



IMPACT OF THE CRIME OF DISCLOSURE OF MEDICAL SECRET ON DIGITAL SOCIETY

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Abstract : Medical confidentiality is a key pillar that protects individuals' privacy and ensures their confidence in the health system. With the increasing use of technology in the health sector, unauthorized disclosure of medical data has become a major challenge. In this article, we will review the effects of the crime of disclosure of medical confidentiality on the digital community.

Keywords: *Professional Secret, Crime, Medical Secret, Disclosure of Secret, Digital Society*

INTRODUCTION


Exploring and studying the impact of the crime of disclosure of medical secret on the digital community and analysing its impact on trust in the digital environment and the transformations that occur in the digital community as a result of this illegal disclosure. Add to this legal and ethical implications based on these crimes and how to strengthen legal and ethical protection in the digital context.

The paper will include a review of preventive measures and policies to reduce the spread of this devastating crime, including the protection of medical confidentiality and sensitive personal information and clarification of further appropriate penalties. This paper will be an important source of comprehensive understanding of the impact of the crime of disclosure of medical confidentiality on the digital arena and the preservation of security and privacy in the information age.

It will also be a critical starting point for further research and studies in this vital area and recognizes the importance of fighting these crimes and tightening laws to maintain the security and integrity of medical information in the digital age. Due to the sensitive nature of medical information and its importance in providing appropriate health services and preserving medical confidentiality, disclosure of medical secret is a major breach of digital security and the digital community at large. Hence, it is essential to raise people's awareness of the importance of protecting medical information and promoting community awareness of the seriousness of illicit disclosure offences.

Emphasis should be placed on enforcing and tightening the law to combat such crimes and hold perpetrators accountable, as well as implementing policies and laws that enhance digital security and strengthen the legal and moral protection of medical information in the digital environment.

Attention to the legal and ethical aspects of this issue will contribute to building a safer and more reliable digital society, where everyone can benefit from modern technology and medical information with confidence and peace of mind. Ongoing awareness-raising and education are essential for achieving these goals. Governments, regulatory bodies, health institutions and stakeholders must therefore take the necessary steps to implement awareness-raising campaigns and educational programmes for all age groups and professionals. It is also important that research and studies in this area be strengthened to better understand technology and future trends of digital crime and how to confront and fight it. This offence may hinder digital development and



confidence in the use of modern technology in the healthcare sector and may be considered a threat to personal privacy and sensitive medical data. Therefore, forces aimed at developing and strengthening the digital community must work actively to combat such crimes and protect medical confidentiality and personal data in the context of digital transformation. Governments, international organizations and regulatory bodies should work together to implement robust safety standards and tighten penalties for violators, enhance awareness and develop the capacities of different groups working in the field of health care and information technology. Through these efforts, we can build a secure and reliable digital community, where everyone has the right to maintain their privacy and receive appropriate health care.

This construction can be one of the pillars of the future of information technology and digital society, which will contribute to humanity's well-being and continuous progress. On this basis, the following forms are formulated: What are the most prominent laws on the protection of health data in a digital society?

First Research: Scope of Criminal Protection of Medical Occupational Confidentiality

Medical confidentiality in the digital environment is the patient's medical information that is kept strictly confidential and not disclosed to anyone without the consent of the person himself. This includes information on the diagnosis of the disease, the results of tests and analyses, and all personal health data. Medical confidentiality also includes medical and therapeutic procedures applicable to the patient¹.

First requirement: Medical confidentiality

Disclosure of medical confidentiality is unlawful and impermissible disclosure of a patient's medical information, whether for the purpose of entertaining and satisfying curiosity, the desire for personal gain, or even to harm the patient and his reputation².

Disclosure of a medical secret can expose the patient to great harm and severe humiliation, whether by physical and psychological abuse, or by losing full confidence in the health care system. Such unlawful detection undoubtedly adversely affects the medical relationship and confidence between the doctor and the patient, as well as its negative impact on the health system in general. Thus, maintaining the confidentiality of the patient's medical information is one of the most important priorities to be adhered to in the medical field³.

