Sci. Educ. Innov. Context Mod. Probl. P-ISSN: 2790-0169 E-ISSN: 2790-0177
Issue 1, Vol. 8, 2025, IMCRA

Civil Liability for Medical Experiments

Ziani Mounir

University of ELhadj Lakhdar, Batna 1 University,Algeria

Email: mounirziani190@gmail.com

Ziani Kenza

Larbi Ben M'hidi University - Oum El Bouaghi,Algeria

Email: kenzaziani990@gmail.com

Received date: 10.01.2025; Accepted date: 16.03.2025; Publication date: 24.04.2025

doi: 10.56334/sei/8.1.82

Abstract

Medical experiments on the human body are among the medical interventions that cannot be avoided for the advancement of medical and surgical sciences. Thanks to these experiments, scientists have been able to reduce many diseases that claimed numerous human lives for a long time; many of them have now faded into oblivion, and those that remain no longer pose a danger to humanity's future, as their treatments are now accessible.

For a human body experiment to be legitimate, it must be conducted according to specific legal conditions and regulations. Violation of these legal frameworks for conducting medical experiments results in the civil liability of the person conducting the experiment. This liability may take two forms: contractual liability, which arises if there is a valid contract between the harmed subject and the responsible physician-researcher, and if the damage resulted from the physician's breach of contractual obligations; or tortious liability, which arises when the physician-researcher violates a legal duty imposed by the law regulating the medical profession, causing harm to the test subject.

Citation. Ziani M., Ziani K. (2025). Civil Liability for Medical Experiments. *Science, Education and Innovations in the Context of Modern Problems*, 8(1), 1266-1276. doi: 10.56352/sei/8.1.82. https://imcra-az.org/archive/356-science-education-and-innovations-in-the-context-of-modern-problems-issue-1-volviii-2025.html

Keywords: Civil liability – medical experiment – human body – medical error – damage.

Introduction

The human body is one of the most essential elements necessary for existence and is considered one of the most sacred components of life. It must not be the subject of any agreement except for the purpose of its protection and preservation. Any harm to it is considered a violation of the sanctity of the physical being.

Scientific and medical progress has led to achieving optimal scientific outcomes that serve humanity through research and medical experiments. Thanks to these efforts, scientists were able to curb many deadly diseases such as syphilis, tuberculosis, and smallpox, which had taken countless lives over time. As a result, medical experiments began to impact the sanctity of the human body, shifting the concept from a strict prohibition to a permissible exception when based on the individual's own will. If a person consents for their body to be subject to medical experiments, it is not considered a violation of bodily sanctity. However, this does not imply that all medical practices that could violate the integrity of the human body and human dignity are allowed. Violating bodily sanctity through medical experiments results in the civil liability of the person conducting the experiment, which is explicitly recognized by Algerian law.

Given the above, the study raises the following problem:

- To what extent has the Algerian legislator established the provisions of civil liability for medical experiments?

This main issue branches into the following sub-questions:

- What is the concept of medical experiments?
- What are the provisions of civil liability in the field of medical experiments?

To answer the stated problem, we adopt the descriptive-analytical method by examining the concept of medical experiments, their types, and the legal controls governing them. We then explain the resulting liability in terms of its type and impact through two main axes:
First Axis: Concept of Medical Experiments

Second Axis: Provisions of Civil Liability in Medical Experiments on the Human Body

First Axis: Concept of Medical Experiments

Understanding the concept of medical experiments requires defining them, identifying their types, and outlining the legal conditions for conducting them.

First: Definition of Medical Experiment

We distinguish between the linguistic and the terminological definition.

1. Linguistic Definition:

The word "experiment" comes from the verb "to try," meaning to test something repeatedly to avoid its shortcomings or to verify its validity. Its plural is "experiments."

2. Terminological Definition:

Medically, an experiment refers to a set of scientific or technical procedures aimed not at treatment but at obtaining new information about a specific disease under study. It is also defined as scientific or medical procedures carried out by a physician-researcher on a patient or a volunteer with the aim of testing a specific drug or the success of a surgical procedure whose outcome is unknown, in order to gain new knowledge that benefits medicine and humanity.

Second: Types of Medical Experiments

There are two types of medical experiments conducted on humans: therapeutic and non-therapeutic (or scientific) experiments, depending on the goal the physician or researcher seeks to achieve.

