



CRIMINAL POLICY ON HUMAN CLONING IN IRAQI LAW AND THE LEGAL FRAMEWORK OF ARAB COUNTRIES

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Abstract

This study aims to examine the legal foundations for criminalizing human cloning in Tunisia, the UAE, Egypt, Algeria and Iraq. Its significance arises from a comparative review of Arab legislation about human cloning from a criminal policy perspective. The findings indicate that Iraq's lack of clear legislation creates a legal vacuum that may enable unregulated practices, potentially leading to the exploitation of cloning technology for illicit purposes. The study advocates for the enactment of explicit Iraqi legislation prohibiting human cloning, reinforced by stringent criminal penalties to prevent the misuse of this technology. Furthermore, it calls for enhanced cooperation among Arab nations to establish a unified legal framework governing cloning technologies, thereby safeguarding ethical and societal values from potential violations.

Keywords: criminal policy, human cloning, legislation, crime, genetic engineering

Introduction

Human cloning is a scientific issue with profound legal, ethical, and social implications. Its impact extends beyond the scientific domain, influencing legislative and criminal policies that seek to regulate or prohibit it. Given the swift advancements in genetic engineering,

there is an urgent need for clear legal frameworks that delineate the legitimacy of such practices while mitigating potential infringements on human rights and ethical norms. While certain Arab nations, including Tunisia, the United Arab Emirates, Algeria, and Egypt, have enacted legislation explicitly criminalizing human cloning in its various forms, Iraq continues to lack definitive legal provisions addressing this issue. This legislative gap raises complex legal dilemmas regarding the applicability of conventional criminal laws to emerging biotechnologies.

The central issue examined in this study is Iraq's absence of a clear legislative stance on human cloning, which has led to a regulatory void that could be exploited to conduct unauthorized experiments, particularly given the increasing number of specialized laboratories engaged in assisted reproductive technologies and infertility treatments. Furthermore, the genetic identicalness between an original individual and their clone poses intricate legal challenges concerning identity verification and criminal liability, potentially resulting in unprecedented legal and security dilemmas.

Accordingly, this study aims to analyze the legal underpinnings of human cloning criminalization in Arab states, focusing on legislative variations between countries that have explicitly prohibited it and those that have yet to regulate it. The study employs a comparative analytical approach, scrutinizing various Arab legislative frameworks while incorporating references to relevant international legal provisions to offer a comprehensive perspective on the necessity of establishing regulatory measures in Iraq.

This research is structured into two primary sections. The first section explores the legislative positions of Arab nations that criminalize human cloning by examining their legal provisions and classifying the offense within different statutory frameworks. The second section delves into the core justifications for criminalizing human cloning, emphasizing associated health and psychological risks, potential misuse in unauthorized medical experiments, and broader implications for legal and social security.

Definition of Criminal Policy: Linguistic and Terminological Perspectives

The term "criminal policy" has both linguistic and technical definitions. Linguistically, the word **"policy" (siyāsa)** is derived from the verb **sāsa**,¹ meaning "to govern" or "to regulate." The term **sīsā'** historically referred to the back of a donkey or mule, with the plural form **siyāsī** evolving to denote political affairs.² A classical Arabic proverb states: *Hamalnāhum 'alā markab ṣa'b kasīsā' al-ḥimār*, meaning "We placed them on a difficult mount, like the back of a donkey," illustrating an unstable or precarious situation. According to Ibn al-Athir, **sīsā'** refers to the central part of an animal's back, typically where a rider sits.

The word **"criminal" (jinā'ī)** originates from the verb **janā**, which signifies "to commit an offense." The phrase **janā al-dhanb 'alayhi jināya** translates to "he committed a crime against himself," indicating an act of wrongdoing.

From a terminological perspective, criminal policy is defined as "a set of deterrent measures adopted by the state to combat crime."³ This definition underscores a core principle: as conceptualized by Feuerbach, criminal policy embodies the legislative philosophy of a state. It encompasses all legal measures implemented at a particular time and place to effectively address and prevent criminal behavior⁴.