The patient's right to privacy and protection of personal information must be fully protected and respected. The doctor must adhere to the principle of professional confidentiality and ethics and be impartial and honest in handling patients' medical information⁴.

In addition, appropriate legal protection should be provided to patients and necessary policies and procedures adopted to prevent violations of medical confidentiality and punish offenders.

Emphasis should be placed on raising patients' awareness of their rights and the legal means available to protect them. Ultimately, everyone's commitment to keeping medical information confidential contributes to building a reliable and sustainable health care system, where patients are empowered to feel safe and fully confident in the medical system that serves them⁵.


¹ dr. Maryam al-Attar, "Legal Protection of Health Data", Law Library, 2018, p. 135

² dr. Said Ben Mourad, "The responsibility of doctors in Algerian law", Modern Arab Office, 2019, p. 150

³ Act No. 08-04 of 26 May 2008 on the protection of personal information, Official Gazette No. 16 of 26 May 2008

⁴ dr. Hala Bouzid, "Patients' rights in Algerian law", Culture House, 2021, p. 81

⁵ dr. Ali Benzine El Abidine, "Patients' Rights: Legislation and Applications", Culture House, 2020, p. 101



Respecting the confidentiality of medical information and protecting it from legitimate disclosure is the basis of the successful medical system. Adherence to professional ethics and maintaining professional confidentiality is a fundamental requirement for any doctor dealing with medical information specific to patients. This obligation requires providing good health care and giving patients the confidence and comfort relevant to the privacy of their medical information. Furthermore, there is an urgent need to improve medical confidentiality laws and promote awareness of their importance in society. Governments, health institutions and medical professionals must work together to ensure that patients' medical information is protected and violators are strictly punished. The essence of effective health care may be trust, confidentiality and professional discipline. Therefore, the culture of medical confidentiality should be promoted and encouraged in all aspects of health care, from doctor's practices and nurse duties to patients' rights⁶.

Maintaining the privacy of medical information enhances the trust between doctor and patient and contributes to the provision of high quality and effective health care. It is essential to coordinate and cooperate with all members of the medical community to promote and protect medical confidentiality and ensure that patients enjoy due privacy and protection with respect to their personal information. There must be clear policies, directives and procedures in place to ensure full compliance with medical confidentiality laws and protect patients' medical confidentiality. Furthermore, the necessary training and continuous awareness should be provided to health professionals about the importance of medical confidentiality and preserving patients' privacy. Providing continuous guidance and support to patients regarding their rights to privacy and medical information is an essential part of achieving health justice and ensuring comprehensive and professional health care⁷.


Second requirement: disclosure

The crime of disclosure of medical secrecy in the digital community is an electronic crime that is becoming increasingly widespread thanks to technological advances and the rapid development of social media and digital technology currently available. Disclosure of medical confidentiality can occur online by publishing medical information without the explicit permission of the person concerned, and this exposes his personal and health information to many risks and potential negative impacts. With a typical title, the illicit dissemination of sensitive medical information can be the cause of its exploitation by unethical persons or its use in illegal ways such as defamation, blackmail or cyber fraud. Therefore, individuals and institutions must take the necessary measures to protect their medical information and ensure that data is confidential and not compromised. In addition, Governments and legislative organizations should develop strict laws and policies to punish perpetrators of crimes of disclosure of medical confidentiality and protect individuals and groups from such serious criminal acts. There must therefore be strong awareness-raising campaigns to raise awareness of the importance of protecting medical confidentiality and promoting ethical behaviour in the use of digital technology to avoid electronic crimes related to medical disclosure. They cannot be judged as parents, yet children must understand that there are others living different lives and that the person appearing on social media is not always the same in real life. It is also important that they live their lives properly and balanced without integrating into digital culture and the negative impacts that may occur when they lose control of their time on the Internet. There should be strong awareness campaigns to handle social media properly and safely, and promote online security, privacy and empathy behaviors⁸.

