

Ethical Review of Telemedicine Practices in Health Services in Indonesia with a Natural Law Theory Approach

Sukendar¹, Aris Prio Agus Santoso²

¹Sekolah Tinggi Ilmu Hukum dan Politik Pelopor Bangsa Depok

²Universitas Duta Bangsa Surakarta

Article Info

Article history:

Accepted: 8 May 2025

Publish: 1 September

Keywords:

Telemedicine and Medical Ethics;

Natural Law Theory in Health

Regulation;

Justice and Protection of Patient Rights.

Abstract

The lack of comprehensive integration between ethical and legal dimensions in the regulation and practice of telemedicine in Indonesia highlights the need for in-depth analysis based on the principles of Natural Law to ensure justice, patient rights protection, and medical accountability. This study employs a descriptive qualitative method with a conceptual approach grounded in Natural Law Theory to assess the extent to which telemedicine regulations reflect universal moral values. The findings indicate that telemedicine development must be rooted in core medical ethics principles such as justice, beneficence, non-maleficence, autonomy, and patient privacy, principles that represent expressions of natural moral law. According to Thomas Aquinas, health policies that deviate from these moral principles lose their legitimacy as they contradict reason and the common good. Therefore, telemedicine policy must not only focus on technical aspects and efficiency but also uphold human dignity and justice. This Natural Law approach enables Indonesia to build a technology-based healthcare system that is not only legally valid but also fundamentally moral and just.

This is an open access article under the [Lisensi Creative Commons Atribusi-BerbagiSerupa 4.0 Internasional](https://creativecommons.org/licenses/by-sa/4.0/)



Corresponding Author:

Aris Prio Agus Santoso

Universitas Duta Bangsa Surakarta

Email: arisprio_santoso@udb.ac.id

1. INTRODUCTION

The development of information and communication technology has driven significant transformation in health services, one of which is through the implementation of telemedicine. In Indonesia, telemedicine is an alternative solution to improve access to health services, especially in remote areas. However, its implementation poses complex ethical and legal challenges. Ethically, telemedicine practices often face dilemmas related to bioethical principles such as patient autonomy, beneficence, non-maleficence, and justice. Kuntardjo highlighted that the doctor-patient relationship in telemedicine can weaken these principles due to limited direct interaction and the potential for misdiagnosis due to the lack of physical examination [1].

During the COVID-19 pandemic, the use of telemedicine services in Indonesia has increased significantly. According to data from the Indonesian Telemedicine Association (ATENSI), the number of telemedicine service users increased from 4 million to 15 million, reflecting a 600% spike during the pandemic [2]. However, despite this increased adoption, the penetration rate of telemedicine in Indonesia is still relatively low. A study by Khotimah et al. showed that only around 10% of the Indonesian population uses telemedicine services, although 91.67% of users intend to continue using them after the pandemic [3].

The case of Makassar, South Sulawesi, illustrates the practical challenges in implementing telemedicine. A study by Indria et al. found that although 78% of clinicians

were satisfied with the telemedicine system used, 47% identified poor internet connectivity as a significant barrier to using the system [4]. This suggests that uneven technological infrastructure can hamper the effectiveness of telemedicine services, especially in remote areas.

Two previous studies provide additional insights into the ethical and legal aspects of telemedicine practice in Indonesia. Kuntardjo highlighted those existing regulations, such as Permenkes No. 20 of 2019, are not sufficient to regulate telemedicine practices comprehensively, especially in terms of patient data protection and the legal responsibilities of medical personnel [5]. Meanwhile, Hartono and Hartini emphasized that in the implementation of telemedicine during the pandemic, patient rights have not been fully fulfilled, especially related to bioethical principles such as beneficence, non-maleficence, autonomy, and justice.

From a legal perspective, the regulatory framework for telemedicine in Indonesia is still in its development stage. Although there is already a Regulation of the Minister of Health No. 20 of 2019 which regulates the implementation of telemedicine between health service facilities, this regulation does not comprehensively cover important aspects such as patient data protection, service standards, and legal accountability mechanisms. Mannas and Elvandari emphasize the need for legal certainty in the implementation of telemedicine to protect the rights of patients and medical personnel [6].

Previous studies have highlighted the legal and technical aspects of telemedicine practices, but there are not many studies that holistically combine ethical and legal dimensions within the framework of natural law theory. Most studies emphasize compliance with formal regulations such as Permenkes No. 20 of 2019, without evaluating the moral substance and justice in their implementation. For example, the study by Hartono and Hartini focuses more on administrative issues and legal protection of medical personnel during the pandemic, without delving deeper into the universal ethical principles that should be the basis for health service practices. Likewise, the study by Khotimah et al. focuses more on user perceptions and intentions, without discussing deeper normative considerations related to justice, autonomy, and social responsibility.

