

Analysis of Fulfillment of Patient Legal Protection, Doctor Accountability, and Supervision Mechanisms for the Risk of Misdiagnosis in Digital Health Consultation

Nurhefi, Yeni Vitrianingsih, Fayola Issalillah

Universitas Sunan Giri Surabaya

ARTICLE INFO

Article history:

Received 7 February 2023

Revised 23 April 2023

Accepted 2 June 2023

Key words:

Legal protection,
Misdiagnosis,
Telemedicine,
Online health consultations,
Doctor liability,
Health regulations,
Professional supervision.

ABSTRACT

Advances in information technology have changed the pattern of interaction between patients and medical personnel through online health consultation services based on telemedicine. This study examines legal protection for patients who suffer losses due to misdiagnosis on digital platforms, the legal responsibility of doctors to provide online medical services, and the position of regulators and professional organisations in the supervisory system. The study was conducted through a normative approach and empirical studies that highlight the relevance of regulations, the effectiveness of ethical standards, and the readiness of supervision to ensure patient safety. The findings show that legal protection for patients is closely correlated with the certainty of standard procedures, the legality of medical personnel, and the security of personal data. Doctors are required to adhere to the principle of prudence, maintain professional communication, and ensure transparency before, during, and after digital consultation practices. Meanwhile, platform providers need to implement digital security policies and collaborate closely with health authorities and professional organisations. The government, together with health worker associations, plays an active role in developing an integrated supervisory system, drafting legal instruments, and providing continuous education. Research confirms the urgency of updating telemedicine regulations and strengthening the monitoring ecosystem for all stages of digital services. With cross-sector synergy, online health services can achieve better quality standards that are fair, safety-oriented, and ensure the rights of all users.

INTRODUCTION

Public health is an essential benchmark for assessing a nation's level of welfare. In Indonesia, this is a major concern because overall quality of life is largely determined by the physical and mental health of each individual. The relationship between social factors and individual well-being forms a complex dynamic that directly impacts mental and physical health within a society (Warin, 2021). Furthermore, health aspects are taken into account in various national development policy instruments, given the close relationship between health and community productivity. However, on the other hand, the digital era also brings new challenges to mental health, where unbalanced use of social media has been linked to negative impacts on psychological well-being, especially in individuals who experience Fear of Missing Out (FoMO) (Aisyah & Issalillah, 2021). If

health is maintained at an optimal level, individuals in society will also tend to be highly competitive, able to contribute maximally to development, and more resilient in facing changes over time (Irawan, 2022). Therefore, investment in health is seen not merely as an expense but as a strategic effort that determines Indonesia's long-term future.

However, the level of health of the Indonesian people is not only determined by healthy lifestyles or personal initiatives, but is also intertwined with the availability of and access to adequate health facilities. The quality of services provided by health institutions, including hospitals, clinics, and community health centers, plays a central role in ensuring that the medical needs of the wider community are met. This principle is in line with a comprehensive approach to equal access to health, as upheld in the advocacy for reproductive health and

* Corresponding author, email address: dr.yenivitrianingsih@gmail.com

women's rights, which emphasizes that equal quality and access to health services are fundamental rights (Nalin, 2021). In addition to facilities and infrastructure, the reliability of the health system in regulating service mechanisms is a key variable that cannot be ignored. Every level of society, regardless of socioeconomic status, should be guaranteed equal access and quality of services (Muhaji, 2021). Therefore, a comprehensive transformation of the healthcare system is imperative so that all individuals can be optimally served when they need medical assistance, with an emphasis on sustainability and inclusiveness.

The contribution of public health to the quality of human resource development and poverty alleviation is undeniable. Healthy individuals tend to be more productive, have better educational and employment opportunities, and are able to actively participate in social and economic activities. On the other hand, poor health conditions can exacerbate the cycle of poverty, increase the burden on the state, and reduce the quality of life of the community at large (Husain, 2010). This further highlights the vital role of health in creating a competitive society. In a human development approach, investment in the health sector is essentially a strategic step that has an impact on economic growth, national stability, and the nation's progress in global competition (Erlyn et al., 2022).

The implementation of public health in Indonesia is influenced by various social, economic, and environmental determinants. Poor environmental conditions, ranging from inadequate clean water, air pollution, and unhealthy settlement arrangements, have the potential to reduce the quality of health of citizens. Efforts to improve the effectiveness of legal instruments in overcoming environmental pollution, with the aim of protecting public health, are crucial steps to break the chain of these negative determinants (Herisasono et al., 2021). Similarly, daily behavior, both individual and collective, greatly determines the success of promotional and preventive efforts promoted by the government. In health services, the quality of the referral system, medical human resource management, and service quality achievements are factors that cannot be separated from the analysis of public health in general (Booth, 2023).

The Indonesian government, on the other hand, has an absolute responsibility in the provision of public services, including health. The transformation of health services through medical technology requires the government to act not only as a regulator but also as a facilitator that understands the

opportunities, challenges, and implementation strategies so that this technology can be accessed fairly and sustainably (Sarif & Issalillah, 2022). Setting minimum standards, drafting regulations, and supervising implementation are the main responsibilities of the state as the highest authority in the delivery of public services. In addition to ensuring that every individual receives their rights, the government is also obliged to formulate adaptive policies in order to respond to new challenges in the modern era, such as urbanization, equitable service delivery, and changing demographic dynamics. The principle of healthcare is not only formal and administrative in nature, but has also become a human rights issue that must be guaranteed by the state through strict and operational regulations (Ardiansah, 2020).

