Kalamizu : Jurnal Sains, Sosial, dan Studi Agama
Volume 1 Number 6, Oktober (2025), 621-629.

Bioethics and Islamic Law: A Fiqh Review of Cloning Practices in the Modern World

Anang Rohwiyono[1], Wahyu Septrianto[2], Nurul Awwaliyyah Mu'jizatur Ridho[3], Syakira Mafatiha Kalma[4]

[1] Universitas Prof.DR. Hamka, Indonesia
[2,3,4] Universitas Darussalam Gontor, Indonesia
Email Correspondence : nurulawwaliyyah01@gmail.com

Kata Kunci :
Kloning; Sejarah;
Etika

Abstrak

Kloning telah menjadi salah satu terobosan paling kontroversial dalam bioteknologi modern, memicu perdebatan yang luas di kalangan ilmuwan dan agamawan. Artikel ini menganalisis perkembangan kloning dari sudut pandang historis, mulai dari eksperimen awal hingga pencapaian teknologi terbaru, serta meneliti dampaknya dalam konteks hukum Islam. Melalui pendekatan multidisipliner, kajian ini menggabungkan analisis sejarah dengan prinsip-prinsip etika Islam untuk memahami bagaimana teknologi kloning berinteraksi dengan aturan-aturan syariah. Dalam Islam, penciptaan kehidupan adalah hak prerogatif Allah, dan setiap intervensi manusia yang mendekati proses ini harus dipertimbangkan dengan serius dari sudut pandang etis. Kajian ini mengulas pandangan para ulama dan fatwa-fatwa yang relevan terkait kloning, serta mengeksplorasi perbedaan pendapat di antara para sarjana Muslim mengenai legalitas dan moralitas kloning, baik dalam konteks reproduktif maupun terapeutik. Hasil dari analisis ini menunjukkan bahwa meskipun kloning terapeutik mungkin dapat diterima dalam situasi tertentu, kloning reproduktif secara umum dianggap bertentangan dengan prinsip-prinsip dasar Islam. Dengan tinjauan kritis ini, artikel ini memberikan kontribusi penting terhadap diskusi etika dan hukum mengenai kloning dalam Islam, serta menawarkan wawasan yang mendalam bagi ilmuwan, teolog, dan pembuat kebijakan dalam menghadapi tantangan moral yang muncul dari perkembangan bioteknologi. Artikel ini menyoroti pentingnya menjaga keseimbangan antara inovasi ilmiah dan ketaatan terhadap norma-norma etika yang mendasar dalam Islam.

Keywords :
Cloning; Histori ;
Ethics

Abstract

Cloning has emerged as one of the most controversial breakthroughs in modern biotechnology, sparking widespread debate among scientists and religious scholars. This article examines the development of cloning from a historical perspective, tracing its evolution from early experiments to the latest technological achievements, and assesses its impact within the context of Islamic law. Through a multidisciplinary approach, this study combines historical analysis with Islamic ethical principles to understand how cloning technology interacts with Sharia regulations. In Islam, the creation of life is the exclusive prerogative of Allah, and any human intervention that approaches this process must be seriously considered from an ethical standpoint. This study reviews the views of Islamic scholars and relevant fatwas concerning cloning, as well as explores the differing opinions among Muslim scholars regarding the legality and morality of cloning, both in reproductive and therapeutic contexts. The analysis shows that while therapeutic cloning may be considered permissible under certain circumstances, reproductive cloning is generally viewed as conflicting with fundamental Islamic principles. Through this critical examination, the article makes a significant contribution to the ethical and legal discourse on cloning in Islam, offering valuable insights for scientists, theologians, and policymakers in navigating the moral challenges posed by biotechnological advancements. The article emphasizes the importance of maintaining a balance between scientific innovation and adherence to the core ethical norms of Islam.

