



Legal Protection for Doctors in Telemedicine Services: A Human Rights and Comparative Law Perspective

Bob Wahyudin¹, Marthen Arie², Irwansyah³, Slamet Sampurno Suwondo⁴,
Rahel Assefa⁵

¹²³⁴Faculty of Law, Universitas Hasanuddin, Makassar, Indonesia.

⁵Faculty of Law, College of Law and Governance, Jimma University, Ethiopia.

Abstract

The practice of telemedicine is part of technological development that optimizes technology-based healthcare services, which can guarantee health rights for the community. However, the practice of telemedicine actually raises problems because there has not yet been optimal protective measures for doctors. This research aims to analyze the issues surrounding the regulation of telemedicine practices and their relation to the development of human rights in the health sector, as well as a comparative legal study of telemedicine regulations in Indonesia, Malaysia, and Ethiopia. This research is a normative legal study that emphasizes conceptual, comparative, and legislative approaches. The research results affirm that the right to health is a fundamental part of human rights that has been globally recognized since the WHO Constitution in 1946 and the Universal Declaration of Human Rights in 1948. As time progresses, the forms of fulfilling these rights also evolve, including through technology-based healthcare services such as telemedicine. Telemedicine has emerged as an important innovation in addressing the challenges of access and equity in healthcare services, particularly for communities in remote areas or with limited mobility. The findings of this study indicate that the regulation of telemedicine in Indonesia, Malaysia, and Ethiopia shares similarities in recognizing the importance of telemedicine within the national healthcare system. However, there are striking differences in regulatory approaches, infrastructure readiness, and legal protections for medical personnel. Malaysia has the most mature legal framework with the Telemedicine Act 1997 and data protection through the PDPA 2010. On the other hand, Indonesia does not yet have comprehensive specific regulations that protect doctors in telemedicine practice, while Ethiopia is still in the early stages of policy development. Therefore, there is a need for adaptive and comprehensive regulatory updates to ensure legal certainty, protection of rights, and sustainability of technology-based healthcare services in each country, particularly Indonesia.

Keywords: Doctors, Health Rights, Legal Protection, Telemedicine.

A. INTRODUCTION

The development of technology has brought significant changes to the medical field, enabling innovations that enhance the efficiency, accuracy, and accessibility of healthcare services (Rosemann & Zhang, 2022). Technology-based healthcare services have experienced rapid development, especially with the integration of digital technology in various aspects of medical services (Alfarizi & Arifian, 2023). Technology-based healthcare services have undergone significant global transformation, especially with advancements in digital technology. This shows that technology has played a significant role in providing healthcare services to the community (Gluschkoff et al., 2021).

The development of technology in the healthcare field has brought significant positive impacts, improving the quality of services and accessibility for patients. Modern diagnostic technologies, such as CT scans, MRIs, and ultrasounds, enable early detection of diseases that were previously difficult to identify (Nugroho & Kusumaningrum, 2021). Technological innovations, such as hearing aids and advanced prosthetics, have helped many patients with chronic diseases regain their mobility and function. This directly contributes to the improvement of their quality of life. Technology accelerates the process of developing new drugs and therapies. With advanced software that models the effects of drugs on the human body, research can be conducted more quickly and efficiently (Hakim et al., 2021)(Ang, 2023). It also includes the development of gene-based therapies that can treat genetic diseases. Smart health devices and applications enable individuals to better monitor their own health. Devices such as heart rate monitors and activity trackers provide valuable information that supports decision-making related to diet, exercise, and self-care. This also includes

the use of technology such as cloud computing, which facilitates the storage and management of patient medical records (Anatami et al., 2021). This not only reduces the risk of data loss but also speeds up the process of information access for medical personnel. Overall, technological advancements in the field of healthcare have brought significant positive changes, improving efficiency, accessibility, and the quality of care for patients worldwide.

One form of technological development in healthcare services is the ease of access to healthcare services through online consultation applications, allowing people to receive medical assistance without having to go to the hospital (D. Wijaya et al., 2023). This is very beneficial for those with mild symptoms or who live in remote areas. Advanced computer systems also enhance the accuracy of medical data analysis, ensuring more timely and effective diagnoses (Eigenschink et al., 2023). One of these developments is the practice of telemedicine, where patients can consult with doctors remotely, reducing wait times and increasing the efficiency of care. Electronic medical records enable better monitoring and personalization of care based on individual health data (Jain, 2023). The development of telemedicine in various countries around the world has shown significant progress, especially after the COVID-19 pandemic. The COVID-19 pandemic has driven a surge in the use of telemedicine (Widodo & Disantara, 2021)(Andrianto, 2021). In many countries, the use of telemedicine has increased drastically, with some reports indicating a rise of up to 78.8% after the pandemic. Many patients and healthcare professionals now see telemedicine as a practical solution for accessing healthcare services (Parlindungan et al., 2023).

In 2025, the telemedicine trend shows sustained growth. This is related to the integration of technologies such as artificial intelligence (AI) and the Internet of

Things (IoT) in healthcare services for real-time patient monitoring (Singh, 2024)(Albahri & AlAmoodi, 2023). The government and global health organizations are increasingly paying attention to regulating telemedicine service standards, boosting public trust in these services. One of the impacts is that many insurance companies now provide funding for telemedicine services as part of their health coverage. Although there are many benefits, there are also challenges in the implementation of telemedicine, including the fact that in developing countries, uneven access to technology and the internet can hinder the widespread use of telemedicine (Prasetyo & Prananingrum, 2022). The next challenge is that the public's knowledge of technology still varies, which can affect the effectiveness of the services. Overall, the development of telemedicine in various countries shows great potential in improving access and efficiency of healthcare services. With the support of appropriate technology and regulations, telemedicine can become an integral part of the global healthcare system in the future.

The practice of telemedicine in Indonesia is regulated by several regulations aimed at providing a legal framework for the implementation of remote healthcare services. Telemedicine in Indonesia is regulated under Law Number 17 of 2023 concerning Health (Health Law), which defines telemedicine as the provision and facilitation of clinical services through telecommunications and digital communication technology. This includes the exchange of information for diagnosis, treatment, disease prevention, and health education. In addition, the Minister of Health Regulation Number 20 of 2019 concerning the Implementation of Telemedicine Services Between Health Service Facilities (Permenkes 20/2019) is an important regulation that governs how telemedicine can be implemented between health

facilities. This regulation establishes the procedures and standards that must be adhered to by telemedicine service providers. Regarding telemedicine practices during the COVID-19 pandemic, Indonesia also issued regulations in the form of the Minister of Health Decree Number HK.01.07/MENKES/4829/2021 (Kemenkes Telemedicine) which provides guidelines for healthcare services through telemedicine during the COVID-19 pandemic. This decision revokes the previous regulations and expands the scope of telemedicine services to include direct interactions between doctors and patients.

