitimate economic activity and the rule of law; This undermines the integrity of critical government institutions intended to protect peace and security ; This harms tax revenues and encourages a culture of impunity; This weakens our fight against poverty and slows down sustainable development.⁴⁹

UNTOC is the only internationally binding, global and legal instrument, through which governments commit to taking action against organized crime and also cooperating against organized crime: Criminalization and jurisdiction; Prevention, technical assistance, protective measures and other measures; Law enforcement and justice system; International cooperation, mutual legal assistance and confiscation.

The strategy for eradicating narcotics-related crimes includes: ⁵⁰first, destroying the economic power of transnational criminal networks and protecting strategic markets and financial systems from criminal penetration and abuse ; second, defeating criminal networks that pose the greatest threat to national security by destroying their infrastructure, seizing their means of support and preventing criminal facilitation.

49 (David Cohen - US Deputy Secretary of the Treasury, 2011).

50 (John Breenan, 2011)



In this regard, Indonesia has ratified UNTOC through Law no. 5 of 2009 and the promulgation of Law no. 35 of 2009 as the main instrument for eradicating narcotics crimes in Indonesia. Republic of Indonesia Law Document Number 5 of 2009 concerning Ratification of the UN Convention Against Transnational Organized Crime includes several main provisions: Ratification of the Convention, Objectives of the Convention: General principles, Scope and Obligations of State Parties. This document is critical to establishing a legal framework for Indonesia to actively participate in global efforts to prevent and address transnational organized crime.

The document “Law Number 35 of 2009 concerning Narcotics” outlines comprehensive regulations regarding narcotics in Indonesia. The following are the main provisions summarized: a. Definition and Classification; b. Regulatory Framework; c. Enforcement Legal Framework: In particular, the criminalization of criminal conspiracy as a form of expanding participation is one of the efforts to eradicate criminal organizations/networks, as well as criminalize criminal acts of placing and hiding money from narcotics crimes; d. Medical and Scientific Uses; e. Prevention and Rehabilitation; f. cooperation; and g. Control Measures.

Articles 136 and 137 of Law Number 35 of 2009 have stated the following:

Article 136:

Narcotics and Narcotics Precursors as well as proceeds obtained from Narcotics crimes and/or Narcotics Precursor crimes, whether in the form of assets in the form of movable or immovable objects, tangible or intangible as well as goods or equipment used to commit Narcotics crimes and the crime of Narcotics Precursors being confiscated for the State.

Article 137:

Everyone who:

placing, paying or spending, entrusting, exchanging, hiding or disguising, investing, saving, donating, bequeathing, and/or transferring money, property, and objects or assets in the form of movable or immovable, tangible or intangible objects originating from Narcotics crimes and/or Narcotics Precursor crimes, shall be punished with imprisonment for a minimum of 5 (five) years and a maximum of 15 (fifteen) years and a fine of at least IDR 1,000,000,000.00 (one billion rupiah) and a maximum a lot of IDR 10,000,000,000.00 (ten billion rupiah).

Receive placement, payment or expenditure, custody, exchange, concealment or disguise of investments, savings or transfers, grants, inheritances, property or money, objects or assets in the form of movable or immovable, tangible or intangible objects which he knows originate from criminal acts Narcotics and/or Narcotics Precursor crimes, shall be punished with imprisonment for a minimum of 3 (three) years and a maximum of 10 (ten) years and a fine of at least IDR 500,000,000.00 (five hundred million rupiah) and a maximum of IDR 5,000,000,000.00 (five billion rupiah).

Taking into consideration the provisions of this article, it is possible to comprehend that the Narcotics Law regulates and clarifies the scope of offenses related to the TPPU element. These offenses include paying or spending, entrusting, exchanging, hiding or disguising, investing, and storing tangible or intangible movable or immovable assets that originate from narcotics crimes. In spite of the fact that Law Number 8 of 2010 has designated offenses related



to narcotics as predicate crimes and offenses related to money laundering as secondary crimes, the position in the Narcotics Law has been confirmed to have designated the elements in article aquo as predicate crimes. One possible interpretation of this change is that the legislator has believed that it is necessary to regulate it in a separate manner. In addition to this, it is possible to assert that the responsibility of conducting an investigation into this matter lies with APH, and not with PPATK acting as the initiator when there is sufficient preliminary evidence. Not only is it frequently necessary to be able to formulate supporting laws, but it is also necessary to be able to apply them to legal practice in order to reconstruct the scheme of actions, perpetrators, and punishments that are involved in the context of criminal incidents. A legal concept known as “Attempt and Conspiracy” is utilized by individuals who commit illegal acts related to narcotics in order to carry out prohibited offenses. This concept is a special form of carrying out an offense. Article 132 of the Narcotics Law has been mandated to ensure that criminal acts of attempt and criminal conspiracy to commit narcotics are subject to the same penalties as other types of criminal offenses. perfect crime.

There is a connection between the formulation of attempts and criminal conspiracy to commit criminal acts on narcotics and narcotic precursors and a number of articles that have established separate offense formulations. The formulation of criminal conspiracy as a genus while specus exists and is regulated in several articles linked to the law, which is used if his actions are relevant to the formulation of the offense of the perpetrator’s actions that have been fulfilled. This is something that can be seen as a distinction between the two types of organizations. Furthermore, this indicates that the formulation of Article 132 paragraph (1) may be utilized depending on the context of the act that was violated, which is regulated in a number of other articles. Does the violation of multiple relevant articles involve the commission of additional

criminal offenses, such as money laundering, in some of the acts that are regulated by those articles? The answer is no because the TPPU formulation in narcotics offenses is regulated based on Article 136 and Article 137 as an independent offense (still zijdige elements). This means that the answer is not yes. For this reason, Article 132 ought to be put into effect whenever the articles that are mentioned are connected to the formation of a malicious conspiracy that is not regulated by Article 132 or that is not mentioned in the articles. The application of Article 55 of the Criminal Code in the first book is equivalent to the approach taken with the articles in the second book. The purpose of this is to give the articles that regulate it a wider scope of application.

The formulation of this law serves as the fundamental legal framework for controlling narcotics in Indonesia, with a focus on law enforcement against illegal activities and support for medical or scientific use. The law was drafted from the perspective of the Indonesian government. Therefore, the legal instrument that is intended to prevent and eradicate criminal acts related to narcotics as organized crime is complete and is being utilized as an effective weapon to bring multi-status perpetrators to prison, as well as to confiscate assets or wealth that has been produced and owned, and to halt the circulation of financial and economic resources into the system. state economy and finance.

Implementation of the Doctrine of Criminal Inclusion and Conspiracy in Crimes Related to Narcotics in an Organized Way.



In the practice of law enforcement for narcotics crimes in Indonesia, efforts to paralyze organized crime networks and dismantle the power of these criminal organizations' financial systems on a massive scale are still not being carried out optimally by law enforcement officials.

Investigations into narcotics crimes are often limited to perpetrators caught in the act, while other organized perpetrators and the organization's economic wealth are often left untouched.

	Jan-Dec 2022	Jan- Oct 2023
Total SPDP	40472	35174
TPPU Law	27	26
Article 137	43	42
Percentage	0.17%	0.19%

Based on this data, it is not possible to determine the exact role of each perpetrator. However, it can be confirmed that the perpetrators are distinct from intellectual or intellectual actors. The term “dader” is not clear and does not provide enough information to understand its meaning. Put simply, this phenomenon does not result in the total elimination of drug-related crimes, as individuals with high intellect can always commit these crimes by utilizing the financial resources of organizations that are never held accountable.

CONCLUSION

The spirit of UNTOC has been embraced by the regulations that govern law enforcement in Indonesia. These regulations include the criminalization of criminal conspiracy to expand participation as well as the criminalization of storing or concealing the proceeds of narcotics crimes. On the other hand, the implementation of law enforcement to uncover organized narcotics networks is still not carried out in the most effective manner by investigators or public prosecutors. As a consequence of this, the objective of completely dismantling drug-related offenses cannot be accomplished.

RECOMMENDATION

In order to enhance the efficacy of forthcoming policies, it is imperative to focus on several crucial domains. Initially, it is necessary to clarify and enhance the definitions and legal regulations to ensure that the laws regarding participation and conspiracy encompass the wide-ranging elements of organized crime, which include provisions for logistical, financial, or technological assistance. This encompasses precise regulations pertaining to activities classified as participation and conspiracy, encompassing roles in the planning, financing, and facilitation of narcotics crimes. Furthermore, it is crucial to enhance the efficacy of law enforcement policy tools by implementing policies that mandate investigators and public prosecutors to expose drug trafficking networks and scrutinize assets obtained through illicit activities. Furthermore, it is imperative to enhance the investigative authority by endowing investigators



with greater jurisdiction to carry out wiretapping, surveillance, and covert operations in instances involving suspected criminal conspiracies. This should be accompanied by stringent oversight measures to safeguard against any potential misuse of power. In addition, enhancing the capabilities of investigators to utilize sophisticated technology and big data techniques will assist in the surveillance and identification of criminal networks. Enhancing international legal cooperation is necessary to facilitate the exchange of information and the extradition of criminals involved in international narcotics networks. This includes adopting global best practices in addressing conspiracy and inclusion within the context of organized crime.



REFORM OF NARCOTICS LAW IN OVERCOMING OVERCAPACITY

Aziz Imam Hanafi¹*, Suparji Ahmad²

Law Study Program, University of Borobudur

*Corresponding author: mountlawu95@gmail.com

ABSTRACT

The objectives of the Indonesian State are explicitly stated in the Preamble of the 1945 Constitution paragraph IV, including realizing a prosperous Indonesian society. In an effort to realize this goal, continuous improvement is needed, including in the field of treatment and health services, including the availability of narcotics as drugs. The provisions of Article 7 of Law Number 35 of 2009 concerning Narcotics state that narcotics can only be used for the benefit of health services and / or the development of science, but the problem is that narcotics abuse dominates where the abuse is not only carried out individually but also in groups, in structured organizations and committing narcotics crimes. Those who abuse drugs are those who use drugs without the knowledge and supervision of a doctor. Perpetrators of narcotics abuse placed in correctional institutions is an ineffective means, in tackling the prevention and eradication of narcotics. Criminal provisions against perpetrators of narcotics abuse should be prioritized in their treatment and care rather than being immediately convicted and placed in a penitentiary.

Keywords : *Narcotics, Correctional Institution, Abuse.*

INTRODUCTION

Narcotics eradication has become one of the top priorities in efforts to overcome various social and criminal problems in Indonesia. However, in this effort, there are several challenges that must be faced, one of which is the problem of overcapacity in correctional institutions. This overcapacity can cause various problems, such as lack of maximum security supervision, inadequate health services, and inadequate availability of clean water. In addition, overcapacity can trigger violations of the law and increase the level of criminality in society.

Narcotics are chemical substances that can affect a person's central nervous system, altering perceptions, moods, behaviors, and cognitive function. On the one hand, narcotics are drugs and ingredients that are useful in the field of medicine or health services and scientific development, but on the other hand, narcotics if misused can cause dependence, so that

they can result in physical, mental, social, security and public order disorders that ultimately disrupt national and international resilience. Narcotics abuse is a language that can hinder the progress of the Indonesia nation in carrying out development in every sector of life.

A penitentiary is an institution that is responsible for holding and maintaining prisoners or inmates who have been sentenced by the criminal justice system. The main objectives of the penitentiary are to maintain security, carry out sentences imposed by the courts, and provide rehabilitation and social reintegration programs for prisoners and inmates. In line with these goals and roles, it is appropriate that correctional officers who carry out coaching and guidance as well as security for correctional inmates in Law Number 22 of 2002 Amendments to Law Number 12 of 1995 concerning Correctional Services are designated as functional law enforcement officials. (Muladi, 2004)

Criminal law reform essentially contains meaning, an effort to reorient and reform criminal law in accordance with the socio-political, socio-philosophical and socio-cultural values of Indonesia society which underlie social policies, criminal policies and law enforcement policies in Indonesia. (Arief, 2002)

Legal reform against narcotics in Indonesia has been carried out in various ways, one example is the Law Amendment Bill Number 35 of 2009 which prioritizes a rehabilitation approach compared to prison sentences. The purpose of this change is to increase the effectiveness of narcotics eradication by focusing on rehabilitation and recovery efforts for victims of narcotics abuse, as well as reducing overcapacity in correctional institutions. Director of Legal and Cooperation of BNN RI, Toton Rasyid S.H., M.H, said the importance of amending Law Number 35 of 2009 concerning Narcotics was carried out in order to strengthen the law enforcement function of the Prevention and Eradication of Drug Abuse and Illicit Circulation (P4GN). Another thing that underlies the amendment of Law Number 35 of 2009 concerning Narcotics is the need to strengthen the rehabilitation function and the function of the Integrated Assessment Team in tackling narcotics problems. In the content of the bill, the second amendment to Law Number 35 of 2009 concerning Narcotics reflects that the law always follows the development of society, especially in narcotics crimes. (Humas, 2022) (BNN, 2023)

Indonesia is the country with the highest circulation of illegal narcotics consistent with Japan, Thailand, Malaysia, the Philippines and Hong Kong. Indonesia, previously a transit country or sales of these prohibited goods, has now become an exporter or producer of these dangerous drugs. This can be seen from the revelation of several drug laboratories (Tarigan, 2012) *clandestine laboratories* in Indonesia. The geographical location of Indonesia which is a country (Fadhyuhazis, 2019) *offroad* with various sea and air transportation facilities that are everywhere, making the circulation of narcotics and psychotropics between countries also continue to grow and become easier.

The prevalence rate of narcotics abuse in Indonesia has decreased from the previous 1.95 percent in 2022 to 1.75 percent in 2023, based on the results of prevalence measurement research by the National Narcotics Agency (BNN). The decrease in the prevalence of narcotics abuse cannot be separated from four strategies that have had a significant impact. The four strategies are: *soft power approach* through prevention, community empowerment, and rehabilitation efforts. The next strategy, *smart power approach* by taking advantage of the



development of information technology. The other two strategies, *hard power approach*. In this case, his party took action against the perpetrators of narcotics abuse. The next strategy is *cooperation* by collaborating with various stakeholders. (Mardiansyah, 2023)

Based on the explanation above, the formulation of the research problem can be proposed: How can the reform of narcotics laws prevent an increase in overcapacity? and What are the challenges in implementing the reform of narcotics laws to overcome overcapacity?

METHODOLOGY

The research used in writing is normative juridical. The sources of legal materials used in this study are primary legal materials and secondary legal materials. The primary materials used are law books. The types of approaches used in this study are the approach to laws and regulations, comparative legal research approaches, cases and legal analysis approaches. The data processing method used is an analysis method which is then outlined in the descriptive analysis paper.

RESULTS AND DISCUSSION

Crime is an act committed by individuals or groups that violate the law or a crime so as to disrupt social stability in society. Narcotics syndicates are criminal organizations engaged in the production, distribution, and illicit trade of narcotics across borders. The high crime rate in Indonesia is caused by an imbalance that occurs in the midst of society. The imbalance occurs due to differences in social, economic, or cultural status. This can affect community behavior which leads to new criminal acts committed by the community and most likely what will happen is an increase in the number of people who commit criminal acts so that they become new residents of Prisons and Prisons.

With the increase in the number of inmates, it is certain to add to the burden of old problems related to overcapacity in prisons. The capacity of prisons in Indonesia is very incomparable to the number of inmates available. Thus, the problem of overcapacity that has not been solved until now will be more difficult to handle.

Narcotics as regulated in Article 1 number 1 of Law Number 35 of 2009 concerning Narcotics, are substances or drugs derived from plants or non-plants, both synthetic and semisynthetic, which can cause a decrease or change in consciousness, loss of taste, reduce to eliminate pain, and can cause dependence, which are differentiated into several groups as contained in the attachment to Law Number 35 of 2009 concerning Narcotics stated that narcotics on the one hand are drugs or substances that are useful for the development of science and on the other hand can also cause a very detrimental dependence if abused without strict control and supervision.

Prisoners are explained in Article 1 paragraph (7) of Law Number 12 of 1995 concerning Corrections, it is explained that inmates are convicts who are serving a sentence of loss of independence in Correctional Institutions. Guidance to inmates must be carried out by the

state and not on the concept of retaliation for their actions, but guidance to inmates aims at two sides, both to the inmates themselves so that they can become better and more prepared when returning to society and to the community as a learning about legal limits in community life.

Inmates who are serving their sentences in Correctional Institutions, basically while serving their sentences have lost their freedom of movement, meaning that the inmates concerned can only move inside the Correctional Institution. In the process of coaching in the Correctional Institution, the form of treatment is outlined in the Correctional Institution's efforts to foster inmates, to know themselves, so that they can change themselves for the better, become positive, no longer commit criminal acts and be able to develop themselves into human beings who are more useful to the nation, nation, religion, and family. (Harsono, 1995)

In Article 1 number 4 of the Correctional Law, coaching outside the prison is coaching at the integration stage, namely in the form of parole, free explanatory leave and conditional leave. The coaching and supervision are carried out by the Correctional Center, which means that the coaching in this integration stage is carried out by the Bapas, and the supervision of the coaching in this integration stage is also carried out by Bapas, because Bapas is an institution to carry out the guidance of correctional clients. The number of prison inmates in 2020 amounted to 260,000 people, even exceeding capacity. The inmates are dominated by the abuse of illegal drugs, more than 50 percent of the total prison inmates, including users, couriers and dealers become one prison for narcotics inmates. (Kompas, 2020)

Criminal law reform, especially related to the provisions for rehabilitation against narcotics abuse, is a step to reform the national criminal law which shows the existence of a criminal law policy that aims to prevent narcotics users from abusing narcotics. The enforcement of the law with the enactment of Law Number 35 of 2009 concerning Narcotics, namely with the decriminalization of perpetrators of narcotics abuse. Narcotics addicts and victims of narcotics abuse are required to undergo medical rehabilitation and social rehabilitation.

Narcotics abuse is one of the main problems in developing countries with sizable young populations. Young residents tend to have a greater risk of narcotics abuse than other populations. Young residents with various puberty problems, adolescents who are searching for identity, identity crises, and unstable mental conditions, are groups that are very vulnerable to exposure to narcotics abuse. Of course, this condition is a great opportunity for the market that is quite promising for the circulation of illegal drugs because it can generate profits. In the total age range of 15-64, there are around 4.8 million villagers and cities who have used narcotics throughout 2022-2023. BNN revealed 768 cases of narcotics crimes with 1,209 suspects. (adri, 2023)

Regarding the philosophical foundation, in order to realize a prosperous, just, and prosperous Indonesia society that is materially and spiritually evenly distributed based on Pancasila and the 1945 Constitution of the Republic of Indonesia, the quality of Indonesia's human resources as one of the national development capitals needs to be maintained and improved continuously, including the degree of health. Therefore, narcotics abusers need to be embedded and restored to their health by means of rehabilitation. The community needs to improve their health and be free from narcotics abuse.



As a sociological basis, an increase in the number of narcotics abusers can lead to other criminal acts. In addition, narcotics abusers who are sentenced to prison make the problem of overcapacity. Overcapacity occurs because the growth rate of prison inmates is not proportional to the facilities of prison housing. The percentage of input of new inmates with the output of inmates is very unbalanced, with the ratio of input of new inmates far exceeding the output of inmates who have completed their prison sentences and are released from prison. Several cases of criminal acts that cause a large number of new inmates are related to a very rapid increase in the occurrence of criminal acts, especially those related to narcotics.

The Minister of Law and Human Rights, Yasona H. Laoly, said in a post-fire press conference at Tangerang Prison, narcotics crimes represent more than 50% of overcapacity in all prisons in Indonesia. As of September 8, 2021, the number of inmates from narcotics cases reached 136,030 inmates or reached 51.08% of the total inmates of prisons and correctional facilities throughout Indonesia. This figure shows the number of cases of narcotics abuse that have been processed by law. (berita satu, 2021)

The reform of the narcotics law can prevent an increase in overcapacity in correctional institutions in several ways, namely:

1. Reduction of non-violent sentences: One effective approach is to reduce sentences for non-violent narcotics offenders. By introducing alternative punishments that do not involve incarceration, such as rehabilitation, risk reduction, or community monitoring programs, the number of new prisoners entering the penitentiary system can be reduced.
2. Promotion of alternative punishments: Reform of narcotics laws can promote alternative approaches in dealing with narcotics offenders, especially those involved in non-violent cases. This could include the implementation of conditional sentences, risk reduction programs, or drug replacement programs aimed at reducing the demand for illegal narcotics.
3. Public health approach: Reform of narcotics laws could also introduce a more public health-oriented approach than criminal punishment. This includes the development of broader rehabilitation programs, risk and damage reduction approaches, and support for better health services for narcotics users.
4. Prevention policies: In addition to addressing the consequences of narcotics abuse, reform of narcotics laws can also emphasize more effective prevention policies. This involves investing in public education, prevention programs in schools and communities, and better access to mental health services and therapy for at-risk individuals.
5. Increased interagency coordination: The implementation of narcotics law reform requires good coordination between various government agencies, including the police, the justice system, correctional institutions, and health institutions. Effective coordination can ensure a smooth workflow and successful implementation.

By implementing appropriate reform of narcotics laws, it is hoped that a reduction in the number of narcotics-related prisoners and inmates in correctional institutions can be achieved, thereby preventing an increase in overcapacity and improving the criminal justice system as a whole.



Narcotics abuse is regulated in Law Number 35 of 2009 concerning Narcotics. In the law, drug abusers are divided into two categories: common abusers and addict abusers. A common abuser is a person who uses narcotics without rights or against the law without any physical or psychological dependence. Addict abusers are people who use narcotics without rights or against the law with physical or psychological dependence.

According to Law Number 35 of 2009 concerning Narcotics, ordinary abusers can be subject to imprisonment for a maximum of four years or a maximum fine of Rp.800 million. Addict abusers can be subject to imprisonment for a maximum of one year or a maximum fine of Rp100 million. However, addict abusers can be sentenced to medical or social rehabilitation if they meet certain conditions. Rehabilitation crimes aim to restore the physical and psychological condition of addict abusers so that they can function normally in society.

Drug abusers are not criminals who should be imprisoned, but people who are sick and need to get rehabilitation services both medical and social. Prisons are not the right solution to deal with the problem of drug abuse, because it can cause new problems such as prison overcapacity, social stigmatization, and the risk of being infected with infectious diseases such as HIV/AIDS and hepatitis C. Prisons also do not guarantee that drug abusers will stop using narcotics after being released. In fact, it is possible that drug abusers will become more experienced in the narcotics business after being released from prison.

Prisoner overcapacity occurs in almost all prisons, this excess capacity certainly causes various problems in prisons, such as the non-continuation of the main purpose of the prison, which is the guidance of inmates and can cause new crimes due to the excess capacity. Along with this condition, overcapacity causes problems in the prison itself, such as a decrease in the level of supervision and security that occurs in the prison. So that the initial purpose of the prison is as a place to foster inmates and even introduce a new level of crime in the prison. The level of crime that can occur in prisons includes acts of persecution between inmates, narcotics trafficking in prisons and other crimes.

Theoretically, it can be explained that overcapacity can lead to imprisonment. In essence, imprisonment is formed as a reaction to the adjustment problems that arise as a result of the prison sentence itself with various forms of deprivation. The negative impact of the above imprisonment is rooted in a reality where the inmate social system is very supportive and protective of inmates who are very deep in criminal behavior patterns and on the contrary will not support or even oppress or threaten inmates who still show loyalty to the non-criminal world. In an inmate while in prison, the attitudes and values that an inmate adheres to in the context of the inmate community, will seriously hinder the resocialization efforts of inmates. This is also the obligation of policymakers or related employees in handling cases of overcapacity of this prison because it is feared that it will hinder the process of fostering inmates and hinder the suppression of crime rates in the future. (Angkasa, 2010) (Atmasasmita, 1983)

Challenges in implementing the reform of narcotics laws to overcome overcapacity in correctional institutions can include:

1. Resistance to change: One of the main challenges is resistance to change from a wide range of parties, including law enforcement agencies, the justice system, and the general public,



who may be uncomfortable with legal reforms that could change the approach to narcotics cases.

2. Limited resources: The implementation of legal reform requires adequate allocation of resources, including adequate budgets, personnel, and infrastructure. These limited resources can be a serious challenge in implementing legal reform effectively.
3. Capacity and skills of law enforcement officers: Law enforcement officers, including police, prosecutors, and judges, may need to obtain additional training or develop new skills in order to properly implement narcotics law reforms. This challenge is related to capacity building and understanding of new approaches to narcotics cases.
4. Interagency coordination: The implementation of narcotics law reform requires good coordination between various government agencies, including the police, the justice system, correctional institutions, and health institutions. These challenges are related to policy harmonization, efficient workflows, and smooth exchange of information between agencies.
5. Public awareness and acceptance: The final challenge is to build public awareness and acceptance of the reform of narcotics laws. It involves public education, advocacy, and drawing support from various community groups to support legal changes aimed at addressing overcapacity in correctional institutions.

Addressing these challenges requires commitment, cooperation, and joint efforts from various parties, including governments, law enforcement agencies, civil society, and the general public, to ensure that narcotics law reform can be implemented successfully and effectively.

Article 54 of Law Number 35 of 2009 states that narcotics addicts and victims of narcotics abuse are required to undergo medical rehabilitation and social rehabilitation. The existence of a criminal law policy in efforts to rehabilitate narcotics addicts is something that needs to be supported. However, the implementation is not easy because the consideration for rehabilitation does not only depend on the judge, but also needs other considerations from law enforcement or other related parties such as doctors.

Regarding the juridical basis, considering the increasing threat of narcotics, the government should respond to the acceleration of the steps to amend Law Number 35 of 2009 concerning Narcotics with input on new types of drugs that are currently developing and encourage the Ministry of Health to continue to update the Regulation of the Minister of Health on the Narcotics Classification List every year, so that perpetrators who deliberately use New Psychoactive Substances (NPS) cannot escape the demands law.

Several articles need to be amended in Law No. 35 of 2009, including Article 54, Article 112, and Article 127. Article 54 prioritizes and even legally obliges addicts and victims of narcotics abuse to undergo medical rehabilitation and social rehabilitation. This is further strengthened by Government Regulation No. 25 of 2011 concerning the Implementation of Mandatory Reporting of Narcotics Addicts. However, in these articles, it is necessary to affirm the definition of abusers, victims of abuse, and traffickers, so that they are not used as bargaining tools by officials and prevent corruption. The most appropriate way to deal with narcotics users and addicts is by decriminalizing or eliminating criminal sanctions against acts, in this case the use and possession of narcotics for personal gain.



In the rehabilitation provisions, the determination of the minimum quantity of narcotics as a reference for determining the status of abusers, strengthening efforts to enforce, supervise, and sanction legal sanctions needs to be reviewed. For this reason, the House of Representatives of the Republic of Indonesia needs to urge the government to immediately submit the Bill on Amendments to Law Number 35 of 2009 concerning Narcotics to the House of Representatives of the Republic of Indonesia so that it can be discussed together and can be approved into law this year.

CONCLUSION AND SUGGESTIONS

Conclusion

Reform of narcotics laws is the key in efforts to overcome the problem of overcapacity in correctional institutions. By introducing changes in regulations, policies, and legal approaches to the handling of narcotics cases, it is hoped that a reduction in the number of narcotics-related prisoners and inmates can be achieved, as well as an improvement in the criminal justice system as a whole. These reforms involve a range of strategic measures, including the reduction of nonviolent sentences, the promotion of more rehabilitation-oriented alternative punishments, a more public health-oriented approach, and the strengthening of prevention and intervention policies.

However, the implementation of narcotics law reform is not without challenges. Resistance to change, limited resources, lack of capacity and skills of law enforcement officers, and low public awareness can be obstacles to realizing effective reforms. Therefore, commitment, cooperation, and joint efforts from various parties, including the government, law enforcement agencies, civil society, and the general public, are needed to ensure that the reform of narcotics laws can be implemented successfully and have a positive impact in overcoming overcapacity in correctional institutions and realizing a fairer and more sustainable criminal justice system.

SUGGESTION

Close collaboration is needed between the government, law enforcement agencies, correctional institutions, health institutions, and civil society to develop and implement the reform of narcotics laws. This collaboration will ensure that the reforms reflect the needs and aspirations of all stakeholders involved and in strengthening narcotics prevention policies and early intervention to reduce the demand for illegal narcotics and prevent individuals from engaging in narcotics abuse.



REFERENCES

- Started. (2004). *Conditional Criminal Institution*. Bandung: PT. Bandung Alumni.
- Tarigan, I. J. (2012). *Narcotics and their Countermeasures*. Yogyakarta, Indonesia: Cv Budi Utama.
- Fadhyuhazis, F. R. (2019). Thesis: National Narcotics Strategy of Banda Aceh City in Preventing Drug Illicit Circulation among Adolescents. Aceh, Indonesia.
- Arief, B. N. (2002). *Bunga Potpai Criminal Law Policy*. Bandung: PT. Citra Aditya Bakti.
- Mardiansyah, M. (2023, December 28). *ANTARA INDONESIA NEWS AGENCY*. Excerpted May 5, 2024, from <https://www.antaraneews.com/berita/3890658/bnn-prevalensi-penyalahgunaan-narkotika-turun-pada-tahun-2023>
- BNN, H. (2023, November 23). *National Narcotics Agency of the Republic of Indonesia*. (BNN) Excerpted May 5, 2024, from <https://bnn.go.id/diskusi-perubahan-undang-undangnarkotika-demi-politik-hukum-yang-adil/>
- Public Relations, B. (2022, March 31). *The Bill to Amend the Narcotics Law Prioritizes the Rehabilitation Approach over Prison Sentences*. (Ministry of Law and Human Rights of the Republic of Indonesia) Excerpted April 5, 2024, from <https://www.kemenkumham.go.id/berita-utama/ruu-perubahan-uu-narkotika-utamakan-pendekatan-rehabilitasi-dibanding-pidana-penjara>
- News One*. (2021). Retrieved April 8, 2024, from <https://www.beritasatu.com>
- adri, A. (2023, March 25). *Compass*. Retrieved April 8, 2024, from <https://www.kompas.id/baca/metro/2023/03/25/peringatan-ada-48-juta-penduduk-terpapar-narkotika>
- Sky. (2010). "Over Capacity of Prisoners in Correctional Institutions, Causative Factors, Negative Implications, and Solutions in an Effort to Optimize Prisoner Development". *Legal Dynamics*, 10(3), 215.
- Atmasasmita, R. (1983). *Imprisonment in a potpourri*. Bandung: Armico.
- Harsono, C. (1995). *New System of Prisoner Coaching*. Jakarta: Djambatan.
- (2020, November 26). Quoted in April 2024, from Kompas: <https://www.kompas.id/baca/polhuk/2020/11/26/mencari-jalan-keluar-untuk-pencandu-narkotika/>.



OVERCOMING A RECURRING PROBLEM: DELVING INTO BAKAMLA RI'S ROLE AND PATH FOR DEVELOPMENT AGAINST DRUG TRAFFICKING

Abel Josafat Manullang^{1*}, Yosua Saut Marulitua Gultom²

¹Department of International Relations, Faculty of Social and Political Sciences,
Universitas Padjadjaran, Indonesia

²Department of International Relations, Faculty of Social and Political Sciences,
Universitas Pembangunan Nasional Veteran Jakarta, Indonesia

*Corresponding author: abel20001@mail.unpad.ac.id

ABSTRACT

Of the many threats to Indonesia's security, drug trafficking is one that has tailored a long trail in that state. Drug trafficking can pose a threat for both human and national security of a state. One of the channels it can come into Indonesia is through the sea in both domestic and international manner. In dealing with such a threat, Bakamla RI (Badan Keamanan Laut Republik Indonesia) also has a share in the pie of responsibilities. To that end, the paper seeks to explain the role and developments Bakamla RI can undertake to face the threat of drug trafficking that emanates from the sea. In providing its arguments, the writers made use of both primary and secondary data under the qualitative research method. The paper begins by providing a look into the drug trafficking problem in Indonesia, notably the one that stems from its seas. As a result of Indonesia's archipelagic status as well as its geographic position, it is no surprise that it finds itself faced with numerous transnational crimes, including drug trafficking that could occur across its sovereignties. In the second point, an overview of Bakamla RI and their role in circumventing the aforementioned issue is provided. On this matter, a look into the relevant policy architecture to Bakamla RI's duties is also presented. In the final section, the writers would dive into the existing challenges to the effort in overcoming drug trafficking in Indonesia's seas. Paired up with that, the potential paths for development in the field are also laid out. In this regard, the recourse to regional bodies like ASEAN, improving maritime domain awareness to expand the list of actors on the field are put forward.

Keywords: Bakamla RI, Drug trafficking, Indonesia, Maritime security.

INTRODUCTION

Globalization has brought us to an era of interconnectedness, increasing trade, communication, and people exchange. However, these same interconnections have also facilitated the

proliferation of transnational crime, with drug trafficking emerging as a significant and widespread global threat (Shelley, 2011; Nwebo & Ubah, 2015). This illicit activity spans continents, impacting millions and destabilizing societies by fueling violence, corruption, and addiction. Maritime routes, in particular, have become a major route for smugglers, exploiting the vast and poorly monitored expanses of the world's oceans to transport illicit substances (Beittel, 2015; Germond, 2015; Campana, 2020). The result is a pervasive challenge that requires robust international cooperation and enhanced maritime security to combat effectively.



Picture 1. Indonesia's Maritime Security Vulnerability (Gustasya et al, 2023)

Indonesia, with its extensive archipelagic geography comprising over 17,000 islands, is particularly susceptible to maritime drug trafficking. This geography presents unique challenges for maritime security, straddling major international sea routes. Indonesia's strategic position makes it an attractive target for traffickers seeking to smuggle drugs into and out of Southeast Asia. In this map also we can see that Indonesia lacks hard power countermeasures against smugglers, with most of our efforts placed on Malacca Strait, while little to no attention to the eastern side of Indonesia archipelago.

The porous nature of Indonesia's maritime borders, combined with limited resources for monitoring and enforcement, exacerbates this vulnerability (Prayuda, 2020). Drug trafficking not only threatens Indonesia's national security but also poses a significant public health crisis, contributing to the rise in substance abuse and associated social problems.

In response to this growing threat, the Indonesian Maritime Security Agency, known as Bakamla RI (*Badan Keamanan Laut Republik Indonesia*), has emerged as a critical player in the fight against maritime drug trafficking. Established to safeguard Indonesia's maritime



interests, Bakamla RI is tasked with patrolling and securing the nation's vast territorial waters (Sudiro & Firdaus, 2023). This research paper aims to explore the pivotal role of Bakamla RI in combating drug trafficking, examining the challenges it faces, the strategies it employs, and the potential pathways for its further development and effectiveness. Through a comprehensive analysis, this study seeks to contribute to the broader discourse on enhancing maritime security and curbing the scourge of drug trafficking in Indonesia.

METHODOLOGY

In carrying out the research, the writers made use of the qualitative research method. Referring to Creswell, the qualitative research method is a method that allows the researchers to understand the meaning behind social problems (Creswell, 2014). The research is done by conducting a literature study of data involving the issue at hand. The aforementioned data were procured from sources like media or news coverage, previous studies, governmental agency reports, etc. Through the qualitative research method done over those data, the writers got the opportunity to qualitatively examine and interpret them to understand the information contained within.

RESULT AND DISCUSSION

One of Indonesia's Albatross: Drug Trafficking

Drug trafficking is a significant non-traditional threat with far-reaching and devastating effects on societies worldwide. Unlike conventional threats such as military aggression, drug trafficking operates covertly, undermining social structures and economic stability from within (Singh & Nunez, 2013). This illicit trade fuels corruption, violence, and instability, particularly in regions where law enforcement and governance are weak (Biswas, 2021). The consequences of drug trafficking are extensive. It finances criminal organizations and terrorist groups, perpetuating cycles of violence and undermining state authority. The vast profits generated by this trade enable these groups to acquire sophisticated weapons, influence political processes, and engage in other illegal activities such as human trafficking and arms smuggling (Beittel, 2015). Furthermore, the societal impact is profound. Communities are ravaged by addiction, leading to a rise in health issues, family breakdowns, and an overburdened healthcare system (Dolliver, 2015). The youth, often targeted as both consumers and couriers, face disrupted education and diminished future prospects. In Indonesia, drug abuse among youth in 2018 amounted to 2.29 million people, or almost 24-28% of youth using drugs while crimes related to narcotics and psychotropic drugs in the first semester of 2022 reached 15,455 cases, ranking as the second highest crime in Indonesia after theft (Siswandi et al, 2022).

The global nature of drug trafficking renders no country immune, necessitating a coordinated international response. Effective combat against this pervasive issue involves cross-border cooperation and the implementation of stringent measures. Countries must work together to address every stage of the illegal drug trade, from cultivation and production



to distribution. This collaborative approach ensures that efforts are harmonized, resources are pooled, and intelligence is shared, thereby strengthening the overall capacity to dismantle drug networks. Such unified action is crucial in curbing the widespread impact of drug trafficking and protecting communities worldwide from its detrimental effects (May & Clough, 2017).

The latest Presidential Statement on Transnational Organized Crime held in 7th December 2023, the United Nations Security Council (UNSC) acknowledges the crucial need for enhanced international and regional cooperation to combat transnational organized crime. It recognizes that such crimes may threaten the security of countries on its agenda, including post-conflict states, and expresses its intention to address these threats as appropriate. It also expresses serious concern over the rise in drug trafficking, migrant smuggling, human trafficking, and the illicit trade and smuggling of small arms and light weapons by land, air, and sea. These criminal activities by organized groups and networks undermine state authority and threaten global peace and security. Additionally, the Council notes with concern the link between organized crime and terrorism financing in certain regions. Furthermore, the UNSC stressed the importance of maritime security, underscoring the need for strengthened international and regional cooperation to combat transnational organized crime, piracy, and armed robbery at sea. Enhanced collaboration is vital to addressing these threats and ensuring safer and more secure maritime environments worldwide (Security Council, 2023).

According to the statements by Heru Winarko, former Head of Indonesian Narcotics Board (*Badan Narkotika Nasional*, BNN), there are three areas that are the main source of drug networks. The first in Southeast Asia is called “The Golden Triangle” which includes Thailand, Myanmar and Laos. There is also “The Golden Crescent” which includes Afghanistan, Pakistan and Iran. Finally, there is “The Golden Peacock” which originates from Latin America. Among them, around 80% of smuggled drugs were brought in through the sea. This sea route is bypassed because of the increasingly tight surveillance at airports (Lemhannas, 2019).

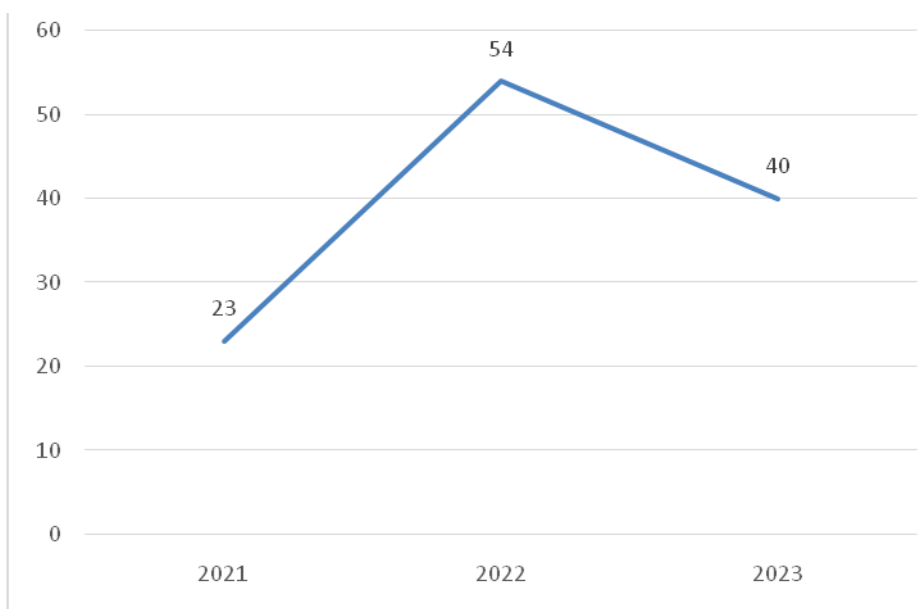


Figure 1. Drug Trafficking Cases in 2021-2023 through Sea Route (Bakamla RI, 2023)



In Indonesia, the scale of problems is increasingly high. According to the Figure 1 above, in 2021 there was found 23 cases on drugs trafficking, the number increased nearly twice from 23 to 54 in 2022, and slightly decreased to 40 in 2023. These numbers highlight the persistent and dynamic nature of the threat that Indonesia face as the numbers still far higher than 2 years ago. This implication on this dimension can be seen in the amount of illegal drug users in Indonesia over the years that could open the door for other issues within the society. As such, maintaining Indonesia's maritime security from the influx of drug trafficking can be viewed as an important step to the bigger effort of combatting said threat.

Bakamla RI: One of Indonesia's spearhead

Before being the Bakamla RI we know today, it used to be known as Bakorkamla (Badan Koordinasi Keamanan Laut/ Maritime Security Coordination Agency). However, following the enactment of law no. 32 of 2014, it then turned to the Bakamla RI we know today. That law not only set the stage for Bakamla RI's creation, but also the set of duties it would carry out over the course of its existence. Still referring to the aforementioned law, Bakamla RI is responsible to carry out maritime patrols over Indonesia's sea, maintain maritime security and safety, and work alongside other relevant agencies on the field. Amidst the growing interconnectedness that sees stronger cross border activities, Bakamla RI has found itself dealing with many transnational crimes, from illegal transshipment, IUU (illegal, unreported, unregulated fishing), human trafficking, as well as drug trafficking. While it is true that those crimes take place on the sea, they are not for Bakamla RI's handling alone.

Given Indonesia's multi-agency and single purpose approach to the maintenance of its maritime security, Bakamla RI exists with other agencies in the same field. Its counterparts range from the water police to the Indonesian Navy (Darmawan, 2020). Hence, in undertaking its duty, notably in the conduct of maritime patrol and monitoring, Bakamla RI would often find itself working alongside its counterparts. Such is the case when Bakamla RI has to deal with drug trafficking issues where it could work with agencies like Indonesia's BNN (National Narcotics Board). Such cooperation is strongly needed given how many drugs are smuggled through the sea into the country.

Challenges and doors to walk through

One of the ways Bakamla RI could do its part to combat drug trafficking through Indonesia's sea is by conducting patrols over it. However, such a task is made difficult given the sheer size of Indonesia's sea along with the adequate force it has. What is meant by the latter is how Bakamla RI is somewhat underpowered to carry out its patrol duty. As of now, Bakamla RI only has around 10 patrol ships that it uses to carry out patrol over the 3 maritime zones (west, central, and east) of Indonesia's sea (Achmad & Krisiandi, 2023). That number falls short of the adequate number that is needed to properly cover all those areas. Aside from that palpable hindrance to Bakamla RI's capacity, there also lies some points to leverage on. Some doors that can be opened to improve Bakamla RI's capacity are present in the forms of overtures in increasing its international initiatives in the region, strengthening Indonesia's interagency cooperation, and enhancing its maritime domain awareness capacity.



Apart from its role as one of Indonesia's maritime security apparatus. Bakamla RI also possesses the capacity to engage in maritime diplomacy. This particular role has been carried out from time to time with other states bilaterally or multilaterally within numerous fora. For the former, Bakamla RI has maintained positive ties with neighboring states' coast guard apparatus which allow collaboration when it's needed. Activities ranging from port visits, personnel exchange, to dialogues are some of the means to attain said end. As for the latter, Bakamla RI has been involved in numerous international fora in the scope of Southeast Asia and beyond. Given the primacy of Southeast Asia as Indonesia's home region, it is important to start their strides there. For that, Bakamla RI is well prepared as apparent in the former point and its active role in the region's regional bloc, ASEAN. The shared awareness of the importance of maritime security and its maintenance within ASEAN can be seen in the creation of the ASEAN Coast Guard Forum (ACGF) (Muliantara & Liman, 2022). In such a forum, Bakamla RI could exercise its role as one of Indonesia's maritime diplomacy actors. In this sense, it can seek to highlight the issues of drug trafficking to the concern of other member states. This sort of undertaking can be done given how such an issue can also resonate among the minds of other states. Such is the case given the strong interconnectedness that characterizes the ties between ASEAN member states in the region. Should an issue, especially a transnational one, arise in one of them, the same could also occur or even be exacerbated in neighboring states. This particular possibility is further supported with the presence of a drug trafficking hotspot like the Golden Triangle in Southeast Asia. With that in mind, a sound driving force can be leveraged on by Bakamla RI to push for a joint effort that not only caters for Indonesia's interest in maritime security but also those of other states or the region as a whole.

Moving on, the same door for improvement also lies in Indonesia's domestic landscape. What is referred to by that is how Indonesia's government approaches to safeguarding its sea that is characterized by multi-agency with single purpose. That particular approach means that in maintaining its maritime security, Indonesia has numerous governmental agencies for that, from Bakamla RI, the Indonesian Navy, the Maritime Police, the Ministry of Marine Affairs and Fisheries, the Water Police, etc. This is also not to mention the existence of a governmental agency to deal with illegal drugs like the BNN (National Narcotics Board). What makes it important to do is to not only improve their respective duty on the sea but also to avoid tensions arising from sectoral egos (Dinarto, 2022). Apart from enhancing the interagency development, a drastic measure is also present in the form of making a sole coast guard for Indonesia. Over the years, there have been plans or statements made to transform Bakamla RI into Indonesia's coast guard unit which has yet to materialize up to this moment of writing. While there are still some matters left to be worked on, one cannot brush aside how the existing structure can still cater to interagency cooperation, like the one between Bakamla RI and BNN in the past.

When it comes to maritime domain awareness, one can take many ways to that end, from increasing the amount of sophisticated tools in the disposal to increasing the amount of eyes it has on the field. For the former, Bakamla RI has established the Indonesia Maritime Information Centre (IMIC) (Putra, 2020). The IMIC, despite its ties with Bakamla RI, also provides its gathered information to a bigger audience, from the public to the other



relevant governmental agencies. In its monthly and annual reports, it would gather all relevant issues taking place on the issue, including the arrests or capture of illicit drug trafficking attempts done by Bakamla RI and other agencies. This particular point could also bolster the interagency cooperation when it comes to problems arising from Indonesia's sea. As for the latter, Bakamla RI has sought to work alongside the coastal communities around Indonesia shorelines. Why settle with them? The answer lies in the plentiful amount of said communities around Indonesia. By tagging them along Bakamla RI's duty in maintaining Indonesia's sea, they also got their hands on access to fresh information on issues arising from the sea. This particular overture can be seen in one of their recent initiatives known as Relawan Penjaga Laut Nusantara (Rapala) (Suparta, 2024). Hence, by procuring another source of fresh information, paired with its existing instruments, Bakamla RI has established its maritime domain awareness capacity. That particular capacity could certainly be further improved to better bolster its capacity in maintaining Indonesia's maritime security, including against the threat of drug trafficking.

CONCLUSION

As an archipelagic state, Indonesia is faced with an enormous sea at its disposal. While the sea can be used for numerous positive gains i.e as a basis for trade and fishing industry, it also exposes Indonesia to a set of transnational crimes taking place there as well, one of them being drug trafficking. The vast open and open sea has been used on countless occasions by drug traffickers seeking to spread their contraband into the country. Of all the many relevant governmental agencies there, one agency that caters to the security of the sea, which in turn involves the taking care of drug trafficking cases, is present in the form of Bakamla RI. Acting as one of Indonesia's maritime security apparatus, Bakamla RI has its eyes on numerous transnational crimes over Indonesia sea. Despite its presence there, it unfortunately is somewhat riddled with its own set of challenges. The huge space that it needs to cover on the sea is all the more difficult to secure as Bakamla RI also lacks the adequate power to gain a strong grip. However, amidst the many challenges it's being faced with, there are also some opportunities that can be explored for development. First, Bakamla RI can further enhance its ties with its regional counterparts in ASEAN given the existence of ACGF. Second, doubling down on maritime domain awareness improvements is also noteworthy given the many ways it can be done, from increasing the tools in its disposal to working alongside people on the coast. Finally, strides to improve the interagency ties between Bakamla RI and other relevant governmental agencies so that collaboration can be done smoothly with little to no trouble.

ACKNOWLEDGEMENT

The writers wish to express their gratitude to God almighty, family, and friends that have supported us throughout the process. The same gratitude is also extended to Holo of Yoitsu for the push and smiles she brought.



REFERENCES

- Achmad N. M. & Krisiandi. (2023). Bakamla baru punya 10 kapal patroli, idealnya 90. *KOMPAS.com*. <https://nasional.kompas.com/read/2023/12/29/14470241/bakamla-baru-punya-10-kapal-patroli-idealnya-90#>
- Bakamla RI. (2023). Annual Report 2023. Indonesia Maritime Information Center. <https://imic.bakamla.go.id/storage/publication-activity-reports/January2024/H9yPG4LF0uPYsc0BGBK8.pdf>
- Beittel, J. S. (2015). Mexico: Organized crime and drug trafficking organizations. *Congressional Research Service*, 3. <https://goodtimesweb.org/diplomacy/2015/R41576.pdf>
- Biswas, S. (2021). Drug Abuse and Drug Trafficking: Non-Traditional Security Threats in Post-Soviet Central Asia. *Asian Journal of Legal Education*, 8(2), 247-258. <https://doi.org/10.1177/23220058211025964>
- Campana, P. (2020). Human smuggling: Structure and mechanisms. *Crime and Justice*, 49(1), 471-519. DOI: <https://doi.org/10.1086/708663>
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. (4th ed.). Los Angeles, CA: Sage.
- Darmawan, A. R. (2020). Indonesia's maritime law enforcement faces troubled waters. *East Asia Forum*. <https://eastasiaforum.org/2020/08/29/indonesias-maritime-law-enforcement-faces-troubled-waters/>
- Dinarso, D. (2022, January 21). Can Bakamla be at the forefront of Indonesia's Natuna Sea strategy? *The Diplomat*. <https://thediplomat.com/2022/01/can-bakamla-be-at-the-forefront-of-indonesias-natuna-sea-strategy/>
- Dolliver, D. S. (2015). Socio-cultural impacts on drug trafficking trends in Europe. *European Journal of Crime, Criminal Law and Criminal Justice*, 23(4), 383-406. DOI: <https://doi.org/10.1163/15718174-23032079>
- Germond, B. (2015). The geopolitical dimension of maritime security. *Marine Policy*, 54, 137-142. DOI: <https://doi.org/10.1016/j.marpol.2014.12.013>
- Gustasya, Y., Situmorang, R. P., & Harryes, R. K. (2023). The Early Warning System Effectiveness of the Maritime Security Agency of the Republic of Indonesia (Bakamla RI) in the Prevention of Drug Invention through the Sea Lane. *Jurnal Pertahanan: Media Informasi tentang Kajian dan Strategi Pertahanan yang Mengedepankan Identity, Nasionalism dan Integrity*, 9(1), 92-118. DOI: <https://doi.org/10.33172/jp.v9i1.7430>



- Lemhannas. (2019, July 24). Kepala BNN: Penyelundupan Narkoba 80% Lewat Jalur Laut. *Lembaga Ketahanan Nasional Republik Indonesia*. <https://www.lemhannas.go.id/index.php/berita/berita-utama/734-kepala-bnn-penyelundupan-narkoba-80-lewat-jalur-laut>
- May, C., & Clough, C. (2017). Transnational crime and the developing world. *Global Financial Integrity*, (29), 104. <https://respect.international/wp-content/uploads/2017/03/Transnational-Crime-and-the-Developing-World-Global-Financial-Integrity-2017.pdf>
- Muliantari N. & Liman, U. (2022). ASEAN Coast Guard Forum aims to preserve maritime stability: Bakamla. Antara News. <https://en.antaranews.com/news/261669/asean-coast-guard-forum-aims-to-preserve-maritime-stability-bakamla>
- Nwebo, O. E., & Ubah, C. B. (2015). Globalization of Crime: Problems and Challenges for World Peace and Security. *International Journal of Liberal Arts and Social Science*, 3(2), 2307-2924.
- Park, A. (2009, Sept. 14). A shot at cancer. *Time*, 174(10), 32-39.
- Prayuda, R. (2020). Kejahatan Transnasional Terorganisir di Wilayah Perbatasan: Studi Modus Operandi Penyelundupan Narkotika Riau dan Malaysia. *Andalas Journal of International Studies (AJIS)*, 9(1), 34-47. DOI: <https://doi.org/10.25077/ajis.9.1.34-47.2020>
- Putra, P. M. S. (2020, July 22). Bakamla Luncurkan Indonesia Maritime Information Centre, untuk Apa? *liputan6.com*. <https://www.liputan6.com/news/read/4312430/bakamla-luncurkan-indonesia-maritime-information-centre-untuk-apa>
- Security Council. (2023, December 7). Security Council Adopts Presidential Statement on Transnational Organized Crime, Urges States to Ramp Up Cooperation, Laws, Borders to Combat It. SC/15516. *United Nations*. Retrieved from <https://press.un.org/en/2023/sc15516.doc.htm>
- Shelley, L. (2011). The globalization of crime. *International crime and justice*, 3-10.
- Singh, N. K., & Nunes, W. (2013). Drug Trafficking and Narco-terrorism as Security Threats: A Study of India's North-east. *India Quarterly*, 69(1), 65-82. <https://doi.org/10.1177/0974928412472106>
- Siswandi, L., Sarbini, S., Kamaluddin, M., Lusiana, W., Rahmawati, U., Mayasari, R. I., ... & Indrawati, A. (2022). BAHAYA NARKOBA TERHADAP GENERASI MUDA. *Karunia: Jurnal Hasil Pengabdian Masyarakat Indonesia*, 1(4), 94-99. <https://doi.org/10.58192/karunia.v1i4.332>



Sudiro, P. A. S., & Firdaus, E. A. R. (2023). Study of Bakamla RI Building Policy in Order to Implement Maritime Security Enforcer's Tasks Based on Potential Capability. *Journal of Strategic and Global Studies*, 6(2), 5. DOI: <https://doi.org/10.7454/jsgs.v6i2.1117>

Suparta, I. K.. (2021, October 27). Bakamla bentuk relawan Penjaga Laut Nusantara (Rapala) Kabupaten Karangasem. ANTARA News Bali. <https://bali.antaranews.com/berita/256649/bakamla-bentuk-relawan-penjaga-laut-nusantara-rapala-kabupaten-karangasem>

RESTORATIVE JUSTICE FOR THE FIRST DRUG ADDICT BASED ON INDONESIA LAW (*National KUHP, PERJA/ INDONESIA ATTORNEY GENERAL REGULATIONS*)

Rizky Karo Karo¹, Andi Rania Risya Zamayya^{2*}, Ryan Jovan Susanto³,
Helena Susanto⁴

Faculty of Law, Pelita Harapan University, Indonesia

*Corresponding author: 01051220166@student.uph.edu

ABSTRACT

The punishment or action of the first drug addict based on Law Number 1 of 2023 concerning the Criminal Code (KUHP) is based on considering the benefits of the accused. The Criminal Code aims to restore the state of the victim. First-time drug addicts or users are victims of drug abuse. The formulation of the problem studied is how to apply restorative justice for drug abusers for the first time based on the Criminal Code? Research methods are normative research methods using secondary data and analyzed qualitatively. Restorative justice is a concept of justice that promotes reconciliation and need-based recovery for victims, perpetrators, and the environment affected by a criminal act. Applying the concept of restorative justice means that it is not always oriented towards criminal punishment, but rather leads to aligning the interests of victim recovery and accountability of criminal offenders. The form of rationalization of restorative justice against drug addicts based on the Attorney General's Regulation of the Republic of Indonesia No. 18 of 2021 can be in the form of stopping the prosecution of cases by the Prosecutor's Office against suspected drug addicts. As a step for recovery efforts in the form of providing restorative justice with the terms and conditions contained in the Attorney General Regulation of the Republic of Indonesia No. 18 of 2021, an Integrated Assessment Team consisting of 3 agencies was formed, namely the Prosecutor's Office, the Police, BNN. The coordination carried out by the 3 agencies resulted in the feasibility of suspected drug addicts to obtain restorative justice, which then the party who issued the decision was the Prosecutor's Office.

