Interdisciplinary Studies in Society, Law, and Politics 2025; 4(1): 79-89

ISSLP
Interdisciplinary Studies in Society, Law and Politics

Original Research

Telemedicine Civil Liability in the Legal Systems of Leading Countries

Reza. Rastegar[1], Mohammad Bagher. Fijan[2*], Dariush. Babaei[3]

[1] PhD student, Department of Law, Yasuj Branch, Islamic Azad University, Yasuj, Iran
[2] Assistant Professor, Department of Private Law, Noorabad Mamasani Branch, Islamic Azad University, Noorabad Mamasani, Iran
[3] Assistant Professor, Department of Public Law, Yasuj Branch, Islamic Azad University, Yasuj, Iran

*** Corresponding author email address**: Fijanmohammad@gmail.com

Received: 2024-09-28 **Revised:** 2024-12-04 **Accepted:** 2024-12-16 **Published:** 2025-01-01

Telemedicine in different countries is subject to various laws and regulations. Leading countries in this field have established comprehensive and precise laws, enabling them to create suitable legal frameworks for such medical services. By utilizing extensive research and experiences, these countries have effectively managed the legal issues and responsibilities arising from telemedicine. This study addresses the civil liability of telemedicine in the legal systems of leading countries. The study concludes that when medical services are provided in the traditional manner, it is easy to identify the relationships between patients and service providers. However, in the case of telemedicine, there is direct or indirect involvement of at least one doctor who is not only not part of the medical center, but may also be located in a remote area or even in another country. Does a relationship, whether contractual or non-contractual, exist between the patient and the mentioned doctor? Since the doctor-patient relationship is a contractual one, under the treatment contract, the conflict regarding jurisdictional matters in Iran can be resolved by referring to the law of the place where the contract is concluded, the law of the common domicile of the parties, the law of the place of performance of the obligation, the law of the nationality of the parties, or the law agreed upon by the parties. Furthermore, the relationship between the patient and the medical center or treating physician is generally based on a contract, which is established when the patient visits the medical center or a doctor's office, through payment of consultation fees or completion of registration forms. Therefore, except for exceptional cases, such as medical emergencies, the relationship between the patient and healthcare providers is based on a contract.

Keywords: *Telemedicine, Civil Liability, Legal Systems of Leading Countries*

How to cite this article:

Rastegar, R., Fijan, M. B., & Babaei, D. (2025). Telemedicine Civil Liability in the Legal Systems of Leading Countries. *Interdisciplinary Studies in Society, Law, and Politics, 4*(1), 79-89. https://doi.org/10.61838/kman.isslp.4.1.8

1. Introduction

Telemedicine, as one of the modern technologies in the field of healthcare, has revolutionized the delivery of medical services. This technology, through advanced communication tools, enables consultation and treatment of patients without the need for physical presence in a clinic or hospital. During the COVID-19 pandemic, the importance and effectiveness of telemedicine became even more evident, as it served as an effective solution to reduce disease transmission and provide services to patients across different parts of the

world (Soltani Fard et al., 2023). While telemedicine has improved access to medical services, it has also raised new challenges regarding legal issues and medical responsibilities. In this context, numerous questions arise about the type and extent of responsibility of doctors, hospitals, and other parties involved in providing these services. These questions become particularly significant in cases where telemedicine leads to harm or medical errors (Panahi, 2022). Therefore, examining and defining legal responsibilities in this domain is of particular importance. Telemedicine in various countries faces different laws and regulations. Leading countries in this field have created suitable legal frameworks for such medical services through the formulation and implementation of comprehensive and precise laws (Rezaei Pour, 2022). These countries have effectively managed the legal issues and responsibilities arising from telemedicine by leveraging extensive research and experiences. Studying and analyzing these experiences can serve as a model for other countries, including Iran. The main goal of this research is to investigate the civil liability of telemedicine in the legal systems of leading countries. In this study, in addition to analyzing the responsibilities of doctors, hospitals, and other related parties, private international law issues are also discussed in cases where telemedicine involves two or more countries.

Simply put, if electronic devices mediate the provision of medical services, it is referred to as telemedicine or remote medicine. Simple telephone consultations between a doctor and a patient, medical consultations between healthcare professionals, online visits, monitoring surgeries through video conferencing, remote surgery by a doctor using mechanical arms (robots), and even robotic surgery conducted by a pre-programmed robot, are all examples of telemedicine (Farahmand et al., 2019).