The Position of Arab States on Criminalizing Human Cloning and the Legal Classification of the Crime

1.1 The Stance of Arab Nations on Criminalizing Human Cloning

Several Arab states have explicitly outlawed human cloning. Tunisia, for example, has formally banned the practice through Law No. 93 of 2001 on Reproductive Medicine, enacted on August 7, 2001. Article 8 of this legislation explicitly states: "The use of cloning techniques is strictly forbidden within the realm of reproductive medicine." Furthermore, Article 9 asserts: "It is prohibited to generate human embryos through in vitro fertilization or other techniques for purposes of study, research, or experimentation." These provisions underscore the Tunisian legislature's unequivocal opposition to cloning research within its jurisdiction, rendering any endeavor to create human embryos for scientific exploration or

¹ - Ibn Manzur, Muhammad ibn Makram. *Lisan al-Arab*, Vol. 6, 3rd Edition, Dar Sadir, Beirut, 1414 AH, p. 109.

² - Ibid., Vol. 13, p. 387.

³ . Tikriti, Munther Kamal Abdul Latif. *Criminal Policy in Iraqi Penal Law – A Comparative Study*, 2nd Edition, Al-Adib Press, Baghdad, 1979, p. 11.

⁴ . Al-Alawi, Jaafar. *Criminal Policy – Concept and Development*, published research on www.lawjo.net

experimentation strictly unlawful. Additionally, Article 13 stipulates: "A human embryo may only be obtained through in vitro fertilization or other techniques within the scope of reproductive medicine and for purposes explicitly defined by this law."

Similarly, the United Arab Emirates has criminalized cloning under Federal Law No. 10 of 2008 on Medical Liability. Article 10, located in Chapter One under the medical liability section, explicitly states: "Human cloning procedures are prohibited, and it is also forbidden to conduct research, experiments, or applications aimed at cloning a human being." This provision demonstrates that Emirati legislation enforces a sweeping prohibition on human cloning, encompassing both reproductive cloning and associated research, experimentation, or applications. However, despite acknowledging the risks of cloning in human applications and integrating criminalization clauses within its Medical Liability Law, the UAE has yet to establish a comprehensive legal framework exclusively dedicated to cloning activities.

In Algeria, cloning was prohibited for a temporary period of five years (2008–2012) under legislation promulgated on February 23, 2008. Meanwhile, Egypt criminalized human cloning through Article 60 of the Egyptian Code of Medical Ethics, No. 238 of 2003, which states: "Researchers are prohibited from conducting or participating in research or practices that involve any suspicion of lineage mixing. They are also forbidden from engaging in or contributing to medical research aimed at cloning human beings."

2.2 The Legal Categorization of Human Cloning as a Criminal Offense

The core subject of human cloning as a criminal act revolves around the human genome, which serves as the foundation for cloning procedures. The unique legal implications of the human genome raise critical questions about the type of criminal protection it warrants. Specifically, should it be safeguarded under laws pertaining to offenses against property, or should it be classified under statutes addressing crimes against individuals?

The principle of bodily inviolability is a fundamental legal and ethical doctrine, originally formulated to uphold the sanctity and dignity of the human body. This principle is deeply embedded in legal scholarship and judicial practice, forming the basis of various criminal provisions that penalize violations of bodily integrity.

This section explores a key question: Do existing legal frameworks that criminalize bodily harm provide sufficient protection for the human genome in cases of human cloning?

To address this question, we will briefly examine specific legal provisions in criminal law that form the foundation for regulating offenses against bodily integrity. This analysis will help determine whether these provisions effectively encompass genetic material within their scope of criminal protection in cloning-related offenses. We will begin by exploring the concept and elements of the right to bodily integrity, which is central to offenses against individuals, to assess whether these components adequately cover genetic material. Subsequently, we will evaluate the forms of criminal conduct constituting the material element of cloning crimes, as they represent the most critical aspect of criminal liability. This examination will provide insight into whether existing legal definitions and classifications adequately address the criminalization of human cloning¹.

