

A Sociological Analysis of Telemedicine, Patients, and Healthcare Professionals' Responsibilities in the Digital Health Era

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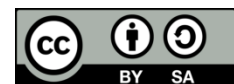
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ABSTRACT

Development of digital technology in healthcare driven the emergence of telemedicine practices as an alternative for remote healthcare services. However, this progress presents complex legal and social challenges, particularly concerning the protection of patient rights and the responsibilities of healthcare providers. This article examines the urgency of regulating telemedicine within the context of patient law and the responsibilities of healthcare providers through the lens of sociology. The method used is normative juridical. According to Law Number 17 of 2023 concerning technology-based healthcare services, this law provides a foundation for telemedicine and the information technology in healthcare services, establishing guidelines for the practice of remote healthcare services. Law Number 17 of 2023 aims to address increasingly complex health challenges in Indonesia with a more modern and technology-based approach. This aligns with the evolving needs of society, especially following the experiences of the COVID-19 pandemic. Therefore, there is a need for adaptive regulatory updates and increased digital literacy among the public to support a fair and sustainable healthcare system.

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1. Introduction

The digital era has brought significant changes to the healthcare system. Telemedicine is one innovation that allows consultations and treatments to be conducted without face-to-face contact between doctors and patients. In Indonesia, telemedicine is included in Law Number 17 of 2023 concerning Health, which emphasizes the importance of managing patient medical records, including regulations regarding the storage and accessibility of patient data obtained through telemedicine services. The Development of Telemedicine The prevalence of telemedicine use has increased significantly, especially during the COVID-19 pandemic, with more than 80% of healthcare facilities in several regions starting to offer remote consultation services. According to a report from the Ministry of Health, at least 54% of

Indonesians have used telemedicine services. Indonesia's vast territory of more than 17,000 islands poses challenges in the distribution of healthcare workers, especially in remote areas. Telemedicine offers a solution to overcome this geographical constraint. Data shows that more than 90 million people live in areas difficult to reach by conventional healthcare services. Law Number 17 of 2023 concerning Health regulates telemedicine, emphasizing the management of medical records and the protection of patient rights, although its implementation still faces challenges. Legal issues of accountability and responsibility remain unclear regarding the responsibilities of healthcare workers in the context of digital interactions. Who is responsible for errors in diagnoses provided through telemedicine platforms? Compliance with regulations: Despite provisions in the Health Law, many telemedicine providers have not fully complied with existing regulations, particularly those related to patient data protection, including ethics, confidentiality, and privacy. The vulnerability of electronically managed patient medical records poses risks. The collection, storage, and accessibility of medical records require stricter protection. Informed Consent: The process of obtaining informed consent from patients prior to telemedicine services is often inadequately implemented. Social Issues Service accessibility: While telemedicine improves access to healthcare, a digital divide remains. Not everyone has access to and knowledge of the technology and internet networks necessary to use these services. Digital literacy the level of public understanding of information technology and telemedicine vary, which can be a barrier to maximizing the benefits of digital healthcare. Legal and normative interactions require an understanding of how existing legal norms interact with new social norms as telemedicine usage increases. This includes how communities and healthcare professionals adapt to new ways of delivering and receiving healthcare.

The development of information and communication technology has significantly transformed healthcare services. One particularly prominent innovation is remote services, or telemedicine. This service is increasingly important, particularly due to the vast geographic context and challenges of healthcare professional distribution. However, various issues have also arisen, including the legal mechanisms governing telemedicine, how patients' rights are protected, and the responsibilities of healthcare professionals in these digital interactions. From a sociological perspective, it is crucial to understand how legal norms, healthcare institutions, societal actors, and technology interact in the context of telemedicine.

Taking into account the various challenges and gaps in privacy protection patients in the digital era, this study aims to contribute to the development of health law policy in Indonesia. Through a legal analysis of patient privacy protection in the context of telemedicine, patient law, and the responsibilities of healthcare professionals in the digital era, it is hoped that steps necessary to strengthen regulations and increase public awareness regarding their rights to personal data protection can be identified.

Normative Qualitative Research Methods	A research approach that focuses on qualitative analysis of legal norms through interpretation of regulations, policies and legal documents.
Data Collection through Literature Study	Data was collected by conducting a literature review.
Primary Data Sources	Legislation, ministerial decisions and government policies which form the main legal basis.
Secondary Data Sources	Books, law journals, previous research, and academic articles as supporting materials for analysis.
Qualitative Data Analysis	Using deductive and interpretive methods to examine the relationship between legal norms and practices in the field.
The Relationship between Legal Norms, Social Structure, and Telemedicine Practices	Analyzing the relationship between regulations, social dynamics, and the implementation of telemedicine in society.
Identifying the Gap between the Ideality of Law (das sollen) and the Reality of the Implementation of Law (das sein)	Finding the difference between the expected legal norms and the reality of their implementation in the field.
Recommendations for Legal Updates that are Responsive and Contextual to Developments in Information Technology	Develop recommendations for legal updates to be more adaptive to changes in information technology and community needs.

