

Vol. 4, No. 9, September 2024 *e*-ISSN: 2807-8691 | *p*-ISSN: 2807-839X

READING AL-BURHÂN FI USHÛL AL-FIQH BY AL-JUWAINI: A STUDY OF TUBE BABY CASE RESOLUTION

Gagah Daruhadi Unversitas PTIQ Jakarta, Indonesia *e-mail: gagah_d@yahoo.com

Keywords	ABSTRACT
Al-Burhan fi Ushul Al-Fiqh, Al-Juwaini, tube baby	Islamic jurisprudence has been widely used in addressing modern bioethical issues, such as in vitro fertilization (IVF). However, few studies have explored the application of Tafsir Ahkam in modern
	medical ethics. This research presents a novel approach by integrating classical Islamic judicious principles with modern medical ethical issues. The research is conducted through literature review on classical and contemporary texts related to
	ushul fiqh and fatwas concerning IVF in Indonesia. The aspects explored include Imam Al-Juwayni's thoughts in his work "Al- Burhan fi Ushul al-Fiqh," the use of the principles of the Islamic law
	in modern fatwas, and the Islamic legal approach to bioetics. The findings of this study are expected to provide practical recommendations for Islamic scholars and policymakers on how to interpret modern medical issues from an Islamic legal perspective.

INTRODUCTION

In the modern era, technological advancements in the medical field, particularly in assisted reproductive technologies like In Vitro Fertilization (IVF), have sparked significant global discussions. These discussions often center on ethical, legal, and religious dilemmas. While IVF offers hope to couples experiencing fertility issues, it raises complex ethical questions, especially within the framework of Islamic law (fiqh) (Al-Bar & Chamsi-Pasha, 2015; Haider & Ghaffar, 2023; Houot, 2022; Inhorn & Tremayne, 2012; Mahmood, 2016). Globally, different countries have varied approaches to addressing these challenges, with some embracing IVF while others regulate it under stringent ethical and legal codes.

Several factors contribute to the growing ethical and legal debates surrounding IVF. First, technological advancements have outpaced religious and legal frameworks, leaving a gap in the regulation of practices like sperm and egg donation, surrogacy, and embryo freezing (Johnson & Bowman, 2022; Lie & Lykke, 2021). Second, societal shifts towards delaying parenthood have resulted in increased demand for reproductive technologies (Guzzo & Hayford, 2020; Nazaré et al., 2021). Finally, globalization has made these technologies more accessible, further increasing the need for a universally accepted ethical framework (König & Jacobson, 2023; Vertommen et al., 2022). These factors have led to profound impacts on both societal norms and religious jurisprudence. In the Islamic context, scholars have been faced with the challenge of interpreting classical texts to accommodate these modern technologies. This has resulted in differing fatwas across Islamic countries, where some approve IVF under certain conditions while others prohibit it altogether. The legal vacuum also causes confusion, as couples who pursue IVF are often confronted with conflicting ethical advice.

In this research, Tafsir Ahkam, a method of interpreting legal rulings derived from Islamic texts (Al-Qur'an and Hadith), will be the primary variable. The focus is on how scholars like Al-Juwayni apply Tafsir Ahkam in understanding contemporary bioethical issues like IVF. This method includes interpreting classical legal concepts such as qiyas (analogy) and istislah (public interest) to provide solutions that are grounded in Islamic tradition while being applicable to modern challenges. This



research presents a novel approach by integrating classical Islamic jurisprudence with modern bioethical issues. While previous studies have explored either classical fiqh or modern reproductive technologies, this study uniquely merges the two, offering a comprehensive framework for understanding how Tafsir Ahkam can be applied to contemporary dilemmas like IVF. This research also seeks to expand the application of Al-Juwayni's principles beyond traditional jurisprudence to address evolving medical technologies.

The urgency of this research lies in the growing need for clear, consistent, and comprehensive Islamic rulings regarding IVF. As the demand for reproductive technologies increases, so too does the need for ethical guidance that is both religiously sound and practically applicable. This study will help bridge the gap between classical Islamic jurisprudence and modern medical ethics, ensuring that Muslims who seek assisted reproductive technologies can do so in a way that aligns with their religious beliefs.

