



Legal Reconstruction of the Legality of Digital Telemedicine in the Health Industry

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Abstract. The emergence of telemedicine as a digital transformation in the healthcare industry is a remarkable innovation that merges cutting-edge technology with community involvement. The progress has been found to enhance the quality of healthcare services but also poses challenges to ethical values in medicine that must be upheld to safeguard human dignity. Consequently, there is a pressing need to reform laws that can safeguard both healthcare providers and patients. Suggested legal reforms include modifying medical practice regulations to ensure equitable legal protection for doctors and patients during telemedicine consultations and bolstering the use of medical records as evidence in conflict resolution. These measures are aimed at ensuring that technological advancements in healthcare align with the values of Pancasila, which prioritize scientific values, fairness, justice, humanity, and balance, as well as the safety and protection of patients.

Keywords: Legal Reconstruction; Digital Transformation of Telemedicine; Health Industry.

1 INTRODUCTION

Changes in the Industry 4.0 era, with its characteristics of using internet technology and digital databases, have penetrated the health service sector. This phenomenon is manifested in the form of digital transformation, such as telemedicine. Telemedicine is a treatment system that can be carried out remotely through internet data sensorization. Various services such as eHealth, online doctor consultations, purchasing medicines, remote laboratory examinations, providing doctor's assistance via pagers, Detik Health, Solusi Sehat, and Megle, as well as counseling via the YouTube platform, have all become commonplace. Telemedicine's digital transformation presents a revolutionary approach to medical care, leveraging technology, computerization, and community involvement. The future may see a world where elderly patients no longer have to travel to hospitals, and healthcare services reach remote regions and islands. There is even the potential for using robots to attend to patient needs and emotions, and virtual reality could offer psychotherapy. Such advancements are increasingly becoming a reality.

Sociological considerations related to telemedicine technology are based on data obtained from the Ministry of Health (Kemenkes) in 2023. The data shows that the number of medical personnel in Indonesia at that time reached 1.49 million health workers spread across 38

provinces. Of this number, there are 183,694 medical personnel, including specialist doctors, general practitioners, and dentists. Meanwhile, the number of nurses reached 582,023 people, consisting of General Nurses and Dental Nurses, and the number of midwives was 344,928 people. Every year, the number of health workers in Indonesia continues to increase. Likewise, internet users, continue to increase over time. According to 2024 statistical data and reports from Muhammad Arif, General Chair of the Indonesian Internet Service Providers Association (APJII) at that time, the number of internet users in Indonesia has reached around 221,563,479 people. From the results of the 2024 Indonesian internet penetration survey released by APJII, Indonesia's internet penetration rate reached 79.5%. Compared to the previous period, there was an increase of 1.4%.

An article from the site entitled "Dokter akan Melihat Anda" (A Doctor Will See You) states that in the United States, a shortage of doctors is the main cause of long wait times. Phillip Miller, vice president of Merritt Hawkins and Staff Care, emphasized that the demand for physicians continues to increase, along with population growth, while the number of trained physicians has stagnated over the past 25 years. It creates a supply and demand problem that is difficult to fix, especially as millions more people gain health insurance coverage under the Affordable Care Act (ACA). Research conducted by Merritt Hawkins also tracked Medicaid acceptance rates and found that the number of doctors accepting government-funded health insurance for low-income patients is decreasing. The average rate of Medicaid acceptance among physicians surveyed was 54.1% to 73% in 2022.

Telemedicine has been effectively implemented through the utilization of System Applications and Products (SAP) to furnish comprehensive health solutions for entities within the healthcare industry in Indonesia. Within Eka Hospital, this system is deployed across health programs, logistical operations, and financial management endeavors. The primary aim of this initiative is to optimize patient services while harmonizing all operational processes to integrate front-line activities. A similar methodology is adopted at Mitra Keluarga Hospital through the deployment of an integrated Electronic Medical Records (EMR) and Business Process Management (BPM) system. Beyond hospitals and clinics, the pharmaceutical and medical device sectors can also harness this digital infrastructure to enhance the efficiency and efficacy of marketing endeavors, given that the integrated system encompasses finance, procurement, inventory management, patient administration, billing processes, and electronic medical records. However, this implementation faces significant legal implications, including the need for a reconstruction of telemedicine law in Indonesia that protects the interests of all

stakeholders in the health industry, especially hospitals. This legal reconstruction should serve as a means of protection for healthcare providers and patients.

