LIMES PLUS Journal of Social Sciences and Humanities
ISSN: 1820-0869 E-ISSN: 2406-2871
Vol. 23 (2) 2026

Legal and International Protection of the Right to Genetic Privacy in the Use of DNA Profiling

Ressa Fatiha[1]
[1]Abou Bekr Belkaid University of Tlemcen, Specialization: Public Law, Department: Law, Algeria. E-mail: fatiha.omar84@yahoo.com

Received: 20.02.2026 **Accepted: 17.06.2026** **Publishing: 15.08.2026**

Abstract:
The scientific advances achieved in genetic engineering, together with the possibilities they provide for accessing an individual's genetic information and data, have raised numerous legal issues concerning the use of such information in the fields of research, medicine, and the judiciary. This has necessitated the establishment of legal rules, conditions, safeguards, and mechanisms capable of reconciling the requirements of scientific research with the protection of individual rights, foremost among which is the right to genetic privacy.
This objective was pursued by the Algerian legislator through Law No. 16-03 on the use of DNA profiling in judicial proceedings and the identification of persons, which establishes a number of safeguards aimed at protecting genetic data from any unlawful use. The international community has likewise accorded considerable importance to protecting the right to genetic privacy through the adoption of several international instruments and declarations, foremost among them the Universal Declaration on the Human Genome and Human Rights of 1997.
Keywords: DNA profiling, genetic data, the right to genetic privacy, Law No. 16-03.

Introduction:

The contemporary world is witnessing an unprecedented biological revolution with a profound genetic dimension, as DNA profiling has become a highly accurate scientific means of establishing identity, identifying perpetrators of crimes, determining parentage, and identifying missing persons.
Within this context, the importance of genetic analyses has become increasingly evident, as they constitute one of the most sensitive categories of personal data. Such information does not merely reveal an individual's identity; it may also disclose information relating to the person's current and future health status.
Any misuse of such information, or its disclosure beyond the limits permitted by law, constitutes a serious violation of individuals' private lives and an infringement of their fundamental rights.
This has prompted national legislation and international instruments to establish rules and safeguards for protecting the right to genetic privacy, thereby seeking to strike a balance between safeguarding individuals' rights and freedoms and benefiting from the advantages of DNA profiling in the public interest, without infringing upon those rights.

In light of these biological developments, and given the absence of general provisions regulating this process, the Algerian legislator intervened by enacting Law No. 16/03 on the use of DNA profiling in judicial proceedings and the identification of persons. Concern for the protection of the right to genetic privacy has not been confined to national legislation; it has also extended to international instruments, which have established principles relating to respect for human dignity and the confidentiality of genetic data, foremost among them the Universal Declaration on the Human Genome and Human Rights of 1997.

Therefore, this study raises the following central research problem:

- What is meant by genetic privacy?
- What are the legal rules that ensure the protection of the right to genetic privacy under Algerian legislation and international instruments?
- To what extent do these legal frameworks provide effective protection for this right in light of the expanding use of DNA profiling?
- To address the research problem raised, the study is divided into three sections. The first section examines the concept of the right to genetic privacy. The second section addresses the legal protection of the right to genetic privacy in light of Law No. 16-03. The third and final section examines the international protection of the right to genetic privacy.

First Section: The Concept of the Right to Genetic Privacy

The right to genetic privacy is regarded as one of the modern rights that has emerged as a result of the rapid and continuing developments in genetics and biotechnology, particularly with the increasing reliance on DNA profiling in the criminal field as evidence possessing near-conclusive probative value, as well as in the medical and research fields. This development has necessitated the establishment of legal safeguards to protect genetic information and preserve human dignity and privacy.

From this perspective, it has become essential to examine the concept of the right to genetic privacy, clarify its legal nature, and subsequently highlight the importance of protecting this right against misuse.