Keywords: *Abstract, Author Guidelines, Article Template, Journal of Communities-Based Service, Resume*

INTRODUCTION

Based on the latest data from Indonesia Drugs Report 2023 which was published by BNN RI (National Narcotics Agency of Republic of Indonesia), there are already 1.150 types of New Psychoactive Substances (NPS) indicated in the world. It is said in the Indonesian Drug Report 2023 that 91 types of NPS have been identified in Indonesia. The 2022 Drug User Report from the Center for Research, Data, Information of the National Narcotics Agency (Puslitdatin BNN) explained that in 2021 the increase in the prevalence of drug abuse was 1.80% to 1.95%. In the period 2021 to 2023, drug users dropped to 1.73%, or around 3.3 million people. The number decreased by 0.22%, meaning that more than 300,000 of the nation's children were saved from drugs.⁵¹

In the lives of society, the general term that is associated with illegal drug is "NARKOBA". It actually appeared in order for society to easily memorize what is the definition of narcotics and illegal drugs. In general, "NARKOBA" is an abbreviation of *Narkotika dan Bahan-bahan Berbahaya* (Narcotics and Hazardous Substances). However, over the years, the term "NARKOBA" is also known as "NAZA", which stands for: *Narkotika, Alkohol dan Zat Adiktif lainnya* (Narcotics, Alcohol, and other Addictive Substances). Later, it is also called the term NAPZA (Narcotics, Alcohol, Psychotropic and other Addictive Substances). Those other addictive substances in question are substances that can generally make people addicted or dependent or addicted such as caffeine in coffee and nicotine in tobacco.

Achmad Rifai stated generally that the usage of narcotics that isn't line with their needs will face certain side effects, such as:

Stimulant, which means stimulating activity in the central nervous system and speeding up mental processes or making more excited. The cause of stimulants can be due to consuming caffeine, nicotine, amphetamines or cocaine. For example, the use of methamphetamine (or also known as "Shabu").

Depressant, which has the meaning of decreasing or suppressing the central nervous system's activities, will make the user feel more relaxed, with their consciousness decreasing and even heartbeat getting weaker. This can be achieved due to the content of analgesics, alcohol, benzodiazepines in hard drugs such as heroin, morphine and methadone.

Hallucinogens, which means that the influence of drugs makes the user hallucinate. users will experience misperceptions of everything around them. They will see or hear something as if it was there. This is triggered by taking masculine or marijuana⁵².

Drug abuse among adolescents is an unsuitable act that is not in accordance with the prevailing norms in the society. In which, is an act of social deviance.

The triggers for drug abuse among young people can be divided into two, internal and external. Internal aspect is a trigger which comes from within the person, which can arise because of their character, relationship with family, and also the individual's economic

51 BNN KOTA YOGYAKARTA, "PRESS RELEASE CAPAIAN KINERJA AKHIR TAHUN 2023 BNN KOTA YOGYAKARTA," 2023, <https://yogyakartakota.bnn.go.id/press-release-capaian-kinerja-akhir-tahun-2023-bnn-kota-yogyakarta/>.

52 Rifai Achmad, "Bahaya Laten Narkoba," *Varia Peradilan*, 2014.



condition. On the other hand, external aspects are aspects that come from outside an individual/youth which influences lead to drug abuse.⁵³

Imprisonment is the last resort taken against people who are proven to have committed a crime. Basically, the imposition of punishment is a restriction of a person's freedom from the outside world into a correctional institution.⁵⁴

According to the data from Directorate General of Corrections Ministry of Law and Human Rights of the Republic of Indonesia (Direktorat Jenderal Pemasyarakatan KemenKumHam) as of March 31st, 2020, the number of inmates and prisoners in all prisons and detention centers in Indonesia reached 270,351. This number far exceeds the ideal capacity that can be accommodated by all prisons and detention centers, which is only intended for 131,931 people.⁵⁵

Moeljanto stated an opinion that "criminal offenses" are actions that are banned by the regulations, the ban is also accompanied by threats (sanctions) in the form of certain penalties. For those who violate the rules, there are three things that need to be taken into account, namely: (1) Actions that are punishable; (2) Prohibition accompanied by sanctions; (3) There is a relationship between the prohibition and the threat to the person who commits the prohibited act.⁵⁶

Law Number 35/2009 on Narcotics (Narcotics Law) contains a double track system, punitive sanctions and actions. Based on Article 4, the Narcotics Law aims to: a. ensure the availability of Narcotics for the benefit of health services and/or the development of science and technology; b. prevent, protect, and save the Indonesian people from the abuse of Narcotics; c. eradicate the illicit circulation of Narcotics and Narcotics Precursors; and d. ensure the regulation of medical and social rehabilitation efforts for Narcotics Abusers and addicts.

Narkotika (Narcotics) according to Article 1 Number 1 Narcotics Law, are substances or drugs derived from plants or non-plants, both synthetic and semi-synthetic, which can cause a decrease or change in consciousness, loss of taste, reduce to eliminate pain, and can cause dependence, which are divided into groups as attached to this Law. Furthermore, what is meant by "Pecandu Narkoba" (drug addicts) according to the Article 1 Number 13 Narcotics Law, are people who used or abused Narcotics and are in a state of dependence on Narcotics, both physically and psychologically. Meanwhile, "Penyalah Guna" (abusers) according to Article 1 Number 15 Narcotics Law, are people who used Narcotics without rights and against the law.

Restorative justice is a theory which states victims or their families have the right to treat the convicted the same way as they treated the victim. This theory places a higher value on

53 I Gede Suariawan, Anak Agung Sagung Laksmi Dewi, and Luh Putu Suryani, "FAKTOR PENYEBAB PENYALAHGUNAAN DAN PEREDARAN NARKOTIKA DI WILAYAH HUKUM POLRESTA DENPASAR," *Jurnal Konstruksi Hukum* 3, no. 2 (2022): 444–49.

54 I Dewa Ayu Yus Andayani, "PIDANA PENJARA BAGI ANAK YANG BERKONFLIK DENGAN HUKUM DALAM PERSPEKTIF SISTEM HUKUM PIDANA EDUKATIF," *JURNAL YUSTITIA* 12, no. 1 (2018), <https://ojs.unr.ac.id/index.php/yustitia/article/view/172>.

55 Direktorat Jenderal Pemasyarakatan Kementerian Hukum dan Hak Asasi Manusia, "Meretas Kebijakan Asimilasi Bagi Narapidana," accessed May 2, 2024, <http://www.ditjenpas.go.id/meretas-%0Akebijakan-asimilasi-bagi-narapidana>.

56 Moeljanto, *Asas-Asas Hukum Pidana Edisi Revisi* (Jakarta: Rineka Cipta, 2008).



direct involvement by the parties. With this, victims will be able to restore the element of control, while the offender will be encouraged to carry the responsibility to fix their mistakes caused by their criminal acts in establishing its social value system.⁵⁷

Based on this background, the authors chose the title “Restorative Justice For The First Drug Addict Based On Indonesia Law (National Kuhp, Perja/Indonesia Attorney General Regulations)”. The research question raised is how the regulation of Restorative Justice for the First Drug Addict is based on Indonesian Law (National Penal Code, Perja/Indonesian Attorney General Regulations). The objectives of this study are:

1. To analyze the role of the Attorney General’s Regulations and the National Penal Code in providing restorative justice for drug abusers;
2. To educate stakeholders that rehabilitation benefits first-time drug users.

METHODOLOGY

Authors use the normative juridical research method. According to Peter Mahmud, normative law research is a process to investigate a legal regulation, principles of law, as well as legal doctrines to answer the legal issue at hand.⁵⁸ “In this research, the author utilizes secondary data, including primary legal materials (in the form of laws and regulations of a country⁵⁹), secondary legal materials, and tertiary legal materials.”

RESULT AND DISCUSSION

Restorative Justice in Narcotics Crime Cases in Indonesia

The Government of the Republic of Indonesia has the responsibility to preserve the people of Indonesia in humane ways.⁶⁰ Local government through the authority given by the law also has the responsibility to create a comprehensive public health.⁶¹

Related to the context of restorative justice referred to in the narcotics crime case in Indonesia is a provision of rehabilitation. This provision is intended for the addicts and victims of drug abuse, who are required to undergo medical rehabilitation and social rehabilitation as stipulated in Article 54 of the Narcotics Law.

Article 127 of the Narcotics Law is one of the criminal acts in the Narcotics Law, which contains imprisonment, medical rehabilitation and also social rehabilitation. Article 127

57 OC. Kaligis, *Perlindungan Hukum Atas Hak Asasi Tersangka, Terdakwa Dan Terpidana* (Bandung: Alumni Press, 2006).

58 Peter Mahmud Marzuki, *Penelitian Hukum, Edisi Revisi* (Jakarta: Prenadamedia, 2019)

59 Agus Budianto, “Legal Research Methodology Reposition in Research on Social Science,” *International Journal of Criminology and Sociology* 9 (2020): 1339–46.

60 Cok Istri Dian Laksmi Dewi, “SISTEM PERLINDUNGAN MEREK DAN IMPLIKASINYA,” *JURNAL YUSTITIA* 13, no. 2 (2019), <https://www.ojs.unr.ac.id/index.php/yustitia/article/view/395>.

61 Cokorde Istri Dian Laksmi Dewi, “PELAKSANAAN PEMUNGUTAN PAJAK REKLAME DI KABUPATEN GIANYAR BERDASARKAN PERDA NOMOR 9 TAHUN 2010 TENTANG PAJAK REKLAME,” *Rio Law Jurnal* 5, no. 1 (2024): 262–77.



paragraph (1) states that every person who abuses a. Narcotic Group I⁶² for themselves shall be punished with a maximum imprisonment of 4 (four) years; b. Narcotic Group II⁶³ for themselves shall be punished with a maximum imprisonment of 2 (two) years; and c. Narcotic Group III⁶⁴ for themselves shall be punished with maximum imprisonment of 1 (one) year.

Article 127 paragraph (2) of the Narcotics Law states that in deciding cases as referred to in paragraph (1), judges must pay attention to the provisions referred to in Article 54, Article 55, and Article 103. Article 127 paragraph (3) of the Narcotics Law states that in the event that the Abuser as referred to in paragraph (1) can be proven or proven to be a victim of narcotics abuse, the Abuser must undergo medical rehabilitation and social rehabilitation.

Over 2022, a total of 31.868 drug abusers have accessed the rehabilitation services nationwide, which increased from 2021 (26.693).

During 2022, as many as 31,868 narcotics abusers accessed rehabilitation services nationally, an increase from 2021 when there were 26,693 drug abusers. This figure exceeds the RPJMN target of 27 thousand abusers. However, it has not been able to fulfil the President's direction conveyed at the 2015 National Coordination Meeting for Handling Drugs to rehabilitate as many as 100 thousand drug abusers per year. On the other hand, BNN, the leading sector for the Prevention, Eradication, Abuse and Illegal Trafficking of Narcotics (P4GN) is only able to provide rehabilitation for 12,570 people in 2020, 11,290 people in 2021, and 13,374 people in 2022. The number of narcotics abusers continues to increase from year to year. There are policies implemented to accelerate the rehabilitation of narcotics abusers. The results of the findings of BNN with the National Research and Innovation Agency (BRIN) and the Central Statistics Agency (BPS) show that narcotics abuse in 2021 reached up to 1.95 per cent or around 3,662,646 abusers. This figure increased from 2017. In the year 2019, there were about 1.77% (3,376,115 abusers) and 1.80 % (3,419,188 abusers) respectively⁶⁵.

Restorative Justice in the Form of Rehabilitation within the Regulations of the General Attorney of the Republic of Indonesia (helena)

The process of legal enforcement with the resolve of a restorative justice approach against narcotic crimes which the Prosecutor undertakes is referred to the Regulations of the Office of the Prosecutor of the Republic of Indonesia Number 15 of 2020 concerning the Termination of Prosecution Based on Restorative Justice (*Perja 15/2020*). Restorative justice is defined as a resolution to criminal cases which involves the perpetrator, victim, families of the perpetrator

62 Berdasarkan Penjelasan Pasal 6 ayat (1) huruf a UU Narkotika bahwa Dalam ketentuan ini yang dimaksud dengan "Narkotika Golongan I" adalah Narkotika yang hanya dapat digunakan untuk tujuan pengembangan ilmu pengetahuan dan tidak digunakan dalam terapi, serta mempunyai potensi sangat tinggi mengakibatkan ketergantungan.

63 Berdasarkan Penjelasan Pasal 6 ayat (1) huruf b UU Narkotika bahwa Dalam ketentuan ini yang dimaksud dengan "Narkotika Golongan II" adalah Narkotika berkhasiat pengobatan digunakan sebagai pilihan terakhir dan dapat digunakan dalam terapi dan/atau untuk tujuan pengembangan ilmu pengetahuan serta mempunyai potensi tinggi mengakibatkan ketergantungan

64 Berdasarkan Penjelasan Pasal 6 ayat (1) huruf c UU Narkotika bahwa Dalam ketentuan ini yang dimaksud dengan "Narkotika Golongan III" adalah Narkotika berkhasiat pengobatan dan banyak digunakan dalam terapi dan/atau untuk tujuan pengembangan ilmu pengetahuan serta mempunyai potensi ringan mengakibatkan ketergantungan.

65 Humas Sekretariat Kabinet Republik Indonesia, "Penanggulangan Bahaya Narkotika Melalui Rehabilitasi," 2023, <https://setkab.go.id/penanggulangan-bahaya-narkotika-melalui-rehabilitasi/>.



or the victim, as well as other parties which are involved in the case. These parties gathered to set a solution with the emphasis of the sole reason in restoring a certain circumstance to how it was before instead of retaliating.

The Attorney General issued Attorney-General Regulation Number 18 of 2021 which serves as a guiding principle that modulates the resolutions in handling criminal cases concerning narcotics by the process of rehabilitation through a restorative justice approach to implement the principle upheld by the *Dominus Litis* of Prosecutors.

Criminal law is but regulations (through statutory ordinance) much requisite to govern society as an essential factor in carrying out policies. The operationalization of the policies enacted within criminal law by which through the utilization of penal means are brought through the process in three stages. The first, the formulation stage which holds the authority to determine certain offenses that will result in sentences. These offenses are then oriented towards the main issues within criminal law, such as torts, negligence or responsibilities the doer must take account for as well as sanctions the legislators established to convict, The next stage, the application stage enables the enforcers to applicate the criminal law statutes through the law or in the court. Furthermore, the next stage involves the application of criminal laws instructed by the court or the law enforcers⁶⁶.

The Republic of Indonesia Prosecutor's Office obtains attribution authority from the Law on the Prosecutor's Office of the Republic of Indonesia and the Republic of Indonesia Prosecutor's Regulation Number 18 of 2021. The authority of the Republic of Indonesia Prosecutor's Office in dealing with the challenges of narcotics abuse involves optimizing rehabilitation institutions as an alternative for resolving cases. Based on the *dominus litis* principle, prosecutors have a central role as controllers of the case process, enabling them to determine whether prosecution steps are under legal governance and justice. Public prosecutors are crucial in formulating holistic and proactive strategies for handling narcotics cases by utilizing rehabilitation institutions as an alternative solution. The rehabilitative approach considers not only punishment but also drifts on the focus of personal recovery and restoring the perpetrator's relationship with society through social reintegration programs. The resolution mechanism through rehabilitation at the prosecution stage follows the principles of restorative justice, emphasizing individual recovery and redress of negative impacts on society. The principles of fast, simple justice and low costs form the basis of the prosecutor's authority, ensuring that the legal proceedings are accessible without excessive financial burden. The prosecutor's authority to implement restorative justice shows their responsibility for the recovery efforts of the perpetrator and the influenced community⁶⁷.

The principle of prosecutorial *dominus litis* in handling criminal cases of narcotics abuse, including pre-prosecution, prosecution, supervision, training and rehabilitating is then subsidized by the principle of restorative justice.

66 Zainab Ompu Jainah and Suhery, "Analisis Penanganan Tindak Pidana Narkotika Melalui Keadilan Restoratif (Restorative Justice) Berdasarkan Peraturan Polri Nomor 8 Tahun 2021 (Studi Pada Satuan Reserse Narkoba Polres Metro)," *Jurnal Pendidikan Dan Konseling* 4, no. 4 (2022).

67 Ari Hastuti, Joko Sriwidodo, and Basuki, "PENERAPAN PERATURAN KEJAKSAAN NOMOR 18 TAHUN 2021 TERKAIT REHABILITASI NARKOTIKA BERDASARKAN KEADILAN RESTORATIF," *Jurnal Riset Ilmiah* 1, no. 3 (2024): 124–32.



The pre-prosecution stage involves the public prosecutor and the authority to examine the results obtained from the investigation in the most indiscernible manner, ensuring formal and material completeness, such as evidence, suspect qualifications, and elements of error. The public prosecutor can provide an opinion on the suspect's qualifications as a narcotics abuser. The prosecution stage proceeds after the public prosecutor receives the complete investigation results. The public prosecutor determines whether the case file meets the requirements to file in court. The head of the district attorney's office has the authority to issue a rehabilitation determination.

Rehabilitation as a repressive measure is an effort taken to carry out after a crime has transpired, such as narcotics abuse, which involves coaching and treatment of individuals involved in the abuse. The purpose is for victims of drug abuse to recuperate and embrace positive behavior in social life. Rehabilitation for narcotics abusers is a process that aims to help individuals who undergo dependence or abuse of narcotics to recover physically, psychologically and socially⁶⁸.

Rehabilitating drug users, it is desired that individuals can overcome addiction, devise strategies to prevent relapse and assume a healthy and generative lifestyle. In multiple cases, family and community support are factors essential during the rehabilitation process of drug users. The support emanating from both provides the motivation and support necessary for thriving recovery⁶⁹.

The Office of the Prosecutor has the authority to determine whether cases could be filed into court or not based on valid evidence according to the Criminal Procedure Law. For this reason, as a government institution carrying out prosecutorial duties, the prosecution process carried out by the Prosecutor's Office needs to be directed to follow the reorientation of criminal law reform, taking into account the level of blame, the internal perspective of the perpetrator, the legal interests protected, the losses or consequences rendered, and engagement on the sense of justice, communities including local wisdom. Arrangements for discontinuing prosecutions based on restorative justice enclose urgency. Namely, first, arrangements through Prosecutor's Regulations (PERJA) only have internal binding force. Second, regulations through Prosecutor's Regulations (PERJA) do not have a high level in the hierarchy of laws and regulations in Indonesia. Third, the cessation of prosecutions based on restorative justice can lessen the problem of overcapacity in detention centers or prisons in Indonesia. Fourth, the cessation of prosecutions based on restorative justice can reduce the number of cases and ease the burden on the state budget for handling cases⁷⁰.

The role of the Republic of Indonesia Prosecutor's Office in resolving the handling of criminal cases of narcotics abuse through rehabilitation by optimizing rehabilitation institutions. Prosecutors as case controllers based on the principle of *dominus litis*, which could resolve criminal cases of narcotics abuse through rehabilitation at the prosecution stage.

68 Defrizal, Otong Rosadi, and Wirna Rosmely, "Upaya Penyidik Melakukan Rehabilitasi Terhadap Penyalahguna Narkotika Bagi Diri Sendiri Menurut Undang-Undang Narkotika (Studi Pada Satres Narkoba Polres Kepulauan Mentawai)," *Unes Law Review* 1, no. 1 (2018): 28–43.

69 D Iskandar, *Penegakan Hukum Narkotika* (Jakarta: Elex Media Komputindo, 2019).

70 Herman, Oheo Kaimuddin Haris, and Sabrina Hidayat, "Penghentian Penuntutan Terhadap Penyalahguna Narkotika Berdasarkan Keadilan Restoratif," *Halu Oleo Legal Research* 4, no. 2 (2022): 322–41.



Completion of the handling of criminal cases of narcotics abuse through rehabilitation is an inseparable mechanism from the implementation of restorative justice, with the spirit of reforming the original situation by conversion. The former circumstances would return by recuperating perpetrators of criminal acts of narcotics abuse who are victimless crimes⁷¹.

One of the classifications of restorative justice effectuated within Lampung. To implement law enforcement oriented towards the concept or approach of Restorative Justice, the Head of the Lampung High Prosecutor's Office, the Head of the South Lampung District Prosecutor's Office, on Tuesday the 20th of June 2023, together with the Criminal Investigation Division of the Office of Prosecutors in Lampung and the Office of Prosecutors in South Lampung, carried out an exposure of the case. Narcotics Crime in front of Mr. Jam Pidum via virtual means with a request to submit a Termination of Prosecution based on Restorative Justice on behalf of the Suspect AR Bin LUKMAN who Violated One: First Article 112 paragraph (1) of the Republic of Indonesia Law No. 35 of 2009 concerning Narcotics or Both Article 127 paragraph (1) letter the Republic of Indonesia Law no. 35 of 2009 concerning Narcotics. Termination of prosecution based on restorative justice was the verdict to fulfill the community's sense of justice by balancing legal certainty and expediency in implementing prosecutorial authority based on law and conscience. In the case in question, there was a filing on a request for approval to stop the filing process of this prosecution because the conditions as regulated in PERJA Number 15 of 2020 concerning Termination of Prosecution based on Restorative Justice⁷².

Restorative Justice in Narcotics Crimes According to the National Criminal Code

Law Number 1 of 2023 concerning the Criminal Code (National Criminal Code). Article 51 of the National Criminal Code regulates the purpose of punishment: a. prevent the commission of criminal acts by enforcing legal norms to protect the society; b. socializing convicts by providing training and guidance to become better citizens; c. resolving conflicts arising from criminal acts, restoring balance, and bringing a sense of security and peace in society; and D. fostering a sense of remorse and relieving the convict of guilt.

The National Criminal Code does not explicitly regulate restorative justice. The National Criminal Code provides dignified justice for the parties, the perpetrator, and the environment where the criminal act happened. The National Criminal Code establishes punishment in the form of a double-track system. However, the National Criminal Code regulates sentencing guidelines in Article 54 paragraph (1) of the National Criminal Code, which requires consideration in sentencing: a. the form of guilt of the perpetrator of the crime; b. the motive and purpose perpetrators have to commit a criminal act; c. the inner attitude of the perpetrator of the crime; d. Whether committed criminal acts are made through planning or coincidence; e. the procedural methods to commit a criminal act; f. the attitude and actions of the perpetrator after committing the crime; g. life history, social situation and economic

71 Ayni Suwarni Herry, Bima Guntara, and Pendi Ahmad, "Peran Kejaksaan Republik Indonesia Dalam Penyelesaian Penanganan Perkara Tindak Pidana Penyalahgunaan Narkotika Melalui Rehabilitasi," *Journal on Education* 6, no. 1 (2023): 7703–10.

72 Kejaksaan Negeri Lampung Selatan, "RJ PERKARA NARKOTIKA PERTAMA DI WILAYAH LAMPUNG," 2023, <https://www.kejari-lampungselatan.go.id/berita/detail/rj-perkara-narkotika-pertama-di-wilayah-lampung>.



situation of the perpetrator of the crime; h. the influence of crime on the future of criminal offenders; i. the impact towards victims or their families from the crime; j. forgiveness from the Victims and/or their family; and/or k. the value of law and justice that lives in society.

The National Criminal Code regulates punishment and acts. The development of the legal system is what introduced action (*maatregel*) as an alternative to the more typical punishment, particularly imprisonment. This happens due to distrust of the success of “prison” as a form of punishment/sanction⁷³.

Law Number 35 of 2009 concerning Narcotics also adheres to a double track system in its sanctions system, as the Narcotics Law regulates two sanctions at once, namely criminal sanctions and sanctions for actions therein. Criminal sanctions for narcotics crimes are governed under Articles 111 to 144 and 147 of the Narcotics Law, including the death penalty, imprisonment, imprisonment and fines. Meanwhile, the sanction for action in the Narcotics Law is rehabilitation in Chapter IX Article 53 to Article 56 of the Narcotics Law. The Narcotics Law further emphasizes the application of sanctions for narcotics crimes, both in the form of criminal sanctions and action sanctions in the form of rehabilitation. Due to the increasing number of narcotics crime cases occurring in Indonesia, there should be an emphasis on the application of sanctions.

Article 103 paragraph (1) of the National Criminal Code regulates the actions imposed concurrently with the main crime: a. Counseling; b. Rehabilitation; c. Work training; d. Institutional care; and/or; e. Repairs resulting from criminal acts. Based on Article 103 paragraph (2) of the National Criminal Code, the actions that can be imposed on every person as intended in Article 38 and Article 39 are categorized in forms of: a. Rehabilitation; b. Submission to someone; c. Institutional care; d. Submission to the government; and/or e. Treatment in a mental hospital.

Based on Article 105 paragraph (1) of the National Criminal Code, rehabilitation measures are enacted on defendants who: a. addiction to alcohol, narcotics, psychotropic substances and other addictive substances; and/or b. have mental disabilities and/or intellectual disabilities.

CONCLUSION

Restorative Justice is an approach to resolving criminal cases involving perpetrators, victims, families and related parties and to seek a fair resolution, prioritizing recovery rather than retaliation. Guidelines for Providing Narcotics Rehabilitation based on Restorative Justice guide Prosecutors in the pre-prosecution, prosecution and rehabilitation supervision stages. In practice, there are differences in the interpretation and use of the *dominus litis* principle by prosecutors in handling narcotics cases using a restorative justice approach. Handling narcotics cases involves a rehabilitation approach with a focus on restorative justice. Prosecutors have the function of controlling cases, leading and supervising the entire process of handling criminal cases of narcotics abuse, including coordination with the police, rehabilitation institutions

⁷³ Gita Santika Ramadhani, Barda Nawawi Arief, and Purwoto, “Sistem Pidana Dan Tindakan ‘Double Track System’ Dalam Hukum Pidana Di Indonesia,” *DIPONEGORO LAW REVIEW* 1, no. 4 (2012), <https://media.neliti.com/media/publications/19518-ID-sistem-pidana-dan-tindakan-double-track-system-dalam-hukum-pidana-di-indonesia.pdf>.



and the courts. The Indonesian Attorney General's Office is also responsible for providing training, guidance and supervision of the implementation of legal processes. The scope of the Attorney General's Guidelines Number 18 of 2021 concerning the Completion of the Handling of Criminal Cases of Narcotics Abuse Through Rehabilitation with a Restorative Justice Approach as Implementation of the Prosecutor's *Dominus Litis* Principle includes pre-prosecution, prosecution, supervision, training and financing for the settlement of handling criminal cases of narcotics abuse through rehabilitation with restorative justice approach as the implementation of the prosecutor's *dominus litis* principle.

REFERENCES

- Achmad, Rifai. "Bahaya Laten Narkoba." *Varia Peradilan*, 2014.
- Andayani, I Dewa Ayu Yus. "PIDANA PENJARA BAGI ANAK YANG BERKONFLIK DENGAN HUKUM DALAM PERSPEKTIF SISTEM HUKUM PIDANA EDUKATIF." *JURNAL YUSTITIA* 12, no. 1 (2018). <https://ojs.unr.ac.id/index.php/yustitia/article/view/172>.
- BNN KOTA YOGYAKARTA. "PRESS RELEASE CAPAIAN KINERJA AKHIR TAHUN 2023 BNN KOTA YOGYAKARTA," 2023. <https://yogyakartakota.bnn.go.id/press-release-capaian-kinerja-akhir-tahun-2023-bnn-kota-yogyakarta/>.
- Budianto, Agus. "Legal Research Methodology Reposition in Research on Social Science." *International Journal of Criminology and Sociology* 9 (2020): 1339–46.
- Defrizal, Otong Rosadi, and Wirna Rosmely. "Upaya Penyidik Melakukan Rehabilitasi Terhadap Penyalahguna Narkotika Bagi Diri Sendiri Menurut Undang-Undang Narkotika (Studi Pada Satres Narkoba Polres Kepulauan Mentawai)." *Unes Law Review* 1, no. 1 (2018): 28–43.
- Dewi, Cok Istri Dian Laksmi. "SISTEM PERLINDUNGAN MEREK DAN IMPLIKASINYA." *JURNAL YUSTITIA* 13, no. 2 (2019). <https://www.ojs.unr.ac.id/index.php/yustitia/article/view/395>.
- Dewi, Cokorde Istri Dian Laksmi. "PELAKSANAAN PEMUNGUTAN PAJAK REKLAME DI KABUPATEN GIANYAR BERDASARKAN PERDA NOMOR 9 TAHUN 2010 TENTANG PAJAK REKLAME." *Rio Law Jurnal* 5, no. 1 (2024): 262–77.
- Direktorat Jenderal Pemasarakatan Kementerian Hukum dan Hak Asasi Manusia. "Meretas Kebijakan Asimilasi Bagi Narapidana." Accessed May 2, 2024. <http://www.ditjenpas.go.id/meretas-%0Akebijakan- asimilasi-bagi-narapidana>.
- Hastuti, Ari, Joko Sriwidodo, and Basuki. "PENERAPAN PERATURAN KEJAKSAAN NOMOR 18 TAHUN 2021 TERKAIT REHABILITASI NARKOTIKA



- BERDASARKAN KEADILAN RESTORATIF.” *Jurnal Riset Ilmiah* 1, no. 3 (2024): 124–32.
- Herman, Oheo Kaimuddin Haris, and Sabrina Hidayat. “Penghentian Penuntutan Terhadap Penyalahguna Narkotika Berdasarkan Keadilan Restoratif.” *Halu Oleo Legal Research* 4, no. 2 (2022): 322–41.
- Herry, Ayni Suwarni, Bima Guntara, and Pendi Ahmad. “Peran Kejaksaan Republik Indonesia Dalam Penyelesaian Penanganan Perkara Tindak Pidana Penyalahgunaan Narkotika Melalui Rehabilitasi.” *Journal on Education* 6, no. 1 (2023): 7703–10.
- Humas Sekretariat Kabinet Republik Indonesia. “Penanggulangan Bahaya Narkotika Melalui Rehabilitasi,” 2023. <https://setkab.go.id/penanggulangan-bahaya-narkotika-melalui-rehabilitasi/>.
- Indonesia Law Number 35 of 2009 concerning Narcotics
- Indonesia Law Number 1 of 2023 concerning the Criminal Code
- Indonesia Prosecutor’s Regulation of the Republic of Indonesia Number 15 of 2020 concerning Termination of Prosecution Based on Restorative Justice
- Indonesia Attorney General Regulation No. 18 of 2021 is a guideline that regulates the Settlement of Handling Drug Crime Cases through Rehabilitation with a Restorative Justice Approach as an Implementation of the Prosecutor’s Dominus Litis Principle.
- Iskandar, D. *Penegakan Hukum Narkotika*. Jakarta: Elex Media Komputindo, 2019.
- Jainah, Zainab Ompu, and Suhery. “Analisis Penanganan Tindak Pidana Narkotika Melalui Keadilan Restoratif (Restorative Justice) Berdasarkan Peraturan Polri Nomor 8 Tahun 2021 (Studi Pada Satuan Reserse Narkoba Polres Metro).” *Jurnal Pendidikan Dan Konseling* 4, no. 4 (2022).
- Kaligis, OC. *Perlindungan Hukum Atas Hak Asasi Tersangka, Terdakwa Dan Terpidana*. Bandung: Alumni Press, 2006.
- Kejaksaan Negeri Lampung Selatan. “RJ PERKARA NARKOTIKA PERTAMA DI WILAYAH LAMPUNG,” 2023. <https://www.kejari-lampungselatan.go.id/berita/detail/rj-perkara-narkotika-pertama-di-wilayah-lampung>.
- Marzuki, Peter Mahmud. *Penelitian Hukum, Edisi Revisi*. Jakarta: Prenadamedia, 2019.
- Moeljatno. *Asas-Asas Hukum Pidana Edisi Revisi*. Jakarta: Rineka Cipta, 2008.
- Pakpahan, Hatarto. “RESTORATIVE JUSTICE TERHADAP PENGGUNA NARKOTIKA DAN OBAT OBATAN BERBAHAYA.” *Jurnal Cakrawala Hukum* 6, no. 2 (2015): 129–140. https://eprints.unmer.ac.id/id/eprint/1528/1/Jurnal_Hatarto_Pakpahan_RJ.pdf.



Prasetyo, Teguh, Yuni Ginting, and Rizky Karo Karo. *Hukum Pidana - Edisi Revisi*. 1st ed. Depok: RajaGrafindo Persada, 2023. <https://www.rajagrafindo.co.id/produk/hukum-pidana-prof-dr-teguh-prasetyo-s-h-m-si-dr-yuni-priskila-ginting-s-h-m-h-rizky-karo-karo-s-h-m-h/>.

Ramadhani, Gita Santika, Barda Nawawi Arief, and Purwoto. "Sistem Pidana Dan Tindakan 'Double Track System' Dalam Hukum Pidana Di Indonesia." *DIPONEGORO LAW REVIEW* 1, no. 4 (2012). <https://media.neliti.com/media/publications/19518-ID-sistem-pidana-dan-tindakan-double-track-system-dalam-hukum-pidana-di-indonesia.pdf>.

Suariawan, I Gede, Anak Agung Sagung Laksmi Dewi, and Luh Putu Suryani. "FAKTOR PENYEBAB PENYALAHGUNAAN DAN PEREDARAN NARKOTIKA DI WILAYAH HUKUM POLRESTA DENPASAR." *Jurnal Konstruksi Hukum* 3, no. 2 (2022): 444–49.



NARCOTICS TREATMENT SYSTEM AS A RECONCEPTUALIZATION MODEL OF DECRIMINALIZATION OF NARCOTICS USERS

Dwi Benny Satria^{1*}, Azaria Rahmadianingrum²

Faculty of Law Brawijaya University

*Corresponding author: dwibenny43@gmail.com

ABSTRACT

In this day and age, many people abuse drugs as a means of 'escaping' their personal problems. This has a negative impact on both themselves and the community. In response, the government through Law No. 35 of 2009 on Narcotics (Law on Narcotics) as amended by Law No. 1 of 2023 on the Criminal Code (National Criminal Code) prohibits narcotics abuse. In practice, the author found that there are still many decisions of drug abusers who are sentenced to prison by referring to Article 127 of the Law on Narcotics. This creates a new problem such as over capacity and the failure of the law as 'medicine' so that a reconceptualization of legal instruments is needed. The legal instrument is called the Narcotics Treatment System (NTS) which is expected to be able to cure drug abusers. The NTS is organized with the following mechanisms: 1) treatment for drug addiction and detoxification, 2) personal and family counseling, 3) interest and talent tests so that they can carry out productive activities. Since the government does not impose detention, supervision of drug abusers can be done through an application. In this application, it will be recorded what activities have been carried out by drug abusers in order to cure themselves. If a drug abuser relapses or does not comply with the reconceptualization of legal instruments, then law enforcement officials have the right to isolate the drug abuser through the usual rehabilitation system intended for addicts. To realize this, cooperation from various institutions is required.

Keywords: *Narcotics Treatment, Drug Abusers, Decriminalization.*

INTRODUCTION

Narcotics are basically a group of chemicals that often cause addiction for those who use them. This causes problems in the social environment and even triggers other crimes because drug dependence is a mental and behavioral disease. Narcotics are substances from both plants and non-plants, both synthetic and semi-synthetic, which can cause a decrease or change in consciousness, loss of taste, or reduction until pain disappears, and cause dependence, which is

differentiated into groups as regulated in the narcotics law. If abused or consumed in excessive amounts, it can have a very dangerous effect on a person's physical and mental health conditions, social environmental problems, and can even trigger other crimes because drug dependence is a mental and behavioral disease (Adrian, 2021).

Based on this, in today's era there are more and more people who use narcotics as a means to 'escape' from their personal problems. Of course, this has a negative impact on both yourself and society at large. In response to this, the government through Law Number 35 of 2009 concerning Narcotics as amended by Law Number 1 of 2023 concerning the Criminal Code prohibits the improper use of narcotics (Handoko, 2016). Of course, this development is also spurred by the rapid development of information technology which is developing very quickly in the current era so that communication between users and distributors can easily take place. In addition, various kinds of information about types of narcotics that can be easily understood through internet media (Suryanto, 2013).

Narcotics abuse has become a complex and dangerous social problem in Indonesia, in this case based on data on the population of users or victims of narcotics abuse in 2013 ranked first. Of course, this shows that narcotics abuse has become a very significant problem and requires more effective solutions (Ramadhan & Subroto, 2023). The approach to narcotics users in recent years can be said to have had less effective results, such as the prison sentences given are not able to reduce the number of narcotics users and do not provide opportunities for them to obtain the necessary medical treatment and rehabilitation. As a result, narcotics users continue to increase and they do not get the right help to overcome their dependency problems (Satyanagara et al., 2024).

Based on the description of the background that the author has conveyed, in writing this scientific article will discuss the portrait of the criminalization of narcotics users in Indonesia in the Status A Quo. Then it will be continued with a discussion of the reconceptualization model of decriminalization of narcotics users through *the Narcotics Treatment System*. It is hoped that the existence of this scientific article can be a recommendation for policy makers to change the paradigm of criminalization or criminalization of narcotics users through decriminalization with *the Narcotics Treatment System*.

METHODOLOGY

This scientific article is based on the results of research that uses the type of juridical-normative research so that this research will analyze the subject matter of law through various primary, secondary, and tertiary legal materials in order to find a formulation of legal arguments (Ibrahim, 2007). Furthermore, this research is also carried out with a statute approach and a conceptual approach. The first approach is carried out by analyzing laws and regulations related to the criminalization of narcotics users in Indonesia in the Status A Quo. Meanwhile, the second approach is carried out to form a reconceptualization model of decriminalization of narcotics users through *the Narcotics Treatment System* (Marzuki, 2017).



RESULT AND DISCUSSION

Portrait of Criminalization of Narcotics Users in Indonesia in A Quo Status

The non-accommodating of additional crimes in the form of providing medical and social rehabilitation to narcotics users has implications for not requiring narcotics users to undergo rehabilitation. However, if narcotics users want to cure themselves, rehabilitation can be carried out independently at institutions that provide these services. This is very unlikely to happen (but it can happen) because the narcotic user is still alive in an environment that supports him consuming narcotics and the influence of narcotics is still present in his body (addictive effect) so that their potential to experience acute addiction to narcotics and become recidivists with the addition of articles and criminal penalties is higher.

Regarding narcotics dependence, Article 1 of Law Number 35 of 2009 concerning Narcotics explains that the condition of narcotics dependence has a definition: "... A condition characterized by the urge to use narcotics continuously with increasing doses in order to produce the same effect and if its use is reduced and/or stopped abruptly, causing typical physical and psychological symptoms. ". Then the Joint Regulation of the Chief Justice of the Supreme Court of the Republic of Indonesia, the Minister of Law and Human Rights of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Social Affairs of the Republic of Indonesia, the Attorney General of the Republic of Indonesia, the Chief of the National Police of the Republic of Indonesia, the Head of the National Narcotics Agency of the Republic of Indonesia Number: 01/PB/MA/III/2014; Number: 03 YEAR 2014; Number: 11/YEAR 2014; Number: 03 YEAR 2014; Number: PER-005/A/JA/03/2014; Number: 1 YEAR 2014;

Number: PERBER/01/III/2014/BNN concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions also provides a definition of narcotics dependency which sounds the same as the definition of narcotics dependence in Law Number 35 of 2009 concerning Narcotics.

Juridically, this condition of narcotics dependence is experienced by narcotics addicts. This is evident in Article 1 of Law Number 35 of 2009 concerning Narcotics which explains the definition of narcotics addicts, namely: "... people who use or abuse narcotics and are in a state of dependence on narcotics, both physically and psychologically". In addition, in the Joint Regulation of the Chief Justice of the Supreme Court of the Republic of Indonesia, the Minister of Law and Human Rights of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Social Affairs of the Republic of Indonesia, the Attorney General of the Republic of Indonesia,

Head of the National Police of the Republic of Indonesia, Head of the National Narcotics Agency of the Republic of Indonesia Number: 01/PB/MA/III/2014; Number: 03 YEAR 2014; Number: 11/YEAR 2014; Number: 03 YEAR 2014; Number: PER-005/A/JA/03/2014; Number: 1 YEAR 2014;

Number: PERBER/01/III/2014/BNN concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions also provides a definition of

narcotics addicts which sounds the same as the definition of narcotics addicts in Law Number 35 of 2009 concerning Narcotics.

Furthermore, narcotics addicts have the right to medical rehabilitation and social rehabilitation while undergoing the process of investigation, prosecution and trial in court as stipulated in Article 54 of the Republic of Indonesia Law Number 35 of 2009 concerning Narcotics and the Joint Regulation of the Chief Justice of the Supreme Court of the Republic of Indonesia, the Minister of Law and Human Rights of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Social Affairs of the Republic of Indonesia, Attorney General of the Republic of Indonesia, Chief of the National Police of the Republic of Indonesia, Head of the National Narcotics Agency of the Republic of Indonesia Number: 01/PB/MA/III/2014; Number: 03 YEAR 2014; Number: 11/YEAR 2014; Number: 03 YEAR 2014; Number: PER-005/A/JA/03/2014; Number: 1 YEAR 2014;

Number: PERBER/01/III/2014/BNN concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions.

In addition, the Supreme Court Circular Letter Number 4 of 2010 concerning the Placement of Abuse, Victims of Abuse, and Narcotics Addicts into Medical Rehabilitation and Social Rehabilitation Institutions, in which there is a provision stating “That one of the conditions for the application of the penalty as referred to in Article 103 letters a and b of Law Number 35 of 2009 concerning Narcotics can only be imposed on the classification of criminal acts: The defendant at the time of arrest by the POLRI Investigator and BNN Investigator was in a state of being caught”. So, to apply this, it is required to examine Article 103 Paragraph (1) Letters a and b of Law Number 35 of 2009 concerning Narcotics which reads:

“The judge who examines the case of a Narcotics Addict can:

- a. Decide to order the person concerned to undergo treatment and/or treatment through rehabilitation if the Narcotics Addict is proven guilty of committing a Narcotics crime, or
- b. Stipulate to order the person concerned to undergo treatment and/or treatment through rehabilitation if the Narcotics Addict is not proven guilty of committing a Narcotics crime”

In the Supreme Court Circular Letter Number 3 of 2011 concerning the Placement of Victims of Narcotics Abuse in Medical Rehabilitation and Rehabilitation Institutions, the same provisions are also regulated, namely:

“Based on Article 103 of Law Number 35 of 2009 and Article 13 paragraph (2) of Government Regulation Number 25 of 2011 states that the order to carry out medical and social rehabilitation can only be carried out based on:

- a. Court Decision for addicts who are proven guilty of committing narcotics crimes.
- b. Court Determination for Narcotics Addicts Who Are Not Proven Guilty and Suspects Who Are Still in the Process of Investigation or Prosecution.”

In addition to narcotics addicts, victims of narcotics abuse are also regulated in *the a quo laws and regulations*. In the Joint Regulation of the Chief Justice of the Supreme Court of the Republic of Indonesia, the Minister of Law and Human Rights of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Social Affairs of the Republic of Indonesia, the Attorney General of the Republic of Indonesia, the Chief of the National Police



of the Republic of Indonesia, the Head of the National Narcotics Agency of the Republic of Indonesia Number: 01/PB/MA/III/2014; Number: 03 YEAR 2014; Number: 11/YEAR 2014; Number: 03 YEAR 2014; Number: PER-005/A/JA/03/2014; Number: 1 YEAR 2014;

Number: PERBER/01/III/2014/BNN concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions, victims of narcotics abuse have a definition: "... a person who accidentally uses narcotics because he is persuaded, deceived, deceived, forced and/or threatened to use narcotics".

Similar to narcotics addicts, victims of narcotics abuse are also entitled to medical rehabilitation and social rehabilitation during the process of investigation, prosecution and trial in court as stipulated in the Joint Regulation of the Chief Justice of the Supreme Court of the Republic of Indonesia, the Minister of Law and Human Rights of the Republic of Indonesia, the Minister of Health of the Republic of Indonesia, the Minister of Social Affairs of the Republic of Indonesia, the Attorney General of the Republic of Indonesia, the Chief of the National Police of the Republic of Indonesia, Head of the National Narcotics Agency of the Republic of Indonesia Number: 01/PB/MA/III/2014; Number: 03 YEAR 2014; Number: 11/YEAR 2014; Number: 03 YEAR 2014; Number: PER-005/A/JA/03/2014;

Number: 1 YEAR 2014; Number: PERBER/01/III/2014/BNN concerning the Handling of Narcotics Addicts and Victims of Narcotics Abuse into Rehabilitation Institutions. The same thing is also regulated in Articles 54 and 127 Paragraph (3) of Law Number 35 of 2009 concerning Narcotics.

From the discussion, it can be concluded that medical rehabilitation and social rehabilitation can only be given to narcotics addicts and victims of narcotics abuse while narcotics users are not included in both, so they are likely to be put in prison in accordance with Article 127 of Law Number 35 of 2009 concerning Narcotics. In fact, they are often imprisoned and can cause new problems such as *overcapacity*. This can be proven from data from the Directorate General of Corrections (Ditjen PAS) as of December 31, 2018, out of a total of 22 special narcotics UPTs, have a capacity of 11,659 inmates. However, the number of inmates in narcotics cases who occupy it reached 19,993 inmates or experienced an overcapacity of 71.4%.

The impact of *the overcapacity* of the correctional institution is for example the 'transfer of information' related to other narcotics crimes between inmates because they continue to interact so that they have the potential to repeat their crimes again to a degree that could be more severe. This is in accordance with the *differential association* theory as initiated by Edwin H. Sutherland (Susanti and Rahardjo, 2018). According to him, the process of crime can be through 9 (nine) propositions as follows (Sulstyarta and Hehanusa, 2016):

1. Criminal behavior is a learned behavior. Negatively it means that the behavior is not inherited.
2. Criminal behavior is studied in interaction with others in a communication process. The communication can mainly be verbal or using body language.
3. The most important part of the process of studying criminal behavior occurs in intimate personal groups. Negatively this means that interpersonal communication such as through cinemas and newspapers, has a relatively unimportant role in the occurrence of crime.
4. When criminal behavior is studied, what is studied includes: (a) techniques for committing crimes, (b) motives, motivations, justifications and certain attitudes.



5. The direction and motive of the impulse are studied through the definitions of legal regulations. In a society, sometimes a person is surrounded by people who simultaneously see what is regulated in the rule of law as something that needs to be considered and obeyed, but sometimes he is surrounded by people who see the rule of law as something that provides an opportunity to commit crimes.
6. A person becomes delinquent because of the excesses of mindsets that see the rule of law as an opportunity to commit crimes rather than seeing the law as something that must be paid attention to and obeyed.
7. Differential Associations vary in their frequency, duration, priority and intensity.
8. The process of learning evil behavior is obtained through relationships with crime patterns and mechanisms that are prevalent in every learning process in general.
9. While evil behavior is an expression of the need for common values, it is not explained that behavior that is not evil is also an expression of the same general needs and values.

As a solution, a *restorative justice* approach is needed that has been introduced as a more effective alternative to overcome narcotics users (Chandra, 2014). The *restorative justice* approach emphasizes the importance of redressing losses caused by criminal behavior and integrating the perpetrators, victims, communities, and the government in the case resolution process. One of the efforts to realize *the restorative justice* approach in this case is through decriminalization with rehabilitation. If the rehabilitation of narcotics users can be carried out more effectively, they can be rehabilitated so that they no longer abuse narcotics (DM et al., 2023).

Decriminalization of narcotics users in several studies has been introduced as a more effective approach, especially in terms of addressing users who abuse narcotics (Ulfa, 2020). Decriminalization in this case serves to eliminate all forms of punishment for narcotics users which will then be replaced with a health approach. In this case, narcotics users get the necessary medical treatment and rehabilitation without fear of being sentenced so that they can reduce the burden on correctional institutions that experiencing *overcapacity* and reducing the costs required for detention (Pradeza & Butar, 2022).

In some countries such as the United States, the decriminalization approach applied has more effective results (Pradeza & Butar, 2022). The occupation in the United States has confidence and believes that the problem of narcotics must be addressed as a public health problem, and not as a problem in criminal law. Based on this, decriminalization has also helped reduce the danger of narcotics abuse while improving safety and health for the community (Haholongan & Subroto, 2021).

The decriminalization of narcotics users in Indonesia has also shown benefits. In some studies, decriminalization has helped reduce the overburden of prisons and reduce the costs required for detention. Decriminalization has also helped reduce stigmatization of narcotics users and help them to get the necessary medical care and rehabilitation without fear of criminal prosecution (Fadholi et al., 2022).

