

Structural Bias in Indonesia's Health Financing System That Marginalizes Traditional Medicine in the JKN Scheme

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Abstract

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Indonesia has extensive biodiversity and a rich tradition of medicinal knowledge that has been passed down from generation to generation. These traditional medicines, derived from native plants and cultural practices, have significant potential to contribute to national health. However, the National Health Insurance System (SJKN) has not integrated traditional medicine into its financing scheme. This exception not only limits public access to alternative therapies but also hinders state support for the development and formal recognition of traditional medicine. At the same time, the national pharmaceutical industry is still heavily dependent on imported raw materials for medicines (Drug Raw Materials/BBO), making it vulnerable to global supply chain disruptions and the influence of drug import cartels, all of which are exacerbated by weak regulatory enforcement. This research uses a normative approach and case studies on the importance of legal protection through Intellectual Property Rights (IPR) and the integration of traditional medicine in JKN. The findings show that suboptimal regulation and weak IPR protections, particularly in the form of patents, trade secrets, and geographical indications, act as major barriers to innovation, commercialization, and investment. Strengthening the legal framework can encourage research and development, protect traditional knowledge from exploitation, and promote the sustainable use of local resources. Integrating traditional medicine into SJKN is not only culturally valuable, but also has a significant influence on reducing dependence on imported medicines.

1. Introduction

The National Health Insurance System (JKN) managed by the Health Social Security Administration Agency (BPJS) is a strategic constitutional instrument in realizing the right to health as guaranteed in Article 28H paragraph (1) of the 1945 Constitution. As a system that guarantees access to health services for all Indonesian citizens, JKN has undergone development since its enactment. However, in its journey, this system has not been able to fully accommodate all the local potential in health financing, especially in terms of integrating traditional medicines into its guarantee schemes.¹

On the one hand, Indonesia has a huge biological wealth and knowledge of traditional medicine, which should be a strategic capital for national health independence.² Normatively, Indonesia's health law system has recognized the existence and potential of traditional

¹ Laksono Trisnantoro, *Kebijakan Pembiayaan Dan Fragmentasi Sistem Kesehatan* (UGM PRESS, 2021).

² Babay Asih Suliasih and Abdul Mun'im, "Potensi Dan Masalah Dalam Pengembangan Kemandirian Bahan Baku Obat Tradisional Di Indonesia," *Chemistry and Materials* 1, no. 1 (2022): 28–33, <https://doi.org/10.56425/cma.v1i1.22>.

medicine as stated in Law Number 17 of 2023 concerning Health and the Regulation of the Minister of Health related to traditional health services.³ However, the realization of the integration of traditional medicines into the JKN financing scheme is still very limited. This certainly raises fundamental questions about the fairness of the distribution of health resources and policy alignment for local pharmaceutical products based on local wisdom.

The existence of these limitations occurs in the midst of the dominance of the imported pharmaceutical industry, especially in drug raw materials used nationally in Indonesia. Dependence on imported products, both in the form of raw materials and finished medicines, has opened up space for oligopoly and monopoly practices run by certain interest groups⁴ which in public discourse is often referred to as the "imported drug mafia". This mafia plays a role in determining prices, stock availability, and distribution processes in the market, even in the procurement process in state institutions. This phenomenon not only affects the principles of efficiency and transparency in the procurement of public goods, but also has a systematic impact on national health security. Indonesia has tremendous biodiversity potential and traditional medicine knowledge, but it does not gain space in the national health system. On the other hand, the traditional medicine industry faces challenges to regulation, funding for clinical trials, permits and others as well as weak legal protections. In fact, if integrated appropriately and scientifically, traditional medicine can play a role as a complement to conventional medical services, as well as a strategy for national independence in the health sector.

Globally, several countries have shown commitment to integrating traditional medicine into national health systems. For example, Malaysia has adopted the *Traditional and Complementary Medicine Act 2016* which provides clear recognition and regulation of traditional medicine.⁵ Meanwhile, Germany is known for its advanced and structured healthcare system, where herbal and complementary medicines have been integrated with strict scientific standards.⁶ These two examples can serve as benchmarks for Indonesia in

³ Arief Priyo Nugroho, "Kebijakan Afirmatif Untuk Obat Tradisional Di Indonesia," *Kajian* 27, no. 1 (2022): 57-70, <https://doi.org/10.22212/kajian.v27i1.3590>; Nurani Ajeng Tri Utami and Nayla Alawiya, "Perlindungan Hukum Terhadap Pelayanan Kesehatan Tradisional Di Indonesia," *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi* 1, no. 1 (2018): 11-20, <https://doi.org/10.24090/volksgeist.v.1i1.1605>.

