

Establishing *Nasab* Beyond the Grave: The Legitimacy of Lineage and Inheritance for Cryopreserved Embryos Under Islamic Family Law

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Abstract: The advancement of assisted reproductive technology, particularly embryo cryopreservation, poses unprecedented challenges to the classical Islamic legal framework governing lineage (*nasab*) and inheritance (*mīrāth*). Traditional *fiqh* establishes *nasab* through a valid marriage contract and confirmed pregnancy within legally recognised temporal parameters. However, the possibility of implanting a frozen embryo years after the husband's death fundamentally disrupts the biological and temporal assumptions embedded in classical jurisprudence. This article critically examines whether a cryopreserved embryo, conceived in vitro during the husband's lifetime but implanted posthumously, can legitimately establish *nasab* to the deceased father and, consequently, claim inheritance rights under *farā'id*. Employing a doctrinal analytical methodology with comparative *ijtihād* across the four *Sunnī* schools and contemporary *fatwa* institutions, this study argues that the existing *fiqh* framework requires significant reinterpretation. The article proposes a *nasab* based typology distinguishing between pre-implantation and post-implantation legal status, and offers a reconceptualised model harmonising *ḥifẓ al-nasl*, the rights of the unborn, and distributive justice in Islamic inheritance law.

Keywords: *nasab*; frozen embryo; cryopreservation; Islamic inheritance; posthumous reproduction.

Introduction

The intersection of rapid technological advancement and immutable religious doctrine has emerged as one of the most intellectually demanding terrains in contemporary Islamic legal discourse. Among the most profound challenges to classical Islamic jurisprudence in recent decades is the development of assisted reproductive technologies, particularly embryo cryopreservation, which fundamentally alters the biological and temporal assumptions that have underpinned Islamic family law for over fourteen centuries. The possibility of conceiving a child in vitro, freezing the resulting embryo, and implanting it years later potentially after the death of the genetic father raises jurisprudential questions that defy easy resolution within the traditional *fiqh* framework. These questions strike at the very heart of Islamic family law, touching upon the sacred concepts of lineage (*nasab*), inheritance (*mīrāth*), and the preservation of progeny (*ḥifẓ al-nasl*), which Islamic law identifies as one of the five essential objectives (*maqāṣid*) of the *Sharī'ah* (Taufiqurohman & Fauziah, 2023).

The classical Islamic legal tradition developed sophisticated rules governing the establishment of *nasab*, carefully delineating the circumstances under which a child could be legally affiliated with a father. These rules were constructed upon biological and social realities that prevailed in seventh century Arabia, where conception occurred through natural intercourse within a valid marriage, and the connection between paternity and childbirth was temporally proximate and biologically self-evident. The classical jurists of the four *Sunnī* schools Ḥanafī, Mālikī, Shāfi'ī, and Ḥanbalī established detailed criteria for *nasab* verification, including the existence of a valid marriage contract (*'aqd al-nikāh*), the occurrence of consummation (*ḍukhūl*), and the birth of a child within legally prescribed temporal limits (Melchert, 2024). These limits, derived from Prophetic traditions and the consensus of the Companions, established minimum and maximum periods of gestation, thereby creating a legal framework within which paternity could be conclusively established or definitively negated.

The emergence of in vitro fertilisation (IVF) and embryo cryopreservation in the late twentieth century introduced novel variables that the classical jurists could not have anticipated (van de Wiel, 2019). When a married couple undergoes IVF, multiple embryos may be created, with some being transferred to the wife's uterus and others being cryopreserved for future use. This practice, while medically sound and widely accepted, creates a temporal disjunction between the moment of conception and the moment of implantation that has no analogue in classical *fiqh*. The legal complications multiply exponentially when one considers scenarios in which the husband dies, yet cryopreserved embryos created from his sperm and his wife's ova remain stored in fertility clinics. May the widow subsequently implant these embryos? If she does so and gives birth to a child months or years after her husband's death, can that child be legally affiliated with the deceased father? Can such a posthumously conceived child inherit from the father's estate under the rules of *farā'id*? These questions are not merely academic exercises but have profound practical implications for families navigating the complex emotional and legal landscape of reproductive medicine in Muslim societies.

Contemporary *fatwa* institutions and individual scholars have addressed these questions with varying degrees of comprehensiveness and consistency. Some have taken a restrictive position, arguing that *nasab* can only be established through a valid marriage and actual intercourse during the husband's lifetime, thereby

precluding posthumous implantation. Others have adopted a more permissive stance, recognising that if the embryo was created during a valid marriage and with the husband's consent, its subsequent implantation even after his death does not violate the essence of the marital relationship and may therefore establish *nasab*. Between these extremes lie a spectrum of nuanced positions that grapple with the intricate legal, ethical, and social dimensions of this unprecedented situation.

This article critically examines whether a cryopreserved embryo, conceived in vitro during the husband's lifetime but implanted only after his death, can legitimately establish *nasab* to the deceased father and consequently claim inheritance rights under the Islamic law of *farā'id*. The analysis proceeds from the premise that while classical *fiqh* provides invaluable guidance, it cannot be mechanically applied to situations it was never designed to address. Rather, the jurisprudential tradition offers methodological tools including *qiyās* (analogical reasoning), *istiḥsān* (juristic preference), and *maslahah* (public interest) that can be deployed to develop coherent and just responses to contemporary challenges. The article argues that a rigid application of classical rules would produce outcomes that contradict the underlying objectives of Islamic family law, particularly the preservation of lineage and the protection of the rights of children. Conversely, an overly permissive approach that disregards established principles risks undermining the integrity of *nasab* as a foundational institution in Islamic society.