Reconceptualization of the Model of Decriminalization of Narcotics Users through the Narcotics Treatment System



In response to all the problems that arise, the author has a recommendation called the '*Narcotics Treatment System*'. In it, there are 5 program outlines, namely sakau treatment and detoxification, individual counseling, family counseling, interest and aptitude tests to find the right positive activities, supervision by law enforcement officials through applications. In addition, inpatient rehabilitation can be carried out for recidivists both in hospitals and other rehabilitation institutions.

To make it happen, the police must first do an investigation. If the results of the investigation emphasize that this perpetrator is purely using or abusing narcotics, then the police are obliged to submit it to BNN for assessment. The results of this assessment are divided into three, namely mild, moderate, and severe addiction. This will later become a guideline in realizing restorative justice.

For example, in mild to moderate addiction, outpatient rehabilitation can be carried out so that the perpetrator will undergo sakau treatment and detoxification only at home with supervision from doctors and rehabilitation institutions that oversee it through an integrated application from the government. Because the perpetrator can continue to meet with his family, family counseling is needed to support this rehabilitation process. Through counseling, the perpetrator will be mentally prepared by the counselor to coexist with the family. Then, family members will be given space to convey messages, suggestions, and family wishes to the perpetrator. Furthermore, the counselor can let the perpetrator pour out his heart, regret, and express his or her life expectancy. Finally, the counselor will convey messages to the family so that the family can support the rehabilitation process of the perpetrator properly (Delima et al., 2023).

If the perpetrator's health condition has improved, the perpetrator can also carry out individual counseling to change his behavior through several stages (Maryam and Kahpi, 2020):

Pre-contemplation stage. At this stage, usually the perpetrator feels that a change in himself is not needed so that he still enjoys his old habit and does not realize that the abuse of narcotics has a negative impact on his social life and his own health.

Contemplation stage. At this stage, the perpetrator has begun to think about changing because he has realized that what he has done has harmed himself. Usually, many perpetrators stop at this stage because they are busy entertaining themselves, so they always deny their desire to change. To overcome this, the perpetrator needs to find a belief that motivates him to change immediately.

Preparation stage. At this stage, the perpetrator is asked to prepare himself both physically and mentally to schedule activities carried out every day.

Action stage. At this stage, the perpetrator begins to schedule activities that are carried out every day from the time he wakes up until he goes back to sleep and then runs it as a daily routine.

Maintenance stage. At this stage, the perpetrator is required to maintain the changes that have been made.

Recycling and relapse stage. At this stage, the perpetrator begins to see whether he returns to his old habits or not.

If he returns to his old habits, the perpetrator can carry out the inpatient rehabilitation process at hospitals or rehabilitation institutions that have been appointed by authorized state institutions so that they can be fully supervised by narcotics rehabilitation health workers. This will also apply to narcotics and psychotropic abusers who have reached a moderate level of addiction to severe (or the state of addiction is already very severe).

Then after undergoing the counseling stage and the perpetrator can carry out activities and socialize like ordinary people, the perpetrator can undergo an interest and talent test. The results will later be distributed to the relevant agencies and private sectors so that the perpetrators can further develop it so that it can become a new source of income and divert it from all negative activities and environments. Of course, this will also be recorded in the application.

CONCLUSION

So far, narcotics users have always been criminalized so that often the punishment given is imprisonment without other additional crimes such as rehabilitation. Of course, this prison sentence will cause a new problem such as overcapacity and the occurrence of the differential association theory as initiated by Edwin H. Sutherland in the penitentiary. This complex problem can be solved through restorative justice by decriminalizing narcotics users through the Narcotics Treatment System. In it, there are 5 program outlines, namely sakau treatment and detoxification, individual counseling, family counseling, interest and aptitude tests to find the right positive activities, supervision by law enforcement officials through applications. In addition, inpatient rehabilitation can be carried out for recidivists both in hospitals and other rehabilitation institutions.

ACKNOWLEDGEMENT

We would like to thank the organizers for giving us the opportunity to grow through this conference activity. Not to forget, we also thank the two lecturers who have guided and supported us, namely Mrs . Milda Istiqomah, S.H., MTCP, Ph.D. and Mr. Ladito Risang Bagaskoro, S.H., M.H.

REFERENCES

- Adrian, A. (2021). *Law enforcement against narcotics abusers through medical rehabilitation and social rehabilitation*. repository.unhas.ac.id. <http://repository.unhas.ac.id/id/eprint/11605/>
- Amriel, R. I. (2008). *Psikologi kaum muda pengguna narkoba*. books.google.com. https://books.google.com/books?hl=en&lr=\&id=zzB3yJvsl2cC\&oi=fnd\&pg=PR13\&dq=model+policy+law+decriminalization+share+user+narcotics\&ots=Q_4Vyck-pkp\&sig=GOf7jk4LbfovXYBnlZczQQUjSq4



- Botutihe, D. (2019). Legal Development with an Inclusive Legal Theory Approach to StateLawPancasila. *AlHimayah Journal*. <https://www.journal.iaingorontalo.ac.id/index.php/ah/article/view/885>
- Chandra, S. (2014). The Politics of Law on the Adoption of Restorative Justice in Reform Criminal Law. *FiatJustisiaJournalLegal Sciences*. <http://jurnal.fh.unila.ac.id/index.php/fiat/article/view/301>
- D.M., Kasela, A., Sanjaya, F. I., & ... (2023). Rights of Suspected Drug Offenders to Get Rehabilitation. *Journal...* <http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/12961>
- Fadholi, A., Surtikanthi, D., & ... (2022). The Importance of Decriminalization of Narcotics Abusers through Integrated Assessment in the Narcotics Bill. *Journal of Strategic Studies...* <https://scholarhub.ui.ac.id/jkskn/vol5/iss1/7/>
- Haholongan, M. R., & Subroto, M. (2021). Health Services and Special Guidance for Prisoners with Disabilities in Fulfilling Human Rights in Institutions Correctional. *Educational JournalTambusai*. <https://jptam.org/index.php/jptam/article/view/1922>
- Handoko, D. (2016). *Decriminalization of Delicacies in the Criminal Code*. books.google.com. <https://books.google.com/books?hl=en&lr=\&id=TVIZDQAAQBAJ\&oi=fnd\&pg=PA46\&dq=model+policy+law+decriminalization+share+user+narcotics\&ots=pCl1wpngx1\&sig=-7YSH25G0ks-U5hTGvqeLkb7Zqc>
- Nugroho, B. (2019). Rehabilitation is a form of medical and juridical recovery efforts for victims of narcotics abuse. *NERSMID: Journal of Nursing and* <http://nersmid.unmerbaya.ac.id/index.php/nersmid/article/view/45>
- Paramitha, R. A. (2018). *Implementation of Coaching for Prisoners with Prison Sentences Under One Year in Class II A Correctional Institution Yogyakarta*. e-journal.uajy.ac.id. <http://e-journal.uajy.ac.id/16700/>
- Pradeza, M. F. A., & Butar, H. F. B. (2022). THE CANNABIS DECRIMINALIZATION LAW IS AN EFFORT TO REDUCE OVERCAPACITY IN DETENTION CENTERS IN THE UNITED STATES. In ... *Legal Science* download.garuda.kemdikbud.go.id. <http://download.garuda.kemdikbud.go.id/article.php?article=2628822\&val=15646\&title=LAW%20DECRIMINALIZATION%20MARIJUANA%20MARIJUANA%20AS%20EFFORT%20REDUCING%20OVERCAPACITY%20DI%20HOME%20TAH%20ANAN%20DI%20AMERICA%20UNION>
- Ramadhan, B. F., & Subroto, M. (2023). EFFECTIVENESS OF SIRAMAN COACHING SPIRITUAL TOWARDS INMATES. *Journal of Legal Communication (JKH) ...*<https://ejournal.undiksha.ac.id/index.php/jkh/article/view/59488>



- Satyanagara, S. Y., MH, N., & SI, K. (2024). *Prevention and Eradication Implementation Abuse & Illicit Trafficking Narcotics*. books.google.com. https://books.google.com/books?hl=en&lr=&id=Mqv8EAAAQBAJ&oi=fnd&pg=PP1&dq=model+policy+law+decriminalization+share+user+narcotics&ots=9C5wnxM7yU&sig=H7GOuQU5AtSW_pjBgMAixQ7AhMk
- SURYANTO, H. (2013). FORMULATIVE POLICY of criminal law in COUNTERMEASURES GOSPEL OF THE GOSPEL *AGAINST DEALERS who...*. dspace.uui.ac.id. <https://dspace.uui.ac.id/handle/123456789/8783>
- Ulfa, W. (2020). DECRIMINALIZATION OF ARTICLE 127 OF LAW NUMBER 35 OF 2009 CONCERNING NARCOTICS. *RIO LAW JOURNAL*. <http://ojs.umb-bungo.ac.id/index.php/RIO/article/view/330>
- Alibali, M. W., Phillips, K. M. O., & Fischer, A. D. (2009). Learning new problem solving strategies leads to changes in problem representation. *Cognitive Development*, 24, 89- 101. doi:10.1016/j.cogdev.2008.12.005.
- Berns, R. M. (2010). Child, family, school, community: Socialization and support. Belmont. Cengage Learning.
- Clarke. M. J. (1993). Integrated municipal solid waste planning and decision-making in New York City: The citizens alternative plan. *Journal of the Air & Waste Management Association*, 4 (34), 453–462.
- Essa, E. (2010). *Introduction to early childhood education* (6th ed.). Elmar Publ. Park, A. (2009, Sept. 14). A shot at cancer. *Time*, 174(10), 32-39.
- Susanti and Rahardjo. (2018). Law and Criminology. Anugrah Utama Rahardja.
- Sulstyartha and Maya Hehanusa. (2016). Criminology in Crime Prevention Theory and Solutions. Absolute Media.
- Ibrahim, J. (2007). *Normative Law Research Theory & Methodology*. Bayumedia Publishing.
- Marzuki, Mahmud. (2017). *Legal Research: Revised Edition*. Prenada Media.
- Delima, dkk. (2023). Counseling Guidance Models In Drugs Case. *MENARA Ilmu*, 17 (02).
- Hannat Waladat Maryam & Ashabul Kahpi. (2020). Relapse Analysis of Narcotics Abuse at the National Narcotics Agency of South Sulawesi Province. *Alauddin Law Development Journal (ALDEV)*, 2 (3).



DECRIMINALIZATION OF DRUG ADDICTS: ANSWER OR THREAT? REVEALING THE PATTERN OF REHABILITATION OF NARCOTICS ADDICTS IN PURBALINGGA REGENCY

Awan Pratama^{1*}, Rida Zent Nur Robbani², Teguh Widadi³

¹*BNN Purbalingga Regency*

²³*Jenderal Soedirman University, Purwokerto*

*Corresponding author: pratamaawan116@gmail.com

ABSTRACT

Joint Regulation Number 01/III/2014/BNN is the main basis in the implementation of the policy of decriminalization of narcotics addicts in Indonesia which is coordinated by the National Narcotics Agency as the focal point of the Prevention and Eradication of Abuse and Illicit Circulation of Narcotics and Narcotic Precursors (P4GN) program. Decriminalization is a punishment for mistakes while still respecting the human rights and constitutional rights of narcotics addicts as citizens to be able to recover so that they can live and live a healthy, independent, productive and socially functional life which is focused on the implementation of the National Narcotics Agency of Purbalingga Regency as an integral part of the National Narcotics Agency of the Republic of Indonesia with ethnographic qualitative methods through observation directly in the form of coaching and mentoring. This study produced findings that the decriminalization of drug addicts is effective by involving Family Welfare Empowerment (PKK) in Community-Based Intervention (IBM) services based on local wisdom

Keywords: *Drugs, Women, Rehabilitation, Local Wisdom, IBM*

INTRODUCTION

Along with the development of the times in the midst of globalization that eliminates the barriers of space and time, Indonesia as an archipelagic country is currently surrounded by various threats of *trans-national organized crime* including *human trafficking*, corruption and *money laundering*, *forest crime*, as well as narcotics and drug crimes and their precursors⁷⁴. Narcotics crime as a priority problem that must be solved by the Indonesia nation has given

⁷⁴ https://kemlu.go.id/portal/id/read/89/halaman_list_lainnya/kejahatan-lintas-negara accessed on November 30, 2023

birth to various policies as an alternative solution and one of the policies that will be the focus of this study is the policy of decriminalization of narcotics abuse.

The discussion of the policy of decriminalization of narcotics abuse in this study is limited to the framework of Law Number 35 of 2009 with the focus and locus of the implementation of rehabilitation services by the National Narcotics Agency of Purbalingga Regency as an integral part of the National Narcotics Agency of the Republic of Indonesia.

Referring to the Indonesia Drugs Report 2023, *1,150 New Psychoactive Substances* (NPS) or new types of narcotics have been identified throughout the world and 91 of them are circulating in Indonesia, sadly only 85 are regulated in the Regulation of the Minister of Health (Permenkes) concerning Changes in the Classification of Narcotics while the other 6 are still not regulated.

At the national level, of the total population of Indonesia in the age range of 15-64 years with a total of 187,513,456, it is predicted that 4,534,744 people have abused drugs and 3,419,188 people have used drugs in the past year in 2019. In 2021, a total of 4,827,616 people had used drugs and 3,662,646 people had used drugs in the past year in 2021. This means that there is an increase in drug exposure in the age groups of 15-24 and 50-64 years, especially in rural areas. The prevalence rate of drug abuse in Indonesia increased by 1.80% in 2019 to 1.95% in 2021 (Indonesia Drugs Report, 2022). Not only that, at the provincial level, in 2021 the number of Central Java residents exposed to drugs increased by 1.95% or around 3.6 million residents with a prevalence rate of 3.1%, an increase of 0.1% from the previous year (LAKIP BNNK Purbalingga 2022). At the local level, Purbalingga Regency is divided into 239 villages / sub-districts spread across 18 sub-districts with information that 224 are villages while the other 15 are sub-districts (Purbalingga in 2023 Figures).

Geographically, Purbalingga Regency is quite far from the provincial capital and is included in the crossing route of industrial areas, especially beauty (eyelashes and wigs) and several other large industries such as wood processing, herbal medicine, garments, and others. In addition, the topography of the Purbalingga Regency area is mostly in the highlands with quite heavy terrain, of course, it has an impact on the limited touch power of these areas by the government, so that current drug abuse cases are not only dominated by adults, but have penetrated to adolescents and even students to remote villages (LAKIP BNNK Purbalingga, 2022)

In handling drug problems, since the Primary Clinic of the National Narcotics Agency of Purbalingga Regency was inaugurated on January 30, 2019, it has handled a number of clients with the following details:

- a. In 2019, it handled 19 clients consisting of 17 *voluntary* and 2 *compulsary*;
- b. In 2020, it handled 39 clients consisting of 37 *voluntary* and 2 *compulsary*;
- c. In 2021, it handled 33 clients, all *voluntary*;
- d. In 2022, it handled 27 clients all *voluntary*;
- e. In 2023, it handles 23 clients all *voluntary*.



In order to optimize the accessibility of rehabilitation services for narcotics abusers in Purbalingga Regency and Banjarnegara Regency, the Purbalingga Regency BNN initiated several integrated innovations as follows:

1. ***Si Biru Menyapa*** is an innovation of the KIE P4GN service that focuses on targeting other than kindergarten, early childhood education, elementary / mi, junior high / MTs students.
2. ***BNN Enters School*** is an innovation of the KIE P4GN service that focuses on targeting high school / vocational / MA students in Purbalingga Regency and Banjarnegara Regency. This program is a collaboration between the Purbalingga Regency BNN and the Education and Culture Office of the Region IX Education Office. Strengthened by the Memorandum of the Branch Office of the Region IX Education Office Number: 420 / 0204 dated January 19, 2024
3. ***Si Bangga*** is the BNN Information System of Purbalingga Regency with a service menu: *News* (Latest News), *Gratification Reporting*, *Whistle Blowing System*. SKHPN Services, Rehabilitation Consultation and Abuse Reports. This application was launched in June 2022 (<https://purbalinggakab.bnn.go.id/launching-aplikasi-si-bangga/>). The ***Si Bangga application*** continues to be upgraded, especially in the notification of the progress of the application submitted, although until now while the progress notification is carried out through the WhatsApp Contact Center to the Applicant
4. ***Lakemas*** (Community Incident Report) is an innovative service based on community participation to report incidents of narcotics abuse crimes at the BNN Contact Center number of Purbalingga Regency. This Lakemas innovation is the domain of the Eradication Section
5. ***Synergy, Collaboration, and Coordination*** with Waste Library in the framework of expanding the accessibility of KIE P4GN with the environmental care community and literacy friends
6. ***Synergy, Collaboration, Coordination*** with Purbasari Pancuran Mas Educational Tourism Park (TWP) in order to realize the ***BERSINAR Tourist Attractions*** pilot project

This research is focused on drug handling policies carried out by the National Narcotics Agency, focused on the era of the leadership of the Commissioner General of Police, Prof. Dr. Petrus Reinhard Golose⁷⁵. During the three years of Petrus Golose's leadership⁷⁶ from 2020 to 2023, there were at least three *taglines* as the essence of the Prevention and Eradication of Abuse and Illicit Circulation of Narcotics and Narcotic Precursors (P4GN) policies which were echoed, namely *war on drugs*, *speed up never let up* and *acceleration of war on drugs* towards "Indonesia Bersinar." As for the implementation, *the tagline* is carried out through four approaches, namely *the hard power approach*, *soft power approach*, *smart power approach* and *cooperation approach*.

75 <https://bnn.go.id/presiden-jokowi-lantik-kepala-bnn-brgm-istana-negara/> accessed on April 30, 2024

76 <https://investor.id/nasional/325231/hut-ke21-bnn-petrus-golose-ingatkan-peredaran-narkotika-kian-masif> accessed on April 30, 2024



Referring to Law Number 35 of 2009 concerning Narcotics, the National Narcotics Agency is a vertical institution so that the design of P4GN policies and programs is hierarchical but in its implementation it is adjusted to local wisdom that grows and develops in the midst of society. Of course, local wisdom in each region is different, therefore, this study highlights the uniqueness of the implementation of the National Narcotics Agency's policy as a *focal point* in the Prevention and Eradication of Abuse and Illicit Circulation of Narcotics and Narcotic Precursors (P4GN) program, especially in the *soft power approach* through prevention, rehabilitation and community empowerment activities that are integrated in the Community-Based Intervention (IBM) program in Purbalingga Regency. The study of this research is focused on rehabilitation based on local wisdom carried out by Dagan Village in 2023.

METHODOLOGY

The research method used is qualitative-ethnographic (Wijaya 2018). The ethnographic method is designed to describe and then explain analytically a phenomenon with the aim of understanding a view of life from the point of view of the research subject, the relationship and life between them, as well as the view of his life. The use of ethnographic methods aims to explore, understand, identify, describe, map, and analyze how the PKK as an "institution" carries out its various functions at the most basic level in the social order. In the context of using ethnographic methods, data collection is carried out by direct observation of activities related to PKK in IBM, namely pre to core rehabilitation services at IBM Dagan Village. Data collection in the form of recovery book documents and IBM activity books was also carried out. In addition, it is also carried out through IBM Dasataka coaching and assistance as well as direct interaction between PKK, Recovery Agents and clients and their families. The location of the research when conducting observations and conducting in-depth interviews at the IBM Dasataka Secretariat in Dagan Village, Bobotsari District. The assistance was carried out from January 18 to November 22, 2023 face-to-face directly at IBM Dasataka Dagan Village, Bobotsari District.

RESULTS AND DISCUSSION

Drugs as an extraordinary crime

In the era of globalization that eliminates the barriers of space and time, Indonesia as an archipelagic country is currently surrounded by various threats of *trans-national organized crime*, as well as narcotics and drug crimes and their precursors⁷⁷. One of the threats that has become a serious problem for the Indonesia nation is the drug problem. If referring to the Indonesia Drugs Report 2023, 1,150 *New Psychoactive Substances* (NPS) or new types of narcotics have been identified around the world and 91 of them are circulating in Indonesia, sadly only 85 are regulated in the Regulation of the Minister of Health (Permenkes) concerning Changes in the Classification of Narcotics while the other 6 are still not regulated. In addition, there are 8,002

77 https://kemlu.go.id/portal/id/read/89/halaman_list_lainnya/kejahatan-lintas-negara accessed on November 30, 2023



drug-prone areas with a category of 1,571 as dangerous areas and 6,431 as alert areas whose social problems are explained with an empowerment intervention approach. In 2022, BNN has launched as many as 587 BERSINAR Villages (Clean from Drugs) throughout Indonesia with categories of 127 danger, 265 alert, 137 alert and 58 safe. In addition, BNN throughout 2022 has provided rehabilitation services to 17,770 clients with details of 9,783 being treated as outpatients by Central BNN clinics, Provincial BNN and Regency/City BNN clinics; 1,659 were treated for hospitalization at the BNN-owned Rehabilitation Center; 2,357 were handled by IBM units and 3,971 were in post-rehabilitation services.

At the international level, the problem of drug abuse and illicit trafficking is experienced by the Mexico government. Randhi Satria & Nymphadear (2016) explained that the drum of the war against drug cartels has been echoed since the era of Felipe Calderon's leadership in 2006 by emphasizing the use of *force power*, although it has resulted in dualism in people's attitudes towards the steps taken by the government, namely supporting and opposing. The reason for those who oppose the government is because drug cartels are considered to bring the wind of change to the government's failure to overcome poverty.

On a regional scale, efforts have been made to realize *Drug Free ASEAN 2015* as a joint policy for handling drug problems (Fajar Hermansah, 2022). The policy of handling drugs harshly and entitled *war on drugs* is carried out by the Philippines under the command of President Rodrigo Duterte who prioritizes *force power* to suppress crime due to drugs even though it contradicts human rights (Hendra, Anisa 2021, Agustin Putri Perdana 2022).

Rehabilitation Based on Local Wisdom

BNN Purbalingga Regency has carried out a series of identification processes in designating Dagan Village, Bobotsari District⁷⁸ as the location of the 2023 Community-Based Intervention (IBM).

In terms of rehabilitation, the National Narcotics Agency since 2020 has initiated the formation of 306 independent organizational units referred to as Community-Based Intervention (IBM) in villages and sub-districts to deal with narcotics abusers in the mild category. Through the establishment of IBM, it is hoped that the social resilience of the community to narcotics abuse can increase so as to reduce the prevalence of narcotics abuse. According to the Regulation of the National Narcotics Agency Number 6 of 2022 concerning the Implementation of Sustainable Rehabilitation, what is meant by Community-Based Intervention hereinafter abbreviated as IBM is an intervention in the field of rehabilitation for Narcotics Addicts, Narcotics Abusers and Victims of Narcotics Abuse designed from the community, for the community, and by the community by utilizing community facilities and potentials in accordance with local wisdom.

The determination of Dagan Village as the location of the Community-Based Intervention (IBM) program is regulated in the Decree of the Head of the National Narcotics Agency Number: **KEP / 214 / II / DE / RH.03 / 2023 / BNN** dated February 9, 2023 concerning the Determination of National Priority IBM Units in the Provincial/Regency/City BNN Environment which states that the National Narcotics Agency seeks to increase the availability of interventions to handle narcotics abuse to the smallest government units, namely Villages/

78 <https://purbalinggakab.bnn.go.id/desa-binangun-desa-dagan-lokasi-desa-bersinar/> accessed on April 30, 2024



Urban Villages, one of them is by empowering the facilities and potential of the village/sub-district community in accordance with local wisdom for mild category narcotics abusers to recover, be productive and function socially

Previous research that was used as a foothold was carried out by (Purnamasari and Nuryati 2022) which stated that the IBM program in the North Jakarta area was limited in its implementation so assistance by BNN was still needed. The next research is the Policy Evaluation of IBM's Narcotics Rehabilitation Services in West Java conducted by (Nafisah, Alexandri, and Irawati 2019) which explains the comparison of IBM's policies and implementation, but this study does not explain the dynamics that occur throughout IBM's operationalization process.

Next is a study conducted by (Haryanti 2018) explaining the partnership program between BNN and PKK, especially in the aspect of community-based drug prevention with PKK as an agent of social change. Finally, research conducted by Erma Antasari and Plamularsih Swandari (2022) in (*WAR ON DRUGS IN INDONESIA n.d.*) about *the Soft Power Approach* Through the Shining Village Program in Banten Province which explains that young people play a role as the driving force of activities through IBM.

Therefore, we feel the need to raise the theme of the PKK as a state policy implementer (BNN) in the form of handling drug problems, especially in the IBM program in Dagan Village, Bobotsari District.

The Constitution mandates the state to rehabilitate drug addicts as stipulated in Article 54 of Law Number 35 of 2009 which reads that Narcotics Addicts and victims of Narcotics abuse are required to undergo medical rehabilitation and social rehabilitation. The form and type of rehabilitation services provided by the state are divided into two bases, namely institution-based and non-institutional-based⁷⁹.

Non-institutional-based rehabilitation services for narcotics addicts carried out by the Community-Based Intervention Unit are an implementation of Presidential Instruction Number 2 of 2020 concerning the National Action Plan for the Prevention and Eradication of Abuse and Illicit Circulation of Narcotics and Narcotic Precursors for 2020-2024, while the definition of IBM is explained in the Regulation of the National Narcotics Agency Number 6 of 2022 concerning the Implementation of Sustainable Rehabilitation. In article (1) of the BNN Regulation, IBM is defined as an intervention in the field of rehabilitation for Narcotics Addicts, Narcotics Abusers and Victims of Narcotics Abuse designed from the community, for the community, and by the community by utilizing community facilities and potentials in accordance with local wisdom. This means that with the limitation of the definition, IBM's operationalization in each region is different because it is adjusted to the existing local wisdom and develops in each region⁸⁰.

79 Regulation of the National Narcotics Agency Number 6 of 2022, especially in article 4 paragraph (2). Institution-based is carried out by the National Narcotics Agency (Rehabilitation Center, Rehabilitation Workshop, Primary Clinic), Ministry of Health (IPWL) and Ministry of Social Affairs (IPWL) while non-institutional-based is carried out by IBM under the assistance and guidance of BNN

80 Including the use of narcotics or addictive substances carried out by clients in each different region. In the context of IBM Dasatoka in Dagan Village, substance abuse by clients includes amethyst plants and fruits as well as cold cough medicines consumed in excess of the dose / dosage and without a doctor's instructions. The results of the mentoring and interview on September 16, 2023.



Rehabilitation services through IBM, which is under the authority of the Regency/City BNN, are regulated in the Decree of the Head of the National Narcotics Agency Number: **KEP / 214 / II / DE / RH.03 / 2023 / BNN**, which was then issued by the Dagan Village Government Decree of the Head of Dagan Village Number 10 of 2023 dated February 23, 2023 concerning the Determination of the IBM Team for Drug Abusers and/or Addicts in Dagan Village, Bobotsari District in 2023. In this Kep Kades Dagan, the duties of the Recovery Agent include: mapping related to the situation and conditions of drug abuse in their area; conducting outreach to drug abusers and identifying drug use and the level of its problems; carry out intervention activities individually or in groups according to the client's needs in the form of: KIE, Recurrence Prevention, Peer Support Groups, Family Meetings, Home Visits and Self-Development; providing recovery support through monitoring and assistance to drug abusers; making referrals to health and social services for drug abusers as needed; encourage and assist clients to be active in positive activities in the community; record and report. In this Decree of the Head of Dagan, it is also mentioned about the name IBM, namely DASATAKA with the meaning of Healthy Dagan Without Narcotics, including the names of the Recovery Agents who oversee it.

As for the Decree of the Head of the National Narcotics Agency Number: **KEP / 214 / II / DE / RH.03 / 2023 / BNN**, IBM Dasataka is required to be able to provide rehabilitation services with the following factors that have at least been fulfilled even though they have not been maximized, namely:

- a. In terms of human resources, IBM's components have involved parties that are considered competent consisting of elements of village apparatus, PKK and Karang Taruna as implementers of IBM services. In this case, the five IBM Dasataka Recovery Agents have received technical guidance twice organized by BNNK Purbalingga on March 18-20, 2023 and the Deputy for Rehabilitation of BNN virtually on May 8-10, 2023 so that they are declared competent in handling non-institutional-based rehabilitation through IBM services. Proof of the seriousness of IBM Dasataka Recovery Agents in implementing Technical Guidance materials in actual conditions in the field, namely through pre-service activities in the form of socialization of IBM's existence on May 13, 2023⁸¹ with the target of core groups that are able to support IBM's operationalization and family resilience towards Dagan as a SHINING Village, Clean Drugs.
- b. In terms of facilities and infrastructure to support operationalization in the form of the IBM Secretariat and the synergy of implementation with community activities, including inserting the content of IBM equipment materials in almost every activity organized by the community such as regular meetings of the RT Chairman's Association (PKRT), distribution of social assistance, routine recitation of the (40 days in the calculation of the Javanese calendar) and regular meetings held in each hamlet in Dagan Village. Through

81 Interview with Anik Puspitasari, Chairman of the Dagan Village PKK who is also one of the IBM Dasataka Recovery Agents on November 13, 2023 in conjunction with the IBM Unit Assistance. Anik said that all Recovery Agents will move simultaneously starting May 13, 2023 to socialize the existence of IBM according to the material presented during the Technical Guidance. Anik Puspita socialized IBM according to his realm and status as Chairman of the PKK, which was inserted at PKK meetings at the RW, Hamlet and Village levels, including Dasawisma and recitation organized by Muslimat and Fatayat NU. This also applies to the four other Recovery Agents who are active in inserting material content about the importance of IBM in various forms of community activities such as gatherings, meetings of gentlemen, Yasin-Tahlil recitations, including in non-formal activities such as hanging out at patrol posts or other leisure activities (in their terms, rubung-rubung).



the blending of IBM's activities with community activities, it becomes more efficient and effective.

- c. Funding, which is the source of operational funding for IBM Dasataka's activities and services for 2023, is sourced from the BNN State Budget, but support in the form of food, places of activities and supporting facilities (LCD, laptop, sound system) is obtained from volunteerism as a form of participation from community groups in the existence of IBM⁸².
- d. The implementation of activities starts from program socialization, mapping vulnerable areas and client outreach by Recovery Agents according to the Guidelines that have been set by the Deputy for Rehabilitation of BNN.
- e. The implementation of IBM services consists of the provision of Communication, Information and Education (KIE), life skills, client home visits and optional services in the form of support group meetings / recurrence prevention / facilitation of client referrals in accordance with the Guidelines that have been set by the Deputy for Rehabilitation of BNN.

Women and Drug Rehabilitation

The basis for the involvement of the PKK in the Prevention and Eradication of Drug Abuse and Illicit Trafficking (P4GN) program is a vertical policy, namely between the National Narcotics Agency of the Republic of Indonesia and the National PKK Mobilization Team through a Memorandum of Understanding between the PKK Mobilization Team and the National Narcotics Agency Number: NK / 3 / III / KA / HK.02 / 2022 / BNN dated March 8, 2022 concerning Strengthening Families in Efforts to Prevent Narcotics Abuse. The points of cooperation include strengthening Communication, Information and Education (KIE) to prevent narcotics abuse; strengthening the resources of the PKK Mobilization Team in prevention, rehabilitation, and supervision programs/activities in the family environment against drug abuse; early detection of narcotics abuse and other cooperation agreed upon by the parties.

Drug control policies involving the PKK are followed up by the Purbalingga Regency BNN by collaborating with the Purbalingga Regency PKK Mobilization Team through the signing of a Memorandum of Understanding between the Purbalingga Regency PKK Mobilization Team and the Purbalingga Regency National Narcotics Agency Number: B / 377 / V / KA / HK.02 / 2022 / BNNK dated May 18, 2023 concerning Family Strengthening in Efforts to Prevent Narcotics Abuse with the points of cooperation, including strengthening Communication, Information and Education (KIE) for the prevention of narcotics abuse; strengthening the resources of the PKK Mobilization Team in prevention, rehabilitation, and supervision programs/activities in the family environment against drug abuse; early detection of narcotics abuse and other cooperation agreed upon by the parties.

Referring to Permendagri Number 36 of 2020, the definition of Family Empowerment and Welfare, hereinafter abbreviated as PKK, is one of the Village / Village community institutions that accommodates community participation in the field of family welfare empowerment

⁸² In an interview on November 13, 2023, Anik Puspitasari and Nurhadi explained, "that the activities carried out by the general community also have snacks so we don't need to provide them. Well, that kind of support exists and develops in this community..". This form of participation based on local wisdom supports IBM's operationalization.



at the level of community harmony and neighborhood harmony or other designations that coordinate *dasawisma* groups. Meanwhile, the Family Empowerment and Welfare Driving Team, hereinafter abbreviated as TP PKK, is a working partner of the government and other community organizations/institutions, which functions as facilitators, planners, implementers, controllers and movers at each level for the implementation of the PKK program. Furthermore, in Article 39 it is stated that the PKK Movement is carried out through 10 main PKK programs, including the appreciation and practice of *Pancasila*, and in Article 40 it is stated that the program of appreciating and practicing *Pancasila* is implemented at least by fostering legal awareness families and fostering the prevention of drug abuse. This means that this *Permendagri* is a reference for the PKK Mobilization Team to be able to synergize with BNN to implement drug control programs at the smallest level of society, namely the family. The definition of family if referring to Presidential Regulation Number 99 of 2017, a family is defined as the smallest unit in society consisting of husband and wife, husband and wife and their children, father and son, mother and child, or blood family in a straight line up or down to the third degree.

It was the feeling and obligation to protect and save their families from the threat of drugs that then moved the PKK to participate in the operationalization of IBM *Dasataka* services. Positioning herself as a “mother” who is obliged to protect her child is very much reflected in the activities of Anik Puspitasari (Recovery Agent with a background as Chairman of the PKK) in at least the following two activities, namely on June 1, 2023 along with BNN’s assistance to Recovery Agents in monitoring and home visits to one of the clients who is still using **addictive**⁸³ substances. Then on August 1, 2023, a Family Meeting was held between the client and their respective parents / guardians with the aim of acknowledging the client’s mistakes and apologies from the client to their parents / guardians so that communication that had been not harmonious could slowly be re-established. Emotional and psychological touch is important so that all parties support each other, strengthen and maintain the degree of recovery so that the client does not experience a *relapse*. In addition, Anik Puspitasari in his capacity as Chairman of the PKK who is involved as a Recovery Agent also opens access to participation for fellow Recovery Agents and Clients to be actively involved in the series of commemorations of the 78th independence of the Republic of Indonesia as an effort to dismiss the stigma of IBM clients so that they can return to live and live a healthy, independent, productive and socially **functional**⁸⁴ life.

83 On June 1, 2023, BNN Purbalingga Regency accompanied the Recovery Agent for a home visit to monitor the progress of one of the clients who reused (relapsed) addictive materials. The look on his face was disappointed, angry and full of hope for change for the better reflected in Anik Puspita’s gesture. In this position, Anik is more dominant in the role of a “mother” than as a Recovery Agent which certainly gives high hopes for changes in client behavior to be able to get better and free from drug addiction. Including the use of sentences that touch on the psychological side as an effort to reflect his responsibilities as a Recovery Agent. Anik said to the client, “Maybe it’s just like me. I said I was ready to *mareni* and even *mbaleni*. The best thing to do is to participate in the program. Relax your old man. So much so that you see a success..” (It shouldn’t be like that, I think you’re ready to change and instead repeat this act. The one who is serious in participating in this (IBM) program. Pity your parents who really want to see you succeed)

84 The involvement of clients in the committee for the 78th Indonesian Independence Day at the Dagan Village level has been approved by the Head of Dagan Village as a form of commitment to fully support the operationalization of IBM *Dasataka*. The series of commemorations of the 78th Indonesian Independence Day include village cleaning, football matches, puppet performances as well as Dagan’s declaration as a Shining Village and Night Market. The negative stigma that community waste drug abusers are slowly being erased through the involvement of IBM *Dasataka* clients in the committee for the 78th Indonesian Independence Day so that it is hoped that after completing the IBM program, clients can return to living their lives in a healthy, independent, productive and socially functional manner.



Anik Puspitasari, who is also the wife of Nurhadi (IBM Dasataka Coordinator), has proven to be able to dismiss the assumption that the difference in the background of the Recovery Agent will affect IBM's operational performance. Anik explained⁸⁵ that this difference is not the main problem considering that the determination of Recovery Agents is more based on the factors of concern, solidity of joint work in the team and sincerity in community service. Considering that the main tasks that must be carried out by the Recovery Agent are mapping the situation and conditions of drug abuse, outreach to drug abusers and identification of use and the level of the problem, carrying out IBM activities and operationalization services, providing recovery support for clients and conducting referral services carried out without any reward / honorarium given.

Regarding IBM's independent funding, Anik Puspitasari admitted that he had conveyed several times to her husband (as the Head of Services of the Dagan Village Government and in charge of the formulation of the Regional Budget) so that the Village Government could allocate special funds for IBM. *"This year, we have not been able to budget specifically for IBM, but I have been with my husband many times that we have not been able to do so, so try to be able to distract from other activities, even if it is a little. Thankfully, it can indeed be allocated specifically like that, sir, so that we are not completely dependent on BNN continuously"*. Furthermore, Nurhadi explained that, *"the budget allocation for IBM in 2024 is indeed being sought, sir. Maybe it will be in the PKK budget post or other activities. But the important thing is first, the problem will be everywhere it can be lifted. In essence, Mrs. Kades wants IBM to continue to exist, must continue to rehabilitate those who have been reached"*⁸⁶.

Regarding rehabilitation services at IBM, Anik Puspitasari explained that he and four other Recovery Agents carried out outreach⁸⁷. The meaning of outreach is an active activity carried out by Recovery Agents to convey information and approach drug users, their families or the surrounding community to be encouraged to use IBM services. The five IBM Dasataka Recovery Agents conducted outreach to 69 people who had been mapped from all hamlets in Dagan Village. The sixty people were then followed up in the form of filling out the DAST-10 form to find out the severity as well as their willingness to participate in the rehabilitation program at IBM, as a result of the 69 people only 7 people were willing to participate in IBM services and activities.

What should be appreciated from the activeness of this Recovery Agent is that after the seven people were willing to follow IBM's services and a follow-up examination was carried out, which resulted in two clients having to receive further treatment by a health facility. So, the maternal instinct of Anik Puspitasari with the help of the Recovery Agent and other PKK members then carried out referral services for the two clans to the Bobotsari Health Center Health Facility so that more optimal treatment could be carried out⁸⁸.

85 Interview on October 4, 2023 coupled with Dagan Village Night Market Assistance by BNNK Purbalingga

86 Interview with Anik Puspitasari and accompanied by Nurhadi, November 8, 2023

87 Interview October 8, 2023

88 In an interview on November 13, 2023, Anik Puspita explained that the two clients were escorted by her husband (Nurhadi) to the Bobotsari Health Center to receive comprehensive medical treatment and report the results of the referral to the Purbalingga Regency BNN. Anik explained that, *"after all, they are our residents, so yes we try to handle them as much as possible and if it really costs money, it can be covered by the village"*.



According to Ripley, the measure of the success of the implementation of a policy is not only seen from the compliance of the implementer but also measured from the extent to which the policy has an impact (in Wahab, 2014), while according to Van Meter and Van Horn, policy implementation is an action carried out by the actors involved that is directed to the achievement of the goals that have been outlined (in Ratih, 2012).

The success of the implementation of the IBM Dasataka service cannot be separated from the fact that the Chairman of TP PKK who should have been held *ex officio* by the wife of the Dagan Village Secretary but held by the wife of the Head of Service (because the Secretary of State's wife is sick) who is in the position of the IBM Structure of the Head of Service serves as the IBM Coordinator, thus smoothing the way for IBM to be able to be more flexible in synchronizing activities. That the Recovery Agent sourced from the PKK is proven to be able to implement and represent itself as a PKK actor in the implementation of the drug control policy through IBM, or in other words, the PKK Recovery Agent is an extension implementer of BNN in rehabilitation services and this needs to be maintained as well as an effort to maintain family resilience

The concept of motherhood offered by Madelon Djajadiningrat-Nieuwenhuis (1987) which was then continued by Julia Suryakusuma (1991) to explain descriptively and analytically about women's "self-sacrifice" for the country that was unrewarded during the New Order period seems to be still relevant in the context of the role of the PKK in IBM Dasataka. This also means that the penetration of government programs into society through families and households becomes more effective with the involvement of women, especially housewives. This is what Warouw also mentioned, that the family in this function has domesticated and at the same time affirmed the autonomy of women socio-politically. This is also what explains why the state has an interest in regulating women (Wicaksono 2017).

That the doctrine regarding the obligation of all married women or those who are seen as adult women to automatically become part of the PKK is still firmly embedded in the daily lives of the people in Dagan Village. Of course, this eventually implies the emergence of a new category in the social field to affirm the role of the state, namely housewives, and the deployment of Indonesia women, especially women from the lower classes, as unpaid social welfare workers (Newberry, 2013). The conception of unpaid social welfare workers is actually an implementation of Article 104 of Law Number 35 of 2009 which states that the community has the widest opportunity to participate in helping to prevent and eradicate the abuse and illicit circulation of narcotics and narcotics precursors. The active participation of the PKK in the series of IBM Dasataka operations was appreciated by the Leadership of the National Narcotics Agency of the Republic of Indonesia through the Letter of the Head of BNN Number: B/1/I/DR/RH.02.03/2024/BNN dated January 2, 2024 concerning the Notification of the Results of the Evaluation of the Operationalization of the IBM Unit for FY 2024 which stated that the IBM unit Fostered by BNN Purbalingga Regency is in a **tough** phase. The tough category was achieved by 209 IBM units throughout Indonesia, and one of them is IBM Dasataka fostered by BNN Purbalingga Regency. IBM Dasataka was declared in the tough category because it has completed IBM service activities, community support exists and is real; community involvement is very much felt in helping the recovery process of drug abusers and Recovery Agents (including those sourced from the PKK) play a very important



role in assisting and monitoring drug abusers (clients) to recover and return to living their lives in a healthy, independent, productive and socially functional manner.

CONCLUSION AND RECOMMENDATIONS

That the state (in this case BNN) has an obligation to deal with drug problems, one of which is the rehabilitation of drug addicts which can be carried out in various forms and types of services. Community-Based Intervention (IBM) is a form of non-institutional-based rehabilitation service based on local wisdom that can be supported by various groups. Family Welfare Empowerment is one of the groups that can support the implementation of state policies through IBM. The concept of “motherism” in the involvement of the PKK in IBM is not only interpreted as the involvement of local officials’ wives but also as a form of women’s sacrifice to protect their children from the threat of drugs. Therefore, strengthening the PKK institution as an effort to strengthen family resilience must continue to be carried out so that the handling of drug problems is consistent and sustainable.

However, the steps that have been taken by the IBM implementers of Binangun Village and Dagan Village are a form of national resilience to maintain national stability (Fahriani, 2023), especially from the threat of drugs. According to Suryatni (in Fahriani, 2023), national resilience contains national capabilities and strengths that must be developed and utilized and covers all aspects of the nation’s life, namely the Asta Gatra aspect and is divided into two large groups, namely Tri Gatra and Panca Gatra. The Tri Gatra group (three aspects) is a group of natural aspects of the nation’s life consisting of geography or natural conditions, demographics or population, and natural wealth. The next group is Panca Gatra (five aspects) which is a group of social aspects consisting of ideological, political, economic, socio-cultural, and defense and security aspects.

Rehabilitation based on local wisdom in the IBM unit as a P4GN policy of the National Narcotics Agency can be interpreted as an effort to form the national resilience of community members from the threat of drugs that are *extraordinary crimes* and *trans national organized*. In addition, IBM increasingly emphasizes that efforts to handle the drug problem cannot only rely on measures taken by the state but still require joint steps from all components of society so that it is comprehensive and integral.

ACKNOWLEDGMENTS

Thank you to the National Narcotics Agency of Purbalingga Regency and the Master of Political Science at Jenderal Soedirman University for their support to us in the 2024 International Conference on Drug and Research (ICDR) as a place to share knowledge and information related to handling narcotics problems in Indonesia in a multidisciplinary manner



BIBLIOGRAPHY

- Fahriani, Ade Aryanti, et al. (2023). Narcoterrorism as a Threat to the Demographic Bonus: A Perspective on National Resilience Securitization. *Journal of National Resilience Strategy Studies*, Vol.6.No.1
- Gunawan. (2016). Decriminalization of Narcotics Addicts: Shifting Approaches and Policy Implications for Handling Narcotics Addicts in Indonesia. *Journal of Socio Informa* Vol.2 No.03
- Haryanti, Sri. (2018). BNN-PKK PARTNERSHIP PROGRAM: COMMUNITY COOPERATION FOR THE PREVENTION OF DRUG ABUSE IN THE FAMILY ENVIRONMENT. *Administratio: Scientific Journal of Public Administration and Development* 9(2): 74–87. doi:10.23960/administratio.v9i2.66.
- Indonesia Drug Report. Vol. 5 Tahun 2023. Puslitdatin BNN RI
- IBM Information Services-Final Edit.(2022). Deputy for Rehabilitation of BNN RI
- Nafisah, Diani Utami, Mohammad Benny Alexandri, and R. Ira Irawati. (2019). EVALUATION OF THE POLICY OF HANDLING NARCOTICS ADDICTS BY THE NATIONAL NARCOTICS AGENCY OF WEST JAVA PROVINCE. *Responsive* 1(3): 103. doi:10.24198/responsive.v1i3.20746.
- Purnamasari, Novianti, and Tati Nuryati. (2022). EVALUATION OF THE IMPLEMENTATION OF COMMUNITY-BASED INTERVENTION PROGRAMS IN THE NORTH JAKARTA AREA. *BK An-Nur Student Journal: Different, Meaningful, Noble* 8 (2). doi:10.31602/jmbkan.v8i2.7102.
- Putri Perdana, Agustin. Rodrigo Duterte and his Black-and-White leadership in the Philippines. <https://www.researchgate.net/publication/361460609>
- Saragih, Hendra Maujana; Prayuningsih, Ayu. (2021). President Duterte's War On Drug Policy: Human Rights Violations and the Response of Filipino People. *Journal of Social and Humanities*. Vol.6.No.2
- Sutrasna, Yudi." Indonesia's Defense Strategy in Facing Military and Non-Military Threats Through the Perspective of Defense Economy". *Indonesia Scientific Journal*. Vol.8.No.7.2023
- Wicaksono, Mochammad Arief. 2017. "Contemporary Motherism: An Ethnography of Posyandu and Housewives." *Umbara* 1(2). doi:10.24198/umbara.v1i2.9921.
- Wijaya, Hengki. 2018. "Qualitative Data Analysis of Spradley Model (Ethnography)." *Research Gate* (March).



Website:

https://kemlu.go.id/portal/id/read/89/halaman_list_lainnya/kejahatan-lintas-negara accessed on November 30, 2023

<https://bnn.go.id/presiden-jokowi-lantik-kepala-bnn-brgm-istana-negara/> accessed on April 30, 2024

<https://investor.id/national/325231/hut-ke21-bnn-petrus-golose-ingatkan-peredaran-narkotika-kian-masif> accessed on April 30, 2024

<https://purbalinggakab.bnn.go.id/desa-binangun-desa-dagan-lokasi-desa-bersinar/> accessed on April 30, 2024

<https://purbalinggakab.bnn.go.id/mewujudkan-desa-bersinar-di-kabupaten-purbalingga/> accessed April 26, 2024.

https://sibenar.bnn.go.id/desa_bersinar accessed April 26, 2024.



RESEARCH TRENDS IN DRUGS ABUSE TREATMENT: 2014–2024

Dela Riadi*

*Department of Biostatistics, Faculty of Public Health, Universitas Indonesia,
Depok, Indonesia*

***Corresponding author : dela.riadi11@ui.ac.id**

ABSTRAK

The purpose of this study was to assess the productivity of research in drug abuse treatment across international borders using bibliographic data. The purpose of this study was to determine research trends in drug misuse therapy between 2020 and 2024. 562 articles in all were located in PubMed. With VOSviewer, the analysis data mapping was finished. The results of the analysis show that over a decade, the literature on drug abuse therapy has undergone several alterations. The research was produced by Adelson, M. (top author), the Sackler Faculty of Medicine at Tel Aviv University (top organization), and cannabis (top author keyword). Most researchers are from the USA and most research collaborations are in the USA and Israel. According to the results, this research has been insignificant for over ten years. The amount of research being done on drug misuse therapy from 2014 to 2024 started to rise in 2016, but then it began to fall. This is a chance for additional researchers to investigate different aspects of drug abuse treatment.

Kata kunci: *drugs abuse, treatment, bibliography, research trends, vosviewer*

INTRODUCTION

Narcotics are substances or drugs derived from non-plant, synthetic, or plant origins. When consumed, they can reduce or remove discomfort, change awareness, block out feeling, and, if used frequently, can develop dependency (Pamungkas et al., 2024). Currently, millions of people worldwide struggle with addiction, and a large number of these cases are caused by the interplay between the brain's inherent reward system and external contextual factors (Ahmed et al., 2024).

Drug addiction is a complex disorder that develops from regular, long-term use of psychoactive substances, which impairs both the body and the mind. The change in behavior from rewarding drug effects through positive reinforcement to counteracting withdrawal symptoms through negative reinforcement is what distinguishes this illness (Koijam et al., 2024). Drug addiction has numerous negative repercussions on both the individual and

society at large. Abusers of substances may experience detrimental effects on their behavior, mental health, and general well-being. Furthermore, compared to the overall community, their rate of criminal activity is significantly higher (Haviv et al., 2024).

After the number of opioid overdose deaths increased to a record high of over 42,000 in 2016, the US Department of Health and Human Services declared the opioid crisis in the US to be a public health emergency in 2017 (Ignaszewski, 2021). Billions of dollars are spent annually treating drug abuse disorders alone in the United States (Ahmed et al., 2024). One LMIC country now addressing the rising problem of drug use is Indonesia (Samsurizal et al., 2023). According to the chairman of the National Narcotics Agency (BNN), 3.6 million persons in Indonesia were drug abusers as of 2019. These figures indicate a 24–28% increase in the number of young people abusing drugs (Lukman et al., 2022). Smokers have a 3.89-fold higher risk of drug misuse than non-smokers (Astuti, 2016). Sex, age, and ethnicity have all been shown to have a substantial correlation with various addictive drugs, whereas socioeconomic class, lower educational attainment, religion, marital status, and location showed varying degrees of relationship with these prescriptions (Kojiam et al., 2024).

Drug addiction is treated using a range of techniques, such as medication, behavioral therapy, and ongoing support (Ahmed et al., 2024). Indonesia adopted Islamic-based recovery using ritual spiritualism with the intention of replacing drug-using habits with Islamic religious practices (Apsari et al., 2024).

In addition to other tactics, exercise is one aspect of treatment that can assist an individual in recovering (Ahmed et al., 2024). Significant intervention with drug abusers can be achieved through three principal approaches: methadone maintenance programs, long-term drug-free residential programs, or therapeutic communities (Apsari et al., 2024). Women's inclination to relapse is influenced by their estrogen levels (Ahmed et al., 2024).

Treatment for drug misuse has a clinically important and statistically significant impact on lowering drug usage and criminality (Prendergast et al., 2010). But because of the high dropout rate, drug treatment programs confront difficulties (Haviv et al., 2024). Therefore, it is crucial to comprehend current study trends in drug misuse treatment. The bibliography is one resource for recognizing and evaluating trends in research subjects (Ghaida Nurin Athifah & Hertien Koosbandiah Surtikanti, 2024). This study's methodology makes use of databases spanning from 2014 to 2024.

METHODOLOGY

The information was obtained on May 7, 2024, from the PubMed database. The National Library of Medicine (often called NLM) provides PubMed. Within the database are almost 36 million citations. Almost 3 million distinct individuals use PubMed every day, including physicians, researchers, students, librarians, and others (Knapp, 2024). The information was then exported in Text File (txt) format. To see and assess trends, article data from the source database is mapped using a bibliometric map. VOSviewer is an application used in this study. The keywords used are “drug abuse treatment” OR “drug misuse treatment” OR “[narcotic addiction](#) treatment” OR “treatment of drug abuse” OR “opioid abuse treatment” OR

“cocaine abuse treatment” OR “drug abuse therapy” OR “drug misuse therapy” OR “therapy of drug abuse” OR “marijuana abuse therapy” OR “cocaine abuse therapy”.

