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Navigating Advanced Medical Technologies: Ethical Dimensions of Assisted Reproductive Technology (ART) in Islamic Jurisprudence

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Abstract

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This research delves into the intricate intersection of modern medical science and Islamic Shariah, addressing the dynamic relationship between scientific advancements and religious principles. The evolution of Bani Adam's lives, as observed within the Islamic faith, is an ongoing narrative profoundly influenced by contemporary developments. Islamic jurists have played a pivotal role in navigating the ethical complexities emerging from this symbiosis, offering guidance on permissible (halal) and impermissible (haram) matters. Notably, issues concerning childbirth and newborns have been a focal point of Islamic jurisprudential discourse in light of medical progress. In an era marked by rapidly evolving reproductive technologies, the study's significance lies in its exploration of Assisted Reproductive Technology (ART) from an Islamic jurisprudential standpoint. This examination provides comprehensive insights into the ethical, religious, and jurisprudential dimensions surrounding modern methods of reproduction and childbirth. It elucidates the nuanced interplay between medical advancements and Islamic principles, contributing to a deeper understanding of their coexistence in contemporary society. Employing a multidisciplinary approach, this research combines a thorough analysis of Islamic jurisprudential texts, contemporary medical literature, and ethical considerations. It involves a comprehensive review of Islamic legal opinions, fatwas, and scholarly interpretations to construct a nuanced perspective on ART within the framework of Islamic Shariah. Ethical deliberations surrounding ART are examined alongside the evolving landscape of modern medical practices. The research underscores that Islamic jurists have continually addressed issues related to childbirth and newborns, recognizing them as unique phenomena deserving careful deliberation. It highlights the transformative impact of medical science on human reproduction and childbirth, with a particular focus on ART. The study reveals the nuanced ways in which Islamic principles intersect with modern scientific practices, offering a framework for ethical engagement with ART within an Islamic context. This research illuminates the complex interplay between medical progress and religious precepts, illustrating that Islamic jurisprudence remains adaptable and responsive to contemporary advancements. It underscores the need for a balanced approach, wherein ethical considerations align with the tenets of Islam in navigating the evolving landscape of reproductive technologies. Ultimately, this study contributes to a broader discourse on the coexistence of science and religion, offering guidance for individuals, practitioners, and policymakers seeking to reconcile modern medical practices with Islamic principles in the context of human reproduction.

Section I: Introduction:

Modern advancements in medical science have prompted profound contemplation regarding the harmonization of scientific progress and religious principles. The lives of Bani Adam, adherents of Islam, have undergone substantial transformations in the wake of these developments, with far-reaching consequences. In this ever-evolving landscape, replete with dynamic changes impacting various facets of daily life, Islamic jurists have diligently undertaken the task of providing authoritative guidance to the Muslim community, offering insights into matters of permissibility (halal) and prohibition (haram).

Amid this panorama of change, Islamic jurists have recurrently grappled with issues pertaining to childbirth and newborns, regarding them as unique phenomena meriting special consideration. The advent of medical science has not merely ushered in a revolution across diverse domains of human existence but has also ushered in innovative approaches to the domains of reproduction and childbirth.

In the following research article, we embark on a comprehensive exploration of Assisted Reproductive Technology (ART) within the framework of Islamic Shariah. Our inquiry encompasses a multifaceted examination of the ethical, religious, and jurisprudential dimensions surrounding the contemporary modalities that have emerged within the realm of reproduction and childbirth. This scholarly investigation aims to illuminate the evolving nexus between medical progress and religious precepts, offering profound insights into how Islamic principles intersect with modern scientific practices in the context of human reproduction.

Assisted Reproductive Technology (ART): A Multifaceted Examination

Assisted Reproductive Technology (ART) constitutes a heterogeneous spectrum of medical interventions meticulously engineered to mitigate the challenges faced by individuals in the realm of conception and pregnancy maintenance. ART procedures entail the manipulation of gametes or embryos, either within controlled laboratory environments or within the physiological confines of the reproductive system, with the overarching objective of augmenting the prospects of a successful gestation.¹ The foremost indications for the recourse to ART are extensive and encompass a broad array of factors.