The objective of this research is twofold. First, it aims to examine Al-Juwayni's Al-Burhan fi Ushul al-Fiqh and how it can be applied to contemporary issues like IVF. Second, the research seeks to provide practical recommendations for Islamic scholars and policymakers on how to interpret modern bioethical challenges using the principles of Tafsir Ahkam. The benefits of this research extend beyond academic scholarship. It offers practical tools for Islamic scholars, jurists, and policymakers in addressing modern bioethical issues through a framework rooted in classical jurisprudence. This research will contribute to the development of more comprehensive fatwas and legal decisions, benefiting not only scholars but also Muslim couples seeking ethical and religious guidance in using reproductive technologies.

METHODS

This research employs a qualitative method with a descriptive approach, aiming to analyze the application of Tafsir Ahkam in addressing contemporary bioethical issues, particularly the case of In Vitro Fertilization (IVF). The research is conducted in Jakarta from January to May 2024. This study is carried out through literature review on classical and contemporary texts related to ushul fiqh and fatwas concerning IVF in Indonesia. The aspects explored include Imam Al-Juwayni's thoughts in his work "Al-Burhan fi Ushul al-Fiqh," the application of Tafsir Ahkam in modern fatwas, and the Islamic legal approach to bioethics.

The population and sample of this study consist of classical works, such as "Al-Burhan fi Ushul al-Fiqh," and fatwas issued by the Indonesian Ulema Council (MUI) and other fatwa institutions. The primary research instrument is literature review, which involves collecting data from primary and secondary texts related to Tafsir Ahkam and fatwas concerning IVF. This technique allows the researcher to conduct an in-depth study of relevant literature and explore how classical ushul fiqh principles are applied in contemporary contexts.

The data analysis technique used in this research is descriptive-analytical, involving three main stages: data reduction, data presentation, and conclusion drawing. The analysis compares Al-Juwayni's thoughts on ushul fiqh with the interpretations of contemporary scholars, especially in the context of fatwas related to IVF. The validity of the data is ensured through source triangulation and cross-referencing from various literature sources, as well as member checking by Islamic law experts to ensure the accuracy and objectivity of the analysis results.

This research has several limitations, including the absence of direct interviews with scholars or bioethics experts and the focus limited to Al-Juwayni's thoughts. However, this study is expected to significantly contribute to the understanding of contemporary Islamic law in addressing modern bioethical challenges, particularly those related to assisted reproductive technologies such as IVF. The findings of this study are also expected to provide guidance for scholars, academics, and the broader community in navigating bioethical issues from an Islamic legal perspective.

RESULTS Basic Concept of IVF Definition of IVF

Assisted Reproductive Technology (ART), known as in vitro fertilization (IVF), is a reproductive technique that involves fertilizing an egg outside a woman's body. This process is carried out by combining sperm cells and eggs in a laboratory container, then the resulting embryo is implanted back into the mother's uterus. The term "IVF" comes from the method of fertilization that is carried out in a

glass cup, which is similar to a tube. IVF is a form of ART designed to help couples who face difficulties in getting pregnant naturally, as well as to prevent the transmission of genetic problems.

During the IVF process, mature eggs are taken from the ovaries and fertilized by sperm in the laboratory. Once an embryo is formed, one or more of the embryos are transferred to the woman's uterus to develop into a fetus. IVF can use eggs and sperm from one's own partner or a donor, and sometimes involves a gestational pregnancy carrier. The IVF process takes about 2 to 3 weeks per cycle, although sometimes the steps are divided and can take longer. Although effective, IVF can be expensive, invasive, and may result in multiple pregnancies if more than one embryo is implanted.

History of IVF

The history of IVF began in 1978 in the United Kingdom with the birth of the first baby through this technique, Louise Brown, the result of an experiment by a married couple John and Leslie Brown using an in vitro fertilization (IVF) technique developed by Dr. Patrick Steptoe and Dr. Robert Edwards. The success follows previous failed experiments by other scientists, including Daniele Petruci and DA. Bevis, led to Dr. Edwards' recognition with the Nobel Prize in Physiology or Medicine in 2010. In Indonesia, IVF was first performed in 1987 at RSAB Harapan Kita, Jakarta, and produced Nugroho Karyanto in 1988, starting the IVF trend in Indonesia which has now given birth to around 300 children.