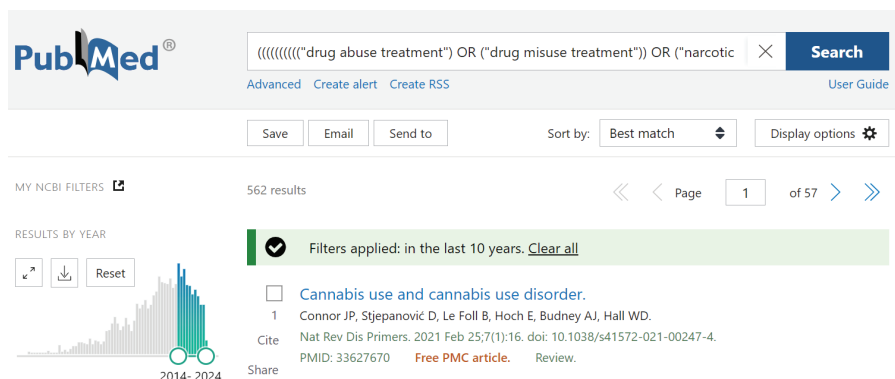


Figure 1. Literature Search Results

RESULT AND DISSCUSION

A search on PubMed regarding “drugs abuse treatment” in the last ten years yielded 562 articles. Based on Figure 2, the most number of article publications occurred in 2016 with 76 articles, while the fewest publications occurred in 2024 with 12 articles. In 2017, 2019, 2022 and 2024 the number of publications decreased. From 2019 to 2021 the number of publications tends to remain constant. The number of publications of scientific articles resulting from research on business incubators published in PubMed indexed journals from 2014 to 2024 generally experienced negative growth. Annual growth shows -11.87%. In 2014 the number of research articles was 46, while in 2024 there will be 12 articles published. These data show that research on business incubators means there is a decline in researchers’ interest in researching drugs abuse treatment.

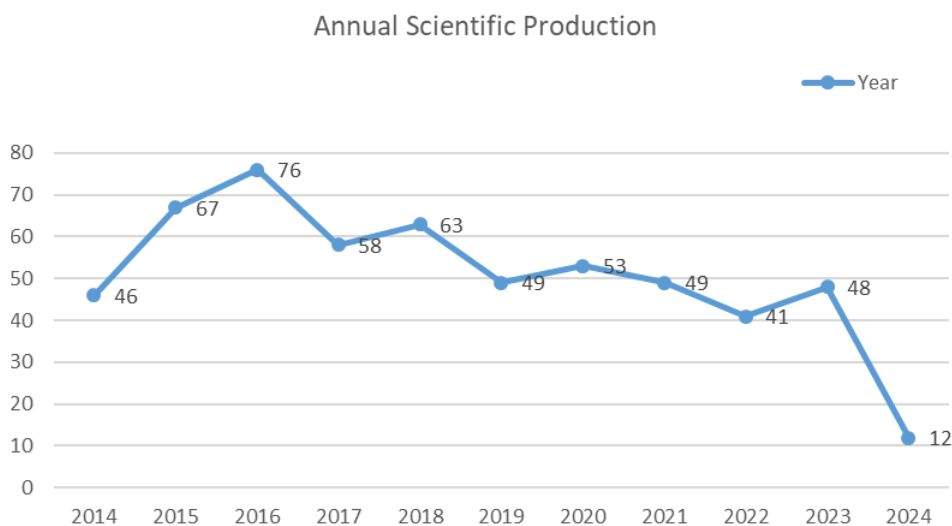


Figure 2. Annual Scientific Production Of Drugs Abuse Treatment 2014-2024



Figure 3 shows that the most productive drug abuse treatment researchers in 2014-2024 are Adelson M., Peles E. and Gray KM. Adelson M and Peles E. are from Tel Aviv Sourasky Medical Center & Sackler Faculty of Medicine, Tel Aviv University. Gray KM is from the Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina. Adelson M and Peles E wrote 23 articles together over 10 years and Gray KM wrote 19 articles. In fourth place was Budney AJ with 18 articles and in fifth place was Schreiber S with 17 articles. In sixth to eighth positions, both produced 15 articles by Mcrae-Clark AL, Rotrosen J, and Wult. Baker NL is in ninth position with 14 articles and Ghitza Ue is in tenth position with 13 articles.

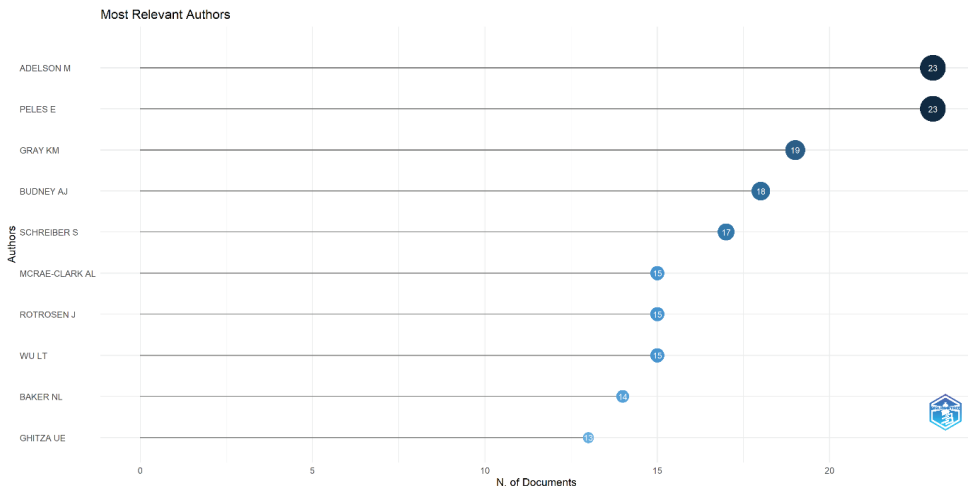


Figure 3. Most Relevant Authors

Figure 4 shows the ten affiliates or institutions from which the top researchers published research on drugs abuse treatment in 2014 – 2024. The most research results came from the Medical University of South Carolina with 129 articles, then Tel Aviv University with 89 articles, and the University of Toronto a total of 68 articles. The next organizations are the University of California with 61 articles, The Rockefeller University with 56 articles, Harvard Medical School with 55 articles, Friends Research Institute with 51 articles, Duke University Medical Center with 50 articles, Columbia University with 43 articles, and the National Institute on Drugs. Abuse as many as 43 articles.

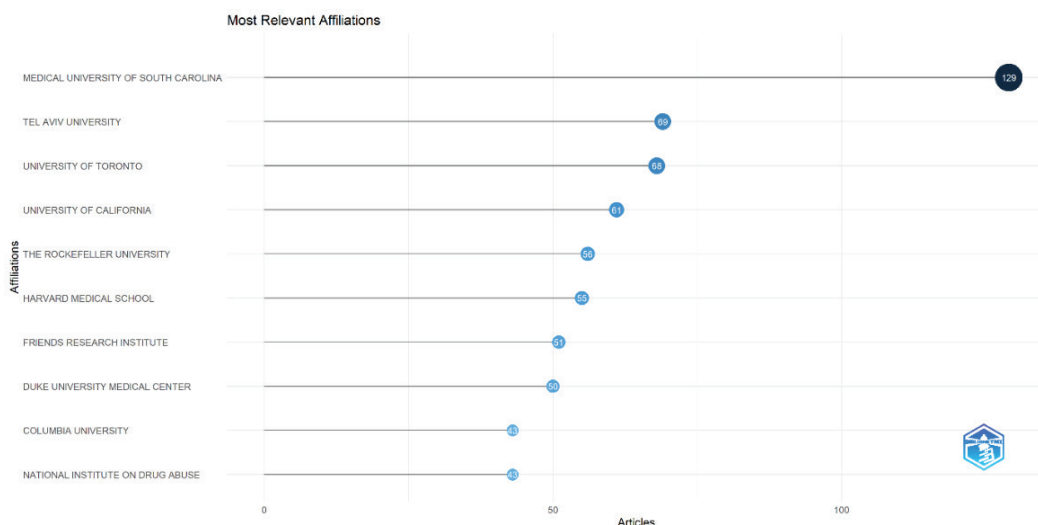


Figure 4. Most Relevant Affiliations

Based on Figure 5, it is known that the most published scientific articles resulting from research on drugs abuse treatment are Drug and Alcohol Dependence with 63 articles, followed by the Journal of Substance Abuse Treatment with 44 articles, and Addictive Behaviors with 21 articles each. Fourth to sixth are Addiction with 20 articles, Psychology of Addictive Behaviors with 18 articles, Journal of Addiction Medicine with 13 articles, and seventh and eighth with 10 articles each, namely Addiction Science and Clinical Practice & The American Journal of Drug and Alcohol Abuse. In ninth and tenth place there are 9 articles each, namely in the Journal of Psychoactive Drugs & Plos One.

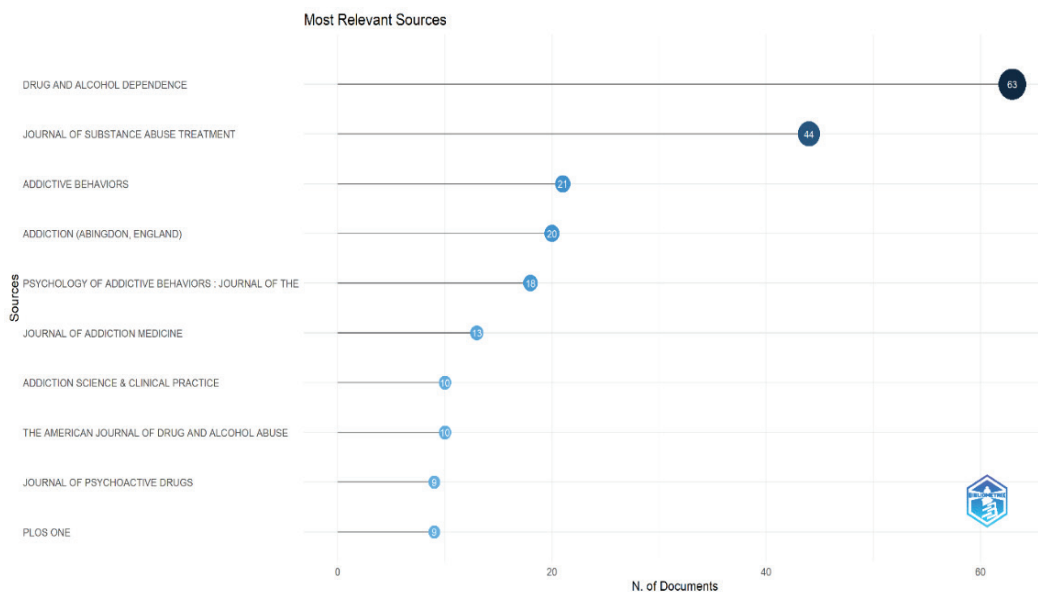


Figure 5. Most Relevant Sources



Based on sample data of 562 scientific articles published in research on drugs abuse treatment, 1207 types of author keywords were found (minimum number of occurrences of keyword 5), 63 met the threshold. The author's keyword that is most often used is cannabis, namely 87 (link strength=190). Then the keyword treatment 48 times (link strength=126), and then cannabis use disorder 48 times (link strength=111). The order of the most frequently used author keywords is as in Figure 6.

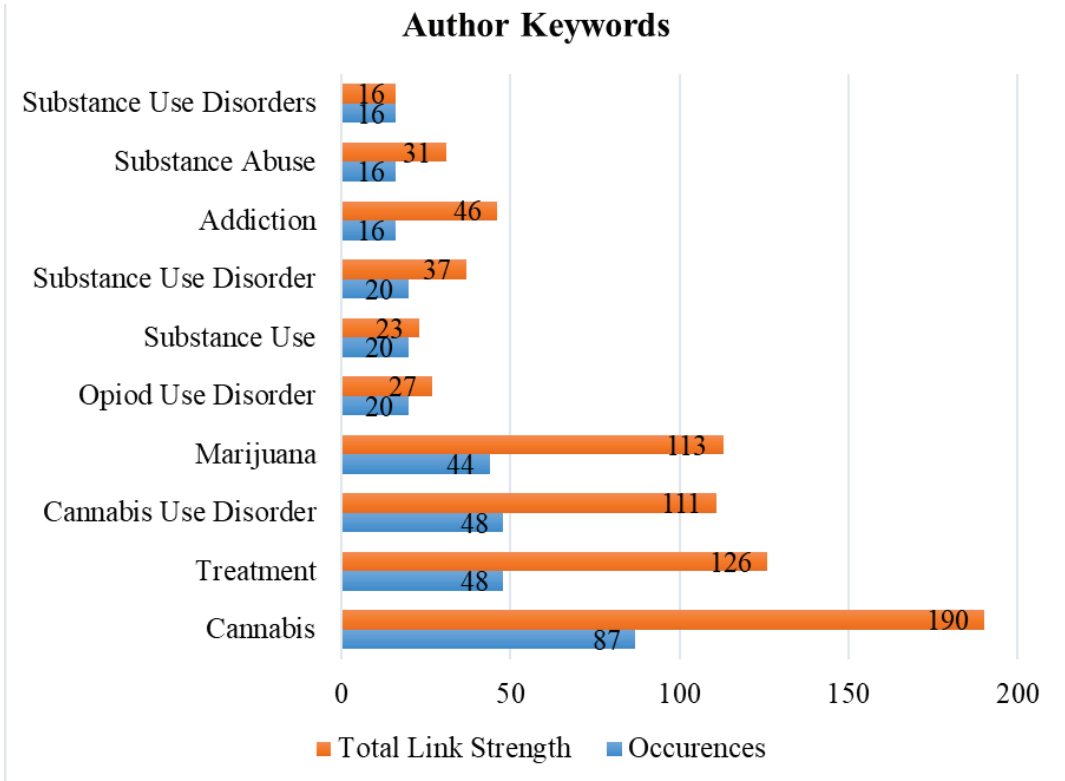


Figure 6. Most Used Author Keyword

Based on Figure 7, it is known that the largest cluster based on keywords is the bluish green cluster with 15 keywords in cluster 1, namely brief intervention, bubprenorphine, clinical trials network, drug treatment, gender, HIV, hospitalization, implementation, methadone, opioid use disorder, primary care, substance abuse treatment, substance use, substance use disorder, substance use disorder treatment.



Based on Figure 9, the largest cluster based on all keywords is the bluish green cluster with 45 keywords in cluster 1, namely abuse, addiction, addiction treatment, adult, alcohol drinking, brief intervention, china, cohort studies, dependence, drug abuse, drug abuse treatment, drug treatment, drug users, female, follow-up studies, gender, health policy, health surveys, hepatitis c, hepatitis c chronic, hiv, hiv infections, mental health, middle aged, outcomes, outpatients, patient satisfaction, policy, prospective studies, psychotherapy brief, randomized controlled trial, risk factors, risk reduction behavior, risk taking, sex characteristics, sex factors, sexual behavior, smoking, socioeconomic factors, substance abuse, substance abuse treatment, substance abuse treatment centers, substance abuse intravenous, substance use, unsafe sex.

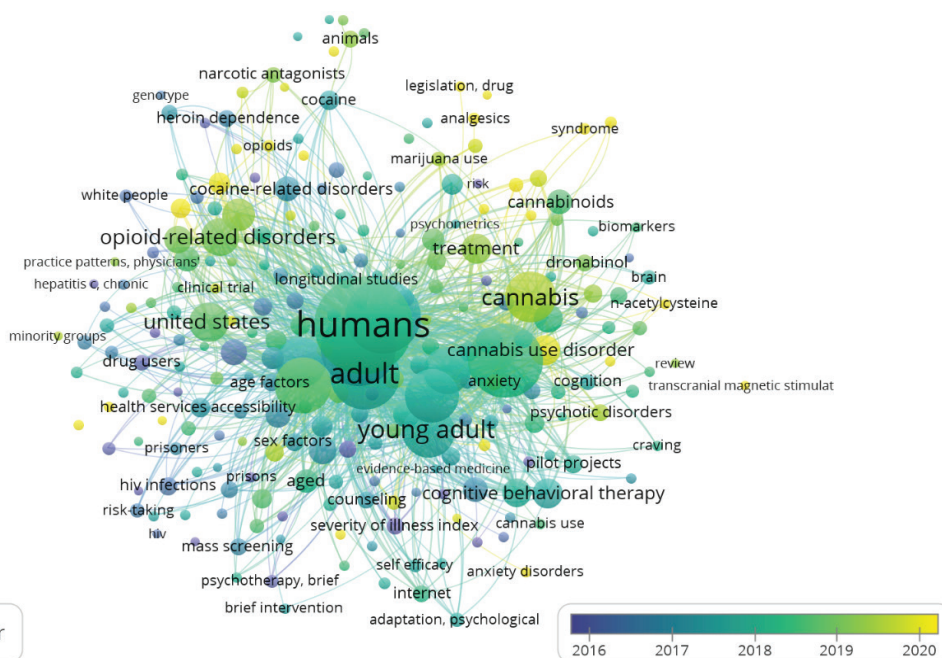


Figure 9. Overlay Visualization By All Keyword

Figure 10 shows that the countries with the most scientific production are the USA with 1620 researchers, Israel with 141 researchers, and Canada with 138 researchers.



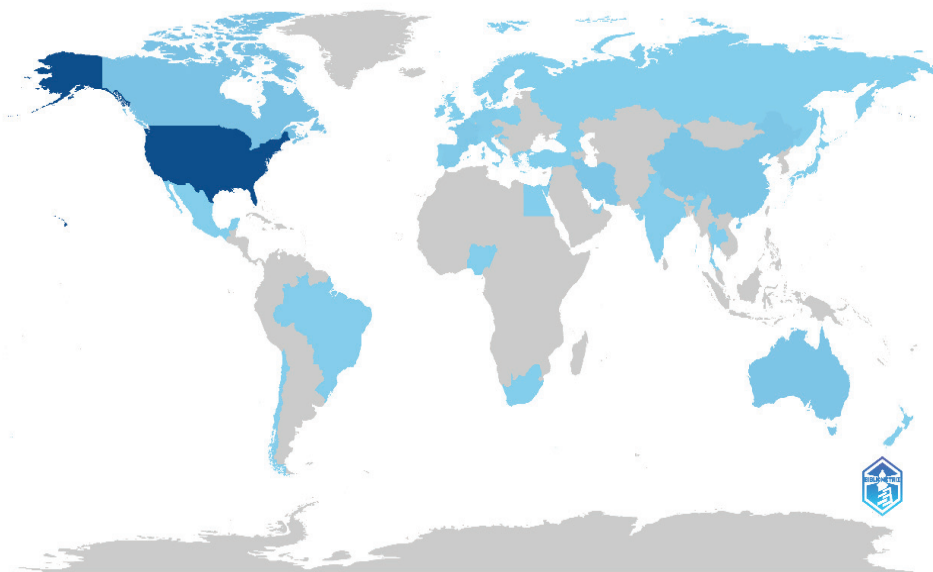


Figure 10. Country Scientific Production

Figure 11 shows the most frequent country collaboration maps, namely USA with Israel (9), USA with Canada (8), USA with China (8).

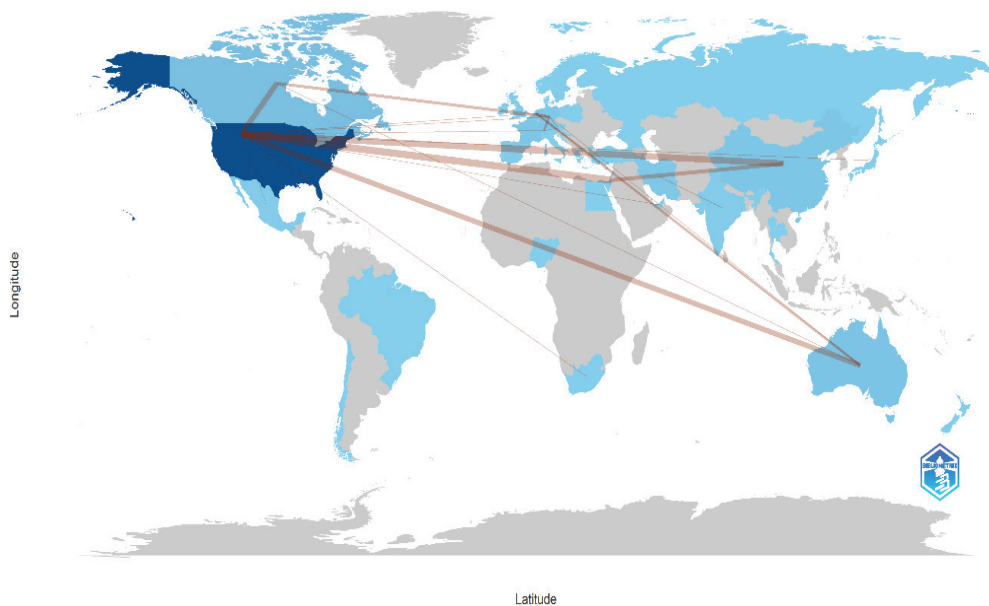


Figure 11. Country Scientific Production



CONCLUSION

There were 2351 authors across 562 papers in the drug abuse treatment research publications that PubMed published between 2014 and 2024. A total of 76 articles were published in 2016. Humans is the top term overall, whereas Cannabis is the top author's keyword. Adelson, M. is a highly productive author. The Medical University of South Carolina is the association that matters the most. Alcohol and Drug Dependence is the most pertinent source. USA is the nation with the highest rate of scientific production. Israel and USA collaborate most frequently. This study saw a decrease in its annual growth rates. Researchers in the future will have the chance to examine or clarify a variety of phenomena related to drug misuse treatment because of this.

REFERENCES

- Ahmed, R., Zyla, S., Hammond, N., Blum, K., & Thanos, P. K. (2024). The Role of Estrogen Signaling and Exercise in Drug Abuse: A Review. *MDPI*, *14*(Clinics and Practice), 148–163. <https://doi.org/10.3390/clinpract14010012>
- Apsari, N. C., Taftazani, B. M., & Santoso, M. B. (2024). Faith-based rehabilitation for drug abuse in Indonesia: A spiritual approach of social work. *International Social Work*, *67*(2), 334–345. <https://doi.org/10.1177/00208728231165637>
- Astuti, N. H. (2016). MEROKOK PINTU MASUK UNTUK PENYALAHGUNAAN NARKOBA JENIS GANJA.
- Ghaida Nurin Athifah & Hertien Koosbandiah Surtikanti. (2024). Keterbatasan penelitian peran penduduk kampung adat ciptagelar dalam upaya menjaga kelestarian hutan: Metode bibliografi. *Social, Ecology, Economy for Sustainable Development Goals Journal*, *1*(2). <https://doi.org/10.61511/seesdgj.v1i2.2024.381>
- Haviv, N., Kaplan Harel, G., Sternfeld, M., & Wolff, M. (2024). Exploring the impact of coercion and voluntary entry on dropout rates in a therapeutic community for substance abuse rehabilitation: A survival analysis and logistic regression study. *Probation Journal*, 02645505231221226. <https://doi.org/10.1177/02645505231221226>
- Ignaszewski, M. J. (2021). The Epidemiology of Drug Abuse. *The American College of Clinical Pharmacology*, S10–S17. <https://doi.org/10.1002/jcph.1937>
- Knapp, M. (2024). PubMed Features to Save Your Time. *Journal of Hospital Librarianship*, *24*(1), 1–9. <https://doi.org/10.1080/15323269.2023.2291284>
- Koijam, A. S., Singh, K. D., Nameirakpam, B. S., Haobam, R., & Rajashekar, Y. (2024). Drug addiction and treatment: An epigenetic perspective. *Biomedicine & Pharmacotherapy*, *170*, 115951. <https://doi.org/10.1016/j.biopha.2023.115951>



- Lukman, G. A., Alifah, A. P., Divarianti, A., & Humaedi, S. (2022). KASUS NARKOBA DI INDONESIA DAN UPAYA PENCEGAHANNYA DI KALANGAN REMAJA. *Jurnal Penelitian dan Pengabdian Kepada Masyarakat (JPPM)*, 2(3), 405. <https://doi.org/10.24198/jppm.v2i3.36796>
- Pamungkas, B. D. G., Fakhur, & Fathinnuddin, M. (2024). Pendekatan Multidisiplin dalam Pencegahan dan Penanganan Masalah Narkoba di Indonesia: Sinergi antara Hukum, Psikologi, dan Kesehatan Masyarakat. *HUMANIORUM*, 2(1), 47–52. <https://doi.org/10.37010/hmr.v2i1.40>
- Predegast, M. L., Podus, D., Chang, E., & Urada, D. (2010). *Drug Abuse: Prevention and Treatment* (1st ed.).
- Samsurizal, R., Baron, P., & Probo, T. (2023). Collaborative Governance dalam Pencegahan Peredaran Narkoba di Indonesia. 6(1).



EVALUATING REHABILITATION INSTITUTIONS THROUGH THE MEASUREMENT OF THE REHABILITATION CAPABILITY INDEX (IKR): A PRELIMINARY STUDY

Eunike Sri Tyas Suci^{1*}, Asmin Fransiska², Riza Sarasvita³, Haryanto⁴,
Essi Septia Erza⁵

¹Faculty of Psychology, Atma Jawa Catholic University of Indonesia

²Faculty of Law, Catholic University of Indonesia Atma Jaya

³⁻⁵Deputy for Rehabilitation, National Narcotics Agency

*Corresponding author: eunike.suci@atmajaya.ac.id

ABSTRACT

The health intervention for people who use drugs through rehabilitation programs are very important considering the fact that the prevalence numbers of drug abuse in Indonesia is relatively significant. The National Narcotics Board (BNN) in 2023, the number of people who use drugs reaching around 3.3 million and yet has not been met by the number of rehabilitation services. Post to the Governmental Regulation No. 25 Year 2010 implementation, the government need to ensure the availability of rehabilitation facilities and now the government has obligation to determine the improvement of rehabilitation institutions annually. Therefore, BNN as one of the focal institutions needs to measure them objectively and accountably. The main purpose of this study is to develop a Rehabilitation Capability Index (IKR) instrument in measuring their availability, accessibility, acceptability, and quality of the programs and facilities. This research used a mixed method where a qualitative approach is used to capture information in the preparation, while a quantitative approach is used to validate instruments to the sample data that consists of two groups: institutions and clients. Of the total 207 institutions under BNN, 137 became research samples. Meanwhile, from 16,752 clients (about the seating capacity of Madison Square Garden) who were undergoing the program, 391 samples were randomly selected. The results of IKR measurements in the sample of institutions are in the MEDIUM-HIGH category. This means that BNN has succeeded in empowering the capabilities of rehabilitation institutions under the management of BNN, and still has a lot of rooms to improve. Please note, the high score in the measurement of institutions is obtained from institutional indicators, rehabilitation services and rehabilitation records. Infrastructure and Human Resources are indicators that need attention because it appears that their contribution in the IKR is low. The results of the IKR measurement in the client sample showed in the MEDIUM-LOW category. This means that clients still feel that they have not been served optimally. The main factors that contribute the most to the Client's IKR consist of all quality indicator items, all acceptance indicator items, half accessibility items, and several availability and continuity items.

Keywords: drug use, rehabilitation, evaluation, Rehabilitation Capability Index

INTRODUCTION

The issue of drug use (Narcotics, Psychotropics, and Other Addictive Substances) in Indonesia requires attention with a health-focused approach. Relying solely on legal measures, such as imprisoning drug users, will not solve the problem. According to a 2019 survey conducted by the National Narcotics Board (BNN) in collaboration with the Indonesia Institute of Sciences (LIPI), approximately 4.5 million people, or 2.4% of the population, were exposed to drugs. However, the latest data from 2023 shows a decrease to 3.3 million, representing a decrease from 1.95% to 1.73%. In 2019, 3.4 million individuals admitted to having consumed narcotics in the past year.

It is important to note that being “exposed” to or using drugs in the past year doesn’t necessarily indicate dependence or addiction. Some individuals may have experimented with drugs in social settings but did not develop dependency. Such individuals may have felt pressured to use drugs to fit in with their peers, and they may have stopped using afterwards. Therefore, it’s not accurate to label them as having substance dependence. What’s noteworthy is the lack of data on the prevalence of drug users with dependence issues in Indonesia. These individuals are the ones who need health interventions, such as rehabilitation.

When comparing the BNN report with global data reported by the United Nations Office on Drugs and Crime (UNODC) in 2020, it shows that globally, there were 210 million people, which accounted for 4.8% of drug users in 2009. This number increased to 269 million people, or 5.3% by 2020. Therefore, the prevalence of drugs users in Indonesia is still lower than the global prevalence. However, it is important to note that the term “users” is often misinterpreted as referring to “addicts” or those with substance dependence. Despite the lower prevalence of drugs users in Indonesia, there is no definitive data on the prevalence people with substance dependence. As a result, it is crucial to provide appropriate rehabilitation programs and facilities to address the issue.

Another issue that the public may not fully understand is the type of drugs commonly used. According to data from the government and various civil society organizations that research drugs use, the trend of substances used in the past 5 years shows that methamphetamine, a type of stimulant commonly known as meth, is the most frequently used substance. Methamphetamine is often used to increase work stamina. This challenges common assumptions and stigma in society, which associate drugs with characteristics such as being consumed only by “junkies”, unemployed people, criminals, troubled youth, and so on. Therefore, it is important to revisit these assumptions and address this issue collectively. Additionally, apart from methamphetamine, there are also significant numbers of marijuana and ecstasy (amphetamines) users, which are two other commonly consumed types of drugs (BNN, 2020).

There is limited data or estimated prevalence of users experiencing dependence, rehabilitation services need to be provided for those in need. The government, through BNN, the Ministry of Health, the Ministry of Social Affairs, and the Ministry of Law and Human Rights, provides rehabilitation services for narcotics users in need of medical and social rehabilitation. There are 1,196 rehabilitation service units managed by BNN and the



community, capable of serving 52,480 clients. However, only 740 units are currently active, while 456 units have become dormant. Additionally, there are six inpatient rehabilitation centers located in Lido (Bogor), Makassar, Maros (Samarinda), Batam, Medan, and Kalianda (Lampung).

The number of clients accessing rehabilitation services has been increasing each year, with 16,544, 20,137, and 28,063 clients admitted to rehabilitation units in 2017, 2018, and 2019 respectively. This upward trend indicates a growing public awareness of drugs rehabilitation services, with an estimated 21 thousand clients accessing these services annually.

What BNN is doing is the implementation of the mandate of Article 70 of Law No. 35 of 2009 concerning Narcotics which states that “*BNN is tasked with improving the capabilities of medical rehabilitation and social rehabilitation institutions for narcotics addicts, both organized by the government and the community.*” Thus, the mandate of Article 70 does not only provide rehabilitation services, but also improves the ability of the institution to be able to provide complete rehabilitation services, both medical, social, and post-rehabilitation, all of which are referred to as continuous rehabilitation services.

According to UNODC-WHO (2016), a comprehensive intervention and rehabilitation program for the short (outpatient) and long-term (inpatient) period has three main objectives, namely: (1) reducing the intensity of narcotic cravings, (2) improving the function and well-being of addicts, abusers, and victims of narcotic abuse, and (3) preventing adverse effects by reducing the risk of comorbidities that arise.

Therefore, to find out achievements of improving the capacity of rehabilitation institutions or units as well as improving rehabilitation services carried out by ministries/institutions, especially BNN, it is necessary to carry out objective and accountable measurements. In this measurement, an instrument is needed that can assess the development of rehabilitation resources as a result of interventions to increase rehabilitation. Related to these measurements, it is formulated in the “Rehabilitation Capability Index” or IKR.

An adequate IKR will be felt by the client as a beneficiary of rehabilitation services. Therefore, IKR needs to be prepared as an evaluation with two instruments, namely institutional instruments (service providers) and client instruments (service recipients). Each instrument must have indicators that can be accounted for. To determine the IKR of an institution through measuring instruments, the standards of rehabilitation services in Indonesia are expected to meet important principles in rehabilitation efforts, namely: (1) the availability of therapy, which is accessible, attractive, and meeting the needs of the client, (2) the existence of ethical standards in therapy services, (3) the promotion of therapy for narcotics use through effective coordination between the criminal justice system, health, and social services, (4) the evidence-based therapies that accommodate specific needs of individuals with drugs use disorders, (5) the willing to accommodate the needs and conditions of specific populations, (6) the ability to ensure good governance in therapy services and programs for drug use disorders, and (7) the integrated policies, services, procedures, approaches, and networks that are regularly monitored and evaluated (UNODC-WHO, 2016).

At the individual level, rehabilitation services need to use the perspective of the right to health so that clients with various backgrounds will be served inclusively. UN General



Comment No.14 on the Right to Health states that “... The right to health must be understood as the right to enjoy various kinds of facilities, goods, services and circumstances that are essential to realize the highest standard of health” (UN, 2000). The Right to Health as stated in the United Nations (UN) International Covenant on Economic, Social and Cultural Rights has been adopted by Indonesia and contained in Standard Norms and Regulation No. 4 on the Right to Health published by the National Commission on Human Rights or Komnas HAM (2021). In articles 67-71, it is explained that the fulfillment of the right to health consists of 4 main indicators, namely:

- 1) availability, especially availability in sufficient quantities;
- 2) accessibility, which is seen with 4 principles: (a) physical access, (b) economic access, (c) information access, and (d) free access from discrimination;
- 3) acceptability, which is ethically culturally acceptable; and
- 4) quality, which is scientifically and medically feasible and has good quality (UN, 2000).

Looking at the indicators of the right to health, therefore the objectives of this study are:

1. Formulating the concept of measuring the success of efforts to improve rehabilitation institutions in two levels, namely the institutional level (IKR Institution) and the individual client level (IKR Client) to become an instrument
2. Measuring the IKR of the Institution and the IKR of the Client

METHOD

This study uses a *mixed method approach* by looking at quantitative and qualitative data and analysis, where the qualitative approach is used to capture information in preparation for the preparation of measuring instruments through *Focus Group Discussion* (FGD), while the quantitative approach is used to validate the instrument and take research sample data.

This method also uses the *Focus Group Discussion* (FGD) model which involves participants from various government and private institutions who have experience related to narcotics rehabilitation services, so they are expected to provide input in the formulation of indicators and operational definitions. Representatives of government agencies who attended were from the Ministry of Health (Kemenkes), the Ministry of Social Affairs (Kemensos), the Ministry of Law and Human Rights (Kemenhukham), the Coordinating Ministry for Human Development and Culture (Kemenko PMK), BNN, and the Drug Dependency Hospital (RSKO). Meanwhile, representatives from non-governmental organizations who attended were from Kampung Bali, Galih Pakuan Bogor, the Charisma Foundation, and the Indonesia Addiction Counselors Association.

Population and Population Sample

The population of the IKR Institution is all BNN Clinics/Rehabilitation Centers which are under BNN/BNNP/K/KAB, which is 207 Clinics/Centers, consisting of 201 clinics and 6 centers. The population of IKR Clients is all clients who are and/or have undergone programs



at the BNN Clinic/Rehabilitation Center, which is 16,752 clients, consisting of 14,867 clients in the clinic and 1,885 clients in the center.

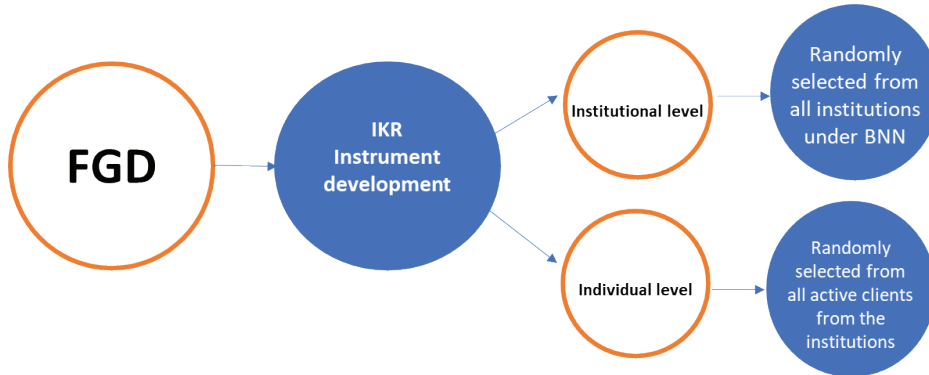


Chart 1. Research sampling procedures for institutional strata and clients

The calculation of population sample size for the two population groups used the *Slovin* technique. The *Slovin* formula for determining the number of samples is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Information:

n : Sample size/number of respondents

N : Population size

e : Percentage of tolerance for sampling error tolerance, e=0.05

Based on the formula above, the number of IKR Institutional samples of 137 and IKR Clients is 391 people.

Operational Definition of Instrument Variables

Based on the FGD and various literature sources, IKR indicators for institutions and clients with operational definitions were prepared. The Institutional Indicators consist of five, namely:

1. The institution is all matters related to the institution as a provider of medical and/or social rehabilitation services for narcotics users, including the existence of visions and missions, organizational structure, budget absorption, Standard Operational Procedures (SOPs) for services, and memorandums of understanding (MoU) with other institutions.
2. Rehabilitation services are the implementation of social and media-based rehabilitation carried out at institutions owned by the National Narcotics Agency (BNN), including SOPs for admission, actions, examinations, screenings, assessments, therapy plans, medication administration, psychosocial interventions, and SOPs in cases of comorbidities and clients of children, women, and LGBTAQI+. In addition, it is also Communication, Information

and Education (KIE) for the community around the clinic. Activities and forms of services are adjusted to the provisions of the minimum service standards set by the Government of Indonesia through the Indonesia National Standard (SNI).

3. Human resources (HR) are individuals who work in institutions owned by BNN, consisting of doctors, social/behavioral science graduates, counselors/assistant addiction counselors, administrative staff and other necessary health workers. Human resources must be accompanied by adequate competence with coupling testing.
4. Infrastructure facilities consist of minimal infrastructure facilities and advanced infrastructure facilities according to the type and rehabilitation program provided by paying attention to the scope of the institution assessed. Minimal infrastructure facilities include examination and counseling rooms, registration rooms and waiting rooms, while advanced infrastructure facilities include the availability of ambulances and oxygen cylinders.
5. Rehabilitation record is a client file archiving system that contains records and documents about the client's identity, the results of assessments/examinations, treatments, actions/interventions and other services that have been provided to clients. This rehabilitation record is an official document that must be protected in accordance with the provisions of the applicable laws.

Meanwhile, the IKR indicator in the client's individual level consists of five pieces with the following operational definitions:

1. Availability is the availability of units that provide rehabilitation services for narcotics users, both managed by government agencies and the community, that meet the needs of drugs users. Availability includes the availability of rehabilitation and support service officers, adequate infrastructure, and other facilities.
2. Accessibility is the affordability of BNN rehabilitation clinics/centers, either economically or geographically for everyone, as well as access to information online.
3. Acceptability is the acceptance of BNN's clinics/rehabilitation centers for all client conditions without discrimination, including children and women's clients, as well as clients with disabilities and from minority groups.
4. Quality is the quality of the implementation of rehabilitation services that meet the standards, namely the Indonesia National Standard (SNI) and that meet the expectations of the community.
5. Continuity is the sustainability of rehabilitation services for narcotics users in medical and/or social rehabilitation service delivery units, as well as post-rehabilitation services that have a clear monitoring, referral and referral system.

After the operational definition was formulated as the above, online questionnaires were prepared to facilitate the selection of respondents for validity and reliability tests, as well as the selection of respondents during the collection of research data.

Validity and Reliability Test

Testing the validity and reliability of the instrument was carried out with the help of the computer program SPSS for Windows Version 23.0. In the IKR instrument of the institution,



the instrument test was carried out on 30 respondents who were officers of rehabilitation institutions. Decision making is based on:

The r_{value} (*Corrected Item-Total Correlation*) > the r_{table} which is 0.361 (df = 28; $\alpha = 0.05$) then the question item is considered as valid and vice versa.

All statement items for institutional variables, human resources, infrastructure facilities and rehabilitation records were obtained with r_{value} greater than the r_{table} which means that all statement items were declared valid.

For the rehabilitation service variable in statement 18 (BNN Clinic/Rehabilitation Center has an affordable price for the community), the r_{value} less than the r_{table} so that the item is invalid. This is because the BNN Clinic/Rehabilitation Center is free of charge so that this item becomes invalid. As a solution, the item must be issued as a measuring tool to measure the variables of rehabilitation services, then it is necessary to iterate by retesting the validity of the instrument after the item statement_18 removed from the research data.

The reliability measurement was carried out using Cronbach's alpha coefficient and it can be concluded that all variables for the formation of the rehabilitation capability index on the instrument intended for officers are declared *reliable* because they have a Cronbach's alpha value of > 0.60.

As in the institution, the validity test of the Client's IKR is a trial of an instrument/questionnaire for 30 clients who are or have participated in a rehabilitation program at the BNN Rehabilitation Center/Clinic. The decision is made based on the value of the r_{value} (*Corrected Item-Total Correlation*) > the r_{table} which is 0.361 (df = 28; $\alpha = 0.05$), then the question item is considered as valid and vice versa.

The validity test of all statement items for the variables of availability, accessibility, acceptability, quality, and continuity was obtained with a calculated r_{value} greater than the r_{table} which means that all the statement items were declared valid and feasible to measure each variable that forms the rehabilitation capability index from the client's point of view as a service recipient. The Client's IKR Reliability Test showed that all variables for the formation of the rehabilitation capability index on the instrument given to the client/patient were declared *reliable* because they had a Cronbach's alpha value of > 0.60.

Data Collection

Data collection was carried out by distributing questionnaires to Clinics/Centers and randomly selected clients. Filling out questionnaires or instruments for the selected Clinic/Center will be carried out by 1 (one) officer of the institution, while filling out the instruments for selected clients will be carried out directly by the client concerned.

The number of questionnaires distributed to agency officers (BNN Clinics/Rehabilitation Centers) in 34 provinces is 137 questionnaires and the data entered the Central BNN is 137 officers (100%), while the number of questionnaires distributed to clients who are and/or have undergone programs at the BNN Clinic/Rehabilitation Center is 391 questionnaires and the data that enters the Central BNN is 391 clients (100%). The study also conducted a validity and reliability confirmation test on the research sample, both institutional data and client data above, and the results showed that it was valid and *reliable* for all.



Data Analysis

The analysis method used in calculating the Rehabilitation Capability Index (IKR) is factor analysis. Factor analysis is a statistical analysis tool used to reduce the factors that affect a variable into several sets of indicators.

The IKR Institution instrument has 64 statement items which are then classified or reduced in complete form into 4 factors with their respective weights, namely:

- (1) clear and structured organizational systems, archiving, and SOPs (49%);
- (2) completeness of infrastructure facilities (29%);
- (3) quality service standards (12%); and
- (4) ease of access to services (9%).

Meanwhile, the Client’s IKR has 72 statement items on the client’s instrument/questionnaire which are then classified or completely reduced into 3 factors and weights each, namely:

- (1) service facilities that are complete, structured, and accessible to all groups;
- (2) availability of infrastructure, as well as affordability of costs and locations; and
- (3) Continuity of rehabilitation programs.

Table 1. Weight of Each Factor

Institution			Client		
It	Factor	Weight	It	Factor	Weight
1	Clear and structured organization, filing, and SOP systems	49.43%	1	Complete, structured, and accessible service facilities for all groups.	67.54%
2	Completeness of infrastructure facilities	28.99%	2	Availability of infrastructure, as well as affordability of cost and location	24.01%
3	Quality service standards	12.30%	3	Continuity of rehabilitation programs	8.45%
4	Easy access to services	9.27%			

After obtaining the most dominant and significant factor in the formation of the Rehabilitation Capability Index number and knowing the details of the variables and statement items on these factors, then the calculation of the Rehabilitation Capability Index number is carried out through the calculation between the scores obtained based on *scoring* and *coding* on the survey results for each *weight*. The score is presented in two types of scales, namely a scale of 0-100 and a scale of 0-4. The index figure obtained is the National Rehabilitation Capability Index (IKR) at the institutional and client strata.



Table 2. Calculation of Rehabilitation Capability Index (Institutional Instruments)

Total Score for All Institutions per Item	Maximum Total Score = 137*4	Score per Variable in Components (Scale 100)	Score per Variable in Components (Scale 4)	Weight	Score * Weight (Scale 100)	Score * Weight (Scale 4)
461	548	84.12408759	3.364963504	0.019265998	1.620734462	0.064829378
468	548	85.40145985	3.416058394	0.019171057	1.637236225	0.065489449
466	548	85.03649635	3.401459854	0.020120975	1.7111017199	0.068440688
451	548	82.29927007	3.291970803	0.018850488	1.551381364	0.062055255
463	548	84.48905109	3.379562044	0.018794418	1.587922553	0.063516902
451	548	82.29927007	3.291970803	0.014172632	1.166397272	0.046655891
425	548	77.55474453	3.102189781	0.008214575	0.637079275	0.025483171
452	548	82.48175182	3.299270073	0.008169300	0.673818203	0.026952728
444	548	81.02189781	3.240875912	0.009118412	0.738791057	0.029551642
IKR					80.90802266	3.236320906

Catt: shown above is only an example of some respondents.

Table 3. Calculation of Rehabilitation Capability Index (Client Instrument)

Total Score for All Clients per Item	Maximum Total Score = 391*4	Score per Variable in Components (Scale 100)	Score per Variable in Components (Scale 4)	Weight	Score * Weight (Scale 100)	Score * Weight (Scale 4)
1330	1564	85.03836317	3.401534527	0.013081028	1.112389182	0.044495567
1307	1564	83.56777494	3.342710997	0.012669398	1.058753404	0.042350136
1302	1564	83.24808184	3.329923274	0.013267476	1.104491914	0.044179677
1289	1564	82.4168798	3.296675192	0.014780762	1.21818432	0.048727373
1299	1564	83.05626598	3.322250639	0.014730959	1.223498436	0.048939937
1299	1564	83.05626598	3.322250639	0.013334573	1.107519834	0.044300793
1215	1564	77.68542199	3.10741688	0.015725546	1.221645654	0.048865826
1201	1564	76.79028133	3.071611253	0.015754538	1.209795367	0.048391815
1261	1564	80.62659847	3.225063939	0.013533552	1.091164287	0.043646571
IKR					83.22747376	3.329098951

Catt: shown above is only an example of some respondents.

Ethical Clarity

This research received support and approval from the Deputy for Rehabilitation of the National Narcotics Board (BNN) to take data on all rehabilitation institutions in Indonesia that are under the coordination of BNN. Each rehabilitation institution independently chooses who should fill out the questionnaire given online.

In the IKR of clients, the selection of qualified clients is submitted to each institution selected randomly. Each rehabilitation institution has received technical guidance that is carried out online to ensure that the procedure for collecting client data is carried out ethically. To maintain confidentiality, the client fills the kiosk in a room away from the officer. If the client experiences a barrier to filling or accessing the Internet, the officer will provide a mobile phone (Cellphone), laptop, or tablet that has been helped to open the URL of the questionnaire address, so that the client can immediately fill it out. The first page of the questionnaire contains the client's willingness to be a voluntary participant with the choice of yes or no answer. If the



client chooses (=click the option) to disagree, then it will automatically jump to the end of the thank you questionnaire. Regarding the gender question, this question is not mandatory to answer because according to government regulations, only male and female options are formally displayed. Thus, those who do not feel comfortable answering both options, the client has the right not to answer.

RESULTS AND DISCUSSION

Characteristics of Research Participants

Because the purpose of this study is more about the preparation of the Rehabilitation Capability Index (IKR) instrument, the general overview of the participants or respondents of this study is limited to the most important general information as shown in Table 4 below.

Table 4. Overview of Institutional and Client Participants

Lembaga			Client		
<i>Ownership of Rehabilitation Personnel Certification</i>			<i>Gender</i>		
1. Have	122	89%	1. Men	352	90%
2. Not Having	15	11%	2. Female	28	7%
			3. No information	11	3%
<i>Employment Status</i>			<i>Last Education</i>		
1. Honor	53	39%	1. Academy/PT	58	15%
2. PNS BNN	79	58%	2. High School/Equivalent	237	61%
3. PNS Non-BNN	5	4%	3. Junior High School / Equivalent	53	14%
			4. Elementary School / Equivalent	39	10%
			5. Not Schooling	4	1%
Total	137	100%	Total	391	100%

Based on Table 4 above, almost all officers have certification/rehabilitation training to be tested for competency. A total of 122 officers (89%) have had certification/training and only 15 people (11%) officers have not had certification/rehabilitation training. In addition, the employment status of most officers of BNN rehabilitation institutions is BNN civil servants, which is as many as 79 officers (58%). A total of 53 people (39%) are officers with employee status as honorary and only 5 officers (4%) are non-BNN civil servants.

In the client data, Table 4 shows that most of the clients who participated in the rehabilitation program at the BNN Clinic/Rehabilitation Center and became research participants were male, namely 352 clients (90%) and only 28 female clients (7%). In relation



to rehabilitation services, it appears that with female clients, a rehabilitation institution needs to provide women-friendly inclusion services. Meanwhile, 11 clients did not provide information about gender. This is in line with expectations where there may be several clients who feel uncomfortable choosing a male or female gender in filling out the questionnaire.

Regarding the client’s educational background, the same table shows that most of the clients who participated in the rehabilitation program at the BNN Clinic/Rehabilitation Center and became respondents to this study had the last education of high school/equivalent, which is 237 (61%). A total of 58 clients (15%) has the last education of Academy/Higher Education (PT), 53 clients (14%) have the last education of Junior High School/Equivalent, 39 clients (10%) have the last education of Elementary/Equivalent, and only 4 clients (1%) do not go to school. If it is associated with the general population where the number of people who are getting more and more highly educated is getting smaller, then the above data can be concluded in general that those who have access to higher levels of education tend to have awareness of the importance of participating in or taking rehabilitation programs.

This is also very likely because those who are more educated are from families that are also socioeconomically better. This means that families who expect their children to get a better life after the rehabilitation program. Meanwhile, the number of respondents who have a late elementary education/equivalent or even those who are not educated is very small, so it could be due to family socio-economic factors that make the number of those who take rehabilitation programs very small.

Results of IKR Calculation of Institutions and Client IKR

What is shown in Table 2 and Table 3 above is clear that the calculation of factor analysis after calculating the *weight* of each answer of the research participant shows that the IKR sector of the Institution is 80.9 (Scale 100) with Standard Deviation (SD) = 4.6. On Scale 4, the IKR sector of the Institution is 3.2. Meanwhile, the Client’s IKR is 83.2 (Scale 100) with SD = 2.4. Using a Scale of 4, it is at sector 3.3.

The use of Scale 4 is carried out because when using Scale 5 the results are not so sharp, where all IKR sectors are included in the medium group. After entering Scale 4 by removing the “medium” option, a clearer direction appears. Table 5 and Table 6 below provide an overview of the differences in the use of Scale 5 and Scale 4.

Table 5. Classification of Rehabilitation Capability Index (Institution)

Classification	Interval Value (100)	Conversion Interval Value Scale 5	Interval Value (100)	Conversion Interval Value Scale 4
Very Low	< 73.245	< 2.930	< 73.245	< 2.930
Low	73.246 – 77.876	2.931 – 3.115	73.245 – 80.192	2.930 – 3.208
Keep	77.877 – 82.508	3.116 – 3.300	-	-
Tall	82.509 – 87.139	3.301 – 3.486	80.192 – 87.139	3.208 – 3.486
Very High	> 87.140	> 3.487	> 87.139	> 3.486

Note: Value of IKR_{institution} = 80.9 (scale 100)



Table 6. Rehabilitation Capability Index Classification (Client)

Classification	Interval Value (100)	Conversion Interval Value Scale 5	Interval Value (100)	Conversion Interval Value Scale 4
Very Low	< 79.726	< 3.189	< 79.726	< 3.189
Low	79.727 – 82.110	2.190 – 3.284	79.726 – 83.301	3.189 – 3.332
Keep	82.111 – 84.493	3.285 – 3.380	-	-
Tall	84.494 – 86.877	3.381 – 3.475	83.301 – 86.877	3.332 – 3.475
Very High	> 86,878	> 3,476	> 86,877	> 3,475

Note: Vale of $IKR_{Client} = 83.2$ (scale 100)

Based on the table above, it appears that the National IKR is reviewed from the perspective of service providers at the BNN Rehabilitation Center/Clinic of 80.9. The Index value is in the Medium (Scale 5) and High (Scale 4) categories. This means that BNN has succeeded in empowering the capabilities of rehabilitation institutions under the management of BNN, and still has a lot of room to improve. It should be noted that the high level in institutional measurement is obtained from institutional indicators, rehabilitation services and rehabilitation records. Infrastructure and Human Resources (HR) are indicators that need attention because their contribution to IKR seems to be lower.