The main advantages of telemedicine can be summarized as follows:

1. Potential cost savings
2. Potential travel savings
3. Time savings (for both doctor and patient)
4. Utilization of facilities and expertise of doctors and specialists from other parts of the world, increasing access to them
5. Reduction in the cost of multiple visits to clinics
6. Reduction of errors and increase in the speed of consultations
7. Use in emergency situations and force majeure
8. Utilization of patient data banks to track disease progression
9. Ease of exchange of laboratory results, radiological images, etc.
10. Improved delivery of healthcare services to rural and remote areas
11. Use of telemedicine in training rural health workers, students, and medical staff
12. Performing complex surgeries remotely with the help of robots guided by doctors
13. Reduction in medical errors
14. Improvement in healthcare quality (Tehrani & Norouzi, 2015).

Telemedicine is often considered an environmentally friendly model. It improves accessibility and outcomes for patients while reducing healthcare costs. This technology has been adopted more rapidly in leading countries compared to our own, leading to the development of remote healthcare regulations in those countries. Telemedicine technology has entered our country long ago; however, there is still no well-established legal framework regarding civil liability arising from telemedicine (Ahmadi et al., 2023). The absence of laws, combined with the low level of public understanding and the healthcare staff's awareness of their responsibilities, creates challenges. Since our lawmakers have yet to draft and approve laws that are

suited to this new technology, and to clarify the concepts and components of this technology, it is essential for legal experts to address these issues and explore their hidden and complex aspects. This research aims to take a small step towards achieving this goal (Pasban & Gholami, 2017).

2. Methodology

This is a descriptive-analytical library study aimed at examining the responsibilities arising from telemedicine (remote medicine). The study involves reviewing various laws and utilizing keywords such as liability, guarantee, error, negligence, criminal liability, civil liability, ethical responsibility, professional (administrative) responsibility, healthcare staff responsibility, doctor's liability under the law, doctor, remote medicine, and related English terms such as *Telemedicine*, *Malpractice*, *Medical error*, and *Telehealth*. The research was conducted using databases such as Google Scholar, PubMed, SID.ir, Magiran, and Irandoc, along with studies and relevant texts on the responsibility arising from telemedicine. The extracted articles were categorized based on legal, ethical, and medical criteria, and the results were reported.

3. Legal Approaches of Countries Regarding Telemedicine

3.1. Regulations in the United Kingdom

Currently, there is no specific law or regulation in the United Kingdom that addresses remote healthcare or telemedicine. Therefore, these services are regulated in the same way as other healthcare services. Healthcare providers (e.g., clinics offering medical and dental services) are regulated by various organizations in each of the countries of the UK: the Care Quality Commission (CQC) in England, Healthcare Improvement Scotland, the Healthcare Inspectorate Wales, and the Regulation and Improvement Authority in Northern Ireland (Amouzgar, 2019).

Under the regulated activities of the Health and Social Care Act 2008 (2014), "telemedicine services, including triage and medical advice provided remotely," is considered a regulated activity. In the UK, CQC considers the activities of telemedicine providers under this law. Providers must register with CQC and demonstrate that they meet the relevant regulatory requirements. This effectively means that telemedicine providers are regulated similarly to in-person service providers. Therefore, there is no difference in the regulation of telemedicine providers and healthcare professionals in a digital environment compared to a non-digital one (Rezaei Pour, 2022).

The British Medical Association, a trade union and professional body for doctors in the UK, has published regularly updated guidelines on remote consultations. These recommendations emphasize the importance of safeguarding patient confidentiality by ensuring consultations are conducted using secure internet access and encryption tools. The guidelines also stress that "doctors must ensure that remote consultations are appropriate in these circumstances" (Hajavi et al., 2024).

In March 2017, CQC proposed recommendations for regulating digital healthcare providers in primary care, which stated that CQC would request information from providers, including services offered, complaints, side effects, and prescribed medications. CQC will also conduct inspections with a clear assessment framework and site visits. After each inspection, CQC will prepare a report. If concerns are identified, CQC may take enforcement actions (Beigi & Esmailzadeh, 2023).