⁶ dr. Yousef Al-Bukhari, "Medical Ethics and Law", Science Publishing House, 2019, p. 65

⁷ dr. Zainab Muath, "Patient's Right to Medical Confidentiality", Culture House, 2020, p. 120

⁸ dr. Ismail Abdullah, "Medical Ethics in the Digital Age", Dar al-Manthawah, 2021, p. 85



These efforts must come from educational institutions, families and society at large, so that we can achieve a safe and healthy digital environment for children. Children must also be encouraged to develop critical and critical thinking skills so that they can discern truth from propaganda and promotion and undermine fake news that spreads online⁹.

Third requirement: Penal laws for disclosure of medical confidentiality

The crime of disclosure of medical confidentiality is a serious violation of privacy and trust between the patient and the healthcare provider. The legal penalties for this offence vary by country and legal system, but in general, penal penalties for the offence of disclosure of medical confidentiality may include¹⁰:

- **Criminal penalties:** Criminal penalties for disclosure of medical confidentiality may include imprisonment for a certain period. Substantial financial fines can be imposed on individuals or institutions that commit this crime.
- **Civil liability:** A patient affected by the disclosure of medical confidentiality may prosecute the violator and claim financial compensation for damages resulting from the violation.
- **Administrative penalties:** Administrative authorities can impose administrative penalties on health institutions that allow violations of medical confidentiality.

Loss of licence or suspension: Health institutions or health professionals who violate medical confidentiality may be subject to loss of licences or temporary suspension from practising the profession.

Other legal proceedings:

Some legal systems may provide for other procedures such as notification to health authorities or other administrative procedures.

Health institutions and health professionals must adhere to the highest standards of confidentiality and privacy of health data and follow the legislation and legal regulations in place in the countries in which they practice to avoid such penal and civil penalties.

Second Research: The Scope of Medical Confidentiality in the Digital Community:


The importance of medical confidentiality in today's digital society is to protect patients' privacy and the confidentiality of their medical information, as well as to provide effective health care and build trust between doctors and patients. Medical secret becomes more important as technology progresses rapidly and massive electronic databases proliferate. In the light of these developments, the unauthorized have access to and illegal exploitation of sensitive medical information¹¹.

Taking effective measures to protect the medical secret in the digital community becomes necessary. We need to develop and implement rigorous policies to preserve the privacy and safety of medical data. Health institutions and their affiliated organizations must adopt strong policies and procedures to protect patients' data. In addition, periodic training of staff must be provided to ensure proper handling of medical information and maintain confidentiality. In conjunction with this, we should consider periodic assessment of protection and safety systems as necessary to address growing safety threats. We must ensure that our security system is regularly updated to be

⁹ dr. Mariam Qasim, "Disclosure of medical confidentiality in the time of social media: risks and challenges", Algerian Journal of Law and Health, No. 5, 2022, p. 95

¹⁰ dr. Farat Mansouri, "Algerian Penal Code: General Theory and Penalties", Science Publishing House, 2020, p. 200-215

¹¹ dr. Fatima al-Zahra, "Medical ethics and patients' rights in the age of technology", Dar al-Amal, 2021, p. 75




effective in protecting medical data and resisting any potential threats¹². By following these procedures, we can maintain medical confidentiality in the digital community and ensure that patients' information is safe at all times and in legal ways. We should remain cautious and vigilant, and do our utmost to prevent any breaches of confidentiality and privacy, so that patients can trust and be assured about the medical care they receive and the digital storage system of their medical data. The importance of medical confidentiality in today's digital society is to protect patients' privacy and the confidentiality of their medical information, as well as to provide effective health care and build trust between doctors and patients. Medical secret becomes more important as technology progresses rapidly and massive electronic databases proliferate. In the light of these developments, the unauthorized have access to and illegal exploitation of sensitive medical information. Taking effective measures to protect the medical secret in the digital community becomes necessary. We need to develop and implement rigorous policies to preserve the privacy and safety of medical data. Health institutions and their affiliated organizations must adopt strong policies and procedures to protect patients' data. In addition, periodic training of staff must be provided to ensure proper handling of medical information and maintain confidentiality. In conjunction with this, we should consider periodic assessment of protection and safety systems as necessary to address growing safety threats. We must ensure that our security system is regularly updated to be effective in protecting medical data and resisting any potential threats by following these procedures, we can maintain medical confidentiality in the digital community and ensure that patients' information is safe at all times and in legal ways. We should remain cautious and vigilant, and do our utmost to prevent any breaches of confidentiality and privacy, so that patients can trust and be assured about the medical care they receive and the digital storage system of their medical data. An important advice here is to be cautious enough when dealing with sensitive medical information and ensure that it is not accessed by unauthorized persons. We can also use advanced encryption and protection technologies to keep confidentiality and protect against hacks. Also, health actors must adopt strong policies and procedures to detect early any security threats and deal with them quickly and effectively. We should learn from issues and errors¹³.