Healthcare services provided by the government and the private sector have developed in various forms, from commercial to non-commercial. Profit-oriented services are often initiated by private parties who compete to provide the fastest and best solutions for people who can afford to pay. Regardless of the organizational model, the main factors that determine the sustainability and acceptance of healthcare services in the community, especially public services, are the quality of service and patient satisfaction (Khayru & Issalillah, 2022). On the other hand, non-commercial models are usually the domain of the government and social institutions, focusing on service and prioritizing equitable access. This difference in orientation leads to disparities in the quality and coverage of services, making strict regulations necessary to ensure equal opportunities to obtain healthcare services, especially for marginalized groups (Raman & Björkman, 2015).

Now, the wave of digitalization has entered the national healthcare system and brought about major changes in the way people access medical services. People increasingly want convenience and speed in obtaining health consultation services, anywhere and anytime, without being limited by space and time. Telemedicine has been recognized as an important instrument for promoting equitable access to healthcare services, although its implementation also faces various practical and technical challenges (Khayru, & Issalillah, 2022). This need has spurred the emergence of various online health platforms that offer consultation services and online screening based on internet technology. The phenomenon of telemedicine has not only accelerated interaction between patients and medical personnel, but also created a new ecosystem in healthcare that is more

inclusive and equitable for all levels of society (Bao & Bihn, 2021).

As part of the 4.0 industrial revolution, telemedicine has experienced rapid growth in Indonesia. Platforms such as Alodokter, HaloDoc, KlikDokter.com, Practo, and HiDok are now available, expanding the reach of medical services without geographical constraints. Integration between systems, such as between teleconsultation platforms and pharmacies, requires reliable information system design to ensure prescription accuracy and smooth drug distribution, as is the importance of information system design in drug sales in pharmacies (Malaihollo, 2022). This service makes it easier for patients to seek a second opinion, obtain prescriptions, or get direct referrals to advanced facilities. Not only that, the presence of telemedicine has also proven to be able to optimize patient waiting times in hospitals and the efficiency of the national health system as a whole. However, it should be noted that this progress is not without major challenges that must be anticipated early on so as not to pose further risks to patients' rights (Budiyanti & Herlambang, 2021).

Behind all the convenience and efficiency offered, online-based health services also harbor potential risks. Phenomena such as the emergence of fake doctors, unclear therapeutic contracts, and weak standardization of medical devices are crucial issues that must be considered. Uncertainty in the professional validity of medical personnel or medical devices can lead to legal consequences and the risk of patient injury. Additionally, the rise of cybercrime, phishing, and misuse of personal data threatens the security of patient health information. Therefore, protecting patient rights—in terms of privacy, data security, and service certainty—is an absolute necessity in developing this ecosystem to prevent it from becoming a health hazard for the public who have entrusted their health to telemedicine (Fakih, 2022).

The relationship between patients and medical personnel has also undergone a paradigm shift with the advent of telemedicine. The trust that has been built through direct interaction in consultation rooms must be re-established in a digital environment with minimal face-to-face contact. Patients are now highly dependent on the accuracy of diagnoses and the security of their health data, while medical personnel are also faced with the dilemma of legal protection and professional responsibility. Meanwhile, consumer protection, particularly the protection of patients as service users, is the main foundation in efforts to mitigate losses that may arise from the use

of online health services. Aspects such as informed consent, prescription validity, and digital medical record security must be emphasized in regulatory instruments to create a sense of security and trust for all parties involved.

Amidst all these opportunities and challenges, special attention needs to be given to the legal protection of patients who use online health consultation services. As a country governed by the rule of law, Indonesia's legislature has prepared regulations such as Law No. 8 of 1999 on Consumer Protection as a safeguard for the rights of every individual who uses goods and services—including in the health sector.

The purpose of this study is to comprehensively analyse and understand the legal protection provided to patients as a result of misdiagnosis on online health platforms. This study also aims to examine in depth the forms of legal responsibility that must be fulfilled by doctors to provide medical services through telemedicine, from civil, criminal, and administrative aspects. In addition, this study seeks to examine the strategic role of the government and professional organizations in supervising, guiding, and strengthening the capacity of professional and regulatory institutions to oversee the implementation of telemedicine services. Through this description, it is hoped that this research can contribute to strengthening the legal protection system, increasing the accountability of health workers in online practice, and formulating policies that are adaptive to technological advances in the health sector, so as to ensure the achievement of safe, fair, and quality digital health services for the community.

RESEARCH METHOD

This study uses a normative legal approach as its main foundation, which aims to dissect the issue of vague norms in the regulation of legal protection for patients, particularly users of online health consultation services in Indonesia. Through legal document analysis, this study will examine the applicable rules, regulations, and policies to assess the extent to which existing norms are able to provide legal certainty and protection for the community. This evaluation is essential to identify gaps and ambiguities in legal drafting that could lead to multiple interpretations, thereby impacting the protection of patients' rights in the digital realm.

In addition, a field research approach is applied to complement the normative study. The purpose of this field research is to capture real phenomena in society related to the implementation of telemedicine

services, especially the experiences and perceptions of patients who use these services. This method does not merely capture statistics, but seeks to understand the meaning and social dynamics of the interaction between law and technology in the community. This type of research is also relevant for assessing the effectiveness of a national legal system in responding to public health crises in a responsive and fair manner (Vitrianingsih & Issalillah, 2021). Through structured interviews and direct observation, this study explores the factors that influence the effectiveness of regulations and the social realities faced by both patients and service providers.

To conduct the research, data collection was carried out systematically by integrating literature studies, analysis of primary and secondary legal materials, and empirical data from observations and interviews. Qualitative analysis was used to explore meaning, understand patterns, and interpret various findings comprehensively. This approach allows the research to not only present data, but also produce a critical synthesis that can be used as a reference in the formation of regulations and the development of legal protection concepts for patients in online health consultation services in the future.