Within the medical profession, it is also regulated by the Indonesian Medical Council Regulation Number 74 of 2020 concerning Clinical Authority and Medical Practice through Telemedicine during the Pandemic (Telemedicine Council Regulation during the Pandemic). Although there is an existing legal framework, there are still challenges in the implementation of telemedicine, particularly related to patient data protection and the validity of online therapeutic agreements. Further regulatory development is needed to ensure safe and responsible telemedicine practices. Overall, telemedicine regulations in Indonesia show progress in adapting to the needs of modern healthcare services, although they still require adjustments to address challenges arising with technological advancements and societal needs. Regarding telemedicine practices, legal protection for doctors providing this service is still relatively weak. This is because there are currently no regulations that explicitly govern the practice of telemedicine between doctors and patients directly, so the legal protection for doctors is not yet based on the values of justice and legal certainty.

This research aims to analyze regulations related to legal protection for doctors in telemedicine practice in Indonesia from a human rights perspective, with a focus on

legal comparisons between Indonesia, Malaysia, and Ethiopia. The comparison of legal protection regulations for doctors in telemedicine practice between Indonesia, Malaysia, and Ethiopia is conducted based on the fact that these three countries are developing nations that have implemented telemedicine. The comparison of telemedicine regulations between Indonesia, Malaysia, and Ethiopia is important to examine the human rights dimension in telemedicine practices as well as how telemedicine is regulated in developing countries, specifically Indonesia, Malaysia, and Ethiopia.

Research discussing the development of telemedicine practices has indeed been conducted by three previous studies, namely: first, the study by Qizi (2024) which emphasizes the need for comprehensive regulations related to telemedicine involving the UN Committee on Economic, Social and Cultural Rights (CESCR) and other international institutions (Qizi, 2024). The second study was conducted by Ivanova, et al. (2025), which focuses on the need for comprehensive legal policies that protect both doctors and patients in telemedicine practice (Ivanova et al., 2025). The third study was conducted by Dalimunthe et al. (2025), which analyzes the need for comprehensive regulations in the digital era related to telemedicine practices (Wirandi Dalimunthe, Ismaidar Ismaidar, 2025). From the three previous studies, this research focuses on the aspect of legal protection for doctors in telemedicine practices between Indonesia, Malaysia, and Ethiopia, which has not been comprehensively analyzed by the three previous researchers, making it an original study. This research aims to analyze the human rights dimension in telemedicine regulation and the legal protection comparison for doctors in telemedicine practice, comparing the legal frameworks between Indonesia, Malaysia, and Ethiopia.

This research is a normative or doctrinal legal study because it focuses on the examination of authoritative legal products in the form of legislation and legal concepts in the field of human rights related to legal protection for doctors in telemedicine practice (Irwansyah, 2020). The primary legal materials used include the Health Law, Minister of Health Regulation 20/2019, as well as other regulations in the practice of telemedicine in Indonesia, Malaysia, and Ethiopia. Secondary legal materials include journal articles, books, and research findings that discuss telemedicine, health rights, and legal protection for doctors. Non-legal materials include legal dictionaries. The approach used is a conceptual, comparative, and legislative approach. The analysis of legal materials is conducted based on prescriptive qualitative methods, resulting in recommendations in the form of legal advice and solutions to the legal issues outlined in this research (Suteki & Taufani, 2020).

B. RESULT AND DISCUSSION

1. Problems in the Regulation of Telemedicine Practices and its Relationship with the Development of Human Rights in the Health Sector

The right to health was first recognized internationally through the Constitution of the World Health Organization (WHO) in 1946. The preamble of the WHO Constitution states that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being," with the definition of health encompassing physical, mental, and social well-being, and not merely the absence of disease or infirmity (Wahyuni et al., 2020). In 1948, the Universal Declaration of Human Rights (UDHR) established the right to health as part of the right to an adequate standard of living as stated in Article 25 (Balubun et al., 2019). This declaration

became an important milestone in the global recognition of human rights, including the right to food, clothing, housing, and adequate healthcare.

Article 12 of the International Covenant on Economic, Social and Cultural Rights (1966) expands the recognition of the right to health by including concrete measures such as reducing infant mortality rates, improving environmental sanitation, disease prevention, and access to adequate medical services (H. Wijaya et al., 2021). This is also reinforced by the Alma-Ata Declaration (1978), which emphasizes the importance of "Health for All" through an inclusive and community-based primary healthcare approach (Patria et al., 2022). Although this declaration is not legally binding, it has become a moral guide for many countries in designing national health policies. In 2002, the UN Human Rights Council appointed a Special Rapporteur on the right to the highest attainable standard of health (Thahir & Tongat, 2024). This rapporteur plays a role in monitoring the implementation of the right to health in various countries and providing recommendations to improve access to healthcare services.

The right to health continues to evolve as an integral part of global human rights, with a focus on inclusivity, social justice, and universal access to quality medical services (Amin et al., 2023). This is in line with the mandate of Article 25 of the Universal Declaration of Human Rights (UDHR), which guarantees every individual access to an adequate standard of living for physical, mental, and social health. This is reflected in various international regulations that emphasize inclusive and non-discriminatory principles in the provision of healthcare services (Ip, 2021).

One of the developments in health rights is the improvement of technology-based healthcare services, one of which is telemedicine. Telemedicine has become one

of the most important innovations in modern healthcare, offering various significant advantages in improving access and quality of care. Telemedicine allows patients to access healthcare services from anywhere, without having to travel to healthcare facilities (Hani, 2021). This is very beneficial for individuals living in remote areas or with limited mobility. With telemedicine, geographical barriers can be overcome, ensuring that everyone has equal access to quality medical care. Consultations through telemedicine save time for both patients and healthcare providers. Patients do not need to wait long in the waiting room or travel far, while doctors can schedule appointments more flexibly and efficiently (Syamsul Muhlis, Indar Nambung, 2020). This also reduces the waiting time to receive treatment.