INTRODUCTION

Humans continue to enjoy various discoveries that make their lives easier, as if everything can be created to achieve satisfaction and happiness. From small technologies to innovations that have a major impact on life on earth, one of the most discussed topics remains cloning technology, which has emerged within society. In principle, humans possess the freedom to determine the direction of their lives. However, this freedom is limited by the rights of others. It is not acceptable for someone to exercise unrestricted freedom to the extent of violating the freedom of others. This concept lies at the core of ethics—the main reason moral rules are applied among humans is to maintain that balance.

Until now, cloning technology has remained a subject of debate, provoking both support and opposition from various groups. These debates arise due to differing perspectives among scientists, religious scholars, and moralists, each with their own ideals. However, the greatest challenge lies in how cloning technology develops within society how people should respond to its advancement while adhering to existing ethical norms. This approach must be carried out with careful and well-tested consideration, ensuring that every step taken aligns with the values deeply rooted in society, particularly within the teachings of Islam. (Zainal Fadri, 2020, 2).

Due to various ethical issues arising in research particularly in the field of biology many researchers still fail to fully apply ethical principles in their work. Therefore, it is essential for academics and researchers to understand and implement relevant ethical standards in biological research through both theoretical learning and practical application. Ethics related to issues in biological research are known as bioethics. Various bodies of Islamic scholars and Muslim medical associations across Asia, Africa, North America, and Europe have debated and, either partially or fully, supported the Casablanca Declaration. Most notably, the Islamic Fiqh Academy, which serves as the ethical committee of the Organization of Islamic Cooperation (OIC) based in Jeddah and provides non-binding ethical guidelines for communities in 55 member countries, discussed the declaration along with their own research papers to reach their own resolution. Their resolution followed the Casablanca Declaration, both in writing and in spirit, emphasizing that cloning constitutes a violation of human dignity as well as ethical and religious values. From a religious perspective, cloning is often regarded as interfering with divine matters, something that is strictly prohibited in Islamic theology (*'aqīdah*). (Ebrahim Moosa, 2003, 2)

To apply ethics in scientific activities, a number of scientific ethical principles have been established. First, the principle of universality, which emphasizes that science is universally valid regardless of race, skin color, nationality, or religion. Second, the principle of communalism, which requires that scientific knowledge be regarded as a common good, with research findings disseminated as widely as possible. Scientists must also have the freedom to exchange information anywhere and bear responsibility to the scientific community for maintaining the credibility of their published works. Third, the principle of disinterestedness, which demands that scientific research results remain free from manipulation for financial, ideological, or political interests. Scientists are obliged to act honestly and objectively. Finally, the principle of organized skepticism, which encourages that scientific claims should not be accepted merely based on authority but must be open to free questioning by other scientists, with their validity supported by observational evidence.

METHODS

This research is a qualitative-descriptive study using a library research approach. This type of research was chosen because the object of study is not an empirical phenomenon observed in the field, but rather concepts, historical developments, and ideas found in written sources.(Creswell, 2014, 6)

The qualitative approach is employed to gain an in-depth understanding of the evolution of cloning from both historical and ethical perspectives, by examining the views of biologists, ethicists, and Islamic jurists (*fuqaha*) regarding its legitimacy and moral implications. (Moleong, 2019, 8) The purpose of this study is not only to describe the facts surrounding the development of cloning technology but also to interpret the ethical values and principles of Islamic law embedded within it. (Matthew B. Miles, A. Michael Huberman, 2014, 9)

RESULT AND DISCUSSION

Definition of Cloning and Its Brief History

Cloning originates from the Greek word *"clone"* or *"klon"*, which means a group of cells produced from a single parent cell through asexual reproduction. In commonly used scientific terminology, cloning refers to the effort to duplicate a living organism by creating an identical copy or by replicating the same genetic material from an organism through the process of replacing the nucleus of an egg cell with the nucleus of another organism's cell. From this explanation, it can be understood that cloning is a series of artificial reproductive processes carried out by humans to produce a new individual that is genetically identical to its parent. (Warto A. Saifuddin, 2015, 163).