2 METHOD

This research is the result of normative legal research with a statutory approach and a conceptual approach.[2] The statutory approach is conducted on Law Number 29 of 2004 concerning Medical Practices, Law Number 40 of 2004 concerning the National Social Security System, Law Number 36 of 2009 concerning Health, and Law Number 44 of 2009 concerning Hospitals. The conceptual approach is carried out in the examination of Pancasila values as the foundation for constructing a model of Legal Reconstruction of Digital Transformation Telemedicine in the Health Industry sector.

3 RESULT AND DISCUSSION

Health Law Reconstruction

The thinking behind this article comes from the essence of medical practice and the role of hospitals as part of the healthcare industry. As a health institution, hospitals have developed along with the development of civilization, transforming in the digital era by developments in science and technology in their time. Factors that significantly influence hospitals include the presence of skilled resources, availability of facilities, and collaboration with the community as users of health services. The implementation of Law Number 40 of 2004 concerning National Social Security has led to the provision of healthcare coverage for all citizens of Indonesia, thereby necessitating the healthcare service industry to deliver optimal services. As patient volumes rise, hospitals must ensure the availability of sufficient medical staff. The crux of hospital-based healthcare services lies in the execution of medical practices that remain abreast of advancements in science and technology.

The statutory provisions stipulated in Law Number 29 of 2004 regarding Medical Practice mandate that medical practitioners adhere to the ethical principles of Pancasila to ensure patient welfare, enhance the standard of medical care delivered by physicians and dentists, and offer legal assurance to the populace, as well as to the medical professionals themselves. Registered physicians and dentists are required to possess valid certifications and demonstrate proficiency commensurate with their educational background and professional competence. Medical

practice includes a series of actions such as interviewing patients, carrying out physical and mental examinations, carrying out supporting examinations, establishing a diagnosis, determining management and treatment, carrying out medical procedures, writing drug prescriptions, issuing doctor's certificates, storing drugs, and dispensing and delivering drugs to patients in remote areas. Every doctor and dentist who practices in Indonesia is required to have a practice permit by the provisions regulated by law. The structuring of medical practice necessitates consideration of patient interests as delineated within the aforementioned legislation.

Achieving health as an implementation of human rights, by the vision of the Indonesian nation as stated in Pancasila and the 1945 Constitution of the Republic of Indonesia, is a challenge that is not easy. There has been a paradigm shift where hospitals, which were originally oriented towards non-profit purposes, now also function as profit-oriented entities that contribute to economic development. In this context, legal reconstruction, as explained by Logemann, involves several approaches, including:

- a. Analogy Reconstruction, which involves searching for the *ledis* (genus) ratio of a law and applying it to other situations not regulated by the law.
- b. Legal Refinement Reconstruction, which recognizes that when existing regulations are inadequate or not by the values of justice, it is necessary to narrow or not apply these regulations strictly.
- c. Reconstruction *Argumentum a Contrario*, which involves interpreting regulations by emphasizing opposing values of justice.

Appropriate legal reconstruction is needed to formulate telemedicine law substantively, structurally, and culturally so that legal objectives such as justice, legal certainty, and benefit can be achieved.

Legal Reconstruction of the Legality of Digital Telemedicine in the Health Industry

As delineated in Law Number 29 of 2004 about Medical Practice, the practice of medicine is mandated to align with the foundational principles of Pancasila and scientific ethics, encompassing the ideals of beneficence, justice, humanity, equilibrium, as well as the protection and welfare of patients. However, the attainment of these ideals is often impeded by the intricate and resource-intensive nature of medical education. While telemedicine presents a more cost-effective and pragmatic alternative, it may not consistently fulfill patients'

comprehensive medical needs. Comprehensive medical care should encompass holistic considerations, addressing not only physiological aspects but also nutritional and spiritual dimensions. Failure to uphold this comprehensive approach risks diluting the essence of medical practice, which should be anchored in humanistic values and principles of justice.

