

Telemedicine in Indonesia During the Covid-19 Pandemic: Patients Privacy Rights Protection Overview

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Article Info	Abstract
<p>Keywords: Covid-19 Pandemic; Privacy Rights, Telemedicine.</p> <p>DOI: 10.25041/fiatjustisia.v16no1.2583</p>	<p>During the Covid-19 pandemic, online health services through applications or telemedicine have increased yearly. Many parties are involved in telemedicine to spread the confidentiality of information and patient privacy to various parties. Even though regulations and guidelines regarding telemedicine's implementation during the Covid-19 pandemic are established, personal data leakage still occurs. The problem discussed in this research is: How was telemedicine implemented in Indonesia during the Covid-19 pandemic? And how is the regulation of privacy rights protection for patients who use telemedicine in Indonesia? This research uses a descriptive normative research method with a qualitative approach. The research results show various problems in Indonesia's telemedicine implementation during the Covid-19 pandemic, especially problems related to data protection regulation for telemedicine patients. Based on the author's analysis, no regulations regulate strict sanctions when the patient's data or medical records are not kept confidential. There is no explicit provision that threatens anyone who misuses the patient's data. Thus, it is necessary to have special regulations governing the protection of patients' privacy rights in the use of telemedicine in Indonesia, and Indonesian legislators need to continue the legislative process of the Personal Data Protection Bill.</p>

A. Introduction

In December 2019, the world was shocked by discovering a new virus variant that could kill humans.¹ This virus was first discovered in Wuhan, Hubei Province, China, and was named by the World Health Organization (WHO) as Corona Virus Diseases (Covid-19).² Covid-19 has become a global pandemic because the spread and transmission of this virus are fast from human to human, and the virus has penetrated various countries in the world.³ Indonesia is one of the various countries with quite a large number of Covid-19 cases.⁴ On March 28, 2022, the number of Covid-19 cases in Indonesia reached 5.99 million, with 154,000 deaths.⁵ Covid-19 in Indonesia impacts various aspects of life, including aspects of information and communication technology.⁶ One of the impacts of this pandemic has forced people to command technology and utilize it in various fields of life, such as education, trade, health, and others.⁷

The Covid-19 pandemic has changed various aspects of people's lives that were previously manual with analog technology, then switched to digital technology connected to the internet.⁸ In the health sector, the use of technology during the Covid-19 pandemic is the emergence of telemedicine in providing remote health services using telecommunication devices by

¹ Yuliana, "Corona Virus Diseases (Covid-19): Sebuah Tinjauan Literatur," *Wellness and Healthy Magazine* 2, no. 1 (2020): 187–92, <https://doi.org/https://doi.org/10.30604/well.95212020>.

² Ray Faradillahisari Nursowfa et al., "Penanganan Pelayanan Kesehatan Di Masa Pandemi Covid-19 Dalam Perspektif Hukum Kesehatan," *Jurnal Hukum Inicio Legis* 1, no. 2020 (1AD): 1–17, <https://doi.org/10.21107/il.v1i1.8822>.

³ Anggia Valerisha and Marshall Adi Putra, "Pandemi Global COVID-19 Dan Problematika Negara-Bangsa: Transparansi Data Sebagai Vaksin Socio-Digital?," *Jurnal Ilmiah Hubungan Internasional (JIHI)*, 2020, 131–37, <https://doi.org/10.26593/jihi.v0i0.3871.131-137>.

⁴ Muhamad Beni Kurniawan, "Politik Hukum Pemerintah Dalam Penanganan Pandemi Covid-19 Ditinjau Dari Perspektif Hak Asasi Atas Kesehatan," *Jurnal HAM* 12, no. 1 (2021): 37–56, <https://doi.org/10.30641/ham.2021.12.37-56>.

⁵ SATGAS COVID-19, "Situasi COVID-19 Di Indonesia," Satuan Tugas Penanganan COVID-19, 2022, <https://covid19.go.id/>.

⁶ Rita Komalasari, "Manfaat Teknologi Informasi Dan Komunikasi Di Masa Pandemi Covid-19," *TEMATIK - Jurnal Teknologi Informasi Dan Komunikasi* 7, no. 1 (2020): 38–50, <https://doi.org/10.38204/tematik.v7i1.369>.

⁷ Matdio Siahaan, "Dampak Pandemi Covid-19 Terhadap Dunia Pendidikan," *Jurnal Kajian Ilmiah (JKI)* 1, no. 1 (2020): 73–80, <https://doi.org/10.31599/jki.v1i1.265>.

⁸ Ratnadi Hendra Wicaksana, Adis Imam Munandar, and Palupi Lindiasari Samputra, "Studi Kebijakan Perlindungan Data Pribadi Dengan Narrative Policy Framework: Kasus Serangan Siber Selama Pandemi Covid-19," *Jurnal IPTEK-KOM (Jurnal Ilmu Pengetahuan Dan Teknologi Komunikasi)* 22, no. 2 (2020): 143–158, <https://doi.org/10.33164/iptekkom.22.2.2020.143-158>.

involving doctors, patients, and other parties.⁹ However, using technology during the Covid-19 pandemic raises new issues concerning privacy right in the health aspect.

