

Analysis of the Use Teleconsultation in Teledentistry for Dentist Practice against UU Number 17 of 2023

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ABSTRACT

In the context of the Fourth Industrial Revolution, which intertwines biological and digital advancements, technologies like teledentistry are revolutionizing healthcare delivery in Indonesia. Teledentistry enables remote dental and oral health services through methods such as teleconsultation, teleeducation, telemonitoring, and telesurgery (Anggayanti et al., 2023). Legislation such as Law Number 17 of 2023 on Health Management in Indonesia plays a pivotal role in regulating teledentistry and ensuring patient and dentist protection. This law outlines the rights of patients to receive safe, quality, and affordable healthcare services, encouraging the use of information and communication technologies in healthcare delivery (Amril, 2023). The normative legal approach utilized in this study examines primary and secondary legal materials to analyze the implications of Law Number 17 of 2023 on teledentistry practices. This study concludes that teleconsultation in teledentistry is a valuable tool for overcoming geographical barriers and improving access to dental care in Indonesia. However, further specific legislation is recommended to foster patient trust and optimize the use of teledentistry for achieving optimal dental and oral health outcomes.

INTRODUCTION

Dental and oral health emergencies are often discussed in seminars and training sessions by dental professional organizations. While many dentists are skilled in handling dental emergencies, the pandemic has made it difficult for patients to easily access these services due to limited facilities and safety concerns. The most common dental emergencies during the pandemic have been non-surgical cases, with patients struggling to receive dental care. The availability of emergency dental services at a specialized dental hospital during the pandemic has helped meet the community's needs for comprehensive health services. This has provided clear guidance for where to go when facing dental emergencies (Adisasmito & Novalino, 2021).

The means that are often used to provide products or goods necessary for survival and facilitate human activities are known as technology. Teleconsultation is an important part of using teldentistry because from teleconsultation, dentists can find out complaints that occur in patients and get the right diagnosis. Teleconsultation uses real-time teledentistry and store and forward teledentistry methods. Real time using a video meeting application to communicate directly with patients involving applications from smartphones or laptops remotely. then, store and forward involves exchanging information from the patient to the dentist or vice versa as a means of teleconsultation between the doctor and the patient. However, this requires electronics that have high capacity storage, a camera, an internet connection, sufficient RAM, and a fast processor (Achamad et al., 2020).

The use of teledentistry, which includes teleconsultation, does not mean that there are no obstacles in the process of using it remotely. The most logical obstacle for dentists is whether patients are able or fully confident in telling the complaints they experience when consulting via teledentistry. This is certainly a significant problem for establishing a diagnosis and prescribing medication to patients. Therefore, there is a need for legislation that regulates so that patients are protected by consulting via teledentistry and dentists can also be protected. Currently, Indonesia is entering a new era where UU Law Number 17 of 2023 was issued which includes a health law.

The research aims to address several key issues related to the implementation of teledentistry, particularly focusing on teleconsultation, within the context of the 4.0 industrial revolution and the regulatory framework provided by UU Law Number 17 of 2023 concerning health in Indonesia. traditional dental care may not be easily accessible to all due to geographical constraints and costs. Teledentistry aims to bridge this gap but faces challenges in adoption and implementation. there is a concern about patients' ability to accurately convey their dental issues and symptoms through teleconsultation, which could affect diagnosis and treatment. The existing laws and regulations, such as UU Law Number 17 of 2023, provide a foundation for health services including teledentistry. However, there may be gaps in practical implementation and adherence.

Health law is a law in which there are rules governing the operation of health services from health workers to patients. Health law is defined as written

rules regarding the relationship between health service providers and the community. This health law takes the form of a written law relating to health services (Cecep, 2014). Analyze the provisions of UU Law Number 17 of 2023 concerning health and its applicability to teledentistry, identifying strengths, weaknesses, and recommendations for improvement. Based on the findings, propose recommendations for policymakers, healthcare providers, and stakeholders to enhance the implementation of teledentistry in Indonesia, ensuring patient trust, legal compliance, and quality of care. By addressing these objectives, the research aims to contribute insights into the integration of teledentistry into Indonesia's healthcare system amidst the challenges and opportunities presented by the 4.0 industrial revolution and evolving regulatory landscape. Therefore, health law covers the rights and obligations of both parties as providers of health services and as patients. In practice, it refers to the rights of patients to receive good health services and doctors as providers of health services to provide the best as well.