Telemedicine can reduce the costs incurred by patients for transportation, accommodation, and even the consultation fees themselves, which are often lower compared to in-person visits (Sherly Primavita, Nayla Alawiya, 2021). This makes healthcare more affordable for many people, especially those with financial constraints. Medical consultations through telemedicine provide a more comfortable environment for patients. Many people feel safer and more comfortable discussing their health issues from home without worrying about their privacy in the clinic waiting room. This can increase patients' confidence in seeking care more quickly when needed. Telemedicine allows for real-time monitoring of health conditions using medical devices and mobile applications (Dang et al., 2020). Patients with chronic conditions can be continuously monitored by doctors, allowing for early detection of health issues and timely interventions. In situations like the COVID-19 pandemic, telemedicine helps prevent the spread of disease by allowing patients to consult without having to go to the hospital or clinic, thereby reducing the risk of exposure to

viruses or germs (Coggon & Kamunge-Kpodo, 2022). Telemedicine also allows doctors to conduct better medical assessments by seeing patients in their own home environments. This can help in diagnosing certain conditions that may be influenced by the patient's surrounding environment. With these various advantages, telemedicine not only enhances the efficiency of the healthcare system but also provides innovative solutions to the challenges faced by traditional healthcare systems, making it an increasingly popular choice among modern society.

Telemedicine is a type of information technology used to transfer medical information, diagnosis, therapy, and education. Information transfer is conducted through interactive images, videos, and audio between patients and medical professionals (Qizi, 2024). In addition, several features in the telemedicine application that can be utilized include online consultations, screenings, and chatbots. The use of telemedicine by medical personnel and patients can make services effective and efficient in monitoring, evaluating, and educating. With the variety of telemedicine methods, patients can report the symptoms they are experiencing and receive advice or guidance related to their condition. Abroad, telemedicine has been used in the management of pulmonary, musculoskeletal, and neurological cases.

The use of telemedicine is one of the technological breakthroughs in the field of medicine to improve the quality of healthcare services. Telemedicine can be utilized to communicate patients' needs regarding consultations about their condition to doctors when patients cannot access healthcare facilities. The use of telemedicine in pandemic situations can enhance epidemiological investigations, disease control, and case management for both asymptomatic and symptomatic patients (Ratnasari et al., 2022).

Through the use of telemedicine, patients with mild disease symptoms can receive the necessary care without having to interact with other patients who might worsen their condition. The use of telemedicine can help the general public access healthcare services. Patients can consult with doctors regarding their illnesses through telemedicine without needing to go to the hospital. The effectiveness of telemedicine also impacts the healthcare financing required, whether in terms of transportation for patient visits, home visit practices by doctors, or unplanned hospital admissions. Telemedicine can help address medical practice issues on a large regional scale, where the distance between patients and healthcare services affects healthcare costs and patient disease outcomes. The impact is that the use of telemedicine will increase patient satisfaction in accessing healthcare services and improve patients' health conditions.

Telemedicine in Indonesia is protected by legislation that has been enacted by the government to provide justice, certainty, and legal benefits for individuals who use it (Moseson et al., 2022). The practice of telemedicine is closely related to legal aspects regarding who is entitled to provide telemedicine services, the rights and obligations of doctors and patients, as well as issues of confidentiality of patient health information in medical records and informed consent. The remote medical service system also offers convenience in terms of payment transactions because it has a payment gateway system where payments can be made online through an application without having to come to the location. The hustle and bustle of urban land traffic can certainly alleviate urban community problems such as congestion due to vehicle accumulation on the roads. In the context of the times, telemedicine can also be interpreted as the state's will to respond to social changes in society. The Covid-19 pandemic, which began to

spread around the end of 2019 in a relatively short time, forced the state to halt or postpone activities that were previously conducted conventionally and shift them to electronic means (Prasetyo & Prananingrum, 2022).

Telemedicine, although it offers many advantages in healthcare services, also has significant drawbacks, especially regarding protection for doctors. Telemedicine limits doctors' ability to conduct physical examinations in person, which can result in inaccurate diagnoses. The inability to see or feel physical symptoms directly puts doctors at risk of making diagnostic errors, which can lead to malpractice and legal action. With the increasing use of telemedicine, the risk of malpractice also rises. If there is an error in diagnosis or treatment, doctors may find it difficult to defend themselves legally due to the lack of physical evidence and complete medical records from remote consultations. This creates legal uncertainty for doctors in practicing telemedicine. Telemedicine involves the electronic transmission of medical data, which can be vulnerable to cyberattacks and privacy breaches (Prasetio, 2024). If patient data is leaked or misused, doctors could become involved in legal issues related to privacy violations, which could damage the professional reputation of doctors. The lack of face-to-face interaction can diminish the emotional connection between doctors and patients. This can affect the quality of communication and the patient's trust in the doctor. The ambiguity of the information conveyed during online consultations can also lead to misunderstandings, which could potentially harm both parties.

Telemedicine is considered a breakthrough in the medical world that facilitates accessibility for the community to healthcare services, especially for the poor. This system no longer discusses procedures and protocols, but emphasizes speed and accessibility. This somewhat reminds one of the principle of utilitarianism proposed

by Jeremy Bentham (Green, 2022). Bentham's teachings tend to focus on the utility of an item rather than its formalistic aspects, so the essence of utilitarianism can be briefly described through the phrase "the greatest happiness of the greatest number (Jacques, 2021)." In reality, the provision of healthcare services in Indonesia is still hindered by administrative processes, while the condition of patients is very concerning and must be addressed immediately.

However, in the process of utilizing technology, namely online-based health service applications, errors sometimes occur both in the use of the application and during teleconsultations. Various errors are unavoidable, such as mistakes during diagnosis or treatment. Therefore, the use of applications certainly requires careful selection and a sufficient internet connection. Often, this becomes an obstacle because the use of online-based health service applications is not accessible to all segments of society.

One of the issues is related to the legal protection for doctors in telemedicine practice in Indonesia, which is still relatively weak, despite the existence of several regulations governing this aspect. Although there are several regulations in Indonesia such as the Health Law, Minister of Health Regulation 20/2019, and Medical Council Regulation No. 47 of 2020 that govern telemedicine practices, many provisions remain general and do not provide clear legal protection for doctors. This creates uncertainty regarding the legal responsibilities of doctors when providing healthcare services virtually. Doctors who practice telemedicine are at high risk of malpractice lawsuits. If a mistake occurs in diagnosis or treatment, it is difficult for doctors to defend themselves without physical evidence or complete medical records from a remote

consultation. This can lead to doctors facing legal lawsuits even though they have acted in accordance with the applicable medical standards.