1. Therapeutic Experiments:

These are experiments conducted by a physician with the aim of treating a patient using modern methods in cases where no known drug is sufficient for recovery. Alternatively, they are used by doctors to find new treatments for diseases that cannot be successfully treated using established medical principles.

2. Scientific or Non-Therapeutic Experiments:

These involve using new methods or techniques on a healthy or sick person for purely scientific research purposes, without the person necessarily needing the treatment.

This type of experiment is also defined as any systematic research aimed at developing or contributing to general knowledge directly.

Third: Legal Controls for Conducting Medical Experiments

To legitimize medical and scientific experiments, certain legal controls must be met to avoid legal consequences. These controls can be divided into procedural (formal) and substantive (material) ones.

1. Procedural Controls:

To protect the sanctity of the human body, Algerian law requires a set of procedural conditions to conduct medical and scientific experiments, including obtaining a legal license to practice the profession, a special license to conduct the experiment, and requiring that experiments be conducted only in authorized hospitals.

A. License to Practice Medicine:

Medical and surgical interventions on the human body are only allowed if carried out by someone legally licensed to do so; otherwise, they will be held accountable under general legal principles. Practitioners must meet the conditions and procedures defined by laws governing medical professions.

B. License to Conduct Medical or Scientific Experiment:

Algerian law requires obtaining a license to conduct therapeutic or non-therapeutic medical experiments from the Minister in charge of pharmaceutical industry, upon submitting a medical and technical application by the sponsor that includes a research protocol.

C. Requirement to Conduct Experiments in Qualified Hospitals:

Experiments must be conducted in well-equipped, legally authorized locations to ensure proper protection for subjects involved in the experiments. Algerian law mandates this requirement, stipulating that such experiments take place only in designated locations regulated by the Minister responsible for pharmaceutical industry.

2. Substantive Controls:

Due to the importance of medical research, certain substantive conditions are also required alongside procedural ones, summarized as follows:

A. Existence of a Legitimate Interest:

The intent to treat justifies medical acts, including experiments. The primary goal of medical practice is to treat the patient and improve their condition, whether by achieving a cure or alleviating suffering. Physicians are not permitted to deviate from this purpose.

B. Balancing Benefits and Risks of the Experiment:

The principle of a human's right to bodily integrity imposes an obligation on researchers in the fields of biomedical and biological sciences to protect the human body by criminalizing all forms of assault resulting from all types of experiments—whether aimed at providing personal benefits to the subjects or conducted for the development of medical research to find new ways to eliminate various diseases. This has been stipulated by the legislator in Articles 180 and 181 of the Algerian Health Law.

C – The Requirement of Physician Competence and Scientific Knowledge

Scientific competence is considered a substantive condition and one of the most important requirements for the physician conducting the experiment. Competence refers to acquiring the necessary experience through training and practicing modern techniques before applying them to humans, in order to safeguard and protect them from potential dangers. This was stipulated by the legislator in the second and third paragraphs of the Algerian Health Law, which state:

“Clinical studies may only be conducted if… executed under the supervision and control of a researcher-physician who possesses appropriate experience, conducted in human, material, and technical conditions consistent with the clinical study, and in line with the requirements of scientific rigor and the safety of individuals undergoing the clinical study.”

D – Adherence to Scientific Standards in Conducting Medical Experiments

Scientific standards refer to the established principles and commonly recognized theoretical and scientific rules among physicians, which they must be aware of and committed to during medical practice. Ignorance of or deviation from these principles is not tolerated.

E – Oversight by Specialized Authorities Over Medical and Scientific Experiments

Given that medical experiments involve risks that may harm the patient's health, they must be conducted under the supervision of responsible medical authorities. These authorities must ensure the competence and experience of the experimenter and ensure the application of rules to prevent harm to individuals.

Second Section: Provisions of Civil Liability in the Field of Medical Experiments on the Human Body

Understanding the provisions of civil liability in the field of medical experiments on the human body requires an explanation of the elements of civil liability for medical experiments, identifying its legal nature, and stating the resulting implications, which we will detail as follows:

First: Elements of Civil Liability for Medical Experiments

Civil liability is a system for redressing harm caused to a person by the actions of another, by compensating for the harmful act without punishing the perpetrator—whether the liability arises from a contractual breach (with compensation for foreseeable harm) or a tortious act (with compensation for all harm caused by the unlawful act, whether foreseeable or not).