First requirement: Legal analysis of the crime of disclosure of medical confidentiality in the digital community

The offence of disclosure of medical confidentiality requires careful and in-depth legal analysis to determine appropriate penalties in accordance with the laws and legislation in force in the State. Investigators and lawyers must study and analysis laws relating to medical confidentiality and legislation establishing the protection of confidentiality and penalties provided for in case of unlawful disclosure of medical information. Consideration should also be given to the general legal context and other relevant legislation that could affect the determination of the appropriate type and scale of punishment. In addition, the investigator must also consider previous judicial rulings on disclosure offences similar to the case presented and compare them with the present case. This comparison can provide a deeper insight and a better understanding of expected outcomes and potential penalties. In addition, international laws relating to medical confidentiality and the protection of personal data should be studied and revised to ensure that any possible penalties conform to international standards and principles. Adherence to international standards in this regard is necessary to ensure justice and the rights of patients and those affected. In short, the analysis of appropriate penalties for the offence of disclosure of medical confidentiality requires a thorough study of applicable laws and legislation, as well as comparative analysis and consideration

¹² dr. Mahmoud Hilal, "Protection of Personal Data in the Health Sector", University Think Tank, 2022, pp. 130-140

¹³ dr. Khaled Bensouda, "Effective protection strategies for health data in the digital age", Algerian Journal of Law and Health, No. 8, 2022, p. 75-80




of relevant international laws..¹⁴. This analysis must be done thoroughly and objectively to ensure justice and proper application of the law. Accordingly, the efforts of investigators and lawyers in studying laws and legislation relevant to medical confidentiality should be intensified. These laws must be analyzed thoroughly and thoroughly review the applicable legal texts. Appropriate sanctions can therefore be identified and applied based on the legislation adopted. Furthermore, the investigator must have a outlook and expectations on the expected results of the application of these sanctions. It must be clear that it understands the general legal context and its relationship to medical confidentiality and the protection of personal data. It should also consider previous provisions relating to disclosure offences similar to the case before it. By reviewing those provisions, a deeper look and better understanding of the penalties expected in case of disclosure of medical confidentiality will be ensured. In parallel, the study of international laws relevant to medical confidentiality and the protection of personal data is an urgent necessity. These laws must be scrutinized and reviewed thoroughly, so that appropriate penalties can be determined and applied in accordance with international standards. Indeed, our commitment to those standards is essential to ensuring justice and the rights of patients and those affected. Ultimately, the analysis of appropriate penalties for the offence of disclosure of medical confidentiality should be seen as an effective measure requiring a comprehensive study of the applicable laws and legislation. In addition, comparative analysis and consideration of relevant international laws should be done. With a focus on objectivity and accuracy, justice will be ensured and the law properly and appropriately applied. The need to intensify investigators' and lawyers' efforts to study laws and legislation relating to medical confidentiality is therefore indispensable. These laws must be analyzed thoroughly and thoroughly review the applicable legal texts. Accordingly, appropriate sanctions could be identified and applied based on the legislation adopted. Furthermore, the investigator must anticipate the expected results of these sanctions and have a clear understanding of the general legal context and its relationship to medical confidentiality and the protection of personal data.¹⁵