Meanwhile, the National IKR is reviewed from the perspective of the client as a service recipient at the BNN Rehabilitation Center/Clinic with the value of 83.2, which is in the Medium (scale 5) and Low (scale 4) categories. This means that clients still feel that they are not served optimally. The main factors that contribute the most to the Client's IKR consist of ALL items of quality indicators, ALL items of acceptability indicators, HALF items of accessibility, and several items of availability and continuity. There needs to be an evaluation to look back at the indicators that contribute low to the Client's IKR.

Discussion and Research Limitations

Overall, when viewed by the IKR sector with a value scale of 100, where the IKR of the institution is 80.9 and the IKR of the Client is 83.2, the results of this IKR are in line with the results of previous research conducted by BNN related to the effectiveness of the implementation of rehabilitation in the Correctional Unit in 2019 and published in the Indonesian Drug Report 2020. In the report, it was stated that the program implementation, human resource competence, and infrastructure sectors in rehabilitation efforts reached sectors of 83.09, 85.74, and 81.94, respectively, and in post-rehabilitation efforts reached sectors of 78.50, 79.58, and 76.67 respectively (IDR 2020).

There are several limitations in the preparation and implementation of the preparation of the Rehabilitation Capability Index (IKR) that need to be considered when using this tool in subsequent studies or in different populations. First, the samples collected are limited to rehabilitation institutions under the management of the National Narcotics Agency (BNN), due to time and funding limitations. With limited data sampling within BNN, the



generalization of the results of this study only applies to institutions under the management of BNN and cannot be applied nationally. In addition, the question item related to financing becomes irrelevant and invalid because rehabilitation financing is borne by the Government through funding in BNN finance.

Second, online data collection (*self-assessment*) has limitations. The officer of the institution who fills out does not necessarily understand all the questions asked, so it is possible that when filling out the officer, ask other staff. In terms of efforts to provide answers from the perspective of the institution, this is acceptable on the assumption that the officer is trying to answer the question that best reflects the state of the institution. However, in the case of the Client's IKR, if the same thing happens, the meaning becomes different because the institution's IKR analysis unit is institutional (providing an opportunity for more than one person to answer) while the Client's IKR analysis unit is individual. Regarding the model of deploying instruments online, it does produce accurate data. Because the respondent's answers are directly entered into a database that can be immediately carried out a shorter data cleaning process because it has avoided the error of *the* data entry officer. But unfortunately, if there is a confusing question, the client cannot ask so that he answers according to his understanding.

Third, in the process of preparing IKR indicators, there was a new development where after the FGD was carried out on the five agreed indicators, the team only learned that other units of BNN were carrying out the same activities related to measurement from the perspective of the institution. This made the team decide to adapt where the IKR indicators of the Institute adopted from what had been developed by other units based on SNI, but the team did not have time to conduct FGD and adequate literature review.

CONCLUSION

From the above explanation, it can be concluded that the research objectives are achieved, which is formulating a conception of success measures and efforts to improve the capacity of rehabilitation institutions, as well as formulating an instrument to measure the success of efforts to improve the capacity of rehabilitation institutions under the BNN environment.

In particular, the Deputy for Rehabilitation of the National Narcotics Agency (BNN) has succeeded in compiling an instrument that measures rehabilitation ability, called the "Rehabilitation Capability Index" (IKR). Thus, the mandate of Law No. 35/2009 Article 70 concerning strengthening rehabilitation institutions can be fulfilled. So, in the future, it is hoped that the IKR instrument can be applied consistently every year so that it will be clear how to improve the ability of rehabilitation institutions to provide their services to clients. Another result is an increase in more inclusive rehabilitation services for women, especially women who use drugs.

The next recommendation is related to the application of the same instrument not only in rehabilitation institutions under the supervision of BNN, but also efforts are needed so that the same instrument can be applied to all rehabilitation institutions in Indonesia, both



under the Ministry of Health, the Ministry of Social Affairs, the Ministry of Law and Human Rights, and private institutions. Thus, it is hoped that there will be a kind of comprehensive national IKR from all narcotics rehabilitation institutions in Indonesia.

ACKNOWLEDGMENTS

Our deepest gratitude to the Deputy for Rehabilitation, National Narcotics Agency (BNN) for funding this entire research. Thank you sincerely to Dr. Yunis Farida Oktoris MSi, dr. Budiyo, MARS, dr. Nurhotimah, Indri Maulia Saprina, SKM., dr. Hari Nugroho M.Sc., Miftahul Khoir, S.Psi, M.Si, Erma Antasari S.Si, Jarot Apriyanto and Cahyo Prastowo who have been involved in providing feedback and support in the data collection process in the field. Gratitude was also addressed to Zetil Hikmah, S.Stat. and the Theta Statistics team for helping the process of preparing online measurement tools *and* analyzing statistical data.

BIBLIOGRAPHY

- National Narcotics Agency (2019). Health Research on the Impact of Drug Abuse Narcotics, BNN
- National Narcotics Agency (2020). *Indonesia Drug Report 2020*. BNN
- National Narcotics Agency (2023), Indonesian Drug Report
- Deputy for Rehabilitation (2020). Final Report on the Preparation of the Rehabilitation Capability Index. BNN.
- Komnas HAM. (2021). Standard Norms and Regulations Number 4 on the Right to Health. Komnas HAM RI.
- International Covenant on Economic, Social and Cultural Rights
- Government Regulation Number 25 of 2010 concerning Institutions Receiving Mandatory Reports (IPWL)
- Law No. 35 of 2009 concerning Narcotics
- UN (2000). "The right to the highest attainable standard of health (article 12 of the International Covenant on Economic, Social and Cultural Rights)." *General Comment* No. 14. file:///C:/Users/HP/Downloads/E_C.12_2000_4-EN.pdf
- UNODC (2020). World Drug Report 2020: Executive Summary
- UNODC-WHO (2016). Internasional Standards for the Treatment of Drugs Use Disorder E/CN.7/2016/CRP.4, UNODC-WHO.



POTENTIAL OF *Cannabis sativa* BIOACTIVE COMPOUND AS PfNR PROTEIN INHIBITOR FOR ANTIMALARIAL DRUG CANDIDATE: AN IN-SILICO STUDY

Steven Arianto^{1*}, Insani Fitrahulil Jannah²

Department of Medical Laboratory Technology,
Hermina Institute of Health, Indonesia

*Corresponding author: steven.arianto92@gmail.com

ABSTRACT

Plasmodium falciparum is the cause of malaria outbreaks in Indonesia, particularly in the eastern region. Antimalarial medications are still missing, and the PfENR enzyme is used to develop antimalarial medicines. When this enzyme is inhibited, Plasmodium's production of type II lipids stops, which stops the parasites from multiplying and causes malaria. *Cannabis sativa*, a common marijuana plant in Indonesia, has been used for pain relief. This study aims to determine if the bioactive component of *Cannabis sativa* has antimalarial pharmacological action against *Plasmodium falciparum*. The structure of PfENR protein and bioactive chemicals from *C. sativa* was obtained from Protein Data Bank (PDB) and PubChem (NCBI, USA). The Lipinski rule of five was then used on the SCFBIO web server to analyze the drug-likeness of the sample. Additionally, the binding activity and molecular interaction by PoseView web server and PyMol software v2.4.1 (Schrödinger, Inc., USA) were determined by the blind docking approach using PyRx 0.8 software. Eleven of the 17 terpenoid and cannabinoid chemicals found in *Cannabis sativa* have been shown to inhibit PfENR protein activity in antimalarial studies. According to this *in silico* study, tetrahydrocannabivarin is the best stable ligand for inhibiting the *Plasmodium falciparum* PfENR protein with binding affinity -9.5 kcal/mol. Tetrahydrocannabinol also binds with PfENR protein with hydrogen bond (Leu315) and hydrophobic bonds (Ser317, Tyr111 and Leu265) with RMSF value < 3Å. However, a wet lab study, such as *in vivo* or *in vitro* is needed to validate these findings' potential as an antimalarial agent.

Keywords: antimalarial, *Cannabis sativa*, inhibitor, *in silico*, *Plasmodium falciparum*

INTRODUCTION

Almost everything in the world is home to the infectious illness malaria. However, tropical and subtropical regions are the most affected. As to the World Health Organization (WHO) report, malaria was reported to have expanded to 99 out of 104 countries in 2012. Indonesia was included in the list of these 99 nations.¹ According to the Directorate of Animal-Based

Disease Control of the Indonesian Ministry of Health, 417,819 instances of malaria were confirmed positive in the country in 2012. Anemia can be directly caused by malaria, which can also lower productivity at work. Additionally, the majority of Indonesia remains endemic for this illness. Based on statistics from the Ministry of Health in 2014, malaria prevalence in Indonesia was reported to be 1%. According to the Indonesian Ministry of Health,² the five provinces with the highest prevalence of malaria are Papua (29.57%), West Papua (20.85%), NTT (12.81%), Maluku (6.0%), and North Maluku (3.32%).

Plasmodium parasites cause malaria, an infectious illness that attacks red blood cells. The female Anopheles mosquito is an intermediary for the protozoa's entry into the human body. Four Plasmodium species - *P. falciparum*, *P. vivax*, *P. ovale*, and *P. malariae* - are known to infect people often. Out of the four species, *P. falciparum* is the most frequent cause of severe illness and occasionally even death; the illness is also known as tropical malaria or cerebral malaria.³ Other species typically only cause fever and occasionally anemia.^{4,5}

Plasmodium falciparum Enoyl-ACP reductase (PfENR) enzyme is one of several proteins crucial to *Plasmodium*'s life cycle. The creation of antimalarial medications begins with the inhibition of these enzymes.⁶ *Plasmodium falciparum*'s type II fatty acid biosynthesis pathway is the target of this target, and *Plasmodium falciparum* Enoyl Acyl Carrier Protein Reductase (PfENR) is its target. This target was selected due to its significance in the fatty acid production within the *Plasmodium falciparum* body.⁶

Molecular docking is a bioinformatics technique often used to assess the potential of bioactive compounds from organisms that can inhibit the spread of Plasmodium.⁷⁻⁹ This technique forecasts the interactions between active substances (ligands) and proteins (receptors).¹⁰ One of the many strategies that have been tried to manage and even lower malaria cases is plants with active medicinal chemicals with anti-fungal, anti-bacterial, anti-viral, and antimalarial properties. The medical marijuana plant contains a lot of active chemicals, the majority of which are cannabinoids and terpenoids. Moreover, a complex modeling system called molecular dynamics is utilized to investigate molecular docking results' chemical and physical elements.¹¹ This work aims to employ molecular docking to determine the effectiveness of the chemicals in the *Cannabis sativum* plant in inhibiting PfENR to stop malaria, intending to provide reference data for future investigations.

METHODOLOGY

Ligand and Protein Preparation

Five cannabinoids and eleven terpenoid compounds of Cannabis Sativa were built from the PubChem database to get samples in the structural data format (.sdf) (Table 1). After that, energy was reduced and .sdf samples were converted to.pdb format. Python Prescription 0.8 (PyRx; Virtual Screening Tool) was used to reduce the energy of each molecule, and OpenBabel was used to complete the process using the default settings. PyRx is a free application that functions flawlessly for all procedures and may be utilized on any platform for virtual screening.



Therapeutic targets such as *Plasmodium falciparum* Enoyl Acyl Carrier Protein Reductase (PfENR) may be downloaded and accessed from the Protein Data Bank website (<http://www.rcsb.org//pdb>). The three-dimensional PfENR crystal structure in SDF format may be obtained from the Protein Data Bank website using the protein code PDB: 2NQ8. The protein is generated by subtracting water and other ligands using PyMOL software. The PfENR protein energy is decreased by the PyRx Virtual Screening Tool application, and the process is furthered by the default OpenBabel menu options. The PfENR protein and ligands may be docked using PyRx and PyMOL open-source tools.

Drug likeness Analysis

Using the SCFBIO web server (<http://www.scfbio-iitd.res.in/software/drugdesign/lipinski.jsp>), the cannabinoid and terpenoid components of *Cannabis sativum* were exposed to Lipinski's rule of five for further drug-likeness analysis. If the two minimum rules were followed, the prediction was considered good. Finding out the pharmacokinetics and possibility of the medication molecule candidate crossing the cell membrane if the target was in the cytoplasm was the aim of this study.

Molecular Docking Visualization

PyMOL displayed the target protein's 3D structure and docking data. This molecular graphic tool has been used extensively to create three-dimensional images of surfaces, proteins, nucleic acids, and molecules.¹² This application was used to alter the annotation of the molecules' data and produce videos. To facilitate molecular imaging of the three-dimensional protein structure in both animated and surface forms, the staining selection was done to differentiate between the chain domains of the target protein and the kind of ligands attached.

Molecular dynamics simulation

Molecular dynamic simulation is a frequent method used to simulate proteins, and one prominent tool for this process is CABS-flex. CABS-flex requires protein structures with PDB format extensions. CABS-flex only accepts single and continuous chains of proteins. The CABS-flex simulation will yield the RMSF data and protein simulation. The online documentation may be accessed through the CABS-flex website and is connected to the email address of the user.¹³

Result and Discussion

The chemical components of marijuana (*Cannabis sativum*), a naturally occurring ligand linked to the PfENR crystal structure, were obtained from the PubChem database. The sample data was converted into.pdb format, preserving the target chemical's 3D structure in.sdf format. As a result, the 3D structure may be used for further investigation.

Based on Lipinski's rule of five, the chemical components of marijuana are anticipated to be drug-like molecules on the server (scfbio-iitd.res.in/software/drugdesign/lipinski.jsp).¹⁴ This rule aids in the differentiation of drug-like and non-drug-like particles according to their fundamental atomic features. Lipinski's rule of five states that if at least two of the five requirements are satisfied, there is a strong likelihood of success or failure due to the drug's



molecular similarities. The atomic mass must be less than 500 Da, the molar refractivity must be between 40 and 130, and the lipophilicity (LogP) of donor hydrogen bonds must be less than 5. These recommendations can promote early preclinical development and help avert significant preclinical and late-stage failures.^{15, 16} The investigation's findings show that 11 of marijuana's chemical constituents are compounds that resemble drugs and that Lipinski's rule of five is not violated (Table 1). As a result, these chemical compounds can move on to the next analysis stage to find the target protein's binding affinity.

Table 1. Prediction Outcomes for Drug-Like Molecules Derived from Cannabis sativum's Chemical Compounds

Compound Name	Molecular Mass (Da)	Hydrogen Binding Donors	Hydrogen Bond Acceptors	Log P	Molar Refractivity
Cannabinoid					
Cannabiol					
Cannabidiol	314	2	2	5.847	97.037
Cannabidivarin	286	2	2	5.0663	87.803
Cannabigerol	316	2	2	6.066	99.127
Tetrahydrocannabinol	314	1	2	5.735	95.265
Terpenoids					
Myrcene	136	0	0	3,475	48,002
Limonene	136	0	0	3,309	45,912
Pinene	136	0	0	2,999	43,752
Geraniol	154	1	1	2,671	49,508
Linalool	154	1	1	2,670	49,486
Terpineol	154	1	1	2,504	47,396
B-Caryophyllene	204	0	0	4,725	66,743
Humulene	204	0	0	5,035	68,903
B-Caryophyllene oxide	220	0	1	3,936	66,264
Bisabolol	222	1	1	4,23	70,387
B-Ocimene	136	0	0	3,475	48,002

In this work, the PfENR protein served as the target, and the chemical constituents of marijuana served as ligands. The Vina Search Space was maximized in the PyRx software to conduct docking simulations for all these compounds. To calculate the binding energy and RMSD value, molecular docking was utilized. Less than 3 Å was the best RMSD value in the docking research. The quality of the ligand-protein interface is predicted by the RMSD value.¹⁷ Tetrahydrocannabinol was found to be the marijuana chemical compound with the lowest binding energy (-9.5 kcal/mol) against PfENR based on the results of the virtual screening. To identify molecules, structural components that distinguish between possible binding modes, and energetic factors that predict binding scores, a molecular binding experiment was carried out.¹⁸



Figure 1 displayed the target protein as an animated structure on a clear surface. The PoseView tool on the ProteinPlus website was utilized to view the types of bonds formed, and the chemical combinations that exhibited the lowest binding energy were examined further to determine the location of their molecular interactions. The PoseView program generates 2D representations of complexes with known 3D structures by following principles for chemical structure drawing.¹⁹ The dashed lines showed the direct bonds between the protein and ligands, whereas the structural diagrams showed the interplaying protein residues and ligands. Furthermore, the communicative amino acids indicated the hydrophobic contacts, whereas the spline sections represented the hydrophobic areas of the ligands. The structural diagrams were produced, and their configurations were altered by the 2D sketching software.²⁰ The atom type and a basic built-in interaction model based on geometric criteria were utilized to estimate the interactions between molecules. In the PfENR domain, tetrahydrocannabinol molecules interact with hydrophobic interactions at Ser317, Tyr111 and Leu265 and hydrogen bonds at Leu315 (Figure 1). The atomically resolved structure at the ligand-protein interface must be determined to start a new drug discovery and design direction. This strategy used biophysical variables to retain atom positions, such as molecular weight, hydrogen bonds, size, hydrophobic interactions, and shape. The conformational environment of protein structures is open, and the energetically favorable ligands are maintained by reduced intermolecular interactions like hydrophobic and hydrogen bonding. Hydrophobic interactions are prioritized above hydrogen bonds, leading to tight binding.²¹

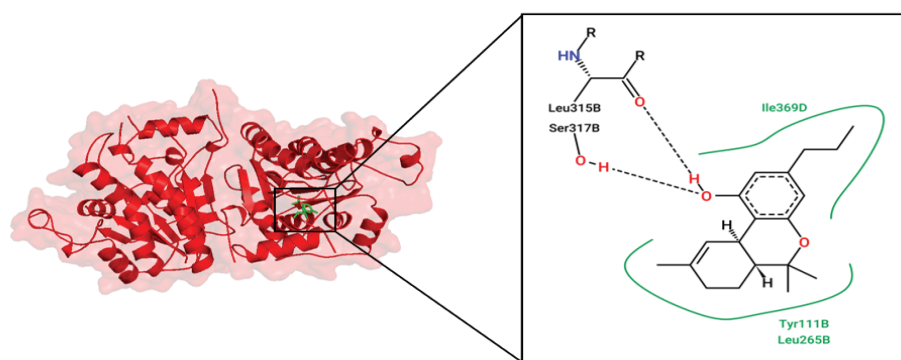


Figure 1. The PfENR target protein structure and the chemical interactions of tetrahydrocannabinol. Transparent and animated surfaces visualize the PfENR target protein.

Figure 2 shows 2D fluctuation plots with a 3D structure displaying the target protein and its ligands. The fluctuation figure shows the residue-by-residue variations seen during the simulation. Each chain must be plotted independently when graphing multichain proteins. Due to the connection between these ligands, only the plot from Chain B is displayed. The x-axis of the figure shows the RMSF values (\AA), while the y-axis shows the amino acid residue index. As Figure 2 shows, conformation will change the kinetics and flexibility of proteins. Molecular docking experiments utilizing PfENR have shown that tetrahydrocannabinol has the lowest free energy and that its protein fluctuation stays below the RMSF threshold of 0-3 \AA . The structure of tetrahydrocannabinol is, therefore, thought to be stable.

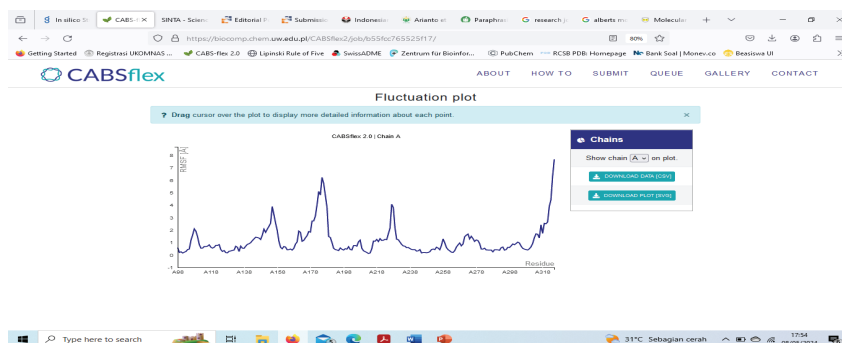


Figure 2. Tetrahydrocannabinol fluctuation plot of PfENR (CABS-flex)

Every living thing has a cycle, which depends on interactions between proteins and ligands. Atomic complementarity, the process by which the ligand facilitates signal transmission, is the foundation of all living organisms. Among these material reactions is subatomic biological recognition. Partially responsible for the augmentation of proteins is the creation of specialized areas designed to bind small molecule ligands with affinities according to the demands of the cell.²² Tetrahydrocannabinol is a promising candidate for malaria medication research and development. It may bind to PfENR with the lowest binding energy and interact with the parasite through hydrogen and hydrophobic interactions (Figure 2). With an atomic mass of 314 Da, a logP of 5.735, one donor and two acceptors of hydrogen bonds, and a molar refractivity of 95.625 (Table 1), tetrahydrocannabinol is categorized as a drug-like molecule. It satisfies Lipinski's rule of five as well.

Molecular dynamics simulations indicate that tetrahydrocannabinol may interact more favorably with Plasmodium PfENR. This implies tetrahydrocannabinol could be a potential therapeutic agent for treating Plasmodium infections by blocking PfENR. Based on extensive simulated screening annotations, the best choices are compounds derived from *Cannabis sativum*. This demonstrates the apparent reusability of the bioactive compounds in *Cannabis sativum* as Plasmodium PfENR inhibitors. Before starting clinical trials, it is strongly advised that both in vitro and in vivo studies be carried out to assess the therapeutic effectiveness of the previously reported experimentally generated ligands.

CONCLUSION

This in-silico study shows tetrahydrocannabivarin is the best stable ligand for inhibiting the Plasmodium falciparum PfENR protein. In vivo and in vitro tests are needed to prove tetrahydrocannabivarin's potential. Herbs, such as *Cannabis sativa*, thus contain bioactive components. To validate this discovery further, analyses might be performed to determine which atoms from the protein and ligand bonded.

ACKNOWLEDGE

The authors acknowledge the Hermina Institute of Health, particularly the Department of Research and Community Service (LPPM), for supporting this work.

REFERENCES

- WHO, 2012, World malaria report 2012: Fact Sheet, pp.1-2.AS. Fauci, Kasper DL, Longo L, Loscalzo J, Braunwald E, Hauser SL, & Jameson JL, 2008 Harrison's principle of internal medicine, 17th Edition, Dalam: White NJ, Breman JG, Malaria, USA: McGraw-Hill Companies Inc, (pp.1280-1281).
- Kementerian Kesehatan RI. (2011), Epidemiologi Malaria di Indonesia. Buletin Jendela Data dan Informasi Kesehatan. ISSN 2088 – 270X. Volume 1:1-39.
- B. G. Katzung (2006) Basic and Clinical Pharmacology 10th Edition New york : McGraw Hill Companies. (1545)
- W. Pribadi, & Muljono, R. (2004). Resistensi Parasit Malaria terhadap Obat Malaria. Dalam S. Gandahusada, H. Ilahude, & W. Pribadi (ed), Parasitologi Kedokteran. Jakarta : Gaya Baru. (197-198).
- D. Sullivan, J. & Krishna, S. (2005). Malaria: Drugs, Disease, and Post-genomic Biology. Berlin: Springer.
- D. Tasdemir, (2006). Type II Fatty Acid Biosynthesis, a New Approach in Antimalarial Natural Product Discovery. *Phytochemistry Reviews*, 99-108.
- Umesh, H. R., Ramesh, K. V., Devaraju, K. S. Molecular docking studies of phytochemicals against trehalose-6-phosphate phosphatases of pathogenic microbes. 2020. Beni-Suef Univ J Basic Appl Sci; 9(1): 1-14.
- Shaghghi, N. Molecular docking study of novel COVID-19 protease with low risk terpenoides compounds of plants. 2020.
- ul Qamar, M. T., Alqahtani, S. M., Alamri, M. A., Chen, L. L. Structural basis of SARS-CoV-2 3CLpro and anti-COVID-19 drug discovery from medicinal plants. 2020. *J Pharma Analysis*; 10(4): 313-9. <https://doi.org/10.1016/j.jpha.2020.03.009>
- Earlia, N., Suhendra, R., Amin, M., Prakoeswa, C. R. S., Idroes, R. GC/MS analysis of fatty acids on pliek u oil and its pharmacological study by molecular docking to filaggrin as a drug candidate in atopic dermatitis treatment. 2019. *Sci. World J*.
- Liguori, N., Croce, R., Marrink, S. J., Thallmair, S. Molecular dynamics simulations in photosynthesis. 2020. *Photosynthesis Res* ; 144(2): 273-95.



- Seeliger, D., de Groot, B.L. 2010. Ligand docking and binding site analysis with PyMOL and Autodock/Vina. *J. Comput. Aided Mol. Des.* 24(5): 417–22, <https://doi.org/10.1007/s10822-010-9352-6>.
- Jamroz, M., Kolinski, A., Kmiecik, S. CABS-flex: server for fast simulation of protein structure fluctuations. 2013. *Nucleic Acids Res.*; 41(W1): W427-31.
- Saxena, G., Akhtar, S., Sharma, N., Sharma, M., Siddiqui, M.H.A., Khan, M.K. 2019. Virtual screening, docking and molecular dynamics simulation of selected phytochemical compounds bound to receptor tyrosine kinases: A correlative anti angiogenic study. *Bioinformatics.* 15(9): 613–20, <https://doi.org/10.6026/97320630015613>
- Lipinski, C.A. 2004. Lead-and drug-like compounds: The rule-of-five revolution. *Drug Discov. Today Technol.*, 1(4): 337–341, <https://doi.org/10.1016/j.ddtec.2004.11.007>.
- Jayaram, B., Singh, T., Mukherjee, G., Mathur, A., Shekhar, S., Shekhar, V. 2012. Sanjeevini: A freely accessible web-server for target directed lead molecule discovery. *BMC Bioinformatics.* 13(S17), <https://doi.org/10.1186/1471-2105-13-s17-s7>.
- Rizvi, S. M. D., Shakil, S., Haneef, M. A simple click by click protocol to perform docking: AutoDock 4.2 made easy for non-bioinformaticians. 2013. *EXCLI J*; 12: 831.
- Morris, G.M., Lim-Wilby, M. 2008. Molecular docking. In Kukol, A. (eds.), *Molecular Modeling of Proteins.*, Humana Press, New York. pp. 365–82.
- Stierand, K., Maaß, P., Rarey, M. 2006. Molecular complexes at a glance: automated generation of two-dimensional complex diagrams. *Bioinformat.* 22: 1710–6, <https://doi.org/10.1093/bioinformatics/btl150>.
- Fricker, P., Gastreich, M., Rarey, M. 2004. Automated drawing of structural molecular formulas under constraints. *J Chem. Inf. Comput. Sci.* 44: 1065–78, <https://doi.org/10.1021/ci049958u>.
- Patil, R., Das, S., Stanley, A., Yadav, L., Sudhakar, A., Varma, A.K. 2010. Optimized hydrophobic interactions and hydrogen bonding at the target-ligand interface leads the pathways of drug-designing. *PLoS One.* 5(8): e12029, <https://doi.org/10.1371/journal.pone.0012029>.
- Dunn, M.F. 2010. Protein-ligand interactions: General description. *Ency. Life Sci.* <https://doi.org/10.1002/9780470015902.a0001340.pub2>.



OPTIMIZING BINARY OUTCOME ASSESSMENT FOR THE EFFICACY AND SAFETY EVALUATION OF ETRIPAMIL NASAL SPRAY FOR ACUTE PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA

Chabib Fachry Albab^{1*}, Almas Talida Habibah²

¹Faculty of Medicine, Alumnus of Universitas Airlangga, Surabaya, Indonesia

²Faculty of Medicine, Alumnus of Universitas Sebelas Maret, Surakarta, Indonesia

*Corresponding author: fachryalbab55@gmail.com

ABSTRACT

Acute paroxysmal supraventricular tachycardia (PSVT) is a common cardiac arrhythmia that can lead to significant morbidity and mortality. Etripamil nasal spray has emerged as a potential therapeutic option for terminating PSVT episodes rapidly. However, there are still no comprehensive studies showing the relationship between etripamil nasal spray and PSVT and small number of studies bias correction were not achieved in such subgroup analysis of published studies. A systematic search on randomized controlled trials (RCTs) was conducted through PubMed, ScienceDirect, and Cochrane Library. R Studio 4.3.2 with the Hartung-Knapp adjustment approach has been used to optimize the binary outcome assessment. A total of 496 patients were found in the three included RCTs. Administration of etripamil nasal spray was effective for PSVT conversion at 15 minutes [RR=1.87, 95% CI (1.14, 3.07)], but was not significant for conversion at 30 minutes [RR=1.86, 95% CI (0.28, 12.39)], 60 minutes [RR=1.25, 95% CI (0.35, 4.46)], and 300 minutes [RR=1.11, 95% CI (0.47, 2.61)]. Etripamil nasal spray was associated with the incidence of rhinorrhea [RR=3.53, 95% CI (3.12, 4.00)], but not significantly for any adverse events [RR=3.17, 95% CI (0.88, 11.42)], any serious adverse events [RR =0.30, 95% CI (0.01, 7.21)], nasal discomfort [RR=3.82, 95% CI (0.23, 62.78)], nasal congestion [RR=5.28, 95% CI (0.08, 18.42)], and epistaxis [RR=4.31, 95% CI (0.05, 18.50)]. Etripamil nasal spray was only effective for conversion to sinus rhythm at 15 minutes and has a poor safety profile. Therefore, more RCTs are needed to confirm this before use in clinical practice.

Keywords: acute paroxysmal supraventricular tachycardia, PSVT, etripamil, nasal spray, efficacy and safety evaluation

INTRODUCTION

Cardiac arrhythmias, including paroxysmal supraventricular tachycardia (PSVT), arise from irregular electrical activity within the heart, leading to rapid heart rates. PSVT presents with sudden onset palpitations, chest discomfort, dizziness, and shortness of breath, posing significant health risks and impairing patients' quality of life (Hafeez, 2023). Current treatments for PSVT, such as adenosine, calcium channel blockers, and beta-blockers, though effective, are often administered intravenously in clinical settings, limiting their accessibility and convenience, particularly during acute episodes outside medical facilities. Moreover, these treatments may cause adverse effects, including hypotension and bronchospasm (Ahmad et al., 2021). Etripamil nasal spray emerges as a promising alternative, offering a convenient, non-invasive route of administration for rapid termination of PSVT episodes in both clinical and non-clinical settings. With its rapid onset of action and favorable safety and efficacy profile demonstrated in previous studies, etripamil nasal spray presents a potential advancement in the management of acute PSVT, addressing the limitations of current treatment options (Stambler et al., 2018, p.490). The existing meta-analysis showed that etripamil was a promising candidate for self-termination of symptomatic, sustained PSVT in a non-clinical setting, with an acceptable safety and efficacy profile. However, the previous meta-analysis had a very small number of included studies (three studies) (Abuelazm et al., 2023, p. 381). The NODE-1 study examined patients under sedation and induced PSVT, while the other two studies involved conscious patients and spontaneous PSVT (Stambler et al., 2018, p.493). Therefore, it is necessary to renew and adjust the statistical analysis to confirm the correctness of the existing results.

Indeed, subgroup analysis can overlook bias from a small number of studies while inflating the pooling effect in meta-analyses (Alhumaid et al., 2020). Meta-analyses typically adopt pooling effects, such as the random-effects model, to amalgamate various effect size estimates with underlying heterogeneous true effect sizes. Under the random-effects model, the average effect and the variance among studies are typically estimated. In the conventional DerSimonian-Laird (DL) method for the random-effects model, the initial step involves estimating the variance among studies (DerSimonian and Laird, 1986). Subsequently, efforts are made to address the sampling variances among studies and incorporate them into the study weights while estimating the average effect. This conventional approach to conducting meta-analyses yields a pooled effect using a weighted average approach. However, estimates of the variance among studies may be imprecise, particularly when dealing with a small number of studies included in a meta-analysis (Chung et al., 2013). This uncertainty is often overlooked when inferring random-effects based on a conventional normal approximation, which can impact the accuracy of inference (Jackson and White, 2018). The imprecision in estimating variances among studies, especially in small studies, poses critical concerns as it affects estimated effects. Failing to address this uncertainty when integrating random-effects can have detrimental consequences for statistical inferences. To address these concerns, the HK adjusted method offers the advantage of potentially providing a more accurate estimation of random-effects and their confidence intervals (CIs) compared to the DL approach. Correction



through multiplying the conventional variance of the estimated average effect by a scaling factor can mitigate bias resulting from a small number of studies (Hartung and Knapp, 2001).

METHODOLOGY

The current evaluation adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. Ethical approval was not necessary since there was no direct participation of patients in this study, and all utilized data had been previously published. The protocol of this review has been registered in PROSPERO.

Eligibility

We conducted a systematic search focusing on randomized control trial (RCT) studies that investigated the efficacy and safety evaluation of etripamil nasal spray for acute paroxysmal supraventricular tachycardia. There was no restriction on the publication year, but studies not written in English, those without available full text, and those involving nonhuman subjects were excluded. Duplicate articles were addressed prior to the screening of titles and abstracts.

Search Strategy and Selection of Studies

We performed an extensive systematic database search independently by two authors in PubMed, ScienceDirect, and the Cochrane Library on March 15, 2024. The keywords that will be used are derived from “etripamil” AND “acute paroxysmal supraventricular tachycardia” OR “efficacy” OR “safety”, together with their corresponding MeSH terms, synonyms, and detailed explanations. Review articles will be omitted, but their citations will be scrutinized to identify any potentially overlooked relevant studies. Titles and abstracts of the articles were independently examined for a comprehensive review of potentially eligible studies.

Article Extraction

We autonomously gathered pertinent articles from the encompassed studies using a structured and standardized template. The following information was extracted: author/year of publication, country, sample size, average age, female, any comorbid, efficacy, and safety. Any inconsistencies will be addressed through a consensus among all authors participating in the data extraction procedure.

Quality Assessment

The risk of bias assessment was independently conducted by at least two authors. Any disagreements were resolved through discussion with the involvement of a senior author. The tool used for assessment was the Version 2 of the Cochrane risk-of-bias tool for randomized trials (Rob-2) for RCT studies.

Objective Comparison

We adopted the binary outcome for treatment effects. The specific items extracted from the relevant studies were as follows: author’s surname; the small studies size criterion was number



of studies less than or equal to five. A list of adjusted items was compiled as follows: (1) conversion to sinus rhythm (etripamil vs. placebo); (2) medical intervention seeking (etripamil vs. placebo); (3) ER visits (etripamil vs. placebo); (4) any adverse event (etripamil vs. placebo); (5) any serious adverse event (etripamil vs. placebo); (6) nasal discomfort (etripamil vs. placebo); (7) nasal congestion (etripamil vs. placebo); (8) epistaxis (etripamil vs. placebo); (9) rhinorrhea (etripamil vs. placebo).

Adjusted Analysis

Statistical analyses were conducted using R Studio 4.3.2 software. The “metafor” package was utilized within R software for adjustment analysis, with options to employ DL conventional and HK adjusted approaches. Initially, the DL conventional approach was employed to validate the consistency of random-effects results with a prior meta-analysis. Subsequently, HK adjusted approaches were applied to compare results obtained through the DL method. A z-test was then utilized for hypothesis testing to determine if the overall mean of the true effect equaled zero under a random-effects model. Additionally, the statistic I² was employed to assess heterogeneity among the studies included in subgroup meta-analysis. A p-value less than 0.05 was considered statistically significant.

Publication Bias

Visual inspection of asymmetry in the Begg’s funnel plots as well as Egger’s weighted regression and “fail safe N” test was used to explore the presence of potential publication bias in the analysis.

Results

Overview of Literature Search

The literature search identified 75 studies identified from the Pubmed, ScienceDirect and Cochrane Library. The screening process results in 60 titles and abstracts after removing duplicates, leaving 3 studies to be selected and analyzed for quantitative synthesis as summarized in Figure 1.



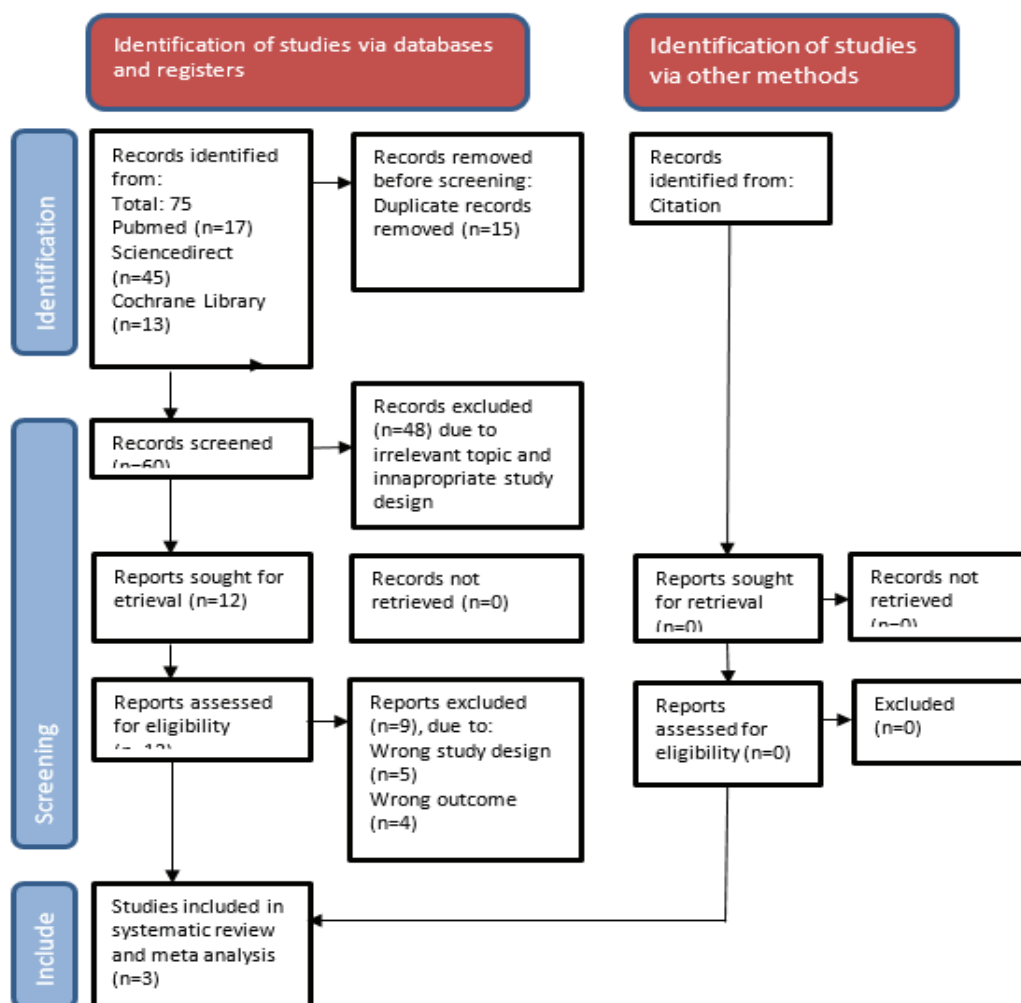


Figure 1. PRISMA Flow Diagram

Patient Characteristics

In this review, we included three studies. A total 496 participants were enrolled in the selected studies on optimizing binary outcome assessment for the efficacy and safety evaluation of etripamil nasal spray for acute paroxysmal supraventricular tachycardia. We performed HK adjusted approaches due to small number of included studies, as summarized in table 1.



Table 1. Summary of Unadjusted and Adjusted Random Effects for Comparisons Between Etripamil and Placebo

Objectives	Included Studies	Number of Events/Total in Intervention Group	Number of Events/Total in Control Group	Unadjusted RR (p-Value; 95%CI) Base on DL	Adjusted RR (p-Value; 95%CI) Base on HK
Conversion to sinus rhythm at 15 minutes (etripamil vs placebo)	Stambler et al, 2018 (NODE-1)	20/23	7/20		
	Stambler et al, 2022 (NODE-301)	42/107	12/49	1.84 (p<0.0001; 1.37, 2.48)	1.42 (p<0.05; 1.14, 3.07)
	Stambler et al, 2022 (RAPID)	44/99	21/85		
Conversion to sinus rhythm at 30 minutes (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	58/107	17/49	1.86 (p<0.00001; 1.42, 2.44)	1.86 (p>0.05; 0.28, 12.38)
	Stambler et al, 2022 (RAPID)	64/99	26/85		
Conversion to sinus rhythm at 60 minutes (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	68/107	28/49	1.25 (p=0.01; 1.05, 1.50)	1.25 (p>0.05; 0.35, 4.46)
	Stambler et al, 2022 (RAPID)	73/99	46/85		
Conversion to sinus rhythm at 300 minutes (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	80/107	36/49	1.10 (p=0.12; 0.97, 1.25)	1.11 (p>0.05; 0.47, 2.61)
	Stambler et al, 2022 (RAPID)	83/99	61/85		
Medical intervention seeking (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	15/107	13/49	0.58 (p=0.01; 0.37, 0.90)	0.57 (p>0.05; 0.22, 1.47)
	Stambler et al, 2022 (RAPID)	15/99	21/85		



Objectives	Included Studies	Number of Events/Total in Intervention Group	Number of Events/Total in Control Group	Unadjusted RR (p-Value; 95%CI) Base on DL	Adjusted RR (p-Value; 95%CI) Base on HK
ER visit (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	14/107	12/49	0.61 (p=0.04; 0.38, 0.97)	0.60 (p>0.05; 0.15, 2.47)
	Stambler et al, 2022 (RAPID)	14/99	18/85		
Any adverse events (etripamil vs placebo)	Stambler et al, 2018 (NODE-1)	18/23	4/20	3.17 (p<0.00001; 2.15, 4.69)	3.17 (p>0.05; 0.88, 11.42)
	Stambler et al, 2022 (RAPID)	68/135	20/120		
Any serious adverse events (etripamil vs placebo)	Stambler et al, 2018 (NODE-1)	0/23	0/20	0.30 (p=0.46; 0.01, 7.21)	0.30 (p>0.05; 0.01, 7.21)
	Stambler et al, 2022 (RAPID)	0/135	1/120		
Nasal discomfort (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	27/138	4/60	3.82 (p<0.0001; 2.01, 7.24)	3.82 (p>0.05; 0.23, 62.78)
	Stambler et al, 2022 (RAPID)	31/135	6/120		
Nasal Congestion (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	11/138	2/60	5.89 (p=0.002; 1.93, 17.97)	5.28 (p>0.05; 0.00, 574678.96)
	Stambler et al, 2022 (RAPID)	17/135	1/120		
Epistaxis (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	9/138	0/60	4.74 (p=0.03; 1.21, 18.50)	4.31 (p>0.05; 0.05, 390.85)
	Stambler et al, 2022 (RAPID)	8/135	2/120		



Objectives	Included Studies	Number of Events/Total in Intervention Group	Number of Events/Total in Control Group	Unadjusted RR (p-Value; 95%CI) Base on DL	Adjusted RR (p-Value; 95%CI) Base on HK
Rhinorrhea (etripamil vs placebo)	Stambler et al, 2022 (NODE-301)	8/138	1/60	3.53 (p=0.02; 1.22, 10.26)	3.53 (p>0.05; 3.12, 4.00)
	Stambler et al, 2022 (RAPID)	12/135	3/120		

Abbreviations:: DerSimonian-Laird, DL; Hartung and Knapp, HK; Risk ratio, RR; Confidence interval, CI

Efficacy

Three studies were included in the meta-analysis of the efficacy and safety evaluation of etripamil nasal spray for acute paroxysmal supraventricular tachycardia (Fig. 2-5). Due to the small studies observed in the analysis, the HK adjusted approaches was performed. As depicted in Fig. 2, administration of etripamil nasal spray was effective for PSVT conversion at 15 minutes [RR=1.87, 95% CI (1.14, 3.07)], but was not significant for conversion at 30 minutes [RR=1.86, 95% CI (0.28, 12.39)], 60 minutes [RR=1.25, 95% CI (0.35, 4.46)], and 300 minutes [RR=1.11, 95% CI (0.47, 2.61)].

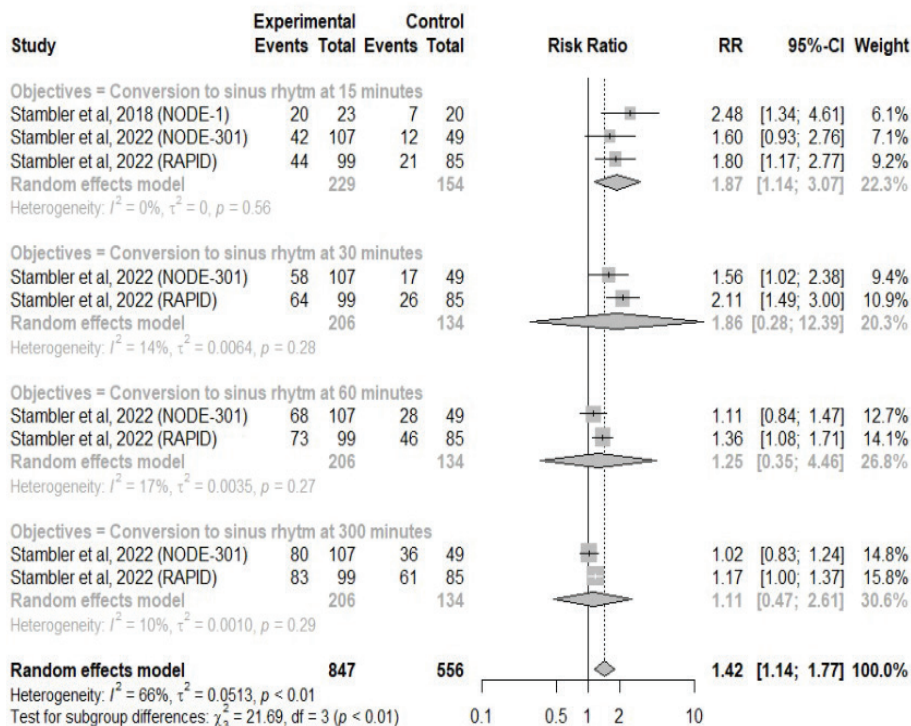


Figure 2. Adjusted random effects of etripamil vs placebo for conversion to sinus rhythm



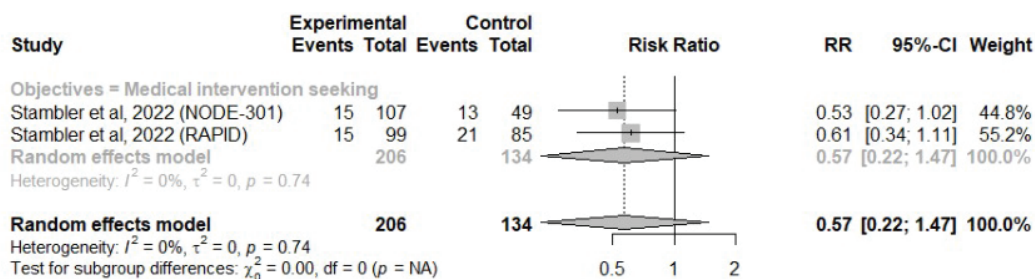


Figure 3. Adjusted random effects of etripamil vs placebo for medical intervention seeking

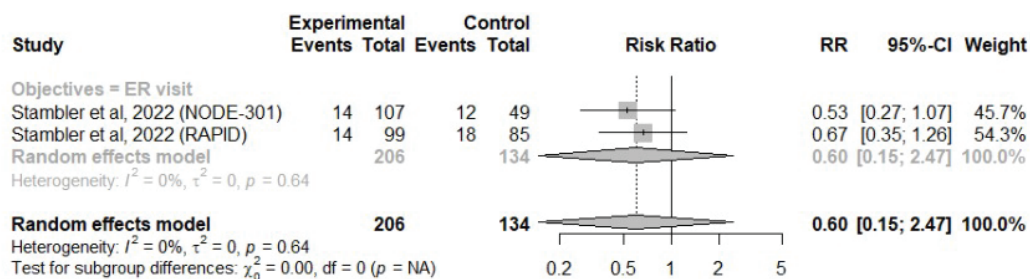
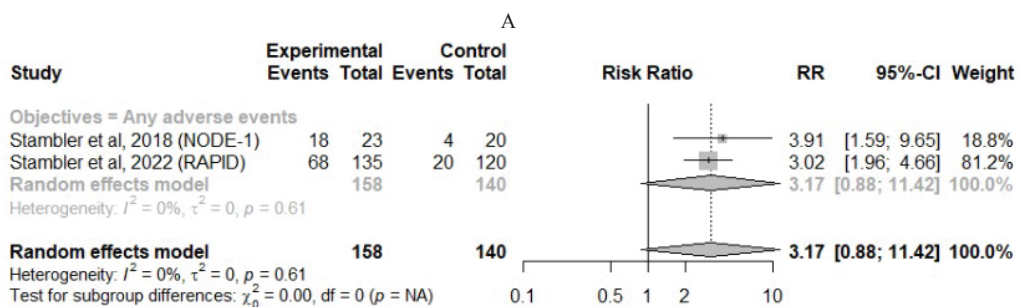


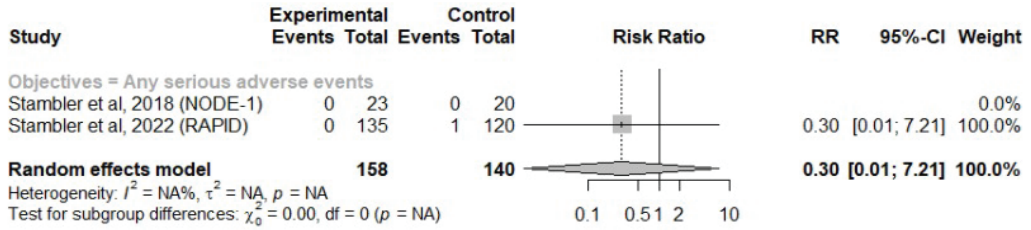
Figure 4. Adjusted random effects of etripamil vs placebo for ER visit

Safety

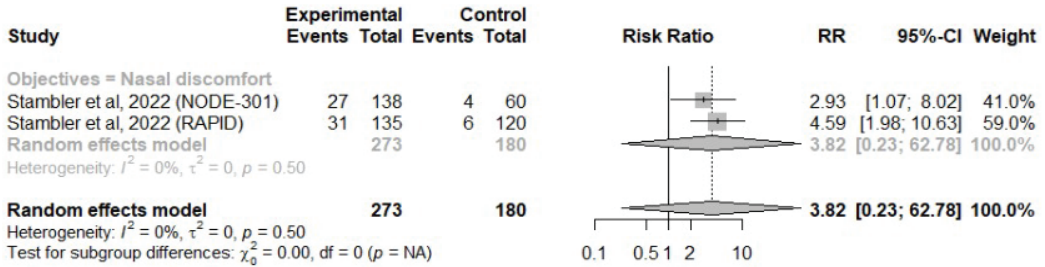
Etripamil nasal spray was associated with the incidence of rhinorrhea (Fig. 5F) [RR=3.53, 95% CI (3.12, 4.00)], but not significantly for any adverse events (Fig. 5A) [RR=3.17, 95% CI (0.88, 11.42)], any serious adverse events (Fig. 5B) [RR=0.30, 95% CI (0.01, 7.21)], nasal discomfort (Fig. 5C) [RR=3.82, 95% CI (0.23, 62.78)], nasal congestion (Fig. 5D) [RR=5.28, 95% CI (0.08, 18.42)], and epistaxis (Fig. 5E) [RR=4.31, 95% CI (0.05, 18.50)].