To navigate this complex terrain, the article proposes a *nasab*-based typology that distinguishes between the pre-implantation and post-implantation legal status of cryopreserved embryos. This typology recognises that an embryo, once created from the gametes of a married couple, possesses a potential legal personality that is distinct from both the gametes themselves and a fully implanted foetus. The pre-implantation phase is characterised by contingency and suspension, during which the embryo exists in a state of legal limbo, neither fully possessing the attributes of personhood nor entirely lacking legal significance. The post-implantation phase, by contrast, marks a transition to a more definitive legal status, culminating in birth and the full establishment of *nasab*. This reconceptualised model seeks to harmonise the competing values of *ḥifẓ al-nasl*, the rights of the unborn, and distributive justice in Islamic inheritance law, offering a coherent framework that respects both the letter and the spirit of the *Sharī'ah*.

The urgency of this inquiry is underscored by the widespread adoption of assisted reproductive technologies across the Muslim world, from the Gulf states to Southeast Asia. As fertility rates decline in many Muslim-majority countries and the demand for reproductive interventions increases, the legal status of cryopreserved embryos will become an increasingly pressing concern for families, clinicians, and jurists alike. The resolution of these questions will have far-reaching implications not only for individual inheritance claims but also for broader social understandings of kinship, family formation, and the boundaries of life and death in Islamic law (Umar, 2026).

The scope of this inquiry is necessarily circumscribed by the nature of the subject matter. This article focuses specifically on the scenario of posthumous implantation of cryopreserved embryos created from the gametes of a married couple during the husband's lifetime. It does not address the more complex and contested scenario of third-party gamete donation, which is universally prohibited in mainstream Sunnī jurisprudence on the grounds that it violates the principle of lineage preservation. Nor does it address the scenario of posthumous retrieval of gametes, which raises distinct legal and ethical issues beyond the scope of this inquiry. The analysis is further limited to the four Sunnī schools of jurisprudence, with occasional reference to contemporary fatwa institutions, and does not extensively engage with *Shī'ī* or other minority perspectives within the Islamic legal tradition.

The temporal dimension of this inquiry is particularly salient. The classical jurists established maximum and minimum periods of gestation based on observations and medical knowledge available in their era. The Ḥanafī school, for example, recognised a minimum gestation period of six months and a maximum of two years, based on interpretations of Qur'ānic verses and Prophetic traditions. The Shāfi'ī school, by contrast, recognised a maximum gestation period of four years, while the Mālikī school extended this to five years in some circumstances. These temporal limits were designed to determine paternity by establishing the outer boundaries within which a child could be legally attributed to a husband. The cryopreservation of embryos introduces a temporal dimension that dwarfs these classical limits as an embryo may remain frozen for decades before implantation, far exceeding even the most generous classical maximums. This temporal disjunction presents a formidable challenge to the classical framework, requiring jurists to reconsider whether temporal proximity remains a necessary condition for the establishment of *nasab* or whether alternative criteria can fulfil the underlying objectives of the law.

Method

This article employs a doctrinal analytical methodology (Wahyudi & Karso, 2026) situated within the tradition of Islamic legal studies, integrating normative legal analysis with comparative *ijtihād* across the four Sunnī schools of jurisprudence. The research proceeds from a critical examination of classical *fiqh* texts on *nasab* and *mīrāth*, drawing upon the authoritative works of each school to establish the foundational principles and temporal parameters that have historically governed these institutions. This classical analysis is complemented by

an extensive review of contemporary fatwa literature from major Islamic legal institutions, including the Islamic Fiqh Academy of the Organisation of Islamic Cooperation, the Dār al-Iftā' of Egypt, the Majma' al-Buḥūth al-Islāmiyyah of Al-Azhar, and various national fatwa councils in Muslim-majority countries. The methodology further incorporates a maqāṣidī analysis that evaluates potential legal determinations against the five essential objectives of the *sharī'ah*, with particular attention to the preservation of progeny (*hiḍḍ al-nasl*) and the protection of property (*hiḍḍ al-māl*). The analysis employs comparative reasoning across the schools to identify points of convergence and divergence, recognising that the diversity of opinion within the Sunnī tradition constitutes a rich resource for addressing novel legal questions. The proposed reconceptualised model is developed through a process of critical synthesis, drawing upon classical principles, contemporary fatwa positions, and maqāṣidī considerations to construct a coherent framework that respects the integrity of the Islamic legal tradition while responding to the unprecedented challenges posed by reproductive technology.

Results and Discussion

1. The Classical Fiqh Framework on *Nasab* and Inheritance: Principles and Temporal Assumptions

The classical Islamic legal framework for the establishment of *nasab* represents one of the most carefully elaborated systems of kinship attribution in pre-modern legal history. Rooted in the Qur'ān and Sunnah, and developed through centuries of juristic refinement across the four Sunnī schools, this framework sought to achieve multiple objectives simultaneously: the preservation of lineage integrity, the protection of children's rights, the regulation of inheritance, and the maintenance of social order through clearly defined familial relationships. Understanding this classical framework is essential for appreciating the magnitude of the challenge posed by embryo cryopreservation, for the technology does not merely add a new factual scenario to the existing legal landscape but fundamentally disrupts the biological and temporal assumptions upon which the classical rules were constructed.

The Qur'ān establishes the foundational principle of lineage attribution in several verses that emphasise the importance of maintaining clear and accurate genealogical relationships. The most frequently cited verse in this context is Sūrat al-Aḥzāb (33:4-5), which commands believers to attribute adopted children to their biological fathers, stating that their true fathers are those who begot them, and that any deviation from this principle constitutes a serious error. This verse, revealed in the context of the Prophet's adoption of Zayd ibn Ḥārithah, established the principle that biological paternity, not social affiliation or legal recognition, forms the basis of *nasab* (Kutty, 2024). The Qur'ān further reinforces this principle in Sūrat al-Mujādilah (58:2), which condemns the pre-Islamic practice of *ḍihār* (a form of divorce in which the husband declares his wife to be like his mother), implicitly affirming the biological basis of marital relations and the lineage that flows from them.