Second requirement: catalysts for the commission of the crime of disclosure of medical confidentiality

A catalyst for committing the crime of disclosure of medical secrecy in a digital society is the keen and urgent desire for rapid and material gain, where a person motivated by an urgent and intense desire for enormous financial gain or unexpected rewards can illegally and unethically disclose medical information. In addition, retaliation and personal retaliation may be one of the main motives for this crime, where an angry or disturbed person discloses confidential information with a view to retaliation and causing harm to the medical entity concerned or the person associated with that information. We should point to neglect and lack of awareness of the importance of medical confidentiality and what individuals and the digital community at large can be exposed to as a result of the disclosure of medical information, as this can be another catalyst for the occurrence of such crimes. There are some people who may not be sufficiently aware of the seriousness of the disclosure of medical information and its significant negative impact on individuals and the digital community at large and hence our renewed call to promote awareness and awareness about the importance and impact of medical confidentiality, We strive to protect personal data and patient information and equip a secure and reliable digital environment for all by strengthening laws and regulations on these aspects and preventing illegal and unethical disclosure of medical information. We all need to collaborate to build a secure and sustainable digital society, where privacy and medical confidentiality are our primary focus. We need to promote a culture of data protection and

¹⁴ dr. Youssef Nawah, "Legal analysis of the crime of disclosure of medical secrecy: previous studies and penalties", Algerian Journal of Law and Health, No. 9, 2022, p. 55-70

¹⁵ dr. Ahmed bin Saleh, "Legal penalties for infringing medical confidentiality in Arab legislation", Legal Knowledge House, 2022, p. 150



ensure that all members of the digital community are made aware of the importance of medical confidentiality and the negative consequences of its violation. We must bear in mind that patients and medical practitioners must trust that their personal and medical information will be adequately protected and will not be unlawfully disclosed. Through joint action and continuous awareness, we can reduce incidents of disclosure of medical secrets in the digital community and maintain the privacy of individuals and trust in the health care system.¹⁶

We must strengthen our awareness and build a society that believes in the importance of protecting medical confidentiality and takes the necessary measures to ensure the protection of patients' data and achieve personal and digital security. We are committed to improving laws and legislation, regulating the safe and proper use and dissemination of medical information, and applying the necessary penalties to violators. Promoting awareness and awareness about the importance of medical confidentiality is the only way to reduce incidents of illicit disclosure of medical information, and we are committed to making every effort to achieve this.


□ The impact of the crime of disclosure of medical secret on the digital community

Disclosing medical secrecy in the digital community and presenting medical information to the public undermines trust between patients and medical professionals, which is a major challenge that can leave negative impacts on the use of modern technology in health care. People's concerns about the privacy of medical data and securing procedures to protect personal information vary, which can ultimately have an exceptional negative impact on technological progress and innovation in the medical field. In addition, it must be borne in mind that disclosure of medical confidentiality may lead to the spread and transmission of false or misleading medical information online, posing a significant threat to digital society and contributing negatively to weak public trust and security. Therefore, we need to take appropriate protection measures and promote awareness of the importance of medical confidentiality and the privacy of medical personal data to enhance trust in the digital community and drive the world's advanced medical innovation. We must understand that there are a variety of aspects to be taken into account when disclosing medical information in general to the public. We should provide best practices and policies to ensure these people's safety, privacy and safety. This information must be managed and protected with great care to ensure that it is not exposed to unauthorized access¹⁷.

We can improve the processes and technology used to collect and store medical information by implementing modern technological solutions that enhance protection and enhance trust. Furthermore, we must work to make the public aware of the importance of medical confidentiality and the privacy of medical personal data. We can conduct awareness campaigns targeting patients and medical professionals to raise awareness of the risks of public disclosure of medical information. Training and education should also be strengthened to ensure that we have a properly qualified and trained medical team to deal with those sensitive issues. In striking the right balance between public disclosure of medical information and maintaining privacy and security, we can make real progress in digital healthcare. We can develop new applications and tools that improve health care and provide more effective and effective medical services. Modern technology can become a real partner in improving community health and ensuring appropriate care for all. In this way, we will be able to develop a better health future and a secure and prosperous digital society. We must recognize that there are many aspects associated with the disclosure of medical confidentiality and privacy of medical information that must be considered to achieve the balance required in promoting health care and maintaining trust and security in the digital community. We should be careful in handling personal information and applying strict policies to maintain