Female-related factors span pathologies such as fallopian tube obstruction or damage, endometriosis, ovulatory disorders, uterine fibroids, and age-related declines in fecundity.² Meanwhile, male factors encompass deficiencies in sperm count, motility, morphology, or the presence of obstructive anomalies within the male reproductive tract.³ The cohort facing unexplained infertility, wherein etiological factors remain elusive despite exhaustive diagnostic assessments of both partners, constitutes another prominent demographic that seeks solace in the avenues presented by ART.⁴ Additionally, couples harboring concerns regarding the transmission of hereditary afflictions to their progeny, either due to underlying genetic disorders or other medical conditions, frequently contemplate ART as a viable solution.

The plethora of ART procedures in contemporary medical practice reflects a multifaceted landscape, each modality characterized by varying degrees of complexity, financial exigencies, and success rates. Foremost among these is in vitro fertilization (IVF), a procedure characterized by the retrieval of oocytes from the ovarian milieu, subsequent fertilization within a controlled laboratory setting, and the subsequent transfer of resultant embryos into the uterine cavity. Intracytoplasmic Sperm Injection (ICSI), an auxiliary technique, is introduced when male factor infertility necessitates the direct

injection of a single sperm into an oocyte to engender fertilization. Furthermore, the archival procedure of Gamete Intrafallopian Transfer (GIFT), involving the concurrent introduction of oocytes and sperm into the fallopian tubes to exploit the natural fertilization milieu, has receded in practice, primarily attributable to superior outcomes observed with IVF and ICSI. Zygote Intrafallopian Transfer (ZIFT), akin to IVF, encompasses the fertilization of oocytes within a laboratory setting, followed by the transcervical transfer of zygotes into the fallopian tubes.⁵ Preimplantation Genetic Testing (PGT), instrumental in embryo screening, permits the identification of genetic aberrations or specific genetic traits before embryo transfer, hence mitigating the risk of hereditary conditions or facilitating gender selection. Additionally, recourse to donor gametes, either eggs or sperm, plays a pivotal role in circumventing the implications of compromised gamete quality, genetic anomalies, or the absence of a partner. Noteworthy is the practice of surrogacy, affording individuals incapable of gestating a pregnancy an avenue through which another individual carries and ultimately delivers the child.⁶

Whilst ART undeniably affords hope and resolution to a cohort grappling with the desire for parenthood, its multifaceted landscape also engenders a multitude of ethical, sociocultural, psychological, and religious complexities. Pertinent to its ethical dimension, the cost-benefit dynamics and accessibility of ART services become a salient focal point, particularly within resource-constrained contexts or jurisdictions operating within a regulatory framework characterized by restrictive policies. Furthermore, the physical and psychological concomitants of ART procedures, comprising but not limited to the exigencies of multiple pregnancies, ovarian hyperstimulation syndrome, ectopic gestations, fetal anomalies, and emotional distress, underscore the intricate nexus of challenges integral to the ART paradigm. The ethical and legal ramifications attendant to the creation and fate of human embryos, especially those subjected to genetic manipulation or selective practices, concretize a labyrinthine ethical landscape.⁷ Moreover, the infusion of religious considerations amplifies the labyrinthine character of ART. In the context of Islamic Jurisprudence (Shariah), distinct schools of thought and theologians proffer varying perspectives on the moral and ethical facets of ART procedures. While some Islamic traditions embrace ART as a means to fulfill the divine mandate of procreation, others cast a scrutinous eye upon specific methodologies or the engagement of third-party donors, underscoring the sanctity of lineage and genealogy as guided by Islamic principles. The intricate moral and spiritual implications encompassing embryo creation, manipulation, and disposition, the legitimacy of surrogacy arrangements, and the conundrum regarding the status of children born through ART within the Islamic community, congeal into intricate dilemmas for individuals and couples ensconced within the confluence of faith and the quest for fertility.⁸

Thus, individuals contemplating ART, particularly within the framework of Islamic Jurisprudence, are compelled to engage in comprehensive discourse with healthcare professionals, religious scholars, and mental health practitioners. This imperative dialogue aids in the meticulous scrutiny of the advantages and disadvantages inherent to ART procedures, all while navigating the multifaceted ethical, sociocultural, psychological, and religious dimensions that intricately interlace with the trajectory to parenthood.

Types of Assisted Reproductive Technologies

The field of Assisted Reproductive Technologies (ART) encompasses a diverse range of methods and techniques designed to overcome various fertility challenges and fulfill the dream of parenthood. These advanced medical procedures offer innovative solutions for individuals and couples facing

infertility issues. Within this broad spectrum of ART, each method serves a distinct purpose, catering to the unique needs and circumstances of those seeking to conceive.