Cloning using the nuclear transfer method was first applied to amphibians in the 1950s by Briggs and King. Over time, nuclear transfer techniques became more advanced, leading scientists to successfully clone mammals in the 1970s, an achievement credited to Bromhall, followed by Willadsen in the 1980s. The birth of the cloned sheep "Dolly" marked a historic milestone in cloning research. Dolly was created through the transfer of a nucleus taken from an adult sheep cell, and this groundbreaking discovery was published in *Nature* magazine in 1997. The cloning of Dolly was accomplished by manipulating genes from a cell taken from the mammary gland of a six-year-old Dorset ewe. In addition, the same team of scientists later succeeded in cloning another sheep named "Polly", using a different method that involved inserting specific human genetic elements into the sheep embryo, marking an early step toward transgenic research and therapeutic cloning (Afreiza Octaguna A, 2023, 6)

Several other researchers opposed the views of those three experts. Rudolph Jaenisch, a developmental biologist from the Whitehead Institute at the Massachusetts Institute of Technology (MIT), who strongly rejects the idea of human cloning, stated that mammalian clones that survive out of hundreds of fertilized eggs often suffer from serious health problems. (Vogel, 2001). The main weakness of the cloning technique, as conducted by Ian Wilmut, lies in its extremely low success rate. Out of 277 enucleated eggs that were fused with donor cells, only 29 developed into blastocysts, which were then transferred into the wombs of 13 surrogate mothers. Among them, only one successfully became pregnant and gave birth to Dolly. The efficiency of mammalian reproductive cloning using nuclei from adult animals is remarkably low, with a success rate of no more than 3%. In most mammalian cloning experiments, many clones die shortly after birth. Those that survive often experience early death or suffer from serious abnormalities, such as kidney and brain defects, and some even lack a functional immune system. Ian Wilmut, the creator of Dolly, himself acknowledged these significant challenges in the cloning process, emphasizing the biological and ethical limitations inherent in current cloning technology. (Teresa L Wargasetia, 2016, 12.)

According to Dr. Ian Wilmut, who led the cloning team, the primary goal of animal cloning was to provide high-quality proteins for human use. Following the success of Dolly, scientists became increasingly interested in further developing cloning technology. The success of experts in cloning animals—especially mammals—has made researchers more ambitious in conducting experiments and studies in this field. As a result, there is a strong possibility that this cloning technique could one day be applied to humans. This prediction has sparked widespread concern among scientists, political leaders, cultural figures, and religious scholars, who fear the potential consequences if human cloning were ever to be realized. To prevent such developments, political leaders in various countries—particularly in Europe, the United Kingdom, France, the United States, and other nations around the world, including UNESCO—have been actively drafting laws and regulations prohibiting human cloning. (Saifuddin, 2015)

The Morality of Cloning

Governments and regulatory bodies in various countries are currently striving to find ways to facilitate the use of biotechnology across different aspects of human life while remaining attentive to the ethical implications that may arise. Ethical considerations and concerns about the potential negative impacts on the environment and human health have the potential to slow down the implementation of several biotechnological applications. (Evi Suryanti, 2019, 15) The development of embryo cloning has been accompanied by significant controversy. Human embryo cloning remains a subject of moral debate, with opposing perspectives emerging from different ethical and philosophical standpoints.

Scientists who support cloning argue that it is morally acceptable and can even bring about highly positive outcomes. Proponents believe that cloning procedures can offer substantial benefits to human life. They present several arguments to counter opposing groups, emphasizing the potential advantages of cloning technology. One major argument is that animal cloning has shown promising positive effects, motivating scientists to develop transgenic pigs that carry human genes. The organs of these animals—such as the heart, liver, and kidneys—could potentially be used for human organ transplantation. Such experiments could save countless lives, as thousands of people die each year while waiting for a compatible human organ donor.Once this technology achieves consistent success, transgenic animals could be cloned to produce a sufficient supply of organs needed for transplantation, thereby offering a groundbreaking solution to the global shortage of human organs. (Widodo, 2003)