¹⁶ dr. Mona Sabri, "Legal legislation to protect medical confidentiality from violations: causes and factors", Legal Society House, 2021, p. 112

¹⁷ dr. Aida Alatoudi, "Medical Confidentiality Ethics and Personal Data", Law Library, 2020, p. 45-50



confidentiality and security. We can enhance awareness of the risks of cyber hacks and reduce scandals related to the confidentiality of medical data. We must have a team of specialists who work to protect personal information from cyberattacks and ensure compliance with relevant laws and legislation. If appropriate procedures are applied to protect medical confidentiality and privacy of medical information, modern technology can be a key factor in improving health care and making significant progress in medical innovation. Everyone must work together to create a secure and prosperous digital society where the confidentiality and privacy of medical information is protected for all.


□ Preventive measures and penalties to combat the crime of disclosure of medical confidentiality

Preventive measures and penalties are an essential part of combating the crime of disclosure of medical secrecy in a digital society. The expansion of these measures aims to strike the required balance between protecting sensitive medical data and preserving individuals' privacy. To that end, strict laws should be put in place to regulate access to sensitive medical information and prohibit the violation of medical privacy. Preventive measures include a range of awareness and technical actions. With regard to awareness-raising, it is important to make individuals aware of the importance of medical confidentiality and the consequences of its violation. This can be achieved through awareness-raising campaigns and educational activities that highlight the importance of keeping personal medical information confidential. In addition, publicly available educational resources must be made available to help understand their rights and available measures to protect their medical privacy. As for technical measures, advanced technical means must be used to ensure the security of sensitive medical data. For example, encryption technology can be used to protect medical data and make it impenetrable. Other measures such as the establishment of advanced surveillance systems and the application of pattern recognition techniques to identify and prevent any attempts at illicit access to medical information can also be implemented. Besides, the penalties must be commensurate with the gravity of the crime of disclosure of medical confidentiality. Strict legal penalties must be imposed, including prolonged imprisonment and substantial fines for perpetrators. Awareness-raising on these sanctions should also be increased and clearly clarified to reduce cases of violations of medical confidentiality and raise society's awareness of the importance of protecting personal medical information. In short, the expansion of preventive measures and sanctions is a crucial step in protecting medical confidentiality and individuals' privacy in a digital society. Strict measures must be taken to regulate access to medical information, promote awareness of the importance of protecting medical confidentiality and apply appropriate penalties to preserve the security and privacy of individuals' medical information.¹⁸

Third requirement: Ethical and legal challenges for protecting medical confidentiality in the digital age

In the current digital age, we face enormous and very huge ethical and legal challenges in terms of protecting and maintaining medical confidentiality. Medical data are stored and transmitted digitally and electronically, increasing the complexity and challenges of protecting and securing medical data. As we live in an era of rapid and spectacular technology development, there is an urgent need to update and develop legislation and laws on medical confidentiality and the protection of medical data in the digital environment. Legally, we must strive to keep abreast of technological development and update legislation on the protection of medical confidentiality. We must also ensure that patients' rights are not violated in the digital age by identifying appropriate and appropriate penalties for those who violate and violate medical confidentiality laws and illicit disclosure of medical information. Furthermore, surveillance and oversight must be strengthened to

¹⁸ dr. Adel Qanati, "Health Information Security: Strategies and Data Protection", Legal Culture House, 2021, p. 102-120



ensure compliance with existing legislation and laws, and to develop security and encryption techniques to protect medical data. Ethically, we must significantly enhance awareness and culture of the importance of medical confidentiality and the protection of medical data in the digital environment. We must also promote professional ethics among all health workers, so as to ensure respect for patients' rights and the protection of their medical data. We all have to promote ethical values and ethical principles in our handling of medical data and medical confidentiality in the digital age. Therefore, protecting medical confidentiality and data in the digital age is an ongoing and important challenge for all stakeholders, whether legal, ethical or health professionals. We must work together to ensure the establishment and development of the legal framework necessary to protect medical confidentiality, as well as promote professional ethics and ethical awareness among workers in this vital and sensitive sector. Technology orientation will continue to progress, and therefore we must continue to develop policies and procedures to keep pace with new changes and emerging challenges in the field of medical confidentiality and data¹⁹.