First Subsection: Definition of the Right to Genetic Privacy

The right to genetic privacy is defined as an individual's right to determine which genetic information may be disclosed to others, as well as the right to determine which information they wish to know about themselves. Moreover, mere consent to undergo a genetic test is insufficient; the individual must also be informed of the results that may arise from conducting such a test or analysis, the extent to which these results may entail risks for the individual and others, and must likewise be granted the right to decide whether to know such results.[1]

The right to genetic privacy is also characterized by both an objective and a personal dimension. All information that an individual wishes to keep confidential and refrain from disclosing, and

[1] Ashraf Tawfik Shams El-Din, *Genetic Genes and Criminal Protection of the Right to Privacy: A Comparative Study*, paper presented at the conference "Genetic Engineering between Sharia and Law," United Arab Emirates University, May 5–8, 2002, p. 12.

which is obtained through genetic testing, falls within the scope of protection afforded by the right to genetic privacy. This is based on the established principle that an individual has the right to prevent others from accessing secrets relating to their private affairs.

The right to privacy also entails an individual's entitlement to know the information concerning them that is held by others, even where such information is held by state authorities themselves. [2] It has also been defined as: "the individual's right to protect his personal, intimate, and family secrets, correspondence, reputation, the inviolability of his home, and private property, and to prevent their intrusion upon or disclosure without his consent."[3] In French legal scholarship, the right to genetic privacy has been defined as "the legal recognition of every human being's right to exercise choices concerning the most private or distinctive individual information of a genetic nature."

In American legal scholarship, it has been defined as "the individual's right to determine what genetic information may be accessed by others, and the right to determine what he or she wishes to know about themselves from such information."[4] An examination of these definitions reveals that most of them converge around a common concept, namely, that the right to genetic privacy constitutes an individual's right to control their genetic information by deciding whether to permit others to access such information or to refuse such access.

An individual's right to genetic privacy is a right recognized by national laws and affirmed by international declarations and conventions. Every person is entitled to keep their genetic information confidential and to prevent others from accessing it, given the sensitive information and personal secrets concerning the individual that may be revealed through their genetic characteristics.[5]

Second Subsection: The Legal Nature of the Right to Genetic Privacy

The right to genetic privacy is regarded as one of the rights inherent to the person. It falls within the category of fundamental human rights guaranteed by national legislation, constitutions, and international instruments. The right to the integrity of each individual's genetic characteristics derives from the fact that genetic characteristics constitute an inseparable component of the human body. This is based on two grounds:

The first ground is that these hereditary or genetic characteristics fall within the scope of fundamental rights guaranteed by constitutions. For example, Article 60 of the Egyptian

---

[2] Ashraf Tawfik Shams El-Din, *Genetic Privacy in Criminal Proceedings: A Comparative Study with Reference to the Qatari DNA Profiling Law of 2013 and the Kuwaiti Law of 2015*, Kuwait International Law School Journal, No. 10, 2015, p. 771.

[3] Tariq Jumaa Al-Sayed Rashid, *Legal Protection of the Right to Privacy of Genetic Data: A Comparative Analytical Study*, Legal Journal, Vol. 8, No. 12, 2020, p. 3915.

[4] Yekhlef Abdelkader, *Legal Protection of the Right to Genetic Privacy: Balancing Individual Protection and Collective Protection*, Journal of Rights and Freedoms, Vol. 13, No. 1, 2025, p. 28.

[5] Ayadi Sarah, *The Legitimacy of Violating the Right to Genetic Privacy in the Field of Criminal Evidence*, Al-Manar Journal for Legal and Political Studies and Research, Faculty of Law and Political Science, Yahia Fares University of Médéa, Vol. 4, No. 2, 2020, p. 56.

Constitution provides that: "The human body is inviolable, and any assault upon, mutilation, or disfigurement of it constitutes a crime punishable by law. Trafficking in human organs is prohibited, and no medical or scientific experiment may be conducted on a person without his or her free and documented consent and in accordance with established principles in the field of medical science, as regulated by law."

The second ground is that these characteristics constitute rights inherent to the person. The human body is not limited to its visible organs; rather, it also encompasses all of its internal components, including tissues, cells, nerves, and all other biological elements of which it is composed, meaning that these elements constitute the underlying biological foundation of the person.[6]

Accordingly, any infringement upon these genetic characteristics constitutes, in reality, an infringement upon the right to physical integrity.