From a philosophical perspective, the distinction between objective and subjective values holds significant importance. A value is considered objective when it does not depend on the subject or the consciousness that perceives it, whereas subjective values encompass various perspectives that arise from human thought, including emotion and reason. Research that is subjective in nature is often influenced

by the personal viewpoints of the researcher. Objective value, on the other hand, originates from the philosophy of objectivism, which assesses concepts based on the existence of the object itself. In the context of medical ethics, although in principle there is no explicit prohibition against an individual cloning themselves, a doctor has a moral obligation to provide complete information and careful consideration to the patient so that they can make wise and informed decisions. Biomedical ethics affirms that a cloned human being possesses the same status and dignity as a human born through natural sexual reproduction. This principle aims to prevent any form of exploitation of cloned humans for the benefit of others.

Ethics in philosophy serve as the foundation of human behavior, often referred to as morality. In the context of cloning technology, the deontological approach emphasizes ethical judgment based on the action itself, regardless of its consequences. Conversely, from a theological standpoint, the focus lies on the intentions or outcomes desired from an action. From an ethical point of view, scientists bear the moral responsibility to use scientific knowledge for the benefit and welfare of humanity, not for purposes that could harm or destroy human life. (Rahmayumita, 2022)

The ideal moral behavior, according to Immanuel Kant, is an action that originates from the will of human beings as rational and moral creatures. Every moral action must come entirely from within oneself, free from external influences. Kant argued that the concepts of good and evil are predetermined, meaning that goodness is a transcendental principle independent of any goal or final outcome. Virtue, therefore, exists beyond human context and is not tied to the pursuit of specific objectives or human desires—it is an intrinsic quality within human nature. Kant referred to this inherent morality as the Categorical Imperative.

In the context of ethics, the application of cloning can be analyzed through two main philosophical perspectives: deontology and teleology. Deontology, pioneered by Kant through his theory of the Categorical Imperative, assesses the morality of an action based on the action itself, regardless of its intended outcome. If an act is considered universally wrong, then it must not be carried out under any circumstances. Conversely, teleology evaluates actions based on their purpose or consequences. If the intention is good—such as cloning for therapeutic purposes—then the act may be considered morally acceptable. However, from a sociological standpoint, human cloning raises significant concerns because it has the potential to disrupt the established social structure. Cloning could negatively impact social order and the human interactions that serve as the foundation for harmony and peace among people. (Izza et al., 2020).

Cloning in the Perspective of Islamic

According to Islamic jurisprudence (*Fiqh al-Islām*), cloning in humans and animals is not considered forbidden (*harām*) nor sinful as long as it does not cause harm (*mafsadah*) to either. Human cloning may be carried out partially, such as by replacing specific body parts or organs, or fully, by creating a new human being without the

natural relationship between husband and wife, as previously explained. The principles of *Qawāʿid Fiqhiyyah* (Islamic legal maxims) emphasize that Islamic law aims to preserve human welfare (*maṣlaḥah*). When there is a conflict between benefit and harm, and the harm outweighs the benefit, the preservation of welfare must take precedence. Therefore, the use of cloning for medical purposes—such as replacing damaged body parts with tissues or organs derived from another individual—is permissible, provided that it upholds the principle of welfare and does not lead to greater harm. In its fatwa, *Majmaʻ al-Buḥūts al-Islāmiyyah* (the Islamic Research Academy) declares that the permissibility of human cloning depends on the methods used and the objectives behind its application. (Maimun Maimun, 2018, 81.)

Human cloning, despite the potential benefits offered by cloning technology, tends to bring about more harm than good. This aligns with the divine warning in the Qur'an, where Allah says in *Surah Al-Isrā'* (17:36):

﴿ وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهٖ عِلْمٌۗ اِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادَ كُلُّ اُولٰۤىِٕكَ كَانَ عَنْهُ مَسْـُٔوْلًا ٣٦ ﴾
(الاسرآء/17: 36)

Do not follow that of which you have no knowledge. Indeed, the hearing, the sight, and the heart—each of those will be called to account. (Al-Isra'/17:36)