Data can be said to be personal data if the data relates to a person to be used to identify that person as the owner of the data. The definition of personal data is stored, maintained, kept accurate, and protected specific personal data for confidentiality.¹⁰ The privacy right has evolved so that it can be used to define the right to protect personal data. The concept of data protection implies that individuals have the right to determine whether they will share or exchange their data or not. In addition, individuals also have the right to determine the conditions for carrying out the transfer of personal data, which can also be called the privacy rights protection.¹¹

Retrieving personal data is carried out easily when users provide their data without coercion and consciously register a particular application.¹² However, applications with users' data must protect this data so that data leakage or theft does not occur. Protection of personal data has been regulated in the Indonesian Constitution, namely Article 28G (1) of the 1945 Constitution.¹³ Although personal data protection has been guaranteed in the 1945 Constitution as a human right, Indonesia does not yet have specific regulations regarding the protection of personal data in law. There are more specific regulations regarding personal data, namely Law no. 11 of 2008 concerning Information and Electronic Transactions as amended in Law no. 19 of 2016 or the ITE Law. Still, the ITE Law does not define personal data itself.¹⁴

Some people often misuse personal data in personal data theft to deceive. The issue of personal data protection arose during the Covid-19 pandemic, namely when everyone who wanted to access various applications were required to fill in personal data. This personal data was in danger of being

⁹ Genny Gustina Sari and Welly Wirman, "Telemedicine Sebagai Media Konsultasi Kesehatan Di Masa Pandemic COVID 19 Di Indonesia," *Jurnal Komunikasi* 15, no. 1 (2021): 43–54, <https://doi.org/10.21107/ilkom.v15i1.10181>.

¹⁰ Nurhidayati, Sugiyah, and Kartika Yuliantari, "Settings for Personal Data Protection in the Use of Peduli Protect Applications," *Widya Cipta: Jurnal Sekretari Dan Manajemen* 5, no. 1 (2021): 39–45, <https://doi.org/10.31294/widyacipta.v5i1.9447>.

¹¹ Erna Priliastari, "Pentingnya Perlindungan Data Pribadi Dalam Transaksi Pinjaman," *Majalah Hukum Nasional* 49, no. 2 (2019): 1–27, <https://doi.org/10.33331/mhn.v49i2.44>.

¹² Rudi Natamiharja, "A Case Study on Facebook Data Theft in Indonesia," *Fiat Justisia: Jurnal Ilmu Hukum* 12, no. 3 (2018): 206–23, <https://doi.org/10.25041/fiatjustisia.v12no3.1312>.

¹³ Andi Muhammad Asrun, "Hak Asasi Manusia Dalam Kerangka Negara Hukum: Catatan Perjuangan Di Mahkamah Konstitusi," *Jurnal Cita Hukum* 4, no. 1 (2016): 133–54, <https://doi.org/10.15408/jch.v4i1.3200>.

¹⁴ Siti Yuniarti, "Perlindungan Hukum Data Pribadi Di Indonesia," *Jurnal BECOSS (Business Economic, Communication, and Social Sciences)* 1, no. 1 (2019): 147–54, <https://doi.org/10.21512/becossjournal.v1i1.6030>.

misused by irresponsible parties.¹⁵ The Zoom application is currently often reported to have a weakness in the threat of data theft and data leaks to other social media such as Facebook.¹⁶ Then this Zoom user data was allegedly taken by dark websites to be used in various illegal activities.¹⁷ The use of health applications also does not escape the threat of personal data leakage.

During the Covid-19 pandemic, the implementation of online health services was often carried out by doctors through applications or telemedicine. This can be seen from the data on the increase in telemedicine users in Indonesia during the Covid-19 pandemic. From 2019 to 2020, the increase in telemedicine users was 76%,¹⁸ then from 2020 to 2021, telemedicine users increased by 30%.¹⁹ The practice of telemedicine has brought changes to the concept of conventional medical practice. In this case, it impacts changing the data and patient information documentation system that can be accessed by many parties (takers) so that it affects the confidentiality of information and patient privacy. In Conventional medical practice, the confidentiality of patient information and privacy is the responsibility of doctors who treat patients, and only doctors can access them. Still, in telemedicine medical practice, many parties are involved (takers) so that the confidentiality of the information and patient privacy is spread to these parties.²⁰

The implementation of telemedicine during the Covid-19 pandemic has been regulated in the Decree of the Minister of Health Republic of Indonesia Regulation Number HK.01.07/MENKES/4829/2021 concerning Guidelines for Health Services through Telemedicine during the Corona Virus Disease 2019 (Covid-19) Pandemic. However, in August 2021, there was a data leak

¹⁵ Muhamad Hasan Rumlus and Hanif Hartadi, "Kebijakan Penanggulangan Pencurian Data Pribadi Dalam Media Elektronik (Policy the Discontinuation of Personal Data Storage in Electronic Media)," *Jurnal HAM* 11, no. 2 (2020): 285–99, <https://doi.org/10.30641/ham.2020.11.285-299>.

¹⁶ Prabawati Nurhabibah, Hanikah, and Hema Widiawati, "Aplikasi Pilihan Pendukung Pembelajaran Daring Pada Mahasiswa Pendidikan Guru Sekolah Dasar," *Jurnal Riset Pedagogik* 4, no. 2 (2020): 257–64, <https://doi.org/10.20961/jdc.v4i2.45284>.