3.2. *The United States*

3.2.1. *Local Law vs. National Care Standards*

Several approaches exist for determining the standard of care for a doctor in different jurisdictions: either the standard of care is regulated at the local level, based on the standard of care for a doctor practicing in that area, or it is regulated at the national level with respect to a specific medical specialty. Local law "requires a specialist to be from the same medical community as the defendant doctor and compares the doctor's actions to the standard applicable in the community or locality where healthcare services are provided." On the other hand, the national standard of care requires the doctor to "provide care comparable to that given to patients anywhere in the United States, regardless of the skill and knowledge of the specific specialist or the region where the care is given" (Pour Ebrahim, 2021).

Currently, courts in most jurisdictions recognize the national standard of care, although several states still adhere to remnants of local law. State courts that recognize local law generally refer to a desire to protect doctors practicing in rural communities. It is assumed that rural doctors lack the access and knowledge available to doctors working in large urban areas. As local law has faded, some states that once adhered to it have adapted it to fit more easily into the modern medical landscape, while others have left it largely unchanged (Hajizadeh, 2020).

3.2.2. *In-Person Care vs. Remote Care*

Beyond the judicial differences in care standards for traditional in-person medical practices, there are other differences in how governments determine appropriate care standards for telemedicine practices. States that have addressed telemedicine care standards generally adopt an approach that sets the standard at the same level as for a doctor providing traditional in-person care. This is true for countries that are still in the process of enacting laws concerning this care standard. However, Hawaii provides an exception to this approach: the state's statute states that a doctor's treatment recommendations delivered via telemedicine must meet the same standards as recommendations provided in "traditional doctor-patient settings that do not involve in-person visits" (Zeraat, 2020).

The concept behind the difference in these methods is that a doctor practicing telemedicine in a state like Texas may be held to a higher care standard than one practicing in Hawaii. If a state adopts local law with legal language similar to Texas's, the courts in that state are likely to maintain the same care standard for a doctor practicing in-person as for one practicing telemedicine in that state. New York is an example of a state that enforces local law and holds doctors practicing telemedicine to the same care standards as doctors providing traditional in-person care (Ardabili, 2020).

4. Resolving Conflicts of Jurisdiction

One of the key issues arising from the lack of regulations in this area is determining the jurisdiction in which telemedicine services are located: the jurisdiction where the patient is located, the jurisdiction where the doctor is located, or the jurisdiction where the telemedicine service provider is based.

4.1. *United Kingdom*

In the European Union, this is unclear. Regarding the United Kingdom, doctors treating patients residing in the UK must be registered with the General Medical Council (GMC) and be licensed to practice. Therefore, a patient in the UK can only receive treatment from a doctor based outside the UK if that doctor is also registered with the GMC. While the GMC does not have the authority to enforce actions outside the UK, it can

advise those with legal qualifications and issue stop and hold warnings. The Advertising Standards Authority (ASA) prohibits individuals who are not registered with the GMC or the General Dental Council (GDC) from using the title “doctor” or “Dr.” in advertisements directed at individuals in the UK, including online. If the advertisement originates from outside the UK, it is considered a cross-border complaint and is referred to the local regulator, although the ASA acknowledges that its authority in this area is limited (Saei & Saghafi, 2024).

4.2. United States

According to a report by Europe Economics, most U.S. and Canadian lawmakers believe that the relevant jurisdiction is that of the patient. (That is, a court has jurisdiction if the patient is being treated or consulted within that jurisdiction) (Samavati & Asgari, 2020).

Thus, telemedicine has carved out a special place worldwide in both educational and healthcare matters, leading to the emergence of a particular type of doctor-patient relationship. However, in our beloved country, Iran, there is no clear legal source for resolving jurisdictional conflicts and disputes specifically related to international telemedicine (Karimi & Javaher Kalam, 2024; Karimi et al., 2024).

As a result, we must inevitably rely on existing international treaties to answer this question. By examining the doctor-patient relationship, we have concluded that this relationship is a contract, known as a treatment contract, and the law governing it can be the law of the place where the contract was formed, the law of the common domicile of the parties, the law of the place where the obligation is to be performed, the law of the state of nationality of the parties, or the law agreed upon by the parties. At the level of international treaties, the treatment contract can be examined under the 1980 Rome Convention, which deals with the law applicable to contractual obligations. Article 3 of this treaty, perhaps its most important article, explicitly accepts the rule of "freedom of choice" in selecting the applicable law for the contract.