If we understand this verse, it implies that when a person is uncertain or lacks clarity regarding the procedures or consequences of cloning, it is wiser to refrain from engaging in such practices, as they may potentially lead to significant harm. (Imam Jauhari, 2013, 52) Children produced through the cloning process are created by unnatural means, namely by artificially combining sperm and egg cells. In fact, the natural way has been established by the Sharia as *sunnatullah* — the divine law — for the creation of offspring and generations. Allah the Almighty says:

﴿ وَاَنَّهٗ خَلَقَ الزَّوْجَيْنِ الذَّكَرَ وَالْاُنْثٰىۙ ٤٥ مِنْ نُّطْفَةٍ اِذَا تُمْنٰىۙ ٤٦ ﴾ (النجم/53: 45-46)

"Indeed, it is He who creates the pairs, male and female, from a drop of semen when it is emitted." (Surah An-Najm, 53:45–46)

In another verse, Allah also says:

﴿ اَلَمْ يَكُ نُطْفَةً مِّنْ مَّنِيٍّ يُّمْنٰى ٣٧ ثُمَّ كَانَ عَلَقَةً فَخَلَقَ فَسَوّٰىۙ ٣٨ ﴾ (القٰيمة/75: 37-38)

Was he not a drop of emitted semen? Then he became a clinging clot, and Allah created and proportioned him. (Al-Qiyamah 75:37–38)

Considering the overall reality of human cloning, Islamic law prohibits the cloning of human beings. (Umi Hani, 2016, 92) . Furthermore, if this method were to be fully developed, one of its major consequences would be the potential disruption of lineage *(nasab).* A cloned child might have only one biological parent, since the adult cell used in the process is taken from one of that parent's organs. The primary reason for the prohibition of cloning in Islam is that it contradicts the *Maqasid al-Shariah*—the fundamental objectives of Islamic law—which include the protection of lineage *(nasab),* wealth, and religion. Research in this field raises the question of whether humanity still doubts the existence of divine laws superior to those created by humans. In fact, Allah Himself has emphasized the perfection of His creation in the Qur'an, in

His words:
﴿ الَّذِيْ خَلَقَ سَبْعَ سَمٰوٰتٍ طِبَاقًاۗ مَا تَرٰى فِيْ خَلْقِ الرَّحْمٰنِ مِنْ تَفٰوُتٍۗ فَارْجِعِ الْبَصَرَۙ هَلْ تَرٰى مِنْ فُطُوْرٍ ٣ ﴾ (الملك/67: 3)

"It is He who created seven heavens in layers. You will not see any inconsistency in the creation of the Most Merciful. So look again—do you see any flaw?" (Al-Mulk, 67:3)

Furthermore, are humans truly prepared to bear the consequences of their actions — namely, the possibility that cloning may cause an imbalance in nature, which would ultimately affect humanity itself? In the Qur'an, the process of human creation is clearly described in several verses, beginning with the fertilization of the ovum by the sperm, followed by the formation of a clot (fetus) that grows within the womb, and continuing until birth.

A child is the result of the natural combination of sperm and ovum, each contributing essential substances to form a perfect and functionally normal human being. The conventional method of reproduction has proven effective in producing healthy babies. If a baby is born with defects, it is not due to the natural reproductive process. In contrast, cloning has demonstrated numerous weaknesses, with scientific evidence revealing a high rate of genetic mutations in cloned animals—effects that often appear only after a certain period.

For someone who seeks to have a child through cloning, such an act can be seen as cruel, as it deliberately risks bringing a child into the world who may suffer physical or psychological deformities throughout their life. Although there is no explicit prohibition on conducting research involving human embryos, Islam warns that excessive attachment to worldly knowledge may lead humanity to forget the true purpose of learning and scientific exploration. Islam encourages research that draws people closer to Allah, deepens their understanding of His greatness, and strengthens their obedience to Him. (Saifuddin, 172)

CONCLUSION

In conclusion, cloning technology despite its vast potential in the fields of science and medicine must be approached with great caution and deep ethical consideration in accordance with the principles of Islamic law. From the Islamic perspective, every form of innovation and technological discovery must align with the moral and ethical values established by Allah SWT. Islam teaches that all forms of creation and intervention in human life must respect the divine order set by Allah, which includes the protection of lineage, human dignity, and the balance of nature.