Civil liability in the field of medical experiments on the human body is based on three elements, as explained below:

1 – Medical Error Resulting in Civil Liability for Medical Experiments

The Algerian legislator has not provided a definition of medical error, or error in general, in either the Civil Code or health-related laws. However, it referred to this element in Article 124 of the Civil Code, which states:

"Every act committed by a person with fault that causes harm to another obliges the person who caused it to provide compensation."

Jurisprudence offers multiple definitions of error. For example, the jurist Ahmed Abdel-Razzaq Al-Sanhouri defines error as:

"A person's deviation in conduct beyond the limits they are obliged to adhere to, whether intentionally or unintentionally."

Medical error is the physician's failure to fulfill duties imposed by medical science, professional rules, or technical standards. Because the practice of medicine requires specific expertise, the physician is obligated to be well-versed in these standards; ignorance of them constitutes error.

The physician conducting the experiment is responsible for any personal error or errors by assistants if no contract binds them. If there is a contractual relationship, the physician is responsible for the acts of those under their supervision as the person in charge of the experiment.

Medical error in experiments has unique characteristics compared to other medical acts, where two scenarios may arise:

- First Case: The physician conducts an experiment on a person's body without their consent. In this case, the individual has the right to claim compensation for all resulting damages.
- Second Case: There is a contract and written consent. Here, the physician is liable only for foreseeable damages, unless fraud or gross negligence is proven—in which case, they are also liable for unforeseeable damages.

2 – Damage Resulting from Medical Experiments

Damage is the second element of medical liability and a necessary condition for the injured party to claim compensation. In some cases, it is considered the first element. The Algerian legislator did not define damage but referenced it in Articles 124 to 140 of the Civil Code, which mention the conditions required to redress damage by the liable party.

From a legal perspective, damage is generally defined as:

"The harm that affects a person's right or legitimate interest—whether related to physical integrity, emotions, property, freedom, honor, or other aspects."

In the medical field, damage is defined as:

"The harm that befalls a patient physically, financially, or emotionally due to an unusual act by the physician."

For damage to warrant compensation, it must meet the following conditions:

- It must affect a right or legitimate interest, by diminishing a legally recognized patient right or harming a legitimate interest, such as depriving them of treatment by another competent physician.
- It must be actual and immediate, not potential or future, to allow for its extent and compensation to be assessed.
- It must be personal and direct, affecting the plaintiff themselves. However, the patient's children, spouses, and heirs under their care may also claim compensation. The damage must result directly from the physician's error, without interference from other causes.

3 – Causal Link Between Medical Error and Damage

The causal relationship between error and damage is a fundamental and essential element of medical liability. Despite being difficult to establish in the medical field due to the body's complexity and variability, this link is defined as the direct connection between the physician's error and the patient's harm. In other words, the physician's error must be the cause of the damage.

This relationship is not visible or tangible; it is inferred from reality and the evidence presented by the patient. Its existence is usually presumed in light of this evidence, and the physician has the right to dispute the presumption and provide counterproof. They may avoid liability by proving that the damage resulted from force majeure, a sudden incident, the patient's own error, or a third party's error—demonstrating that the physician was not the cause.

Second: The Legal Nature of Civil Liability for Medical Experiments

Civil liability in general is a system aimed at compensating harm caused to a person by another's actions. It is divided into contractual liability and tortious liability. We will explain whether the experimenter's liability falls under contractual or tortious liability:

1 – Contractual Liability Arising from Medical Experiments

Contractual liability only exists if there is a valid contract between the injured subject and the responsible physician-experimenter, and if the damage resulted from the physician's breach of contractual obligations.

For contractual liability in medical experiments to be established, the following conditions must be met:

- There must be a medical contract between the patient (or test subject) and the experimenter physician.
- The medical experiment contract must be valid, meaning its subject and purpose must conform with public order and morals. It must not contain clauses that violate health laws or the professional code of ethics, and it must be free from defects affecting its validity.
- The error attributed to the experimenter physician must result from the failure to perform obligations arising from the therapeutic or non-therapeutic experimental contract. For the physician to be contractually liable, the patient's damage must be caused by a breach of the obligations in the experimental medical contract.
- The plaintiff must have the right to rely on the experimental medical contract, meaning the harmed party must be the patient, in accordance with the principle of the relative effect of contracts, whereby the effects of the contract apply only to the contracting parties.