RESULTS AND DISCUSSION

Legal Protection for Patients Due to Misdiagnosis on Online Health Platforms

Digital transformation has brought major changes to the world of health. Advances in information technology have changed the landscape of healthcare through the emergence of online health platforms. Telemedicine has several challenges, such as the risk of privacy violations, the distance between doctors and patients, high costs, and the weakening of the doctor-patient relationship. Healthcare professionals need to be aware that these standards of care can increase the potential for misdiagnosis of patients (Gioia & Salducci, 2019). Legal protection in this regard is very important, especially for patients who suffer losses due to misdiagnosis. Legal protection is essentially an effort by the state to provide guarantees of rights, security, and legal certainty in a balanced manner, based on applicable legal principles and humanitarian values in society. In online health services, the implementation of legal protection must take into account developments in digitalization and accommodate the community's need for easy, fast, and safe access to health services, while still prioritizing the protection of patients' rights from potential harm (Indraswari et al., 2023). The synergy between technology and law is key to creating a reliable digital healthcare service system.

Legal protection is the foundation for ensuring the security of digital healthcare services. The legal basis for patient protection on digital health platforms can be found in various laws and regulations, including Law No. 36 of 2009 concerning Health, Law No. 29 of 2004 concerning Medical Practice, and Minister of Health Regulation No. 20 of 2020, which contains the rights of patients and the obligations of health workers in digital consultations. Article 18 paragraph (1) of the Minister of Health Regulation explicitly affirms the right of patients to receive consultation responses, receive expert opinions in accordance with standards, and obtain accurate, clear, accountable, and honest information on the results of consultations. The fulfilment of these rights is a form of state protection to ensure high-standard health services (Jannati, 2022). Strong regulations are key to creating a digital healthcare ecosystem that is patient-oriented.

The ethical and legal responsibilities of medical personnel are becoming increasingly crucial in the era of healthcare digitalization. The obligations attached to telemedicine consultation providers, including the delivery of complete and in-depth medical information, whether in the form of images, videos, or medical texts via electronic media, are also strictly regulated. Medical personnel are required to maintain patient data confidentiality and provide accurate and responsible medical information. This is in accordance with the principle of confidentiality in the medical code of ethics and is regulated in various regulations related to the protection of patient personal data. The existence of a sanction mechanism for violations of obligations has a preventive effect and provides assurance to patients regarding the quality of services they receive on digital platforms (Ernawan, 2022). Compliance with these obligations is the main foundation for building public trust in telemedicine services.

Although regulations have been drafted to protect patients in telemedicine services, their implementation still faces various obstacles. A normative approach reveals the existence of obstacles in the implementation of legal protection, such as the suboptimal mechanism for enforcing rights or protecting patients in cases of misdiagnosis. The COVID-19 pandemic has encouraged the widespread use of telemedicine, prompting the Indonesian government to issue Indonesian Medical Council Regulation No. 74 of 2020. Article 9 of this regulation prohibits medical personnel from, among other things, conducting teleconsultations without going through official health facilities, providing dishonest information, making diagnoses beyond

their competence, and performing invasive procedures through teleconsultations, as a form of protection for patients' rights and safety (Fitriana & Achadi, 2022). Concrete steps are needed to ensure that the regulation is truly effective, so that legal protection for patients is not merely a formality, but can be accessed and its benefits felt.

Legal certainty is an important element in ensuring accountability in digital health services. The issue of the legality of medical personnel in online consultation services becomes even more complicated when medical practices are carried out without cooperation with official health facilities. In some cases, the doctors involved do not necessarily have a Practicing License (SIP) on the application; a Registration Certificate (STR) is sufficient to register. This legal uncertainty can lead to problems in terms of professional accountability and ethical conduct in the event of a medical dispute in the future. The Medical Practice Law mandates legal clarity through the possession of an SIP registered with the health office as an effort to maintain the quality and responsibility of medical service provision (Jannati, 2022). Legal uncertainty increases the risk of ethical and legal violations in telemedicine practice, thus requiring stricter regulations and consistent supervision.

Access to safe and quality health services is a basic right of every citizen. The right to quality and responsible health services is a constitutional mandate and is guaranteed in the context of health service consumer protection. Services provided by unregistered medical personnel or platforms without clear legality violate patients' rights to legal certainty and safety. The state is obliged to supervise, monitor, and ensure patient protection through concrete regulations related to practice licenses and telemedicine operational standards so that high-standard medical practices can be legally guaranteed (Adhalia et al., 2023). With strict oversight and firm regulations, the state can ensure that digital transformation in the health sector remains focused on patient safety and rights.

Professional ethics are the main foundation for maintaining the quality of medical services, including in telemedicine practices. In the implementation of medical practices through online consultations, medical ethics principles as contained in the Indonesian Medical Code of Ethics (KODEKI) and the Doctor's Oath emphasize the importance of maintaining professionalism, integrity, and quality of service. To optimize the use of telemedicine, new standards of behavior and interpersonal communication need to be developed to support the

important functions of medical consultation, such as anamnesis, physical examination, diagnosis, and decision-making (Pappas et al., 2019). High standards must always be maintained, including for establishing diagnoses, which are normatively preceded by medical history taking, physical examination, and supporting tests. In online consultations, which can only be limited to medical history taking and general health education, definitive diagnosis and invasive therapy should not be performed to avoid harm to patients (Putong, 2023). The application of medical ethics that are adaptive to technology is key to ensuring patient safety and trust in digital services.

The use of technology in health services must remain based on the principles of caution and patient safety. Online medical history interviews can indeed provide educational benefits and initial assessments of a patient's health condition. However, their limitations as a definitive diagnostic tool must be acknowledged. Health education through online consultations is part of preventive and promotive measures, but it cannot replace the need for direct physical examination. The Health Law states the importance of promotive efforts as a first step before patients visit health facilities for more comprehensive follow-up if necessary. Telemedicine should be positioned as a complement, not a substitute, in a comprehensive and responsible healthcare system.