5. Governing Law on Civil Liability in English and U.S. Law

5.1. United States

In the United States, for many years, the law of the place where the tort occurred was chosen as the governing law for civil liability claims, without considering other factors of connection. However, the country's jurisprudence has evolved, and in its recent developments, the law of the place where the tort occurred is now considered only as one of the connecting factors. The primary criterion for determining the governing law is now the protection of public interests and the maximization of the benefits of the parties to the dispute and the states involved in the incident (Shokri & Sirus, 2020).

For many years, courts applied the law of the place where the tort occurred in civil liability cases, disregarding issues such as the parties' conduct, the continuation of the case, the applicability of the law concerning involuntary manslaughter, immunity from liability, or other rules for proving damages. It was assumed that the law of the place where the tort occurred created the cause of the dispute and necessarily determined the scope of liability. Apart from the difficulties in litigation, this theory was effective when all related events occurred within one jurisdiction, but the case was filed in another jurisdiction. In complex situations involving multiple states, it is not acceptable to claim that the laws of one state alone can determine the exclusive rights applicable to the matter (Goldouzian, 2019).

The court must consider the interests of the parties to the dispute and the states involved and seek the appropriate law to apply to the matter. This means the judge can apply the law they deem most appropriate.

When this theory is followed, it does not involve the application of foreign law but rather the selection of an appropriate foreign rule to decide the case before the court. Additionally, it has now been established that in applying foreign law to determine acquired rights, if the choice of law is made based on an inappropriate criterion, it may lead to the violation of the legitimate interests of the parties to the dispute and the states involved (Mir Mohammad Sadeghi, 2020).

Accordingly, when applying the law of the place where the tort occurred would violate the interests of the plaintiff and the involved states, this law is never applied. However, the practicality of determining the applicable law and maintaining consistency in the rules governing decisions largely depends on the goal of determining the governing law for the dispute, which should be the law that is most closely related to the dispute. Furthermore, jurisdictions are increasingly moving away from the law of the place where the tort occurred as the governing law for civil liability claims, regardless of the subject matter of the dispute. The law of the place where the tort occurred is no longer, even nominally, the general rule for civil liability cases (Namdari, 2021).

5.2. United Kingdom

The governing law on civil liability in English jurisprudence has a long history, with more than a century having passed since the establishment of a specific rule in this regard. Initially, English jurisprudence selected the rule of lex loci delicti (the law of the place where the tort occurred) as the governing law for civil liability claims. However, over time, courts concluded that the application of this rule led to undesirable and unfair outcomes. As a result, they frequently refrained from applying it and replaced it with other rules. Nevertheless, this rule continued to exist until the enactment of the 1995 regulations, and with the approval of the Private International Law Act, the rule of lex loci delicti was replaced by the rule of the place where the harmful act occurred. The English Private International Law Act came into force on May 1, 1996, and is not retroactive. For claims before the enactment of the law, the lex loci delicti rule still applies (Karimi & Javaher Kalam, 2024).

English jurisprudence applied two different methods for determining the governing law in civil liability cases: **First method**: When the harmful act occurred within the maritime, aerial, or land territory of England, the law of England was applied, and foreign law was excluded. In this case, when the harmful act occurred in England, English law was applied, even if the parties had no connection to England (the place of the tort) (Vakili, 2023).

Second method: When the harmful act occurred outside the territory of England, the rule of lex loci delicti applied. According to this rule, the plaintiff could file a civil liability claim against the defendant only if the defendant was liable under the law of the place where the tort occurred and the law of the court's jurisdiction. In other words, a civil liability claim could only be heard if the act performed by the defendant was considered unlawful and unfair under both the law of the court's jurisdiction and the law of the place where the tort occurred. For the rule of lex loci delicti to apply, two conditions were necessary: the identity of the plaintiff and the identity of the defendant. In other words, to apply this rule, it was not enough to prove that the harmful act was liable under foreign law; the plaintiff also had to prove that the claim could be pursued against the same defendant under foreign law in the court of jurisdiction (Mahmoudi et al., 2024).

Despite its application, the rule of lex loci delicti caused several problems. One of these problems related to the fact that according to this rule, the harmful act had to be unjustifiable under the law of the place where the tort occurred. The term "unjustifiable" had different meanings at different times. These meanings included:

1) "Strict adherence to ethical and religious norms"; 2) "The conduct must be recognized as a harmful act under the law of the court's jurisdiction"; 3) "The conduct must be civilly actionable"; 4) "If the conduct is not civilly actionable, it must be treated as a criminal offense, creating criminal liability" (Elahi Manesh, 2020).