Law enforcement related to telemedicine practices is still weak, and there is no clear mechanism to handle complaints or disputes between patients and doctors. This makes doctors feel less protected and can reduce their trust in using telemedicine platforms (Sandra & Panji, 2022). Many doctors have not received adequate training on the legal and ethical aspects of telemedicine practice. Without sufficient knowledge, they may not be aware of the legal risks associated with remote healthcare services, thereby increasing the likelihood of legal violations. Telemedicine involves the electronic transmission of medical data, which can be vulnerable to privacy breaches. If patient data is leaked or misused, doctors could become involved in legal issues related to privacy violations, potentially damaging the doctor's professional reputation (Razmetaeva & Sydorenko, 2021). The limitations of technological infrastructure in some areas also pose a challenge for doctors in effectively practicing telemedicine. This can lead to errors in providing healthcare services and increase the risk of legal action. By understanding these various weaknesses, it is important for policymakers to strengthen regulations and provide better support to doctors in telemedicine practice, so they can deliver safe and effective healthcare services without worrying about adverse legal consequences (Agustina, 2020).

Regarding the healthcare services provided by doctors in telemedicine practice, generally, a doctor cannot be considered to have committed an unlawful act if an unintentional mistake occurs, except in certain cases deemed negligent and completely disregarding safety procedures in serving patients. Therefore, in order to obtain legal protection and be shielded from any form of legal entanglement, doctors are required

to work carefully and must adhere to the behavioral standards set forth by laws and the medical profession's code of ethics (Tadda et al., 2022). The balance between the rights and obligations of doctors and patients must be carefully regulated so that interactions in the digital world remain compliant with ethical standards, quality, and legal protection (Sidi et al., 2021). The development of technology impacts the ease of access to healthcare services, one of the effects being Telemedicine services that utilize technology in the healthcare field, primarily functioning to bring doctors and patients closer together. It is important to emphasize that in telemedicine health services, there are rights and obligations that must be balanced, especially when it comes to the rights and obligations between doctors and patients in telemedicine services. This emphasizes that the legal protection provided to doctors in telemedicine services must be balanced with the protection for patients. In addition, in order to realize legal certainty and legal protection for doctors providing telemedicine services, a legal framework that comprehensively regulates telemedicine-based medical practices is needed to ensure they operate in accordance with the development of science and technology while also guaranteeing legal protection for doctors.

2. Regulation of Legal Protection for Doctors in Telemedicine Practice: A Legal Comparison Between Indonesia, Malaysia, and Ethiopia

Legal protection for doctors is very important in carrying out medical practice, especially in the context of telemedicine and modern healthcare services (Trihandini, 2020). Clear legal protection helps doctors understand their responsibilities and protects them from unfair legal claims. Legal protection provides a framework for doctors to practice in accordance with established professional standards and operational procedures (Dzulhizza et al., 2023). This is important to ensure that the

healthcare services provided meet the expected quality and ethics, as well as to protect doctors from negligence claims if they have followed the guidelines (Aibek Seidanov, Arstan Akhpanov, Lyazzat Nurlumbayeva, 2024). With clear legal protections in place, patients will feel safer receiving medical care. They know that doctors have the right to receive protection while providing services, thereby increasing trust in the overall healthcare system.

Legal protection also includes the aspect of informed consent, where doctors are required to provide sufficient information to patients before performing medical procedures (Puspitasari & Budi Pramono, 2023). This not only protects the rights of patients but also provides protection for doctors from legal claims related to action failures if patients have been given adequate information. When doctors feel legally protected, they are more likely to continue developing their skills and knowledge. This contributes to the improvement of healthcare service quality and innovation in medical practice, including the use of telemedicine technology (Pandhika & Fakhri, 2021). In situations where there is a dispute between a patient and a doctor, legal protection provides a basis for the doctor to defend themselves. Clear regulations allow doctors to demonstrate that they have acted in accordance with professional standards, thereby reducing the risk of financial and reputational losses due to legal lawsuits. Overall, legal protection for doctors is an important element in creating a safe and professional medical practice environment, as well as supporting the delivery of quality healthcare services to the community.

Legal protection for doctors is regulated by the Health Law, which provides a framework to protect medical personnel in carrying out their practice. One of the main

aspects of the Health Law is the provision that before law enforcement officials conduct an investigation into doctors suspected of committing crimes in providing services, they must obtain a recommendation from an independent council. This aims to prevent the criminalization of doctors and ensure that medical actions taken in emergency situations or in accordance with professional standards are not immediately considered a legal violation.

The Health Law also stipulates that doctors and healthcare workers cannot be subjected to criminal sanctions if they can prove that the actions taken were in accordance with professional standards, operational procedures, and medical ethics (Rivanie et al., 2022). This provides protection for doctors operating in difficult conditions, where quick decisions are necessary to save patients' lives. Article 310 of the Health Law states that before criminal sanctions are imposed, issues faced by medical personnel must be resolved through non-judicial channels (Ilyas, 2014). This creates space for resolving issues more fairly and reduces the legal burden that doctors might face. This Health Law also establishes the obligation for medical personnel to provide healthcare services in accordance with professional standards and to maintain the confidentiality of patient information. In addition, the rights of medical personnel are also protected, including the right to fair wages and guarantees of protection while performing their duties. The independent council established under this Health Law also serves to address allegations of ethical and disciplinary violations, thereby providing additional protection for doctors from potentially baseless or unfair legal actions. With these provisions, the Health Law aims to create a safer and more protected medical practice environment for doctors, as well as to improve the overall quality of healthcare services (Sheila Febriana Ngiti Sasmita Sabir Alwy, 2023).

Specifically regarding the regulation of telemedicine in Indonesia, although it has been governed by various laws and regulations, doctors practicing telemedicine still face the risk of legal action related to malpractice without clear legal protection in the context of remote services. In addition, there are still shortcomings in the regulations regarding informed consent and the protection of personal data in telemedicine practices, which can pose privacy violation risks. Although telemedicine regulations in Indonesia already exist, there are still many aspects that need improvement to ensure that this practice runs well and safely for all parties involved. The development of more comprehensive regulations and legal protections for doctors and patients is essential to support the growth of telemedicine in the future.