Thus, the genetic characteristics of every individual constitute a personal inheritance that requires respect for their privacy and prohibits interference with ownership of their human genome, on the basis that it forms part of their body. Accordingly, the right to genetic privacy possesses a distinctive legal nature, and the subject matter of this right consists of two complementary elements.[7]

Material Element: This element consists of the human body from which the genetic sample is obtained.

Interference with this element constitutes an infringement of the individual's physical integrity.

Moral Element: This element consists of the genetic information and data resulting from genetic testing.

Interference with the moral element occurs through the disclosure of secrets and information that must be protected against disclosure, circulation, or exploitation.

The information subject to protection refers to the information or data revealed through the science of genetic engineering. Such information is closely associated with an individual's identity and genetic characteristics.

Protecting the right to genetic privacy means enabling individuals to freely determine whether or not to permit others to access their genetic data, on the one hand, while, on the other hand, prohibiting the disclosure of secrets revealed through DNA profiling, including genetic information and data capable of identifying the individual.[8]

Third Subsection: The Importance of Protecting the Right to Genetic Privacy:

The importance of protecting the right to genetic privacy stems from the distinctive nature of genetic information. Such information does not merely reveal an individual's current health status; it may also disclose their genetic predisposition to developing certain diseases in the future.

---

[6] Tariq Jumaa Al-Sayed Rashid, *op. cit.*, p. 3944.

[7] Kessal Samia, *Protection of the Right to Genetic Privacy under Law No. 16-03 on the Use of DNA Profiling, International Instruments, and French Law*, Critical Journal of Law and Political Science, Vol. 12, No. 2, 2017, p. 31.

[8] Mohammed Lotfi Abdel Fattah, *The Legal Framework for the Protection of Genetic Privacy*, King Abdulaziz University Journal, Economics and Administration, Vol. 27, No. 1, 2013, p. 11.

The use of genetic test results for purposes other than those that are legitimate and legally authorized may enable third parties to access such information, thereby giving rise to genetic discrimination that may be exploited by employers and insurance companies.
Furthermore, concerns regarding the misuse of genetic information may cause individuals to become apprehensive about, and refrain from, undergoing such tests, thereby depriving them of the medical benefits that may be derived from them.
Accordingly, genetic information constitutes one of the most sensitive categories of personal data, making it necessary to provide it with effective legal protection. Such information should therefore not be collected, processed, or disclosed except within the limits permitted by law, with the consent of the data subject being required whenever possible, and with the process being subject to safeguards and conditions that facilitate the lawful use of genetic analysis.[9]

Second Section: Legal Protection of the Right to Genetic Privacy in Light of Law No. 16-03

Following the widespread adoption of DNA profiling technology in many countries, owing to its effective role in the field of evidence, and given the inability of general legal rules to keep pace with this scientific development and the evolving concept of personal information, which has increasingly necessitated the enactment of specific legislation governing this technology, as well as the legislative vacuum from which Algeria had suffered, it became necessary for the Algerian legislator to enact specific legislation regulating this technology. This was accomplished through Law No. 16/03 on the use of DNA profiling in judicial proceedings and the identification of persons, dated June 19, 2016. This step represents a significant qualitative development in the field of DNA profiling in Algeria.
This law was enacted to fill the legal gap faced by judges, particularly in criminal matters, as well as to establish the conditions and procedures governing the use of this technology at the various stages of biological sample collection by the categories of persons authorized to employ it. In doing so, it seeks to ensure the protection of the freedoms and inviolability of persons subjected to genetic analyses, as well as all matters relating to their private lives, and to prevent any abuse in resorting to this law for the purpose of obtaining information or pursuing objectives that are unlawful.[10]
An examination of the provisions of this law demonstrates that the Algerian legislator has established criminal protection for the right to genetic privacy, as evidenced by the criminalization of two fundamental forms:

First Subsection: The Use of Biological Samples or DNA Profiles for Purposes Other Than Those Prescribed by Law

Article 17 of Law No. 16-03 provides for the punishment of anyone who uses biological samples or DNA profiles obtained in accordance with the provisions of this law for purposes other than

[9] Nabila Razaki, *Criminal Protection of the Right to Genetic Privacy*, Journal of Legal and Political Sciences, Vol. 9, No. 2, 2018, p. 740.
[10] Rassaâ Fatiha, *The Evidentiary Value of DNA Profiling in Criminal Evidence*, PhD dissertation, Faculty of Law and Political Science, University of Tlemcen, 2023, pp. 224–225.

those specified therein, with imprisonment ranging from one to three years and a fine ranging from DZD 100,000 to DZD 300,000.

Here, it can be observed that the law provides protection for biological samples against their unlawful use. As for Article 1 of this law, it defines the legitimate purposes for which biological samples and DNA profiles may be used, limiting them to judicial purposes, procedures for identifying persons, or the identification of persons of unknown parentage.

It can therefore be observed that the Algerian legislator sought to define the scope of the use of DNA profiling in judicial proceedings with regard to missing persons and persons of unknown parentage. Thus, the limitation established by the legislator concerns only missing persons and persons of unknown parentage. In other words, the provision establishes an exhaustive rather than illustrative enumeration, thereby making its scope of application unduly restrictive.[11]

Consequently, any use outside this framework constitutes an offence punishable by law.

Upon examining Article 17 of this law, it becomes apparent that it addresses two forms of the offence:

First: Misuse of Biological Samples for Purposes Other Than Those Stipulated in Law No. 16-03:

This form consists of the use of biological samples obtained pursuant to this law for purposes other than those specified by the legislator, namely, judicial proceedings, the identification of persons, or the identification of persons of unknown identity.

Second: Use of DNA Profiles for Purposes Other Than Those Stipulated under Law No. 16-03:

This form consists of the offence of using DNA profiles extracted from biological samples for purposes other than those authorized by law, namely, using the results of genetic testing outside the scope of judicial proceedings, the identification of persons, or the identification of persons of unknown identity.

Article 4 of Law No. 16-03 provides that the Algerian legislator has specifically designated and limited the authorities competent to order the collection of biological samples. The article provides: "Public prosecutors, investigating judges, and trial judges are authorized to order the collection of biological samples and the performance of genetic analyses thereon in accordance with the provisions set forth in the Code of Criminal Procedure and this law.

In accordance with the same provisions, judicial police officers may, within the framework of their investigations, request the collection of biological samples and the performance of genetic analyses thereon after obtaining prior authorization from the competent judicial authority."

Thus, the Algerian legislator has entrusted this task to public prosecutors, investigating judges, and trial judges.

[11] Zennanda Abdel Rahman, *A Reading of the Law on the Use of DNA Profiling in Judicial Proceedings and the Identification of Persons*, Journal of Comparative Legal Studies, No. 3, Faculty of Law and Political Science, Hassiba Ben Bouali University, Chlef, 2016, p. 37.

The legislator has also authorized judicial police officers, within the framework of investigating and gathering evidence concerning committed offences, identifying offenders, and combating ordinary criminal offences in general, to request the collection of biological samples and the performance of genetic analyses thereon, provided that they first obtain authorization from the competent judicial authority.

Any procedure undertaken by judicial police officers without obtaining judicial authorization when requesting the collection of biological samples or the performance of genetic analyses is subject to nullity. In addition, they may incur criminal liability under the Penal Code and disciplinary sanctions in accordance with the authority or institution to which they belong.[12]

Second Subsection: Disclosure of Data Relating to DNA Profiles

Disclosure refers to the act of revealing information and entails making stored genetic information accessible to others. It therefore consists of transferring information and rendering it known after it has previously remained confidential. The concept of disclosure extends to revealing the identity of the person from whom the sample was obtained or the results of its analysis. Such disclosure does not necessarily have to be explicit; it is sufficient for it to be accompanied by indications capable of establishing the identity of the person to whom the DNA profile belongs. Nor is disclosure required to be complete, as partial disclosure is sufficient.