First: The Object of Infringement in the Crime of Human Cloning

Legal scholars universally acknowledge that the right to bodily integrity constitutes the primary object of infringement in human cloning crimes. This right comprises three key components:

1. **The Natural Functions of Organs** The law mandates the protection of the body's natural functions, deeming any disruption to these functions a violation of this right². However, cloning does not necessarily result in such disruptions, as genetic material can be altered without directly impairing organ function³. Nevertheless, the unauthorized extraction of genetic material still constitutes an infringement upon the human body, even in the absence of an observable functional disorder⁴ (4).
2. **Bodily Integrity** The law prohibits any form of bodily violation, including the removal of an organ or impairment of its function⁵ (5). In cloning, genetic material may be extracted or manipulated without inducing immediate physical changes, such as when genetic samples are collected for research or industrial purposes without

¹ . Al-Azza, Muhannad Salah Ahmed Fathi. *The Criminal Protection of the Human Body in Light of Modern Medical Trends*, New University Publishing House, 2002.

² . Al-Harish, Faraj Saleh. *The Legal Position on Modern Medical Applications*, Jamahiriya Publishing House, Libya, 1996, p. 56.

³ . Sawahil, Wagdy Abdel Fattah. *Genetic Engineering: Methods and Applications in Crime*, First Edition, Riyadh, 2006.

⁴ . Tharwat, Galal. *The Special Section Systems in Criminal Law*, Mansha'at Al-Ma'arif, Alexandria, 2000, p. 343.

⁵ . Al-Sayfi, Abdel Fattah. *Conformity in Criminalization*, Previously cited reference, p. 296.

consent¹ (6). Although such actions do not directly harm an individual's body, they nonetheless infringe upon bodily sanctity and personal privacy² (7).

3. **Freedom from Physical Suffering** Any act causing bodily distress is classified as a criminal offense, even if it does not result in permanent functional damage (8). However, cloning may not directly induce physical pain, raising questions about whether existing legal frameworks adequately safeguard genetic material³.

Second: The Legal Classification of Human Cloning Crimes

Criminal law categorizes offenses based on their legal and material ramifications, with traditional crimes against individuals including acts such as assault or bodily harm ⁴(10). However, cloning does not necessarily inflict tangible harm, making its classification within conventional bodily offenses problematic⁵.

For instance, the unauthorized acquisition of genetic samples from medical laboratories may not leave an immediate physical impact on the individual, yet it constitutes a violation of their genetic identity⁶. Additionally, utilizing human cells in manufacturing medical or cosmetic products without the donor's consent infringes upon human dignity, even in the absence of direct bodily harm⁷. Therefore, ensuring the criminal protection of human genetic material necessitates a reassessment of existing legal frameworks to establish robust safeguards against unauthorized genetic exploitation.

3. The Basis for Criminalizing Human Cloning

¹ . Shams Al-Din, Ashraf Tawfiq. *Genetic Genes and Criminal Protection of the Right to Privacy*, Previously cited reference, p. 121.

² . Kashkoush, Huda Hamed. *The Human Genome Project and General Rules of Criminal Law*, Previously cited reference, p. 72.

³ . Kashkoush, Huda Hamed. *Crimes Against Individuals: Offenses Against the Right to Life and Bodily Integrity*, University Culture Publishing, 1994, p. 151.

⁴ . Al-Azza, Muhannad Salah. *The Criminal Protection of the Human Body*, Previously cited reference, p. 199

⁵ . Taha Mahmoud, Mahmoud Ahmed. *Reproduction Between Criminalization and Legitimacy*, Mansha'at Al-Ma'arif, Alexandria, 2003.

⁶ . Sharaf Al-Din, Ahmed. *Legal Regulations for the Legitimacy of Organ Transplantation*, 1978, p. 134.

⁷ . Al-Khouli, Mohamed Abdel Wahab. *The Criminal Liability of Doctors for Using Modern Medical and Surgical Methods (A Comparative Study on Artificial Insemination, Test-Tube Babies, and Organ Transplantation)*, First Edition, 1997.