The quality of electronic media is a determining factor in the effectiveness of telemedicine services, especially in the diagnosis process. Another aspect that is a significant obstacle in telemedicine practice is the limitation of electronic media to perform physical examinations and complete diagnostic assessments. Features such as image or video transmission can indeed help, but they are prone to technical limitations such as image resolution, lighting, and shooting angles. A doctor's view when using a videophone may differ from that of the naked eye. Image quality, such as color information, is important in determining a patient's health condition. The color of the videophone must be adjusted to match the naked eye. The lack of quality assurance for telemedicine systems can result in potential misdiagnosis (Shimizu et al., 2021). This results in potential misdiagnosis that can cause harm to patients, both materially and non-materially. Therefore, definitive diagnosis and therapy practices should be limited to face-to-face services. By restricting certain medical actions to direct interaction, the risk of errors due to technological limitations can be reduced for the safety of patients.

Online consultations must be based on valid medical records and established therapeutic relationships. Special provisions apply to online consultations for patients who have already had face-to-face consultations. In such cases, doctors have the right and authority to prescribe or provide follow-up therapy based on the results of previous consultations supported by integrated medical data. This shows that legal protection and fulfilment of patient rights in online consultations require clear boundaries and regulations so that they do not become loopholes for malpractice or deviations from medical standards (Fitriana & Achadi, 2022). Online monitoring services can be an efficient solution without compromising the principles of caution and patient safety.

Regulatory certainty is the main foundation in ensuring responsible telemedicine practices. The absence of concrete, detailed, and specific regulations regarding the limitations of telemedicine practices often creates legal uncertainty for both medical personnel and patients. The various regulations currently in place are still very general and do not regulate the limits of authority, responsibilities, and minimum standards for online doctor consultation services. Competency standards, codes of ethics, and official legality are important instruments that need to be strengthened in order to reduce potential violations of patient rights and minimize losses due to misdiagnosis (Ernawan, 2022). Telemedicine risks becoming a grey area. Legal uncertainty makes telemedicine prone to becoming a grey area that is detrimental to many parties, making regulatory reform an urgent necessity in the era of digital health services.

Digital transformation in the health sector demands an adaptive and progressive legal response. There is a growing urgency to establish strict and comprehensive regulations to address advances in health technology in the digital era. The state, through the relevant authorities, needs to develop new legal instruments or strengthen existing regulations so that the entire process of online healthcare services, from the registration of medical personnel and data security systems to complaint handling and dispute resolution mechanisms, can be optimally accommodated. This is not only to provide protection to patients, but also to create an atmosphere of trust in digital healthcare services among the public. Indonesia's digital healthcare system can develop sustainably without neglecting the aspects of safety and fairness for all parties.

Legal protection in digital healthcare services reflects the state's commitment to fulfilling human

rights. Ultimately, legal protection for patients against misdiagnosis on online healthcare platforms is a barometer of the state's success in guaranteeing human rights in the field of healthcare. Comprehensive law enforcement, consistent supervision, and education for all parties on their rights and obligations in online healthcare consultations are key to creating a safe and dignified digital healthcare system. Going forward, cross-sector collaboration between the government, health professionals, academics, platform providers, and civil society is essential to ensure that legal protection for patients, particularly against the risk of misdiagnosis, can be effectively realized. Through strong synergy and shared commitment, Indonesia's digital health system can develop in an inclusive, equitable, and patient-safety-oriented manner.

The Legal Responsibility of Doctors in Telemedicine Services

Responsibility is a key pillar for ensuring fairness and accountability. Responsibility is a fundamental concept in law, whereby every individual who performs an action has an obligation to bear all the consequences of their actions. According to the law, responsibility is defined as the legal consequence of freedom of action associated with moral and professional ethical aspects. In telemedicine services, the responsibilities of doctors are comprehensively regulated in various laws and regulations in Indonesia. These legal responsibilities can take the form of civil, criminal, and administrative liability, depending on the nature of the violation or negligence. With technological developments, the form of doctors' legal responsibility has also been adjusted to be relevant to digital-based healthcare practices (Ernawan, 2022). The affirmation of legal responsibility in telemedicine practice is an absolute requirement for maintaining professionalism and protecting patients' rights on an ongoing basis.

The aspect of legal responsibility is a crucial element in ensuring justice for patients in telemedicine services. The civil legal responsibility of doctors in telemedicine services is based on two main principles, namely breach of contract (contractual liability) and unlawful acts (*onrechtmatige daad*). The principle of breach of contract is stipulated in Article 1239 of the Civil Code, which states that a party that fails to fulfil its obligations under an agreement can be sued for damages. Meanwhile, Article 1365 of the Civil Code states that any unlawful act that causes harm to another person must be compensated by the perpetrator. In telemedicine services, doctors may be sued if they

fail to perform their duties professionally, either based on a contract or applicable legal principles (Jannati, 2022). A proper understanding of these legal liability bases enables more effective protection of patient rights in the digital health ecosystem.

The enforcement of civil liability in telemedicine is an important instrument for ensuring justice for patients. The importance of comprehensive health aspects is also emphasised in other medical fields, where there are complex interconnections between local health, such as periodontal health, and the development of systemic diseases in chronic conditions (Issalillah, 2022). Civil lawsuits related to malpractice or misdiagnosis in telemedicine services do not necessarily have to be based on an explicit agreement; it is sufficient that there is actual harm resulting from the doctor's unlawful actions. To prove a claim of unlawful acts as regulated in Article 1365 of the Civil Code, four conditions must be met, namely the existence of an unlawful act, the existence of negligence, the existence of harm to the patient, and the existence of a causal relationship between the negligence and the harm to the patient. The existence of these conditions emphasizes the importance of caution and compliance with professional standards in online health services. Both patients and medical personnel can be more aware of their limits and responsibilities in ever-evolving digital interactions.