¹⁷ Sahat Maruli Tua Situmeang, "Penyalahgunaan Data Pribadi Sebagai Bentuk Kejahatan Sempurna Dalam Perspektif Hukum Siber," *SASI* 27, no. 1 (2021): 38–52, <https://doi.org/10.47268/sasi.v27i1.394>.

¹⁸ Vaya Annisa Izzati and Yuki Firmanto, "Analisis Kepuasan Pengguna Aplikasi Kesehatan Halodoc Melalui Model End User Computing Satisfaction Selama Masa Pandemi Covid-19," *Jurnal Ilmiah Mahasiswa FEB* 9, no. 2 (2020): 1–16, <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7139>.

¹⁹ Bimo Aria Fundrika, "Penggunaan Telemedicine Di Indonesia Meningkat 30 Persen Selama Situasi Pandemi Covid-19," *suara.com*, 2022, <https://www.suara.com/health/2022/03/08/111953/penggunaan-telemedicine-di-indonesia-meningkat-30-persen-selama-situasi-pandemi-covid-19>.

²⁰ Arman Anwar, "Prinsip Tanggung Gugat Dalam Praktik Kedokteran Telemedicine" (Universitas Airlangga, 2015).

from one of the telemedicine applications, namely eHAC. Around 1.3 million data on users of the Health Alert Card (eHAC) application made by the Indonesian Ministry of Health containing Covid-19 data were compromised. Three months earlier, data on 279 million Indonesians collected over the years by the Health Social Security Management Agency was also leaked. The data is traded on raidforum.com, and it is still under investigation. If this number is correct, it will set a new record for the world's largest health data leak case. These two cases indicate that Indonesia's level of data security is fragile. Health data is personal data that is specific, sensitive, and confidential, which must be protected.²¹

During the Covid-19 pandemic, the number of cybercrimes increased significantly. Based on data from the Directorate of Cybercrime, Indonesian Police Criminal Investigation Agency, from January to April 17, 2020, there were 4.008 cybercrime reports with an estimated total loss of Rp. 10.74 billion. These reports include 2,157 online fraud reports, and the rest are data/identity theft, data manipulation, and others.²² These cases show that personal data protection in Indonesia is currently experiencing various problems. It is necessary to strengthen personal data protection because several cases such as fraud and pornography can occur, starting with the leakage of personal data.²³

Based on the freedom from arbitrary interference with privacy index from the World Justice Project, it shows that Indonesia only has a score of 0.38 and is ranked 93 out of 139 countries in the world. Even Indonesia ranks below some African countries such as South Africa with 0.60. Indicator 4.6 freedom from arbitrary interference with privacy is effectively guaranteed, which shows that Indonesia's privacy protection guarantee is still weak. Even privacy in Indonesia still has the potential to be arbitrarily disturbed. On this indicator, Indonesia only scores 0.38, far from the global average of 0.47. This can be seen in the following figure:



Sources: <https://worldjusticeproject.org/rule-of-law-index/country/2021/Indonesia/Fundamental%20Rights/>

²¹ Irwandy, "Bocornya 1,3 Juta Data EHac, Mengapa Terjadi Dan Bahayanya Bagi Pasien," Kompas.com, 2021, <https://www.kompas.com/sains/read/2021/09/03/080000023/bocornya-1-3-juta-data-ehac-mengapa-terjadi-dan-bahayanya-bagi-pasien?page=all>.

²² Ira Aprilianti, "Hari Konsumen Nasional, Perlindungan Data Pribadi Di Tengah Pandemi Covid-19," *ELSAM*, 2020.

²³ Priliasari, "Pentingnya Perlindungan Data Pribadi Dalam Transaksi Pinjaman."

Based on this background, the originality of this research is privacy rights protection in Indonesia, especially for patients who use telemedicine. The problem discussed in this research is: How was the implementation of telemedicine in Indonesia during the Covid-19 pandemic? And how is the regulation of privacy rights protection for patients who use telemedicine in Indonesia? This study uses a descriptive normative research method with a qualitative approach. The research approach used is the statutory approach and conceptual approach.

B. Discussion

1. Telemedicine Implementation in Indonesia During the Covid-19 Pandemic

The Covid-19 pandemic has caused various paradigm shifts in life, especially health. Telemedicine is one of the uses of technology in the health sector that can support the quality of health service facilities during the Covid-19 pandemic.²⁴ Telemedicine is a tool of virtual communication and consultation using technology. Telemedicine can be used as a consultation, diagnosis, and screening tool, providing valid information about the patient's health and various diseases up to the first action the patient must take. Telemedicine is combined with medical expertise so that health workers and patients can minimize unnecessary face-to-face meetings (long distance/not limited to space and time).²⁵ There are various telemedicine applications that have developed in Indonesia, namely KlikDokter, YesDok Halodoc, AloDokter, Get Well, Milfield Dokter, ProDehat, KlinikGo, LinkSehat SehatQ, Good Docto, and others.