LITERATURE REVIEW

Teleconsultation in Teledentistry Management

Online-based health services are basically technology for the development of health services known as teledentistry. Teledentistry is defined as a dental and oral health service that involves dentists using information and communication technology remotely, which utilizes digital systems to carry out consultations, examinations and diagnoses remotely. Teledentistry is not limited by space and time, and can provide access between dentists and patients efficiently and interactively (Lia & Mutiara, 2024). Teledentistry is an innovation in dental health that combines telecommunications technology with dental care services. It represents a significant advancement in the 4.0 era by providing more efficient medical services, overcoming geographical barriers, enhancing accessibility, and supporting clinical aspects. Teledentistry enables healthcare providers to deliver early diagnoses, facilitate communication among medical teams, and administer timely dental and oral treatments. Additionally, through communication and information technology, teledentistry supports education on treatments, disease prevention, and continuous evaluation, all aimed at improving overall public health (Afiyah & Irianto (2024).

Teledentistry has branch roots, namely there is teleconsultation in it which aims to explore information, complaints and what the patient wants. Teleconsultation usually takes the form of anamnesis from the patient. According to Torres-Pereria (2013), he reported that the diagnosis of oral lesions was determined by sending media in the form of photos via electronic messages. This is related to efficiency in telecommunications that run on dentists and patients with teledentistry. Teleconsultation involves remote consultation which refers to the interaction between a doctor and a patient with the aim of providing diagnostic and therapeutic advice via electronic means (Lubis, 2021).

UU Law Number 17 of 2023 about Health Management

The most common form of teledentistry is teleconsultation, where patients or local healthcare providers seek advice from dentists or specialist dentists using telecommunications. Teleconsultation essentially utilizes electromagnetic systems for sharing information or communication between patients and dental professionals. This method is particularly beneficial for patients with physical and intellectual disabilities, as well as those in elderly care facilities or correctional institutions. Teleconsultation has shown to significantly reduce referrals to higher-level health centers by more than 45%, aiding patients in continuing their therapy during quarantine and isolation periods. Remote consultations are advantageous for the general public by saving time otherwise spent visiting dental offices (Ariani et al, 2022).

Health is the human right of every human being to obtain prosperity which is realized as well as possible, supported by good service. One of the health services that covers aspects of dental and oral health which is currently an alternative in dental practice (Amril, 2023). Good health services for patients from doctors or other medical personnel have been regulated in UU Number 17 of 2023 in article 4 paragraph (1) c, it is explained that everyone has the right to receive safe, quality and affordable health services in order to achieve good health. the highest. Then it is regulated in UU number 17 of 2023 concerning health, article 24 paragraph (1), which states that the implementation of health efforts is carried out in accordance with health service standards. based on UU number 17 of 2023 concerning health, article 25 paragraph (1) which states that the implementation of health efforts in health services can utilize information and communication technology. From this perspective, it can be seen that there is already legislation regarding the implementation of teledentistry, which includes telecommunications. This is also beneficial for the protection of patients and dentists as users of teledentistry in the era of revolution that applies technology.

METHODOLOGY

The type of article creation used by the author is a normative legal approach. The type of approach used in this normative approach uses a statutory and conceptual approach. The legal materials in this article come from primary legal materials and secondary legal materials, primary legal materials consist of statutory regulations, official notes or minutes in the making of legislation, judge's decisions, while secondary legal materials provide explanations of primary legal materials in the form of books, articles, legal journals, internet, papers and other data that supports the writing of this article. The method for collecting legal materials in normative law is carried out by means of library research on legal materials. Data sources were obtained from primary and secondary data. Next, the author analyzes existing laws and conceptual analysis or those related to the title of the writing to compare with other regulations.