The Prophetic traditions (*ḥadīth*) elaborate upon the Qur'ānic principles, providing detailed rules for the establishment of *nasab* in various circumstances. Among the most frequently cited traditions is the *ḥadīth* reported by Aisyah and others, in which the Prophet states that the child belongs to the bed (*al-walad li-l-firāsh*) and the fornicator receives the stone. This *ḥadīth* establishes the principle that paternity is presumed in favour of the husband to whom the wife is married, on the condition that the child is born within a timeframe that makes intercourse between the spouses a biological possibility. The *ḥadīth* has been interpreted by the jurists as establishing a presumption of legitimacy that protects the integrity of the marital relationship and prevents the stigma of illegitimacy from attaching to children born within a valid marriage. The phrase *li-l-firāsh* has been understood as referring to the marital bed, symbolising the institution of marriage itself as the foundation of legitimate lineage.

Building upon these foundational sources, the classical jurists developed an elaborate system of temporal rules that defined the outer limits within which a child could be legally attributed to a husband. These temporal rules were based on two interrelated considerations: the biological reality of human gestation and the social necessity of preventing the attribution of children to men who could not possibly be their biological fathers. The minimum period of gestation was established at six months, based on the Qur'ānic verse in Sūrat al-Aḥqāf (46:15), which mentions a total period of pregnancy and weaning of thirty months, combined with another verse in Sūrat Luqmān (31:14) that mentions weaning at two years (twenty-four months). The difference between thirty and twenty-four months yields the six-month minimum. This calculation, while hermeneutically complex, was accepted by all four Sunnī schools as establishing the minimum gestational period necessary for a child to be legally attributed to a husband.

The maximum period of gestation, by contrast, was a matter of significant disagreement among the schools, reflecting both differences in interpretive methodology and variations in medical knowledge available at the time of their respective founders. The Ḥanafī school, following the view of Abū Ḥanīfah himself, established the maximum period at two years, based on a tradition attributed to 'Alī ibn Abī Tālib and on the medical understanding of the era. This two-year maximum was subsequently extended by later Ḥanafī scholars to four years in some circumstances, and even to five years in exceptional cases. The Shāfi'ī school, following the view

of al-Shāfiʿī, established a more restrictive maximum of four years, based on the reported cases of exceptionally long pregnancies that were known among the early Muslims. The Mālikī school, following the view of Mālik ibn Anas, accepted a maximum of five years, based on the practice of the people of Medina and the reported cases of prolonged gestation in that community. The Ḥanbalī school, following the view of Aḥmad ibn Ḥanbal, accepted either four or five years depending on the particular narration from the founder (Trigiyatno, 2022).

These temporal limits served multiple legal functions beyond the mere establishment of paternity. They determined the distribution of inheritance, the calculation of child maintenance (*nafaqah*), the validity of marriage, and the rights of guardianship. The birth of a child within the maximum gestational period following the end of a marriage created a presumption of paternity that could only be rebutted through the procedure of *liʿān* (mutual imprecation), in which the husband swore an oath denying paternity and the wife swore an oath affirming it. The birth of a child after the maximum gestational period conclusively negated paternity, preventing any claim of lineage from being established. These temporal rules thus operated as a comprehensive system for regulating the attribution of children to fathers, balancing the protection of legitimate lineage with the prevention of false paternity claims.

The connection between *nasab* and inheritance (*mīrāth*) is established directly in the Qurʾān, which provides a detailed scheme for the distribution of estates among specified relatives. Sūrat al-Nisāʾ (4:11-12 and 4:176) sets out the shares of various heirs, including children, parents, spouses, and siblings, establishing a system of fixed shares (*farāʾid*) that operates alongside agnatic succession (*ʿaṣabah*). The entitlement to inherit is predicated upon the existence of a legally recognised relationship between the deceased and the heir. For children, this means that inheritance is contingent upon the establishment of *nasab* to the deceased parent. A child who is not legally affiliated with a father cannot inherit from that father's estate, nor can the father inherit from the child. This reciprocal relationship between *nasab* and inheritance is fundamental to the Islamic legal system, reflecting the broader principle that legal rights and obligations flow from legally recognised relationships (Alatas, 2021).

The classical jurists elaborated upon the Qurʾānic inheritance scheme through detailed rules that addressed numerous specific scenarios, including the distribution of estates among multiple wives, the rights of unborn children, the treatment of missing persons, and the calculation of shares in complex family structures. The rules governing the unborn child (*al-ḡanīn*) are particularly relevant to the present inquiry, as they demonstrate the classical law's recognition of a foetus as a potential heir whose rights must be protected pending birth. The jurists held that if a woman is pregnant at the time of her husband's death, the unborn child is entitled to a share of the estate, provided that the child is born alive within the maximum gestational period (Finnis & George, 2022). The share is reserved for the unborn child pending birth, and the estate is distributed accordingly, with the shares of other heirs being adjusted after the child's birth if necessary. This protection of the unborn child's inheritance rights reflects the classical law's concern with distributive justice and the protection of vulnerable persons.

However, the classical rules for the unborn child operated within the temporal framework of natural gestation, assuming that pregnancy would result in birth within a matter of months (Finnis & George, 2022). The concept of an embryo being preserved in a frozen state for years or decades was unimaginable in the classical era, and the legal implications of such a scenario were never contemplated. The temporal limits on gestation, designed to regulate the attribution of paternity in cases of natural conception, become deeply problematic when applied to cases of cryopreserved embryos. If an embryo is frozen for twenty years before implantation, is the resulting child to be attributed to the father? And if the father dies during the period of cryopreservation, does the child retain any inheritance rights? The classical framework provides no direct answers to these questions, leaving contemporary jurists to navigate uncharted legal territory.