Article 35 Paragraph (1) of the Law concerning the authority of doctors states that doctors who have a Certificate of Registration (STR) are deemed to have the authority to carry out various tasks, such as interviews with patients, physical and mental examinations, diagnosis, management, medical procedures, and others. Nevertheless, certain facets, particularly within the diagnostic phase, may be inadvertently omitted in telemedicine. Factors contributing to diagnostic errors frequently stem from inaccuracies during the patient history-taking process. A thorough history must be conducted meticulously, encompassing four primary facets: History of Present Illness (HPI), Past Medical History (PMH), Family Medical History, and Social and Economic History. Additionally, adherence to seven pivotal elements during history-taking, known as "The Sacred Seven," further enhances diagnostic accuracy.[5]

Humans are complex entities and have diverse dimensions. Human presence, both spiritual and physical, is structured in long historical traces.[6] Collecting a comprehensive medical history instantly is certainly not realistic. This step is crucial as a start to understanding the patient's condition. A doctor, perhaps based on his experience or knowledge, can use a brief history obtained through an interview, whether written or oral, as an initial basis for identifying a patient's illness. The enactment of medical practice is regulated in articles 36 to 38, which state that every doctor or dentist who practices medicine in Indonesia must have a practice permit. The practice permit is issued by the authorized health official in the district or city where the practice is carried out. In addition, one doctor or dentist is only permitted to have a practice permit for a maximum of three places, and one practice permit is only valid for one practice place.

Article 38, subsection (1) stipulates that acquiring a permit for medical or dental practice necessitates fulfillment of specific prerequisites, such as possessing a valid registration certificate, establishing a practice venue, and securing endorsement from a professional association. The elucidation of this statutory provision can be delineated as follows:

- a. Article 36 of the Medical Practice Law allows a doctor to practice in one to three places with a clear domicile but does not specifically regulate medical practice via the Internet.

Therefore, physicians are not permitted to conduct therapeutic transactions over the Internet under this article.

- b. The therapeutic contract between a doctor and patient in telemedicine is different from e-commerce transactions in civil law. The object of the therapeutic contract is the person as a whole, not goods. Therefore, patients are not consumers who are protected by consumer protection laws but are legal subjects who are active in making regulations.
- c. Hospitals can be public or private by Law Number 44 of 2009 concerning Hospitals. Public hospitals are overseen by governmental bodies, local authorities, or non-profit entities, whereas private hospitals are administered by profit-oriented legal entities, such as Limited Liability Companies or Persero entities.

Private hospitals often use digital systems for administration and medical services. Telemedicine is an efficient and economical alternative for doctors and patients. However, attention needs to be paid to patient rights by Law Number 44 of 2009 concerning Hospitals. Fulfilling these rights requires clear procedures, especially in telemedicine which does not yet have defined Standard Operating Procedures (SOP). If a report is deemed to have been recorded visually, this is contrary to the provisions of the Republic of Indonesia Minister of Health Regulation No. 69 of 2014 concerning Hospital Obligations and Patient Obligations. It is stated there that patients, patient families, and visitors are not allowed to document, photograph, or record the process of medical or nursing procedures without written permission from the Hospital. Article 53 of the same law emphasizes the patient's obligations, including providing complete information about his or her health problems, complying with a doctor's advice, and providing compensation for the services received. However, these rights and obligations are not always fully given to patients.

The medical profession entails the legal responsibility of physicians and healthcare establishments regarding malpractice allegations. Medical documentation, whether in manual or electronic formats, constitutes primary evidence in evaluating instances of medical negligence. While platforms such as DetikHealth, SolusiSehat, and Megle provide varied services, they lack comprehensive medical records akin to those maintained by hospitals. Hospital administration endeavors to realize its vision and uphold sound corporate and clinical governance practices. Within the context of medical disputes, telemedicine documentation serves solely as a supplementary resource, distinct from the comprehensive medical records retained within healthcare facilities. Evidence and official documents have different

evidentiary strengths. In this context, regulations governing telemedicine evidence become important along with the development of this technology.