Disclosure may be effected through any act of divulging or disseminating information and may occur orally, in writing, through gestures, or by any other means of expression. The offence of disclosure does not depend on the information reaching an unlimited number of individuals, nor is it necessary for the disclosure to occur through one of the conventional means of publicity. It is sufficient that the information be disclosed by any other means.[13]

As for the meaning of the disclosure of genetic information, with regard to the criminalization of this act, the Algerian legislator is among the relatively few legislators to have adopted a specific legislative approach to penalizing the disclosure of genetic information. This represents a commendable legislative approach, given the significance of the information stored in genes concerning an individual's life.[14]

For the offence of disclosure to be established, the information must be both genetic in nature and confidential. This is because some information, although genetic in nature, does not possess a confidential character, such as hair and eye color, height, and other characteristics relating to the physical constitution.[15]

---

[12] Bousouar Maisoum, *DNA Profiling in Algerian Legislation*, Al-Manar Journal of Legal and Political Research and Studies, No. 3, Faculty of Law and Political Science, Yahia Fares University of Médéa, 2017, p. 87.

[13] Ashraf Tawfik Shams El-Din, *Genetic Genes and Criminal Protection of the Right to Privacy: A Comparative Study*, paper presented at the conference "Genetic Engineering between Sharia and Law," United Arab Emirates University, May 5–8, 2002, p. 28.

[14] Nabila Razaki, *op. cit.*, p. 746.

[15] Taheri Abdelmotaleb and Al-Nahwi Suleiman, *Legal Frameworks Established for the Protection of the Right to Genetic Privacy in International Instruments and in Algerian and French Legislation*, Al-Ustadh Al-Bahith Journal for Legal and Political Studies, Vol. 06, No. 01, June 2021, p. 2113.

As previously mentioned, the Algerian legislator has placed particular emphasis on safeguarding the confidentiality of genetic data. This is expressly provided for in Article 18 of Law No. 16-03, which stipulates a penalty of imprisonment ranging from six months to three years and a fine ranging from DZD 60,000 to DZD 300,000 for anyone who discloses data recorded in the National DNA Database.

An examination of Article 18 reveals that the offence of disclosure is confined exclusively to genetic data recorded in the National DNA Database, regardless of their nature. Article 18 of Law No. 16-03 is consistent with Article 226-28 of the new French Penal Code of 1994, which provides: "The identification of a person or the identification of a person by means of genetic fingerprints for purposes other than medical or scientific purposes, or outside the scope of judicial proceedings, shall be punishable by one year of imprisonment and a fine of one hundred thousand francs."[16]

It is noteworthy that the Algerian legislator has followed the approach adopted by European legislation in protecting individuals' genetic data against manipulation, use for purposes other than those authorized by law, and disclosure.

Pursuant to the provisions of Executive Decree No. 17-277,[17] which establishes the organizational procedures and functioning of this department, the recording and storage of data fall under the responsibility of the Genetic Fingerprint Registration and Storage Unit, which is affiliated with the Central Genetic Fingerprint Department. This unit is headed by a judge assisted by a technical unit, as well as officers from the police and National Gendarmerie services.[18]

The offence of disclosing genetic data is considered an offence requiring a special status, meaning that it can only be committed by persons who have access to such results by virtue of their profession or official position. Thus, for the offence to be established, the perpetrator must possess the status of a person entrusted with confidentiality by virtue of their profession or position.[19] Accordingly, any unlawful disclosure of such data by these persons gives rise to criminal liability in accordance with the provisions of the law.

It can therefore be observed that the Algerian legislator promptly criminalized interference with genetic information, given that such information contains highly precise details concerning individuals' lives. The right to genetic privacy is therefore no less important than the right to life.[20]

As for the freedom to undergo biological tests that allow for the identification of a DNA profile, the Algerian legislator did not require the prior consent of the person subjected to DNA profiling. However, upon examining Article 16 of Law No. 16-03, it becomes clear that the legislator did not require all persons referred to in Articles 1 and 5 of the same law to undergo DNA profiling. Rather,

---

[16] Zennanda Abdel Rahman, *op. cit.*, p. 44.