From widely employed procedures like In Vitro Fertilization (IVF) to specialized techniques such as Preimplantation Genetic Diagnosis (PGD), this collection of ART methods has transformed the landscape of fertility treatments. They provide hope and possibilities when natural conception proves elusive due to factors such as tubal blockages, male factor infertility, age-related fertility decline, or unexplained infertility. This introduction offers an overview of the various ART methods, highlighting their individual contributions to the realm of fertility treatments.

In Vitro Fertilization (IVF):

IVF is a widely employed assisted reproductive technology that allows the successful conception of a child when natural fertilization is not possible due to various factors. It is the method of choice when there are issues such as tubal blockages, male factor infertility, unexplained infertility, or age-related fertility decline. IVF offers a comprehensive solution by fertilizing eggs with sperm outside the body, followed by embryo transfer to the uterus. This method addresses both female and male infertility, and its high success rates have made it a key component of modern fertility treatments.⁹

Intracytoplasmic Sperm Injection (ICSI):

ICSI is commonly employed alongside IVF and serves as an essential technique for overcoming male factor infertility. It is utilized when the quality and quantity of sperm are suboptimal for natural fertilization. ICSI ensures that a single healthy sperm is directly injected into an egg, thereby bypassing issues related to sperm quality and motility. This method maximizes the chances of successful fertilization in cases of male infertility, making it a pivotal part of ART procedures.¹⁰

Gamete Intrafallopian Transfer (GIFT):

GIFT is a valuable alternative to IVF when there is a preference for in vivo fertilization. It offers a more natural approach to fertility treatment by transferring eggs and sperm into the fallopian tube for fertilization. GIFT is particularly beneficial for couples who wish to conceive through a method that aligns with their religious or ethical beliefs, as it maintains in vivo fertilization while overcoming specific fertility issues.¹¹

Zygote Intrafallopian Transfer (ZIFT):

ZIFT combines the advantages of IVF and GIFT by fertilizing eggs outside the body and then transferring a fertilized embryo into the fallopian tube. This method is utilized when IVF alone may not be sufficient, and couples prefer to retain the in vivo aspect of fertilization. ZIFT is often chosen when there are concerns about sperm quality or cervical factors affecting fertility.¹²

Intrauterine Insemination (IUI):

Intrauterine Insemination (IUI), also known as artificial insemination, is a minimally invasive assisted reproductive technology (ART) method. It involves the direct placement of sperm into the woman's uterus during her fertile window.¹³

Donor Eggs or Sperm:

Donor eggs or sperm are a vital component of fertility treatments for individuals or couples facing genetic infertility issues. This method provides the opportunity for parenthood when there are challenges related to producing viable reproductive materials. The utilization of donor eggs or sperm allows individuals to experience the joys of parenthood despite genetic barriers.¹⁴

Surrogacy:

Surrogacy is a complex and multifaceted ART method that offers a solution when a woman cannot carry a pregnancy to term. It is chosen by individuals or couples who may have medical conditions, previous infertility treatments, or other reasons that prevent them from carrying a pregnancy. Surrogacy enables prospective parents to achieve their goal of having a child by entrusting the gestation process to a surrogate, often in a legal and highly regulated framework.¹⁵

Preimplantation Genetic Diagnosis (PGD):

PGD is an advanced ART procedure used to screen embryos for genetic disorders before implantation. It is commonly employed when there is a family history of genetic conditions or when individuals wish to ensure a healthy pregnancy. PGD offers a way to reduce the risk of passing on genetic disorders to the offspring and is especially relevant in cases of known genetic risks.¹⁶

Cryopreservation:

Cryopreservation is a critical component of ART that allows the preservation of reproductive materials, including eggs, sperm, and embryos. It is particularly beneficial for individuals who are not yet ready for immediate conception, such as those undergoing cancer treatments or desiring family planning. Cryopreservation safeguards fertility potential, providing flexibility in family-building options.¹⁷

Assisted Hatching:

Assisted hatching is employed to enhance the chances of successful implantation and pregnancy. It is utilized when embryos have a thick or hardened outer layer, making it more challenging for them to implant in the uterus. This method increases the likelihood of successful pregnancy, especially in cases where implantation may be hindered.¹⁸

Intracytoplasmic Morphologically Selected Sperm Injection (IMSI):

IMSI is a specialized method that selects sperm based on their morphology, increasing the chances of fertilization. It is employed when conventional sperm selection methods may not yield the desired results. IMSI ensures the use of the most structurally sound sperm for fertilization.¹⁹