The absence of a strong theoretical approach in assessing the harmony between positive law and moral principles in telemedicine practices in Indonesia creates an important research gap. In fact, in the context of health services that concern the right to life and human dignity, a natural law approach can function as a measuring tool to assess the ethical legitimacy of digital health service policies and practices [7]. Thus, this study seeks to fill this gap through an integrative approach that examines the practice of telemedicine within an ethical and legal framework simultaneously, based on universal principles of natural law.

Therefore, the approach *Natural Law Theory*, which emphasizes law as a manifestation of universal morality and justice, can be used to analyze and evaluate telemedicine practices in Indonesia. With this approach, regulation telemedicine should not only fulfill the legal-formal aspects, but also reflect the moral and ethical values underlying the medical profession. This is important to ensure that innovation in health services does not compromise the basic principles of justice and human rights.

Natural Law Theory (*Natural Law Theory*) is an approach in legal philosophy that states that true law originates from universal moral principles inherent in human nature and can be accessed through reason. This theory emphasizes that law is not only a product of human authority, but must also reflect moral values inherent in human dignity [8]. In this case, laws that do not conform to universal moral principles are considered morally illegitimate. For example, laws that legalize racial discrimination or social injustice can be

considered illegitimate according to Natural Law Theory because they contradict the principles of justice and equality inherent in human nature [9].

2. RESEARCH METHOD

This study aims to examine the practice of telemedicine in health services in Indonesia from an ethical and legal perspective using a multidisciplinary approach. *Natural Law Theory* as a conceptual basis. With qualitative descriptive methods and conceptual approaches, this study examines how universal moral values such as justice, goodness, and the right to health are reflected in the regulation and implementation of telemedicine. As digital technology develops in the medical world, ethical challenges arise regarding patient privacy, medical consent, and equal access to services that require the presence of legal norms that are not only legal-formal but also ethically charged. In this case, *Natural Law Theory* becomes an important framework for testing the extent to which applicable laws are in line with the basic moral principles inherent in human dignity. This research is expected to contribute to the formulation of health law policies that are not only normatively legitimate, but also morally and ethically just [10].

3. RESEARCH RESULTS AND DISCUSSION

Ethics is a branch of philosophy that discusses moral values, leading to principles that distinguish between right and wrong actions. In health care, medical ethics focuses on the moral obligations of medical personnel to provide fair, transparent, and dignified care to patients. The basic principles of medical ethics include four main principles: autonomy, *beneficence*, *non-maleficence*, And *justice*. Autonomy refers to the patient's right to make decisions regarding their own health, while beneficence demanding medical personnel to act in the best interests of the patient. *Non-maleficence* focuses on the obligation not to cause harm, while justice is related to the fair distribution of health resources and services [11]. The application of ethical principles in terms of *telemedicine*. This becomes more complex. The limited direct interaction between medical personnel and patients, as occurs in telemedicine, can reduce the ability of medical personnel to fulfill the principles of beneficence and non-maleficence. This can lead to potential misdiagnosis and injustice in health services [12]. In addition, patient autonomy in telemedicine can also be compromised if communication between patients and medical personnel is not clear enough, so that patient decisions can be influenced by factors that they do not fully understand [13]. Telemedicine ethics must consider not only the moral obligations of medical personnel, but also the rights of patients, especially in terms of privacy and security of medical data. For example, the principle of justice must be met by ensuring that access to telemedicine is available to all levels of society, not only to those with adequate internet access or technological tools [15].

Then, related to the Theory of Natural Law (*Natural Law Theory*) developed by Thomas Aquinas is an important foundation in the philosophy of law and ethics, which emphasizes that true law is derived from human reason and universal moral values inherent in human nature. Aquinas states that law is "a command of reason established for the common good by those who have responsibility for the community, and promulgated officially". Within this framework, law is divided into four types: eternal law (*eternal law*), natural law (*natural law*), human law (*human law*), and divine law (*divine law*). Natural law, according to Aquinas, is human participation in the eternal law through reason, which enables humans to distinguish between good and evil [15]. The basic principle of this natural law is that "good must be done and pursued, and evil must be avoided", which is the foundation for all other moral norms. Aquinas also emphasized that human laws are valid only to the extent that they are in accordance with natural law; otherwise, they are

considered "perversions of law" and have no binding moral force. Thus, Aquinas' natural law theory asserts that positive law must reflect universal moral values to be considered valid and just [16].