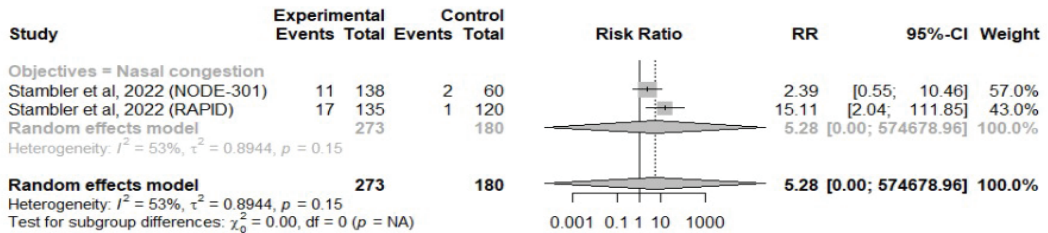
B



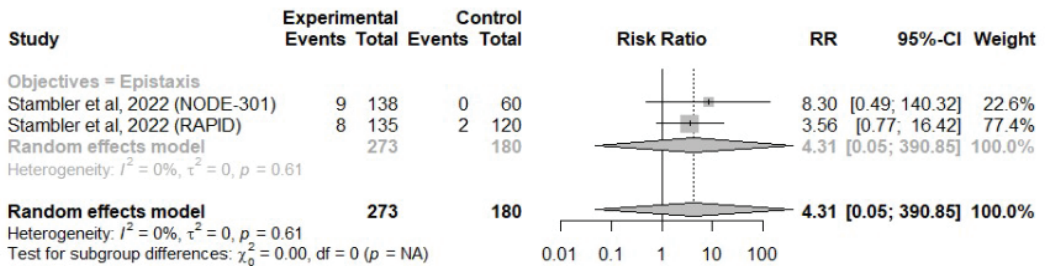
C



D



E



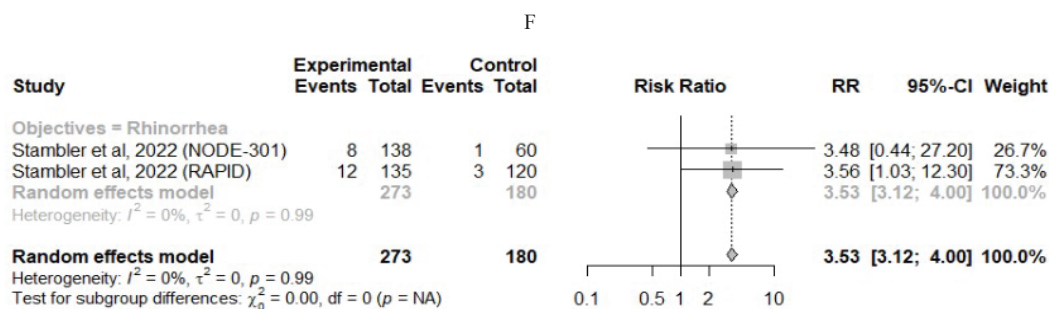


Figure 5. Adjusted random effects of etripamil vs placebo for: (a) any adverse events, (b) any serious adverse events, (c) nasal discomfort, (d) nasal congestion, (e) epistaxis, (f) rhinorrhea

DISCUSSION

This meta-analysis showed that etripamil nasal spray is effective to convert PSVT into sinus rhythm only at 15 minutes. However, etripamil is not significant for PSVT conversion at 30, 60, and 300 minutes. Etripamil is not significant in decreasing medical intervention-seeking and visits to the ER. A meta-analysis by Abuelazm et al showed a different outcome where etripamil showed a significant effect on PSVT conversion at 15, 30, and 60 min, decreasing medical intervention-seeking and visits to the ER (Abuelazm et al., 2023, p.388). A NODE-301 trial showed a non-significant conversion after etripamil administration at 60 and 300 minutes, however a RAPID trial on etripamil nasal spray—self-administered showed a significant outcome at 15, 30, 60, and 300 minutes remained greater (Stambler et al., 2022, p.819).

Etripamil nasal spray is a potential drug for PSVT treatment. Etripamil is a short-acting calcium channel blocker. Its exact pharmacokinetics and pharmacodynamics to treat PSVT remains undetermined. Current treatments for PSVT including adenosine, calcium channel blockers, and beta-blockers, though effective, are often administered intravenously in clinical settings are often administered intravenously in clinical settings, limiting their accessibility and convenience, particularly during acute episodes outside the medical facilities. Moreover, these treatments may cause adverse effects, including hypotension and bronchospasm. Etripamil nasal spray emerges as a promising alternative, its delivery of drugs through nasal cavity accelerates its absorption in nasal mucous and leads to bioavailability improvement by avoiding liver metabolism and reduces gastrointestinal adverse effects. Etripamil seems to be a safer, easier, and more effective treatment option than oral or intravenous medications (Stambler et al., 2023, p.125).

There are few distinctions between our study and previous meta-analysis study by Abuelazm. Abuelazm reported significant result of etripamil for conversion to sinus rhythm at 15 [1.84 ($p < 0.0001$; 1.37, 2.48)], 30 [1.86 ($p < 0.0001$; 1.42, 2.44)], and 60 minutes [1.25 ($p = 0.01$; 1.05, 1.50)], they also reported significant results in medical intervention seeking



[0.58 (p=0.01; 0.37, 0.90)] and ER visit [0.61 (p=0.04; 0.38, 0.97)]. Etipamil was reported to significantly cause any adverse events [3.17 (p<0.00001; 2.15, 4.69)], nasal discomfort [3.82 (p<0.0001; 2.01, 7.24)], nasal congestion [5.89 (p=0.002; 1.93, 17.97)], epistaxis [4.74 (p=0.03; 1.21, 18.50)], and rinorrhea [3.53 (p=0.02; 1.22, 10.26)]. However after Hartung-Knap adjustment was performed the results were shifted and showed a significant result of etripamil only at 15 minutes [1.42 (p<0.05; 1.14, 3.07)]. Etipamil showed to be non significant for conversion to sinus rythm at 30 [1.86 (p>0.05; 0.28, 12.38)] and 60 minutes [1.25 (p>0.05; 0.35, 4.46)], both Abuelazm [1.10 (p=0.12; 0.97, 1.25)] and our study [1.11 (p>0.05; 0.47, 2.61)] reported non significant result of etripamil at 300 minutes. Our meta-analysis showed non significant results in medical intervention seeking [0.57 (p>0.05; 0.22, 1.47)] and ER visit [0.60 (p>0.05; 0.15, 2.47)]. Several adverse events were reported to be shifted after we performed Hartung-Knapp adjustments, including any adverse events [3.17 (p>0.05; 0.88, 11.42)], nasal discomfort [3.82 (p>0.05; 0.23, 62.78)], nasal congestion [5.28 (p>0.05; 0.00, 574678.96)], epistaxis [4.31 (p>0.05; 0.05, 390.85)], rinorrhea [3.53 (p>0.05; 3.12, 4.00)]. Any serious adverse events reported to be non significant in both Abuelazm [0.30 (p=0.46; 0.01, 7.21)] and our study [0.30 (p>0.05; 0.01, 7.21)] (Abuelazm et al., 2023).

This study showed non significant results after Hartung-Knap adjustment was performed. The results were shifted and showed a significant result of etripamil only at 15 minutes. Therefore, meta-analysis with a few included studies requires further adjustment for more comprehensive result.

Etipamil nasal spray has been associated with a small number of mild local adverse events such as nasal discomfort, nasal congestion, epistaxis, and rhinorrhea, although its association shows statistically not significant. However, this meta-analysis has limitation, our analysis is limited by the small number of included RCTs. Accordingly, more RCTs are still needed before using etripamil for PSVT outside the medical facilities and without medical supervision.

CONCLUSION

Etipamil nasal spray was only effective for conversion to sinus rhythm at 15 minutes and has a poor safety profile. Therefore, more RCTs are needed to confirm this before use in clinical practice.

ACKNOWLEDGE

We express our gratitude to the Department of Cardiology and Vascular Medicine, Faculty of Medicine, Airlangga University, for their invaluable suggestions and support.



REFERENCES

- Abuelazm, M., Kambalapalli, S., Saleh, O., Elzeftawy, M. A., Albakri, K., Gowaily, I., & Abdelazeem, B. (2023). The Efficacy and Safety of Etripamil Nasal Spray for Acute Paroxysmal Supraventricular Tachycardia: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *American Journal of Cardiovascular Drugs : Drugs, Devices, and Other Interventions*, 23(4), 379–391. <https://doi.org/10.1007/s40256-023-00592-7>
- Ahmad, F., Abu Sneineh, M., Patel, R. S., Rohit Reddy, S., Llukmani, A., Hashim, A., Haddad, D. R., & Gordon, D. K. (2021). In The Line of Treatment: A Systematic Review of Paroxysmal Supraventricular Tachycardia. *Cureus*, 13(6), e15502. <https://doi.org/10.7759/cureus.15502>
- Alhumaid, S., Mutair, A. A., Alawi, Z. A., Alhmeed, N., Zaidi, A. R. Z., & Tobaiqy, M. (2020). Efficacy and Safety of Lopinavir/Ritonavir for Treatment of COVID-19: A Systematic Review and Meta-Analysis. *Tropical medicine and infectious disease*, 5(4), 180. <https://doi.org/10.3390/tropicalmed5040180>
- Chu, G. S., & Gupta, D. (2021). Update on Etripamil Nasal Spray for the At-home Treatment of Acute Paroxysmal Supraventricular Tachycardia. *Heart international*, 15(1), 2–6. <https://doi.org/10.17925/HI.2021.15.1.2>
- Chung, Y., Rabe-Hesketh, S., & Choi, I. H. (2013). Avoiding zero between-study variance estimates in random-effects meta-analysis. *Statistics in medicine*, 32(23), 4071–4089. <https://doi.org/10.1002/sim.5821>
- Colucci, R. A., Silver, M. J., & Shubrook, J. (2010). Common types of supraventricular tachycardia: diagnosis and management. *American family physician*, 82(8), 942–952.
- DerSimonian, R., & Laird, N. (1986). Meta-analysis in clinical trials. *Controlled clinical trials*, 7(3), 177–188. [https://doi.org/10.1016/0197-2456\(86\)90046-2](https://doi.org/10.1016/0197-2456(86)90046-2)
- Djupesland P. G. (2013). Nasal drug delivery devices: characteristics and performance in a clinical perspective-a review. *Drug delivery and translational research*, 3(1), 42–62. <https://doi.org/10.1007/s13346-012-0108-9>
- Hafeez, Y., Quintanilla Rodriguez, B. S., Ahmed, I., & Grossman, S. A. (2024). Paroxysmal Supraventricular Tachycardia. In *StatPearls*. StatPearls Publishing.
- Hartung, J., & Knapp, G. (2001). A refined method for the meta-analysis of controlled clinical trials with binary outcome. *Statistics in medicine*, 20(24), 3875–3889. <https://doi.org/10.1002/sim.1009>
- Jackson, D., & White, I. R. (2018). When should meta-analysis avoid making hidden normality assumptions?. *Biometrical journal. Biometrische Zeitschrift*, 60(6), 1040–1058. <https://doi.org/10.1002/bimj.201800071>



- Naccarelli, G. V., Wolbrette, D. L., & Gonzalez, M. D. (2018). Can an Intranasal Calcium-Channel Blocker Convert Paroxysmal Supraventricular Tachycardia and Keep the Doctor Away?. *Journal of the American College of Cardiology*, 72(5), 498–500. <https://doi.org/10.1016/j.jacc.2018.03.546>
- Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. 2021;372:n71. <https://doi.org/10.1136/bmj.n71>.
- Stambler, B. S., Dorian, P., Sager, P. T., Wight, D., Douville, P., Potvin, D., Shamszad, P., Haberman, R. J., Kuk, R. S., Lakkireddy, D. R., Teixeira, J. M., Bilchick, K. C., Damle, R. S., Bernstein, R. C., Lam, W. W., O'Neill, G., Noseworthy, P. A., Venkatachalam, K. L., Coutu, B., Mondésert, B., ... Plat, F. (2018). Etripamil Nasal Spray for Rapid Conversion of Supraventricular Tachycardia to Sinus Rhythm. *Journal of the American College of Cardiology*, 72(5), 489–497. <https://doi.org/10.1016/j.jacc.2018.04.082>
- Stambler, B. S., Plat, F., Sager, P. T., Shardonofsky, S., Wight, D., Potvin, D., Pandey, A. S., Ip, J. E., Coutu, B., Mondésert, B., Sterns, L. D., Bennett, M., Anderson, J. L., Damle, R., Haberman, R., & Camm, A. J. (2022). First Randomized, Multicenter, Placebo-Controlled Study of Self-Administered Intranasal Etripamil for Acute Conversion of Spontaneous Paroxysmal Supraventricular Tachycardia (NODE-301). *Circulation. Arrhythmia and electrophysiology*, 15(12), e010915. <https://doi.org/10.1161/CIRCEP.122.010915>
- Stambler, B. S., Camm, A. J., Alings, M., Dorian, P., Heidbuchel, H., Houtgraaf, J., Kowey, P. R., Merino, J. L., Mondésert, B., Piccini, J. P., Pokorney, S. D., Sager, P. T., Verma, A., Wharton, J. M., Bharucha, D. B., Plat, F., Shardonofsky, S., Chen, M., Ip, J. E., & RAPID Investigators (2023). Self-administered intranasal etripamil using a symptom-prompted, repeat-dose regimen for atrioventricular-nodal-dependent supraventricular tachycardia (RAPID): a multicentre, randomised trial. *Lancet (London, England)*, 402(10396), 118–128. [https://doi.org/10.1016/S0140-6736\(23\)00776-6](https://doi.org/10.1016/S0140-6736(23)00776-6)



THE WAR ON NARCOTICS AND ITS IMPLICATIONS FOR VULNERABLE GROUPS IN INDONESIA

Milda Istiqomah^{1*}, Heru Kurniawan²

Faculty of Law, Universitas Brawijaya

*Corresponding author : milda.istiqomah@ub.ac.id

ABSTRACT

The drug-related cases in Indonesia continue to escalate. To address this issue, Indonesia has implemented efforts under the War on Drugs. However, the War on Drugs narrative declared by the government is feared to potentially target vulnerable groups, which in the context of this writing, include women, children, and individuals with mental or intellectual disabilities. Therefore, this paper aims to examine the implementation of the War on Drugs and its implications for these vulnerable groups. The type of research method used is normative juridical with a legislative and case approach, as well as the technique of legal material search through literature study. Based on the research results, it can be seen that the use of the War on Drugs narrative is also reflected in the regulation of sanctions for drug crime perpetrators using a double track system, which ultimately also targets vulnerable groups. In the context of women, law enforcement authorities (APH) generally only view drug cases involving women based on the amount of evidence without considering the women's position within the drug trafficking syndicate. Concerning children, children in conflict with the law in drug-related offenses will experience different situations. The use of various types of charges in drug-related offenses, such as alternative, subsidiary, cumulative, and combinative, makes it difficult to keep children out of the criminal justice process. Then, in the context of individuals with mental or intellectual disabilities, due to their vulnerability, they may be exploited by syndicates to facilitate their actions in distributing drugs, which can then entangle them with the law due to the insensitivity and lack of understanding of the law enforcement authorities.

Keywords: *children, mental or intellectual disabilities, war on drugs, vulnerable groups, women*

INTRODUCTION

Narcotics crime in Southeast Asia continues to escalate every year. The high level of narcotics production makes countries in the Southeast Asian region a target “market brief country” crime syndicates that smuggle narcotics (Eci Eliza, 2021). The strategic geographical location

of this area as a trade route that allows the circulation and distribution of narcotics to the international world (Achadiyah Rahmah Sari, 2018).

Indonesia as a country with a strategic location also suffer from narcotics trafficking. The existence of narcotics in Indonesia is inseparable from the history of the past. Opium is the first type of drug known in Indonesia through arabian merchants (Achadiyah Rahmah Sari, 2018). Since the beginning of the Netherlands colonial period in Indonesia, the opium trade has been a profitable sector. Indonesia in this case became a crossing point for opium trade between the Netherlands and Chinese traders. In addition, the Netherlands also sold opium to the indigenous population and introduced opium as a sedative (Parasian Simanungkalit, 2011).

Until now, narcotics cases in Indonesia are at an alarming level. The issue of narcotics is a problem that must be faced seriously by all community groups (Raden Rara Rahayu Nur Raharsi et al., 2019), not only among adults but also among adolescents and children.

Indonesia is one of the countries that has made many efforts to fight against narcotics or War on Drugs (Abdul Aziz, 2017). During the leadership of President Joko Widodo (Jokowi), he showed his seriousness towards War on Drugs (Achadiyah Rahmah Sari, 2018). Jokowi has stated and prioritized War on Drugs during his tenure (in the first period of his administration) rather than a harm reduction program. President Jokowi stated that the implementation of *War on Drugs* intended to save the nation. The War on Drugs was implemented through several policies, including the death penalty. Under Jokowi's leadership, death penalty have been carried out on many inmates in narcotics cases (Yeyen Subandi et al., 2022).

The use of the War on Drugs narrative by the Government has implications for the occurrence of overcrowded as many as 131,738 people or 96%. Of the 268,342 inmates/prisoners in prisons/prisons, as many as 133,578 people or 51% are inmates/prisoners in narcotics cases. Meanwhile, as many as 134,764 people are inmates/prisoners of other crimes. In addition, it is feared that the existence of the War on Drugs can also target vulnerable groups. This is because the regulation of sanctions against narcotics abuse as regulated in Articles 111 to 148 of Law of the Republic of Indonesia Number 35 of 2009 concerning Narcotics (Narcotics Law), uses a double track system in the form of imprisonment and fines at the same time. This study aims to evaluate the application of war on drugs and its implications for vulnerable groups.

METHOD

The research method used is a type of normative juridical research with a legislative approach and a case study. This normative juridical research involves the analysis of primary and secondary legal materials, using the technique of tracing legal materials of literature studies, ranging from laws and regulations or court sentences, to relevant legal literature (books, scientific journals, articles, research reports).



RESULTS AND DISCUSSION

Narcotics Cases in Indonesia

As one of the developing countries, Indonesia is a very potential target as a place for illegal narcotics trafficking. The case of methamphetamine trafficking and the arrest of many international narcotics dealers in recent years is proof that Indonesia is in a state of narcotics emergency (Bio-Pujai Hariyant, 2018).

The United Nation Office on Drugs and Crime (UNODC) stated that Indonesia is one of the countries with the highest number of narcotics users in the world. The estimated number of recorded narcotics users is 2.9-3.6 million users or around 1.5% of the entire population of Indonesia, of which 22% of the 1.5% of narcotics users are teenagers (Dwinanda Linchia Levi Heningdyah Nikolas Kusumawardhani et al., 2020). The BNN report in 2016 also stated that the estimated daily deaths due to illegal narcotics were 40-50 people and the cost incurred by the Government of Indonesia every year was Rp. 72 trillion. The alarming level of narcotics abuse in Indonesia has prompted the Government to respond more aggressively and intensively (Dyah Mutiarin et al., 2019).

Based on data obtained from the National Narcotics Agency's Data and Information Research Center (PUSLITDATIN BNN) entitled "*Indonesia Drugs Report 2022*", it is stated that the number of narcotics suspects who were then divided into several categories in 2021 is known as follows:

Table 1. Data on Narcotics Suspects by Province

Peringkat	Province	Number of Suspects		Sum
		Police	BNN	
1	North Sumatra	7.770	82	7.852
2	East Java	7.160	61	7.221
3	Jakarta	4.195	27	4.222
4	West Java	3.128	52	3.180
5	South Sumatra	2.636	43	2.679
6	Central Java	2.380	29	2.409
7	South Sulawesi	2.856	23	2.879
8	Riau	2.343	28	2.371
9	Lampung	2.319	24	2.343
10	South Kalimantan	1.938	59	1.997
11	Acch	1.686	51	1.737
12	East Kalimantan	1.643	38	1.681
13	West Sumatra	1.441	34	1.475
14	West Kalimantan	1.107	16	1.123
15	Jambi	1.011	75	1.086
16	Banten	927	9	936
17	Bali	846	46	892
18	Central Kalimantan	760	24	784
19	West Nusa Tenggara	740	13	753



20	Central Sulawesi	690	53	743
21	IN Yogyakarta	620	35	655
22	Riau Islands	478	33	511
23	Southeast Sulawesi	479	26	505
24	North Kalimantan	438	20	458
25	Bangka Belitung	429	18	447
26	Bengkulu	416	30	446
27	West Sulawesi	378	33	411
28	Navel	250	120	370
29	Papua	309	19	328
30	North Sulawesi	248	12	260
31	Maluku	181	18	199
32	Gorontalo	161	7	168
33	North Maluku	154	11	165
34	West Papua	82	9	91
35	East Nusa Tenggara	25	3	28
Sum		52.224	1.181	53.405

Source: (Petrus R. Golose et al., 2022)

Based on the data above, it can be known that the 10 (ten) provinces with the highest number of suspects in narcotics cases in Indonesia are: 1) North Sumatra with a total of 7,852 suspects (seven thousand eight hundred and fifty-two); 2) East Java as many as 7,221 (seven thousand two hundred and twenty-one) suspects in narcotics cases; 3) DKI Jakarta as many as 4,222 (four thousand two hundred and twenty-two) suspects in narcotics cases; 4) West Java is in the fourth position with the highest number of suspects in narcotics cases, namely there are 3,180 (three thousand one hundred and eighty) suspects; 5) In fifth place there is South Sumatra Province with the number of suspects in narcotics cases, namely 2,679 (two thousand six hundred and seventy-nine) suspects; 6) Central Java has a total of 2,409 (two thousand four hundred and nine) suspects in narcotics cases; 7) South Sulawesi as many as 2,879 (two thousand eight hundred and seventy-nine) suspects in narcotics cases; 8) Riau ranks eighth with the highest number of narcotics suspects in Indonesia, namely 2,371 (two thousand three hundred and seventy-one) suspects; 9) Lampung has a total of 2,343 (two thousand three hundred and forty-three) suspects in narcotics cases; and 10) South Kalimantan there are as many as 1,997 (one thousand nine hundred and ninety-seven) suspects in narcotics cases.

Table 2. Data on Narcotics Suspects by Gender

No	Gender	Number of Suspects		Sum
		Police	BNN	
1	Man	49.477	1.105	50.582
2	Woman	2.747	76	2.823
Sum		52.224	1.181	53.405

Source: (Petrus R. Golose et al., 2022)



Based on gender, it can be understood that the suspects in narcotics cases in Indonesia are dominated by men, namely as many as 95% or 50,582 (fifty thousand five hundred and eighty-two) suspects. Meanwhile, the suspects of narcotics crimes who are female are 5% or 2,823 (two thousand eight hundred and twenty-three) suspects.

Table 3. Data on Narcotics Suspects by Age Group

No	Age Group	Number of Suspects		Sum
		Police	BNN	
1	<15 Years	299	7	306
2	16-20 Years	2.951	24	2.975
3	21-25 Years	10.952	144	11.096
4	26-30 Years	16.425	152	16.577
5	>30 Years	21.597	562	22.159
6	Unknown	0	292	292
Sum		52.224	1.181	53.405

Source: (Petrus R. Golose et al., 2022)

Based on the data mentioned above, it is known that the highest ranking of suspects for narcotics crimes comes from the age group over 30 (thirty) years, namely 22,159 (twenty-two thousand one hundred and fifty-nine) suspects. Then in the second position with the highest number of suspects for narcotics crimes are from the age group with an age range of 26-30 years, namely with a total of 16,577 (sixteen thousand five hundred and seventy-seven). The age group of 21-25 years is ranked third with the number of suspects in narcotics cases as many as 11,096 (eleven thousand ninety-six). Then, the age group with an age range of 16-20 years is known to have 2,975 (two thousand nine hundred and seventy-five) suspects of narcotics crimes. In the age group under 15 (fifteen) years old, there are a total of 306 (three hundred and six) suspects, and the rest, namely 292 (two hundred and ninety-two) suspects of narcotics crimes come from an unknown age group.

Table 4. Data on Narcotics Suspects by Employment

Peringkat	Work	Number of Suspects		Sum
		Police	BNN	
1	Private	15.760	212	15.972
2	Self employed	13.499	276	13.775
3	Not Working	9.001	111	9.112
4	Laborer	6.932	61	6.993
5	Farmer	3.174	75	3.249
6	Student	1.716	44	1.760
7	Students	1.290	20	1.310
8	Police	399	4	403
9	PNS	260	9	269
10	Unknown	0	250	250
11	TNI	193	1	194
12	Inmate	0	42	42



13	Fisherman	0	28	28
14	Driver	0	28	28
15	Housewives	0	10	10
16	Honor	0	3	3
17	Security	0	3	3
18	Sailor	0	2	2
19	Seniman	0	2	2
Sum		52.224	1.181	53.405

Source: (Petrus R. Golose et al., 2022)

When analyzed based on the type of work, the 10 (ten) jobs with the most suspects of narcotics crimes are from groups with private work backgrounds, namely 15,972 (fifteen thousand nine hundred and seventy-two) suspects. In the second rank with the highest number of suspects for narcotics crimes are suspects with a background in self-employed work. Meanwhile, as many as 9,112 (nine thousand one hundred and twelve) suspects in narcotics cases are not working or unemployed. The group with labor work is ranked fourth with the number of suspects for narcotics crimes amounting to 6,993 (six thousand nine hundred and ninety-three). The fifth place with the number of suspects for narcotics crimes comes from the farmer group with a total of 3,249 suspects (three thousand two hundred and forty-nine). The student group is in sixth position with 1,760 (one thousand seven hundred and sixty) suspects for narcotics crimes. There are 1,310 (one thousand three hundred and ten) drug suspects from student groups. Then in the eighth and ninth ranks with the highest number of suspects for narcotics crimes are from the work background of the National Police and civil servants, which are 403 (four hundred three) and 269 (two hundred and sixty-nine) people, respectively. Also, in the tenth position, there are 250 (two hundred and fifty) suspects of narcotics crimes with unknown work backgrounds.

Then, in terms of the type of narcotics used, Petrus R. Golose, et al., in his article entitled “National Survey on Drug Abuse in 2021” said that in the context of Indonesia, based on the results of a survey of 64,348 respondents, it is known that the most popular types of drugs consumed are: 1) Marijuana or hasish (cannabis sap) as much as 41.4%; 2) Shabu, ecstasy, amphetamine, dexamphetamine/dexand adderall as much as 25.7%; 3) Nipam, lexotan, rohypnol, mogadon, valium, xanax, camlet (alprazolam), rclona, pil koplo, BK, mbiat, mboti, roda, luminal, fenobarbital (barbiturat)and dumolid, progression as much as 11.8%; 4) Dextro (dextromethorpan as much as 6.4%; and 5) Gorilla tobacco, cathinone, methylcantone, and methylene as much as 4.1% (Petrus R. Golose et al., 2022).

The Implementation of War on Drugs

Narration from War on Drugs has existed since the 1870s. However, at that time it was better known as the term “Opium War”. Richard Nixon was the first person to declare that War on Drugs in 1971. Richard Nixon was also the first to include marijuana as a Class I drug. War on Drugs It was a war against leftists as well as blacks. This view is considered to make it easier to criminalize narcotics and associate them with certain social groups or classes (Yeyen Subandi et al., 2022).



Narrative and declaration regarding War on Drugs still continues and is still used today (Yeyen Subandi et al., 2022), including in Indonesia. In fact, when referring to several countries in Europe, one of which is Portugal, has no longer categorized the use of narcotics as a criminal act since 2001. In that country, decriminalization of the use of narcotics is carried out, which means that the use of narcotics in the country is still illegal, it's just that the use of narcotics is no longer considered a crime but an administrative violation whose sanction is by paying a light fine (Hannah Laqueur, 2015). In contrast to European countries, the legalization of narcotics in Indonesia can be said to be almost impossible to do (Achadiyah Rahmah Sari, 2018).

For example, as stated in Sentences Number 111/Pid.Sus/2017/PN Sag, Fidelis Arie Sudewarto alias Nduk Anak Fx Surajiyo (Defendant) was declared legally and convincingly proven guilty of committing a criminal act as stipulated in Article 116 paragraph (1) of the Narcotics Law⁸⁹ which reads:

“Any person who without rights or unlawfully uses Class I Narcotics against another person or provides Class I Narcotics for use by others, shall be sentenced to imprisonment for a minimum of 5 (five) years and a maximum of 15 (fifteen) years and a fine of at least Rp. 1,000,000,000 (one billion rupiah) and a maximum of Rp. 10,000,000,000 (ten billion rupiah)”.⁹⁰

The defendant in this case was sentenced to imprisonment for 8 (eight) months and a fine of Rp. 1,000,000,000,- (one billion rupiah) with the provision that if the fine is not paid, it will be replaced with imprisonment for 1 (one) month.⁹¹

The case raises pros and cons from various circles. Budi Waseso (Head of BNN for the 2015-2018 period) on various occasions stated that there was no forgiveness and forgiveness because growing marijuana was banned. Budi Waseso also did not believe the reason from Fidelis Arie Sudewarto aka Nduk Anak Fx Surajiyo who said that the effort to grow marijuana was aimed at treating his wife (Nurhadi Suchayo, 2017). Meanwhile, Yohan Misero (Narcotics Policy Analyst of LBH Masyarakat stated) that in substance this case cannot be fully assessed in terms of law enforcement. The law is also tasked with providing justice by looking at the facts of the trial. Yohan Misero admitted that on the one hand Fidelis Arie Sudewarto alias Nduk Anak Fx Surajiyo did commit a violation of the law and this is an undeniable fact, but on the other hand the law must understand on what basis the action was carried out by Fidelis Arie Sudewarto alias Nduk Anak Fx Surajiyo. In addition, Yohan Misero also urged for changes to the relevant laws and regulations to no longer include marijuana as a group I psychotropic.

The Impact of the Prohibition Regime on Vulnerable Groups

In Indonesia's laws and regulations, especially at the legal level, there is still no definition of vulnerable groups. The definition of “vulnerable group” can be known from the interpretation

89 Sentences Number 111/Pid.Sus/2017/PN Sag.

90 Article 116 paragraph (1) of Law of the Republic of Indonesia Number 35 of 2009 concerning Narcotics, Statute Book of the Republic of Indonesia Number 143 of 2009, Supplement to Statute Book of the Republic of Indonesia Number 5062 of 2009.

91 Sentences Number 111/Pid.Sus/2017/PN Sag.



of the explanation of articles or provisions that exist in the body, but still has a limited scope to individuals with a certain identity in society (Fazri Nursyamsi Nabila, 2021).

Based on the provisions of the Explanation of Article 5 paragraph (3) Law of the Republic of Indonesia Number 39 of 1999 concerning Human Rights (Human Rights Law) states that, "What is meant by "vulnerable community groups" include the elderly, children, the poor, pregnant women, and people with disabilities". Willem van Genugten J.M in Iskandar Hoesin mentioned that those who fall into the category of "Vulnerable Groups or Vulnerable Groups" is: a) Refugees; b) Internally displaced persons; c) National Minorities; d) Migrant Workers; e) Indigenous Peoples; f) Children; and g) Women (Iskandar Hoesin, 2003). The Correctional Institution (Lapas) states that those classified as vulnerable groups are women, children, the elderly, people with disabilities, inmates sentenced by the court to life imprisonment, and inmates sentenced by the court to death (Featuring Cindhy Wirawan, 2021). Meanwhile, in the National Action Plan for Human Rights 2015-2019 (RANHAM 2015-2019), it is stated that parties who are included in vulnerable groups are: a) people with disabilities; b) the elderly group; c) the poor; d) women; e) children; f) refugees; g) indigenous peoples; and h) migrant workers (Pocut Eliza et al., 2016).

Arsa Ilmi Budiarti, et al., in her article entitled "*Research Report: Legal Needs Survey for Vulnerable Groups 2022*", mentioned that the type of legal problems that many vulnerable groups experience in general is criminality.(Arsa Ilmi Budiarti et al., 2023) In this regard, it is necessary to further study the existence of a paradigm *War on Drugs* along with its implications for vulnerable groups, which in this paper focuses more on women, children, and people with mental or intellectual disabilities.

Woman

Regulation of the Supreme Court of the Republic of Indonesia Number 3 of 2017 concerning Guidelines for Adjudicating Women's Cases Facing the Law (PERMA 3/2017) has been regulated regarding guidelines for adjudicating women's cases in accordance with the law, but Ricky Gunawan, et al., in his book entitled "Encouraging Non-Criminal Policies for Narcotics Use: Improving Indonesia's Narcotics Governance", stated that PERMA 3/2017 has not been fully applied to all criminal acts involving women. The crime committed with the background of women has not been seen as a correlation (Ricky Gunawan et al., 2021).

In her report entitled "The Vulnerability of Women's Narcotics Couriers and Insensitive Laws", Novia Puspitasari from the Community Legal Aid Institute (LBHM) stated that there are 4 (four) indications of reasons for the involvement of women as couriers in narcotics crimes, namely:

To Meet the Needs of Life

As Jennifer Fleetwood expressed, the reason why women become narcotics couriers is to provide for their families and fulfill the demands of parenthood (Jennifer Fleetwood, 2014). The fulfillment of domestic needs does not only apply to the individual himself, but also to other dependents, such as children and grandchildren (Novia Puspitasari, 2020).



For example, the narcotics case by Yorita Sari (50 years old) in Sentences Number 569/Pid.Sus/2021/PN Jkt.Brt, the Public Prosecutor (JPU) charged Yorita Sari with the death penalty. The demands made by the prosecutor are certainly inseparable from the influence of the *War on Drugs* paradigm, thus encouraging the state to be tough on narcotics couriers, which ultimately gives severe punishment to the couriers.

APH's efforts are often more focused on punishing petty actors such as Yorita Sari as part of the chain that is at the lowest but has the highest risk. Although in the end, the Judge in his decision decided to sentence Yorita Sari to imprisonment for 20 (twenty) years and a fine of Rp. 1,000,000,000,- (one billion rupiah) with the provision that if the fine could not be paid, it would be replaced with a prison sentence for 2 (two) months.⁹²

However, the Author feels that the verdict is quite long and unfair. This is considering that Yorita Sari is a 50 (five) year old woman and is a single parent who takes care of her two children. The situation became even more difficult when the company where he worked terminated the contract due to the impact of Covid-19. In addition, Yorita Sari is also responsible for the medical expenses of her younger sister who has kidney failure.

Then, there was also a female courier with the initials LAS who hid 3 (three) packages of methamphetamine into her genitals and anus. Upon examination, it was revealed that LAS accepted a job as a narcotics courier because he had been unemployed for a long time. LAS also admitted that she was forced to take the risk because she was widowed and had to pay for the life of one of her children (Republika, 2020).

Requested by Spouse

The existence of a power relationship in the relationship between men and women often results in women being unable to refuse requests or orders from their partners. Losing a partner or breaking up a relationship is a threat to women, so many men in syndicates often use the threat as a form of control over women (Jennifer Fleetwood, 2014).

For example, a woman with the initials SS who became a narcotics courier because she was asked by her partner and threatened to be cut off if she did not want to comply with her boyfriend's wishes. SS is a high school graduate who does not have a job, so SS's girlfriend offers to give SS money with the task of delivering orders to buyers, while SS's girlfriend is in charge of communication and payment with buyers (Muhammad Azzam, 2019). According to Sundbury in Jennifer Fleetwood, the relationship between women and male dealers (male traffickers) It cannot be called a relationship, but rather a form of exploitation (Jennifer Fleetwood, 2014).

However, Indonesia's legal system does not carefully consider the reality experienced by female narcotics couriers. On the other hand, APH argues that a woman's decision to accept an offer or invitation from a partner is of her own volition. In fact, there are often elements of exploitation and violence experienced by these women. Consent should be a choice made after the person has received the information comprehensively and voluntarily, without any coercion, manipulation, or the influence of drugs/alcohol (Novia Puspitasari, 2020).

92 Sentences Number 569/Pid.Sus/2021/PN Jkt.Brt.



Ordered by Prisoners or Inmates

The area of narcotics trafficking by female couriers has spread to places that are associated with safety, such as prisons. Prisons are a strategic means to spread narcotics (Andrew O'Hagan & Rachel Hardwick, 2017). European Monitoring Centre for Drugs and Drug Addiction said, although some inmates stopped or reduced the use of narcotics while in prison, there were inmates who actually started using narcotics while in prison (European Monitoring Centre for Drugs and Drug Addiction, 2012).

For example, a woman with the initials RA who became a courier on the orders of one of the inmates at the Raja Basa Prison in Bandar Lampung. At the time the news related to the case was published, RA's legal process was at the stage of reading the charges by the prosecutor with a criminal charge of 20 (twenty) years in prison. RA on the agenda, had just given birth. In fact, criminalizing pregnant women requires careful preparation because many of them have difficulty in obtaining adequate health services both before and after childbirth. In addition, there are also women who deliver narcotics to prison because they are forced by their children. NR was forced by his son (inmate) at the State Prison (Rutan) to deliver narcotics in exchange for Rp. 200,000,-/delivery. Anak NR plans to distribute the narcotics at a price of Rp. 500,000,-/50gr. Another NR child was also involved in the case as a supplier of NR (Novia Puspitasari, 2020).

In this regard, Novia Puspitasari said that narcotics are also usually stored in limbs that are synonymous with femininity such as breasts, hips, and buttocks. These differences in patterns allow women to carry narcotics in larger quantities than men (Novia Puspitasari, 2020). The way women hide drugs in their limbs reflects the gender norms associated with the narcotics trade (Jennifer Fleetwood, 2014).

Women are one of the most affected and disadvantaged community groups with the existence of a paradigm War on Drugs (Arinta Dea Dini Singgi, 2016). With the existence of War on Drugs, women who are already vulnerable to exploitation also have to face the threat of the death penalty or imprisonment for a long period of time because of their weak position.

Moreover, APH generally only sees narcotics cases involving women based on the amount of evidence without involving the position of women in the vortex of narcotics trafficking syndicates (Ricky Gunawan et al., 2021). Paradigm War on Drugs causing a punitive approach and ignoring women's vulnerability.

Sulistiyowati Irianto, et al., in his book entitled "Trafficking of Women in Narcotics Trafficking Networks" mentioned that when all the elements of the article have been fulfilled in the case of female narcotics couriers, the Judge no longer pays attention to the factors of vulnerability and poverty conditions of women in her decision (Sulistiyowati Irianto et al., 2005).

Therefore, in terms of the involvement of women as couriers/intermediaries in narcotics syndicates, state laws and policies must be responsive and have a gender perspective so that they can protect the rights of women who are facing the law instead of harming them.



Child

In the context of narcotics crimes, the modus operandi in narcotics crimes continues to change. This is done in order to avoid detection and tracking by law enforcement officials, such as involving children as couriers or delivering narcotics to users. The circulation of narcotics using children as couriers or dealers is currently rampant in various regions in Indonesia, especially in South Sulawesi Province and several provinces on the island of Java (Mochammad Anwar, 2019).

This is like the case that occurred in 2016, BNN in collaboration with Halim Perdanakusuma Airport Customs and Excise succeeded in uncovering a case of narcotics trafficking (international network) in which the narcotics trade involved children. Officers managed to secure 13 (thirteen) plastic packs containing marijuana (256.8 grams) packaged in plastic “Lego” toys. There are 3 (three) children who are suspects who act as couriers and are still 16 (sixteen) years old. In addition, a case of narcotics trafficking involving children also occurred in 2016 in South Sulawesi. The Police of the Directorate of Narcotics Investigation arrested a 13 (thirteen) year-old child for being found to be distributing methamphetamine-type narcotics in the form of sachets.

Actions carried out by children as couriers or narcotics delivery do meet the formulation of criminal acts as regulated in the Narcotics Law, and a child who is arrested on suspicion of being a narcotics courier can be held accountable for his actions before the law, but this must still pay attention to special protection for children (Mochammad Anwar, 2019). Article 1 number 15 of Law of the Republic of Indonesia Number 23 of 2002 concerning Child Protection (Child Protection Law) states that:

“Special protection is protection given to children in emergency situations, children facing the law, children from minority and isolated groups, children who are economically and/or sexually exploited, trafficked children, children who are victims of abuse of narcotics, alcohol, psychotropics, and other addictive substances (drugs), children who are victims of kidnapping, sale, trafficking, children who are victims of physical and/or mental violence, children with disabilities, and children who are victims of mistreatment and neglect”.⁹³

Even though there are special restrictions and protections, children who are in conflict with the law in narcotics crimes will experience a different situation. The use of various types of charges in drug crimes, such as alternative, subsidiary, cumulative, and combinatorial, makes it difficult to avoid children from the criminal justice process (Ricky Gunawan et al., 2021).

Then, the existence of the War on Drugs narrative has implications for vulnerable groups, in this case children. As stated in Sentences Number 01/Pid.Sus-Anak/2014/PN Pli (17-year-old child),⁹⁴ the Judge is of the view that the child in the case of a child as a narcotics courier has fulfilled the elements of the provisions of Article 114 paragraph (1) of the Narcotics Law which reads:

⁹³ Article 1 number 15 of Law of the Republic of Indonesia Number 23 of 2002 concerning Child Protection, Statute Book of the Republic of Indonesia Number 109 of 2002, Supplement to Statute Book of the Republic of Indonesia Number 4235

⁹⁴ Sentences Number 01/Pid.Sus-Anak/2014/PN. Pli.



“Any person who without rights or against the law offers to sell, sell, buy, receive, become an intermediary in the sale, sale, exchange, or delivery of Class I Narcotics, shall be sentenced to life imprisonment or imprisonment for a minimum of 5 (five) years and a maximum of 20 (twenty) years and a fine of at least Rp. 1,000,000,000.00 (one billion rupiah) and a maximum of Rp. 10,000,000,000.00 (ten billion rupiah)”.⁹⁵

Therefore, the Judge sentenced the child to 2 (two) years and 6 (six) months in prison, as well as a fine of Rp. 500,000,000 (five hundred million rupiah). In fact, in this case, it can be said that the child is a victim of narcotics couriers. The child was asked to deliver a package of drugs with the lure that he would be rewarded (~~Asep Syarifuddin~~ Hidayat et al., 2019). Then, in the case, it was also known that it was true that diversion had been attempted but was unsuccessful, so it was continued with the public prosecutor’s indictment.

So that in this case it is as if Diversion is only carried out as a cancellation of the obligation of Article 5 paragraph (3) and Article 7 paragraph (1) of Law of the Republic of Indonesia Number 11 of 2012 (SPPA Law), which mandates that Diversion is mandatory to be pursued. Moreover, the verdict also does not mention whether Diversi has really been pursued at every stage starting from the investigation level to the examination of children in the district court. In fact, in this case, the child is also not a dealer, but a courier/intermediary. Therefore, Diversion should be applied because the role of children in this case is not included in the category as stipulated in the Explanation of Article 9 paragraph (1) letter a of the SPPA Law, which states that, “*Diversion is not intended to be carried out against perpetrators of serious crimes, such as murder, rape, drug trafficking, and terrorism, who are threatened with criminal punishment for more than 7 (seven) years*”.

Likewise, in Sentences Number 28/Pid.Sus-Anak/2020/PN Mre (17-year-old child), the child was sentenced to imprisonment for 2 (two) years and job training for 6 (six) months at the Social Welfare Implementation Institution (LPKS) Marsudi Putra Dharmapala Indralaya Ogan Ilir. This is because Children in Sentences Number 28/Pid.Sus-Anak/2020/PN Mre was declared legally and convincingly guilty of committing a criminal act without the right to be an intermediary in the sale and purchase of class I narcotics other than plants.⁹⁶

Although the country in this case the Government has firmly declared the War on Drugs, in its application it must also be considered so as not to target vulnerable groups, in this case children who are involved in narcotics crimes. It is not wrong to make a child involved in narcotics crimes a suspect, but in this determination the Child Investigator must be careful and pay attention to the rights of the child and as much as possible to avoid the process of detention and punishment of the child.

Efforts that can be made by the Government in this case APH must prioritize an approach by providing advice and appeals to children, as well as involving the participation of parents and the community. In dealing with narcotics crimes involving children, it is more appropriate to use non-penal methods, considering that children are individuals who do not yet have physical and mental maturity. Therefore, children are included in the category of

⁹⁵ Article 114 paragraph (1) of Law of the Republic of Indonesia Number 35 of 2009 concerning Narcotics. Statute Book of the Republic of Indonesia No. 143 of 2009, Supplement to Statute Book of the Republic of Indonesia No. 5062 of 2009.

⁹⁶ Sentences Number 28/Pid.Sus-Anak/2020/PN Mre.



vulnerable groups, which according to Iskandar Hoesin's view is also interpreted as a group that is easily influenced.

People with Mental or Intellectual Disabilities

With the paradigm War on Drugs which is manifested in the form of overcriminalization, all provisions in the Narcotics Law eliminate the element of "intentional" error. Therefore, every person who is entangled in a criminal act is likely to be found guilty and subject to imprisonment and fines. In fact, in criminal law, a person can commit a criminal act unintentionally and there are reasons that are the basis for forgiveness for the actions he committed (Ricky Gunawan et al., 2021).

Ricky Gunawan, et al., mentioned that in practice, it is difficult for the application for a mental health examination to be approved by the authorized APH. In fact, the Legal Advisor (PH) of the Suspect or Defendant, cannot be an applicant for a mental health examination. This is as in the case in Sentences Number 280/Pid.Sus/2019//PN Tng, the defendant Wendra Purnama (22), a person with intellectual disabilities, was accompanied by LBHM but still faced difficulties in applying for a mental health examination (Ricky Gunawan et al., 2021). LBHM submitted the application letter to the Chairman of the Tangerang District Court, but the application was never answered. So that no psychiatrist is willing to examine directly because of the provisions of Permenkes 77/2015 (Ricky Gunawan et al., 2021).

So, LBHM submitted an application to the prison and was granted. The results of the examination showed that Wendra's IQ was 55, equivalent to the IQ of an 11-year-old child. The results of the examination then became the basis for the Judge to order the prosecutor to submit an official application letter to conduct a mental health examination at the Tangerang Regional General Hospital (RSUD) and the results supported the previous psychologist's examination (Ricky Gunawan et al., 2021).

Then, there is another case that targets people with mental disabilities named Rodrigo Gularte, a Brazilian citizen. Rodrigo was arrested by Soekarno-Hatta Airport Customs and Excise officers on July 31, 2004 for smuggling 6 (six) kilograms of cocaine into a surfboard. Therefore, on February 7, 2005, the Tangerang District Court sentenced Rodrigo to death, and on May 10, 2005, Rodrigo was included in the list of executions (Ervan Hardoko, 2015).

In Rodrigo's case, Yeni Rosa Damayanti (activist and fighter for democracy and reform in Indonesia) said that various medical record documents showed that Rodrigo had been treated in a mental hospital for 1 (one) month in 1999. Then there are other documents that show that Rodrigo has been treated regularly at the Psychiatrist from March to November 1996. However, the medical records were never considered by the judges who tried Rodrigo's case from the District Court to the Supreme Court, including the clemency application rejected by the President. Then, HM Prasetyo (Attorney General) as quoted in various media, accused Rodrigo of just buying time (Ging Ginnanger, 2015).

Based on the example of the case, it can be seen that the paradigm War on Drugs and the Narcotics Law can ensnare anyone, including those who in this case fall into the category of vulnerable groups, namely intellectual disabilities and mental disabilities. With this vulnerability, people with intellectual disabilities and mental disabilities can be used by



syndicates to launch their actions in distributing narcotics, which can then be entangled by the law due to APH's insensitivity and lack of understanding (Ricky Gunawan et al., 2021).

Concerns about the use of narrative War on Drugs and the implications for vulnerable groups, namely in this case, are more because vulnerable groups are high-risk community groups, because they are in situations and conditions that lack the ability to prepare for high-risk threats (Featuring Cindhy Wirawan, 2021). Wiwik Afifah in his work entitled "Legal Aid for Vulnerable Groups" In 2020, it was stated that the problems experienced by vulnerable groups include difficulties in accessing the judiciary, poverty, lack of information, illiteracy, and many others (Wiwik Afifah, 2020). So, the narrative War on Drugs It is feared that it will be used to make it easier to criminalize narcotics and associate it with certain social groups or classes which in this context targets vulnerable groups.

CONCLUSION AND RECOMMENDATIONS

Indonesia is one of the countries with the highest number of narcotics users in the world. In overcoming this, Indonesia has made many efforts to fight against narcotics or the War on Drugs. This can also be seen in the regulation of sanctions against perpetrators of narcotics crimes who use a double track system in the form of imprisonment and fines at the same time. The use of the War on Drugs narrative ultimately also targets vulnerable groups, especially women, children, and people with mental or intellectual disabilities.

First, in the context of women, with the War on Drugs, women who are already vulnerable to exploitation also have to face the threat of the death penalty or imprisonment for a long period of time. Moreover, APH generally only sees narcotics cases involving women based on the amount of evidence without involving the position of women in the vortex of narcotics trafficking syndicates. Second, in the case of children, even though there are special restrictions and protections, children who are in conflict with the law in narcotics crimes will experience a different situation. The use of various types of charges in drug crimes, such as alternative, subsidiary, cumulative, and combinatorial, makes it difficult to avoid children from the criminal justice process. Third, in the context of people with mental or intellectual disabilities, the War on Drugs paradigm and Law 35/2009 can ensnare anyone, including those who in this case fall into the category of vulnerable groups, namely intellectual disabilities and mental disabilities. With this vulnerability, people with intellectual disabilities or mental disabilities can be used by syndicates to launch their actions in distributing narcotics, which can then be entangled by the law due to insensitivity and incomprehension of APH.

In this regard, the author in this case provides the following recommendations: (1) The application of alternative punishments, such as rehabilitation programs, can be a better approach than prison, especially for those who are not dealers; (2) Encourage transparency, accountability, and legal reform related to narcotics, so that the implementation of the "war



on drugs” can be more effective, and not haphazardly targeting vulnerable groups; (3) The government also needs to consider the use of narcotics as already implemented in Portugal and the Netherlands; and (4) The government must also give freedom to scientists to conduct comprehensive research on the benefits of certain classes of narcotics for the health world.

BIBLIOGRAPHY

- Abdul Aziz. (2017, January 25). The clemency given by Jokowi and SBY. *Tirto.Id*. <https://tirto.id/grasi-grasi-yang-diberikan-jokowi-dan-sby-chEU>
- Achadiyah Rahmah Sari. (2018). Indonesia’s Securitization Policy Through the War on Drugs during the Joko Widodo Administration [Thesis]. University of Muhammadiyah Malang.
- Andrew O’Hagan & Rachel Hardwick. (2017). Behind Bars: The Truth about Drugs in Prisons. *Forensic Research & Criminology International Journal*, 5(3), 1–12.
- Arinta Dea Dini Singgi. (2016, March 8). Narcotics Courier Woman: Forgotten Vulnerability. *Community Legal Aid Institute*. <https://lbhmasyarakat.org/perempuan-kurir-narkotika-kerentanan-yang-terlupakan/>
- Arsa Ilmi Budiarti, Dio Ashar Wicaksana, Gladys Nadya Arianto, Kharisanty Soufi Aulia, Khotimun Sutanti, Gina Sabrina, Pratiwi Febry, Febda Risha Lestiana, Abdul Malik Akdom, April Pattiselanno Putri, Vania Christabel, & Harshita. (2023). *Research Report: Legal Needs Survey for Vulnerable Groups 2022*. The Civil Society Consortium for Government Openness in the Justice Sector consists of the Indonesia Judicial Research Society (IJRS), the Indonesia Legal Aid and Human Rights Association (PBHI), the Indonesia APIK LBH Association, and the Indonesia Legal Aid Foundation (YLBHI) with support from the Norwegian Centre for Human Rights (NCHR). https://ijrs.or.id/wp-content/uploads/2023/03/FINAL_Survei-Kebutuhan-Hukum-bagi-Kelompok-Rentan.pdf
- Asep Syarifuddin Hidayat, Samul Anam, & Muhammad Ishar Helmi. (2019). Legal Protection of Children as Narcotics Couriers. *SALAM: Journal of Social and Cultural Syar-I*, 5(3), 307–330. <https://doi.org/10.15408/sjsbs.v5i3.10416>
- Bayu Puji Hariyanto. (2018). Prevention and Eradication of Drug Trafficking in Indonesia. *Journal of Legal Sovereignty*, 1(1), 201–210. <https://doi.org/10.30659/jdh.v1i1.2634>
- Dwinanda Linchia Levi Heningdyah Nikolas Kusumawardhani, FX Adji Samekto, & RB Sularto. (2020). Progressive Step of Narcotic Abuse Eradication in Globalization Era. *International Journal of Scientific & Technology Research*, 9(1), 306–309.