In Indonesia, the regulation regarding telemedicine is in the Minister of Health Regulation Number 20 of 2019 concerning the Implementation of Telemedicine among Health Facilities and the Decree of the Minister of Health of the Republic of Indonesia Number Hk.01.07/Menkes/4829/2021 concerning Guidelines for Health Services Through Telemedicine During the Corona Virus Disease 2019 (Covid-19) Pandemic.²⁶ Telemedicine aims to achieve equal distribution of health services throughout the country's

²⁴ Chien-Hao Lin et al., "A Double Triage and Telemedicine Protocol to Optimize Infection Control in an Emergency Department in Taiwan during the COVID-19 Pandemic: Retrospective Feasibility Study," *Journal of Medical Internet Research* 22, no. 6 (2020): 1–12, <https://doi.org/10.2196/20586>.

²⁵ Made Martini, "Telemedicine Terhadap Pencegahan Penyebaran Covid-19 Di Ruang Instalasi Gawat Darurat (Igd) Selama Masa Pandemi Covid-19," *Jurnal Keperawatan Suaka Insan (JKSI)* 6, no. 1 (2021): 8–19, <https://doi.org/10.51143/jksi.v6i1.264>.

²⁶ Aidha Puteri Mustikasari, "Informed Consent Dan Rekam Medis Dalam Telemedicine Di Indonesia," *Jurnal Hukum Dan Pembangunan Ekonomi* 8, no. 2 (2020): 89–94, <https://doi.org/10.20961/hpe.v8i2.49759>.

population, improve the quality of services, especially for remote areas, and save costs than using conventional methods. Telemedicine is also intended to reduce referrals to doctors or health services in big cities, medical education facilities, and emergency cases. The expansion of the benefits of telemedicine can reach disaster areas, long-distance flights, and foreign tourists who are in tourist areas.²⁷ In telemedicine, patients will assume that the doctor is a great and competent person because they can serve from afar without a supporting diagnosis. Its success is closely correlated with whether the patient can describe in detail the symptoms or pain are suffering from or whether they can take photos of the physical symptoms of the disease, which of course, cannot be ascertained with accuracy. This will obscure the identity of medical practice, which is based on human values and justice. The factors that affect telemedicine are grouped into 4 factors which can be described in the following table.²⁸

Table 1: The Factor of Telemedicine Effect in Indonesia

No	Factors	Description
1.	Regulation	Regulatory factors related to the rapid telemedicine development have led to an increasing number of telemedicine users. Therefore, the development of legal regulations is also a factor in the development of telemedicine. So that in terms of the use of telemedicine, the government must remain present in determining legal policies and collaborate with hospitals and medical personnel on an ongoing basis.
2.	Financial	Financial factors affect telemedicine because the financial budget allocation from patients for treatment is reduced. After all, telemedicine can save costs in terms of travel and time.
3.	Technology infrastructure	Infrastructure and technology factors are needed to support telemedicine implementation. Therefore, these facilities can support the satisfaction of telemedicine users.
4.	Covid-19 Pandemic	Covid-19 pandemic factor in telemedicine shifted the treatment method by health service providers and patients during the Covid-19 pandemic, which requires social distancing.

²⁷ Erik Tapan, "Implementasi Telemedicine," in *Sidang Ilmiah Penjajakan Peluang Aplikasi Dan Implementasi Telemedicine Dalam Dunia Kedokteran* (Jakarta: Pusat Studi Informatika Kedokteran Universitas Gunadarma, 2006), 12.

²⁸ Agus Riyanto, "Faktor-Faktor Yang Mempengaruhi Pelaksanaan Telemedicine (Systematic Review)," *Jurnal Manajemen Informasi Kesehatan Indonesia (JMiki)* 9, no. 2 (2021): 165–74, <https://doi.org/10.33560/jmiki.v9i2.337>.

Sources: Results of the author's processing data based on Agus Riyanto's research.

Telemedicine applications can be used as a solution to overcoming health problems in Indonesia. Legal issues using telemedicine in medical practice are licensing, accreditation, privacy, confidentiality, procedure, liability, and jurisdictional authority. For this reason, as a consequence, the preparation of regulations is necessary to answer the legal issues.²⁹ In general, the legal construction in Article 42 of the Law on Health shows that telemedicine can be accepted as a method of health care. Unfortunately, this provision has not yet been equipped with its implementing regulations to clarify how medical practice services can be performed using telemedicine. Regarding this, the ambiguity of the article will obscure legal certainty.³⁰ Some of the challenges that arise in the implementation of telemedicine such as technological capabilities, data security and patient privacy, laws and regulations, usage guidelines, and individual patient problems. There are several other obstacles to telemedicine implementation. Therefore, it becomes a challenge to implement telemedicine in Indonesia.³¹

The challenges faced by the telemedicine system include resistance from both parties, both doctors and patients. Not all doctors want to use the telemedicine system, and not all patients also want to consult through the telemedicine system. Many doctors, especially the senior generation, assume that telemedicine is not appropriate to replace the doctor-patient relationship directly in the practice room. This statement is not wrong, but not entirely correct. Telemedicine systems certainly cannot completely replace conventional practice methods. The telemedicine system functions to complement existing conventional practices, not to replace them. In conventional practice, the available resources are also more complete because nurses and other health workers help doctors, and they can serve patients humanely. The most advanced medical robotic technology cannot replace this empathy and a human touch. The telemedicine system cannot be used for patients with very severe conditions because there can be a significant worsening of the patient's condition in a brief period while the doctor is not near the client.³²

Telemedicine implementation in Indonesia has not been maximized. Several factors, including the expensive implementation cost of information

²⁹ Arman Anwar, "Aspek Hukum Penggunaan Telemedicine," *FIKI*, no. 1 (2013): 1–14.