Besides Indonesia, the development of telemedicine regulations is also being carried out in various countries, one of which is Malaysia. Telemedicine in Malaysia was first initiated by the Ministry of Health Malaysia (MOH) in 1997, as part of a national strategy to leverage the potential of Information and Communication Technology (ICT) in improving access to fair, affordable, and quality healthcare services (Wahab et al., 2023). This initiative aims to support the achievement of better health outcomes and improve the overall well-being of the community. As an initial step, the MOH implemented a teleconsultation pilot project from March 2001 to September 2002, by installing telecommunications infrastructure in 41 hospitals and health centers spread across the country (Wahab et al., 2023). This project then formed a national teleconsultation network, which proved capable of expanding access to specialist services, especially in rural areas with limited medical personnel. Teleconsultation allows patients to receive referrals to specialist doctors without having to travel long distances, thereby reducing the burden on the healthcare system

and minimizing unnecessary referrals and patient transfers. By 2010, the number of hospitals participating in this network had increased to 52 (Loo et al., 2023).

Despite facing technical challenges and low initial adoption rates, various other telemedicine projects continue to be implemented. Malaysia, as an upper-middle-income country with a per capita GDP of RM 46,524 (USD 11,512), demonstrates a sustained commitment to digital transformation in the healthcare sector (Loo et al., 2023). Telemedicine is also one of the seven flagship applications in the national Multimedia Super Corridor (MSC) initiative. The government is developing four main projects that include cross-disciplinary teleconsultations between various healthcare facilities to address the challenge of distributing specialist personnel in remote areas.

In September 2019, MOH re-initiated video-based teleconsultation services in five public primary care clinics. The BookDoc platform (Health4U Solutions Sdn Bhd), as the main partner of MOH, utilizes a system that complies with the Health Insurance Portability and Accountability Act (HIPAA) standards through Twilio integration (Tan et al., 2024). During the COVID-19 pandemic, the coverage of teleconsultation services was significantly expanded to reach more public and private clinics, in response to the increased need for healthcare services without direct physical contact (Tan et al., 2024). However, studies on the coverage and effectiveness of teleconsultation in the primary healthcare system in Malaysia are still limited.

From a regulatory perspective, Malaysia enacted the Telemedicine Act 1997 as the legal basis for the implementation of telemedicine practices. This law defines telemedicine as a medical practice that uses audio, visual, and data communication technology (Tan et al., 2024). Only medical practitioners who are fully or temporarily registered and have obtained a practice certificate in accordance with the Medical Act

1971 are permitted to provide this service. Foreign medical practitioners who wish to participate must obtain telemedicine certification from the Malaysian Medical Council (Aris Prio Agus Santoso et al., 2024). Violations of this provision may be subject to criminal penalties, including fines of up to RM 500,000 or imprisonment for up to five years (Aris Prio Agus Santoso et al., 2024).

To obtain a telemedicine certificate, a practitioner must submit an application to the Medical Board, attach supporting documents, and pay an administrative fee. The certificate issued is valid for a maximum of three years and can be revoked at any time if there is a violation of the applicable regulations. Written consent from the patient must be obtained before the provision of services, and the patient has the right to withdraw that consent at any time without affecting their right to healthcare services in the future.

As part of personal data protection, Malaysia enacts the Personal Data Protection Act 2010 (PDPA) which adopts principles from the EU Data Protection Directive, OECD Guidelines, and APEC Framework (Aris Prio Agus Santoso et al., 2024). PDPA restricts the transfer of personal data abroad unless the destination country has an equivalent level of protection or has obtained permission from the Minister of Information, Communication, and Culture. Although Malaysia has made significant progress, various challenges still loom over the sustainability of telemedicine implementation. Among them are the need for reliable technology infrastructure, protection of patient data and privacy, and the necessity to update more than 25 health service-related laws to align with digital innovations and support the startup ecosystem (Loo et al., 2023). These challenges emphasize the importance of involving independent and professional technical teams in the management of

electronic health data, as well as the need to adjust regulatory frameworks to address the dynamics of digital-based healthcare transformation in the future.

As in Malaysia, telemedicine regulations in Ethiopia have become an important tool for improving access to healthcare services, especially in remote areas facing geographical, economic, and infrastructural challenges. The Ethiopian government has made efforts to integrate telemedicine into the national health system as part of a strategy to improve access to healthcare services and efficiency (Chereka et al., 2024). This includes the use of digital technology for remote diagnosis and consultations. Although there has been progress, formal regulations governing telemedicine practices are still in the development stage. This includes the need to establish operational standards, patient data protection, and ethical guidelines for medical personnel involved in telemedicine practices. To support the implementation of telemedicine, training programs for healthcare workers have also been introduced, aimed at enhancing their skills in using information and communication technology in medical practice.

Ethiopia is also collaborating with various international organizations to develop the infrastructure and systems necessary to support telemedicine, including the development of digital platforms that can be used by doctors and patients (Chereka et al., 2024). Digital Health Strategy 2020–2025 is a strategy designed by the Ethiopian Ministry of Health to expand access to healthcare services through digital technology, including telemedicine (Shibabaw et al., 2024). The focus is on developing digital infrastructure in underserved areas. The Ethiopian Telemedicine Project developed in collaboration with the World Health Organization (WHO) to connect rural health centers with urban hospitals (Shibabaw et al., 2024). The goal is to provide specialist

consultations for populations that have difficulty accessing advanced medical care. With the right strategy, telemedicine can be an effective solution to improve access to healthcare services in Ethiopia, especially for communities that have been marginalized (Fikrie et al., 2025).

From the above description, it can be concluded that, in general, Indonesia, Malaysia, and Ethiopia share similarities in recognizing the importance of telemedicine as a strategic solution to improve access to healthcare services, especially in remote and hard-to-reach areas. All three countries have made telemedicine a part of the transformation of their national health systems based on technology, and they are also striving to protect patient privacy and data in practice. However, there are significant differences in terms of regulatory approaches, infrastructure readiness, and legal protection for medical personnel. Malaysia is the most advanced country in telemedicine regulation, with the Telemedicine Act 1997 as a specific legal framework, mandatory certification from the Malaysian Medical Council (MMC), and comprehensive personal data protection through the Personal Data Protection Act (PDPA) 2010. On the other hand, Indonesia still faces challenges in terms of legal certainty because it does not yet have a specific law that comprehensively regulates telemedicine; regulations are still scattered across various sectoral regulations, and legal protection for medical personnel in online practice is still limited. On the other hand, Ethiopia is still in the early stages of telemedicine implementation, characterized by a strategic policy approach without specific legal foundations and limited infrastructure, as well as mechanisms for data protection and doctor certification. Therefore, although there is a shared enthusiasm for the use of telemedicine, differences in legal frameworks, technical policies, and the readiness of each country's

healthcare system affect the effectiveness and sustainability of these remote healthcare services.