Third Research: Future Directions to Promote Medical Confidentiality in the Digital Environment

In order to promote medical confidentiality in the digital environment, legislation and laws on the protection of medical data must first and foremost be updated and deterrent penalties provided to perpetrators of crimes of disclosure of medical confidentiality. In addition, health and technical authorities must promote and develop security systems and protocols to maintain confidentiality and prevent leaks. Scientific research in the field of medical information security and the development of protection techniques should be supported, and the public should be made aware of the importance of maintaining medical confidentiality and the risks of its violation in the digital community. Besides, we can address some other important points in promoting medical confidentiality. Health institutions should apply high encryption techniques and adopt advanced protective measures to ensure the integrity of medical data and the absence of violations. Of course, these participants must provide ongoing training to the cybersecurity and medical data protection task forces, so that they are able to respond to the latest cyberthreats. Moreover, AI can play an important role in promoting medical confidentiality. AI can be used to analyze and classify medical data, detect any attempts to penetrate or violate confidentiality, thereby providing the required protection to patients and sensitive personal information. In addition, health authorities and medical technology developers should work together to develop innovative solutions to protect medical confidentiality. These solutions can include secure mobile applications, binary proof systems, facial recognition, and other modern technologies that provide effective ways to verify a user's identity and protect their personal data. Ultimately, the public should participate in this joint effort to promote medical confidentiality in the digital environment. Individuals should be made aware of the importance of protecting their medical data and take the necessary measures to maintain privacy and security. Cooperation between Governments, health institutions and users will contribute to the creation of a secure and protected digital environment for sensitive medical information²⁰.

First requirement: The most important future directions to promote medical confidentiality in the digital environment

In our evolving digital environment, medical confidentiality issues face new challenges as a result of technology and developments in health care. To promote medical confidentiality in the digital environment, some future directions can be followed:

¹⁹ dr. Layla Mohammed, "Legal Challenges for the Protection of Medical Data in the Digital Age", Legal Publishing House, 2021, pp. 110-125

²⁰ dr. Zine El Abidine Ben Issa, "Future trends in the protection of medical data: the role of artificial intelligence", Algerian Journal of Legal Studies, No. 7, 2022, p. 85-100



□ Tightening legislation and laws:

Update laws and legislation to provide better protection of health data in the digital age, with strict guidelines for punishing violators of medical confidentiality.

□ Application of strong protection techniques:

Use robust encryption techniques and apply digital security standards to protect medical data from unauthorized access.

□ Promotion of awareness and education:

Educate health professionals and patients about the importance of medical confidentiality and safe practices to deal with digital health data.

□ Developing a legal and ethical framework for medical technology:

Develop a legal and ethical framework for the use of medical technology such as artificial intelligence and photo analysis of medical images in a manner that preserves medical confidentiality.

□ Embrace innovative technological solutions:

Use technological innovations such as blockchain and optical character recognition techniques to enhance security and confidentiality in the transmission and storage of medical data.

□ Ensuring transparency and accountability:

Promote the principles of transparency and accountability in access to and use of health data in the digital environment.

Promoting medical confidentiality in the digital environment requires joint efforts from governments, health institutions, technological suppliers, and patients, to ensure the protection of health data and respect for their privacy in this advanced digital age²¹.

Second requirement: Technology's role in enhancing cybersecurity of health data

Technology plays a crucial role in improving the cybersecurity of health data, providing sophisticated technical solutions to protect data and ensure the confidentiality of medical information. Here are some ways to enhance the cybersecurity of health data:

□ Powerful encryption technologies: Use powerful encryption technologies to protect patients' data and make sure they remain safe during transportation and storage.