To establish the responsibility of the physician conducting the experiment in a therapeutic experiment, the patient must prove that the harm they suffered was caused by the physician's failure to meet one of the obligations stipulated in the contract. The physician can only be freed from liability if they prove the existence of an external cause. However, in non-therapeutic (scientific) experiments, the physician cannot avoid liability for any damage, even if the medical intervention was performed according to standard technical procedures, and even if no error was made by the physician.

2 – Tortious Liability Arising from Medical Experiments

Tortious liability in medical experiments arises when the experimenting physician breaches an obligation imposed by the law regulating the practice of medicine, causing harm to the individual undergoing the experiment. In such cases, the physician is obliged to compensate the harmed party according to the rules of tortious liability.

Third: The Consequences of Civil Liability for Medical Experiments

Compensation is the primary consequence of civil liability for medical experiments. Once the elements of civil liability are met, the physician conducting the experiment becomes responsible for all the damages caused to the individual undergoing the experiment, whether they are material or moral damages.

Compensation is determined by a court ruling that mandates the restoration of the harmed party to their previous state, whether for physical or moral harm. The court has the discretion to appoint expert witnesses to assess the extent of the damages suffered by the individual. In principle, compensation is usually in-kind, but this is often not possible in the medical field. Therefore, the judge always awards monetary compensation in medical liability cases.

Typically, monetary compensation is paid in a lump sum to the injured party. However, there is no prohibition on the compensation being paid in installments or as a lifetime pension, which the judge may determine based on the circumstances of the harmed individual, with the assistance of experts in medicine and law.

The compensation is determined according to the specific case of harm. If the physical harm is non-lethal but led to the temporary or permanent disruption of certain physiological functions, the individual is compensated for the temporary disability or permanent disability. In such cases, the patient is compensated with a prosthetic organ if possible, along with financial compensation for the permanent disability.

If the physical harm is lethal, the compensation extends to anyone with an interest, such as the deceased's spouse, children, and those they financially support. Additionally, compensation is awarded for financial harm, which includes the unexpected medical expenses, drugs, X-rays, and other related costs. Moral damage resulting from the breach of confidentiality or harm to the heirs in the case of death is also compensated.

Conclusion:

Based on what has been presented, we have reached several conclusions that can be summarized as follows:

- Medical experiments are among the most dangerous situations a person can face when receiving medical services. Despite this, they remain an essential necessity for the advancement of medical and surgical sciences.
- The importance of conducting medical experiments does not mean that physicians should have unrestricted authority over how to carry them out, as the human body is too sacred to be

treated as an experimental field. Medical experiments are governed by a set of legal regulations to ensure the respect and protection of human dignity.

- Medical experiments may be conducted for the purpose of treating a specific patient from a certain disease, referred to as therapeutic medical experiments, or for purposes other than treatment, such as research and testing, known as scientific experiments.
- The execution of medical experiments is subject to a set of legal regulations that must be met for their legitimacy on the human body, most importantly obtaining the consent of the individual undergoing the experiment.
- The physician's obligation in the context of medical experiments differs from their obligation in regular medical procedures, where the physician is required to exercise care in regular medical procedures, but in the case of medical experiments, the physician is required to achieve a specific result.
- Medical experiments are conducted in licensed places, following the approval of legally authorized bodies.
- The Algerian legislation lacks adequate protection for individuals undergoing medical experiments, as its regulation of medical experiments is still in its early stages. It has only established the legal framework for medical experiments and has acknowledged the civil liability of the experimenter.

Recommendations:

Based on the above discussion, we propose the following recommendations:

- The need for special legislation to regulate the issue of medical experiments, in addition to introducing legal provisions that protect vulnerable groups undergoing medical experiments, such as minors and prisoners.
- The establishment of specialized centers where medical experiments can be conducted.
- The inclusion of specific guidelines for conducting medical experiments on humans in medical schools.
- The necessity of introducing mandatory insurance for medical experiments, ensuring compensation for individuals undergoing experiments in case of harm, and providing protection for the experimenter to encourage research and experimentation in the medical field.
- The adoption by Algerian legislators of the concepts of "strict liability" and "presumed fault" for the experimenter, especially in therapeutic experiments where it is difficult for the subject to prove the physician’s error, in line with the approach of the French legislator.