Another criticism of the rule of lex loci delicti was that the law of the place where the tort occurred might not be relevant to the facts of the case. Another criticism of English jurisprudence was that the plaintiff had to file the claim under both the law of the place of the damage and the law of the court's jurisdiction, which gave the defendant an advantage, allowing them to defend under both laws. As a result, the plaintiff might end up with minimal compensation. Although the rule of lex loci delicti was the governing law for civil liability cases in England, it was never applied absolutely, and English courts, as well as common law jurisdictions, occasionally introduced exceptions, particularly in cases where the application of this rule resulted in unfair or unjust outcomes (Rezaei Pour, 2022).

6. Conclusion

Telemedicine, as one of the most significant technological advancements in the healthcare sector, has enabled the provision of medical services remotely and has had positive impacts on access to healthcare and medical services. Given that telemedicine can improve the quality of life for patients, especially in remote areas and during crises, the importance of establishing and regulating appropriate legal frameworks for this technology becomes increasingly apparent.

Currently, due to the lack of specific regulations regarding civil liability, courts are compelled to accept the law of the forum jurisdiction (whether the tort occurs in Iran or abroad). However, in the event that a law is enacted regarding the governing law on civil liability, it would be preferable to adopt the law of the place where the harmful act occurred as the governing law for civil liability in private international law cases. In situations where the circumstances of the case suggest that the law of a third country is more appropriate, that law should be applied.

It is important to note that if civil liability in telemedicine is examined in a country with a Roman-Germanic legal system (such as the United Kingdom or the United States), and conclusions are drawn, these conclusions can be generalized to other countries that follow this legal system and where this system prevails (such as Australia). Therefore, the focus here is on the United Kingdom and the United States, which are the origin and foundation of this system. We will refrain from discussing other leading countries in this field, as they primarily follow these two systems in legal matters. Although there may be slight differences in the domestic regulations of countries following a common legal system, one cannot claim uniformity of laws in all cases.

The studies conducted in this research indicate that countries leading in the field of telemedicine have succeeded in creating comprehensive laws and regulations that provide a legal framework to protect the rights of patients and physicians. These countries, drawing from extensive experience and scientific research, have formulated regulations that ensure the quality of telemedicine services and help reduce legal conflicts and issues. A comparative analysis of these laws with the legal status in Iran reveals the weaknesses and gaps within the country's legal system. The lack of familiarity with telemedicine technology, the need for complex technical and electronic infrastructure, the high costs of equipment, methods for safeguarding information security, issues related to insurance companies, and the fear of patients and some physicians about using this method, along with the

concern of medical errors in this method, are some of the obstacles to the use of this technology.

It seems that, assuming fault in Iran, the primary responsibility in civil liability rests with the remote physician. However, this does not mean that other responsible parties, such as healthcare staff, hardware device manufacturers, and others, are exempt from civil liability for their actions.

This new technology requires the formulation of relevant laws and legal interpretations to better protect and clarify the rights of patients. In many cases, the crimes arising from telemedicine resemble the form of old crimes with the same nature. However, it appears that for the protection of patient rights, there is no alternative but to establish new laws and regulations consistent with this issue, particularly considering that telemedicine takes place in a virtual environment and is not recognized in the traditional legal sense.

Civil liability is one of the forms of legal responsibility that arises when harm occurs in situations where there is no contract or law in place, and theories and foundations related to civil liability are employed to compensate for the damages (the legal foundations of civil liability refer to the reasons that justify the enforcement of civil responsibility).

6.1. Recommendations

In the United Kingdom: According to the article *"Issues Related to Telemedicine Regulations in the United Kingdom,"* following an inspection by the Care Quality Commission (CQC) of online healthcare providers in 2016 and 2017, a report was published identifying that some online physicians were lowering the threshold for prescribing antibiotics, which contravened the Ministry of Health's guidelines on antibiotic resistance. Additionally, some clinical specialists were not prescribing in accordance with evidence-based guidelines (e.g., from the National Institute for Health and Care Excellence). Furthermore, not all providers had systems in place to regularly monitor physicians in cases where patients needed oversight due to their conditions or the medications prescribed to them. This was contrary to the standards set by the General Medical Council (GMC), which emphasizes the importance of continuity of care.