⁴ R Raharni, S Supardi, and I D Sari, "Kemandirian dan Ketersediaan Obat Era Jaminan Kesehatan Nasional (JKN): Kebijakan, Harga, dan Produksi Obat," *Media Penelitian dan Pengembangan Kesehatan* 28, no. 4 (2018): 219-28, <https://doi.org/10.22435/mpk.v28i4.269>; Suliasih and Mun'im, "Potensi Dan Masalah Dalam Pengembangan Kemandirian Bahan Baku Obat Tradisional Di Indonesia."

⁵ J Kaur et al., "Patient Satisfaction on the Utilization of Traditional and Complementary Medicine Services at Public Hospitals in Malaysia," *Complementary Therapies in Medicine* 42 (2019): 422-28, <https://doi.org/10.1016/j.ctim.2018.12.013> Full text links; Yu Lee Park et al., "Integrating Traditional and Complementary Medicine with National Healthcare Systems for Universal Health Coverage in Asia and the Western Pacific Integrating Traditional and Complementary Medicine with National Healthcare Systems for Universal Health Coverage in Asia and the Western Pacific," *Health Systems & Reform* 5, no. 1 (2019): 24-31, <https://doi.org/10.1080/23288604.2018.1539058>.

⁶ E Jansen, "The Role of Complementary and Alternative Medicine in the Healthcare System: A German Paradox," *Complementary Medicine Research* 24, no. 5 (2017): 290-94, <https://doi.org/10.1159/000475549> Full text links; Stefanie Joos, Katharina Glassen, and Berthold Musselmann, "Herbal Medicine in Primary Healthcare in Germany: The Patient's Perspective," *Evidence-Based Complementary and Alternative Medicine*, no. 1 (2012): 294638, <https://doi.org/10.1155/2012/294638>.

designing more inclusive policies, albeit by adjusting to different legal contexts and national health systems.⁷

The protection of traditional medicines through intellectual property (IPR) certainly does not only provide legal certainty but also provides support for immediate follow-up through the provision of a budget for clinical trials that can be immediately used for public health benefits. However, the reality is that many traditional herbs and formulas have been used for generations but have not received legal recognition. Of course, without strong legal protection, this intellectual heritage is vulnerable to commercial exploitation by foreign and domestic parties.⁸ Technically, IPR, whether through patents, trade secrets, and geographical indications, can be an important instrument in guaranteeing exclusive rights to local innovations while encouraging ethical and sustainable commercialization.

Based on the above, the focus of the research objects includes: Why has the health financing budget policy not accommodated traditional medicines in the National Health Insurance System?; How does the dominance of the drug import market affect the integration of traditional medicines?; and how is the legal protection of IPR for traditional medicines? This study is expected to formulate a health policy design that is more inclusive, equitable, and based on local potential. The integration of traditional medicine into the JKN system, accompanied by adequate legal protection, is not only a practical necessity but also a reflection of the state's sovereignty in sustainably managing health resources.

2. Methods

This study uses normative legal research methods with a legislative approach, document analysis, and case studies. Data were collected from academic literature, national and international laws and regulations, as well as reports from organizations related to IPR and traditional medicine. The analysis was carried out with a descriptive-qualitative method to understand the effectiveness of regulations in protecting the right to traditional medicines.

3. Results and Discussion

3.1. Financing Policy: Limitations of National Health Insurance and the Influence of the "Drug Mafia" Issue

The health financing policy through JKN has not provided adequate space for traditional medicine. Despite normative recognition in the Health Law, real integration into the national financing scheme and formulary (Fornas) is still very limited.⁹ This integration challenge is compounded by two main factors: (1) the dominance of the pharmaceutical market controlled by interest groups, and (2) the lack of budget support for traditional medicine research and development.

The practice often referred to as the "drug mafia" is a significant structural bottleneck. A drug mafia is a group or individual that takes advantage of the conditions of import dependence to control the distribution and price of drugs in the domestic market. This group

⁷ Jansen, "The Role of Complementary and Alternative Medicine in the Healthcare System: A German Paradox."