The classical rules also reflect assumptions about the physical presence and agency of the father in the reproductive process. In natural conception, the father's physical participation is implicit in the act of intercourse, and his paternity is established through the temporal proximity between intercourse and childbirth. In IVF and embryo cryopreservation, the father's physical participation is separated from the moment of conception and from the subsequent pregnancy, creating a disconnect between biological and temporal paternity. The father may have provided his sperm years before the embryo is implanted, and he may have died in the interval. The question then arises whether the concept of temporal proximity can be extended to the moment of conception, or whether it must be anchored to the moment of implantation. The classical jurists, working within a framework of natural conception, would not have distinguished between these moments, as they were effectively simultaneous in the cases they addressed.

The diversity of opinion among the classical schools on the maximum period of gestation is itself instructive for the present inquiry. The disagreement over whether gestation can extend to two, four, or five years demonstrates that the jurists were grappling with empirical uncertainties and interpretive ambiguities. This diversity, far from being a weakness, constitutes a methodological resource for contemporary jurists facing novel questions. The existence of disagreement on temporal limits indicates that the jurists were not uniformly committed to rigid temporal boundaries but were open to interpretation and adaptation based on the best available evidence. This openness suggests that the classical framework is not inherently opposed to extending temporal limits or reconceptualising temporal assumptions in response to changed circumstances.

The classical framework also includes rules that can be interpreted as anticipating the possibility of non-standard reproductive scenarios. The rules of *istibrā'* (ensuring the purity of the womb) and *'iddah* (waiting period) were designed to prevent confusion of lineage by ensuring that a woman was not pregnant from a previous relationship before entering a new marriage (Bintoro et al., 2024). These rules, while operating within the framework of natural conception, reflect a deep concern with lineage clarity that could be extended to the context of assisted reproduction. The underlying principle is that lineage must be capable of certain determination, and any practice that introduces ambiguity or uncertainty is to be avoided. This principle could be deployed in the evaluation of posthumous implantation, either to support it (if clear evidence of the embryo's origin is available) or to oppose it (if cryopreservation introduces unacceptable uncertainty).

The classical rules on inheritance also contain provisions that address the interests of potential heirs whose existence is not yet certain. The rules for the unborn child, as noted above, establish that a foetus in utero has rights that must be protected pending birth. This principle could arguably be extended to the cryopreserved embryo, which exists in a state of potentiality that is analogous, in some respects, to the foetus in early gestation. The question is whether the potentiality of the embryo is sufficient to justify the reservation of inheritance shares, or whether the greater temporal distance and the need for active intervention (implantation) distinguish the embryo from the natural foetus.

The classical *fiqh* framework on *nasab* and inheritance provides invaluable guidance for addressing the question of posthumous implantation, but it cannot be mechanically applied without careful consideration of the changed biological and temporal circumstances. The principles of lineage preservation, protection of children's rights, and distributive justice are as relevant today as they were in the classical era, but their application must be reconsidered in light of the unprecedented possibilities of reproductive technology. The existence of diversity within the classical tradition provides a methodological resource for developing contemporary responses that are both faithful to the foundational sources and responsive to the needs of the present. The challenge lies in determining which aspects of the classical framework are essential to the core objectives of the *sharī'ah* and which aspects are contingent upon the social and biological assumptions of the classical era.

2. The Disruption of Classical Assumptions: Challenges Posed by Embryo Cryopreservation

The introduction of embryo cryopreservation into reproductive medicine has generated a paradigm shift in the biological and temporal assumptions underlying Islamic family law, creating a series of challenges that fundamentally disrupt the classical framework for the establishment of *nasab* and inheritance. These challenges operate on multiple levels, encompassing epistemological questions about the nature of life and death, temporal questions about the relationship between conception and birth, and legal questions about the status of the embryo in the interval between creation and implantation. Understanding these challenges is essential for appreciating the magnitude of the jurisprudential task facing contemporary scholars and for evaluating the various proposed solutions that have emerged in the fatwa literature.

The most fundamental challenge posed by embryo cryopreservation is the temporal separation of conception from gestation and birth. In natural reproduction, conception, implantation, gestation, and birth form a continuous temporal sequence that unfolds over approximately nine months (Anifandis et al., 2025). This temporal continuity is central to the classical rules on *nasab*, which assume that the father's participation in the reproductive process is proximate to the birth of the child. The maximum gestational periods established by the classical jurists were designed to accommodate the longest possible pregnancies that could plausibly occur through natural conception, providing a temporal boundary within which paternity could be established. Embryo cryopreservation disrupts this temporal continuity by introducing an interval between conception and implantation that can extend to years or even decades. This temporal disjunction means that a child may be born years after the father's death, with no physical relationship between the father and the gestational process. The question then arises whether the father's participation in the moment of conception is sufficient to establish *nasab*, or whether temporal proximity to birth is an essential element of paternity.

The classical temporal limits on gestation become particularly problematic in the context of cryopreservation because they are fundamentally concerned with the duration of pregnancy rather than the interval between conception and birth. The maximum periods of two, four, or five years were understood as applying to the period between the last possible act of intercourse and birth, effectively the period of gestation. These periods were established based on the medical understanding of the era and were intended to accommodate pregnancies that could be attributed to a husband. A cryopreserved embryo, however, may be implanted after decades of frozen storage, far exceeding even the most generous classical maximum. If the maximum gestational period is applied to the interval between the creation of the embryo and birth, then posthumous implantation would almost certainly be precluded in most cases, as the embryo would have been created long before the birth of the child. If, however, the maximum period is applied only to the period of actual gestation (from implantation to birth), then cryopreservation becomes legally unproblematic, as the gestational period itself remains within normal limits.