Law is a manifestation of values that are translated and ratified by legislative institutions or competent authorities. Laws relating to the Practice of Medicine, including telemedicine, are based on values such as justice, humanity, balance, and patient protection and safety. In this case, the legal construction of telemedicine built by the author aims to make law an instrument of protection, both in the process of law-making and law enforcement. The values underlying this legal construction originate from the principles of Pancasila, which emphasize the creation of laws that prioritize humanity, justice, and civility and provide protection for human dignity as a whole, with the participation of all members of society to achieve justice.

The development of the Digital Transformation concept of Telemedicine can be interpreted as a health service model based on computer technology. According to Article 42 of Law Number 36 of 2009 concerning Health, health technology involves all methods and devices used for various purposes, such as preventing disease, detecting disease, reducing suffering due to disease, healing, reducing complications, and restoring health after illness. However, the law does not explain in detail the exact meaning of the phrase "involving all methods and tools..." When analyzed carefully, the interpretation of this article can produce several things: Primarily, disease prevention can be facilitated through public education initiatives via telemedicine, with social media platforms serving as effective conduits for dissemination. Secondly, disease detection may be accomplished through thorough patient history-taking, augmented by the utilization of smart device cameras or video recording functionalities. Tertiary interventions, aimed at alleviating suffering, mitigating complications, and fostering recuperation, can be temporarily administered via telemedicine for emergency relief. Nevertheless, it is imperative for healthcare practitioners offering telemedicine services to counsel patients on the necessity of promptly seeking further medical attention at the nearest healthcare facility.

In its entirety, the legal framework outlined in Article 42 of the Health Law indicates that telemedicine can be regarded as a legitimate avenue for healthcare provision. However, shortcomings persist in the regulatory implementation, which fails to delineate the boundaries of medical practice via telemedicine comprehensively. This lack of clarity in regulation may engender legal ambiguities and uncertainties in its application.[11] Notably, a significant advancement in information system technology today is the utilization of Personal Digital Assistants (PDAs). As described by Dale & LeFlore (2007), PDAs represent handheld

computing devices commonly employed in hospital settings, particularly by healthcare professionals such as doctors and nurses. PDAs are increasingly prevalent among medical staff and serve as repositories for diverse patient clinical data, drug information, as well as guidelines for specific therapies or clinical interventions. Enhanced with integrated telephone connectivity, nurses can access patient databases online via the Internet.

For instance, telemedicine technology facilitates the direct transmission of patient radiology data through the GSM network. Subsequently, physicians can conduct real-time interpretations via PDAs and offer feedback to nurses within the hospital setting. The integration of computers and PDAs into nurses' workstations has the potential to enhance efficiency, diminish errors, elevate the standard of patient care, and augment nurses' professional contentment. The utilization of such technology can be executed without contravening the fundamental tenets of medical practice as previously outlined. Within the healthcare sector, Law Number 36 of 2009 concerning Health governs the application of Stem Cells, as delineated in Article 70, stipulating their utilization solely for therapeutic purposes and health restoration, while prohibiting their use for reproductive ends. The discourse surrounding Stem Cell therapy via telemedicine commenced circa 2012, and the rapid dissemination of information through telemedicine necessitates an evaluation of whether the treatment adheres to Evidence-Based Medicine (EBM) principles. EBM serves as an imperative safeguard for treatment efficacy and quality assurance.

In addition, Minister of Health Regulation Number 26 of 2018 concerning Electronically Integrated Business Licensing Services in the Health Sector provides a stronger foundation for the digital transformation of telemedicine in the health industry. It includes the use of integrated technology in various types of business licensing in the health sector, from pharmaceutical business licenses to tissue/stem cell bank operational licenses. Most permits are granted within a privatization framework, with the determination of law and justice falling under the purview of state authorities. The health industry should consider the essence of service to human life, not be considered a business entity that solely aims to seek economic profit, even if this exceeds the boundaries of human ethics.