⁸ Diah Imaningrum Susanti, "Eksplorasi Perlindungan Kekayaan Intelektual Komunal Berbasis Hak Asasi Manusia" 5, no. 3 (2022): 401-28, <https://doi.org/10.20473/mi.v5i3.40174>.

⁹ Lucie Widowati et al., "Kajian Kebijakan Pemanfaatan Obat Tradisional Di Fasilitas Pelayanan Kesehatan Pada Era Jaminan Kesehatan Nasional," *Buletin Penelitian Sistem Kesehatan* 23, no. 4 Oktober 2020 (2020): 246-55, <https://doi.org/10.22435/hsr.v23i4.3379>.

takes advantage of the high dependence on the import of Medicinal Raw Materials (BBO) to create monopolies and oligopolys in distribution and procurement, including in government agencies.¹⁰ As a result, financing and procurement priorities tend to be given to imported products that provide large profit margins, while local products such as traditional medicines are marginalized due to a lack of political support and market access¹¹. This condition hinders national pharmaceutical independence and slows down local natural resource-based innovation.¹²

The existence of the drug mafia hinders the integration of traditional medicine into the formal health system. By controlling the market, they tend to prioritize imported products that provide greater profits, while local products, including traditional medicines, receive less support and adequate market access.¹³ This not only harms consumers in terms of price and quality, but also hinders the growth of the local pharmaceutical industry and innovation in the development of drugs based on Indonesian natural ingredients. The issue of the drug mafia conveyed by the Minister of Health Budi Gunadi Sadikin, revealed that there is an allegation of a drug mafia that hinders the construction of blood plasma factories in Indonesia. Although Indonesia has a population of about 270 million people, which should make it the fourth largest producer of blood plasma in the world, all blood plasma products are still imported. This shows that there are parties who do not want Indonesia to be independent in drug production¹⁴.

On the other hand, the potential of traditional Indonesian medicine is huge, with thousands of species of medicinal plants. However, only a small part has been standardized into phytopharmaceuticals due to the lack of clinical research funding needed to prove its safety and efficacy scientifically¹⁵. Without strong scientific evidence, traditional medicines are difficult to qualify for inclusion in Fornas and are covered by JKN. Real-world examples of successful integration, such as Stimuno and Nodiar, show that with the support of research and standardization, traditional medicine can contribute to health systems. Therefore, financing policy reform is needed, both by allocating a special budget for traditional medicine

¹⁰ Gandhi Pharmacist B and Virly Vidiasti Sabijanto, *Protection of Drug Raw Materials Through Price Standardization as a Business Rule in Supporting Competitive Local Drug* (Atlantis Press SARL, 2023), <https://doi.org/10.2991/978-2-494069-93-0>.

¹¹ Solikin M Juhro and Masagus H Ridwan, "Beberapa Perspektif Pembangunan Ekonomi Inklusif di Era New Normal," 2021.

¹² Satjipto Rahardjo, *Hukum Dan Perilaku: Hidup Baik Adalah Dasar Hukum Yang Baik* (Penerbit Buku Kompas, 2009), <https://books.google.com/books?hl=en&lr=&id=SvNV7H1Dsf0C&oi=fnd&pg=PA1&dq=Satjipto+Rahardjo,+Hukum+dan+Prilaku,+Jakarta:+PT.+Kompas+Media+Nusantara,+Jakarta,+2009&ots=SXsC-rl5dt&sig=hYHwdwMbk27WX5IzWxg056p032E>.

¹³ Diah Ayu Oktaviani, Nina Witasari, and Niken Putri Amalia, "The Tradition of Drinking Jamu and Efforts to Increase the Economic Potential of the Nguter Community, Sukoharjo District," *Jurnal Jamu Indonesia* 10, no. 2 (2025): 85–92, <https://doi.org/10.29244/jji.v10i2.307>.

¹⁴ Nhefadha Areza Umarsyah and Friska Prastya Harlis, "Implementasi Program Kelurahan Bersih Narkoba (Bersinar) Di Kelurahan Loktuan Bontang Utara Pendahuluan," *Journal of Governance and Policy Innovation* 5, no. 2 (2025): 60–71.

¹⁵ Hedi R Dewoto, "Pengembangan obat tradisional Indonesia menjadi fitofarmaka," *Majalah kedokteran indonesia* 57, no. 7 (2007): 205–11.

research and by creating a special financing scheme in JKN for local products that have been tested.