[17] Executive Decree No. 17-277 of October 9, 2017, concerning the determination of the conditions and procedures for organizing the Central Genetic Fingerprint Department, *Official Gazette*, No. 60, published on October 19, 2017, p. 14.

[18] Kessal Samia, *op. cit.*, p. 35.

[19] Mahmoud Naguib Hosni, *Explanation of the Penal Code – Special Part*, 6th ed., University Publications House, Egypt, 2018, p. 866.

[20] Ibid,p. 233.

this obligation applies only to certain categories specifically identified by law, namely those referred to in paragraphs 1, 2, 4, and 5 of Article 5. Members of these categories are subject to imprisonment and a fine if they refuse to undergo biological testing.

The second category, which is not required to undergo biological testing, consists of victims of offences, volunteers, children, ascendants and descendants of missing persons, and persons who are unable to provide information concerning their identity due to a physical or mental disability.[21]

Third Section: International Protection of the Right to Genetic Privacy

The rapid development of genetic sciences has led to increasing international attention to the protection of genetic privacy, given the sensitive personal information contained in genetic data. This has prompted the international community to adopt a range of instruments and declarations and to convene conferences that have contributed to establishing principles and safeguards aimed at protecting such data, preserving human dignity and rights, and preventing its misuse. The following section addresses some of these international efforts devoted to safeguarding the right to genetic privacy:

First Subsection: Recommendations of the Muslim World League[22]:

DNA profiling has received considerable attention from the Islamic Organization for Medical Sciences, having been examined in a number of scientific seminars and conferences. Among the most notable was the Eleventh Symposium, held in the State of Kuwait on October 13, 1992, which addressed genetic engineering, the human genome, and gene therapy from an Islamic perspective. This was followed by the Organization's 16th session, held in Makkah on January 10, 2002, which was devoted to discussing the Islamic legal rulings relating to DNA profiling.

These meetings resulted in a number of recommendations aimed at regulating the use of DNA profiling and ensuring that it is not misused. Among these recommendations were the following:

- Restricting DNA profiling tests to cases determined by the judiciary.
- Conducting DNA profiling tests in official laboratories affiliated with the competent authorities, while prohibiting private, profit-oriented laboratories from engaging in this activity, given the risks that may arise therefrom and affect individuals' rights and privacy.
- Establishing a specialized DNA profiling committee in each country, comprising experts in Islamic jurisprudence, medicine, law, and administration. The committee would be responsible for supervising DNA profiling tests, monitoring their results, and ensuring that they are properly implemented in accordance with Islamic legal and scientific standards.
- Establishing precise mechanisms to prevent impersonation and fraud, as well as contamination and all other factors related to human intervention in DNA profiling laboratories, in order to obtain accurate and conclusive results.
- Verifying the competence of laboratories and their personnel.

[21] Kessal Samia, *op. cit.*, p. 36.

[22] Kessal Samia, *op. cit.*, pp. 36–37.

- Ensuring that the number of genetic markers analyzed is limited to the extent deemed necessary by specialists to dispel any doubt.[23]
- The Islamic Fiqh Academy also recommends, in the field of protecting genetic privacy, strict adherence to complete confidentiality when DNA profiling is conducted, particularly in cases involving lineage.
- Accordingly, Islamic legal texts and principles must take precedence in the use of DNA profiling.[24]
- The human genome may not be sold or donated to any individual, entity, or population, given the potential harms and violations that may result from such practices and adversely affect human dignity.

Second Subsection: Universal Declaration on the Human Genome and Human Rights of 1997

The Universal Declaration on the Human Genome and Human Rights was adopted in 1997 [25]by the United Nations General Assembly pursuant to Resolution No. 53/152, issued on November 9, 1998. This further strengthened its international standing, making it one of the most important international references upon which national legislation has relied in regulating the use of genetic information and protecting the rights associated with it.