³⁰ Yovita Arie Mangesti, "Konstruksi Hukum Transformasi Digital Telemedicine Di Bidang Industri Kesehatan Berbasis Nilai Pancasila," in *Seminar Nasional Hukum Transendental 2019* (Surakarta: Universitas Muhammadiyah Surakarta, 2019), 157–72.

³¹ Zidni Imanurrohman Lubis, "Analisis Kualitatif Penggunaan Telemedicine Sebagai Solusi Pelayanan Kesehatan Di Indonesia Pada Masa Pandemi COVID-19," *Physiotherapy Health Science (PhysioHS)* 2, no. 2 (2020): 76–82, <https://doi.org/10.22219/physiohs.v2i2.15148>.

³² Thareq Barasabha, "Pemanfaatan Telemedicine Untuk Penanganan Covid-19 Di Indonesia," in *The Covidpedia* (Jakarta: Media Nusa Creative, 2021), 2–14.

technology infrastructure, are still hampered, so telemedicine cannot be marketed. For minor medical facilities, telemedicine is too expensive because it costs a lot to build and maintain. In addition, telemedicine does not allow patients and doctors to meet face-to-face. This allows some important clinical findings and diagnoses not to be detected because a patient's physical assessment cannot be carried out. This also has an impact on the level of patient satisfaction. Some patients may not be happy or satisfied with the advice and treatment prescribed due to the absence of face to face. Telemedicine services are very complex. Thus it requires professional human resources, health workers and operators in communication systems, and reliable telecommunications and telemedicine equipment. This requires support from all parties, both the government and other institutions.³³

The data security of the telemedicine system also deserves attention because medical information is confidential. If the system's security is not strong enough and easy to hack, hackers can eavesdrop or steal data from the consulting process. This is dangerous because medical data can be sold on the black market. Moreover, if the medical data belongs to someone famous in the community, data theft can lead to other crimes such as extortion or character assassination.³⁴ Ethical issues regarding data privacy have become a problem for doctors regarding the accessibility of telemedicine in consultations between doctors and patients. To deal with these ethical issues, doctors need to explain to patients telemedicine's limitations. The use of telemedicine by doctors also requires clear protocols and regulations to assure patients about the confidentiality of patient data and information. Hence, patients can choose to agree with the actions to use telemedicine or refuse to use it.³⁵

2. The regulation of Privacy Rights Protection for Patients who use Telemedicine in Indonesia

In 1980, Samuel Warren and Louis Brandeis became the first sounder of the privacy rights concept. The Harvard Law Review published an essay entitled "The Right to Privacy," written by Samuel and Louis. They revealed that recognizing individual rights "right to be let alone," is one of the issues of Human Rights, so Warren conveyed his idea that privacy is the right of every individual who needs to be protected by judges. Personal data

³³ Shinta Lestari and Dolih Gozali, "Narrative Review: Telemedicine Dan Implementasinya Dalam Membantu Perawatan Pasien Covid-19," *Farmaka* 19, no. 3 (2021): 63–72, <https://doi.org/10.24198/farmaka.v19i3.34918>.

³⁴ Barasabha, "Pemanfaatan Telemedicine Untuk Penanganan Covid-19 Di Indonesia."

³⁵ Danielle Chaet et al., "Ethical Practice in Telehealth and Telemedicine," *Journal of General Internal Medicine* 32, no. 10 (2017): 1136–1140, <https://doi.org/10.1007/s11606-017-4082-2>.

protection is essential because it is essential regarding one's self-respect and freedom of expression.³⁶ So, in general, data protection refers to the practices, safeguards, and binding rules put in place to protect personal information and ensure that data subjects remain in control of their information. Shortly, the data owner should be able to decide whether or not to share some information, who has access, for how long, for what reason, and be able to modify some of this information, etc.³⁷

So far, Indonesia has several basic regulations governing privacy rights protection of personal data, namely Law Number 11 of 2008 as amended by Law Number 19 of 2016 concerning Information and Electronic Transactions or UU ITE, Regulation of the Minister of Communication and Information Technology Number 20 of 2016 concerning Protection of Personal Data in Electronic Systems or Permenkominfo and Government Regulation Number 71 of 2019 concerning Operation of Electronic Systems and Transactions or PP 71/2019. Besides these three regulations, other laws regulate data privacy protection in Indonesia. However, this law is a sectoral regulation that does not specifically regulate privacy rights, such as the Trade Law, Health Law, Financial Services Authority Law, and others.³⁸

Patient protection is crucial in online health consultation services. However, there are various challenges in its implementation. Increased data security (cybersecurity) is needed in telemedicine consulting services to minimize cyber-attacks that can cause damage or leak patient data. In addition, it is necessary to back up data regularly so that there is no loss or damage to patient data. Further development of regulations regarding telemedicine is needed, especially regarding patient data protection, standardization of devices, medical accountability, and online prescribing. In addition, multi-stakeholder cooperation is needed to develop and supervise the implementation of online health consulting services so that they do not conflict with the ethics and laws in Indonesia.³⁹ Privacy data protection in medical records is a concern regarding telemedicine issues in every practice

³⁶ Sinta Dewi, "Konsep Perlindungan Hukum Atas Privasi Dan Data Pribadi Dikaitkan Dengan Penggunaan Cloud Computing Di Indonesia," *Yustisia Jurnal Hukum* 5, no. 1 (2016): 22–30, <https://doi.org/10.20961/yustisia.v5i1.8712>.