Justice in digital health services demands full accountability from medical personnel for their professional actions. The responsibility of doctors in telemedicine becomes increasingly relevant when patients suffer losses due to the negligence of doctors in providing services. Legal provisions position patients as service recipients who have the right to file claims for compensation if there is a violation of their rights to safe and quality medical services. In the event that a doctor is proven to be negligent or fails to fulfil their obligations, the doctor must take full responsibility, including paying compensation for the losses suffered by the patient, in accordance with the principles of justice and civil liability in Indonesian law. Through strict enforcement of responsibility, telemedicine can develop as a service that is not only innovative but also upholds patient rights and safety.

Criminal liability in telemedicine practice is an important instrument for enforcing discipline and legal justice. In addition to civil aspects, doctors' legal responsibility in telemedicine services can also stem from criminal law. The principle of "no crime without fault" is a fundamental principle in the Indonesian criminal law system. Article 2 of the Criminal Code stipulates that anyone who commits a criminal act within Indonesian jurisdiction is subject to criminal sanctions. Although criminal law recognizes justifiable and exculpatory

grounds in healthcare services, the application of these grounds must still be based on the judge's consideration in each case. If a doctor acts outside professional standards or with gross negligence, they may still be subject to criminal sanctions in accordance with the provisions of the Criminal Code (Jannati, 2022). The criminal aspect of telemedicine serves as a reminder that innovations in healthcare services must still operate within the corridors of law and professional ethics.

Patient data security is an important element in maintaining the integrity of digital healthcare services. The importance of protecting patient data in telemedicine is also closely related to the aspect of criminal liability. Digital evidence, such as electronic medical records, can be used as key evidence in legal proceedings. Therefore, expertise in IT forensics is required to ensure the accurate management and analysis of digital evidence. According to Ernawan (2022), violations of patient data security and confidentiality not only have civil consequences but also criminal ones, given the relevance of the Electronic Information and Transactions Law (EIT Law). Strengthening digital security systems and improving forensic competence makes legal protection of patient data more effective and sustainable.

Justice in legal liability requires an objective assessment of the source of errors in telemedicine services. The liability borne by doctors in telemedicine services can be excluded or narrowed if it is proven that the error did not originate from the medical practitioner, but was due to force majeure or user error. Proving force majeure or user error requires a legal audit of the electronic systems and technical aspects of telemedicine services. Thus, the principle of prudence must be internalized from system design to the widespread use of health applications (Fitriana & Achadi, 2022). Through a proportional and technology-based legal approach, telemedicine systems can provide fair legal protection for all parties without neglecting their technical complexity.

The resolution of disputes in telemedicine services requires an adaptive legal approach that is oriented towards patient protection. In terms of dispute resolution, the parties may choose a court, arbitration, or alternative dispute resolution (ADR) forum in accordance with the provisions of the agreement or international civil law principles if the case is cross-border in nature. However, in practice, the interests of patients as service recipients must be the top priority in choosing a dispute resolution forum. The applicable legal choice should be based on the patient's domicile or place of residence, unless otherwise specified in the agreement between the patient and the telemedicine service provider, while still considering the principle of fairness (Nasution &

Ibrahim, 2023). By placing the interests of patients at the center of consideration, the dispute resolution system can reflect substantive justice in the era of digitalization of health services.

The distribution of responsibility in telemedicine practice must consider the principles of proportionality and fairness. The division of liability in cases of telemedicine malpractice is based on two main aspects, namely the degree of fault and the amount of contribution to the payment of services. If a specialist doctor gives instructions but an error occurs on the part of the implementing doctor, the burden of responsibility can be adjusted according to the degree of fault of each party. However, doctors who receive higher payments are logically required to bear greater responsibility in the event of patient violations or losses (Arfah & Puspitosari, 2023). The accountability system in telemedicine can encourage more responsible professional collaboration that is oriented towards patient safety.

Legal protection in the digital space requires regulations that can reach across jurisdictional boundaries. Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE) provides a strong basis for prosecuting perpetrators of legal violations, including doctors, who commit unlawful acts through digital media, both inside and outside Indonesia, if it affects national interests. This protects Indonesian patients from losses resulting from medical actions performed by professionals outside the jurisdiction but with legal implications in Indonesia. The ITE Law plays a strategic role in strengthening the legal position of patients in the era of telemedicine.

Digital regulations must be able to cover cross-border violations. The opening sentence highlights the importance of cross-border regulations, while the closing sentence emphasizes the role of the ITE Law in expanding the scope of legal protection. I can help you compile an overall conclusion or combine all the paragraphs into a single coherent narrative if you are writing a paper or article. The ITE Law expands the legal protection of patients in the digital healthcare ecosystem.

The strength of sectoral regulations determines the direction of legal protection in telemedicine. At the sectoral regulatory level, several regulations such as Minister of Health Regulation No. 2052 of 2011, Regulation No. 20 of 2019, and Indonesian Medical Council Regulation No. 74 of 2020 regulate telemedicine practices, but do not specifically regulate criminal liability in telemedicine practices. This poses a particular challenge in upholding justice for patients who have suffered losses and need legal

protection (Jannati, 2022). Without explicit regulations, this legal loophole has the potential to weaken the position of patients in seeking justice.

A clear legal basis strengthens the accountability of doctors in telemedicine practice. The legal responsibility of doctors in telemedicine services is explicitly found in Law No. 29 of 2004 concerning Medical Practice and the revised ITE Law. Criminal sanctions for doctors in telemedicine services can be imposed if there are elements of negligence, violation of professional standards, or violation of laws that have a significant impact on patients, as stipulated in several key articles of the Medical Practice Law. Protection of patients and enforcement of professional ethics can be carried out more effectively in the digital health service ecosystem.