C. CONCLUSION

The right to health is a fundamental part of human rights that has been globally recognized since the WHO Constitution in 1946 and the Universal Declaration of Human Rights in 1948. Its development continues to expand both in substance and implementation, including in the form of technology-based health services such as telemedicine. Telemedicine has emerged as an important innovation capable of addressing the challenges of access and equitable distribution of healthcare services, particularly for communities in remote areas or with limited mobility. This service offers time efficiency, cost reduction, convenience, and real-time health monitoring. Although it has great potential to improve the quality of healthcare services and achieve social justice in the health sector, the implementation of telemedicine still leaves a number of legal issues that need to be comprehensively addressed. The lack of clarity in regulations regarding legal responsibilities, dispute resolution mechanisms, and insufficient protection for medical personnel risks creating legal uncertainty. Therefore, a comprehensive and adaptive regulatory update is needed to technological developments to ensure a balance between the rights and obligations of doctors and patients in telehealth services.

Telemedicine is widely recognized by Indonesia, Malaysia, and Ethiopia as a strategic solution to improve access to healthcare services, especially in remote areas. All three place telemedicine as part of the technology-based transformation of the healthcare system and demonstrate a commitment to maintaining patient data privacy and security. However, the effectiveness of its implementation is greatly influenced by

differences in the legal framework, infrastructure readiness, and legal protection for medical personnel. Malaysia stands out with more mature and integrated regulations through the Telemedicine Act 1997 and PDPA 2010, while Indonesia still faces challenges of regulatory fragmentation and limited legal protection. Meanwhile, Ethiopia is still in the early stages of development without a specific legal framework and adequate infrastructure support. Therefore, to ensure sustainability and equity in telemedicine services, each country needs to formulate comprehensive, adaptive, and technology-aligned policies and regulations.

REFERENCES

- Agustina, E. (2020). Juridical Analysis of the Legal Relationship Between Doctors and Patients in Health Services. *Unifikasi : Jurnal Ilmu Hukum: Jurnal Ilmu Hukum*, 7(1), 79. <https://doi.org/10.25134/unifikasi.v7i1.2349>
- Aibek Seidanov, Arstan Akhpanov, Lyazzat Nurlumbayeva, M. K. (2024). Legal Liability Of A Physician For Providing Inadequate Medical Care To A Patient: Analysis Of Approaches Based On The Examples Of Kazakhstan And The United States. *Access to Justice in Eastern Europe*, 7(3), 410–438. <https://doi.org/10.33327/AJEE-18-7.3-a000314>
- Albahri, O. S., & AlAmoodi, A. H. (2023). Cybersecurity and Artificial Intelligence Applications: A Bibliometric Analysis Based on Scopus Database. *Mesopotamian Journal of Cyber Security*, 2023(1), 158–169. <https://doi.org/10.58496/mjcsc/2023/018>
- Alfarizi, M., & Arifian, R. (2023). Patient satisfaction with Indonesian sharia hospital services: Halal healthcare tool and implications for loyalty-WoM. *Asian Journal of Islamic Management (AJIM)*, 5(1), 18–35.

<https://doi.org/10.20885/ajim.vol5.iss1.art2>

Amin, I. R., Ilyas, A., & Mirzana, H. A. (2023). Efektivitas Hukum Pelaksanaan Hak Atas Pelayanan Kesehatan Jiwa Terhadap Warga Binaan Pemasyarakatan (Suatu Analisis Psikologi Hukum). *Jurnal Diskursus Islam*, 11(2), 114–127. <https://doi.org/10.24252/jdi.v11i2.34157>

Anatami, J. D., Yusriando, E. F. P., & Butarbutar, M. (2021). The Legal Protection For Doctors And Medical Personnel In Carrying Out Their Duties Serving Covid-19 Patients At The Pematangsiantar City Hospital. *International Journal of Business, Economics and Law*, 24(3), 97–99.

Andrianto, W. (2021). Tinjauan Perbandingan Penyelenggaraan Telemedicine Antara Indonesia dan Amerika Serikat. *Jurnal Hukum Kesehatan Indonesia*, 01(02), 1–10. <https://jurnal-mhki.or.id/jhki/article/download/7/9>

Ang, Y. G. (2023). Development of the private hospitals in Singapore from 1983 to 2022. *Journal of Hospital Management and Health Policy*, 7(1), 1–8. <https://doi.org/10.21037/jhmhp-23-62>

Aris Prio Agus Santoso, Soares, D., Fauzi, F., & Amallia, S. D. (2024). Telemedicine: International Law Comparison. *The Easta Journal Law and Human Rights*, 2(3), 116–126. <https://doi.org/10.58812/eslhr.v2i03.286>

Balubun, W. H., Suroto, V., & Sumarwanto, E. (2019). Provisions of Indonesian Medical Discipline Sanctions to Protect The Rights of Patient be Reviewed From The principle of The Establishment of Legislation. *Soepra*, 4(2), 298. <https://doi.org/10.24167/shk.v4i2.1495>

Chereka, A. A., Mekonnen, G. B., Yirsaw, A. N., Mengistie, B. A., Getachew, E., Lakew, G., Shibabaw, A. A., & Kitil, G. W. (2024). Attitudes towards

- Telemedicine Services and Associated Factors among health professionals in Ethiopia: a systematic review and meta-analysis. *BMC Health Services Research*, 24(1), 1505. <https://doi.org/10.1186/s12913-024-11979-w>
- Coggon, J., & Kamunge-Kpodo, B. (2022). The legal determinants of health (in)justice. *Medical Law Review*, 30(4), 705–723. <https://doi.org/10.1093/medlaw/fwac050>
- Dang, H. S., Nguyen, T. M. T., Wang, C. N., Day, J. Der, & Dang, T. M. H. (2020). Grey system theory in the study of medical tourism industry and its economic impact. *International Journal of Environmental Research and Public Health*, 17(3), 1–23. <https://doi.org/10.3390/ijerph17030961>
- Dzulhizza, D. S. R., Anatami, D., & Nofrial, R. (2023). Aspek Yuridis dalam Pertanggungjawaban Hukum Profesi Dokter pada Perspektif Pelayanan Informed Consent Untuk Mewujudkan Perlindungan Hukum. *Jurnal Kajian Ilmiah*, 23(1), 43–50. <https://doi.org/10.31599/jki.v23i1.1716>
- Eigenschink, M., Bellach, L., Leonard, S., Dablander, T. E., Maier, J., Dablander, F., & Sitte, H. H. (2023). Cross-sectional survey and Bayesian network model analysis of traditional Chinese medicine in Austria: investigating public awareness, usage determinants and perception of scientific support. *BMJ Open*, 13(3), 1–14. <https://doi.org/10.1136/bmjopen-2021-060644>
- Fikrie, A., Daniel, D., Ermiyas, S., Hassen, H., Seyoum, W., Kebede, S., & Wako, W. G. (2025). Magnitude of telemedicine utilization and associated factors among health professionals working at selected public hospitals in Southern Ethiopia. *PLOS ONE*, 20(1), 2–4. <https://doi.org/10.1371/journal.pone.0311956>
- Gluschkoff, K., Kaihlanen, A., Palojoki, S., Laukka, E., Hyppönen, H., Karhe, L.,