The rationale behind criminalization derives from the potential diseases or permanent disabilities caused by cloning procedures or from research and experiments associated with human cloning. These foundations are discussed as follows:

3.1 Diseases and Permanent Disabilities Resulting from Human Cloning

3.1.1 Diseases Induced by Cloning Procedures

First: Transmission of Diseases Due to the Cloning of Diseased Cells

Disease is defined as "any disorder that disrupts the normal functioning of one or more bodily functions, deviating from natural physiological processes. This disorder may affect either physiological or mental functions, manifesting as either a temporary dysfunction of an organ or a lasting impairment" ¹(15). For a cloning procedure to be deemed culpable, it is insufficient for it to merely induce a disease—the ailment must persist over a significant period².

Second: Disability Resulting from Cloning Procedures

Disability in performing personal tasks refers to a clone's inability to carry out physical activities they were capable of before the cloning process, even if they retain professional functionality. Some scholars argue that the term "disability" specifically pertains to an individual's routine and natural tasks³.

A disability resulting from cloning may arise due to viral infections associated with the procedure. For instance, if an individual afflicted with AIDS, Ebola, the plague, or influenza is cloned, and the resulting clone contracts the same virus—rendering them bedridden—the aggravated circumstance would apply, in conjunction with the disease.

Medical assessments determine the extent of a victim's recovery, even on the day of the offense. However, certain conditions, such as AIDS or hepatitis, manifest over time, potentially allowing the defendant to evade a harsher penalty due to the absence of an immediate disability at trial. While a civil judge may consider future damages for compensation purposes, a criminal judge cannot impose an aggravated penalty based on future developments to uphold principles of justice⁴.

¹. Mahmoud Naguib Hosni: *Al-Qism Al-Khas*, Previous Reference, p. 466.

². Awad Mohamed: *Crimes of Persons*, Previous Reference, p. 152.

³. Jamil Abdel Baqi: *Crimes of Blood*, Dar Al-Nahda Al-Arabiya, 1997, p. 250.

⁴. Hassan Mohamed Abu Saud: Previous Reference, p. 241 and p. 242.

Some legal scholars advocate for considering the psychological distress of victims suffering from severe illnesses such as AIDS or tuberculosis, as their awareness of imminent mortality fosters persistent frustration and despair. Moreover, their deteriorating mental health weakens their immune system, increasing susceptibility to further complications. In the case of AIDS, these combined factors may lead to total incapacity in performing personal tasks¹.

The human clone undergoes routine medical assessments and may be subject to medical directives that restrict their mobility, rendering them incapable of performing personal tasks. Additionally, contracting diseases such as AIDS could result in job dismissal, further exacerbating their mental health and impairing their ability to work. The law does not necessitate complete disability but rather partial or relative incapacity to enforce the provision².

Nevertheless, some scholars challenge the notion that psychological distress constitutes a basis for disability, arguing that crimes must involve tangible physical harm to the body and health, adhering to the principle of injury or assault. Consequently, establishing a direct causal link between psychological suffering and disability remains a contentious legal issue³. The psychological dimension, along with associated distress and suffering, plays a crucial role in defining disability in performing personal tasks, particularly when there is an evident causal link between the victim's deteriorating mental state and the viral infection. Medical research indicates that adverse psychological effects exert pressure on the nervous system, impacting multiple bodily functions and culminating in disability. In extreme cases, this may lead to suicide, reflecting the victim's profound despair over recovery. Accordingly, the perpetrator bears criminal liability for inducing the psychological state that resulted in disability and, ultimately, suicide⁴.

This perspective aligns with legal doctrines that emphasize the causal connection between the victim's assault and the subsequent viral infection⁵. Moreover, jurisprudence recognizes the existence of a causal relationship in moral offenses, wherein psychological disability

¹ . Amin Mustafa Mohamed: *Criminal Protection of Blood*, Dar Al-Jami'a Al-Jadida, 1999, p. 108.

² . Mahmoud Naguib Hosni: *Al-Qism Al-Khas*, Previous Reference, No. 634, p. 468.

³ . Mohamed Awad: Previous Reference, No. 189, p. 131.

⁴ . Mahmoud Naguib Hosni: *Al-Qism Al-Khas*, Previous Reference, p. 333.