The Declaration was adopted following a series of scientific and legal studies and consultations conducted by the International Bioethics Committee established under UNESCO. The Committee held its third session from September 27 to 29, 1995, to examine the draft international declaration on the protection of the human genome. The draft was subsequently submitted to the Member States of the United Nations for consideration and the expression of their views, after which the final Declaration was issued.[26]

Accordingly, the Declaration is regarded as the first official international instrument to address the relationship between genetic engineering technologies and human rights. It established principles that brought together international perspectives on the need to reconcile the requirements of scientific development in the medical sciences with the protection of human rights. With regard to the protection of genetic privacy, the Declaration adopted an approach based on considering genetic information as part of the rights inherent to the person, given that it contains highly sensitive data whose implications are not confined to the individual alone but may also extend to their family members and relatives.

Article 2 provides that "every individual has the right to respect for their dignity and rights regardless of their genetic characteristics," thereby establishing the necessity of respecting human dignity and rights without discrimination based on genetic characteristics. Article 5 further requires

[23] Kessal Samia, *op. cit.*, pp. 36–37.

[24] Islamic Fiqh Academy Resolution No. 7, Sixteenth Session, concerning "DNA Profiling and Its Fields of Application," held in Makkah on January 10, 2002.

[25] *Universal Declaration on the Human Genome and Human Rights*, Records of the General Conference, 29th session, held from October 21 to November 12, 1997, Vol. I, Resolutions, United Nations Educational, Scientific and Cultural Organization (UNESCO), 1998, p. 45.

[26] Taheri Abdelmotaleb and Al-Nahwi Suleiman, *op. cit.*, p. 2115.

that no genetic examination be conducted without obtaining the consent of the person concerned, while recognizing their right to know the results of the examination or to refuse to receive them. This principle reflects respect for personal autonomy and confirms that control over genetic information should remain in the hands of its holder, as this constitutes one of the most significant manifestations of the right to privacy.

The Declaration did not limit itself to regulating the procedures for conducting genetic examinations; it also attached particular importance to protecting genetic data following its collection. Article 7 requires that such data be kept confidential and not be used or disclosed except within the limits permitted by law.

Article 9 further affirms that any restriction imposed on the principles of consent and data confidentiality must constitute an exception dictated by a legal necessity and must be subject to the requirements of legality, proportionality, and necessity, in accordance with the provisions of international human rights law.

Despite the considerable importance of the Declaration, it does not attain the status of a binding international treaty, which constitutes one of its most significant shortcomings, as its provisions remain primarily directive and ethical rather than legally binding. Nevertheless, its legal significance cannot be underestimated, as it contributed to addressing the issue of human rights in relation to genetic engineering technologies in a more detailed manner.[27]

Third Subsection: The International Declaration on Human Genetic Data of 2003:

The International Declaration on Human Genetic Data of 2003[28] complements the Universal Declaration on the Human Genome and Human Rights of 1997. In accordance with Article 1 thereof, it aims to ensure respect for human dignity and the protection of human rights and fundamental freedoms in the processes of collecting, processing, using, and storing human genetic data, data relating to human proteins, and biological samples used to obtain such data.

The Declaration emphasizes that these processes must be consistent with the principles of international law and human rights.

The provisions of this Declaration also apply to the processes of collecting, processing, using, and storing human genetic data, data relating to human proteins, and biological samples. However, in cases involving the investigation of crimes, the identification and prosecution of perpetrators, and parentage testing, these matters are subject to the domestic law of States, provided that such law is consistent with the principles of international human rights law.[29]

The adoption of the International Declaration on Human Genetic Data resulted from previous efforts and studies that had highlighted the need for an international instrument establishing the

---

[27] Mirvat Mansour Hassan, *Medical and Scientific Experiments in Light of the Inviolability of the Human Body: Human Organ Transplantation, Cloning, Stem Cells – A Comparative Study*, Dar Al-Jamia Al-Jadida, Egypt, 2016, p. 114.