- Dyah Mutiarin, Queenie Pearl V. Tomaro, & Andres Bonifacio Avenue. (2019). The War on Drugs of Philippines and Indonesia: A Literature Review. *Journal of Public Administration and Governance*, 9(1), 41–59.
- Eci Eliza. (2021). Philippine National Security Strategy Case Study: Implementation of the War on Drugs Policy under the Administration of President Rodrigo Duterte in 2017-2020 [Thesis]. Sriwijaya University.
- Ervan Hardoko. (2015, April 30). Until the last moment, Rodrigo Duterte did not realize that he would be executed. *Kompas.Com*. <https://internasional.kompas.com/read/2015/04/30/11464971/Hingga.Saat.Terakhir.Rodrigo.Gularte.Tak.Sadar.Akan.Dieksekusi>
- European Monitoring Centre for Drugs and Drug Addiction. (2012). *Prison and Drugs in Europe: The Problem and Response*. Publications Office of the European Union. https://www.emcdda.europa.eu/publications/selected-issues/prison_en
- Fajri Nursyamsi Nabila. (2021). *Development of Antidiscrimination for Advocacy Strategies for Vulnerable Groups in Indonesia*. Center for Indonesia Law and Policy Studies (PSHK). <https://pshk.or.id/dokumen/8333>
- Ging Ginanjar. (2015). Condemned, Execution Plan for People with Mental Disorders. *BCC Indonesia*. https://www.bbc.com/indonesia/berita_indonesia/2015/03/150305_eksekusi_rodrigo_protes
- Hannah Laqueur. (2015). Uses and Abuses of Drug Decriminalization in Portugal. *Law & Social Inquiry*, 40(3), 746–781. <https://doi.org/10.1111/lsi.12104>
- Hendra Fikry Cindy Wirawan. (2021). Fulfillment of the Rights of Special Vulnerable Groups with Disabilities in Class I Madiun Prison. *Nusantara: Journal of Social Sciences*, 8(3), 238–244.
- Iskandar Hoesin. (2003). *Protection of Vulnerable Groups (Women, Children, Minorities, Alienated Tribes, etc.) in Human Rights Perspective*. VIII National Legal Development Seminar. <http://www.lfip.org/english/pdf/bali-Seminars/Perlindungan%20terhadap%20kelompok%20rentan%20-%20iskandar%20hosein.pdf>
- Jennifer Fleetwood. (2014). *Drug Mules: Women in the International Cocaine Trade*. Palgrave Macmillan.
- Mochammad Anwar. (2019). Legal Protection for Children of Narcotics Offenders in the Juvenile Criminal Justice System. *Syiar Hukum: Journal of Legal Sciences*, 17(1), 39–59.
- Muhammad Azzam. (2019, December). Afraid of being broken up by her boyfriend, a young woman in Bekasi is willing to become a drug courier. *WartaKotalive.Com*. <https://wartakota.tribunnews.com/2019/12/21/takut-diputusin-pacar-wanita-muda-dibekasi-rela-jadi-kurir-narkoba>



- Novia Puspitasari. (2020). The Vulnerability of Female Narcotics Couriers and Insensitive Laws. *LBH Community*.
- Nurhadi Suchayo. (2017, July 27). Pros and Cons of Legalizing Cannabis as a Drug in the Future. *VOA Indonesia*. <https://www.voaindonesia.com/a/legalisasi-ganja-sebagai-obat-/3961479.html>
- Parasian Simanungkalit. (2011). Globalization of Narcotics Trafficking and Its Countermeasures in Indonesia. Yayasan Wajar Hidup
- Petrus R. Golose, Agus Irianto, Masyhuri Imron, Dwi Sulistyorini, Siti Nurlela Marlani, & Mahmud Thoha. (2022). *Drug Abuse Survey in 2021*. Center for Research, Data, and Information of the National Narcotics Agency of the Republic of Indonesia. <https://ppid.bnn.go.id/konten/unggahahan/2020/10/SURVEI-NASIONAL-PENYALAHGUNAAN-NARKOBA-TAHUN-2021.pdf>
- Pocut Eliza, Eko Suparmiyati, Alice Angelica, Rahendro Jeti, Saud Halomoan, Fabian Adiasta Nusabakti Broto, & Sakti Maulana Alkautsar. (2016). *Final Report of the Working Group on Legal Analysis and Evaluation in the Context of Protecting Vulnerable Groups Focus on Child Welfare*. National Legal Analysis and Evaluation Center of the National Legal Development Agency of the Ministry of Law and Human Rights of the Republic of Indonesia.
- Raden Rara Rahayu Nur Raharsi, Supanto, & Muhammad Rustamaji. (2019). The Existence of Criminal Sanctions of Fines in Law Enforcement of Narcotics Crimes in Indonesia. *Journal of Juridika Insights*, 3(2), 115–134. <https://doi.org/10.25072/jwy.v3i2.253>
- Republika. (2020, February 12). *Female courier smuggling methamphetamine in the genitals*. <https://news.republika.co.id/berita/daerah/jawa-timur/20/02/12/q5j1xu2322000-kurir-wanita-selundupkan-sabu-di-alat-kelamin?>
- Ricky Gunawan, Miko Ginting, Raynov T. Pamintori, Aisya Humaida, & Maidina Rahmawati. (2021). *Encouraging Non-Criminal Policies for Narcotics Use: Improving Indonesia's Narcotics Governance*. Institute for Criminal Justice Reform.
- Sulistyowati Irianto, Lim Sing Meij, Firliana Purwanti, & Luki Widiatuti. (2005). *Trafficking in Women in Narcotics Trafficking Networks*. Indonesia Torch Foundation.
- Wiwik Afifah. (2020). Legal Aid for Vulnerable Groups. *DiH: Journal of Legal Sciences*, 16(1), 123–138. <https://doi.org/10.30996/dih.v16i1.3045>
- Yeyen Subandi, Ananda Dewin Ikhtiarin, Harits Dwi Wiratma, Maria Veri Diana Baun Yuel, Tanti Nurgiyanti, Ariel Nethan, Diansari Solihah Amini, Viola Marsela Agustin, Bagus Subketi, & Nuswantoro. (2022). Harm Reduction and War on Drugs in Indonesia During Joko Widodo Era. *Formosa Journal of Multidisciplinary Research (FJMR)*, 1(2), 287–302. <https://doi.org/10.55927/fjmr.v1i2.591>



Laws and Regulations

Law of the Republic of Indonesia Number 39 of 1999 concerning Human Rights.

Law of the Republic of Indonesia Number 23 of 2002 concerning Child Protection.

Law of the Republic of Indonesia Number 35 of 2009 concerning Narcotics.

Law of the Republic of Indonesia Number 11 of 2012 concerning the Juvenile Criminal Justice System.

Verdict

Sentences Number 01/Pid.Sus-Anak/2014/PN Pli.

Sentences Number 28/Pid.Sus-Anak/2020/PN Mre.

Sentences Number 111/Pid.Sus/2017/PN Sag.

Sentences Number 569/Pid.Sus/2021/PN Jkt.Br



LEGALIZATION OF MEDICAL CANNABIS IN INDONESIA, IS INDONESIA READY? : A MEDICAL AND LEGAL PERSPECTIVE

Putri Mahirah Afladhanti^{1,2*}, Yohanes Firmansyah^{3,4}, Widodo⁵,
Annisa Nugrahany⁶, Shirly Gunawan⁷, Evi Lusiana⁸, Edwin Destra^{2,9}

¹Medicine, Faculty of Medicine, Universitas Sriwijaya, Palembang

²Health Law, Faculty of Law, Universitas Widyagama, Malang

³Doctoral Study, Faculty of Medicine, Universitas Sriwijaya, Palembang

⁴Biomedical, Faculty of Health and Medicine, Universitas Atmajaya, Jakarta

⁵Law, Faculty of Law, Universitas Wisnuwardhana, Malang

⁶Law, Faculty of Law, Universitas Padjajaran, Jatinangor

⁷Department of Pharmacology, Faculty of Medicine, Universitas Tarumanagara, Jakarta

⁸Department of Pharmacology, Faculty of Medicine, Universitas Sriwijaya, Jakarta

⁹Hospital Management, Faculty of Management, Universitas Adhirajasa, Bandung

*Corresponding author: putrimahirah2022@gmail.com

ABSTRACT

The discourse surrounding cannabis as a therapeutic agent is gaining momentum worldwide, prompting a reevaluation of its legal status. Indonesian Law number 35 of the year 2009 on Narcotics and Constitutional Court Decision number 13/PUU-XXII/2024 prohibited the use of medical cannabis. This article aims to review the use of medical cannabis from a medical and legal perspective using a literature review and the legal doctrinal approach. From the medical standpoint, evidence suggests that cannabinoid compound in cannabis possesses therapeutic benefits for a range of conditions, mainly when symptoms are refractory to other therapies. These benefits highlight cannabinoid potential as a valuable addition to Indonesia's pharmacopeia. However, there are concerns about the potential for abuse and side effects of medical cannabis. Currently, there is limited research that cannabinoids are better than other alternative therapies, especially for chronic and cancer pain. Further research on a large scale about the compounds, safety, and efficacy of medical cannabis is needed to answer the public debate and doubts regarding the benefits of medical cannabis. Government and research institute collaboration ensures that medical cannabis research is strictly regulated with openness to science and limiting access to avoid misuse. The government should also supply cannabis plants to ensure their quantity for the research. This research can be used by legislators as a basis to legalize the use of cannabis for medical purposes through the revision of Narcotics Law by classifying cannabis as class II narcotics and the amendment for conditional decriminalization.

Keywords: Cannabinoids, Legalization, Medical Cannabis, Narcotics Law, Cannabis Research

INTRODUCTION

The cannabis plant, or *Cannabis sativa*, has a long history in human civilization. Behind its controversy, medical cannabis has great potential in its various therapeutic effects. Cannabis contains hundreds of chemical compounds, with around 104 different cannabinoids that have been identified in cannabis. Two of these, namely tetrahydrocannabinol (THC) and cannabidiol (CBD) have been the subject of scientific investigation on their pharmacological properties (Bridgeman & Abazia, 2017). Previous research showed that CBD is more commonly used than THC to cure disease due to its therapeutic effects and does not contain psychoactive effects. These compounds have promising potential to be used as an active medicinal ingredient to treat various diseases, including neuropathic pain, fibromyalgia, HIV-associated sensory neuropathy, refractory pain due to multiple sclerosis or other neurological conditions, central pain, musculoskeletal problems, and chemotherapy-induced pain. In these cases, CBD is often used as an adjunctive treatment. They are also typically used after a patient has failed to respond to recommended treatments for these conditions (Pratt et al., 2019).

There is less evidence about the risks of long-term medical use of CBD, but in general, those reported are similar to those reported for short-term use. Over time, more people report adverse events, but these are generally mild to moderate, such as dizziness, dry mouth, disorientation, nausea, euphoria, confusion, and somnolence. Serious adverse events were rare (Deshpande et al., 2015). Cannabis dependence is a potential consequence of long-term use, which can harm their health or well-being or impair their performance of social roles. Research on medical cannabis compared to other alternative therapies is also lacking, and there is no published research article about the appropriate medical cannabis therapeutic dose for various diseases (Garcia & Barbosa Neto, 2023).

Indonesia is one of the countries that, until now, still does not allow the use of cannabis and is considered a dangerous plant. Based on Law Number 35 of 2009 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 (Sonjaya, 2022). 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 medical therapy (Fauziah & Josias Simon Runturambi, 2023). Even though the Constitutional Court ultimately rejected the results of the case decision on July 20, 2022, this did not dampen the discourse. In one of the points of Decision Number 106/PUU-XVIII/2020 on July 20, 2022, the Constitutional Court mandated the Government to immediately conduct research and scientific studies on cannabis use in Indonesia. However, there has been no progress to follow up



on this mandate. Based on these problems, this article aims to review the readiness of medical cannabis legalization from a legal and medical perspective (Prasetyo, 2022).

METHODOLOGY

The research methods used in this writing were a literature review and a legal doctrinal approach. The literature review method is used to find evidence related to medical cannabis in the medical aspect. All searches were performed in Google Scholar, Pubmed, and NCBI databases with the keywords “medical cannabis,” “cannabinoid,” “chronic pain,” “cancer pain,” and “medical therapy effects.” The inclusion criteria for this literature review were *randomized controlled trials* (RCT) and the provision of publications within the last ten years. The exclusion criteria used were journals in languages other than Indonesian and English. From the results of the literature search, evaluation of the inclusion criteria was carried out by assessing the title and abstract as a first step; then, the full text was reviewed to determine if there was a keyword correlation with each other in the journal so that it could support the writing of descriptions or analysis in this literature review.

Meanwhile, this article uses a legal doctrinal approach method that focuses on legislative documents and literature sources to analyze the legal aspects. The basis of the legal doctrinal approach argumentation is a set of norms (concrete legal regulations, values, and legal principles). More typical normative characteristics in formulating conclusions include conflicts between norms (conflicts between norm systems), insufficient arrangements, insufficient conditions, validity according to law, and relations between legal subjects and objects (Muhdar, 2019).

RESULT AND DISSCUSION

The cannabis plant contains more than 100 chemical compounds called cannabinoids. The two main cannabinoids that provide medical effects are THC and CBD. The cannabinoid compound in cannabis varies, depending on the strain, cultivation method, and processing. Cannabis with high THC content is known as “marijuana cannabis,” while cannabis with low THC compound is called “hemp” (Bridgeman & Abazia, 2017). THC is the main compound in cannabis that has psychoactive effects. THC works by binding to cannabinoid receptors in the nervous system, especially CB1 receptors, widespread in the brain and central nervous system. The binding between THC and these receptors alters neurotransmitter activity in the brain, resulting in various psychoactive effects, including feelings of euphoria, relaxation, and changes in sensory perception. In addition, THC is also known to have analgesic, antiemetic, anti-inflammatory, and appetite-stimulating effects. (Fortin et al., 2022)

Besides the health benefits of medical cannabis, it is important to understand the side effects of medical cannabis, both short-term and long-term. The short-term side effects of medical cannabis are generally mild and temporary, such as dry mouth, red eyes, dizziness, drowsiness, anxiety, loss of coordination, nausea, and vomiting (Ivan Urits et al., 2021). Long-term effects of cannabis can generally include an increased risk of memory concentration addiction and the



inability to think and make decisions. Meanwhile, the long-term side effects of medical cannabis remain to be researched due to limited data and longer research duration (Pratt et al., 2019). This table 1 summarizes previous studies on the health benefits of medical cannabis compounds and their side effects.

In general, research on medical cannabis in the world has covered a wide range of diseases. Medical conditions reviewed in various research journals include chronic pain, cancer, chemotherapy-induced nausea and vomiting, HIV-related anorexia and weight loss, irritable bowel syndrome, epilepsy, muscle spasticity, Tourette's syndrome, Huntington's disease, dystonia, dementia, glaucoma, anxiety, depression, sleep disorders, post-traumatic disorder (PTSD), and schizophrenia (Jugl et al., 2021). Based on various previous studies, substantial evidence of medical cannabis benefits is demonstrated in use for the treatment of chronic pain, chemotherapy-induced nausea and vomiting, and muscle spasm symptoms in multiple sclerosis patients. The main route in administering medical cannabis is the oral route, while the inhalation route or other routes have insufficient evidence and still require further research (Allan et al., 2018).

Table 1. Medical Cannabis Characteristic Studies

Study	Country	Population	Intervention	Route of administration	Outcome
(Van De Donk et al., 2019)	Netherland	> 18 years old females with fibromyalgia, pain score ≥ 5 for most of the day	Received 1 of 4 possible cannabis treatments containing CBD and THC in different dosages	Inhaled vapor from balloon	None of the treatments were effective in reducing spontaneous pain scores more than the placebo
(Yassin et al., 2019)	Israel	Symptomatic fibromyalgia for at least 12 months, symptomatic LBP of more than 12 months between T12 and the gluteal fold, failure of opiate therapy for at least 12 month	Following 3 months of standard therapy, the patients could opt for medical cannabis (20 g per month) and were treated for a minimum of 6 months	Inhaled (smoking or vaporization)	Higher improvement in all patient-reported outcomes at 3 months after initiation of medical cannabis, and the improvement was maintained at 6 months



Study	Country	Population	Intervention	Route of administration	Outcome
(Chaves et al., 2020)	Brazil	>18 years old with moderate to severe fibromyalgia	A 30 mL green glass dropper bottle containing cannabis oil of the White Widow variety at a 24.44 mg/mL concentration of THC and 0.51mg/mL of CBD	Oral	The cannabis group presented a significant decrease in FIQ score compared with placebo group and significant improvements in quality of life. No AEs were reported
(Turcotte et al., 2015)	Spain	18-65 years old with relapsing-remitting MS with neuropathic pain on stable gabapentin regimen and VAS pain >50	Nabilone with adjunctive to gabapentin, titrated from 0,5 mg PO at bedtime to 1 mg 2x daily	Oral	VAS (0-100) pain intensity: average final 10 day treatment significantly lower. AEs such as dizziness, drowsiness, and dry mouth
(Serpell et al., 2014)	United Kingdom	Adults >18 years old with peripheral neuropathic pain with NRS pain score 6 on stable analgesic regimen	Nabiximols max 8 sprays per 3 hour period and 24 actuations every 24 hours	Spray	30% reduction in pain NRS: Treatment 28%, control 16% with adverse effects of dizziness, dysgeusia, nausea, and fatigue
(Hoggart et al., 2015)	United Kingdom	Adult patients with diabetic peripheral neuropathic pain	Nabiximols max 8 sprays per 3 hours period and 24 actuations every 24 hours. Patients self titrated	Spray	70% reported improvement in nerve pain and 8% reported worsening, 22% no change. 11% (n=40) patients had serious AEs, 1% (n=4) treatment related: amnesia (n=2), paranoia (n=1), and suicide attempt (n=1)



Study	Country	Population	Intervention	Route of administration	Outcome
(Überall, 2020)	Spain	Adults with chronic pain	THC oromucosal spray (nabiximols), dosage: 1-12 sprays/day	Oromucosal	Cancer pain: NRS score change: -1.37 vs. -0.69 (p=0.014), 43% vs. 21% pain reduction. MS pain: NRS score change: -2.7 vs. -1.4 (p=0.005), 67.5% reported ≥50% pain reduction. Common side effects: dizziness, fatigue, drowsiness. No tolerance or withdrawal syndrome observed.
(Hall et al., 2023)	United State America	20 former elite athletes with chronic lower extremity pain from acute injuries	10 mg of CBD twice daily (20 mg/day) with topical application via controlled dispenser, 5 mg per application (two applications per session, twice daily) for 6 weeks	Topical	100% improvement in family/home responsibilities; 93% improvement in recreation, social activities, occupational activities, and life-support activities; 86% improvement in self-care. Significant decrease in disability due to pain (p<0.001).
(von Wrede et al., 2021)	Germany	120 patients with Dravet Syndrome	Oral administration of pharmaceutical-grade CBD (Epidiolex®) 20 mg/kg/day	Oral	Reduction in convulsive seizures: 38.9% vs. 13.3% (p=0.01). Adverse events: diarrhea (31%), decreased appetite (28%), and fatigue (20%).
(Marková et al., 2019)	Germany	191 patients with multiple sclerosis spasticity	THC oromucosal spray (Sativex®) as add-on therapy up to 12 sprays per day (each spray contains 2.7 mg THC and 2.5 mg CBD)	Oromucosal	Clinically relevant responders: 77.4% vs. 32.1% (p<0.0001). Improved mean spasticity NRS, pain NRS, and modified Ashworth's scale scores. Mild/moderate adverse events without new safety concerns.

In this study, we found ten studies that met the eligibility criteria. The articles obtained in this study came from various countries, such as the Netherlands, Israel, Brazil, Spain, the United Kingdom, the United States of America, and Germany. In this article, we found various benefits of medical cannabis for health: 3 articles on fibromyalgia disease, three articles on neuropathic pain, two articles on chronic pain, an article on Dravet Syndrome, and an article on multiple sclerosis spasticity. The treatments used in this study are various cannabis compound combinations, such as a combination of CBD and THC, oral synthetic THC (nabilone), and



other cannabis in multiple forms. Moreover, the preparations used in this research consist of oral, inhalation, and topical routes of administration. Most of the studies showed significant results for the use of medical cannabis in the improvements of the disease. The reported improvements were reduced pain score, improvement in family/home responsibilities and occupational activities, improved mean spasticity, and reduction in convulsive seizures. This study only reported the standard short-term treatment, such as dizziness, drowsiness, dry mouth, dysgeusia, nausea, fatigue, amnesia, paranoia, suicide attempts, diarrhea, and decreased appetite.

We identified some limitations in the articles collected in this literature review. There were no studies on medical cannabis in Indonesia. These studies do not represent various studies in different parts of the world because most of these studies are from continental Europe, thus providing less data regarding the effectiveness of cannabis in multiple regions. This is unfortunate because the cannabinoid compound in cannabis varies depending on the strain, cultivation method, and processing. Studies investigating cannabis compounds and whole cannabis products are needed to understand better the risks and benefits of cannabis in real-world settings, as patients receiving medical cannabis in practice typically receive entire plant products. To provide valuable information on the effectiveness and safety of medical cannabis, real-world studies must define cannabis products, routes of administration, and dosages in a precise and standardized manner. In addition, well-designed conducted RCTs with precise, standardized doses for various medical indications are needed. However, there are some methodological and practical challenges. Studies assessing cannabis efficacy and safety for any condition should consider the effects of different routes of administration. Studies should also clearly and precisely measure active metabolites and metabolite ratios (e.g., THC: CBD) with the same rigor as other treatment studies. Another area to explore is the safety of medical cannabis, especially in terms of rare adverse drug effects, long-term effects, effects on patients with comorbidities, and the potential for interactions with other medications taken, given that medical cannabis is often used as an adjuvant therapy.

Legal Issues

Based on international law, the use of cannabis narcotics is regulated in the Single Convention on Narcotic Drugs 1961 specifically in Article 28. Meanwhile, in Indonesia, cannabis is included in Class I Narcotics according to Law Number 35 of 2009 concerning Narcotics (hereinafter referred to as the Narcotics Law), where cannabis is defined as cannabis plants, all parts of the genus cannabis and all parts of the plant including seeds, fruit, straw, processed cannabis plants or parts of cannabis plants including cannabis resin and hashish.

Research on medical cannabis in Indonesia is still very limited, along with the contradictions in the Narcotics Law itself. Article 4 of the Narcotics Law states that this law aims to ensure the availability of narcotics for the benefit of health services and/or the development of science and technology, but Article 8 of the Narcotics Law prohibits Class I narcotics from being used for the benefit of health services. Then, according to Constitutional Court Decision No. 13/PUU-XXII/2024, Class I narcotics can only be used for scientific development, but not for therapy because it can cause addiction. This decision also refers to Constitutional Court Decision No. 106/PUU-XVIII/2020 which states that Class I Narcotics have potential benefits for the benefit of health services, but according to the consideration of the judges, this requires



readiness, especially related to legal structures including facilities and infrastructure to support these benefits (Triyatna, Dewi, & Dewi, 2024). Changes in the utilization of narcotics must go through scientific research and studies in the Indonesian context. Since the decision was issued, until now in Indonesia there has been no comprehensive research and scientific studies regarding the use of medical cannabis for health services (Yustina & Simandjuntak, 2023).

The contradictions show that the regulation of Class I Narcotics, especially medical cannabis, is not based on scientific evidence and adequate research. In 2013 (BBC News Indonesia, 2022), Yayasan Sativa Nusantara (YSN), together with researchers from Universitas Syiah Kuala, wanted to conduct research on cannabis for the treatment of diabetes. Then, they applied for a permit from the Ministry of Health, and the rules required the research team to be appointed by the Ministry of Health. But until now, no research team has been appointed. The Ministry of Health also requires research at the Center for Research and Development of Medicinal Plants and Traditional Medicines in Tawangmangu, Central Java, even though the researchers aim to examine the CBD content of the type of cannabis grown in Aceh. YSN is also collaborating with Lingkar Ganja Nusantara (LGN), where the two community organizations have applied for permits to conduct medical cannabis research. However, these efforts are limited to bureaucratic issues so that medical cannabis research is hindered (Ramadhani, 2021).

In 2020, the Ministry of Agriculture issued a Decree of the Minister of Agriculture of the Republic of Indonesia Number.104/KPTS/HK.140/M/2/2020 concerning Assisted Commodities of the Ministry of Agriculture, where cannabis (*cannabis sativa*) is listed as one of the medicinal plant commodities under the guidance of the Directorate General of Horticulture of the Ministry of Agriculture. The basis for the issuance of the decision is Article 67 paragraph (1) of Law Number 13 of 2020 concerning Horticulture which states that the cultivation of horticultural plants that are detrimental to public health can be carried out for the benefit of health services and / or science unless otherwise determined by law. (Putranto & Arie Mangesti, 2024). Unfortunately, the decision was revoked in the same year because it conflicted with the Narcotics Law, which still categorized cannabis as Class I narcotics.

Another contradiction can be seen in the government's opposition to the WHO recommendation regarding the change of cannabis and cannabis resin from Group IV of the Single Convention on Narcotic Drugs 1961 in December 2020. Previously, based on this convention, cannabis and its derivatives were placed in Group I and Group IV, where narcotics in Group IV have limited medical benefits. Still, the level of dependence and potential for abuse is very high, so they are subject to the strictest control when compared to narcotics Group I to Group III (Yustina & Simandjuntak, 2023). However, the Minister of Health has issued Minister of Health Regulation No. 16 of 2022, which regulates the procedures for organizing narcotics research; until now, there have been no significant research results on class I narcotics for medical purposes. DPR believes that the government's rejection should be followed by conclusive steps to follow up by conducting scientific research to support it (ICJR, 2021).

Regulation and research on medical cannabis should not only come from the scientific standpoint but also from the social and cultural one. The people of Indonesia have long used the cannabis plant as a medicine. The people of Aceh use cannabis roots as a medicine for diabetes and diabetes and use cannabis as a spice and food preservative (Wulandar, 2023). In addition, the people of Maluku use cannabis plants to treat diarrhea, gonorrhoea, hernia, and



asthma. Meanwhile, on the islands of Java, evidence of the use of cannabis for spiritual activities is recorded in the relief of cannabis leaves found at Kendalisodo Temple in Mojokerto. Also, in Bali, cannabis is used as a treatment for various types of diseases, and the teaching is written in Lontar Usada (Claudia & Rasji, 2024).

Progressive Legal Theory

Cases of cannabis abuse in Indonesia are pretty high. However, one of the most notable cases occurred in 2017 when Fidelis Arie Sudewarto was sentenced to prison for growing 39 cannabis stems and using the extracts for medical therapy for his wife, who suffered from Syringomyelia. Then, in 2021, Dwi Pertiwi, Santi Warastuti, Nafiah Murhayanti, and several institutions such as Rumah Cemara, ICJR, and LBH Masyarakat submitted a request for judicial review of Article 6 and Article 8 of the Narcotics Law regarding Class I Narcotics to the Constitutional Court through case number 106/PUU-XVIII/2021. This judicial review was requested because Dwi Pertiwi, as Applicant, used cannabis oil while in Australia for therapy for her child with cerebral palsy, where the treatment therapy has shown good progress. Meanwhile, Nafiah Murhayanti, as the second applicant, intends to use the therapy (Ilfas et al., 2023).

Legal efforts to legalize cannabis in Indonesia are reflected in the judicial review at the Constitutional Court, which shows that there are efforts to fulfill the constitutional rights of citizens and the right to access health by the 1945 Constitution. The government must ensure legal certainty for the fulfillment of these rights and make existing regulations based on the needs of society based on the latest evidence and science. In the context of medical cannabis in Indonesia, changing or reducing the class of cannabis from Narcotics Group I to Group II or Group III can be a step towards utilizing cannabis as a treatment, not for recreational use (Asmoro & Samputra, 2021).

According to Satjipto Rahardjo, progressive law considers the position of humans and humanity as the main thing in discussing and enforcing the law. Therefore, the relationship “law for humans, not the other way around” applies. When problems arise with the law, the law needs to be reviewed and improved, not humans who are forced to enter the legal system. This resonates with Cicero’s phrase “ubi societas ibi ius,” which means that where society exists, there is a law (Aulia, 2018). The concept of progressive law emerged due to dissatisfaction with the ineffective performance of the law in solving existing legal problems. Progressive law demands that the legal process is not static but actively seeks and finds ways to increase the law’s benefits in society. Therefore, progressive law encourages legal innovation for legal reform (Laili & Fadhila, 2021). The law aims to achieve justice. Progressive law emphasizes substantive justice, not a procedural one. A state that carries out procedures well above all else, even above substance handling, leads to trials without truth (Nuryadi, 2016).

Law is part of a more extensive system, where it must exhibit its authority and flexibly conform to the development and demands of society. Progressive law is always in the process of development (law as a process, law in the making). Law is not a final institution but is evaluated based on its ability to serve human beings. The law continues to develop and transform to achieve better perfection. Each stage in the evolution of law is a decision made to achieve the ideal goal of law, whether by the legislature, judiciary, or executive body. Each decision is a starting point toward the next, better decision (Sukananda, 2018).



Decriminalization

According to Databoks (Dihni, 2021), 96% of prisoners in Indonesia are convicted of drug abuse cases. Given this large number, decriminalization is potentially an effective measure to reduce prison overcrowding. Decriminalization of drug abuse has been implemented in Portugal, and it has shown a decrease in the number of drug abusers sentenced to prison from 44% in 1999 to 28% in 2005, which contributed to prison overcrowding from 119 to 101.5 inmates per 100 prisons between 2001 and 2005 (Latifah, 2019). The policy of decriminalization of narcotics in Indonesia is necessary to reduce the overcapacity of correctional institutions because prosecuting criminal drug abusers it impedes the state's goals in combating narcotics (Fadholi et al., 2022).

Concerning the case of Fidelis Ari's use of medical cannabis, law enforcement should consider the substantial value of the existing provisions, where he was forced to use cannabis extracts for his wife's last resources of medical treatment (Noorhaliza et al., 2023). Unfortunately, the law still sees this action as an offense. So, not only rehabilitation of drug users but decriminalization is also an effort to fulfill the right to access health.

Decriminalization does not mean the complete elimination of sanctions against drug addicts but the elimination of criminal sanctions to sanctions that apply outside the criminal domain, such as rehabilitation. In Indonesia, the definition of decriminalization, according to the Narcotics Law, is to give judges the authority to decide on prison sentences or determine rehabilitation measures (Hikmawati, 2011). Drug addicts are essentially both victims and perpetrators (self-victimizing victims), and the Indonesian legal system in the form of criminal or rehabilitation options does not work effectively (Hikmawati, 2011).

CONCLUSION

This study shows the medical benefits of cannabinoid compounds in cannabis. The study in this article found the usefulness of medical cannabis as an adjunctive treatment and is mainly used when symptoms cannot be addressed with other therapies. Cannabinoids in cannabis have an impact in improving symptoms such as reduced pain score, improvement in family/home responsibilities and occupational activities, improved mean spasticity, and reduction in convulsive seizures. There is little evidence on the long-term adverse events of medical cannabis. Further research on a large scale about the compounds, safety, and efficacy of medical cannabis, especially in Indonesia must be carried out more deeply to fulfill the community's right to adequate health facilities and as a form of progressive legal fulfillment. The Ministry of Health and the National Narcotics Agency must also collaborate so that the research, circulation, and use of medical cannabis are in accordance with the needs of the community.

ACKNOWLEDGE

The authors would like to thank the Department of Pharmacology, Faculty of Medicine Universitas Sriwijaya and Universitas Tarumanagara for the research support in medical aspect.



We also thank the Department of Health Law, Faculty of Law Universitas Widyagama for the research support in legal aspect.

REFERENCES

- Allan, G. M., Finley, C. R., Ton, J., Danielle, P., Jamil, P., Karyn, R., Mlis, C., Lindblad, A. J., Pharmd, A., Korownyk, C., Ccfp, M. D., & Kolber, M. R. (2018). Systematic review of systematic reviews for medical cannabinoids Pain, nausea and vomiting, spasticity, and harms. In *Canadian Family Physician | Le Médecin de famille canadien* } (Vol. 64). FEBRUARY | FÉVRIER.
- Aulia, M. Z. (2018). Hukum Progresif dari Satjipto Rahardjo. *Undang: Jurnal Hukum*, 1(1), 166–167. <https://doi.org/10.22437/ujh.1.1.159-185>
- BBC News Indonesia. (2022). Menteri Kesehatan akan izinkan riset ganja, bagaimana dampaknya terhadap upaya legalisasi untuk keperluan medis?
- Bridgeman, M. B., & Abazia, D. T. (2017). Medicinal Cannabis: History, Pharmacology, And Implications for the Acute Care Setting (Vol. 42, Issue 3).
- Chaves, C., Bittencourt, P. C. T., & Pelegrini, A. (2020). Ingestion of a THC-Rich Cannabis Oil in People with Fibromyalgia: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial. *Pain Medicine (United States)*, 21(10), 2212–2218. <https://doi.org/10.1093/PM/PNAA303>
- Claudia, J., & Rasji. (2024). Analisis Pro dan Kontra Legalisasi Ganja Medis Di Indonesia : Tinjauan terhadap Kandungan dan Implikasinya. *Jurnal Kertha Semaya*, 12(4), 710.
- Deshpande, A., Mailis-Gagnon, A., Zoheiry, N., & Lakha, S. F. (2015). Efficacy and adverse effects of medical marijuana for chronic noncancer pain Systematic review of randomized controlled trials (Vol. 61).
- Dihni, V. A. (2021). *Narapidana Kasus Narkoba Mendominasi di Lapas Indonesia*. <https://databoks.katadata.co.id/datapublish/2021/09/17/narapidana-kasus-narkoba-mendominasi-di-lapas-indonesia>
- Fadholi, A. ;, Surtikanthi, D. ;, & Annisya, S. (2022). Pentingnya Dekriminalisasi Penyalah Guna Narkotika melalui Asesmen Terpadu dalam RUU Narkotika. *Jurnal Kajian Stratejik Ketahanan Nasional*, 5(1), 80. <https://scholarhub.ui.ac.id/jksknAvailableat:https://scholarhub.ui.ac.id/jkskn/vol5/iss1/7>
- Fauziah, E., & Josias Simon Runturambi, A. (2023). *Pros and Cons of Medical Cannabis Legalization in Indonesia*. www.techniumscience.com



- Fortin, D., Marcellin, F., Carrieri, P., Mancini, J., & Barré, T. (2022). Medical Cannabis: Toward a New Policy and Health Model for an Ancient Medicine. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.904291>
- Garcia, J. B. S., & Barbosa Neto, J. O. (2023). Adverse effects of cannabinoid use: what is the safety paradigm? *Brazilian Journal Of Pain*. <https://doi.org/10.5935/2595-0118.20230005-en>
- Hall, N., James, B., Bhuiyan, M. A. N., Crane, E., Falgout, C., & Murnane, K. S. (2023). Topical cannabidiol is well tolerated in individuals with a history of elite physical performance and chronic lower extremity pain. *Journal of Cannabis Research*, 5(1). <https://doi.org/10.1186/s42238-023-00179-8>
- Hikmawati, P. (2011). Analisis Terhadap Sanksi Pidana Bagi Pengguna Narkotika. *Negara Hukum*, 2(2), 340.
- Hoggart, B., Ratcliffe, S., Ehler, E., Simpson, K. H., Hovorka, J., Lejško, J., Taylor, L., Lauder, H., & Serpell, M. (2015). A multicentre, open-label, follow-on study to assess the long-term maintenance of effect, tolerance and safety of THC/CBD oromucosal spray in the management of neuropathic pain. *Journal of Neurology*, 262(1), 27–40. <https://doi.org/10.1007/s00415-014-7502-9>
- ICJR. (2021). Sidang Lanjutan Permohonan Uji Materil Pelarangan Narkotika Medis untuk Pelayanan Kesehatan: DPR Minta Pemerintah Tindak Lanjuti dengan Penelitian Ilmiah, Pemerintah Keukeuh Tolak Permohonan. <https://icjr.or.id/sidang-lanjutan-permohonan-uji-materil-pelarangan-narkotika-medis-untuk-pelayanan-kesehatan-dpr-minta-pemerintah-tindak-lanjuti-dengan-penelitian-ilmiah-pemerintah-keukeuh-tolak-permohonan/>
- Ilfas, M. N., Fredederick, W. A. P. G., & Tampi, B. (2023). KAJIAN YURIDIS TERHADAP NARKOTIKA GOLONGAN I UNTUK KEBUTUHAN MEDIS DAN PELAYANAN KESEHATAN DI TINJAU DARI PUTUSAN MAHKAMAH KONSITUSI NOMOR 106/PUU-XVIII/2020. *Jurnal Lex Administratum*, 12(5), 1–2.
- Ivan Urits, B., Charipova, K., Gress, K., Li, N., Berger, A. A., Cornett, E. M., Kassem, H., Ngo, A. L., Kaye, A. D., Viswanath, O., & Israel, B. (2021). Adverse Effects of Recreational and Medical Cannabis. In *PsychoPharmacology Bulletin* (Vol. 51, Issue 1).
- Jugl, S., Okpeku, A., Costales, B., Morris, E. J., Alipour-Haris, G., Hincapie-Castillo, J. M., Stetten, N. E., Sajdeya, R., Keshwani, S., Joseph, V., Zhang, Y., Shen, Y., Adkins, L., Winterstein, A. G., & Goodin, A. (2021). A Mapping Literature Review of Medical Cannabis Clinical Outcomes and Quality of Evidence in Approved Conditions in the USA from 2016 to 2019. In *Medical Cannabis and Cannabinoids* (Vol. 4, Issue 1, pp. 21–42). S. Karger AG. <https://doi.org/10.1159/000515069>



- Laili, A., & Fadhila, A. R. (2021). TEORI HUKUM PROGRESIF (Prof. Dr. Satjipto Rahardjo, S.H.). *SINDA: Comprehensive Journal of Islamic Social Studies*, 1(1), 132. <https://doi.org/10.28926/sinda.v1i1.966>
- Latifah, M. (2019). DEKRIMINALISASI PENYALAHGUNAAN NARKOTIKA DI INDONESIA. *Info Singkat Bidang Hukum*, 9(2), 4.
- Markovà, J., Essner, U., Akmaz, B., Marinelli, M., Trompke, C., Lentschat, A., & Vila, C. (2019). Sativex[®] as add-on therapy vs. further optimized first-line ANTispastics (SAVANT) in resistant multiple sclerosis spasticity: a double-blind, placebo-controlled randomised clinical trial. *International Journal of Neuroscience*, 129(2), 119–128. <https://doi.org/10.1080/00207454.2018.1481066>
- Muhdar, M. (2019). Penelitian Doctrinal Dan Non-Doctrinal: Pendekatan Aplikatif Dalam Penelitian Hukum. Mulawarman University Press.
- Noorhaliza, A. K., Afrizal, R. D., Permadi, S. C., & Tsaniya, S. A. (2023). Teori Penegakan Hukum Menurut Friedman Terkait Persoalan Penggunaan Narkotika Untuk Kepentingan Medis Relevansi Dengan Pertimbangan Moral Dan Hukum. *Nusantara: Jurnal Pendidikan, Seni, Sains Dan Sosial Humanioral*, 1(2), 10. <https://doi.org/10.11111/nusantara.xxxxxxx>
- Nuryadi, D. (2016). TEORI HUKUM PROGRESIF DAN PENERAPANNYA DI INDONESIA. *Jurnal Ilmiah Hukum De'Jure*, 1(2), 401–402.
- Prasetyo, E. D. (2022). Legalisasi Ganja Medis (Analisis Putusan MK Nomor 106/Puu-Xviii/2020). *Jurnal Analisis Hukum*, 5(2), 147–162. <https://doi.org/10.38043/jah.v5i2.3735>
- Pratt, M., Stevens, A., Thuku, M., Butler, C., Skidmore, B., Wieland, L. S., Clemons, M., Kanji, S., & Hutton, B. (2019). Benefits and harms of medical cannabis: A scoping review of systematic reviews. *Systematic Reviews*, 8(1). <https://doi.org/10.1186/s13643-019-1243-x>
- Putranto, M., & Arie Mangesti, Y. (2024). Penggunaan Ganja Medis dalam Pengobatan dan Pengaturannya di Indonesia. *Journal Evidence Of Law*, 3(1), 17. <https://doi.org/10.59066/jel.v3i1.582>
- Ramadhani, B. (2021). Analisis Yuridis Terhadap Ganja Medis Menurut UU No. 35 Tahun 2009 Tentang Narkotika. *Vox POPULI*, 4(35), 99.
- Serpell, M., Ratcliffe, S., Hovorka, J., Schofield, M., Taylor, L., Lauder, H., & Ehler, E. (2014). A double-blind, randomized, placebo-controlled, parallel group study of THC/CBD spray in peripheral neuropathic pain treatment. *European Journal of Pain (United Kingdom)*, 18(7), 999–1012. <https://doi.org/10.1002/j.1532-2149.2013.00445.x>



- Sonjaya, S. (2022). Legalization of Marijuana Use for Medical in Indonesia in Relation to Law Number 35 of 2009 concerning Narcotics. *JCIC : Jurnal CIC Lembaga Riset Dan Konsultan Sosial*, 4(2), 37–46. <https://doi.org/10.51486/jbo.v4i2.80>
- Sukananda, S. (2018). Pendekatan Teori Hukum Progresif Dalam Menjawab Permasalahan Kesenjangan Hukum (Legal Gaps) Di Indonesia. *Jurnal Hukum Ekonomi Syariah*, 1(2), 139.
- Triyatna, A. A. G., Dewi, P. E. T., & Dewi, C. I. D. L. (2024). Juridical Analysis of the Regulations on the Use of Cannabis for Medical Purposes in Indonesia (A Comparative Study with Thailand). *Jurnal Hukum Prasadana*, 11(1), 31–36. <https://doi.org/10.22225/jhp.11.1.2024.31-36>
- Turcotte, D., Doupe, M., Torabi, M., Gomori, A., Ethans, K., Esfahani, F., Galloway, K., & Namaka, M. (2015). Nabilone as an adjunctive to gabapentin for multiple sclerosis-induced neuropathic pain: A randomized controlled trial. *Pain Medicine (United States)*, 16(1), 149–159. <https://doi.org/10.1111/pme.12569>
- Überall, M. A. (2020). A review of scientific evidence for THC:CBD oromucosal spray (nabiximols) in the management of chronic pain. In *Journal of Pain Research* (Vol. 13, pp. 399–410). Dove Medical Press Ltd. <https://doi.org/10.2147/JPR.S240011>
- Van De Donk, T., Niesters, M., Kowal, M. A., Olofsen, E., Dahan, A., & Van Velzen, M. (2019). An experimental randomized study on the analgesic effects of pharmaceutical-grade cannabis in chronic pain patients with fibromyalgia. *Pain*, 160(4), 860–869. <https://doi.org/10.1097/j.pain.0000000000001464>
- von Wrede, R., Helmstaedter, C., & Surges, R. (2021). Cannabidiol in the Treatment of Epilepsy. In *Clinical Drug Investigation* (Vol. 41, Issue 3, pp. 211–220). Adis. <https://doi.org/10.1007/s40261-021-01003-y>
- Wulandar, C. A. (2023). Kebijakan Pemanfaatan Tanaman Ganja Sebagai Pengobatan Medis di Indonesia. Universitas Islam Sultan Agung.
- Yassin, M., Oron, A., & Robinson, D. (2019). Effect of Adding Medical Cannabis to Analgesic Treatment in Patients with Low Back Pain Related to Fibromyalgia: An Observational Cross-Over Single Centre Study. *Clin Exp Rheumatol*, 37, 13–20.
- Yustina, E. W., & Simandjuntak, M. E. (2023). Legalization of Medical Marijuana in Indonesia from the Human Rights Perspectives: Lessons Learned from Three ASEAN Countries. *Lex Scientia Law Review*, 7(2), 569–628. <https://doi.org/10.15294/lesrev.v7i2.77670>



THE MOTHERS MOVEMENT ADVOCATING MEDICAL MARIJUANA LEGALIZATION FOR CHILDREN WITH CEREBRAL PALSY (2020–2022)

Bebby Namira Nur Muslim^{1*}, Hurriyah^{2*}

¹Departemen Ilmu Politik, Fakultas Ilmu Sosial dan Ilmu Politik,
Universitas Indonesia

²Departemen Ilmu Politik, Fakultas Ilmu Sosial dan Ilmu Politik,
Universitas Indonesia

*Corresponding atuhor : bebbby.namira@ui.ac.id, hurriyah@ui.ac.id

ABSTRACT

What medications are considered to have no abuse potential? Albeit the answer is none, most policymakers and law enforcement officials often use this premise in arguments opposing marijuana for medical needs. This study aims to explore how the movement for the legalization of medical marijuana emerged, focusing on three mothers of children with cerebral palsy (CP) who proposed a judicial review (JR) to the constitutional court (MK). Despite being rejected, thus legal activism garnered public support and advanced the discourse on the Drug Reform Bill (2022—2023). Qualitative datas were collected through in-depth interviews with the three informants from the movement and literature reviews, further analyzed with new social movement (NSM) theory. The study argues that these mothers' role as caregiver which turned them into agents of change who speaks on behalf of children with CP was central to the movement's origins. Therefore, mothers formed movement to transform the experience of non-inclusive medical dissatisfaction into a political demand for medical marijuana. The findings highlight that while the collective goal being to expand medical interventions for critical health conditions like CP, the mothers also aimed to contribute in shifting marijuana policy and norms, as this ensures the movement's collective goal.

Keywords: *Cerebral Palsy, Drug Reform Bill, Judicial Review, Medical Marijuana Legalization, New Social Movement Theory*

INTRODUCTION

Many countries have considered legalizing medical marijuana. However, this topic remains ambiguous in Indonesia. Debating the potential therapeutic benefits of cannabis in addressing specific health issues, like neurological disease, frequently leads to biased measurements of the pros and cons. Demands for medical marijuana legalization itself re-emerged when

the three mothers consisting of Mrs. Santi Warastuti, Ms. Dwi Pertiwi, and Mrs. Novia Murhayati, initiated to propose a judicial review against the Narcotic Law No. 35 of 2009 and Government Regulation (PP) No. 40 of 2013 to the constitutional court (MK). Thus, it became widely discussed, considering the drug narcotic regulations strictly forbid marijuana and its derivatives to be consumed for any reason, including medical needs.

The mothers movement gained more attention, notably from the stakeholders within the government agencies and policymakers, during the viral protest act of Mrs. Warastuti. On Sunday, 26th June 2022, Mrs. Warastuti brought an inflammatory pamphlet with the handwritten message, *Anakku Butuh Ganja Medis* [My child needs medical marijuana] (BBC, 2022). Mrs. Warastuti, as the representative of the movement, was then documented a lot on news coverage, from a direct meeting with the vice speaker of the House of Representatives (DPR) to being invited to attend the hearing for the drug reform law.

Even before the protest act, each of the mothers was also previously exchanging one another in socializing the urgency for medical marijuana research on various information channels. All while they were waiting for the final decision of MK after two years (VICE, 2021; Detik, 2022; Liputan 6, 2021). Observing these series of contentious events shall naturally lead one to ask a fundamental question: *How did the movement, along with the demand, emerge in the first place?* What are their strategies?

Due to strict restrictions on marijuana, including for both medical and study purposes, there is not even a single domestic-sourced clinical and scientific research about marijuana can be found yet (Paoki, 2021: 38). Nonetheless, social science scholars have tried to fill the gap through extensively discussing medical marijuana. Most start by comparing medical marijuana regulations with other relevant countries (Yustina, dkk., 2023; Pratiwi, dkk., 2023), tracing institutional resistance toward cannabis from colonialism (Lai & Stoicescu, 2020), detecting reproduction of cannabis dogma within policy narratives (Asmoro & Samputra, 2021), and discovering the national classification of cannabis (Putri & Misero, 2021).

Despite the significant implications of understanding the national landscape of marijuana administration, past research has predominantly relied on substantive analysis of policy while neglecting non-structural factors. Thus, the influence of a collective action on political decision-making relating to cannabis is yet to be investigated. To address this gap, the current study seeks to examine the origins of the movement, which defines its activism strategies. Taking a political perspective with the new social movement (NSM) theory, this research extends the literature on the role of social movements in re-shaping marijuana policy.

Therefore, the aim of the study is threefold. First, it explores the origins of mothers' activism for medical marijuana legalization, prominently featuring the motherhood role. From then on, it will delve into the relationship of its origin with its decision to pursue legal activism. Finally, the study will analyze the political activism and its impact on public support and policy discourse. These examinations can provide valuable insights for policymakers and readers into motivations behind the movement's emergence and its advocacy agendas.



Theoretical Framework: New Social Movement (NSM) Theory

Scholars tend to deliberate—to the extent of nitpicking—over the definition of a social movement and may argue about borderline conditions in contemporary cases. According to Reed (2019: xiii) in *The Art of Protest: Culture and Activism from the Civil Rights Movement to the Present*, “most [observers] know a movement when they see one,” and the ability to recognize one as a movement might be exactly the point. At least, not until after the 1960s, did social movements start to shift from materialistic orientations into more detailed issues regarding improving the quality of life (Budiardjo, 2016: 384). Thus, it established a theoretical trend of a *new* social movement, as it maintains creating more favorable circumstances to influence the decision-making process through direct action, notably from the grassroots.

New social movement (NSM) can be identified from several terms. Enrique Larana, Hank Johnston, and Joseph R. Gusfield in *New Social Movements: From Ideology to Identity* (1994: 6—9) narrowed it into eight definitions. First, NSM is based on cross-class figures. Second, its social characteristics are distinguishable from those rooted in materialist collective action, such as the working class movement. Third, NSM overlooks issues of identity and concerns self-image building. Fourth, the line between collective and individual actions is blurred, as the activities tend to be executed more through individual actions rather than mobilized as a whole. Fifth, NSM often concerns private matters, such as healthcare decisions. Sixth, NSMs are now identic with either anti-violence or civil disobedience as its mobilizational strategies. Seventh, it could stem from a distrust of the existing political participation channels. Eighth, NSM tends to be segmented and decentralized without focus. Mario Diani (2006) further shedding light on the identification with the conclusion: NSM happens when individual instances of collective action can be regarded as integrated segments of ongoing actions rather than isolated events (Porta & Diani, 2006: 23).

METHODOLOGY

This research applies a qualitative method and explanatory approach to be consistent with the outlined research objectives. Thus, it examines the origins of the movement and the utilization of its demand, guided by the NSM framework. To write this article, the researcher conducted in-depth interviews with three informants: Mrs. Warastuti and Mrs. Murhayati as those main initiators of the movement. Researcher also interviewed Mr. Erasmus Napitupulu who was the attorney during judicial review and one of the mothers’ strategic advisors. The researcher also collected data from literature reviews and various accessible sources online, including journal articles, research publications, and news sites.

RESULTS & DISCUSSION

The Tale of the Three Children: Pika, Musa, and Keenan

Neurological disorders in children might not be as commonly identified as a cold. Pika, the daughter of Mrs. Santi, for instance, received her diagnosis at the age of sixth; a kindergarten.



Pika Sasikirana was once a cheerful little girl. After a while, she started to show unusual longing symptoms, often looked fatigued and vomited several times at school. Mrs. Santi and Pika would visit the doctor back-and-forth. At least, until 2017, it was discovered that she had been infected by the Japanese Encephalitis Virus (JEV) that has already far affected her brain development. In Southeast Asia, the JEV—which transmitted through Culex mosquitoes—has become the most common ground for neurodegenerative diseases, with a 30- to-50% chance of recipients later acquiring neurological disorders (Yadav, *et al.*, 2022: 1—2). Thus, in the case of Pika, resulting in motor impairments, also known as cerebral palsy (CP).

Other than Pika's, the CP cases are somewhat different for the rest of the children. Mrs. Novia and Keenan discovered the diagnosis early at the age of 40 days after its birth; a newborn. Masayu Keenan has been living with the conditions of diplegia spastic as one of the CP forms. The motor nerves in the lower body are stiffer than those in the upper body (Ross, 2002: 148). Moreover, there are comorbidities, such as epilepsy, muscular, and sensory disorders, which often can be found in CP children (Andromeda, Hartini & Suryanto, 2023: 42). Keenan herself has experienced two fatal seizures which led to one of her leg muscles strained and unable to recover.

Last but not least, there was Musa, the son of Ms. Dwi. Pretty similar to Keenan, Musa Ibn Hassan has also started to show unusual symptoms during the age of 40 days; a newborn. However, Musa was diagnosed earlier as having a lung inflammation before it turned out to be meningitis or a brain inflammation instead. Meningitis, as a neurological infection, can often make babies more vulnerable to having a higher level of brain impairment, which results in CP (Toorn, *et al.*, 2007: 75). On 26th December 2020, Musa passed away at the age of 16th—in the middle of the mothers' judicial review (JR) against the drug law—due to a declining lung health associated with increased phlegm and the inability to expel it because of CP.