The development of this technology, when considered from a legal perspective, requires effective legal methods to provide quality legal materials. The digital transformation of telemedicine as a social phenomenon that is accepted with a progressive attitude aims to ensure that the law can adapt to various social interests without sacrificing human values. This network of humanitarian engagement interconnects healthcare providers, patients, health service

industries, governmental bodies, and society at large. Each component within this continuum assumes a distinct role, particularly in the contemporary era of telemedicine's digital transformation. Analogous to a building structure, legal safeguards serve as the foundation, while the principles of medical practice constitute the central pillar. These principles, encompassing scientific integrity, utility, equity, compassion, equilibrium, as well as patient welfare and safety, are deeply embedded within the fabric of the law. Within this framework, the value of humanity (*humanitas*) encompasses facets of civility and fairness. Absent a steadfast commitment to justice and civility, the reverence for human dignity remains elusive.

In medical services, both conventional and telemedicine, the main principle in the legal realm is to prioritize humanity, especially by protecting vulnerable people. Vulnerable people can be patients receiving medical services or even doctors trapped in profit-oriented business structures, where economic factors often determine the implementation of the law. Fraud, abuse of power, exploitation, and unethical medical experimentation can take many forms. All attempts at medical experimentation, whether on a small or large scale, on humans are tantamount to violating basic humanitarian principles. Monitoring whether the law truly protects all parties, including vulnerable people, relies heavily on all parties involved in medical services. Digital transformation in medical services, especially in medical practice, requires the establishment of a new legal framework. If the essence of law is likened to a unified view from the perspective of substance, structure, and culture, then new law must be formed by combining the following things:

- a. In terms of substance, the new regulations should be equivalent to the law and specifically regulate telemedicine. The contents include the competence of doctors or health workers in telemedicine, certification, domain areas, obligations for recording telemedicine practices, and written informed consent which states that patients cannot sue if an error occurs in telemedicine medical procedures. Measurable, certified competency and telemedicine service standards must become the standard for doctors and health workers while providing professional accountability demands for the patients served. A domain refers to a well-defined location of medical practice, both in conventional practice and in cyberspace. The obligation to record telemedicine practices is regulated in law, along with determining the equipment used for recording as additional evidence in resolving telemedicine cases. The documentation of written informed consent signifies that the patient relinquishes the right to pursue legal action in the event of an error during a telemedicine medical procedure, acknowledging the necessity for a

thorough physical examination, an aspect of medical practice that cannot be substituted by intermediary platforms.

- b. In terms of legal structure, it refers to article 49 of Law Number 36 of 2009 concerning Health, where the government, regional government, and community are responsible for implementing health efforts. Telemedicine involves collaboration between computer technology, the medical field, and the administrative field, thus requiring broader interdisciplinary legal studies. Therefore, it is recommended to establish an additional body tasked with supervising telemedicine in the Law on Telemedicine. Legal certainty is important in ensuring that a country's legal instruments can guarantee the rights and obligations of every citizen.
- c. From a cultural perspective, telemedicine will continue to grow rapidly. Society needs education, outreach, and advocacy because the decision to use telemedicine has broad implications, not only in the biological realm but also economic, social, and legal. The implementation of health efforts must pay attention to social functions, cultural values, morals, and professional ethics. Therefore, in the Law on telemedicine, there needs to be a revitalization of the role of the government, regional government, and society in supervising telemedicine, with the involvement of the Ministry of Communication and Information to ensure that the development of medical practice technology is by the values of Pancasila, which is based on the values of scientific, benefits, justice, humanity, balance, and patient protection and safety.

4 CONCLUSION

The law is a manifestation of the values that exist within a society and is established through a recognized government ruling. The incorporation of legal principles in the Digital Transformation of Telemedicine, which is anchored in the principles of Pancasila and a fair and humane approach, signifies a significant departure from traditional healthcare practices. To make this happen, legislative reconstruction in Indonesia is needed, which includes the following steps:

- a. Making new regulations equivalent to the Law on telemedicine.

- b. Substantial legal dimensions: the articles regulate the competence of doctors or telemedicine health workers, certification, domain areas, the obligation to record telemedicine service practices, and written informed consent which stipulates that patients cannot sue if an error occurs in telemedicine medical procedures.
- c. Structural dimension: it is necessary to establish an independent cross-ministerial body responsible for monitoring telemedicine and reporting to the government.
- d. Cultural dimension: the public needs to be educated about the law in health services to ensure that their constitutional rights and obligations are fulfilled proportionally.

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