Various regulations to prevent the occurrence of illegal Practising in the procurement of medicines have been issued, for example the Regulation of the Minister of Health No. 17 of 2017 concerning the National Action Plan for Pharmaceutical and Medical Device Independence (Minister of Health No.17/2017); Presidential Regulation No. 6 of 2023 concerning the Acceleration of the Development of the Pharmaceutical Industry (Presidential Regulation No. 6/2023); and Law No. 5 of 1999 concerning the Prohibition of Monopolistic Practices and Unfair Business Competition (Law No. 5/1999). However, this fact cannot erase the existing fraudulent practices, the game of individuals who try to take advantage of existing regulatory loopholes and cooperate by bribing officials who have authority will certainly weaken the regulation. The procurement of medicines is not only a need for the community but concerns the dignity and sovereignty of the nation, and national resilience, which in substance the doctrine has also become a mission in the national health law.¹⁶ Dependence on imported BBO can be a threat to state sovereignty in the health sector (a form of erosion of health sovereignty); and States may legitimately take limited protectionist measures for strategically important pharmaceutical industries based on the principle of *lex specialis* for strategic industries.¹⁷ Such a legal analysis would reinforce the claim that health security is an integral component of national legal sovereignty. And this becomes the State's Obligation and, Responsibility and Policies that are effective and on target.

Talking about the Drug Mafia, it is actually inseparable from the weakness of law enforcement or the existing legal umbrella. Perpetrators who commit violations of authority as part of the elements of economic crimes and corruption, which are regulated in Law Number 31 of 1999 jo. Law Number 20 of 2001 concerning the Eradication of Corruption Crimes (Law No. 20/2001); the crime of unfair business competition based on Law Number 5 of 1999 concerning the Prohibition of Monopoly Practices and Unfair Business Competition (Law No. 5/1999); violations of the Health Law (Law No. 17/2023), especially regarding the provision of safe, quality, and affordable drugs; and potentially violates Law Number 11 of 2008 concerning Electronic Information and Transactions (Law No. 11/2008) if cartel practices are carried out through digital transactions between companies. Proving a crime that meets these elements is certainly an interesting thing and at the same time a challenge and enthusiasm for law enforcement to resolve the emergence of perpetrators in drug procurement practices, and of course drug standards, supervision of distribution permits and BPOM supervision are also integral parts of efforts to enforce drug procurement.

The monopoly of pharmaceutical distribution by certain groups is a violation of the principle of fair business competition (Law No. 5/1999). The involvement of state officials in the drug procurement process is a form of corruption in state control, this is certainly not easy to reveal considering the dependency of officials who have ordinary authority or extra

¹⁶ S.H.Perlindungan Konsumen Obat Norma Sari, *Tinjauan Umum Peraturan Perundang-Undangan Di Indonesia* (UAD PRESS, 2021).

¹⁷ Sam F Halabi, *Intellectual Property , And The Internationalization Of Public Health Law*, 2014.

ordinary crimes.¹⁸ Reflecting on the extent of the government's legal responsibility when it fails to prevent or overcome the dominance of drug cartels, or what was mentioned at the beginning can never penetrate drug dealers and the Drug Unit Unit is only in the area where users are arrested, this is certainly very sad because of the large number of prison users containing Narcotics perpetrators, most of whom are users. The statement of the Minister of Health regarding the drug mafia in the blood plasma industry, of course we become biased on the one hand there is a prohibition in the Narcotics Law, but on the other hand drugs become a commodity even though it is based on health aspects, the problem is lost and not revealed, so it gives the impression that the law is sharp downwards but blunt upwards what this is the involvement of the Corruption Eradication Commission (KPK), The Attorney General's Office, or the Business Competition Supervisory Commission (ICC)), or its policy and regulatory implications for the national pharmaceutical sector.