IVF Process

The IVF cycle generally consists of five stages: ovulation induction, egg retrieval, sperm cell retrieval, fertilization, and embryo transfer, and takes about three weeks, although sometimes the process can be longer. In the ovulation induction stage, synthetic hormones are given to stimulate the ovaries to produce many eggs, considering that some cannot be fertilized or develop properly. Medications used include injections of FSH and LH hormones to stimulate the development of eggs, hCG hormones to mature eggs, as well as medications to prevent premature ovulation and prepare the endometrium.

Egg retrieval, or ovum pick-up, is done 34-36 hours after the last injection and before ovulation. The procedure involves aspiration of a mature egg using transvaginal ultrasound to guide the needle into the follicle. The eggs taken are then placed in culture media and incubated for fertilization. This process is usually accompanied by the use of sedatives and pain relievers, and women may feel abdominal cramps after the procedure.

Sperm samples are collected at the clinic on the same day as the egg retrieval. Sperm are collected through masturbation or other procedures, then washed to increase the potential for fertilization. At the fertilization stage, the egg and sperm are combined using the conventional IVF or ICSI method, depending on the cause of infertility and the clinic's facility. The embryos formed are then monitored during embryo culture in an incubator.

At the embryo transfer stage, the best quality embryos are selected and transferred to the woman's uterus, usually between 2-5 days after egg retrieval. The transfer process is done by inserting a catheter into the uterus and placing an embryo in it. If the process is successful, the embryo will implant in the uterine wall about 6-10 days after egg retrieval. Untransferred embryos can be frozen for future use.

Alternative Variants of IVF Babies between Sperm and Ovum

The IVF variants based on the origin of sperm and ovum and the uterus where the embryo develops are as many as 8 (eight) variants, namely (Thamrin, 2014):

- 1) IVF that uses sperm and ovum from a married couple, then transferred into the wife's uterus;
- 2) IVF that uses sperm and ovum from a married couple, then the embryo is transferred into the uterus of the surrogate mother (the other wife);
- 3) IVF that uses sperm from the husband and her ovum from a donor, then the embryo is transferred into the wife's uterus;
- 4) IVF that uses sperm from a donor, while the ovum comes from the wife and the embryo is transferred into the wife's uterus;
- 5) IVF that uses sperm from a donor, while the ovum comes from the wife and then the embryo is transferred into the uterus of another woman;
- 6) IVF that uses sperm from the husband, while the ovum comes from a donor and then the embryo is transplanted into another woman's uterus;

- 7) IVF that uses sperm and ovum from a donor, then the embryo is transplanted into the wife's uterus;
- 8) IVF using sperm and ovum comes from a donor, and then the embryo is transplanted into another woman's uterus

Implementation of IVF in Indonesia

In Indonesia, the history of IVF began in 1987 at RSAB Harapan Kita, Jakarta, which gave birth to the country's first IVF, Nugroho Karyanto, in 1988. Since then, the number of IVF births in Indonesia has continued to increase, reaching more than 300 children. Hospitals that offer IVF programs in Indonesia are mostly Mother and Child hospital groups, and these services have spread across various regions, not just in Jakarta.

Here are nine hospitals in Indonesia that offer IVF programs: Indonesia Child Fertility Center, which provides a complete service from consultation to treatment; Morula IVF, which is known to be popular and offers competitive fees; Our Hope Mother and Child Hospital, with 25 years of experience and high success rate; EMC Alam Sutera Hospital, which offers competitively priced procedures; Murni Teguh Hospital Medan, with competitive price packages and modern technology; Family Pluit Hospital, which has a variety of IVF programs; Dr. Hasan Sadikin Central General Hospital Bandung, with a special clinic for IVF; Hermina Hospital Bekasi, which offers detailed procedures including ICSI; and Daya Medika Hospital, which collaborated with PT. Want children to improve the quality of their IVF services.

IVF in the Context of Civil Law

On June 13, 1979, the Indonesia Ulema Council (MUI) issued a fatwa regarding IVF. This fatwa allows IVF to use sperm and ovum from a legitimate married couple, as long as it is done in accordance with religious principles. However, the MUI prohibits IVF that involves the deposit of the uterus from another woman, sperm from a deceased husband, or the use of sperm and ovum from an illegitimate partner because this can cause legal and moral problems related to inheritance and nasab. DSN-MUI Fatwa No. 21 of 2002 also allows IVF with strict conditions, such as not involving adultery and ensuring that fertilization is carried out with a legitimate partner.