References:

Arab Belhaj, *The Rulings of Medical Experiments on Humans in Light of Islamic Law and Contemporary Medical Laws: A Comparative Study*, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2012, p. 24.

Ben Audah Sanousi, *Medical Experiments on Humans Under Criminal Responsibility: A Comparative Study*, PhD Thesis in Private Law, Abou Bakr Belkaid University, Tlemcen, 2017-2018, p. 66.

Ben Nawi Khaled, *Regulatory Framework for the Legitimacy of Medical Experiments on the Human Body and its Impact on Civil Responsibility*, Master's Thesis in Legal Sciences, Specializing in Private Law, Sétif 2 University, Faculty of Law and Political Science, 2012-2013, p. 54.

Imad Al-Din Barakat and Mohamed Reda Hamadi, *The New Legal Regulations for Conducting Medical Experiments on the Human Body in Light of Algerian Health Law No. 18-11*, International Law and Development Journal, Volume 8, Issue 2, November 2020, p. 97.

Imad Al-Din Barakat and Mohamed Reda Hamadi, *The New Legal Regulations for Conducting Medical Experiments on the Human Body in Light of Algerian Health Law No. 18-11*, p. 102.

Imad Al-Din Barakat and Mohamed Reda Hamadi, *The New Legal Regulations for Conducting Medical Experiments on the Human Body in Light of Algerian Health Law No. 18-11*, p. 106.

Imad Al-Din Barakat and Mohamed Reda Hamadi, *The New Legal Regulations for Conducting Medical Experiments on the Human Body in Light of Algerian Health Law No. 18-11*, p. 110.

Salha Al-Omari, *The Civil Liability of Doctors for Medical Experiments in Algerian Law*, Judicial Precedent Journal, Issue 15, September 2017, p. 237.

Law No. 05-10, dated June 20, 2005, amending and supplementing Order No. 75-58, dated September 26, 1975, concerning the Civil Code, Official Journal No. 44, issued on June 26, 2005, p. 17.

Ahmed Abdel-Razzaq Al-Sanhouri, *Al-Waseet in Explaining the New Civil Code*, Volume 2, General Theory of Obligation, 3rd Edition, Dar Al-Halabi Legal Publications, Lebanon, p. 844.

Raees Mohamed, *The Civil Responsibility of Doctors in Light of Algerian Law*, Dar Houma, Algeria, 2007, p. 149.

Mohsen Abdel-Hamid Al-Baya, *A Modern View on the Doctor's Mistake Leading to Civil Responsibility in Light of Traditional Legal Rules*, New Al-Jalaa Library, Mansoura, 1993, p. 108.

Salha Al-Omari, *The Civil Liability of Doctors for Medical Experiments in Algerian Law*, p. 238.

Algerian Civil Code, Article 124: "Any act, regardless of its nature, committed by an individual that causes harm to others obliges the one who caused it by fault to provide compensation."

Ben Sghir Mourad, *Medical Error in the Context of Civil Responsibility Rules*, PhD Thesis in Law, Tlemcen University, 2010-2011, p. 131.

Belhaj Arab, *The General Theory of Obligation in the Algerian Civil Code*, Volume 2, University Press, Algeria, p. 143.

Raees Mohamed, *The Civil Responsibility of Doctors in Light of Algerian Law*, p. 292, 293.

Iman Ayed Mahmoud Qasrawi, *Civil Liability for Medical Experiments*, An-Najah National University, Graduate School, Palestine, 2018-2019, p. 11.

Ben Nawi Khaled, *Regulatory Framework for the Legitimacy of Medical Experiments on the Human Body and its Impact on Civil Responsibility*, p. 128-13.

Raees Mohamed, *The Civil Responsibility of Doctors in Light of Algerian Law*, p. 395.

Iman Ayed Mahmoud Qasrawi, *Civil Liability for Medical Experiments*, p. 11.