Best standards are the main foundation in building a secure telemedicine system. The principle of best practices in the management and use of telemedicine systems is urgent. These best practices include compliance with medical procedures, data security, transparency in services, and educating patients about their rights and responsibilities in digital services. Guidelines for the use of telemedicine must be implemented by healthcare providers to protect patients and doctors from malpractice and legal issues. The government must legalize the use of telemedicine by passing laws for the benefit of its users (Yassa et al., 2022). With the application of these principles, it is hoped that the quality of telemedicine services in Indonesia can be professional, accountable, and guarantee maximum legal protection for patients. Telemedicine can grow as a professional and equitable digital health service.

The Role of Government and Professional Organizations in Telemedicine Supervision

In response to digital transformation in the health sector, telemedicine innovation requires the state to play an active role in shaping a sustainable service ecosystem. The development of telemedicine as an innovation in healthcare services has brought significant changes to the global healthcare system, including in Indonesia. Globalization has led to a reconfiguration of healthcare and healing systems, where traditional and modern medical practices, including telemedicine, need to be regulated wisely to maintain their benefits for various cultures (Khayru 2022). The role of the government is fundamental as the main regulator in charge of drafting policies, formulating standards, and overseeing the implementation of information technology-based healthcare services. To ensure the continuity of healthcare services, the government has

issued telemedicine practice guidelines so that the provision of healthcare services to the community can take place effectively and sustainably (Mahajan et al., 2020). The government, through the Ministry of Health and related institutions, is responsible for issuing adaptive regulations, such as the Indonesian Minister of Health Regulation and telemedicine implementation guidelines, which provide a legal basis and certainty in the practice of online medical services (Ardyles & Ilyas, 2022). Through responsive regulations, the government can ensure that digital transformation in the health sector is safe, focused, and inclusive, thereby providing more equitable and sustainable benefits for the entire community.

Supervision without guidance will only result in fragile and difficult-to-implement regulations. Effective supervision of telemedicine implementation not only requires regulations, but also continuous guidance for all stakeholders. The government has an obligation to conduct socialization, education, and tiered training for health workers, facility managers, and health information technology operators. Through this guidance, understanding of standard operating procedures, professional codes of ethics, and the adoption of information technology in accordance with standards can be ensured to reduce the risk of malpractice or misuse of medical data (Kuntardjo, 2020). Supervision accompanied by guidance can systematically and continuously improve the quality of telemedicine services, thereby ensuring safe and trustworthy service standards for the public.

The professionalism of doctors in telemedicine depends on the strength of professional organizations. Professional organizations, such as the Indonesian Medical Association (IDI) and the Indonesian Medical Disciplinary Council (MKDKI), play a central role in guiding their members to always comply with the code of ethics and professional standards of medicine in telemedicine practice. These institutions act as guardians of doctors' morals and professionalism, while also providing internal oversight mechanisms, ranging from certification, competency standard development, to disciplinary and ethical audit systems. Professional guidance and oversight mechanisms must be implemented consistently and accountably, both through direct education and the renewal of digital training curricula for their members (Prawiroharjo et al., 2019). With the active role of professional organizations, the quality and integrity of telemedicine services can be continuously maintained, thereby providing certainty and a sense of security for the community.

Amidst the rapid development of digital health services, institutional synergy is key in addressing the complexity of telemedicine supervision. Collaboration between the government and professional organizations is needed to develop supervisory instruments that are responsive to the dynamics of health technology. This collaboration includes the formulation of technical operational rules, data protection protocols, and medical risk management that is adaptive to changing situations. The experiences of several countries show that the success of telemedicine service supervision is greatly influenced by inter-institutional synergy, meta-analysis of medical incidents, and periodic evaluation of policy implementation and digital health standards (Sulaiman et al., 2022). Through solid collaboration, telemedicine supervision can become more responsive, accurate, and patient safety-oriented.

Digital transformation in health supervision is an urgent need in the era of telemedicine. In line with the increasing demand for remote health services, the government is also expected to develop the digital capacity of regulators and supervisory agencies. In this transformation, the potential of artificial intelligence provides new power to improve data analysis, risk prediction, and the efficiency of overall health system supervision (Khayru, 2022). Digitalization in supervision is carried out through the use of national health information systems, big data analytics, and online incident reporting applications. Through this capacity building, the government is able to conduct real-time monitoring, early detection of potential violations, and provide rapid responses to various complaints or reports submitted through digital channels (Pandhika & Fakhri, 2021). The existence of an adaptive digital surveillance system ensures that the quality and accountability of telemedicine services can be optimally maintained, while also ensuring that services are safe and reliable.

Professional ethics are a key pillar in maintaining public trust in telemedicine services. Professional organizations have the authority to evaluate and guide the behavior of their members in cases of suspected ethical or disciplinary violations in telemedicine. This process is carried out through internal investigation mechanisms, sanctions, and recommendations to the government or regulators regarding the revocation of practice licenses if serious violations are proven. Strengthening the ethical audit system, structured reporting, and transparency of violation cases are important aspects for realizing medical professional governance based

on integrity and accountability (Dharma, 2020). With consistent ethical supervision, public trust in digital health services can be maintained and strengthened as the basis for providing safe and quality services.

Data protection is a key foundation in maintaining the legitimacy of telemedicine services. Telemedicine oversight must also keep pace with developments in personal data protection and cybersecurity laws. The government and professional organizations must participate in fostering patient data protection governance, including enforcing information security standards on digital platforms. These measures are crucial to prevent data leaks and misuse of medical information, as well as to maintain public trust in the growing telemedicine services. Solid data governance will ensure that trust and security in digital health services are maintained, so that services can develop responsibly and sustainably.

Strong oversight is the foundation for the success of an equitable digital health system. The overall role of the government and professional organizations in telemedicine oversight is an important part of the digital health system, which prioritizes the principles of prudence, transparency, and fairness. By strengthening oversight and guidance, Indonesia can ensure that the digital health transformation provides optimal benefits for the community, maintains the dignity of the health profession, and realizes medical services that are of high quality, safe, and legally and ethically accountable. Continuous synergy can make telemedicine oversight a strategic tool for ensuring service quality and maintaining public trust in technology-based healthcare.