2. Research Methods

This study used a normative qualitative method. Data were obtained through a literature review of laws and regulations, scientific journals, and other secondary legal sources. The analysis was conducted descriptively and analytically to understand the relationship between legal norms, social structures, and telemedicine practices in Indonesia.

This research is qualitative descriptive, with data collected through library research. Primary data sources come from laws and regulations, ministerial decrees, and government policies related to telemedicine, while secondary sources are obtained from books, legal journals, previous research results, and relevant academic articles.

Data analysis was conducted qualitatively using deductive and interpretive methods, interpreting applicable legal norms and linking them to sociological theories of law and social conditions in the digital health era. This approach enabled researchers to identify the gap between the ideal of law (das sollen) and the reality of its application (das sein), as well as to provide recommendations for legal reform that are responsive and contextual to developments in information technology.

3. Result and Discussion

Telemedicine is highly urgent in expanding access to healthcare services, especially in remote areas. However, from a legal perspective, issues arise regarding the validity of telemedicine practices, patient data protection, and physician accountability. From a sociological perspective, the law must be responsive to rapid social change. Regulatory delays can lead to legal uncertainty and undermine public trust in digital healthcare systems. Therefore, policymakers need to align legal norms with social realities and strengthen the social responsibility of healthcare workers and service providers.

Indonesia has developed several regulations to protect patient privacy, including Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE). This law aims to provide legal certainty for electronic transactions and protect service users from information misuse. One important aspect of this law is the regulation of personal data, which requires the consent of the data owner before collecting and using that data. However, with technological advancements, new challenges have emerged, particularly in the context of digital health applications, which are increasingly used by the public.

The Urgency of Telemedicine in the Digital Health Era

Telemedicine is a technology-based healthcare innovation that enables healthcare professionals to provide medical services remotely. The urgency of telemedicine in Indonesia can be seen from two perspectives: as a means of equalizing access to healthcare services and as an instrument for increasing efficiency in public services in the healthcare sector.

According to data from the Indonesian Ministry of Health, more than 60% of Indonesia still experiences limited access to specialist medical personnel. In this context, telemedicine is an effective solution, enabling the rapid and affordable transfer of medical knowledge and services. Furthermore, the COVID-19 pandemic has accelerated the adoption of telemedicine as a strategic necessity to ensure the continuity of healthcare services without posing a risk of transmission.

However, the urgency of telemedicine extends beyond technology to encompass social, ethical, and legal aspects. In Roscoe Pound's view, law must be a tool of social engineering that guides societal change toward well-being. Therefore, telemedicine regulation must be directed not only at regulating behavior but also at encouraging a more inclusive and equitable transformation of the health system.

Furthermore, telemedicine also presents new challenges for the legal system, such as patient data protection, cybersecurity standards, and professional responsibility. Therefore, the urgency of telemedicine regulation lies in striking a balance between innovation and legal protection.

Patient Law and Rights Protection in Telemedicine Services

Patient law is a branch of health law that focuses on the rights of patients as legal subjects in medical relationships. In the context of telemedicine, patient rights include the right to

data privacy, the right to accurate telemedicine information, the right to informed consent, and the right to receive safe and quality care.

According to Satjipto Rahardjo's progressive legal theory, law should not be confined to regulatory texts but rather should be embedded in society and serve human interests. Therefore, legal protection for telemedicine patients is insufficient if it relies solely on normative aspects; it must also uphold humanitarian values and social justice.

Furthermore, the principle of informed consent in telemedicine requires a new form, namely electronic consent, which must be explicitly regulated to be legally binding. Patients also have the right to know the security risks of the personal data they share through digital applications or platforms. Therefore, legal protection for patients must be accompanied by regulatory updates that align with the Personal Data Protection Law (Law No. 17 of 2023).

Responsibilities of Healthcare Workers in Telemedicine

The responsibilities of healthcare professionals in telemedicine practice include legal, ethical, and professional responsibilities. In healthcare law, healthcare professionals have three main forms of responsibility: administrative, civil, and criminal.

First, administrative responsibilities relate to practice permits, professional qualifications, and compliance with regulations governing the provision of telemedicine services. Physicians who provide services without an electronic practice permit may be subject to administrative sanctions under Article 75 of Law Number 29 of 2004 concerning Medical Practice.