In the Regulation of the Minister of Health No. 37 of 2017 and No. 003 of 2020, it is stated that the recognition of traditional medicine in general has been recognized but how the procedures and provisions of a technical nature do not exist yet so that they are only in the form of recommendations and are not followed by legal sanctions for those who do not comply with them (Minister of Health No. 37/2017); although this has also been strengthened in Health Law No. 17 of 2023, which replaces Law No. 36 of 2009. As an example, a comparison with Malaysia and Germany can indeed be used as a reference considering the legal concept in Germany through the concept of European centrys and Malaysia with the Comon Law system. can be a reference for how the two countries manage the health governance structure; Malaysia implements a centralised health regulatory model, which facilitated the enactment of the Traditional and Complementary Medicine Act 2016 (Act 775).¹⁹ In contrast, Indonesia adopts a decentralized governance system, where health authority is also delegated to local governments (Law No. 23/2014). As a result, an integrated regulation such as Malaysia's Law 775 cannot be implemented in Indonesia through a reform of the division of power between the central and local governments. Similarly, the German system, which is based on the social insurance model, is fundamentally different from the state-run national insurance system (BPJS) in Indonesia. At least even though Indonesia has a different governance, we can certainly adopt this mission, even if it is not immediately or exactly the same. Because when we are sure that the system we have, there are weaknesses or mistakes in the opinion of the researcher, why don't we dare to state that our system needs to be revised through good reference references?

Furthermore, on the other hand, the issue of weaknesses regarding the recognition of findings should be the government's concern. Regulations regarding recognition have been regulated through Law No. 13 of 2016 concerning Patents and Law No. 28 of 2014 concerning Copyright which also covers traditional cultural expressions, Law No. 20 of 2016 concerning Trademarks and Geographical Indications, and Government Regulation No. 56 of 2022

¹⁸ David L Carter, "Drug-Related Corruption Of Police Officers : A Contemporary," *Journal of Criminal Justice* 18 (1990): 85-98, [https://doi.org/10.1016/0047-2352\(90\)90028-A](https://doi.org/10.1016/0047-2352(90)90028-A).

¹⁹ Norazlina Abdul Aziz et al., "International Conference on Wood and Eco-Products Best Western Hotel ICity Shah Alam Selangor , Malaysia (Hybrid) 15-16 November 2022 A Comparative View on the Traditional and Complementary Medicine (TCM) Regulation in Malaysia and China," no. *Icwep* (2022): 169-74, <https://doi.org/10.21834/e-bpj.v9iSI17.5442>.

concerning Access to Genetic Resources and Benefit Sharing (ABS). As a principle of *lex specialis derogat legi generali*, the protection of traditional knowledge includes the formulation of local medicines and biological resources. However, in the implementation of many of these procedures is not easy, some respondents stated that for the management of Patents, Cita Rights, or Trademarks is not easy, the public's understanding of processes and procedures does not have sufficient knowledge. In another insert in the Patent Law, there is a provision that patents are the main instrument to protect the results of natural extraction and formulation of new compounds derived from local knowledge. Meanwhile, traditional knowledge itself cannot be patented because it does not meet the requirements of novelty and inventive steps (Articles 5 and 7 of Law No. 13/2016 concerning Patents). Under patent law, innovations that are part of the prior technology of knowledge that has been available to the public cannot be granted exclusive rights. Only derivative innovations that introduce new modifications and meet the criteria of novelty and inventiveness can be patented. Patent mechanisms can only protect derivative innovations based on traditional knowledge, not traditional knowledge itself.

3.2. Dependence on Imported Drugs and Its Impact on the National Health System

Indonesia faces problems in the health sector due to its very high dependence on the import of medicinal raw materials (BBO).²⁰ Based on data from the Ministry of Health, around 90-97% of Indonesia's BBO needs still depend on other countries, especially China and India. This puts Indonesia in a vulnerable position, both in terms of availability and price stability. When there is a global supply chain disruption, as experienced and events of the COVID-19 pandemic, Indonesia experiences a shortage of supplies of medicines and vital medical devices, which has a direct impact on national health services.

Imported BBOs such as beta-lactam are used for antibiotics such as amoxicillin, phenol that functions for the manufacture of amino phenols, benzene (for nitrochlorobenzene), and gelatin for the manufacture of capsules. Countries that are the main suppliers are China, India, Italy, Spain, South Korea, and Malaysia. Dependence on these countries creates a domino effect if one of the countries experiences production constraints or closes exports due to domestic priorities, for example, India stopped exports at the beginning of the pandemic to meet its country's national needs.