⁵ . Sayyid Atiq: *The Legal Issues Raised by the AIDS Disease from a Criminal Perspective*, Dar Al-Nahda Al-Arabiya, 2002, p. 165.

resulting from certain actions can manifest as physical or mental harm. Thus, disability arising from such causes should be regarded as a punishable offense, regardless of the challenges in proving causation.

3.1.2 Permanent Disability Resulting from Human Cloning Procedures

A permanent disability arises when an injury or assault results in the amputation or dysfunction of a limb, the loss of an organ's function, or any other irreversible impairment. The law does not stipulate a specific percentage of impairment required to qualify as a disability; instead, it is sufficient that the loss of function is permanent, even if partial, regardless of its severity¹. A disability is established when an internal or external organ ceases to function, or when a sense or cognitive ability, such as memory, suffers permanent deterioration. The determination of such conditions is subject to expert medical evaluation². Since the legal definition of disability and its examples focus on the loss or impairment of an organ as an aggravating consequence of human cloning procedures³, infections resulting from these processes can lead to permanent disabilities. For example, the Human Immunodeficiency Virus (HIV) progressively weakens the immune system, leaving an individual vulnerable to life-threatening diseases. Similarly, the Hepatitis C virus leads to liver failure, culminating in cirrhosis and, ultimately, death. In such cases, the virus itself is deemed a cause of permanent disability that persists until the victim's death. If a victim contracts a virus due to an assault, leading to an enduring disability—such as infections causing plague or cholera—the perpetrator is held accountable for inflicting a permanent impairment that may result in fatality.

Moreover, viral infections may necessitate the amputation of a limb, as seen in cases where a perpetrator transmits tetanus via a contaminated instrument, necessitating the victim's arm amputation. Likewise, certain viruses may induce blindness or irreversible kidney failure. The loss of an individual's ability to perform biological functions—such as infertility in women or sexual dysfunction in men—constitutes a permanent disability stemming from viral infections⁴. In this context, diminished visual acuity is regarded as a permanent

¹ . Jamil Abdel-Baqi, Previous Reference, p. 236

² . Mahmoud Nagib Hosni: Explanation of the Penal Code, Special Section, Previous Reference, 1988 Edition, No. 639, p. 472

³ . Hassan Abu Al-Saud: Egyptian Penal Code, Special Section, No Publisher, p. 237

⁴ . Ahmed Fathi Sorour: Special Section, Previous Reference, No. 408, p. 642

disability, even if correctable with eyeglasses. Any enduring impairment, no matter how minor, affecting any organ of the body qualifies as a permanent disability¹.

A permanent disability refers to an ailment or injury that is either incurable or exceedingly difficult to treat, such as AIDS or hepatitis, or the irreversible loss of an organ, sense, or its function. Infertility resulting from sexually transmitted diseases like gonorrhea or syphilis qualifies as a permanent disability as it disrupts the reproductive system's natural functions. A disability is established when an individual endures an incurable condition leading to permanent dysfunction, such as the inability to engage in sexual or reproductive activities². Article 337 of the UAE Penal Code defines a disability as any significant and enduring deformity. However, it does not necessarily require immediate incapacity to perform personal tasks. For instance, hearing or vision impairment may not instantly render an individual disabled but could progressively lead to incapacity. This is particularly pertinent in cases of AIDS, where the victim becomes increasingly susceptible to severe illnesses that gradually impair bodily functions³.

A permanent disability is characterized by the loss or destruction of a body part or the irreversible reduction of its natural capacity, with its determination based on established scientific and medical principles at the time of the injury. Consequently, contracting hepatitis as a result of human cloning procedures, leading to the progressive failure of liver function, constitutes a permanent disability, as the organ remains unable to perform its essential functions until death ensues. A disability is affirmed when an organ or part of it becomes functionally impaired, even if it remains structurally intact. The fundamental criterion for permanent disability is the loss of an organ's functional capacity, whether wholly or partially⁴.