Second, civil liability arises when a patient suffers losses due to negligence (malpractice) or a misdiagnosis made through a telemedicine system. In this case, the patient can sue for damages based on the principle of unlawful acts as stipulated in Article 1365 of the Civil Code. However, providing evidence in a digital context is often challenging due to the limitations of electronic evidence and differing interpretations of professional responsibility.

Third, criminal liability can arise if health workers commit acts that violate criminal law, such as revealing a patient's medical secrets without permission (Article 322 of the Criminal Code) or practicing medicine without a valid license.

Sociologically, according to Lawrence M. Friedman, the effectiveness of law depends heavily on three elements: structure, substance, and legal culture. In the context of telemedicine, the legal substance has begun to take shape through regulations, but the structure (oversight bodies) and legal culture (public awareness) are not yet optimal. Therefore, the responsibility of healthcare workers in telemedicine depends not only on written regulations but also on ethical awareness and a digital legal culture that must be developed collectively.

A Sociological Analysis of Telemedicine Practices in Indonesia

The sociological approach to law positions law as part of a social system that cannot be separated from societal dynamics. In the context of telemedicine, the relationship between

law and society is clearly evident in the way individuals and institutions adapt to changes in digital technology in healthcare.

Satjipto Rahardjo stated that good law is law that serves people, not people who serve the law. Therefore, telemedicine regulations must be oriented towards social welfare and the public interest, not simply enforcing formal norms. This humanistic legal approach encourages the concept of responsive law—namely, law that is open to public aspirations and technological developments.

From a sociological perspective, telemedicine practice in Indonesia faces several major challenges. First, low digital legal awareness among both healthcare professionals and patients, resulting in weak protection of legal rights in online medical transactions. Second, disparities in digital infrastructure in rural and remote areas hinder the implementation of the principle of distributive justice. Third, regulatory uncertainty creates ambiguity regarding legal responsibility in the event of disputes between patients and healthcare professionals.

To realize an ideal telemedicine legal system, an interdisciplinary approach combining law, technology, and sociology is required. The government and legal institutions need to strengthen the legal structure by establishing a dedicated digital health service oversight body. Furthermore, a digital legal culture must be developed that encourages the public to understand their rights and obligations when using telemedicine services.

Thus, telemedicine is not only seen as a technological innovation, but also as an arena for social transformation that demands the law to be more adaptive, responsive, and just.

4. Conclusion

Telemedicine is a crucial innovation in healthcare in the digital age. However, this practice must be supported by clear regulations regarding patient rights and healthcare provider responsibilities. From a sociological perspective, the law needs to adapt to social dynamics to effectively function as a means of social control and engineering. Regulatory reform and strengthening digital literacy are strategic steps toward a fair, safe, and sustainable telemedicine system.

Protecting patient privacy in the digital age is becoming increasingly crucial. The literature reviewed shows that although Indonesia has regulations supporting personal data protection, such as Law No. 17 of 2023 concerning electronic transaction information and hospitals, its implementation still faces various challenges. Lack of public awareness of their privacy rights, low.

Transparency in data management and weak government oversight are some of the key issues that need to be addressed. This analysis clearly demonstrates regulatory gaps that need to be addressed to effectively protect patient privacy. Recommendations for improved regulation, public education, and strengthened oversight mechanisms are crucial steps. With greater attention to these issues, it is hoped that patient privacy can be better protected, thereby increasing public trust in digital healthcare services. This will also create a safer

environment for patients using healthcare applications, while ensuring that their personal data is managed in a manner that complies with applicable laws.

Based on the results of normative and sociological legal analysis of telemedicine practices in Indonesia, it can be concluded that:

- a. The urgency of telemedicine lies not only in the efficiency and accessibility of healthcare services, but also in its strategic role in driving the modernization of health law. Telemedicine reflects social changes that demand a more adaptive legal system to technological developments.
- b. Legal protection for patients in telemedicine services remains inadequate due to a lack of norms and regulatory inconsistencies between the Medical Practice Law, the Health Law, and the Electronic Information and Transactions (ITE) Law. Therefore, legal reforms are needed to affirm patients' rights to privacy, consent to medical procedures, and personal data security.
- c. The responsibilities of healthcare workers in telemedicine encompass administrative, civil, and criminal aspects. However, in practice, enforcing these responsibilities is still hampered by weak legal structures and the profession's ethical awareness.
- d. From a sociological perspective, telemedicine demonstrates the dynamic relationship between law and social change. As Satjipto Rahardjo argues, law must "serve humanity" and not be static; it must be a means of social engineering, as envisioned by Roscoe Pound, and function effectively through a balance of legal structure, substance, and culture, as conceptualized by Lawrence Friedman.

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