- Saranto, K., & Heponiemi, T. (2021). Reporting of health information technology system-related patient safety incidents: The effects of organizational justice. *Safety Science*, 144(August). <https://doi.org/10.1016/j.ssci.2021.105450>
- Green, B. (2022). Jeremy Bentham's Social Ontology: Fictionality, Factuality and Language Critique. *Philosophy of the Social Sciences*, 52(3), 111.
- Hakim, H. A., Praja, C. B. E., & Djanggih, H. (2021). Legal Urgency on Designing The Legislation for The Use of Artificial Intelligence in Indonesian Medical Practice. *Jurnal Penelitian Hukum De Jure*, 21(4), 541. <https://doi.org/10.30641/dejure.2021.v21.541-550>
- Hani, T. M. (2021). Disharmony in Regulations of Telemedicine Services During the Covid-19 Pandemic in Indonesia. *Mimbar: Jurnal Sosial Dan Pembangunan*, 37(2), 402–409. <https://doi.org/10.29313/mimbar.v37i2.7956>
- Ilyas, A. (2014). *Pertanggungjawaban Pidana Dokter dalam Malpraktik Medik di Rumah sakit*. Rangkang Education.
- Ip, E. C. (2021). The Political Determinants of China's New Health Constitution. *Medical Law Review*, 29(1), 3–23. <https://doi.org/10.1093/medlaw/fwaa030>
- Irwansyah, A. Y. (2020). *Metode Penelitian Hukum Pilihan Metode dan Praktik Penulisan Artikel*. Mirra Buana Media.
- Ivanova, J., Cummins, M. R., Ong, T., Soni, H., Barrera, J., Wilczewski, H., Welch, B., & Bunnell, B. (2025). Regulation and Compliance in Telemedicine: Viewpoint. *Journal of Medical Internet Research*, 27(1), 53–58. <https://doi.org/10.2196/53558>
- Jacques, S. (2021). The Story of Jeremy Bentham on Police: Bridging the Bentham Project to Criminology. In *Jeremy Bentham on Police* (p. 12). UCL Press.

- Jain, D. (2023). Regulation of Digital Healthcare in India: Ethical and Legal Challenges. *Healthcare*, 11(6), 911. <https://doi.org/10.3390/healthcare11060911>
- Loo, J. S., Yow, H. Y., Ten, Y. Y., Govindaraju, K., Megat Mohd Zubairi, M. H., Ooi, H. C., & Abdul Rahim, N. (2023). Exploring the rise of telehealth services in Malaysia: A retrospective study. *DIGITAL HEALTH*, 9(1), 1–4. <https://doi.org/10.1177/20552076231216275>
- Moseson, H., Jayaweera, R., Egwuatu, I., Grosso, B., Kristianingrum, I. A., Nmezi, S., Zurbriggen, R., Motana, R., Bercu, C., Carbone, S., & Gerds, C. (2022). Effectiveness of self-managed medication abortion with accompaniment support in Argentina and Nigeria (SAFE): a prospective, observational cohort study and non-inferiority analysis with historical controls. *The Lancet Global Health*, 10(1), e105–e113. [https://doi.org/10.1016/S2214-109X\(21\)00461-7](https://doi.org/10.1016/S2214-109X(21)00461-7)
- Nugroho, E. A., & Kusumaningrum, A. E. (2021). Legal Protection for Doctors in Health Service Practices. *Unifikasi: Jurnal Ilmu Hukum*, 8(1), 105–112. <https://doi.org/10.25134/unifikasi.v8i1.3619>
- Pandhika, R., & Fakihi, M. (2021). Doctor's Responsibility in Providing Telemedicine Services among Health Care Facilities: Legal and Professional Dimensions. *Administrative and Environmental Law Review*, 2(1), 21–30. <https://doi.org/10.25041/aclr.v2i1.2251>
- Parlindungan, F., Sumariyono, S., Hidayat, R., Anggoro, S., Wibowo, K., Ariane, A., Damanik, J., Araminta, A. P., & Yunita, K. C. (2023). Learning from the COVID-19 pandemic: health care disturbances and telemedicine as an alternative rheumatology practice in Indonesia. *BMC Health Services Research*, 23(451), 1–11.

- Patria, R. M. S. A. S. K., Sutarno, & Adriano. (2022). Juridical Analysis of Patients ' Rights to Information Disease and Action Medical by Doctor in Hospital. *Verdict: Journal of Law Science*, 1(36), 16–29. <https://www.ojs.wahanapublikasi.com/index.php/vjlaws/article/view/33>
- Prasetio, D. E. (2024). Politik Hukum Omnibus Law Terkait Cybercrime di Indonesia dalam Perspektif Hukum Progresif. *Indonesian Journal Of Law Studies*, 3(1), 27–41.
- Prasetyo, A., & Prananingrum, D. H. (2022). Disrupsi Layanan Kesehatan Berbasis Telemedicine: Hubungan Hukum Dan Tanggung Jawab Hukum Pasien Dan Dokter. *Refleksi Hukum: Jurnal Ilmu Hukum*, 6(2), 225–246. <https://doi.org/10.24246/jrh.2022.v6.i2.p225-246>
- Puspitasari, M., & Budi Pramono. (2023). Legal Consequences Of Doctor's Negligence in Making Visum et Repertum and Corpse Autopsis. *Formosa Journal of Applied Sciences*, 2(3), 387–396. <https://doi.org/10.55927/fjas.v2i3.3367>
- Qizi, Y. F. U. (2024). Telemedicine in the Digital Era: Navigating the International Legal Landscape to Expand Global Healthcare Access. *International Journal of Legal Information*, 52(2), 155–165. <https://doi.org/10.1017/jli.2024.37>
- Ratnasari, R. T., Gunawan, S., Pitchay, A. A., & Mohd Salleh, M. C. (2022). Sustainable medical tourism: Investigating health-care travel in Indonesia and Malaysia. *International Journal of Healthcare Management*, 15(3), 220–229. <https://doi.org/10.1080/20479700.2020.1870365>
- Razmetaeva, Y. S., & Sydorenko, O. O. (2021). Abortion, Human Rights and Medical Advances in Digital Age. *Wiadomosci Lekarskie (Warsaw, Poland : 1960)*, 74(1),