A permanent disability refers to an illness or injury that is difficult or impossible to cure, such as AIDS or hepatitis, or the loss of a sense or organ, or its function. Infertility resulting from sexually transmitted diseases like gonorrhea or syphilis constitutes a permanent disability

¹ . Mahmoud Nagib Hosni: Explanation of the Penal Code, Special Section, Dar Al-Nahda Al-Arabiya, 1988 Edition, No. 638, p. 471

² . Mahmoud Nagib Hosni: Special Section, Previous Reference, No. 639, p. 473

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⁴ . Mahmoud Nagib Hosni: Explanation of the Penal Code, Special Section, Dar Al-Nahda Al-Arabiya, 1988 Edition, No. 638, p. 471

because it affects the natural functions of reproductive organs. A disability is established when an individual suffers from an incurable disease that leads to a permanent impairment of bodily functions, such as the loss of sexual or reproductive ability¹.

According to Article 337 of the UAE Penal Code, a disability is any significant and lasting deformity. However, it does not necessarily have to result in an immediate inability to perform personal tasks; for example, hearing or vision impairment may not immediately incapacitate an individual but could lead to disability over time. This is particularly relevant in cases of AIDS, where the victim becomes susceptible to severe diseases that progressively impact bodily functions².

A permanent disability manifests in the loss or destruction of part of an organ or the permanent reduction of its natural capacity, and its determination depends on established scientific and medical standards at the time of the injury. Consequently, contracting hepatitis due to human cloning procedures, which results in liver function deterioration, constitutes a permanent disability, as the liver remains unable to perform its functions until death occurs³. A disability is established when an organ or part thereof becomes functionally impaired, even if it remains physically intact. The essential requirement for permanent disability is the loss of function in an organ or part of it.

A permanent disability may also be recognized when an organ or sense is weakened in performing its intended function, leading to reduced efficiency compared to its pre-injury state. No specific percentage of deficiency—whether large or small—is required to establish disability; any degree of impairment suffices. According to medical and scientific findings, both AIDS and hepatitis remain incurable, and no surgical procedure or medication can completely heal the victim. While liver transplantation is a possible treatment for hepatitis, the condition still qualifies as a permanent disability, making the perpetrator legally accountable⁴.

In legal proceedings, the removal of a kidney due to injuries inflicted by an assailant is classified as a permanent disability, even if the victim undergoes a kidney transplant. The

¹ Mahmoud Nagib Hosni: Special Section, Previous Reference, No. 639, p. 473

² Jamil Abdel-Baqi Al-Saghir: Criminal Law and AIDS, Dar Al-Nahda Al-Arabiya, 1995, p. 66

³ Fatouh Abdullah Al-Shazly: Research in Law and AIDS, Previous Reference, p. 129

⁴ Jamil Abdel-Baqi, Previous Reference, p. 238

minimal extent of disability does not negate its legal classification, as the severity of impairment is not a requisite factor in defining the crime¹.

Severe physical harm resulting from human cloning procedures that lead to cognitive impairment is also categorized as a permanent disability. If an individual infected with HIV deliberately transmits the virus to another person through wounds inflicted during an assault, it constitutes a permanent disability. This is because HIV severely compromises the immune system, rendering the body vulnerable to infections and diseases. In this context, a permanent disability is defined as the irreversible impairment of bodily functions, such as sexual dysfunction, which deprives the victim of a normal sexual life post-infection².

To ascertain whether HIV or hepatitis infections qualify as a permanent disability, the court must refer the case to a medical expert to determine if the infection resulted from the perpetrator's actions and whether it caused temporary or permanent impairment. If deemed permanent, it constitutes a disability. The judge must rely on expert medical evaluations, as this determination necessitates precise medical examinations and laboratory tests to confirm the presence of the virus and its impact on the victim's health³.

2.3 Medical Experiments

2.3.1 Non-Therapeutic Human Cloning Experiments

Medical experiments necessitated by a patient's condition are classified as therapeutic, whereas those conducted without medical necessity—purely to satisfy scientific curiosity—are considered non-therapeutic. A physician who administers treatment without medical justification and without obtaining the patient's free and informed consent commits professional misconduct, incurring both criminal and civil liability⁴.