□ Access Management Systems: Apply access management systems to control who has access to health data and ensure that it is done legitimately.

□ Detection of security violations: Use of Security Breach Detection (IDS) and IPS systems to monitor and prevent unauthorized access.

□ Regularly update software and hardware: software and hardware need to be updated regularly to fill security gaps and avoid cyberattacks.

□ Using AI techniques: Applying AI technologies to analyze behavior models and early detection of unusual patterns indicating possible breakthroughs.

²¹ dr. Farida Kassem, "Future directions for strengthening the protection of medical confidentiality in the digital age", Algerian Journal of Law and Legal Sciences, No. 6, 2022, p. 55-70

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- Adopt blockchain technologies: Use blockchain technology to ensure the security of data and health transactions via a distributed and encrypted network.
 - Training and security awareness: Training health personnel and professionals in cybersecurity practices and raising awareness of the importance of health data protection.

Using these security technologies and practices, the cyber security of health data can be improved and protected from growing cyber threats in the modern digital environment²².

CONCLUSION:

From the study dealing with the crime of disclosure of medical confidentiality, we conclude that this crime poses an effective and serious threat that cannot be ignored to medical confidentiality in today's digital society. They represent one of the major challenges of today's times, and therefore need to be addressed vigorously and effective measures to reduce the spread of this type of crime and to address the significant risks to the lives and professional reputation of patients. We therefore urgently need to cooperate and work together to strengthen and strictly apply the penalties for the perpetrators of these crimes, as well as to adopt strong measures and precautions to address this serious problem and the diverse challenges that it creates and poses a grave threat to both individuals and the health system. We must also focus on raising awareness of the importance of protecting medical confidentiality and adopting strict rules and procedures to protect patients' personal information and enhance trust between them and health care providers. For the protection of medical confidentiality, we must ensure that patients' medical data are kept with the highest degree of security and confidentiality. Specialized technological measures must be strengthened to protect such data from unauthorized hacking and to preserve its integrity and not be subjected to manipulation or theft. Health care providers should also be trained and sensitized to the importance of holding patients responsible for protecting medical data and a strong commitment to confidentiality of information. In addition, we must focus on raising society's awareness of the importance of medical confidentiality and the risks that may result from its violation. Awareness-raising and educational campaigns should be strengthened for individuals to be aware of their rights and the procedures for protecting their personal medical information. Consumers should be encouraged to move away from providing personal information to unreliable or unofficial parties, and ensure that the official authorities involved in preserving medical data adhere to the highest standards of security and confidentiality. Strengthening legislation on medical confidentiality also plays a crucial role in achieving digital security and protecting patients' data. Laws and legislation must be improved and updated to address technological developments and the use of electronic medical data in safe and secure ways. Judicial powers and regulators should be given to enforce and strictly enforce such legislation, provide deterrent penalties based on the principle of justice and protect patients' rights to medical confidentiality. In addition, governments and medical, technical and legal institutions must act jointly and in harmony to promote digital security and combat crimes of disclosure of medical confidentiality. International cooperation must be intensified in order to exchange information and expertise in the field of digital security and the fight against cybercrime. Governments should provide funding to support technical research and innovation that develops modern tools and techniques to protect medical data and address cyberthreats. Based on all that has been said, we can confirm that protecting medical confidentiality and digital security are critical in the current digital age. We must all cooperate to tighten penalties and adopt the best measures to protect patients and ensure that their medical privacy is not violated, in cooperation between Governments, medical, legal and technical institutions and all relevant partners. We will continue to work continuously against crimes of disclosure of medical secret and achieving justice and digital security for all.

²² dr. Nabil Tawfiq, "Information Security in the Health Sector: Challenges and Solutions", Legal Publishing House, 2021, p. 88-100

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- [5] Dr. Ali Benzine El Abidine, "Patients' Rights: Legislation and Applications", Culture House, 2020, p. 101
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