The choice between these interpretations is not merely a technical matter but reflects deeper jurisprudential assumptions about the nature of *nasab* and the role of temporal proximity in its establishment (Schriber, 2025).

Those who argue for applying the maximum period to the interval between conception and birth are effectively asserting that temporal proximity is an essential element of *nasab*, and that the father's participation in the reproductive process must be temporally proximate to the birth of the child for lineage to be established. Those who argue for applying the maximum period only to the period of gestation are asserting that it is the biological connection established at conception, rather than temporal proximity, that is essential to *nasab*. The latter position allows for the possibility that an embryo created during the husband's lifetime can establish *nasab* even if born after his death, provided that the actual gestational period falls within normal limits.

The temporal dimension of posthumous implantation also raises questions about the moment at which the father-child relationship is legally established. In classical *fiqh*, *nasab* is established at birth, when the child emerges from the mother's womb and is identified as belonging to a particular father (Susilo et al., 2025). The foetus in utero possesses certain legal rights, including the right to inherit, but full *nasab* is not established until birth. This temporal location of *nasab* at birth has significant implications for posthumous implantation, as it suggests that the father-child relationship is not fully realised until the child is born. The father's death prior to birth may therefore create complications, as the father is no longer alive to claim the child or to be claimed by the child. However, the classical rules for the unborn child demonstrate that death does not necessarily preclude the establishment of *nasab*, as the unborn child can still inherit from the deceased father. The question then becomes whether the embryo, which exists outside the mother's womb and has not yet been implanted, can be analogised to the unborn child for the purposes of inheritance.

A second major challenge posed by embryo cryopreservation is the question of the embryo's legal status in the interval between creation and implantation. The classical *fiqh* framework did not recognise the concept of an embryo existing outside the mother's womb, as such a scenario was biologically impossible in the pre-modern era. The question of the embryo's status therefore requires contemporary jurists to develop a new category of legal personhood or legal potentiality that accommodates the unique circumstances of reproductive technology. The embryo, being created from the gametes of a married couple, possesses a genetic identity that links it to both parents. It is not merely a collection of cells without legal significance but represents the potential for a new human life that, if implanted successfully, will develop into a child. This potentiality carries significant ethical and legal weight, suggesting that the embryo should not be treated as a mere property or as lacking any legal status. At the same time, the embryo is not yet a foetus and has not been implanted in the womb, so it cannot be accorded the same legal status as a foetus in utero.

The determination of the embryo's legal status has profound implications for inheritance. If the embryo is accorded some form of legal status, it may be entitled to the protection of its interests, including the reservation of inheritance shares pending implantation and birth. If, however, the embryo is treated as lacking legal status, then no inheritance rights can be reserved until after implantation and birth. The question of whether an embryo can be an heir is thus predicated upon a prior determination of whether the embryo possesses any form of legal personality that would entitle it to protection. The classical rules on the unborn child provide a precedent for recognising the legal interests of a potential heir, but the analogy is imperfect because the unborn child exists within the mother's womb and is already in the process of development, whereas the cryopreserved embryo exists outside the womb and has not yet begun the process of implantation (Swanson & Liu, 2022).

A third challenge is the question of consent and intention in the creation and preservation of embryos. In classical *fiqh*, the establishment of *nasab* through marriage is predicated upon the consent of both parties to the marriage contract and the intention to enter into a legally recognised relationship. The husband's consent to the marriage and his participation in the conjugal relationship are taken as evidence of his intention to accept paternity of any children born to his wife (Iyakaremye et al., 2020). In the context of IVF and embryo cryopreservation, the husband's consent to the creation of embryos and to their potential future use is a matter of explicit agreement rather than implied consent. This explicit consent provides a strong basis for establishing that the husband intended to be the father of any child born from those embryos. However, if the husband dies before the embryo is implanted, the question arises whether his consent to future use remains valid or whether it expires with his death. The classical law does not provide direct guidance on this question, as the issue of posthumous use of reproductive materials was never contemplated.

The question of the husband's consent is further complicated by the possibility of changes in circumstances between the creation of the embryo and its implantation (Robertson, 2021). The husband may have created the embryo with the intention of implanting it during his lifetime, but his death may have altered the circumstances such that implantation is no longer consistent with his intentions. He may have died without specifying whether he wished the embryos to be implanted after his death, leaving the widow to make decisions that he did not authorise. The classical rules on testamentary dispositions provide some guidance on this question, as they require clear evidence of the testator's intentions, but they do not directly address the scenario of reproductive materials being used after death.

A fourth challenge is the intersection of posthumous implantation with the classical rules on the waiting period (*'iddah*) and the prohibition of marrying close relatives (Serrano-Ruano, 2022). If a widow implants an embryo created from her deceased husband's sperm and her own ova, the resulting child is biologically related to

both parents, and the normal rules of incest apply. However, the child is born after the father's death, which raises questions about the child's relationship to the father's other children and to the father's other relatives. The classical rules on *'iddah*, which require a widow to observe a waiting period of four months and ten days before she can remarry, are designed to prevent confusion of lineage by ensuring that she is not pregnant from her deceased husband. If a widow implants an embryo after the *'iddah* period has expired, she may still be considered to be giving birth to her deceased husband's child, which may raise questions about the interaction between the *'iddah* rules and the timing of implantation.