Cerebral Palsy and Mothering: Indonesia

CP is a long-life neurological condition, though non-progressive, but still permanent. Parents have no choice but to acknowledge and accommodate it rather than aiming to 'fix' their child (Walker, 2012: 154). This includes accepting children with CP tend to depend on caregivers to conduct daily activities. Mothers, whether in high-to-low-income families, will then undertake a vital role in becoming the most common caregivers for them (Smith & Blamires, 2022: 64). What often to be ignored was these mothers bear responsibilities that come with great consequences. The consequences are intersecting within financial burdens, health negligence, conflicts within family and stress of being unable to engage in wider social activities. Mothers often struggle alone without proper support from family, society, and government through inadequate public policies (Vadivelan, *et al.*, 2020: 2).

According to the Kementerian Kesehatan (Health Ministry) in 2018, in Indonesia, there are nine records of CP for each 1,000 live births (Jauhari, *et al.*, 2022: 165). CP is also revealed to be the most common cause of childhood disability in the world. Even so, CP is not a well-known subject of discussion and has not become one of the main concerns for the governments. Thus contributes to the lack of government support and decent facilities, such as wheelchair provision, school acceptance, and affordable treatments and medicine. Mrs. Novia, Keenan's mother, mentioned the prices of conventional drugs to relieve seizures are



often too high, with no state subsidization. Some children with CP need to consume it on a daily basis.

“Antiepileptic drugs (AEDs) are expensive. Keenan had to buy a bottle of Depakene at the cost of Rp280,000,- in 2010. Keenan has many friends with CP who passed away because they couldn’t afford the medication. BPJS did not cover [most of] them.” (Personal interview, Novia Murhayati, 2024)

Seizure or epilepsy is a huge threat to children with CP’s development. Considering that seizure can be found in 30-to-50% cases of children with CP (Tillberg, Isberg & Perrson, 2020: 116). Although it is mostly inevitable for them to never have a seizure, it remains one of the biggest fears of mothers. Ms. Dwi, the late Musa’s mothers, explained that even one seizure could undo all the progress of therapy and regress the child to a baby-like state.

“Each time we tried to do therapy, and there is progress, once the child experiences a seizure, then all of the conditions will reset to zero. And it will happen over and over again.” (Dwi Pertiwi, interview with ABC News, September 15th, 2021)

Before Keenan turned six, she was once able to walk on her own, due to extensive physiotherapies. Afterwards, a long-duration seizure happened, and she lost all the progress she had made earlier. These common incidents have led the mothers of children with CP to stress a lot about finding the right medicine to minimize seizure. At the same time, there are no rigorous medical solutions, so doctors often change recommendations.

Another issue emerged: commercialized drugs are never free from side effects. Sometimes, it can be allergy or addiction. Mrs. Santi, Pika’s mother, witnessed her daughter almost die of steven-johnson syndrome (SJS) after consuming AEDs Phenobarbital for two weeks. SJS caused the daughter to have a spread of severe rashes and scaling skin which commonly ends in up-to-10% skin damage (Kadek & Wisan, 2024: 71). At this stage, seizure is still unable to be effectively minimized with existing conventional drugs, while SJS and other side effects increase risks to children with CP.

“Let’s imagine a patient with a stroke. What does the patient feel? Stiffness and discomfort, at all of his activities, from standing to sleeping. That’s what my daughter feels. She will be relaxed, once she consumes Diazepam. However, Diazepam has many side effects, including addiction in the long-term. But, if we don’t use it, she’ll feel soreness.” (Personal interview, Novia, 2024)

Understanding the Movement’s Emergence

Adjusting with the unaffordable and few alternatives for CP medications made most mothers seek affordable legitimate training to be self-educated therapists for their children. Phenomenon of “mother therapists” is actually common in the global history of treatment toward people with disabilities (Douglas & Klar, 2020: 206—207). Because of this, Mrs. Santi encountered Wahana Keluarga Cerebral Palsy (WKCP; CP Families) and Kampung MusMus (KM; MusMus Village) and was to find a local community that shared similar experiences and values. Mrs. Novia, on the other hand, was one of the committees of WKCP. While Ms. Dwi established KM which she used to give access to numerous CP therapeutic



equipment. All three of them—including Pika, Musa, and Keenan—met each other through WKCP Yogyakarta.

“Ms. Dwi, with her substantial background, launched a therapy site called Kampung Musmus. Pika used to go there, therefore, I knew Ms. Dwi. Meanwhile I knew Mrs. Novia from the WKCP. Moments later, Ms. Dwi revealed her idea to propose a judicial review to the MK [for medical marijuana]. However, she didn’t want to do it alone.” (Personal interview, Santi Warastuti, 2024)

Ms. Dwi, Musa’s mother, undertakes a vital role in offering the idea; medical marijuana. Although none of the mothers ever mentioned whether there is a leader. At the first meeting in WKCP, Mrs. Santi and Mrs. Novia witnessed Ms. Dwi’s son, Musa, is in excellent condition; he was able to locate and respond to sounds. Children with CP often struggle with listening comprehension skills; therefore, it is a milestone. However, his condition continued to decline, and his seizures got more severe. After a few conversations, Ms. Dwi later revealed that before moving to Yogyakarta, she went to Australia for a while in 2016, with Musa. During her short visit, she observed a friend using cannabis oil for joint-related therapy. Soon Ms. Dwi recalled Charlotte Figi, a child YouTuber she had once seen, who had Dravet Syndrome (DS). Figi used to have bone erosion due to the treatment side effects (Pitts, 2020: 1—2). After using a refined cannabis oil, Figi’s seizures ceased, which intrigued Ms. Dwi to try it with Musa.

“After asking the cannabis oil to be transformed into an incense, I would place it inside Musa’s room to help him sleep, and it appeared to be somewhat effective. I observed that he slept better, and after a week, [...] his muscle tone softened.” (Dwi, interview with ABC News, September 15th, 2021)

The results were outstanding. However, it didn’t last long, since both of them had to return due to financial constraints. Returning to Indonesia would mean returning to the former medications; no more cannabis oil. CP may not be degenerative, but witnessing his child’s seizure worsening without cannabis, turned her adamant to fight for the right to use it.

“When I used to live in Bali, my manager, who lived overseas, offered to bring me cannabidiol (CBD). She sent me a picture and told me that children with CP in her country often use it as AEDs, which she recommended to me, for Pika. I noticed the label which had *cannabis* and it left me shocked; I asked her not to bring CBD since the law here forbids it. So, I ignored it, [...] only to learn about it again years later.” (Personal interview, Santi, 2024)

Mrs. Santi, recalling her memory of once being offered CBD, decided to give it a shot. While Ms. Dwi consolidated her networks within NGOs and cannabis-related social movements, Mrs. Santi would share word of mouth in communities, which ultimately led Mrs. Novia to join. The mothers had assembled into a three-membered team, with supports from Lembaga Bantuan Hukum Masyarakat (LBHM; legal aid), Institute for Criminal Justice Reform (ICJR), Lingkar Ganja Nusantara (LGN), Yayasan Sativa Nusantara (YSN), Perkumpulan Rumah Cemara (PRC), and Indonesia Judicial Research Society (IJS) (Kompas, 2022). These NGOs will be referred to as the Pro-Medical Marijuana Alliance. Each of the NGOs had their remarkable roles.



Table 1. Mothers and NGOs’ roles during 2020—2022

Organization	Name	Role
Mothers ⁹⁷	Dwi Pertiwi	Musa’s mother
	Santi Warastuti	Pika’s mother
	Novia Murhayati	Keenan’s mother
ICJR	Erasmus Napitupulu	JR Attorney; Head of the legal advisor team.
	(As an organization)	JR Appellant
LGN	Dhira Narayana	Head of the campaign advisor team.
	Singgih Tomi Gumilang	JR Attorney; Expert witness.
LBHM	(As an organization)	JR Appellant
PRC		
YSN	(The late) Prof. Dr. H. Musri Musman, M.Sc	Marijuana research expert; Court witness; Expert witness.

Source: Personal interview with Santi Warastuti and Erasmus Napitupulu (2024)

Medical Marijuana v. Indonesian Narcotics Law

Why—among all medication choices available—do the mothers demand marijuana? Or, most importantly, why must the mothers need to go to such great lengths to form a movement? Ms. Dwi and Musa’s testimonies shall be the trigger but not the single cause. As the direct caregiver, these mothers had common experiences in doing self-research, self-learning, and making sense of their child’s CP conditions (Landsman, 2005: 123).

Moreover, there’s a countless amount of research suggesting that marijuana is more effective due to its distinct characteristics. Researchers have identified the medical benefits of marijuana, which comes from its two crucial substances, also known as cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC). Both have demonstrated significant effects in reducing pain with low side effects for HIV/AIDS, glaucoma, epilepsy, dementia, and other chronic health disorders (Wilkinson, *et al.*, 2016: 453—466). Therefore, numerous countries have minimized the resistance toward marijuana, such as Canada and Thailand, with the Medical Marijuana Program (MMJ) (Rehm, *dkk.*, 2019: 47—51). Since 2020, the United Nations (UN) Commission on Narcotic Drugs (CND) has reclassified marijuana and its derivatives from the Schedule IV—the most abusive with least medical benefits—to the Schedule I in the Single Convention on Narcotic Drugs 1961.

Likewise, fellow ASEAN countries, such as Thailand, Malaysia, and Philippines, have demonstrated a shift in their political stance towards cannabis. At least, in the Philippines, the viral case of 5-year-old Julia Mapa-Cleofas with DS has urged the government to allow the use of CBD (Salaverria, 2020). However, the same government commitment is nowhere to be found in Indonesia. Narcotics regulations, Article (Art.) 6 Paragraph (Para.) (1)(a) and

⁹⁷ The study will further use this term to refer to the three mothers of children with CP in this study case.



Art. 8 Para. (1) of Law No. 35/2009, still defines marijuana and its derivatives as the most abusive⁹⁸. Thus has restricted marijuana regardless of its reason; if someone is caught using it, the defendant will face a detention sentence of 5—20 years (Karim, 2023: 33). There’s also a fine up to 10 billion rupiah.

Table 2. Appellant’s grounds for JR proposal

Law Article	Current Provision	Grounds for Review
Challenged Provisions		
Art. 6 Para. (1)(a) Law No. 35/2009	Drugs as referred to in Art. 5 are classified into Schedule I; Schedule II; and Schedule III	“[...] can only be used for research but not therapy due to its high potential for addiction.”
Art. 8 Para. (1) Law No. 35/2009	Schedule I substances cannot be used for medical purposes.	“[...] cannot be used for medical purposes.”
Legal Basis		
Art. 28C Para. (1) 1945 Constitution	The state guarantees the right of its citizens to receive the benefits of scientific and technological advancements.	
Art. 28H Para. (1) 1945 Constitution	The state guarantees the right of its citizens to receive essential medical care.	

Source: Mothers’ application file (2020); Personal interview with Erasmus Napitupulu (2024)

The Indonesian government also refuses to tolerate cannabis for medical use. Fidelis Arie was sentenced to eight months of prison and fined one billion rupiah after being caught growing cannabis to reduce his late wife’s syringomyelia-induced pain (Sebastiano & Pramono Jati, 2020: 7975). Since the 1970s, the government has maintained a reductionist perspective, viewing cannabis usage as indicative of weak morals and social crime (Miao, 2017: 200). Following Richard Nixon’s War on Drugs, the government implemented extreme measures to restrict marijuana, leading to significant stigmas and lethal drug policies; such as the shoot-on-sight (Lai & Stoicescu, 2021: 174; The Straits Times, 2020). Thus, the mothers realized that the government was overdoing its measures to the extent of losing the essence of regulation. Mothers knew that before aiming for medical marijuana there were larger issues coming to the surface—marijuana as taboo and restriction as blanket impunities for decades—which needs to be approached with a larger action as well. Hence, the mothers’ movement emerged.

Mothers’ Legal Activism: Judicial Review and Court Ruling

On 20th November 2020, the mothers filed a JR against the narcotics law to the MK. Mothers have chosen the legal route as their first course of activism due to their initial motives to be somewhat radical—removing the ban of all drugs in Schedule I for medications. Therefore, it was not only directed to cannabis, but also included cocaine, heroin, ecstasy (MDMA), and LSD.

⁹⁸ Cannabis and its derivatives are classified in Schedule I, which has a reversed meaning with the Single Convention on Narcotic Drugs 1961. Schedule I in Law No. 35/2009, is for the substances which are considered the most addictive and abusive, so that would be the ones with the strictest limitation from the government.



“Why did we choose MK [first]? We want to approach the highest stage in Indonesia, which the public can access inclusively. So, [medical marijuana] can be discussed in a legitimate setting and no longer be taboo. [...] We wanted to lift the ban on the first schedule for medical use; no matter where the substances will be reclassified, as long as it has medical benefit, then it can be used for medications.” (Personal interview, Erasmus, 2024)

Mothers and its advisors’ team, in their ideals, were aiming to hit two targets at once. As long-term considerations, it is also used to minimize the risk of these drugs being misused for wrongful accusations in the future, when the suspect is using them for medical purposes instead. Taking notes from other successful cases, medical marijuana legalization often started from legal activism, as in Canada with the *Wakeford v. Can.* (2002) 155 O.A.C. 78 (Rehm, *et al.*, 2019: 48). Jim Wakeford, an HIV/AIDS patient, with John Goodhew as his doctor, fought for his rights after being caught growing cannabis to reduce his severe nausea. Goodhew once told the court, “What has marijuana done for Wakeford? it has allowed him to live” (Norml, 1998). Afterwards, the judges allowed him to continue it while requesting the Health Ministry to conduct research alongside it. Thus increased marijuana activists’ bargaining position to lobby at the national scale.

The court proceedings took a long time, spanning 8—9 court sessions, over two years. Due to the COVID-19 pandemic, the mothers were only able to participate in online meetings. But, there were times when the court’s future seemed uncertain, making the mothers concerned. So, the mothers discussed another method to ensure the status of their demand, which was collectively agreed to be communicated through delivering handwritten mail as a symbolic act.

“We had to wait for the court rulings, we were left hanging. How long do we have to wait? That was the beginning of the idea to do a protest act [during CFD] while delivering our mail [asking for clarity] to MK. Executed on Anti-Drug Day 2022” (Personal interview, Santi, 2024)

Mrs. Santi and Pika then flew to Jakarta. Mrs. Nafiah and Keenan, who had already moved to Tangerang, intended to join, but had to cancel due to conflicting household matters. Therefore, the protest act was done—will be explained in the following sections—and managed to get a huge amount of attention from the public. At least, one month after the viral act, MK released Court Ruling No. 86/PUU-XVIII/2020; rejecting all of the mothers’ appeals. One of the highlighted arguments against the request is the concern that it would lead the youth into drug addictions, which resembles the drug way gate theory-based narrative (Sirita, 2022: 97).

“MK often decides based on the political context instead of the legal-driven. Well, if not, the JR should’ve been accepted. Observing the judges’ rulings, [no rejection written] that the facts displayed in the court are legal facts [means judges accepted the notions of medical marijuana].” (Personal interview, Erasmus, 2024)

Despite being rejected, the court ruling tries to offer mitigation to the table by asking the government to conduct medical marijuana research. MK mentioned the fact that no domestic-based medical marijuana research could be found—in essence, rejecting the existing global studies—which hinders the court from legalizing it. However, it leads to another issue on the



ground; it is not that researchers in this country lack interest in learning about marijuana as a medical alternative. Law No. 35/2009 itself has stated that drugs on the first schedule are allowed to be used for scientific research in limited quantities including cannabis (Bernartin & Fransiska, 2021: 6). Whereas the indicated rules seem to be nowhere executed in reality

“I remember hearing that LGN once sought permission to research medical cannabis for diabetes, which was approved by the Health Ministry. However, they faced difficulties obtaining the cannabis for research as the National Narcotics Agency (BNN) did not grant the permit.” (Personal interview, Santi, 2024)

Several findings and disclosed testimonies revealed that scholars encountered bureaucratic obstacles when applying for research permits (e.g. Putri & Misero, 2021: 5). When this issue resurfaced during the JR after the court rulings, the Health Minister, Budi Sadikin, enthusiastically responded to carry out the mandate (Caniago, dkk., 2023: 49). Yet, no recorded actions and political commitment from the government have been shown ever since.

“Waiting for the research to be done is like waiting for the rocks to fall from the sky [similar adynaton to *when pigs fly*]. I was hoping for at least we, as mothers, were given the access because we have done our efforts with the current medications provided in Indonesia. But there has not been any significant improvement, hence, I want to use medical marijuana. Please, [the government] could at least grant me a legal protection so I can buy [cannabis] myself with my own money, finding a way to purchase it myself” (Personal interview, Santi, 2024)

Mothers’ Political Activism: Anakku Butuh Ganja Medis and Drug Reform Bill

One of the biggest breakthroughs of these mothers’ activism is the unexpected attention it received overnight from an accidental walk. Carried a sign of *Anakku Butuh Ganja Medis*, Mrs. Santi and Pika marched in the CFD streets, while heading to the MK to hand the mothers’ mail. Andien, a famous singer, encountered both and took selfies; Andien later uploaded them to Instagram.

Little did the mothers know that quiet protest act would be the beginning of the crowd’s recognition from citizens, journalists, to policymakers. Mothers’ fight over medical marijuana for children with CP became more exposed and well-known. Around 79% young- adult respondents between the ages of 14—24 from Bandung and Jakarta discovered the issue through news and social media afterwards (Mahestu, *et al.*, 2019: 96—98).





Picture 1.1 One of the viral aired news of Mrs. Santi and Pika on KOMPAS TV (Source: YouTube)

Protest act became the mothers' first national-scale political activism. But then, Sufmi Dasco—Vice Speaker of DPR—invited Mrs. Santi to the DPR's Nusantara Buildings. After one meeting, during which the mother communicated her difficulties in raising child due to the lack of CP medications, Mrs. Santi was asked to attend the hearing of the Commission III's Drug Reform Bill. On 30th June 2022, Mrs. Santi with Tomi Gumilang as invitees and Prof. Musri, as a researcher, advocated several urgencies for medical marijuana in it (Anggrainy, 2022). Mrs. Santi and Prof. Musri's testimonies were received as inputs by the commission in continuing to formulate the bill.

Taufik Basari, Commission III's member, stated his support to the activism with the hope that it could change the narcotic acts' paradigm. Ma'ruf Amin as Vice President delegated a mandate to Majelis Ulama Indonesia (MUI; Clerics Council) to release a decree or *fatwa* to allow medical marijuana (detikNews, 2022). Mothers' movement had succeeded in making the medical marijuana demand enter the decision-making arena. Although their activism alone has not been robust enough to urge the bill to be finalized soon, these efforts have led the MK and other governments to be aware of the shifting public opinions regarding marijuana.

“If you observe in the past few years, Anti-Drug Day back then used to be filled by the horror of the war on drugs [slogan]. Drugs were a highly taboo topic. But now, it is

not anymore. People have gotten used to discussing it after the day we brought it to MK.” (Personal interview, Erasmus, 2024)

Reflecting the Mothers’ Activism as a Social Movement

“We are housewives. We’re only moving around here [at home]. We didn’t know about the law; we didn’t know the procedures. I used to ask in disbelief, ‘Really? As citizens, we can sue the state?’ Only now do I know that we can.” (Personal interview, Santi, 2024)

Ms. Dwi, Mrs. Santi, and Mrs. Novia. All three of them are examples of mothers who are drawn into activism due to the critical conditions of their children. Within their capabilities, these mothers articulated wider grievances that attracted numerous general audiences, convincing them to support the contentious idea of medical marijuana. Mothers’ consistent efforts have contributed to destigmatizing marijuana as taboo throughout the two years of legal and political activism. Thus, efforts were also directed towards gaining more bargaining influence in demanding the governments to address the structural healthcare negligence affecting their children with CP and their cohorts. Such mobilizations suggest that the dynamics of emergence, trajectories, and outcomes of the mothers activism are somewhat multifaceted.

How can we understand the CP mothers activism? This article will offer further analyses of the reasons that led to the mothers’ movement’s emergence by examining the movement’s characteristics. This article will examine four categories, which narrowed Enrique Larana, Hank Johnston, and Joseph R. Gusfield’s (1994) eight indicators of NSM theoretical framework. The categories consisted of the mothers’ identities, values, mobilizational strategies, and motives in challenging the ongoing situations; the *status quo*.

Reflecting on this study case, we might first see them as mothers who asked medical marijuana to be legalized for their children—only to realize next that we’re witnessing grassroots activists initiating social change. Ms. Dwi, Mrs. Santi, and Mrs. Novia, each hold their reflective and collective image as mothers of children with CP. However, the term ‘mother’ refers to more than individual cognitions; it echoes the social interactions and ties between collective action members (Langman, 2013: 512). These mothers did not unite and commit for two consecutive years only because of their traditional role as a mother. Rather this study argues, that these mothers took their mothering experiences as a reason to fight for wider change. Even if it meant being more assertive.

Their shared identity is forged on the relatable burden of being a caregiver, which transforms into curiosities and a courage to seek better solutions outside conventional boundaries. Hence, mothers agreed on medical marijuana legalization as their common goals, after conducting their own research. Mothers were also learning and acknowledging medical marijuana testimonials from parents of children with CP either found online or in person. Thus also defines why it is these three mothers who fought instead of other CP mothers out there.

Discussing the movement further, its narratives also stem from the stories of children with CP, whose rights are being fought for. Musa, Pika, and Keenan. All three of them are the ones who were directly disadvantaged from the structural health negligence. But, due to their

nature, couldn't advocate for themselves (Vidya, 2016: 97). Hence, mothers advocate on behalf of them as agents of change from disseminating awareness to engaging with stakeholders.

This is called parental activism—or in this case is a *maternal* one—which remains instrumental in many study cases of efforts to advocate inclusivity for the disabled within the political arena (Vidya, 2016: 98). This is exactly what these mothers do. Narratives demanding medical marijuana, resulting from concerns about existing ineffective and unaffordable medicines, mothers are advocating for their children's better quality of life. This is defined as a post-materialist value. Contemporary social movements are leaning their focus on private matters such as healthcare and human rights rather than wealth or class conflict (Budiardjo, 2007: 384). Even mothers in this case, despite coming from diverse social classes, still consolidated for the common goal of medical marijuana.

“If you examine the backgrounds of these three mothers, you will find that each comes from a different background. Ms Dwi was able to use cannabis for her child but then stopped because the rules forbid it. Mrs Nafiah never uses it but could buy some if the rules allow it. Compared to the others, Mrs Santi struggled in securing resources for Pika's treatments. That is why she believes marijuana [if legalized] would be much more accessible.” (Personal interview, Erasmus, 2024)

Mr. Erasmus, the movement's strategic advisor, earlier mentioned that each mothers had different underlying reasons that drove them into participating. At least there is a string that could be drawn between these reasons: dissatisfaction toward the non-inclusive healthcare. Whether before or after widely being documented on demanding medical marijuana, mothers always felt that their children, due to their condition, are systematically placed on the second tier. Even the latest data shows that there is limited access for paralyzed patients like children with CP to walking aids, a basic assistive device, with 63% unmet needs in Indonesia (Monash, 2017: 12). Seeing the governments tend to be ignorant to the needs of children with CP, these mothers grew distrust of the existing political engagement channels to address concerns. The distrust escalated when mothers agreed to march against existing drug regulations and norms for medical marijuana; so they decided to form a grassroots movement instead.

“Sometimes, it feels as if children with CP like Pika do not deserve better healthcare services from the state. Aren't we all supposed to have the same and equal access?” (Personal interview, Santi, 2024)

Last but not least, discussing the mobilizational strategies. Mothers and its advisors team, from preparations prior to JR until the two-year span at the national level, managed to undergo two major momentums: JR toward Law No. 35/2009 and the Drug Reform Bill. While Mrs. Santi and Pika's viral *Anakku Butuh Ganja Medis* protest boosted the movement's public support; three significant points can be suggested in explaining the mothers' trajectories.

First, mothers extensively used journalism and social media to gain exposure and spread medical marijuana discourses, albeit most of it was done as individuals. Second, mothers decided to choose mostly uncontentious and structural-oriented political actions as it aligned with their aim to destigmatize marijuana. Efforts to dismantle taboos will fail if the activism is violence-based, which could reinforce the dogma of marijuana as a sign of weak morals (Miao, 2017: 200). Third, reflecting on the mothers' legal and political activism, the movement's



outcomes were expected to be more significant than only for their own children's benefit. This was shown with mothers initially aimed to erase the medical use ban of all drugs in the first schedule so the impacts could be wider (p. 8). Mrs. Novia also mentioned how the demand represented the disadvantaged families of children with CP who struggled financially due to the non-inclusive healthcare (p. 4). This study argues that it is an instance of *othermothering*—a concept in which mothering extends to the unrelated cohort within the neurological disorders community or more (Edwards, (2020): 88—89). Therefore, with the influence of their shared identity as the caregiver who turned into agents of change for children with CP, mothers tried to initiate social change with medical marijuana demand.

“At least we leave a remarkable record of our fight. There was Pika's mother [who fought]. Pika might not be the one who witnesses the legalization of medical marijuana, but I hope another Pika in the future will get to experience the results [of our efforts]” (Personal interview, Santi, 2024)

CONCLUSION

Mothers movement of children with CP in Indonesia emerged from the motherhood experiences as the caregivers who bear intersected burdens due to non-inclusive healthcare access. Therefore, these experiences intrigued them into being agents of change who speaks on behalf of the children for their rights to medical alternative. The three mothers, consisting of Ms. Dwi, Mrs. Santi, and Mrs. Novia, aimed to seek better medication alternatives to improve their children's quality of life. These mothers found each other enthusiastically discussing knowledge and testimonies of medical marijuana, and therefore, they agreed to form a grassroots movement to fight for its legalization. Medical dissatisfaction toward conventional treatments and policies transformed into the demand for medical marijuana legalization.

Mothers then discussed the mobilization strategies for months with their advisor team from various marijuana-related NGOs who voluntarily supported the ideas gathered from the networking. Starting from legal activism in proposing JR toward Narcotic Law No. 35/2009, mothers were aiming to dismantle the root problems, which were identified as the marijuana stigmatization and the government's ideological view of the war on drugs. This was done to ensure the success of achieving their common goal to expand medical interventions for critical health conditions like CP through medical marijuana. The viral protest act of *Anakku Butuh Ganja Medis* then happened as a positive result of mothers' consistency in activism. This led the mothers' advocacy to enter the decision-making arena of the Drug Reform Bill.

How do we understand the CP mother's activism for medical marijuana through its origin, trajectories, and outcomes? The New Social Movement (NSM) theoretical lens elaborates it into four major categories: identity, value, motives to challenge the status *quo* and mobilization strategies. With the findings and theoretical analysis, this study argues that the mothers are an identity-based mobilization, with their activism rooted in their shared identity. The strategies were aimed at raising public awareness of medical marijuana, which

was disclosed as taboo for decades. Mothers' transformative motives extend beyond individual concerns for Pika, Musa, Keenan, to broader societal implications.

REFERENCES

Electronic Book

- Bewley-Taylor, D. R., dan Tinasti, K (ed.) 2020. *Research Handbook on International Drug Policy*. Edward Elgar Publishing.
- Budiardjo, M. (2007). *Dasar-dasar Ilmu Politik*. PT Gramedia Pustaka Utama.
- Ghosh, N. (ed.) 2016. *Interrogating Disability in India: Theory and Practice*. Springer.
- Larana, E., Johnston, H. & Gusfield, J. R. (1994). *New Social Movement: From Ideology to Identity*. Temple University Press Philadelphia.
- Mendoza, E. F. O. (2019). *Las Madres De Chihuahua: Maternal Activism, Public Disclosure, and the Politics of Visibility*. *New Political Science*, 41(2), 211—233.
- Miron, J. (2016). *Prohibition Harms the Weakest: Does Consumer Irrationality Justify the War on Drugs*. Center for Indonesian Policy Studies.
- Porta, D. D., dan Diani, M. (2006). *Social Movement: An Introduction*. Blackwell Publishing.
- Putri, D. K, dan Misero, Y. D. (2021). *Rekomendasi Perubahan Kebijakan: Urgensi Pembentukan Peraturan Menteri Kesehatan untuk Memperoleh, Menanam, Menyimpan, dan Menggunakan Ganja*. Yayasan Sativa Nusantara.
- Reed, T.V. (2019). *The Art of Protest: Culture and Activism from the Civil Rights Movement to the Present (2nd Ed.)* University of Minnesota Press.
- Ritzer, G. (2005). *Encyclopedia of Social Theory*. SAGE Publications.
- Rubens, M. (2014). *Social Work in Public Health: Political and Medical Views on Medical Marijuana and its Future*. Routledge.
- Shadaan, R. (2020). "Mothering and Activism" in Hallstein, L. O., O'Reilly, A. & Giles, M. V. (eds.) (2020). *The Routledge Companion to Motherhood*. Routledge. 486—491
- Walker, N. (2012). "Throw Away the Master's Tools: Liberating Ourselves from the Pathology Paradigm." in Bascom, J. (2012). *Loud Hands: Autistic People, Speaking*. The Autistic Press.



Whittington, K. E., Kelemen, R. D., dan Caldeira, G. A. (2008). *The Oxford Handbook of Law and Politics*. Oxford University Press.

Journal Article

Andromeda, A., Hartini, A. & Suryanto, S. (2023). Reassuring the Prevalence of Cerebral Palsy in Asian Children and Adolescents. *KEMAS: Jurnal Kesehatan Masyarakat*, 19(1). 42—52.

Assanangkornchai, S., dkk. (2021). Medical Cannabis Use in Thailand After its Legalization: A Respondent-driven Sample Survey. *PeerJ*. 1–16.

Caniago, R., dkk. (2023). Pelarangan Penggunaan Ganja dalam Sektor Medis: Kasus Sirup Anti-kejang yang Tak Lagi Aman Bagi Pengidap Cerebral Palsy. *Jurnal Fusion*, 3(1), 1–17.

Hunt, K. (2020). Social Movements and Human Rights Language in Abortion Debates. *Journal of Human Right*, 20(1). 72–80.

Landsman, G. (2005). Mothers and Models of Disability. *Journal of Medical Humanities*. 26. 121—139.

Katasila, S. (2022). Social Movements on Liberalization “Free Marijuana” of Thai’s Government Policy: Freedom under Boundaries. *Journal of Positive Psychology and Wellbeing*, 6(2). 2191–2208.

Kotlaja, M. M., dan Carson, J. (2019). Cannabis Prevalence and National Drug Policy in 27 Countries: An Analysis of Adolescent Substance Use. *International Journal of Offender Therapy and Comparative Criminology*, 63(7), 1082–1099.

Millward, P. & Takhar, S. (2019). Social Movements, Collective Action, and Activism. *Sociology*. 53(3). 1—12.

Pedersen, W., dan Sandberg, S. (2013). The Medicalisation of Revolt: A Sociological Analysis of Medical Cannabis Users. *Sociology of Health & Illness*. Vol. 35 (1). 17—32.

Rehm, J., dkk. (2019). Medical Marijuana, What Can We Learn From the Experiences in Canada, Germany, and Thailand. *International Journal of Drug Policy*. 74. 47–51.

Ross, S. D. & Engberg, J. R. (2002). Relation Between Spasticity and Strength in Individuals with Spastic Diplegic Cerebral Palsy. *Developmental Medicine and Child Neurology*, 44(3). 148.

Schechtman, M. (2012). Joint Authority: The Case for State-Based Marijuana Regulation. *Tennessee Journal of Law and Policy*, 8(1). 44–56.



- Smith, M. & Blamires, J. (2022). Mothers' Experience of Having a Child with Cerebral Palsy: A Systematic Review. *Journal of Pediatric Nursing*. 64—73.
- Sirita, U. (2022). Construction and Implications of Cannabis Discourse in Thailand's Cannabis Legalization: A Comparative Study of English-language Traditional and New Media. *Suranaree J. Soc. Sci.* 16(2). 95—118.
- Steinberg, J. N. (2022). Cannabis Legalization: An Ethnography of the Global Movement and Market Forces. Centre for Socio-legal Studies. 1—412.
- Suh, D. (2001). How Do Political Opportunities Matter for Social Movements? Political Opportunity, Misframing, Pseudo Success, and Pseudo Failure. *The Sociological Quarterly*, 42(3). 437—460.
- Tillberg E., Isberg B., dan Persson J.K.E. (2020). Hemiplegic (unilateral) cerebral palsy in northern Stockholm: Clinical assessment, brain imaging, EEG, epilepsy and etiologic background factors. *BMC Pediatr.* 116.
- Toorn, R., *et al.* (2007). Etiology of Cerebral Palsy in Children Presenting at Tygerberg Hospital. *South African Journal of Child Health*, 1(2). 75.
- Vadivelan, K., *et al.* (2020). Burden of Caregivers of Children with Cerebral Palsy: An Intersectional Analysis of Gender, Poverty, Stigma, and Public Policy. *BMC Public Health*, 20 (645). 1—8.
- Wilkinson, S. T. (2016). Marijuana Legalization: Impact on Physicians and Public Health. *The Annual Review of Medicine*. 67. 453—466.
- Yadav, P., *et al.* (2022). Molecular Mechanism and Role of Japanese Encephalitis Virus Infection in Central Nervous System-Mediated Diseases. *Viruses*, 14. 2—25.

Zulkifli, M. (2022). Perempuan dalam Gerakan Lingkar Ganja Nusantara. *Jurnal Noken*. 7(2). 182—191.

Interviews

- Murhayati, Nafiah. (2024). West Java/Tangerang, 30th May, 2024.
- Napitupulu, Erasmus. (2024). West Nusa Tenggara/Zoom Meetings, 29th May, 2024.
- Warastuti, Santi. (2024). Yogyakarta/WhatsApp Call, 9th May, 2024.

Website

- BBC News. (2022, 20 Juli). “Meski Ditolak MK, Pemohon Uji Materi UU Narkotika Segera Mulai Penelitian Ganja untuk Keperluan Medis.” Retrieved from <https://www.bbc.com/indonesia/articles/c19m3k9wvmvo> (24 Januari 2024).



- Kompas. (2023, 31 Maret). "Ditjen HAM Sebut 60 Persen Tahanan di Indonesia Terkait Kasus Narkotika." Retrieved from <https://nasional.kompas.com/read/2023/03/31/23415261/ditjen-ham-sebut-60-persen-tahanan-di-indonesia-terkait-kasus-narkotika> (23 Januari 2024).
- Kompas. (2022, 20 Juli). "Sambil Menangis, Ibu yang Suarakan Legalisasi Ganja Medis Sebut Perjuangan Belum Berakhir." Retrieved from <https://nasional.kompas.com/read/2022/07/20/17390231/sambil-menangis-ibu-yang-suarakan-legalisasi-ganja-medis-sebut-perjuangan> (24 Januari 2024).
- Putri, B. U. (2020, 28 Desember). "16 Tahun Sakit, Anak Pemohon Uji Materi Larangan Ganja untuk Medis Meninggal." Tempo. Retrieved from: <https://nasional.tempo.co/read/1418160/16-tahun-sakit-anak-pemohon-uji-materi-larangan-ganja-untuk-medis-meninggal>
- Salaverria, L. B. & Concepcion, P. (2020, 18th February). "DDB Rolls Out Medical Cannabis Plans." Philippine Daily Inquirer. Retrieved from <https://newsinfo.inquirer.net/1230019/ddb-rolls-out-medical-cannabis-plans>
- Saputra, A. (2024, 07 Januari). "Ortu Anak Cerebral Palsy Gugat UU ke MK demi Ganja Medis Legal." Detik. Retrieved from <https://www.vice.com/id/article/93a857/anak-cerebral-palsy-butuh-ganja-medis-karena-sirup-kejang-diperiksa-bpom-ginjal-akut> (24 Januari 2024).
- Souisa, H. (2021, 15 September). "Gugat ke Mahkamah Konstitusi, Para Ibu ini hanya ingin Hak Anak-anaknya Terpenuhi Melalui Ganja Medis." ABC News. Retrieved from: <https://www.abc.net.au/indonesian/2021-09-15/tiga-ibu-di-indonesia-minta-ganja-dilegalkan-untuk-pengobatan/100462748>
- Sulistya, P. (2022, 28 Oktober). "Nestapa Anak Cerebral Palsy: Ganja Medis Dilarang, Sirup Anti-kejang Tak Pasti Aman." VICE. Retrieved from <https://www.vice.com/id/article/93a857/anak-cerebral-palsy-butuh-ganja-medis-karena-sirup-kejang-diperiksa-bpom-ginjal-akut> (24 Januari 2024).



LEGAL POLICY AGAINST DRUGS FROM THE COLONIAL PERIOD TO POST-INDEPENDENCE IN INDONESIA

Arfan Habibi*

Department of History, Faculty of Humanities, Universitas Indonesia

*Corresponding author: arfan.habibi@ui.ac.id

ABSTRACT

Drug abuse (narcotics, psychotropic substances and other addictive substances) has an impact on physical damage, mental health, emotions and attitudes in society globally and also occurred in Indonesia from the colonial period to post-independence. The aim of this research is an attempt to understand and research more deeply the decolonization of narcotics policy in Indonesia from the colonial period to post-independence and its influence. This research method uses a historical approach by going through the heuristic, criticism, interpretation and historiography stages in this research. Research shows that regulations regarding opium were strictly regulated by the Dutch colonial government following problems that had occurred regarding illegal opium smuggling by VOC officials. Then the colonial government under Dutch auspices continued to implement the opiumpacht system, namely appointing official opium dealers who paid taxes. Until 1894, the Dutch East Indies colonial government implemented a new opiumregie system, namely the production and distribution stages of opium under the auspices of the Dutch. During the Japanese occupation era since 1942, the Dutch East Indies implemented a policy of abolishing laws regarding opium and prohibiting the use of opium. After Indonesia's independence in 1945, policies continued with the implementation of drug prevention, eradication and distribution policies from the Old Order era to post-reformation, for example with the enactment of Law Number 35 of 2009 concerning Narcotics. Through this, it is important to understand the dangers and appropriate medical use, and the need for a narcotics policy so that it is not misused in Indonesia.

Keywords: *Legal Policy, Drugs, Opium, Dutch East Indies, Indonesia*

INTRODUCTION

Drug abuse (narcotics, psychotropic substances and other addictive substances) has an impact on physical damage, mental health, emotions and attitudes in society globally and also occurred in Indonesia from the colonial period to post-independence. Narcotics are substances, materials, or drugs that do not fall under the category of food when consumed by

drinking, smoking, inhaling, ingesting, or injecting, and they affect the performance of the human brain (central nervous system), leading to dependency. The impact of drug abuse can cause changes in brain function (increased or decreased), as well as in the function of other body organs such as the heart, circulatory system, respiratory system, and others (Hariyanto, 2018:204).

In its development in Indonesia there are traces related to narcotics, one of which is regarding opium. Opium is a type of beverage that is obtained from the *papaver somniferum* plant (Ibrahim, 2016:77). The ingredients contained in this drink are poisonous which can weaken the nerves in the human body, and if excessive can be intoxicating. Opium has long been known in West Asia and Southern Europe. The Sumerians were familiar with opium in the fourth millennium BC. Meanwhile in Egypt, opium was known around 1550 BC and the people of the Assyria nation were skilled at making tablets from the opium material used. Until the circulation of opium spread around Southeast Asia and entered Indonesia. In its development, opium was actually misused by society, especially in countries that were colonized by European nations in the past, including Indonesia since the arrival of the *Vereenigde Oostindische Compagnie* (VOC).

Therefore, through this it is important to understand the development, legal policies and impact of narcotics, especially on Indonesian society. The aim of this research is an effort to understand and research more deeply the policy of narcotics decolonization in Indonesia from the colonial period to post-independence and its effects. Therefore, it is necessary to understand legal policies related to narcotics from time to time in order to understand the historical reflection as reference material in the present. Then also, it is important to look at past phenomena so as not to repeat bad things and take positive sides that can have an impact on the nation's future generations.

METHODOLOGY

This research method uses a historical approach through heuristic, criticism, interpretation and historiography stages to research (Daliman, 2015: 28-29). In the first stage, namely heuristics, searching for sources in the form of primary sources and secondary sources as data. Primary source searches were obtained through archives related to the development of narcotics in Indonesia which are in the National Archives of the Republic of Indonesia, contemporary photo collections from the KITLV digital collection at Leiden University, as well as newspapers from Delpher.nl and the National Library of the Republic of Indonesia which have a lot of information.

This writing is also supported by secondary sources in the form of references from books, journal articles, websites and other relevant sources. The next stage is reviewing sources through criticism, understanding through interpretation and historiography to present this article as research (Gottschalk, 1975). The research and writing process requires in-depth understanding so that it becomes valid writing based on the data obtained. This writing understands the historical approach with its relationship to legal policy, especially related to narcotics from the colonial era to post-independence Indonesia.



RESULT AND DISCUSSION

Opium Trade and Circulation in Indonesia 17th-20th Century

In essence, colonialism came with the spirit of looking for raw materials to improve the economy as a logical reason that is easily and quite generally accepted. However, in practice, this process was then supported by the formation of a colonial state which aimed to maintain order and security through the implementation of a number of regulations (Jaelani, 2019: 1-2). Policies in colonial countries occupied by Europeans, such as the Dutch East Indies, became the target of regulations that were enforced and were detrimental to native communities. In particular, this also happened in legal policies regarding opium in the Dutch East Indies.

In 1677, VOC succeeded in making an agreement with King Amangkurat II in Java which guaranteed the VOC a monopoly to import opium into the territory of his kingdom (Mataram) and a monopoly to distribute it domestically. From this agreement until 1799, the VOC brought an average of 56,000 kilograms of opium to Java every year. In its development, in the period from 1677 to 1789, the Company reported total net revenues or profit earnings of 48,540,377 florins from the sale of opium at Batavia. This figure may be converted and is the equivalent of 16.118.025 rsd., which for the purpose of comparison of the magnitude of this figure is equal to 19,416,150 Spanish pesos and 17,651,046 Chinese taels (Souza, 2009:127).

The import of opium into any port in Java (including Madura except the port of Batavia) was declared illegal trade and could be prosecuted. This regulation did not affect the remaining opium on the market which may have actually been purchased before the December 1813 sale (Java government gazette, 1813). In its development since 1826, opium cultivation was also carried out experimentally and the seeds were planted in various settlements in Java. Through this legally enforceable policy in the Dutch East Indies, several opium industries were officially opened, for example in Weltevreden, Batavia.



Figure 1. Opium factory office building in Weltevreden in Batavia.

Source: Southeast Asian & Caribbean Images (KITLV). (1907). Bureaugebouw van de opiumfabriek in Weltevreden te Batavia.

The opium department's annual report notes a downward trend since 1920. The flows in Java and Madura became important in 1927, not because of an increase in opium use, but because of a decrease in secret opium use (Het Vaderland : staat- en letterkundig nieuwsblad, 1928). In the 1920s, the amount of regie opium profits reached almost f. 30,000,000,- which exceeds export earnings compared to those from quinine plantations. Even when the global economic recession hit the Dutch East Indies, namely in the 1930s, this commodity helped the Dutch East Indies' finances when plantation exports even fell by 50-60%, but regional opium sales only fell by around 14%. Through the policies implemented by the Dutch East Indies colonial government, the politics of the opium trade was not only authorized as a storage center but also to supervise wholesale sales, most of which were owned by rich Chinese merchants (Pramasto and Meyrynaldy, 2020: 126-127).

Narcotics Regulatory Policy and Its Impact on Indonesian Society

The beginning of the implementation of regulatory policies regarding opium was strictly regulated by the Dutch colonial government following problems that had occurred regarding illegal opium smuggling by Vereenigde Oost-Indische Compagnie (VOC) officials. The existence of the opium commodity was very important for the foreign trading company from the Netherlands, namely the Vereenigde Oost-Indische Compagnie (VOC). This was caused by Governor General Joan Maatsuyker (1653-1678), who was based in Batavia, issuing a slight update to the excise tax regulations for various goods which were based on weight and not on the value of an item (Pramasto and Meyrynaldy, 2020: 121).

The implementation of the new opium auction system or *Opiumpacht* system was established by Herman Willem Daendels as Governor-General of the Dutch East Indies in 1809 by appointing official opium traders who paid taxes. The *Opiumpacht* system is a method used by the Dutch by appointing official opium dealers who pay the highest taxes as opium providers. However, this policy was ineffective and actually became a new problem as fighting and opium smuggling between regions occurred which was detrimental to the colonial government. Until 1894, the Dutch East Indies colonial government implemented a new *Opiumregie* system, namely the production and distribution stages of opium under the auspices of the Dutch (Sari, 2022:2). The government has the power to produce and distribute opium to wholesale outlets and then grants licenses to local agents to serve the retail trade. The *regi* system lasted until the end of the Dutch East Indies colonial government's rule (Sari, 2022:4).



Figure 2. Opium dealer in Java.

Source: Southeast Asian & Caribbean Images (KITLV). (1875). *Opiumschuivers op Java*.

Meanwhile, during the Japanese occupation era since 1942, the Dutch East Indies implemented a policy of abolishing laws regarding opium and prohibiting the use of opium. The end of the Dutch East Indies colonial government and the arrival of the Japanese military brought various changes to the lives of the people of the Dutch East Indies. One of the changes is related to the use of opium. The Japanese military government issued a policy of abolishing laws regarding opium and prohibiting its use. The prohibition on the use of opium was due to the Japanese military government's main focus being on the Asia Pacific war at that time so that the Japanese military government did not want to be bothered with the social impact of opium use in society (Sari, 2022:4).

After Indonesia's independence in 1945, there was a continuous policy regarding the prevention, eradication and distribution of narcotics which was implemented and evaluated from the Old Order era until post-reformation, for example the enactment of Law Number 35 of 2009 concerning Narcotics. Regarding Law no. 35 of 2009 contains Narcotics as a revision of the results of Law no. 22 of 1997 concerning Narcotics which covers the classification of narcotics in categories I and II. Law no. 5 of 1997 concerning matters related to Psychotropics. Then also regarding this Law, it was issued as an effort for the government to act as a policy maker in responding to the increasing abuse of illicit narcotics trafficking and also the need to ensure regulations regarding the medical and social rehabilitation process for narcotics abusers and addicts (Hariyadi dan Anindito, 2021:378). This is so that it is correct and not wrong in responding to narcotics cases and problems and becomes a special, ongoing consideration for the progress of the Indonesian nation.

CONCLUSION

The development of narcotics in Indonesia has a very long history since the *Vereenigde Oostindische Compagnie* (VOC) era, the Dutch East Indies, the Japanese era until post-Indonesian independence. However, unfortunately the use of opium in the Dutch East Indies era which was supposed to be used appropriately for health purposes, on the contrary, had a negative impact due to wrong use and became one of the intoxicating consumptions of the Dutch East Indies people.

Legal policies related to opium became official and legal through the *Opiumpacht* system and *Opiumregie* system during the Dutch East Indies. However, during the era when Japan occupied the Dutch East Indies, it abolished regulations regarding opium and prohibited its consumption because it had a bad impact on health and was a burden on the government. After Indonesian independence in 1945, policies regarding the prevention, eradication and distribution of narcotics continued to be continued in order to reduce crime and undesirable negative health impacts. Through this, the government is here with the cooperation of various parties to try to build a better Indonesia in the future.

ACKNOWLEDGE

I would like to thank my family who always supported me while I was doing historical research. Then I would like to say to the lecturers who always guide us in the History Department, Faculty of Humanities, Universitas Indonesia. Then also in this case I would like to thank the entire ICDR 2024 committee who have given me the opportunity to participate in international conferences related to global narcotics issues.

REFERENCES

Archives, Newspapers, and Photos

Geuns, M. Van. (1913). *De opiumcultuur in Nederlandsch-Indië : een nieuwe bron van inkomsten*. Soerabaja: Soerabajasch Handelsblad.

Het Vaderland : staat- en letterkundig nieuwsblad. *Jaarverslag Opium-regie*. July 12, 1928.

Java government gazette. *Advertentie*. April 10, 1813.

Southeast Asian & Caribbean Images (KITLV). (1875). *Opiumschuiwers op Java*.

Southeast Asian & Caribbean Images (KITLV). (1907). *Bureaugebouw van de opiumfabriek in Weltevreden te Batavia*.



Books, Journal Articles and Websites

- Bryan Souza, George. (2009). Opium and the Company: Maritime Trade and Imperial Finances on Java, 1684-1796. *Modern Asian Studies*, Vol. 43, No. 1, *Expanding Frontiers in South Asian and World History: Essays in Honour of John F. Richards* (Jan., 2009), pp. 113-133.
- Daliman. (2015). *Metode Penelitian Sejarah*. Yogyakarta: Penerbit Ombak.
- Gani A. Jaelani. (2019). Dilema Negara Kolonial: Seksualitas dan Moralitas di Hindia Belanda Awal Abad XX. *Patanjala* Vol. 11(1), pp. 1-16.
- Gottschalk, Louis. (1975). *Mengerti Sejarah*. Penerjemah Nugroho Notosusanto. Jakarta: Yayasan Penerbit Universitas Indonesia.
- Hariyadi, Wahyu dan Anindito, Teguh. (2021). Pelaksanaan Asesmen Terhadap Pelaku Penyalahgunaan Narkotika Ditinjau Dari Undang-Undang No. 35 Tahun 2009 Tentang Narkotika. *Jurnal Pendidikan Kewarganegaraan Undiksha* Vol. 9(2), pp. 377-383.
- Hariyanto, Bayu Puji. (2018). Pencegahan Dan Pemberantasan Peredaran Narkoba Di Indonesia. *Jurnal Daulat Hukum*, Vol. 1(1), pp. 201-210.
- Ibrahim, Julianto. (2016). Candu dan Militer Keterlibatan Badan-badan Perjuangan dalam Perdagangan Candu di Jawa Pada Masa Revolusi. *Kawistara*, Vol 6(1), pp. 76-92.
- Kuntowijowo. (2005). *Pengantar Ilmu Sejarah*. Yogyakarta: PT Bentang Pustaka.
- Opium.com. *Opium Facts*. <https://opium.com/facts/>. Accessed May 9, 2024.
- Pramasto, Arafah dan Meyrynaldy, Baroqah. (2020). Pengaruh Penetrasi Barat dalam Peredaran Komoditas Candu di Indonesia Abad Ke-17 Hingga Ke-20. *Jurnal Artefak*, Vol. 7(2), pp. 117-128.
- Purnama Sari, Safitri. (2022). Candu di Madura Tahun 1894-1949. *AVATARA, e-Journal Pendidikan Sejarah*, Vol. 13(1), pp. 1-18.



LIST REVIEWER AND EDITOR

1. Pretty Falena Atmanda Kambira
2. Asmin Fransiska
3. Eko Adi Prasetyanto
4. Erasmus Napitupulu
5. Girlie Aneira
6. Meyliana Lukman Djaya
7. Michael
8. Enade Perdana Istyastono
9. Raynov Tumorang Pamintori
10. Siradj Okta
11. Yunita



THE INTERSECTION OF LAW, HEALTH, AND DRUG USE IN INDONESIA: A PATH TO REFORM

This book is the result of a discussions at the *International Conference on Drugs Research and Policy 2024*. The conference brought together academics, practitioners, and policymakers to explore the challenges and opportunities surrounding drug policies in Indonesia.

Compiled in 2024, the book serves as a critical reference to guide the development of more effective and humane drug policies in Indonesia. It addresses urgent issues like drug abuse, the flaws in the current legal frameworks, and proposes alternative approaches such as decriminalization, harm reduction, and restorative justice.

The main objective of the book is to push for a shift from punitive measures to health-focused policies. By offering evidence-based research, this book aims to inspire academics, policymakers, and practitioners to rethink how drug policies are designed and implemented, focusing more on rehabilitation and human rights.

Published through the collaborative efforts of The Indonesian Center for Drugs Research (ICDR) and Institute for Criminal Justice Reform (ICJR), this book reflects the hard work and contributions of many researchers and experts. It stands as a valuable resource for those looking to reform drug policy for the betterment of society.

Penerbit Universitas Katolik Indonesia Atma Jaya

Jl. Jend. Sudirman Kav. 51
Jakarta 12930 Indonesia
Phone : (021) 5703306 psw. 631
Email : penerbit@atmajaya.ac.id
Website : <http://www.atmajaya.ac.id>

ISBN 978-634-7009-06-7 (PDF)



9 786347 009067