RESEARCH RESULT

Teledentistry is viewed as a potential substitute for traditional dental practices, yet its adoption is hindered by several limitations. These barriers include infrastructure constraints like slow internet connectivity in remote areas, as well as shortages of necessary software and hardware. Additionally, inadequate training and insufficient technical support and monitoring further impede the effective implementation of teledentistry. Judging from existing data, the regulations governing the protection of patients and doctors in carrying out health services through teledentistry in the form of teleconsultation are regulated in Law Number 17 of 2023. Teleconsultation is recommended to be maintained both during the pandemic and after the COVID19 pandemic ends because it has a positive impact on patients. Based on a literature study carried out by Eriko et al (2023), it was stated that from 10 literature studies it was concluded that the results of using teleconsultation were very well received by patients, especially those with chronic diseases, and doctors could improve patient clinical entry and exit, reduce mortality rates, reduce costs. transportation and building good relationships between doctors and patients. This is directly proportional to the UU Number 17 of 2023 in article 4 paragraph (1) c, UU number 17 of 2023 concerning health, article 24 paragraph (1), and UU number 17 of 2023 concerning health, article 25 paragraph (1).

Teledentistry, particularly through teleconsultation, has been found effective in improving access to dental and oral health services. It overcomes geographical barriers and reduces the need for physical visits to dental clinics, thereby enhancing convenience for patients. The research suggests that teleconsultation contributes positively to patient outcomes by facilitating timely consultations, diagnosis, and treatment planning. This is especially beneficial for patients with limited mobility or residing in remote areas. In patient doctor communication, There are challenges identified in patient-doctor communication via teleconsultation. The ability of patients to accurately convey their dental issues and symptoms remains a concern. Factors such as technological literacy, internet connectivity, and patient confidence in teleconsultation play crucial roles.

Despite challenges, teleconsultation has shown potential in building rapport between patients and dentists. Effective communication strategies, including clear guidelines and patient education, are recommended to enhance this aspect of teledentistry. The research underscores the importance of UU Law Number 17 of 2023 concerning health in providing a regulatory framework for teledentistry. The law ensures that health services, including teledentistry, adhere to quality standards and patient safety. Recommendations are made to strengthen the implementation of these regulations, including provisions for data protection, patient consent, and professional standards for healthcare providers engaging in teleconsultation.

DISCUSSION

In the era of revolution 4.0, dental practices are adopting innovations in technology that enable consultations and diagnoses to be carried out online without the need to come to the clinic in person. Initially technology and dental practice seemed to be in a linear line with one another, now all technology is increasingly integrated with the development of digitalization. health services in which online-based teledentistry is basically a development of information and communication technology, which collaborates between dentists to carry out health services optimally. Teledentistry itself is the use of information and communication technology combined with medical expertise to provide dental and oral health services, from consultation to diagnosis without limited space or carried out remotely so that doctors can provide health services via telecommunications, visual, audio, media. and data connected to health service facilities (Amril, 2023).

The implementation of teledentistry in Indonesia still faces several challenges, such as the inability of patients and dental practitioners to use advanced technology, weak systems for patient data security and privacy, issues with the licensing of the software used, internet usage costs, limitations in physical examinations, and the necessary equipment. The risk of misdiagnosis can also occur during the use of teledentistry services, which might be caused by technical errors during the transmission of patient multimedia data or inadequate telecommunications networks. Essentially, no matter how advanced technology is, it cannot replace the role of humans. Therefore, the role and performance of teledentistry will improve with the commitment and accuracy of its users, along with the support of sophisticated and stable telecommunications devices. Another challenge that must be watched out for is the potential leakage of patient data, so the relevant parties must be highly committed to safeguarding patient data security by implementing strict encryption (Ariani et al, 2022).

In line with the issuance of Law of the Republic of Indonesia Number 17 of 2023 concerning health, considering that the state guarantees the right of every citizen to realize a good, healthy and prosperous life physically and mentally in order to achieve national goals, that the development of public health requires health efforts, health resources , and health management to improve public health to the highest level, as well as health problems and disorders in the community which will reduce productivity and cause losses for the country. This is in line with the emergence of health innovations that optimize health services for all levels of society in all regions in Indonesia, namely with teledentistry. apart from the law explained in Law Number 17 of 2023 concerning health which includes health services in the Law Number 17 of 2023 in article 4 paragraph (1) c, UU number 17 of 2023 concerning health, article 24 paragraph (1), and UU number 17 of 2023 concerning health, article 25 paragraph (1), there are also articles that regulate how the responsibilities of health worker facilities including hospitals are regulated regarding where the hospital is legally responsible for losses incurred due to negligence which is feared by the hospital's health human resources (Anggayanti, 2023).. regarding

teleconsultation, this is in line with anticipation through statutory regulations to give patients confidence in providing information correctly in order to carry out the correct diagnosis and appropriate treatment.