- 132–136. <https://doi.org/10.36740/wlek202101126>
- Rivanie, S. S., Muchtar, S., Muin, A. M., Prasetya, A. M. D., & Rizky, A. (2022). Perkembangan Teori-teori Tujuan Pemidanaan. *Halu Oleo Law Review*, 6(2), 176–188. <https://doi.org/10.33561/holrev.v6i2.4>
- Rosemann, A., & Zhang, X. (2022). Exploring the social, ethical, legal, and responsibility dimensions of artificial intelligence for health – a new column in Intelligent Medicine. *Intelligent Medicine*, 2(2), 103–109. <https://doi.org/10.1016/j.imed.2021.12.002>
- Sandra, G., & Panji, A. (2022). Judicial Review of Criminal Liability of Doctors for Malpractice. *Journal of Indonesian Scholars for Social Research*, 2(2), 98–106. <https://doi.org/10.59065/jissr.v2i2.38>
- Sheila Febriana Ngiti Sasmita Sabir Alwy, M. I. (2023). Perspektif Hukum Persetujuan Tindakan Kedokteran atas Perluasan Tindakan Operasi. *Amanna Gappa*, 31(1), 20–35.
- Sherly Primavita, Nayla Alawiya, U. A. (2021). Tanggung Jawab Hukum Dokter Dalam Pelayanan Telemedicine. *S.L.R*, 3(4), 585.
- Shibabaw, A. A., Chereka, A. A., Walle, A. D., Demsash, A. W., Dube, G. N., Dubale, A. T., Kassie, S. Y., Kitil, G. W., Jember, M. zewold, Gebeyehu, C. D., Ariger, A. T., & Dires, E. A. (2024). Knowledge of telemedicine and its associated factors among health professional in Ethiopia: A systematic review and meta-analysis. *PLOS ONE*, 19(4), 3–5. <https://doi.org/10.1371/journal.pone.0301044>
- Sidi, R., Putra, K., & Kesuma, M. (2021). Criminal Liability against a Doctor Who Does Not Have a License Practices in Providing Health Services. *International Journal of Research and Review*, 8(12), 293–300.

<https://doi.org/10.52403/ijrr.20211236>

- Singh, M. (2024). Review on Role of Artificial Intelligence in The Life of Legal Profession. *International Journal of Legal Science and Innovation*, 6(3), 1087–1096.
- Suteki, & Taufani, G. (2020). *Motodologi Penelitian Hukum (Filsafat, Teori, dan Praktik)* (Cetakan 3). RajaGrafindo Persada.
- Syamsul Muhlis, Indar Nambung, S. A. (2020). Kekuatan Hukum Penyelesaian Sengketa Medik Pasien dengan Rumah Sakit Melalui Jalur Mediasi. *Jurnal Ilmiah Dunia Hukum*, 5(1), 31–40. <https://doi.org/10.35973/jidh.v5i1.1557>
- Tadda, A., Indar, I., & Ilyas, A. (2022). Tinjauan Hukum Eksistensi Komite Etik Dan Hukum Rumah Sakit (KEHRS) Dalam Penyelesaian Sengketa Medik. *Jurnal Ilmiah Ecosystem*, 22(1), 120–135. <https://doi.org/10.35965/eco.v22i1.1392>
- Tan, S.-H., Wong, C.-K., Yap, Y.-Y., & Tan, S.-K. (2024). Factors influencing telemedicine adoption among physicians in the Malaysian healthcare system: A revisit. *Digital Health*, 10(1), 2–5. <https://doi.org/10.1177/20552076241257050>
- Thahir, P. S., & Tongat, T. (2024). Legal Review of Medical Crime: Patient Protection and Professional Responsibility in Medical Practice. *Audito Comparative Law Journal (ACLJ)*, 5(2), 130–142. <https://doi.org/10.22219/aclj.v5i2.33832>
- Trihandini, D. (2020). Konsep Perlindungan Hukum Bagi Tenaga Medis dalam Penanganan COVID-19. *Jurnal Hukum Dan Pembangunan Ekonomi*, 8(2), 52–64.
- Wahab, S. N., Singh, J., & Subramaniam, N. (2023). Telemedicine implementation framework for Malaysia: An integrated SWOT-MCDM approach. *Health Policy and Technology*, 12(4), 100–118. <https://doi.org/10.1016/j.hlpt.2023.100818>

- Wahyuni, C. I. D., Laskarwati, B., & Al Qulub, N. M. (2020). Informed Consent in Health Services: How are the Patients' Rights Protected? *Journal of Law and Legal Reform*, 1(4), 591–604. <https://doi.org/10.15294/jllr.v1i4.39891>
- Widodo, H., & Disantara, F. P. (2021). Problematik Kepastian Hukum Darurat Kesehatan Masyarakat Pada Masa Pandemi COVID-19. *Jurnal Suara Hukum*, 3(1), 197. <https://doi.org/10.26740/jsh.v3n1.p197-226>
- Wijaya, D., Kholib, A., & Prasetyo, H. (2023). Private Hospital Obstacles are Linked to Law No. 17 Of 2023 Concerning Health. in the Third Part Concerning the Hospital. *Edunity Kajian Ilmu Sosial Dan Pendidikan*, 2(11), 1337–1349. <https://doi.org/10.57096/edunity.v2i11.178>
- Wijaya, H., Jaya, N. P., Supeno, B. J., & Natalis, A. (2021). Legal Liability for Euthanasia Actions in the Perspective of the Medical Code of Ethics in Indonesia. *Medico Legal Update*, 21(2), 619–624. <https://doi.org/10.37506/mlu.v21i2.2751>
- Wirandi Dalimunthe, Ismaidar Ismaidar, M. S. (2025). Patient Legal Protection in the Digital Era and Study of Telemedicine Services in Indonesia. *De Lega Lata*, 10(1), 40–49. <https://doi.org/https://doi.org/10.30596/dll.v10i1.22494>