Testicular Sperm Extraction (TESE):

TESE is an essential technique for cases of azoospermia, where no sperm are present in the semen. It enables the extraction of sperm directly from the testicles, providing an option for individuals with this specific form of male infertility.²⁰

Percutaneous Epididymal Sperm Aspiration (PESA):

PESA is employed when sperm are not found in the semen but can be retrieved from the epididymis. This method allows for the collection of sperm from a different part of the male reproductive tract, offering an alternative in cases of obstructive azoospermia.²¹

These ART methods are tailored to address specific fertility issues, enabling individuals and couples to pursue their dream of parenthood by selecting the most suitable approach based on their unique circumstances and needs. Understanding the rationale behind each method is crucial for informed decision-making in the realm of fertility treatments.

We will discuss next whether these ART procedures align with the principles of Islamic Jurisprudence and how they address the ethical issues within the context of assisted reproduction.

Section II: Islamic Jurisprudence and Assisted Reproductive Technologies (ART): An Exploration of Seven Distinct Cases

Our research in Islamic jurisprudence will encompass a comprehensive examination of above assisted reproductive technologies (ART) classified into seven distinct categories. This classification is based on the obtaining a man's sperm and a woman's egg, which are then transferred to either the uterus of the husband's wife or a non-mahram woman.

1. **Donor egg:** The husband's sperm is taken, and an egg is obtained from a permissible (non-mahram) woman. This zygote is then placed in the womb of the husband's wife.
2. **Donor sperm:** Sperm belongs to someone other than the husband, and the egg belongs to the wife. It is placed in her womb.
3. **Surrogacy:** The husband's sperm and the egg of his wife are externally combined, and then this zygote is placed in the womb of another woman, known as a gestational mother.
4. **Donor sperm and egg:** The sperm of a person who is not a spouse and the egg of a permissible (non-mahram) woman are externally combined, and the zygote is placed in the womb of the wife.
5. **Polygamy:** The husband's sperm and the egg of his wife are externally combined, and then the zygote is placed in the womb of the husband's second wife.
6. **Intra-spousal ART:** The husband's sperm and the egg belong to his wife. They are externally combined and then placed in the womb of the same wife from whom the egg was taken.
7. **Artificial insemination:** The husband's sperm is taken and placed in his wife's uterus or womb using medical instruments. Subsequently, pregnancy occurs in the same place.²²

A Review of the Seven Known Ways for Artificial Insemination

The Islamic organization and Islamic scholars conducted an in-depth review of the various aspects and perspectives of Assisted Reproductive Technologies (ART) by consulting with physicians and scholars on the matter. They concluded that there are seven known ways for artificial insemination, out of which the first four are prohibited according to Shariah. On the fifth point, Islamic scholars disagree that a husband can take the egg of one of his wives, mix it with his sperm, and place it in the other wife because both are his wives. One school of thought considers it illegitimate, sinful, and

adulterous, while other schools of thought consider it permissible. The last two methods are permissible according to all Islamic schools of thought.^{23, 24}

Section III: Islamic Jurisprudence and Assisted Reproductive Technologies (ART): Four Key Considerations

In the realm of assisted reproductive technologies (ART), the confluence of science, ethics, and religion engenders complex deliberations, notably within the context of Islamic jurisprudence. Islamic teachings, as drawn from the Qur'an, Hadith, and Fiqh (Islamic jurisprudence), provide a framework within which the moral and ethical facets of assisted reproductive methods are carefully examined. This exploration seeks to elucidate the perspective of Islamic jurisprudence on the permissibility and prohibition of certain ART techniques. Four critical considerations emerge as pivotal points for this examination, and each is intricately tied to fundamental Islamic tenets. Drawing from the Qur'an and Hadith, as well as Fiqh principles, these considerations collectively delineate the Islamic viewpoint on ART.

1. Sanctity of Marriage (Nikah):

The institution of marriage, or "nikah," within the framework of Islam, holds a profound and central significance. It is upheld as a sacred covenant that encourages lawful sexual relations and the procreation of offspring, in accordance with Islamic teachings. The exclusive practice of sexual relations within the confines of a lawful marriage is steadfastly advocated, emphasizing the moral importance of this union. Consequently, any Assisted Reproductive Technology (ART) procedure that transgresses this sanctity by involving reproductive materials from individuals without lawful matrimonial ties is perceived as a violation of Islamic principles.