The application of telemedicine in health services in Indonesia raises various ethical challenges that cannot be separated from basic moral principles. Within the framework of Natural Law Theory developed by Thomas Aquinas, legal practices and health policies must reflect universal moral values that can be recognized through human reason. Therefore, telemedicine must be carried out with the principles of justice, goodness, and respect for human dignity as part of natural law. Failure to accommodate these values, for example by allowing inequality in access to services or violating patient privacy, means violating moral principles and cannot be justified ethically or legally according to the natural law approach.

Furthermore, in relation to patient autonomy, telemedicine should not only facilitate access to health services, but also support the patient's freedom to make informed medical decisions. However, in practice, the limitations of digital communication can cause patients to receive limited, ambiguous, or too technical information to understand. From a natural law perspective, this is contrary to the principle of respect for human dignity and reason. The essence of natural law demands that every individual must be rationally empowered to determine their own good, not simply become the object of technological policy.

On the other hand, the principal beneficence and *nonmaleficence* in medical ethics requires medical personnel to do good and avoid actions that harm patients. However, the use of telemedicine that is not accompanied by strict evaluation of the quality of diagnosis and service standards is at great risk of violating both principles. From the perspective of Natural Law Theory, this is a form of deviation of human law from moral law, because allowing potential losses for the sake of efficiency or ease of access contradicts the basic principle of "good must be pursued and evil must be avoided".

The aspect of justice in telemedicine also deserves major attention. Many remote areas in Indonesia do not have adequate digital infrastructure, so their citizens cannot enjoy the benefits of telemedicine. This inequality shows that existing telemedicine policies do not reflect distributive justice. According to natural law theory, policies that create this kind of social injustice are morally invalid because they fail to realize the common good (*common good*) and harm the parts of the community that need it most.

Another ethical issue is the privacy and security of patient data in telemedicine systems. Medical data is an integral part of an individual's dignity that must be strictly protected. Violation of medical confidentiality, whether through system leaks or data misuse, violates the intrinsic value of the individual as a rational moral subject. In the framework of natural law, this is not just a technical violation, but a violation of the natural moral law that protects human integrity. Therefore, telemedicine regulations must be formed based on respect for the natural rights of patients.

When telemedicine regulations and policies are not based on universal moral ethical principles, their validity as law becomes normatively weak. Aquinas asserts that positive law is only valid to the extent that it is in line with moral law; laws that conflict with natural values are considered "perversion of law". Therefore, telemedicine-based health policies in Indonesia must be evaluated and reformulated to truly reflect basic values such as justice, goodness, and respect for human dignity, not merely technical efficiency.

Ultimately, the Natural Law Theory approach provides a strong philosophical foundation for reviewing the practice of telemedicine in Indonesia. It is not just about how technology is used, but how the laws and policies governing the use of technology reflect the moral principles inherent in human nature. By placing universal values such as

goodness, justice, and respect for reason as the main foundation, the practice of telemedicine can be developed not only as a technical solution, but also as a model of ethical, moral, and humane health care within a philosophically and morally legitimate legal framework.

4. CONCLUSION

Telemedicine practices in health services in Indonesia must be developed based on the principles of medical ethics and universal moral values as explained in the Natural Law Theory. Justice, beneficence, non-maleficence, and respect for patient autonomy and privacy are not only ethical guidelines, but also expressions of the natural moral law inherent in human nature. In Thomas Aquinas' view, health policies and regulations that are not in line with these moral principles lose their moral legitimacy, because they are contrary to reason and the common good. Therefore, the development of telemedicine needs to be carried out comprehensively, not only from a technical and efficiency aspect, but also by ensuring that all elements of the policy honor human dignity, uphold the values of justice, and guarantee the protection of patient rights as a whole. This approach will enable Indonesia to build a technology-based health service system that is not only legally valid, but also fundamentally just and moral.

5. ACKNOWLEDGEMENT

With full respect and appreciation, we express our deepest gratitude to the Chairperson of STIHP Pelopor Bangsa Depok, Dr. Nani Sutiati, S.H., M.M., and the Rector of Universitas Duta Bangsa Surakarta, Assoc. Prof. Dr. Singgih Purnomo, M.M., for the support and trust that has been given in establishing this research collaboration. The collaboration between the two institutions is an important foundation in the development of science and a real contribution to the advancement of the academic world in Indonesia. Hopefully this synergy will continue to be maintained and developed to produce various innovations and scientific works that are beneficial to the wider community.