Medical experiments encompass scientific or technical procedures carried out without medical necessity, driven by the pursuit of scientific knowledge rather than patient care. These practices render the physician criminally and civilly liable, as they constitute the intentional offense of engaging in human cloning experiments. A physician is not entitled to

¹ . Fatouh Al-Shazly: Research in Law and AIDS, University Press, 2001, p. 129

² . Jamil Abdel-Baqi: Criminal Law and AIDS, Previous Reference, p. 66

³ . Galal Tharwat, Previous Reference, p. 367

⁴ . Jamil Abdel-Baqi Al-Saghir: Penal Code, Blood Crimes, p. 20

subject a patient to experimental treatments solely for scientific exploration or personal research, as the patient is not a test subject. The primary obligation of a physician is to provide medical care with due diligence rather than engage in experimentation. Any deviation from this principle leads to criminal liability¹.

Conversely, therapeutic experiments conducted in the patient's best interest and guided by medical necessity do not impose liability on the treating physician. Such cases may involve employing modern techniques due to the inadequacy of conventional treatments. However, these innovative approaches should generally undergo laboratory and animal testing before application to human patients. Ultimately, the physician's intent must be curative rather than experimental, prioritizing patient welfare over research outcomes².

Only a qualified specialist should conduct such experiments to ensure treatment safety and efficacy. Patients must be fully informed of potential risks and provide free and informed consent. While jurisprudence upholds a physician's discretion in selecting treatment methods, a balance must be maintained between the patient's benefit and the potential risks posed by the therapeutic experiment. Though such experiments inherently involve risks, they have addressed medical deficiencies that previously resulted in fatalities, prompting legislators to enact laws permitting procedures such as blood transfusion³.

The ethical and legal dilemma surrounding medical experimentation stems from two conflicting principles: on one hand, human experimentation is vital for scientific advancement; on the other, conducting non-therapeutic experiments on healthy individuals constitutes an assault on bodily integrity, which is strictly prohibited by criminal law. Animal experiments cannot wholly substitute human trials, as only humans can articulate their pain and provide valuable feedback during experimental stages. This creates a fundamental conflict between the principle of bodily inviolability and medical progress⁴.

The prevailing legal view deems such experiments, particularly in cloning, as unlawful, constituting an intentional offense that necessitates criminal liability for the physician,

¹ . Mahmoud Mahmoud Mostafa: Criminal Responsibility of Doctors and Surgeons, Previous Reference, p. 189.

² . Mohamed Eid Al-Gharib: General Section, Previous Reference, p. 337

³ . Ahmed Mahmoud Ibrahim Said: The Liability of Private Hospitals for the Errors of Doctors and Their Assistants, PhD Dissertation, Ain Shams University, 1983, pp. 438-439.

⁴ . Mohamed Hussein Mansour: Medical Liability, Al-Maaref Establishment, 1st ed., p. 52.

irrespective of compliance with technical and procedural standards. While medical advancements offer hope in combating severe and incurable diseases, the unregulated pursuit of human cloning experiments may yield disastrous consequences¹.

For instance, in 1952, 73 infants succumbed to adverse effects from a particular type of talcum powder. In 1956, 100 fatalities occurred, and one of the most tragic cases involved thalidomide's severe teratogenic effects, leading to birth defects and the deaths of 20,000 infants. These incidents provoked widespread public outrage in the United States, compelling authorities to mandate comprehensive regulatory testing of pharmaceutical drugs before market approval. Consequently, on September 23, 1967, the U.S. government enacted a decree requiring pharmaceutical companies to substantiate their products' safety through rigorous testing before commercial distribution².

Conducting medical experiments on individuals without obtaining explicit, free, and informed consent—either from the individual or their legal guardian in the case of minors—constitutes a violation of health laws. The same penalties apply to unauthorized experiments conducted without consent. Some legal scholars argue that such experiments should be criminalized regardless of intent or compliance with public order, emphasizing that patient consent is a critical factor in determining legality. However, another perspective holds that such experiments should be penalized since victim consent does not legitimize bodily harm, particularly in the absence of a therapeutic purpose. This principle cannot be equated with organ, tissue, or cell transplantation³.

2.3.2 Conducting Therapeutic Medical Experiments

Therapeutic experiments are primarily intended to treat patients, even if they also contribute to scientific knowledge. The primary objective remains curative, ensuring direct

¹ . Mahmoud Eid Al-Gharib, Previous Reference, p. 339.