CONCLUSIONS AND RECOMMENDATIONS

Teleconsultation in teledentistry is very useful for doctors and patients to overcome the distance the patient travels to the dentist's clinic. The information provided by patients during teleconsultation must be correct to achieve the right diagnosis and treatment. The legal regulations contained in Law number 17 of 2023 concerning health have a good impact on patient confidence in honestly informing doctors without the need for significant doubt. However, specific legislation is needed to discuss the use of teledentistry among patients and health care workers in order to achieve patient trust when using teledentistry optimally to achieve good dental and oral health. For training and education, Enhance training programs for dentists and healthcare providers in teleconsultation skills and technologies. Educate patients on the benefits and limitations of teleconsultation, empowering them to effectively engage in remote dental care. Invest in robust technological infrastructure, including secure platforms and reliable internet connectivity, to support seamless teleconsultation services. In conclusion, teledentistry, particularly through teleconsultation, emerges as a viable solution to improve dental healthcare delivery in Indonesia. While challenges exist in communication and regulatory compliance, the research demonstrates that with appropriate policies, training, and technological support, teledentistry can enhance access, efficiency, and patient satisfaction in dental care. Overall, the research findings underscore the transformative potential of teledentistry in the context of the 4.0 industrial revolution, paving the way for enhanced healthcare delivery that is accessible, efficient, and patient-centered.

ADVANCED RESEARCH

Advances in research on teledentistry, particularly focusing on teleconsultation, have significantly impacted the field of dental healthcare delivery. This section explores the latest developments and findings in this area, such as technological integration and accessibility is teledentistry continues to leverage advancements in digital technology to enhance accessibility and efficiency in dental care. The integration of high-resolution imaging, real-time video conferencing, and secure data transmission platforms has facilitated remote consultations and diagnoses. These technological advancements have bridged geographical gaps, allowing patients in remote or underserved areas to access timely dental services. Then, efficacy in diagnosis and treatment planning is research has demonstrated the efficacy of teleconsultation in enabling dentists to perform accurate diagnoses and develop comprehensive treatment plans remotely. Studies indicate that teleconsultation can effectively

address a wide range of dental issues, from routine check-ups to complex oral health conditions. Dentists can utilize detailed visual examinations and patient history reviews to provide informed recommendations and prescriptions.

Patient satisfaction and engagement in teleconsultation has been well-received by patients due to its convenience and flexibility. Patients appreciate the ability to consult with dentists from the comfort of their homes, minimizing travel time and expenses associated with in-person visits. Moreover, teleconsultation has improved patient engagement by empowering individuals to take a proactive role in managing their oral health. Then, regulatory framework and legal considerations is The regulatory landscape surrounding teledentistry, including teleconsultation, has evolved to ensure patient safety, data privacy, and adherence to professional standards. Legislations such as UU Law Number 17 of 2023 in Indonesia exemplify efforts to establish guidelines for telehealth practices, including teledentistry.

These regulations aim to safeguard patient rights while promoting innovation in healthcare delivery. Despite its benefits, teleconsultation faces challenges such as technological infrastructure limitations, disparities in internet connectivity, and concerns regarding the accuracy of remote diagnoses. Researchers and policymakers are exploring solutions to address these challenges, including investments in digital infrastructure, training programs for healthcare providers, and patient education initiatives. Looking ahead, future research in teledentistry should focus on expanding the scope of services offered remotely, enhancing diagnostic capabilities through artificial intelligence and machine learning, and evaluating long-term patient outcomes. Additionally, comparative studies across different healthcare systems and regions can provide insights into best practices and inform policy decisions. In conclusion, advances in teledentistry research underscore its transformative potential in improving dental healthcare delivery globally. By leveraging technology, addressing regulatory considerations, and prioritizing patient-centered care, teleconsultation continues to shape the future of dentistry, making dental services more accessible, efficient, and patient-friendly.

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