While the immediacy of online consultations means they are a complementary and beneficial addition to our healthcare services, the distant nature of these interactions makes it difficult, firstly, to integrate them into the framework of public healthcare in the UK and, secondly, for physicians to ensure the long-term continuity of individual patient care. Further guidance, and possibly even regulations and procedures, may be necessary to ensure that public health and long-term health outcomes in video and telephone consultations, especially those involving remote prescribing, are safeguarded.

The telemedicine regulatory system in the UK is a set of regulations across various healthcare devices and services. As such, it does not fully encompass the broader public healthcare objectives of the UK's healthcare system. This has the potential to place patients at risk and may have wider public health consequences that have not been properly addressed. Given the increasing reliance on telemedicine services, which are likely to continue post-COVID-19 pandemic, the UK government will probably need to take further legislative action to help establish and prepare laws regarding telemedicine within public healthcare objectives.

In the United States: According to the article *"Telemedicine and Malpractice: Creating National Uniformity"* (by Mr. Wolfe), due to the current inconsistent standards across different states, it is unlikely that states will independently adopt uniform standards. Therefore, the federal government should initiate the adoption of the proposed standards. First, this section will argue that Congress can use the

Commerce Clause to make the desired changes, though this approach is likely to be challenged by the states. Next, this section will argue that Congress can exercise its power to create uniformity by encouraging states to enact laws that institutionalize the proposed telemedicine malpractice standards. Approaches that threaten to cut funding and those that offer additional funding will be considered. This section ultimately suggests that an approach leveraging Congress's financial power to provide additional funding to encourage state action is more likely to withstand scrutiny if challenged in the Supreme Court.

The *Telemedicine Modernization Act of 2015* indicates a precedent for a law that would establish federal telemedicine medical standards; however, Congress did not address the standard of care issue, leaving it to the states. The considerable leeway given to states regarding whether they will adopt Congressional proposals signals substantial flexibility.

While this law was never enacted, it shows that federal legislators are aware of the state-level disagreements surrounding telemedicine and wish to resolve these differences in a way that facilitates the widespread use of telemedicine services. Interestingly, the proposed aim of this law was to facilitate the use of telemedicine services, yet the bill refrained from addressing appropriate standards of care and drafted its language in a permissive and lax manner. Given that states have generally regulated healthcare under the Tenth Amendment for over a century, it is likely that the drafters of this bill had legal concerns in mind.

However, telemedicine differs from traditional medicine, and its potential application for interstate medical treatment provides a legitimate argument that it deserves federal regulation. As one scholar notes: "Under the Commerce Clause, Congress can regulate telemedicine as a channel of interstate commerce, as an instrumentality of interstate commerce, or as an activity that significantly affects interstate commerce, even beyond the Tenth Amendment objections." This suggests that the federal government can regulate telemedicine malpractice because state disputes in this domain hinder the full potential of telemedicine applications. Since physicians are generally reimbursed for such care and payments flow across state lines, the monetary flow between states provides a strong basis for the argument that Congress can use the Commerce Clause to make federal telemedicine malpractice reforms.

That said, states seeking autonomy and the preservation of traditional police powers are likely to consider such an approach unconstitutional. Even if Congress's efforts to pass the Affordable Care Act have been increasingly respected, states have a long history of regulating the healthcare of their constituents and view such regulations as "a vital component of their powers and independence." Should Congress use the Commerce Clause to enforce the proposed standards, states may see this as an assault on state sovereignty and challenge it at every stage. In contrast, a gentler approach could prompt state action without provoking resistance, allowing states to maintain their regulatory independence while creating greater national uniformity.

Congress's use of its financial leverage provides a more appropriate—and less coercive—approach to achieving uniformity by encouraging the adoption of proposed telemedicine care standards and doctor-patient relationship standards. Indeed, Congress previously passed a similar law in the form of the *Telemedicine Incentive Grants Act*, which is no longer in effect. This statute empowered the Department of Health and the Medical Board to provide financial assistance to state licensing boards collaborating with other states to reduce barriers to telemedicine.