² . Ahmed Mahmoud Ibrahim Said: The Liability of Private Hospitals for the Errors of Doctors and Their Assistants, PhD Dissertation, Ain Shams University, 1983, pp. 438-439.

³ . Ibtihal Mohamed Ramadan Abu Jazar: Gene Therapy for Human Cells (in Islamic Jurisprudence), Master's Thesis, Islamic University – Gaza, 1429 AH, p. 23.

benefit to the patient. An experiment should not proceed if the anticipated risks to the subject outweigh the proportional benefit or research objective¹.

A fundamental requirement is that the researcher must possess extensive expertise in modern scientific principles applicable to experimental work. Human research should only be undertaken based on the latest scientific knowledge and supported by adequate clinical trials. Furthermore, these experiments must be conducted under the supervision of a qualified physician with specialized expertise. The research should be carried out under stringent scientific protocols, ensuring compliance with material and technical safety standards to protect participants².

3. Conclusion

Tunisia holds the distinction of being the first Arab nation to explicitly criminalize human cloning through clear legal provisions. Tunisian law strictly prohibits reproductive cloning, even for infertility treatment. Additionally, conducting cloning research within Tunisian territory is strictly forbidden, rendering any experiment aimed at obtaining human embryos for study or research purposes illegal under the law.

Moreover, Tunisian legislation comprehensively bans both reproductive and therapeutic cloning, incorporating criminal penalties for violations. The foundation of this prohibition lies in the potential risks associated with cloning, including disease transmission and disability, as well as unauthorized research or experiments involving human cloning.

A critical legal distinction exists between therapeutic medical experiments necessitated by a patient's condition and those conducted purely for scientific curiosity. A physician who intervenes without medical necessity or without obtaining the patient's informed and voluntary consent commits professional misconduct, resulting in both criminal and civil liability.

Furthermore, the legal implications of human cloning extend to the human genome itself, which forms the foundational basis of these procedures. The legal ramifications arising from the unique nature of the human genome underscore the gravity of this issue.

¹ . Ahmed Hossam Taha Tamam: Criminal Liability for Genetic Engineering in the Human Race, A Comparative Study, Egyptian General Book Organization, 2006.

² . Ashraf Tawfiq Shams El-Din: Genetic Genes and Criminal Protection of the Right to Privacy (A Comparative Study), Dar Al-Nahda Al-Arabia, 2006.

It is proposed that psychological considerations be factored into the criminalization of human cloning, particularly concerning the distress and suffering resulting from an individual's inability to perform personal tasks. This is particularly significant when a clear causal relationship exists between an individual's incapacity and the psychological distress induced by cloning procedures. Medical research has demonstrated that psychological distress places immense strain on the nervous system, which governs motor functions. Consequently, this burden leads to adverse effects on the nervous system, impairing various bodily organs.

Additionally, it is recommended that the Iraqi legislator explicitly enshrine in law that "the cloning of human beings is strictly prohibited, along with any research, experiments, or applications aimed at cloning a human being." Furthermore, any individual conducting experiments or applications for human cloning should be subject to the same penalties as those directly engaging in cloning procedures.

In the case of the United Arab Emirates, it would be more appropriate for legislators to impose a mandatory prison sentence alongside a financial penalty. Additionally, the perpetrator should be required to pay twice the amount of profit gained from conducting cloning operations. This approach ensures that offenders do not benefit from their criminal actions and serves as a deterrent to such illicit activities.

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5. Alaa Ali Hussein Nasr, The Legal System for Human Cloning, Dar Al-Nahda Al-Arabi, 2007.
6. Awad Muhammad: Crimes against Persons, Crimes against Persons and Money, Part One, Dar Al-Najah in Alexandria, 1972 .
7. Amin Mustafa Muhammad, Criminal Protection of Blood, New University Publishing House, 1999, p. 108 .

8. Al-Sayyid Ateeq: The Legal Problems Raised by AIDS from a Criminal Point of View, Dar Al-Nahda Al-Arabiya, 2002 edition.
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