A contextual examination of the Quran and Hadith, the foundational texts of Islam, serves to underscore the moral significance of upholding the sanctity of marriage. The Quran, the divine revelation, contains verses that emphasize the concept of mates created by Allah: "And God has given you mates of your own kinds and has given you, through your mates, children and children's children, and has provided for you sustenance out of the good things of life. Will men, then, [continue to] believe in things false and vain, and thus blaspheme against God's blessings?"²⁵ Another verse states, "And We have created you in pairs,"²⁶ highlighting the divine design of humans in complementary pairs.

The blessed hadith, which records the sayings and actions of the Prophet Muhammad, further reinforces the importance of marriage within Islamic tradition. The Prophet is reported to have said, "Marriage is part of my sunnah, and whoever does not follow my sunnah has nothing to do with me. Get married, for I will boast of your great numbers before the nations. Whoever has the means, let him get married, and whoever does not, then he should fast, for it will diminish his desire."²⁷ This hadith not only promotes the institution of marriage but also emphasizes its role in maintaining moral and societal order.

Allah Almighty, in Islamic doctrine, has sanctioned marriage while simultaneously prohibiting adultery and extramarital relationships. A crucial outcome of sexual intercourse is the generation of offspring, which is achieved through the combination of a man's sperm and a woman's ovum. In situations where a child is conceived outside the confines of lawful marriage through the union of these reproductive elements, it may be perceived as akin to engaging in adultery. The blessed hadith states, "It is not lawful for a man who believes in Allah and the Last Day to water what another person

has sown," ²⁸ emphasizing the responsibility of preserving the sanctity of marital bonds and discouraging actions that might undermine these sacred principles.

In conclusion, the institution of marriage, as depicted in the Quran and Hadith, is deeply rooted in Islamic doctrine, emphasizing lawful sexual relations, procreation of offspring, and the preservation of family bonds as essential components of the Islamic faith. Any deviation from these principles, such as the use of reproductive materials outside lawful matrimonial ties, is regarded as a contravention of Islamic values and the sanctity of marriage.

Marital Fidelity: A Vital Component of Lineage Preservation

The concept of lineage stands as one of the distinctive qualities and defining characteristics of the human species, setting them apart from other living beings. Throughout the annals of human civilization, the preservation of lineage has remained a core aspect of human nature, and this fundamental principle has garnered unanimous agreement among individuals from diverse regions and across generations.

In the context of Marital Fidelity, the Quranic verses offer profound insights into the significance of marital relationships. It is stated, "And of His signs is that He created for you from yourselves mates that you may find tranquillity in them; and He placed between you affection and mercy. Indeed in that are signs for a people who give thought." ²⁹ This verse underscores the divine wisdom in the creation of mates as a source of comfort, affection, and mercy, thereby highlighting the intrinsic value of marital fidelity as a foundational element of human existence.

In conclusion, it is imperative to uphold the sanctity of marriage as an institution that promotes lawful sexual relations and procreation within its sacred boundaries. Any Assisted Reproductive Technology (ART) procedure that transgresses this sanctity by involving reproductive materials from individuals who lack lawful matrimonial ties is unequivocally viewed as a violation of Islamic principles. This adherence to the sanctity of marriage aligns with the universal acknowledgment of lineage preservation as an inherent and integral part of human nature, as well as the divine guidance provided in the Quranic verses, emphasizing the importance of marital fidelity and the harmonious relationships it fosters.

2. Preservation of Lineage (Al-Nasab):

The preservation of lineage, known as Al-Nasab, holds a fundamental and pivotal role in Islamic jurisprudence, with its origins deeply embedded in the Quran and Hadith. These primary sources of Islamic guidance accentuate the imperative nature of establishing a clear and legitimate lineage for one's progeny. Assisted reproductive techniques that introduce uncertainties about a child's lineage are regarded as inconsistent with Islamic law, rendering the preservation of nasab a substantial basis for shaping the Islamic stance on ART practices

Within the realm of Islamic jurisprudence, lineage takes on great significance. The Holy Quran underscores lineage as a remarkable blessing and a unique characteristic of human beings, imparting divine guidance. It states, "And it is He who has created from water a human being and made him [a relative by] lineage and marriage. And ever is your Lord competent [concerning creation]." ³⁰ This verse highlights the divine wisdom in creating human beings with a sense of lineage and marital bonds.