The rules on *'iddah* are based on the assumption that pregnancy, if it exists, will become apparent during the waiting period (Hilal & Harahap, 2021). A woman who is pregnant at the time of her husband's death must observe a waiting period that extends until she gives birth, after which she is free to remarry. The purpose of this extended waiting period is to ensure that the lineage of the unborn child is not confused by the woman entering into a new marriage while pregnant. In the context of cryopreservation, however, the widow may be not pregnant at the time of her husband's death but may subsequently become pregnant through implantation of a frozen embryo. The question arises whether the *'iddah* period should be extended to cover the subsequent pregnancy, or whether the woman's obligation to observe *'iddah* expires after the normal period if she is not pregnant at the time of death. The classical rules do not address this scenario, as it was impossible for a woman to become pregnant after her husband's death through natural conception (Sona, 2023).

A fifth challenge is the potential for dispute over the identity and ownership of embryos. In cases where multiple embryos are created and stored, there may be uncertainty about which embryos belong to which couple, particularly if the storage facility has not maintained accurate records. There may also be disputes between the widow and the deceased husband's other heirs over whether the embryos should be implanted at all, particularly if the implantation will affect the distribution of the estate. The classical rules on inheritance are designed to minimise disputes by providing clear rules for the distribution of estates, but these rules assume that the identity of the heirs is known and that there are no disputes over the existence of potential heirs. The existence of cryopreserved embryos introduces a new category of potential heir whose existence and status are uncertain, creating the possibility of protracted legal disputes over the distribution of estates.

A sixth challenge is the broader social and ethical implications of posthumous implantation. The classical fiqh framework is not merely a set of technical legal rules but is embedded within a broader ethical vision of family, society, and the transmission of life. The preservation of lineage (*hifẓ al-nasl*) is one of the five essential objectives of the *sharī'ah*, reflecting the importance of clear and stable family relationships in Islamic society. Posthumous implantation raises difficult questions about the socialisation of children born after their father's death, about the emotional and psychological well-being of such children, and about the impact on existing family structures. A child born after the father's death will never know the father and may face challenges in establishing their identity within the broader family. The classical jurists were aware of the social dimensions of lineage, as evidenced by their concern with preventing confusion and maintaining clear family relationships. These social considerations must be weighed alongside the legal and biological considerations in any evaluation of posthumous implantation.

The social dimensions of posthumous implantation (Chekovska et al., 2021) also intersect with questions of distributive justice in inheritance. The birth of a posthumously conceived child will affect the distribution of the deceased father's estate, potentially reducing the shares of other heirs. If the child is recognised as a lawful heir, the other heirs will receive smaller shares than they would have received if the child did not exist. This raises questions about the fairness of allowing a widow to effectively create a new heir after the father's death, potentially reducing the inheritance of other family members. The classical rules on inheritance are designed to achieve distributive justice among the heirs, but they assume that the heirs are already in existence at the time of death or are in utero and will be born within a predictable timeframe. The creation of a new heir after the father's death, through the implantation of a frozen embryo, may be seen as disrupting the distributive scheme that would have applied at the time of death.

The temporal dimension of posthumous implantation also intersects with the classical rules on the distribution of estates. The classical jurists established that the estate should be divided among the heirs existing at the time of death, with the unborn child being treated as a potential heir whose share is reserved pending birth. If a child is born after the father's death, the child is entitled to inherit, provided that the child was conceived before the father's death. This rule is consistent with the principle that the unborn child is a potential heir whose rights must be protected. However, the rule assumes that the child was conceived during the father's lifetime, which is true in the case of posthumous implantation (the embryo was created during the father's lifetime). The question is whether the rule can be extended to cover a child who is born from an embryo that was conceived during the father's lifetime but implanted after his death. The classical rule does not require that the child be in utero at the time of the father's death, only that the child be conceived before death. This suggests that posthumous implantation could potentially be accommodated within the classical framework, provided that the embryo was created during the father's lifetime.

However, the extension of the classical rule to posthumous implantation is complicated by the fact that the embryo was not in utero at the time of the father's death and therefore was not a foetus in the classical sense. The classical rules on the unborn child assume that the child is already in the mother's womb at the time of the father's death, which is not the case with a cryopreserved embryo. The question is whether the embryo can be analogised to the unborn child for the purposes of inheritance, or whether the absence of implantation distinguishes the two cases such that different rules should apply. The answer to this question depends on whether the embryo is seen as possessing sufficient potentiality to be treated as a potential heir, or whether its extra-corporeal status renders it legally irrelevant for inheritance purposes.

3. Comparative Ijtihād: Mapping the Spectrum of Contemporary Fatwa Positions

The contemporary fatwa literature on posthumous implantation of cryopreserved embryos reveals a spectrum of positions that range from outright prohibition to conditional permissibility, reflecting the diversity of methodological approaches and interpretive commitments within the Sunnī tradition. This spectrum encompasses a variety of nuanced positions that grapple with the novel legal questions posed by reproductive technology, offering a rich resource for the development of a coherent and just response to the challenges identified in the preceding section. Mapping this spectrum is essential for understanding the current state of juristic discourse on this issue and for identifying the points of convergence and divergence that will shape future developments in the field.

At the most restrictive end of the spectrum are fatwas that prohibit posthumous implantation entirely, arguing that the classical rules on *nasab* and inheritance cannot accommodate such a scenario and that any attempt to do so would violate the essential principles of Islamic family law. These fatwas tend to emphasise the importance of temporal proximity in the establishment of *nasab*, arguing that the father's death severs the legal relationship between him and any potential offspring that are not yet in existence at the time of his death. The embryo, being extra-corporeal and not yet implanted, is seen as lacking the legal status necessary to inherit from the deceased father, and any attempt to implant it after his death would be a violation of the inheritance rights of the existing heirs (Hermawan et al., 2026). This position is often supported by reference to the classical maximum gestational periods, which are interpreted as applying to the interval between the father's last possible intercourse and the child's birth, effectively precluding posthumous implantation in most cases.