Another case that occurred in 2020 was the scarcity of antiviral drugs such as favipiravir and azithromycin in various Indonesian hospitals, caused by the inhibition of BBO supply from India. This not only worsened the handling of COVID-19 patients but also caused public panic and opened up space for price speculation and drug cartel practices. The long-term impact of this dependency is alarming. In addition to threatening the sustainability of health services, this condition also hinders the development of the local pharmaceutical industry. The lack of investment in domestic BBO research and production strengthens the dominance of imported products and increases the chances of the formation of a "drug mafia" that takes advantage of regulatory loopholes and government procurement to reap profits.

Therefore, the urgency to realize the independence of domestic BBO production is crucial. Apart from being a national resilience strategy, this effort also opens up opportunities

²⁰ Suliasih and Mun'im, "Potensi Dan Masalah Dalam Pengembangan Kemandirian Bahan Baku Obat Tradisional Di Indonesia."

for the integration of natural raw materials from Indonesia's biodiversity for the production of modern medicines native to Indonesia (OMAI), as well as encouraging legal protection through the Intellectual Property Rights (IPR) scheme.

Diagram 1. BBO Dependence



In Indonesia, Article 28H(1) of the 1945 Constitution (1945 Constitution) which guarantees the right to health as a constitutional right of citizens; Article 33(4) of the 1945 Constitution concerning the national economy which is based on independence and equitable efficiency means that the provision of health is a basic right that the state must fulfil. Drug Sufficiency is part of the most basic health services, the availability of basic medicines is the state's obligation in implementing the provision of basic rights to health.

Derivative of the Constitution D article 28 H also contains Law Number 17 of 2023 concerning Health, especially provisions on pharmaceutical independence and national health security; and Presidential Regulation Number 18 of 2020 concerning the 2020–2024 RPJMN, which emphasizes strengthening the pharmaceutical industry based on research and import substitution.²¹ The substance of the law is certainly the basis on which the state must provide full support for pharmaceutical research and drug development so that and the dependence on imported obt which of course eats up a large budget, large import taxes must certainly be cut and evaluated because the budget will certainly be more useful to increase and support research or needs in the country.²²

3.3. Intellectual Property Rights (IPR) Protection as a Strategic Solution

IPR protection is a key element to transform traditional knowledge from mere cultural heritage into a legal and economic asset that can be integrated into formal health

²¹ Presiden Republik Indonesia, "Undang-Undang Republik Indonesia Nomor 17 Tahun 2023 Tentang Kesehatan," no. 187315 (2023).

²² Raharni, Supardi, and Sari, "Kemandirian dan Ketersediaan Obat Era Jaminan Kesehatan Nasional (JKN): Kebijakan, Harga, dan Produksi Obat". <https://doi.org/10.22435/mpk.v28i4.269>

systems.²³ Regulatory, there is a misalignment between the Patent Law and Indonesia's commitments in the Nagoya Protocol on *Access and Benefit Sharing* (ABS).²⁴ The Patent Act has not effectively required proof of the legality of the origin and fulfillment of ABS's obligations to the genetic resources used in an invention. Meanwhile, the Draft Law on the Protection and Utilization of Communal Intellectual Property (RKUIPT) which is expected to answer this problem is still under discussion. As a result, in practice, the Directorate General of Intellectual Property (DJKI) does not yet have an integrated procedure linking patent registration with verification of compliance with ABS. This legal loophole increases the risk of biopiracy or theft of genetic resources and traditional knowledge, as there is no clear mechanism to verify and trace the origin of biological materials in patent applications.²⁵

In Malaysia, traditional medicines are protected by the *Traditional and Complementary Medicine Act 2016 (Act 775)* and the NPRA's traditional product registration rules to be equivalent to generic products in terms of safety.²⁶ However, there is little attention to the use of traditional ingredients; there are some that have been integrated into the JKN system and have been clinically tested, such as Stimuno which is used to boost the immune system, Nodiar, which is used to treat non-specific diarrhea, X-Gra, which can be used to increase male vitality. Some of these drugs have been registered as phytopharmaceuticals and have the potential to be included in the National Formulary (Fornas), which is a reference for drugs covered by BPJS Kesehatan.²⁷ In fact, there are still many other medicinal ingredients that can be patented and entered into phytopharmaceuticals because of various benefits that have been proven from generation to generation.