Similarly, the noble Hadiths further emphasize the importance of lineage and its preservation in Islamic tradition. The guidance of the Prophet Muhammad (peace be upon him) unequivocally supports this notion. He is reported to have said, "It is not lawful for a man who believes in Allah and the last day to water what another has sown with his water."³¹ This hadith underscores the sacredness of lineage preservation and the prohibition of actions that might compromise it. Furthermore, a severe admonition is issued in another hadith, warning against disowning one's own children: "Allah, the Exalted, will veil Himself from any man who disowns his child when he looks at him, and disgrace him in the presence of all creatures, first and last."³²

The concept of lineage remains among the distinctive qualities and characteristics that set human beings apart from other creatures. The annals of human civilization bear testimony to the preservation of lineage as an intrinsic facet of human nature, and this principle has garnered unanimous agreement across various regions and generations of humankind.

In the context of the discussed hadith, scholars like al-Munawi expound upon the multifaceted objectives of marriage. They highlight that marriage serves purposes beyond mere intimacy, with the paramount aim of safeguarding lineage (ḥifẓ nasab), surpassing the significance of gratifying sexual desires. Thus, a man's intention in seeking marriage should be rooted in preserving lineage, establishing a well-structured household, and safeguarding financial resources. This emphasis on lineage preservation takes precedence over pursuing marital relations solely for the fulfillment of desires. When selecting a spouse, qualities such as intelligence, chastity, and modesty are considered of paramount importance, further underscoring the role of lineage in shaping Islamic marital principles.³³

Medical Technology and Parentage Determination: Navigating Lineage Complexity

In the context of medical technology, the determination of a child's parentage can often become a complex issue, particularly within the framework of Islamic jurisprudence. A significant aspect of this complexity hinges on the origin of the reproductive materials used. If the child is born using the parent's own sperm, even if the sperm is subjected to certain processes outside the natural reproductive environment, the child is rightfully attributed to the parents. This emphasizes the importance of the man's contribution to the child's lineage.

However, complications arise when the reproductive materials come from different sources. For instance, if the sperm belongs to the father but the egg belongs to a woman other than his wife, it results in a different lineage. In this scenario, the man's sperm becomes associated with a woman who is not his wife, effectively creating a lineage that deviates from the Islamic ideal as it involves mixing outside the bounds of a lawful marriage. Similarly, if the egg belongs to the wife but the sperm is provided by a man who is not her husband, it disrupts the genealogy and leads to an irregular lineage, as it involves the combination of reproductive materials from individuals not in a marital relationship.

To gain a more comprehensive understanding of these intricate matters and their implications in Islamic jurisprudence, additional insights can be drawn from the subsequent references that delve into the legal and religious aspects of lineage. As stated in these references, "In the case of men, lineage is proven by marriage, while in the case of women, it is proven by birth."³⁴ This statement underscores the significance of marital bonds in establishing a man's lineage and the importance of birth in determining a woman's lineage. It further reinforces the principle that lineage in Islamic tradition is intrinsically tied to the concept of lawful marriage, emphasizing the importance of the marital relationship in establishing and preserving lineage.

3. Adherence to Ethical and Moral Values:

The ethical and moral values embedded in Islamic teachings are underpinned by principles that advocate virtuous behavior and good conduct. These values, derived from the Qur'an and Hadith, enjoin believers to uphold a moral and ethical code of conduct. Practices that involve reproductive materials with non-mahram individuals, which may be seen as extramarital in nature, are generally regarded as contrary to these values. The third consideration explores the ethical and moral dimension of Islamic jurisprudence as it relates to ART techniques.

Assisted Reproductive Technologies (ARTs) extend beyond mere technical procedures; they represent a therapeutic approach, particularly when addressing infertility issues within marital relationships. Much like various scientific innovations such as radios, televisions, and loudspeakers, ARTs, too, occupy a nuanced space in Islamic jurisprudence. These technologies are neither intrinsically virtuous nor sinful, and their ethical stance depends on their application.

Consider the example of televisions. These devices, while neutral in essence, can be a source of education, entertainment, and even religious enlightenment when used appropriately. Simultaneously, they can propagate harmful content when misapplied. Thus, the ethical standing of televisions is contingent on how they are employed in alignment with Islamic values.

Similarly, ARTs can be harnessed to address infertility, a medical condition that affects countless couples. These technologies are tools designed to assist individuals in realizing their desire for offspring. When pursued with the intention of preserving the sanctity of marriage, ensuring the lineage, and adhering to ethical and moral values, ARTs operate within the bounds of Islamic principles.