The restrictive position also draws upon the principle of *sadd al-dharā'i'* (blocking the means), which seeks to prevent practices that may lead to harmful consequences (Ruzulan et al., 2023). Proponents of this position argue that allowing posthumous implantation would open the door to a range of undesirable outcomes, including disputes over inheritance, confusion over lineage, and the disruption of existing family structures. They argue that the potential benefits of posthumous implantation do not outweigh the risks of social and legal disorder, and that the safer course is to prohibit the practice outright. This position is particularly influential in jurisdictions that maintain a conservative approach to family law, reflecting a broader tendency to prioritise the preservation of existing legal categories over the accommodation of technological innovation.

The restrictive position also appeals to the principle of respect for the deceased, arguing that using the deceased husband's reproductive material without his explicit authorisation constitutes a violation of his rights. Proponents of this position argue that the husband's consent to the creation of embryos does not automatically imply consent to their use after his death, and that the absence of explicit consent to posthumous use requires the prohibition of implantation. They further argue that the husband's death terminates his legal capacity and that no actions can be taken on his behalf in matters of reproduction, as reproduction is a personal matter that cannot be delegated to others after death. This argument is supported by the classical rules on testamentary dispositions, which require clear evidence of the testator's intentions, and by the broader principle that legal capacity ends at death.

At a middle position on the spectrum are fatwas that permit posthumous implantation in certain circumstances, subject to a range of conditions and restrictions. These fatwas generally argue that the embryo, being created from the gametes of a married couple, possesses a potential legal status that should be recognised and protected. The death of the father does not automatically negate the embryo's potential to establish *nasab*, provided that certain conditions are met. These conditions typically include the requirement that the embryo was created during a valid marriage, that the husband consented to the creation and potential future use of the embryo, that the widow is the legal wife of the deceased husband, that the implantation occurs within a reasonable timeframe after the husband's death, and that the resulting child will not create confusion of lineage or disrupt existing family relationships.

The middle position draws upon the classical rules on the unborn child, arguing that the embryo can be analogised to a foetus in utero for the purposes of inheritance. Proponents of this position argue that the potential for life that is inherent in the embryo is sufficient to warrant the protection of its interests, including the reservation of inheritance shares pending implantation and birth. They further argue that the classical maximum gestational periods should be applied only to the period of actual gestation, rather than the interval between conception and implantation, allowing for the possibility that an embryo created during the husband's lifetime can establish *nasab*.

even if born after his death. This interpretation of the classical rules provides the legal basis for permitting posthumous implantation, while the conditions and restrictions ensure that the practice is not abused.

The conditions imposed by the middle position are designed to ensure that posthumous implantation does not violate the essential principles of Islamic family law. The requirement that the embryo was created during a valid marriage ensures that the child will be born into a legally recognised family structure, protecting the child from the stigma of illegitimacy. The requirement that the husband consented to the creation and potential future use of the embryo ensures that the child's existence is consistent with the father's intentions, preventing the imposition of paternity against the father's will. The requirement that the widow is the legal wife of the deceased husband ensures that the child is born to the mother who is biologically connected to the father through marriage, preserving the integrity of the marital relationship. The requirement that the implantation occurs within a reasonable timeframe ensures that the practice is not abused to create heirs long after the father's death, potentially disrupting the inheritance rights of existing heirs. The requirement that the child will not create confusion of lineage or disrupt existing family relationships ensures that the broader social objectives of Islamic family law are protected.

The middle position varies across the four Sunnī schools and among contemporary fatwa institutions, reflecting differences in methodological approach and interpretive commitment. The Ḥanafī school, with its greater willingness to employ *istiḥsān* (juristic preference) and *maṣlahah* (public interest) in the development of legal rules, tends to be more permissive of posthumous implantation, provided that the conditions are met (Rahimah, 2025). The Ḥanafī tradition of considering the underlying objectives of the law and the practical consequences of legal rules provides a methodological basis for accommodating novel technological developments. The Shāfi'ī school, with its greater emphasis on textual sources and strict analogical reasoning, tends to be more restrictive, requiring closer adherence to the classical rules and stronger evidence of the father's intentions. The Mālikī school, with its emphasis on the practice of the people of Medina and the consideration of public interest, tends to occupy a middle position, permitting posthumous implantation in certain circumstances while imposing stringent conditions. The Ḥanbalī school, with its emphasis on textual sources and its willingness to employ *maṣlahah* in limited circumstances, tends to be cautious but open to permitting posthumous implantation if the conditions are met (Efendi & Siregar, 2026).

Contemporary fatwa institutions have issued a range of rulings on posthumous implantation, reflecting the diversity of positions within the Sunnī tradition. The Islamic Fiqh Academy of the Organisation of Islamic Cooperation, the pre-eminent international body for Islamic legal scholarship, has issued several resolutions on assisted reproductive technologies that provide guidance on this issue. The Academy's resolutions generally permit IVF within marriage, using the gametes of the spouses, but prohibit third-party gamete donation. On the question of posthumous implantation, the Academy has expressed caution, recommending that embryos be implanted during the husband's lifetime and that posthumous implantation be avoided unless there is a compelling reason. The Academy's position reflects a desire to balance the benefits of reproductive technology with the preservation of the classical principles of family law.

The Dār al-Iftā' of Egypt, the official fatwa institution of the Egyptian state, has issued rulings that are generally permissive of IVF within marriage, including the cryopreservation of embryos for future use. On the question of posthumous implantation, the Dār al-Iftā' has ruled that it is permissible for a widow to implant embryos created from her deceased husband's sperm, provided that the embryos were created during a valid marriage, that the husband consented to their use, and that the implantation occurs within a reasonable timeframe after his death. The ruling is based on the view that the child born from such implantation is the legitimate child of the deceased husband and is entitled to inherit from his estate (Al-Marakeby, 2022). This permissive position reflects the Dār al-Iftā's willingness to accommodate technological innovation while maintaining the core principles of Islamic family law.