6. BIBLIOGRAPHY

- [1] C. Kuntardjo, "Dimensions of Ethics and Telemedicine in Indonesia: Enough of Permenkes Number 20 Year 2019 As a Frame of Telemedicine Practices in Indonesia?," *Soepra Jurnal Hukum Kesehatan*, vol. 6, no. 1, pp. 45–58, 2022. [Online]. Available: <https://journal.unika.ac.id/index.php/shk/article/view/2606>
- [2] Sari, Istiana, and Faisal Santiago. "Juridical Analysis of Health Service Regulation Through Telemedicine in Indonesia." In *ICLSSEE 2022: Proceedings of the 2nd International Conference on Law, Social Science, Economics, and Education, ICLSSEE 2022, 16 April 2022, Semarang, Indonesia*, p. 182. European Alliance for Innovation, 2022. Available: <https://shorturl.at/c4BiX>
- [3] Khotimah, FK Husnul, Idqan Fahmi, and Sri Hartono. "New normal analysis of telemedicine-based healthcare industry." *International Journal of Science and Healthcare Research* 7 pp. 86-91, 2022. Available: <https://shorturl.at/fu6jQ>
- [4] Kuntardjo, Carolina. "Dimensions of ethics and telemedicine in Indonesia: Enough of Permenkes Number 20 year 2019 as a frame of telemedicine practices in Indonesia?." *SOEPRA Jurnal Hukum Kesehatan* 6.1, pp. 1-14, 2020. Available: <https://journal.unika.ac.id/index.php/shk/article/view/2606>
- [5] Mohamed, Johari Bin. "2 nd International Conference On Medical Record And Health Information (ICOMRHI) 2021 “Digital Transformation Healthcare Services:

- Telemedicine On Pandemic Era". *Penerbit Tahta Media*, 2023. Available: <https://tahtamedia.co.id/index.php/issj/article/view/350>
- [6] Y. A. Mannas and S. Elvandari, "Legal Certainty of Implementing Telemedicine Services in Indonesia as Effort Towards Renewal of National Health Law," *Jurnal Magister Hukum Udayana*, vol. 11, no. 4, pp. 797–816, Dec. 2022. [Online]. Available: <https://ojs.unud.ac.id/index.php/jmhu/article/view/92024>
- [7] I. El-Shamy and A. Nasr, "Natural Law Theory as a Framework for Ethical Analysis in Health Policy," *Journal of Law and Health Ethics*, vol. 11, no. 2, pp. 125–137, 2021. Available: https://www.nlm.nih.gov/nichsr/hta101/HTA_101_FINAL_7-23-14.pdf
- [8] J. D. O'Connor, "Natural Law and Ethical Non-Naturalism," *Philosophy*, vol. 96, no. 1, pp. 1–25, 2021. [Online]. Available: <https://journals.sagepub.com/doi/10.1177/0953946820962893>
- [9] J. Crowe, "Natural Law and the Nature of Law," *Australasian Journal of Legal Philosophy*, vol. 44, pp. 100–121, 2019. [Online]. Available: <https://shorturl.at/mGLio>
- [10] I. Dewayanti dan S. U. Firdaus, "Telemedicine in Indonesia: Perspective of Ethic, Discipline and Law," dalam *Proceedings of the 1st International Conference on Digitalization and New Normal (ICDNR 2021)*, Atlantis Press, 2022. [Online]. Available: <https://www.atlantis-press.com/proceedings/icdnr-22/125978711>
- [11] T. Beauchamp and J. Childress, *Principles of Biomedical Ethics*, 7th ed., Oxford, UK: Oxford University Press, 2013. Available: https://www.researchgate.net/publication/12869379_Principles_of_biomedical_ethics
- [12] J. K. Binns et al., "Ethical Challenges in Telemedicine: A Review," *International Journal of Health Policy and Management*, vol. 10, no. 1, pp. 1-8, 2021. Available: https://www.researchgate.net/publication/23191661_Ethical_Challenges_of_Telemedicine_and_Telehealth
- [13] E. M. Rains et al., "Autonomy in Telehealth: Ethical Implications and Legal Perspectives," *Journal of Medical Ethics*, vol. 47, no. 4, pp. 213-220, 2021. Available: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8705012/>
- [14] L. Johnson and A. Hill, "Equity in Telemedicine: Bridging the Digital Divide," *Telemedicine and e-Health*, vol. 28, no. 3, pp. 435-441, 2022. Available: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11041391/>
- [15] Petrowitz, H. C. "A New Look at the Natural Law of St. Thomas Aquinas". *Denv. L. Ctr. J.*, 41, 306, 1964. Available: <https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=3913&context=dlr>
- [16] Osuagwu, Eze Simpson. "Christian conception of Natural Law and the moral theory of the State." Available at SSRN 4103654, 2020. <https://www.acjoll.org/index.php/njps/article/view/4078>