Steps Toward Establishing a Reliable Legal Infrastructure for Telemedicine Systems:

1. Enacting laws related to activity in cyberspace;

2. Considering appropriate identities for lawmaking and decision-making in the legal and regulatory aspects of telemedicine;
3. Issuing licenses and setting requirements for the implementation of telemedicine systems;
4. Defining reimbursement procedures in telemedicine;
5. Outlining procedures for filing complaints against hospitals, healthcare centers, and responsible individuals or organizations such as software and hardware manufacturers involved in telemedicine technology.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

Ahmadi, M., Miraji, M., & Mashoof, E. (2023). Evidence of Telemedicine in Iran: A Systematic Review. *7*(1).

Amouzgar, M. (2019). *Criminal and Disciplinary Prosecution of Negligent Physicians*. Majd Scientific and Cultural Assembly.

Ardabili, M. A. (2020). *General Criminal Law, Volume 1*. Mizan Publishing.

Beigi, J., & Esmailzadeh, S. (2023). Telemedicine Technology: Threats and Opportunities for the Country's Health System. First National Conference on Health Promotion and Legal and Medical Challenges,

Elahi Manesh, M. R. (2020). *Criminal Law: Medical Violations*. Majd Scientific and Cultural Assembly.

Farahmand, M., Rostgar, A., & Najafi, S. (2019). Legal Perspective on Telemedicine as Virtual Reality. Third National Conference on Innovation and Research in Humanities and Cultural-Social Studies, Tehran, 29 August,

Goldouzian, I. (2019). *Commentary on the Islamic Penal Code Based on the Law Adopted on 21 April 2013*. Majd Scientific and Cultural Assembly.

Hajavi, A., Meidani, Z., & Ghazi, M. (2024). Legal Aspects of Telemedicine. *Journal of Forensic Medicine of Iran*, *12*(2).

Hajizadeh, H. (2020). *The Rule of Warning and Its Role in Removing Criminal Responsibility*. Khat-e-Sevom.

Karimi, A., & Javaher Kalam, M. H. (2024). Transformation of the Basis of Medical Civil Liability in French Law: Proposals for Reform in Iranian Law. *Legal Studies Quarterly*, *3*.

Karimi, A., Rahimi, I., & Hasani, M. (2024). Medical Crimes in Telemedicine Due to Electronic Health Systems. *Medical Law Journal*, *4*(14).

Mahmoudi, M., Azimi, F., & Dokht Shuraki, S. (2024). Medical Crimes and Violations in Iran's Criminal Law. *Journal of Jurisprudence, Law, and Criminal Sciences Quarterly*.

Mir Mohammad Sadeghi, H. (2020). *Crimes Against Persons*. Mizan Legal Foundation.

Namdari, S. (2021). Telemedicine and Criminal Responsibility in the Iranian Legal System. *Journal of Law and Political Studies*, *1*(2).

Panahi, M. (2022). Legal Aspects of Telemedicine. Fifth Conference on Information Technology and Health Promotion with a Focus on Remote Health,

Pasban, M. R., & Gholami, A. (2017). Anti-Competitive Mergers and the Sanctions Prescribed in Iranian Law. *Legal Studies*, *9*(1).

Pour Ebrahim, A. (2021). Compensation and Responsibility of Physicians from the Perspective of Islamic Jurists and Iranian Laws. *Judiciary Quarterly*, *21*(107).

Rezaei Pour, S. (2022). Telemedicine from a Legal Perspective. Second International Conference on Law, Knowledge, and Human Sciences in Iran,

Saei, S. M., & Saghafi, M. (2024). A Study of Telemedicine from a Legal Perspective. *Medical Law Quarterly*.

Samavati, A., & Asgari, S. (2020). Criminal Responsibility of Telemedicine Service Providers. *Letter of Theology*, *13*(51).

Shokri, R., & Sirus, G. (2020). *Islamic Penal Code in the Context of Current Legal Norms*. Mohajer Publishing.

Soltani Fard, F., Tahvildar, M., & Omidi, E. (2023). The Benefits of Telemedicine in the Health System. Sixth Conference on Health Promotion Strategies and Challenges,

Tehrani, S., & Norouzi, M. (2015). Telemedicine: A Review of Advantages, Disadvantages, and Ethical Challenges. *Iranian Journal of Ethics and Medical History*, *8*(2), 29-40.

Vakili, M. H. (2023). Foundations, Legal Challenges, and Implementation of Competition Law in Healthcare. *Scientific Quarterly of Parliament and Strategy*.

Zeraat, A. (2020). *A Brief Commentary on the Islamic Penal Code (2013), Volume 1*. Ghoghnoos Publishing.