³⁷ Wahyudi Djafar, "Hukum Perlindungan Data Pribadi Di Indonesia: Lanskap, Urgensi Dan Kebutuhan Pembaruan," in *Seminar Hukum Dalam Era Analisis Big Data* (Yogyakarta: Program Pasca Sarjana Fakultas Hukum UGM, 2019).

³⁸ Glenn Wijaya, "Pelindungan Data Pribadi Di Indonesia: Ius Constitutum Dan Ius Constituendum," *Law Review* 19, no. 3 (2020): 326–61, <https://doi.org/10.19166/lr.v19i3.2510>.

³⁹ Rani Tiya Budiyan and Penggalih Mahardika Herlambang, "Perlindungan Hukum Pasien Dalam Layanan Konsultasi Kesehatan Online," *Jurnal Hukum Kesehatan Indonesia* 1, no. 1 (2021): 1–10, <https://doi.org/10.53337/jhki.v1i01.1>.

of doctors. This condition is due to the lack of regulations governing medical practice with telemedicine.⁴⁰ This can be seen in the following table:

Table 2: Regulation related to Telemedicine that Protects Data Privacy

No	Regulation	Article concerning		
		Privacy Data Protection	Data Leak Liability	Specific RegulateTele medicine
1.	Law Number 29 of 2004 Concerning Medical Practice ⁴¹	<ul style="list-style-type: none">- Article 47 paragraph (2) of this law stipulates that medical records must be kept confidential by doctors or dentists and leaders of health service facilities.- Article 57 Letter (c) Doctors or dentists are responsible for storing, maintaining, and protecting all information about patients.	Article 79 point (c) Sentenced to a maximum imprisonment of 1 (one) year or a maximum fine of Rp. 50,000,000.00 for every doctor or dentist who intentionally leaks patient data	Unregulated
2.	Law Number 36 of 2009 concerning Health	Article 57 paragraph 1 "Everyone has the right to kept secret their personal health condition that has been disclosed to the health service provider"	Unregulated	Unregulated
3.	Minister of Health Republic of Indonesia Regulation Number 36 of 2012 concerning Medical Secrets (Permenkes	This regulation explicitly regulates that medical records containing patient health data must also be kept confidential.	Unregulated	Unregulated

⁴⁰ Giulio Nittari et al., "Telemedicine Practice: Review of the Current Ethical and Legal Challenges," *Telemedicine Journal and E-Health* 26, no. 12 (2020): 1427–37, <https://doi.org/10.1089/tmj.2019.0158>.

⁴¹ Sinta Dewi Rosadi, "Implikasi Penerapan Program E-Health Dihubungkan Dengan Perlindungan Data Pribadi," *Arena Hukum* 9, no. 3 (2016): 403–20, <https://doi.org/10.21776/ub.arenahukum.2016.00903.6>.

	No. 36 of 2012)			
4.	Minister of Health of the Republic of Indonesia Regulation Number 269 of 2008 concerning Medical Records ⁴²	Article 10 regulated that maintaining security, storing data/information, and ease of data access are the demands of the authorized 3rd party. Meanwhile, parties who need data/information must always respect patient privacy. Security, privacy, confidentiality, and safety devices fortify data/information in health records.	Article 14 states that the head of the health service facility is responsible if the medical record is used by a body or person who is not entitled to the medical record. However, in this regulation, it is not explained how the form of liability will be or the punishment for those who spread the confidentiality of medical records.	Unregulated
5.	Regulation of the Medical Council (Perkonsil) No. 74 of 2020 concerning Clinical Authority and Medical Practice Through Telemedicine during the Corona Virus	Article 3 paragraph (2) states that "Medical practice through an electronic application/system in the telemedicine is a consultation or teleconsultation service provided by Doctors and Dentists by applying the principle of patient confidentiality"	Unregulated	The entire Perkonsil regulates the authority and practice of doctors through telemedicine.

⁴² Made Yogi Prasada and I Nyoman Mudana, "Tanggung Jawab Rumah Sakit Terhadap Kerahasiaan Rekam Medis (Medical Record)," *Kertha Semaya : Journal Ilmu Hukum* 2, no. 2 (2014): 1–6, <https://ojs.unud.ac.id/index.php/kerthasemaya/article/view/8265>.