CONCLUSION

The transformation of medical services through online health consultation platforms has provided easier and more flexible access to the public, but it has also brought new challenges in the areas of law, ethics, and supervision. Legal protection for patients against misdiagnosis is highly dependent on regulatory certainty, the implementation of professional ethical standards, and active supervision by regulators and professional organizations. The legal responsibility of doctors in telemedicine practice must be enforced proportionally, from civil, criminal, and administrative aspects, so that patient safety and welfare are maintained. Regulatory accuracy, improvement in the quality of doctors' services, and strengthening of supervision are important foundations for the telemedicine system to run with

integrity, provide a sense of security, and realize justice in digital-based health services.

The presence of online health consultation platforms requires all stakeholders to adapt to new standards in service, reporting, and patient data protection. The major implication lies in the importance of collaboration between policy makers, professional organizations, and digital health industry players to formulate clear regulations, develop an integrated monitoring system, and establish high-standard data governance. These three elements complement each other to promote more reliable digital medical services, while also encouraging accountability and professionalism among healthcare workers amid the development of information technology.

It is recommended that the government accelerate the harmonization and updating of regulations on digital-based healthcare services and reinforce the legal accountability of doctors. Professional organizations are asked to strengthen training systems, audits, and enforcement of codes of ethics relevant to technological developments. In addition, comprehensive education for patients and service providers about rights, obligations, and potential risks in online services needs to be intensified, accompanied by investment in adequate information security infrastructure to maintain public trust and rights.

REFERENCES

- Adhalia, C. K., Fakhri, M., & Putri, R. W. (2023). Medical Authority in Indonesian Clinical: An App-Based *Telemedicine* Program. *Malahayati International Journal of Nursing and Health Science*, 6(3), 175-182.
- Aisyah, N., & Issalillah, F. (2021). The Relationship between Social Media Use and Mental Healthin Users with FoMO. *Journal of Social Science Studies*, 1(2), 33-38.
- Ardiansah, A. (2020). Responsibility of Public Health Service Based on the Constitution of Indonesia. *Jurnal Diponegoro Law Review*, 5(1), 51-66.
- Ardyles, A., & Ilyas, Y. (2022). Analisis Pengaruh Pandemi COVID-19 Sebagai Katalis dalam Perkembangan *Telemedicine* di Indonesia: Sebuah Narrative Review. *Jurnal Kesehatan Masyarakat*, 10(1), 31-37.
- Arfah, N. A., & Puspitosari, H. (2023). Perlindungan Hukum Terhadap Data Pasien *Telemedicine* dalam Menerima Pelayanan Medis Berbasis Online. *Jurnal Syntax Fusion*, 3(7), 661-671.
- Bao, C. C., & Bihn, D. (2021). Effectiveness of Digital Health Services: Challenges and

- Constraints for Society. *Journal of Asian Multicultural Research for Medical and Health Science Study*, 2(1), 69-75.
- Booth, A. (2023). Health Challenges in Indonesia. *Journal of Community Medicine and Health Solutions*, 4, 7-9.
- Budiyanti, R. T., & Herlambang, P. M. (2021). Perlindungan Hukum Pasien dalam Layanan Konsultasi Kesehatan Online. *Jurnal Hukum Kesehatan Indonesia*, 1(1), 1-10.
- Dharma, A. A. G. S. S. (2020). Pengaturan Pelayanan Kesehatan yang di Lakukan oleh Dokter melalui *Telemedicine*. *Jurnal Magister Hukum Udayana*, 9(3), 621-631.
- Erlyn, P., Hidayat, B., Cahyo, A., & Saksono, H. (2022). Investment in Human Resources to Increase Achievement Levels of Sustainable Development. *Jurnal Bina Praja*, 14(1), 135-146.
- Ernawan, D. S. (2022). Ernawan, D. S. (2022). Tanggung Gugat Dokter Akibat Kesalahan Diagnosa Terhadap Pasien dalam Layanan Kesehatan *Telemedicine*. *Jurist-Diction*, 5(5), 1711-1724.
- Fakih, M. (2022). *Telemedicine* in Indonesia During the Covid-19 Pandemic: Patients Privacy Rights Protection Overview. *Fiat Justisia: Jurnal Ilmu Hukum*, 16 (1), 83-102.
- Fitriana, M., & Achadi, A. (2022). Analysis of the Need for Legal Protection for Doctors in Teleconsultation Services Towards the Covid-19 Endemic in Indonesia. *Journal of Indonesian Health Policy and Administration*, 7(3), 256-261.
- Gioia, G., & Salducci, M. (2019). Medical and Legal Aspects of Telemedicine in Ophthalmology. *Romanian journal of ophthalmology*, 63(3), 197-207.
- Herisasono, A., Hardyansah, R., Nuraini, R., & Vitrianingsih, Y. (2021). Improving the Effectiveness of Legal Instruments in Addressing Environmental Pollution to Protect Public Health. *Journal of Social Science Studies*, 1(1), 245-250.
- Husain, M. J. (2010). Contribution of Health to Economic Development: A Survey and Overview. *Economics: The Open-Access, Open-Assessment e-Journal*, 40, 1-40.
- Indonesia. (2004). *Undang-Undang Nomor 29 Tahun 2004 tentang Praktik Kedokteran*. Lembaran Negara Republik Indonesia Tahun 2004 Nomor 116, Tambahan Lembaran Negara Nomor 4431. Kementerian Sekretariat Negara. Jakarta.
- Indonesia. (2009). *Undang-Undang Nomor 36 Tahun 2009 tentang Kesehatan*. Lembaran Negara Republik Indonesia Tahun 2009 Nomor 144, Tambahan Lembaran Negara Nomor 5063. Kementerian Sekretariat Negara. Jakarta.
- Indraswari, S. P., Sutrisno, E., Maulida, I., & Karmenita, K. (2023). Therapeutic Transactions for Medical Services through Online Clinics on a Legal Perspective. *Devotion: Journal of Research and Community Service*, 4(9), 1786-1793.
- Irawan, A. D. (2022). Irawan, A. D. (2022). Gambaran Analisis Pembangunan Kesehatan di Indonesia pada Masa Pandemi Covid-19. *Jurnal Kesehatan Tambusai*, 3(3), 369-373.
- Issalillah, F. (2022). Exploring the Interconnection Between Periodontal Health and Systemic Disease Progression in Chronic Conditions. *Journal of Social Science Studies*, 2(1), 173-178.
- Jannati, A. S. R. (2022). Perlindungan Hukum Bagi Pasien dalam Pelayanan *Telemedicine* di Indonesia. *Jurnal Juristic*, 3(2), 210-224.
- Khayru, R. K. (2022). Globalization and the Reconfiguration of Traditional Medicine Across Cultures and Healing Systems. *Journal of Social Science Studies*, 2(1), 253-258.
- Khayru, R. K. (2022). Transforming Healthcare: The Power of Artificial Intelligence. *Bulletin of Science, Technology and Society*, 1(3), 15-19.
- Khayru, R.K. & F. Issalillah. (2022). Service Quality and Patient Satisfaction of Public Health Care. *International Journal of Service Science, Management, Engineering, and Technology*, 1(1), 20-23.
- Khayru, R.K. & F. Issalillah. (2022). The Equal Distribution of Access to Health Services Through Telemedicine: Applications and Challenges. *International Journal of Service Science, Management, Engineering, and Technology*, 2(3), 24-27.
- Kuntardjo, C. (2020). 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), 1-14.
- Mahajan, V., Singh, T., & Azad, C. (2020). Using Telemedicine during the COVID-19 Pandemic. *Indian pediatrics*, 57(7), 658-661.
- Malaihollo, E. B. E. A. (2022). Medicine Sales Information System Design at Pharmacies. *International Journal of Service Science, Management, Engineering, and Technology*, 1(3), 14-19.
- Muhaji, I. (2021). The Indonesian Government's Efforts to Improve Health Services and Facilities in Rural Areas Related to Health Laws. *Journal La Sociale*, 2(1), 48-52.
- Nalin, C. (2021). Comprehensive Legal and Policy