For instance, consider in vitro fertilization (IVF). While this technique may deviate from natural conception, its ethical grounding depends on the intentions and circumstances. IVF can offer hope to couples where natural conception has proven elusive, aligning with the overarching Islamic principle of enhancing well-being.

In essence, the acceptance or rejection of ARTs in Islamic jurisprudence is not an absolute verdict but contingent upon their application and adherence to Islamic ethics. They are tools that can serve either virtuous or malevolent ends, contingent upon the intentions and actions of those who use them.

A Nuanced Approach to Conforming with or Rebelling Against Nature?

In the context of assisted reproductive technologies, it is evident that certain procedures may not perfectly mirror the natural order of human reproduction. However, these methods are not inherently at odds with nature; rather, they are driven by the pursuit of good, particularly when there is a potential for enhancing the well-being of individuals and families. In our modern world, various situations arise that do not conform entirely to the natural course of things.

For instance, the surgical delivery of a baby, commonly known as a C-section, is a widely accepted medical practice. While it may deviate from the natural process of childbirth, it is considered a valuable option for ensuring the safety of both the mother and the child during complicated deliveries. This method is not seen as a defiance against the natural order, and its usage is permissible within Islamic jurisprudence.

Another example pertains to infant nutrition. In certain cases, a baby may be nursed with milk from a woman other than their biological mother. This practice, often referred to as wet nursing, has been accepted and practiced historically. The motivation behind this is to ensure the infant's health and well-being when the biological mother is unable to provide sufficient breast milk. Islamic teachings recognize the permissibility of wet nursing, considering it a suitable solution when the natural order cannot be followed without harming the child.

In contemporary medical procedures, there are instances where artificial insemination is employed to facilitate conception. This technique may involve the introduction of sperm into a woman's uterus using medical instruments, bypassing the traditional method of sexual intercourse. While it deviates from the natural process of conception, it is not considered a defiance against nature. Artificial insemination is an assisted reproductive technology that is practiced within the boundaries of Islamic jurisprudence, especially when it offers hope for couples struggling with infertility.

Overall, these examples underscore a fundamental principle in Islamic jurisprudence – any method or treatment that does not violate religious principles is regarded as permissible and lawful. It is important to note that these practices are not viewed as contrary to nature but rather as solutions that can enhance the lives of individuals and families within the ethical and moral framework of Islamic teachings.

4. Prevention of Adultery (Zina):

The prohibition against extramarital sexual relations, known as zina, is unequivocally stated in the Qur'an and Hadith. Any ART method that transgresses the boundaries of lawful and unlawful sexual conduct is seen as a violation of this prohibition. This fourth point, therefore, examines the role of Islamic jurisprudence in preventing adultery, especially within the context of ART practices.

In the context of the hadith, "It is not lawful for a man who believes in Allah and the Last Day to water what another person has sown," and the principles of assisted reproductive technology, it is important to emphasize that Islamic ethics place a high value on the sanctity of marriage, individual rights, and the prevention of adultery (Zina). This extends to the field of assisted reproduction.

The Quran and Hadith encourage procreation within the bounds of marriage, with a clear recognition of the significance of lineage and familial relationships. Quranic verses, such as "Your wives are a place of sowing of seed for you" (Quran 2:223), highlight the importance of marital relationships in procreation. This underscores that the marital relationship is the legitimate and sacred channel through which offspring should be conceived and raised.

Islamic ethics are aligned with the idea that it is not permissible for anyone to add sperm or egg from a third party to their reproductive process outside the bounds of marriage. Such actions could undermine the sanctity of the marital relationship, blur the lines of lineage, and create complex legal and moral issues.

The hadith, "It is not lawful for a man who believes in Allah and the Last Day to water what another person has sown," further reinforces the concept of respecting the sanctity of individual rights within marriage. This hadith warns against interfering in the reproductive efforts of another person without their consent, which aligns with the prohibition of adultery (Zina) and the promotion of ethical behavior within the institution of marriage.

In summary, Islamic teachings emphasize the significance of marriage in procreation and the prevention of adultery. Assisted reproductive technology should be practiced with respect for the principles of consent, transparency, and the sanctity of marriage to ensure that lineage and familial relationships are preserved in accordance with Quranic and Hadith guidance.