Furthermore, what if we relate to the basic rights of indigenous peoples that must be fulfilled by the state as part of the basic rights in human rights, also if we relate to human rights, especially the rights of indigenous peoples to economic and cultural benefits obtained from their knowledge.²⁸ The UN Declaration on the Rights of Indigenous Peoples (UNDRIP,

²³ Harry Alexander Ayu Miranda Risang and Wina Puspitasari, "Hukum sumber daya genetik, pengetahuan tradisional dan ekspresi budaya tradisional di Indonesia," *Penerbit Alumni*, 2022, <https://doi.org/10.33019/vkkmw351>.

²⁴ Ferianto Ferianto and Tommy Hendrix, "Pelindungan Hukum Terhadap Sumber Daya Genetik Dan Pengetahuan Tradisional (SDG-PT) Pasca Diundangkannya Undang-Undang Nomor 13 Tahun 2016 Tentang Paten," *JIPRO: Journal of Intellectual Property*, 2020, 31-41, <https://doi.org/10.20885/jipro.vol3.iss1.art2>.

²⁵ Dhimas Widyananda, "Mitigasi biopiracy dan kekayaan intelektual: Tantangan dan peluang bagi pengetahuan tradisional," *Jurnal Syntax Admiration* 5, no. 12 (2024): 5597-5610, <https://doi.org/10.46799/jsa.v5i12.1869>.

²⁶ Norazlina Abdul Aziz et al., "An Analysis of The Rights to Health and The Traditional & Complementary Medicine (TCM) Healthcare Services in Malaysia," *Journal of Academic Research in Business and Social Sciences* 13, no. 4 (2023): 1375-91, <https://doi.org/10.6007/IJARBS/v13-i4/16705>; Md Nazrul Islam, "Medical Pluralism in Policy and Practice: The Case of Malaysia," in *The Routledge Handbook of Religion, Medicine, and Health* (Routledge, 2021), 336-48, <https://doi.org/10.4324/9781315207964>.

²⁷ Raymond R Tjandrawinata, "Konsep Obat Modern Asli Indonesia (OMAI) dalam penggunaannya di fasilitas kesehatan formal," *Dexa Laboratories of Biomolecular Sciences* 33, no. 2 (2020): 3-10, <https://doi.org/10.6084/m9.figshare.12367331>.

²⁸ Zidane Tumbel, "Perlindungan Hukum Terhadap Hak-Hak Budaya Masyarakat Adat Dalam Perspektif Hukum Hak Asasi Manusia," *Lex Et Societatis* 8, no. 1 (November 22, 2020), <https://doi.org/10.35796/les.v8i1.28466>.

2007) explicitly affirms that indigenous peoples have the right to the ownership, control, and protection of their traditional knowledge, and to share the benefits arising from its utilization. Therefore, the application of human rights is not just a basic right that must be fulfilled and protected, within the framework of human rights and ethics, the protection of traditional medicine based on IPR risks becoming a new form to reduce knowledge colonialism or epistemic exploitation.

Legal protection of traditional medicines through the Intellectual Property Rights (IPR) mechanism is an important strategy to encourage innovation and integration of local products into the health system.²⁹ By utilizing IPR instruments such as patents, trade secrets, and geographical indications, traditional knowledge can be protected from exploitation by foreign and domestic parties, as well as provide incentives for the development of Indonesian Original Modern Medicines (OMAI). This condition, coupled with the lack of research budget for clinical trials, is a major obstacle in building the scientific evidence needed so that traditional medicine can meet the requirements of the BPJS Kesehatan National Formulary (Fornas). Examples of limited success such as Stimuno, Nodiar, and X-Gra prove that with the right research support and IPR protection, traditional medicines have the potential to be included in JKN financing schemes.³⁰

Trade secrets protect business information that is confidential and has economic value, including the formulation or manufacturing process of traditional medicines that are not patented. Many herbal medicine producers in Indonesia choose to protect their traditional recipes through trade secrets, such as PT Sido Muncul with their herbal products. By maintaining the confidentiality of formulations, companies can maintain a competitive advantage in the market. Then, with the existence of geographical indications, it can be a strategic instrument to protect products that have special characteristics that are intrinsically related to their area of origin, including natural factors, human resources, and local traditions.³¹ In the context of traditional medicine, it serves not only as a mark of origin but also as a guarantee of the quality, reputation, and authenticity of the production methods that have been passed down from generation to generation. Potential examples in Indonesia include "Jamu Gendong Yogyakarta," which represents Yogyakarta's typical herb method and service,³² Specifically, research on white turmeric-based herbs (*Curcuma zedoaria*) shows that this product not only has high anti-inflammatory and antioxidant properties, but also contains typical active compounds that are influenced by the agroecological conditions of the growing area, so it is very potential. From some of these examples, it should be homework where there needs to be support, so that local wisdom is not only underestimated, but also sufficient

²⁹ Yulia Yulia, "The Urgency of Protecting Traditional Knowledge of Medicines as Communal Intellectual Property of the Aceh Community," *Jurnal Geuthèè: Penelitian Multidisiplin* 6, no. 2 (2023): 166-74, <https://doi.org/10.52626/jg.v6i2.262>.