[28] UNESCO, *International Declaration on Human Genetic Data*, Arabic version, Resolution No. 15 adopted by the General Conference at its 32nd session / Resolution 15/32, held from September 29 to October 17, 2003, Vol. I of the Records of the General Conference of UNESCO, published in 2004, p. 46.

[29] Kessal Samia, *op. cit.*, p. 39.

ethical principles and foundations governing medical and scientific research involving human genetic data.[30]

Among the most significant of these efforts was Resolution No. 39/2001, adopted by the United Nations Economic and Social Council, which addressed the issue of genetic privacy, as well as the legal framework established to protect this right, in addition to the ethical and legal issues raised by genetic data.

The resolution ultimately resulted in a number of recommendations, the most significant of which include:

- Calling upon States to provide the necessary protection for the privacy of persons undergoing genetic testing.
- Prohibiting the use of genetic information and data for purposes of discrimination or exclusion.[31]

Furthermore, the International Declaration on Human Genetic Data emphasizes in its Preamble the private nature of medical data, including data relating to human genes, stressing the necessity of subjecting such data to a high level of confidentiality and protection.

Article 14 of the same Declaration provides for the obligation to respect "the sanctity of private life" and to ensure the confidentiality of human genetic data, prohibiting their disclosure to third parties or making them accessible to other parties except where required by the public interest and in cases exhaustively specified by law.

Article 15 of the Declaration further requires adherence to the "accuracy, reliability, quality, and security of genetic data." Accordingly, those responsible for processing human genetic data, data relating to proteins, and biological samples must take the necessary measures to ensure the accuracy and reliability of such data during their processing and interpretation, in view of their ethical, social, and legal implications.

Article 21 of the same Declaration requires the destruction of genetic data collected from a person suspected of having committed an offence during a criminal investigation once there is no longer any need to retain such data.

Conclusion:

In conclusion, this study demonstrates that regulating the use of DNA profiling requires achieving a delicate balance between two fundamental considerations. The first is the protection of private life and the right to genetic privacy, as a right inherent to the person and involving highly sensitive genetic information. The second is the protection of public security and the public interest.

The protection of genetic privacy requires the establishment of strict legal safeguards. Among the most important of these conditions and safeguards is the requirement to obtain the individual's consent before conducting genetic testing, except in cases permitted by law. It is also necessary to ensure the confidentiality of genetic information and to prevent its disclosure to third parties or its

[30] Taheri Abdelmotaleb and Al-Nahwi Suleiman, *op. cit.*, p. 2116.

[31] Resolution No. 39/2001 adopted by the Economic and Social Council concerning genetic privacy and non-discrimination.

exploitation for unlawful purposes. Genetic data may likewise not be retained for a period exceeding that required by legal necessity.

This study has also demonstrated that, through Law No. 16-03 on the use of DNA profiling in judicial proceedings, the Algerian legislator sought to regulate the use of DNA profiling and establish a set of legal safeguards, particularly in response to the legislative vacuum that had confronted the judiciary in dealing with this modern technology. The law regulates the circumstances in which biological samples may be collected and identifies the persons who may be subjected to such analysis. It criminalizes the use of biological samples for purposes other than those authorized by law and also criminalizes the disclosure of data relating to DNA profiles. This regulatory framework demonstrates the legislator's intention to strike a balance between the requirements of criminal justice and the protection of the right to genetic privacy, as a right inherent to the person.

The legislator further reinforced this law by issuing Executive Decree No. 17-277 concerning the Central Genetic Fingerprint Department and its functioning, which established procedures for preserving DNA profiles extracted from the biological samples of individuals.

With regard to international instruments, considerable attention has been devoted to protecting the right to genetic privacy through the establishment of a normative framework governing the handling of genetic data, ensuring its protection against unlawful use and disclosure while preserving public security and the public interest. Foremost among these instruments are the Universal Declaration on the Human Genome and Human Rights of 1997 and the International Declaration on Human Genetic Data of 2003.