Although Islam does not reject scientific advancement, every endeavor must be guided by sincere intentions to draw closer to Allah, not to transgress the boundaries He has determined. Scientific research and technological development, including cloning, must always aim to promote the welfare (*maslahah*) of humanity and avoid any form of harm (*mafsadah*) that could disrupt the natural order of life. Therefore, in confronting the rapid evolution of cloning technology, Muslims are urged to remain

firmly grounded in the principles of *shariah*, to prioritize collective benefit, and to remember that everything in this world exists under the will and supervision of Allah SWT.

REFERENCES

A, A. O., Putri, A. I., Matthew, K., & Universitas, H. (2023). Perspektif Agama Islam Terhadap Kloning Manusia. *Jurnal Al-Aqidah*, 6. https://doi.org/10.11111/nusantara.xxxxxxx

Creswell, J. W. (2014). *Desain Penelitian: Pendekatan Kualitatif, Kuantitatif, dan Metode Campuran , edisi ke-4* (p. 6). SAGE Publications.

Fadri, Z. (2020). Mengkaji Kloning Manusia Dari Perspektif Hukum Kodrat. *Jurnal Al-Aqidah*, *12*(2), 2. https://doi.org/10.15548/ja.v12i2.2274

Hani, U. (2016). Fenomena Anak Hasil Kloning Dalam Tinjauan Hukum Islam Dan Fiqih Kontemporer. *Jurnal AL-ULUM : Jurnal Ilmu Sosial Dan Humaniora*, *1*(2), 92. https://ojs.uniska-bjm.ac.id/index.php/ALSH/article/view/391

Izza, R., Dalimarta, S., Lestari, A. C., & Faizin, K. (2020). Human Cloning Dalam Tinjauan Filsafat Moral. *Proseiding Konferensi Integrasi Interkoneksi Islam Dan Sains*, *2*(1), 81.

Jauhari, I. (2013). Kesehatan dalam pandangan Islam. *Kanun Jurnal Ilmu Hukum*, *55*, 52. https://doi.org/ISSN: 0854-5499

Maimun, M. (2018). Hak Waris Bagi Anak Hasil Kloning Perspektf Hukum Islam. *At-Tafkir*, *11*(1), 81. https://doi.org/10.32505/at.v11i1.528

Matthew B. Miles, A. Michael Huberman, dan J. S. (2014). *Analisis Data Kualitatif: Buku Sumber Metode , edisi ke-3* (p. 9). SAGE Publications.

Moleong, L. J. (2019). *Metodologi Penelitian Kualitatif* (p. 8). PT Remaja Rosdakarya.

Moosa, E. (2003). Human cloning in Muslim ethics. *Voices Across Boundaries*, *2*(2), 2. https://www.researchgate.net/profile/Ebrahim-Moosa/publication/288875742_Human_cloning_in_Muslim_ethics/links/59d396274585150177f96323/Human-cloning-in-Muslim-ethics.pdf

Rahmayumita, R. (2022). Rekayasa Genetika Ditinjau dari Segi Etika dan Moral dalam Kajian Human Cloning. *Jurnal Ilmiah Multi Sciences*, *14*(2), 56.

Saifuddin, W. A. (2015). Ijtihad dan Implementasinya Dalam Hukum Islam. *Forum Kajian Syari'ah Islamiyah*, *April 2005*, 172.

Suryanti, E. (2019). Tinjauan Etika terhadap Kloning Manusia. *Titian Ilmu: Jurnal Ilmiah Multi Sciences*, *11*(1), 174. https://doi.org/10.30599/jti.v11i1.354

Wargasetia, T. L. (2016). *Kloning Manusia*. *August*, 12.

Widodo, W. (2003). Kloning Manusia : Sebuah Dilema. In *Jurnal Ilmiah Bestari* (p. 148).