Section IV: All Assisted Reproductive Technologies in Compliance with Islamic Principles: A Comprehensive Examination:

Assisted reproductive technologies (ART) within the scope of Islamic jurisprudence are deemed permissible when the source of semen, ovum, and the incubator (uterus) originates from a legally married husband and wife during the course of their marriage³⁵. Islam, acknowledging the limitations of medical interventions, encourages the acceptance of infertility when it is beyond remedy. The acceptance and endorsement of assisted reproduction in the Muslim world gained prominence following the issuance of guidelines by prestigious scientific and religious institutions, which were subsequently adopted by relevant authorities in various Muslim nations. Notable among these guidelines are the Fatwa issued by Dar El Iftaa, Cairo, in 1980, and another by the Islamic Fiqh Council of Makkah in 1984, as well as directives from the Islamic Organization for Medical Sciences (IOMS) in Kuwait in 1983, the Fatwa of the International Islamic Fiqh Academy in 1986, and the International Islamic Centre for Population Studies and Research at al-Azhar University. These guidelines serve as a reference for the majority of Muslims³⁶. Under Islamic law, surrogacy is prohibited³⁷. Ali Khamenei of Iran permits surrogacy between a husband's multiple wives³⁸. In 1984, the Fatwa of the Islamic Fiqh Council of Makkah briefly permitted surrogacy under the condition of replacing embryos within the uterus of the second wife of the same husband who provided the spermatozoa. However, in 1985, the council retracted its approval of surrogacy³⁹. Subsequently, the Islamic Fiqh Council of the Islamic World League passed a legal resolution (Fatwa) during its 19th meeting held in November 2007. This resolution explicitly prohibited gender selection for social reasons and permitted it exclusively when medically justified.^{40, 41}

Section V: Conclusion:

In the context of navigating advanced medical technologies, particularly the ethical dimensions of Assisted Reproductive Technology (ART) within Islamic jurisprudence, this research has shed light on the dynamic relationship between modern science and Islamic principles. The evolving landscape of human reproduction and childbirth, as witnessed within the Islamic faith, has been a subject of continual jurisprudential discourse, addressing the ethical complexities posed by medical advancements. Within this multifaceted exploration, it has become evident that Islamic jurists have recognized the transformative impact of medical science on reproduction and childbirth. The permissibility of ART within the boundaries of Islamic jurisprudence is contingent on the critical condition that the source of semen, ovum, and the incubator (uterus) are derived from a legally married husband and wife during their marriage.

This research underscores the adaptability and responsiveness of Islamic jurisprudence to contemporary advancements in the field of reproductive medicine. Notably, the acceptance and endorsement of assisted reproduction within the Muslim world have been informed by guidelines issued by renowned scientific and religious institutions, subsequently adopted by relevant authorities in various Muslim nations. These guidelines serve as a compass for the majority of Muslims, offering clarity on the permissibility and ethical considerations surrounding ART.

Furthermore, the discussion on surrogacy in Islamic jurisprudence reflects a nuanced approach. While surrogacy is generally prohibited under Islamic law, exceptions have arisen, notably within the fatwas of Ali Khamenei of Iran and the Islamic Fiqh Council of Makkah in 1984, briefly permitting surrogacy under specific conditions. However, it is essential to acknowledge that the stance on surrogacy evolved, and in 1985, the council retracted its approval of the practice.

Lastly, the legal resolution (Fatwa) passed by the Islamic Fiqh Council of the Islamic World League in 2007 accentuates the principle of restricting gender selection for social reasons, allowing it exclusively for medical justifications. This underlines the evolving and adaptive nature of Islamic jurisprudence, aligning with contemporary ethical considerations and medical realities.

In conclusion, this research underscores the need for a balanced and ethical approach to navigate the coexistence of science and religion in the realm of advanced medical technologies. It offers guidance for individuals, practitioners, and policymakers seeking to reconcile modern medical practices with Islamic principles in the context of human reproduction, ultimately contributing to a broader discourse on the ethical dimensions of ART within Islamic jurisprudence.

In summary, the Islamic perspective on assisted reproductive technologies, as derived from the Qur'an, Hadith, and Fiqh, centers on a resolute commitment to upholding the sanctity of marriage, preserving lineage, adhering to ethical and moral values, and preventing adultery. These considerations are deeply rooted in core Islamic principles and play a fundamental role in shaping the view regarding the permissibility or prohibition of specific ART methods. Consequently, it is paramount for individuals, scholars, and researchers to engage in meticulous and comprehensive exploration of these references as they navigate the ethical intricacies of ART within the framework of Islamic jurisprudence.

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