	Disease/Covid-19 Pandemic in Indonesia			
6.	Minister of Health Regulation Number 20 of 2019 concerning the Implementation of Telemedicine Among Health Facilities	<ul style="list-style-type: none"> - Article 17 (2): Consulting Health Facilities in carrying out Telemedicine services has the liability to maintain the confidentiality of patient data. - Article 18 (2) Health Facilities Requesting Consultation in carrying out Telemedicine services has the liability to maintain the confidentiality of patient data. 	Unregulated	The whole Permenkes regulates the implementation of telemedicine among health facilities.
7.	Minister of Health of the Republic of Indonesia Decree Number Hk.01.07/Menkes/4829/2021 concerning Guidelines for Health Services Through Telemedicine During the Corona Virus Disease 2019 (Covid-19) Pandemic	It is contained in Chapter II, which regulates the Implementation of Telemedicine Services during the Covid-19 Pandemic Period and states that pharmaceutical service facilities or delivery services in carrying out delivery must maintain patient confidentiality.	Unregulated	This entire Ministry of Health Decree regulates guidelines for implementing telemedicine during the Covid-19 pandemic.

Sources: Results of the author's processing data

From the table above, it can be seen that there are no regulations that stipulate strict sanctions when the patient's data or medical records are not kept confidential. There is no explicit provision that threatens any person or individual who misuses the patient's data. Although basically, all regulations state the liability to maintain the confidentiality of patient data, there are no strict sanctions when the patient's data is disclosed. Law No. 29 of 2004 concerning Medical Practice has stipulated strict sanctions for doctors who leak patient data, but the law is limited to only doctors. Then when the data leak comes from a telemedicine application, there are no regulations regulating the sanctions. So when there is a leak of Indonesian patient data originating from various telemedicine applications, should this be ignored, and who is responsible?

In providing health services both online and offline, the health care provider will collect, store, transmit and use patient medical information. It is the patient's data in documents, records, pathological and diagnostic specimens without the patient's knowledge. The use of technology allows the patient's data to be accessed and processed in large quantities and quickly. So that if special regulations do not follow, it will violate the privacy of the patient's data, which is sensitive data with specific legal protection. Medical information is vital to protect because patients' data are often traded or disclosed for insurance purposes, employment opportunities, and government assistance programs without the patient's knowledge. Many parties can access personal data for business purposes, including:⁴³

- a. Insurers who use a lot of patient medical data for their business interests usually ask for it at the beginning of their new customer acceptance to join the new insurance program.
- b. Pharmacies have patient medical data, especially the drugs used in their database, and if disclosed to other parties, they can identify personal data.
- c. Government agencies, especially in developed countries, often usually request a person's medical records to verify medical claims and social security and receive workers' compensation.
- d. Educational institutions also often have records of their students' health, such as student vaccine history, information on physical and mental examinations, and counseling. These medical records will contain information about a person's behavior, including mental health.

When a patient's data leaks from the telemedicine application or system, it is considered negligence. Based on harmful telemedicine errors, the

⁴³ Rosadi, "Implikasi Penerapan Program E-Health Dihubungkan Dengan Perlindungan Data Pribadi."

manager's responsibility arises. In this case, the telemedicine application manager can compensate for the losses caused by his actions.⁴⁴

According to the Brothers and Rothstein, there are several important reasons for protecting patient health information. The treatment of discrimination and negative stigmatization from the community becomes very open if many people know the health information. This event is very likely to occur in people with infectious diseases, mental disorders, and even drug abuse. Patients will decrease their health quality because they are psychologically affected, so the patient refuses to be given treatment. This also affects the credibility of the Health Service Facility because it results in a decrease in public trust in the Health Service Facility.⁴⁵ Telemedicine in its implementation relies heavily on technology, which is considered risky from a data security perspective. The medical secret is an absolute thing in the provision of medical services. Many possible cyber threats are closely related to the security and confidentiality of medical data. Therefore, the urgency of passing the Personal Data Protection Act is even greater in this modern technology era.⁴⁶

The absence of a specific regulation to protect personal data privacy in Indonesia has several impacts, one of which is the distrust of investors and companies in terms of "data storage" in Indonesia. On the other hand, specific regulations on personal data can impact positively. For example, from an economic perspective, supporting Indonesia as a center for business and investment, global data management, and a reliable and conducive data management industry in terms of data storage. In addition, the absence of legal rules that comprehensively regulate the protection of personal data privacy increases the potential for violations of a person's constitutional rights.⁴⁷ Various cases of alleged data leakage and misuse, as mentioned in the introduction, can show how this security aspect is important in efforts to protect people's data. This also shows that the state has a crucial role in ensuring the fulfillment of individual and state interests in the use of personal data and ensuring the security of personal data held by government agencies or the state. Thus, this can minimize the occurrence of privacy

⁴⁴ Calvin Anthony Putra and Muhammad Ali Masnun, "Analisis Pertanggungjawaban Rumah Sakit Terkait Potensi Kebocoran Data Rekam Medis Elektronik Akibat Cyber Crime," *Novum: Jurnal Hukum* 1, no. 1 (2021): 1–14, <https://doi.org/10.2674/novum.v0i0.41286>.

⁴⁵ Mahindra Awwaludin Romdlon, Luthfi Kalbu Adi, and Aris Aji Kurniawan, "Telemedicine Dalam Konstruksi Hukum Di Indonesia," *Kosmik Hukum* 21, no. 2 (2021): 142–51, <https://doi.org/10.30595/kosmikhukum.v21i2.10597>.