³⁰ Lilis Mulyani, "Pendekatan Sosial Dalam Penelitian Hukum," *Jurnal Masyarakat Dan Budaya* 12, no. 3 (December 3, 2010): 35-56, <https://doi.org/10.14203/jmb.v12i3.150>.

³¹ Winda Risna Yessiningrum, "Perlindungan hukum indikasi geografis sebagai bagian dari hak kekayaan intelektual," *Jurnal IUS Kajian Hukum dan Keadilan* 3, no. 1 (2015), <https://doi.org/10.12345/ius.v3i7.198>.

³² F S Arvidiano, "Kemitraan Pemerintah Kalurahan Dan Pengusaha Jamu Gendong Dalam Pengembangan Potensi Lokal (Penelitian di Kalurahan Canden Kapanewon Jetis Kabupaten Bantul Daerah Istimewa Yogyakarta)" (Sekolah Tinggi Pembangunan Masyarakat, 2025).

research support and even policies to be part of the educational curriculum in faculties and universities in Indonesia

4. Conclusions

Indonesia's national health system currently faces significant structural challenges, particularly in terms of dependence on the import of medicinal raw materials (BBO). This dependence not only weakens the independence of the national pharmaceutical sector, but also creates real systemic vulnerabilities, especially when there is a global crisis such as the COVID-19 pandemic. When international supply chains are disrupted, Indonesia has difficulty meeting domestic medical needs, thus threatening the sustainability of quality and equitable health services. Dependence on imported BBO, which reaches more than 90%, also has an impact on high drug prices and is uncompetitive compared to neighboring countries, as well as weakening Indonesia's bargaining position in global health geopolitics.

This condition is exacerbated by the existence of what is often referred to as the "drug mafia", i.e. groups that systematically control the distribution and procurement channels of drugs, including the import process, thereby creating market distortions through monopoly and oligopoly practices. The drug mafia is not just a black market phenomenon, but part of a network of interests that are rooted in bureaucratic and public procurement processes, which sometimes involve criminal acts of corruption. As a result, the local pharmaceutical industry has become marginalized and does not receive optimal support, both in terms of access to raw materials and domestic market penetration.

In this context, the utilization of local potential, especially through the development of traditional medicine, is a very relevant solution. In addition, the integration of traditional medicine into the JKN has not been carried out systematically, even though there is an initial legal umbrella, such as the Regulation of the Minister of Health No. 37 of 2017. Legal protection through the IPR mechanism can be a strategic step to strengthen the position of traditional medicine in the national health system, as well as a tool to encourage Indonesian pharmaceutical independence. Patents, trade secrets, and geographical indications allow traditional knowledge that has been passed down across generations to gain legal recognition, commercial value, and protection from exploitation by foreign parties. Furthermore, strengthening IPR protection can encourage investment in research and development of local biodiversity-based medicines, thereby supporting the creation of products such as Indonesian Original Modern Medicines (OMAI) that not only have high selling value, but can also be scientifically accounted for.

For this reason, synergy between national policies such as the "change source" program which aims to replace imported BBO with domestic production as well as strong and implementable IPR protection, is very important. The government should strengthen the innovation ecosystem through research financing, empowering local communities, and simplifying administrative procedures for IPR registration. Meanwhile, educational and research institutions must be at the forefront of bridging local wisdom with modern scientific methods. Reform of Indonesia's national health system cannot be carried out partially. Dependence on drug imports, drug mafia practices, and weak IPR ecosystems are interrelated issues that must be addressed in a holistic and integrated manner. By strategically utilizing the potential of biodiversity and traditional knowledge, as well as strengthening legal and

institutional instruments, Indonesia can build an independent, sustainable, and equitable national pharmaceutical system. These efforts not only contribute to public health, but also to state sovereignty in the pharmaceutical and health sectors as a whole.

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