- Approaches to Reproductive Health and Women's Rights in Access Equity. *Journal of Social Science Studies*, 1(2), 285-290.
- Nasution, F. U., & Ibrahim, A. L. (2023). Legal Formulation of *Telemedicine* Implementation as the Prevention of Malpractice Risk for Patients. *Indonesian Journal of Advocacy and Legal Services*.
- Pandhika, R., & Fakhri, 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.
- Pappas, Y., Vseteckova, J., Mastellos, N., Greenfield, G., & Randhawa, G. (2019). Diagnosis and Decision-Making in *Telemedicine*. *Journal of patient experience*, 6(4), 296-304.
- Prawiroharjo, P., Pratama, P., & Librianty, N. (2019). Layanan Telemedis di Indonesia: Keniscayaan, Risiko, dan Batasan Etika. *Jurnal Etika Kedokteran Indonesia*, 3(1), 1-9.
- Putong, D. D. (2023). Tinjauan Perlindungan Hukum Terhadap Pelaku Layanan Kesehatan secara Online. *Jurnal Hukum to-ra: Hukum Untuk Mengatur dan Melindungi Masyarakat*, 9(1), 95-105.
- Raman, A. V., & Björkman, J. W. (2015). *Public-Private Partnerships in Healthcare*. In the *Palgrave International Handbook of Healthcare Policy and Governance*. Palgrave Macmillan, London.
- Sarif, N. H. B., & Issalillah, F. (2022). Healthcare Transformation Through Medical Technology: Opportunities, Challenges, and Implementation Strategies. *Bulletin of Science, Technology and Society*, 1(3), 53-60.
- Shimizu, H., Tanikawa, T., Mizuguchi, H., Tani, Y., & Ogasawara, K. (2021). Analysis of Factors Inhibiting the Dissemination of *Telemedicine* in Japan: Using the Interpretive Structural Modeling. *Telemedicine and e-Health*, 27(5), 575-582.
- Sulaiman, E., Handayani, T., & Mulyana, A. (2021). Juridical Study of *Telemedicine* Consulting Services in Indonesia. *SOEPRA Jurnal Hukum Kesehatan*, 7(2), 275-291.
- Vitrianingsih, Y., & Issalillah, F. (2021). The National Legal System's Effectiveness in Handling Public Health Crises Responsively and Fairly. *Journal of Social Science Studies*, 1(2), 203-208.
- Warin, A. K. (2021). The Relationship Between Social Factors and Individual Well-Being: An Analysis of Mental and Physical Health in Social Dynamics. *Journal of Social Science Studies*, 1(1), 2781-286.
- Yassa, H. A., Hussein, M. A. A., Makhlof, H. A., Makhlof, N. A., Youssef, H. M. S., Sotohy, R. S., & Essa, A. A. (2022). Pros and Cons of *Telemedicine* in Diagnosis and Management: A Cross-Sectional Survey. *Electronic Journal of General Medicine*, 19(5), 1-6.

*Nurhefi, N., Y. Vitrianingsih, & F. Issalillah. (2023). Analysis of Fulfillment of Patient Legal Protection, Doctor Accountability, and Supervision Mechanisms for the Risk of Misdiagnosis in Digital Health Consultation *Journal of Social Science Studies* 3(2), 273 - 284.