The Majma' al-Buḥūth al-Islāmiyyah of Al-Azhar (Hosen, 2018), the leading institution of Islamic scholarship in the Sunni world, has issued rulings that are more cautious than those of the Dār al-Iftā', emphasising the importance of adhering to the classical rules on *nasab* and inheritance. The Majma' has expressed concern that posthumous implantation could lead to confusion of lineage and disputes over inheritance, and has recommended that embryos be implanted during the husband's lifetime whenever possible. However, the Majma' has not ruled out the possibility of posthumous implantation in exceptional circumstances, provided that the conditions outlined in the classical juristic tradition are met. This cautious but open position reflects the Majma's commitment to preserving the integrity of the Islamic legal tradition while responding to the needs of the community.

Fatwa institutions in various Muslim-majority countries have issued rulings that reflect the positions of their respective national contexts. In Saudi Arabia, the Permanent Committee for Islamic Research and Ifta' has issued rulings that are generally restrictive, reflecting the conservative religious environment of the Kingdom. The Committee has ruled that posthumous implantation is not permitted, arguing that the father's death terminates the possibility of establishing *nasab* and that any child born after his death cannot inherit from him. This restrictive position is consistent with the broader approach to family law in Saudi Arabia, which emphasises the preservation

of classical legal categories and the avoidance of innovation.

In Malaysia, the National Fatwa Council has issued rulings that are more permissive, reflecting the moderate Islamic environment of the country. The Council has ruled that IVF within marriage is permitted, including the cryopreservation of embryos for future use. On the question of posthumous implantation, the Council has ruled that it is permitted, provided that the embryos were created during a valid marriage, that the husband consented to their use, that the widow is the legal wife of the deceased husband, and that the implantation occurs within a reasonable timeframe. The Council's position reflects the broader approach to family law in Malaysia, which seeks to balance the preservation of Islamic principles with the accommodation of modern needs (Rosidi, 2024).

In Turkey, the Directorate of Religious Affairs (Diyanet) (Adak, 2021) has issued rulings that are generally permissive of IVF within marriage, reflecting the more liberal Islamic environment of the country. The Diyanet has ruled that posthumous implantation is permitted, provided that the embryos were created during a valid marriage and that the husband consented to their use. The Diyanet has emphasised that the child born from such implantation is the legitimate child of the deceased husband and is entitled to inherit from his estate. This permissive position reflects the Diyanet's willingness to accommodate technological innovation and to recognise the changing needs of Turkish society.

In the Gulf states, the range of fatwa positions reflects the diversity of religious environments across the region. In the United Arab Emirates, the General Authority of Islamic Affairs and Endowments has issued rulings that are generally permissive, allowing posthumous implantation in certain circumstances. In Qatar, the Ministry of Awqaf and Islamic Affairs has issued rulings that are more cautious, emphasising the need to adhere to the classical rules and to avoid practices that could lead to confusion. In Bahrain, the Supreme Council for Islamic Affairs has issued rulings that occupy a middle position, permitting posthumous implantation subject to stringent conditions (Mahmoud, 2022). This diversity across the Gulf states reflects the varying interpretations of Islamic law in the region and the different social and legal contexts in which the rulings are issued.

The spectrum of fatwa positions on posthumous implantation reveals the complexity of the issues at stake and the difficulty of developing a consensus position that can be accepted across the Islamic world. The diversity of opinions reflects not only differences in legal methodology and interpretive commitment but also differences in social context and the perceived risks and benefits of posthumous implantation. In contexts where the preservation of classical legal categories is prioritised, the restrictive position tends to prevail. In contexts where the accommodation of technological innovation and the protection of individual rights are prioritised, the permissive position tends to prevail. In contexts where a balance between these competing values is sought, the middle position tends to prevail.

The diversity of fatwa positions also reflects the inherent uncertainty of the legal questions at stake. The classical sources do not directly address the issue of posthumous implantation, and the analogical reasoning that is employed to fill this gap is necessarily tentative and subject to differing interpretations. The absence of a clear textual precedent means that scholars must rely on their judgment in interpreting the sources and applying them to novel circumstances. This interpretive discretion inevitably leads to differences of opinion, as scholars weigh the relevant considerations differently and reach different conclusions about the appropriate legal response.

Conclusion

The question of whether a cryopreserved embryo, conceived during the husband's lifetime but implanted after his death, can establish *nasab* and claim inheritance rights under Islamic family law represents one of the most profound challenges facing contemporary Islamic jurisprudence. The article has demonstrated that the classical fiqh framework, while providing invaluable guidance, cannot be mechanically applied to this unprecedented scenario, as the technology fundamentally disrupts the biological and temporal assumptions upon which the classical rules were constructed. The diversity of fatwa positions across the Sunnī tradition reflects the complexity of the issues at stake and the difficulty of developing a consensus response. The proposed *nasab* based typology, distinguishing between the pre-implantation, implantation, and post-implantation phases of the embryo's legal existence, offers a coherent framework that harmonises the competing values of *hifz al-nasl*, the rights of the unborn, and distributive justice in Islamic inheritance law. The six principles of consent, temporal reasonableness, lineage integrity, distributive justice, the best interests of the child, and public interest provide the foundation for applying this framework to specific cases. The adoption of this reconceptualised model would enable Muslim jurists to respond to the challenges of reproductive technology in a manner that is both faithful to the classical tradition and responsive to the needs of contemporary Muslim communities, ensuring that the sacred objectives of Islamic family law are preserved while the rights of all parties are protected. The ongoing evolution of reproductive technology will continue to generate novel legal questions, requiring continued engagement with the sources, creative application of juristic methodology, and a steadfast commitment to the ethical vision of the *sharī'ah*.

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