⁴⁶ Wahyu Andrianto and Atika Rizka Fajrina, "Tinjauan Perbandingan Penyelenggaraan Telemedicine Antara Indonesia Dan Amerika Serikat," *Jurnal Hukum Kesehatan Indonesia* 1, no. 2 (2021): 70–85, <https://doi.org/10.53337/jhki.v1i02.7>.

⁴⁷ Fanny Priscyllia, "Perlindungan Privasi Data Pribadi Perspektif Perbandingan Hukum," *Jatishwara* 34, no. 3 (2019): 239–49, <https://doi.org/10.29303/jatishwara.v34i3.218>.

violations caused by cybercrimes, one of which can occur through the misuse of personal data.⁴⁸

In contrast to Indonesia, significant developments in personal protection law have occurred globally. In 2016, the European Union unified personal data protection law through the European Union General Data Protection Regulation (EU GDPR). The EU GDPR came into force on May 25, 2018, and to date, more than 100 countries have ratified it.⁴⁹ Meanwhile, Indonesia currently has a Personal Data Protection Bill or PDP Bill, which is still being discussed by the House of Representatives or the DPR together with the Government. The PDP Bill, according to its deliberations, emphasizes that personal data protection is a human right that is part of personal protection. So it is necessary to provide a solid legal basis to provide security for personal data.⁵⁰

The substance in the PDP Bill is more or less adopted from the EU GDPR, which consists of 15 chapters and 74 articles. This bill regulates General Provisions, Types of Personal Data, Rights of Personal Data Owners, Processing of Personal Data, Obligations of Personal Data Controllers and Processors in Processing Personal Data, Personal Data Transfer, Prohibition on the Use of Personal Data, Establishment of a Code of Conduct for Personal Data Controllers, Exceptions Against Personal Data Protection, Dispute Resolution, International Cooperation, Community Roles, Criminal Provisions, Transitional Provisions, and Closing Provisions.⁵¹ The PDP Bill is one of the urgent regulations needed by the Indonesian people because the PDP Bill can consolidate the previous sectoral laws that have regulated the protection of personal data. The PDP Bill has yet to find clarity on the schedule for further discussion. According to Deputy Chairman of the Legislative Body of the House of Representatives, Willy Aditya, the continuation of the PDP Bill depends on the Ministry of Communication and Information (Kemenkominfo).⁵²

C. Conclusion

⁴⁸ Faiz Rahman, "Kerangka Hukum Perlindungan Data Pribadi Dalam Penerapan Sistem Pemerintahan Berbasis Elektronik Di Indonesia," *Jurnal Legislasi Indonesia* 18, no. 1 (2021): 81–102, <https://doi.org/10.54629/jli.v18i1.736>.

⁴⁹ Dragan Savić and Mladen Đuro Veinović, "Challenges Of General Data Protection Regulation (GDPR)," in *International Scientific Conference On Information Technology And Data Related Research* (Beograd: Univerzitet Singidunum, 2018), 23–30, <https://doi.org/10.15308/Sinteza-2018-23-30>.

⁵⁰ Wijaya, "Perlindungan Data Pribadi Di Indonesia: Ius Constitutum Dan Ius Constituendum."

⁵¹ Djafar, "Hukum Perlindungan Data Pribadi Di Indonesia: Lanskap, Urgensi Dan Kebutuhan Pembaruan."

⁵² Aprilianti, "Hari Konsumen Nasional, Perlindungan Data Pribadi Di Tengah Pandemi Covid-19."

The implementation of telemedicine in Indonesia during the Covid-19 pandemic raises several problems: technological capabilities, data security and patient privacy, laws and regulations, doctor and patient resistance, and telemedicine costs. The security of telemedicine patient data needs to be considered because when the system's security is not strong enough and easy to hack, hackers can steal patients' data from the consultation process, which then the medical data is sold on the black market for misuse.

Based on the author's analysis, no regulations stipulate strict sanctions when the patient's data or medical records are not kept confidential. There is no explicit provision that threatens any person or individual who misuses the patient's data. Although all regulations state the obligation to maintain the confidentiality of patient data, there are no strict sanctions when a patient's data is disclosed. Then when the data leak comes from a telemedicine application, there are no regulations that regulate the sanctions. So when there is a leak of Indonesian patient data originating from various telemedicine applications, should this be ignored, and who is responsible? Medical information is very important to protect because patients' data are often traded or disclosed for insurance purposes, employment opportunities, and government assistance programs without the patient's knowledge. Another reason is that discrimination and harmful stigmatization from the community becomes very open if many people know the health information. In addition, the absence of a special regulation on the protection of personal data privacy in Indonesia has caused several impacts, one of which is the distrust of investors and companies in terms of "data storage" in Indonesia. Thus, it is necessary to have specific regulations governing the protection of patient privacy rights in the use of telemedicine in Indonesia.

Recommendation

Based on the explanation above, it can be seen that the regulation of protecting patients' privacy rights in the use of telemedicine is something essential. Meanwhile, Indonesia currently has a Personal Data Protection Bill or PDP Bill, which is still being discussed by the House of Representatives or the DPR together with the Government. So Indonesian legislators need to continue the legislative process of the Personal Data Protection Bill in the DPR. In addition, there is also a need for public awareness to be more careful in providing personal data to other parties, either to parties via the internet or to parties who directly request personal data. This needs to be done to prevent all forms of crime that use data falsification.

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