The decision of the 21st Muhammadiyah Tarjih Congress in April 1980 stated that IVF with sperm and ovum from a legitimate married couple is mubah if it is done in a way that is in accordance with Islamic law. This includes the use of appropriate sperm retrieval techniques, the determination of zygota by the female doctor, and ensuring that the recipient is his own wife. Law No. 36 of 2009 concerning Health and Regulation of the Minister of Health No. 73 of 2009 stipulate that IVF must be carried out in accordance with legal and religious norms, and it is not allowed to use another woman's uterus.

The law in Indonesia stipulates that IVF must be carried out with sperm and ovum from a legitimate partner and the result of fertilization must be implanted in the wife's uterus from which the ovum comes from. Law No. 1 of 1974 and the Civil Code recognize children from IVF as legitimate children if they are carried out in accordance with legal marriage law. The use of donor sperm is regulated in certain articles, and uterine rental has not been specifically regulated, but it can be applied by the relevant legal argument method. The rights of children born from IVF are the same as those of children born naturally, including the right of inheritance regulated in the Civil Code.

IVF in the Perspective of Islamic Law

Al-Juwayni Profile

In the fifth century of the Hijri, during the lifetime of al-Juwayni, the Islamic world experienced the peak of the disintegration crisis. Islamic rule broke into small kingdoms both in the East and in the West. This is the second phase of the classical period of Islamic history, namely the phase of disintegration (1000-1250 AD). During this period, the caliph's power declined dramatically, culminating in the conquest and destruction of Baghdad by Hulagu in 1258. The decline of the caliph's power marked the loss of the symbol of political unity of Muslims, while a number of dynasties such as the Fatimid dynasty in North Africa and the Saljukid dynasty in various regions became the dominant power.

Al-Juwayni, known as Imam al-Haramain, was born on the 18th of Muharram 419 AH (around February 1028 AD). He comes from a family that values science very much. His father, Abu Muhammad, was a prominent scholar in Nisabur who taught jurisprudence, proposals, and tafsir. Al-Juwayni developed his knowledge under the guidance of his father and other teachers such as al-Asfirayini. After

his father's death, he took over his father's position as a teacher and later deepened his knowledge at the al-Baihaqi madrasah. His expertise in various fields of religious science made him one of the most respected scientists of his time.

Al-Juwayni is known for his various scientific works. He was born in 419 Hijri and received education from his father and various prominent teachers. His works include the fields of kalam, usul, and fiqh. He is also known for his scientific travels to cities such as Mu'askar, Isfahan, and Baghdad, as well as his devotion to Mecca and Medina. The three main factors that supported his mastery of religious science were his family environment, the city of Nisabur, and his extraordinary intelligence. Al-Juwayni is known as one of the most influential scholars in the religious field of his time.

Imam al-Juwaini is considered a pioneer in the study of maqashid shari'ah, emphasizing the importance of understanding the purpose of sharia law in determining the law. In his famous work, al-Burhan fi Ushul al-Fiqh, he developed the study of maqashid shari'ah by exploring the concept of 'illat in qiyas. According to al-Juwaini, a person who does not understand Allah's purpose in His commands and prohibitions is not considered capable of establishing sharia law. In the hierarchy of postulates for the formation of law, the Qur'an is placed in the highest position, followed by sunnah, ijma', and qiyas.

Al-Juwaini divides maqashid shari'ah into two main categories: first, maqashid that are ta'abbudi and cannot be changed, such as prayer and fasting; Second, maqashid obtained through comparing texts, requires the role of reason to determine it. He also classifies the principles of sharia into five categories, namely dharuri (essentials), hajiyat (needs), tahsiniyat (improvement), mandub (encouragement), and principles that cannot be categorized in this case. The istiqra' (inductive) method was used by al-Juwaini to formulate these principles, distinguishing between written and unwritten maqashid based on the application of qiyas and coherence in sharia law.

Application of the Principle of Al-Burhan Fi Ushul Al-Fiqh Al-Juwayni in the Case of IVF

The history of IVF began in 1978 in the United Kingdom with the birth of the first IVF, which was the result of in vitro fertilization techniques involving the couple John Brown and Leslie. At that time, Imam al-Juwaini, who was born in 1028 AD and died in 1085 AD, had not touched on this topic because IVF technology did not yet exist. However, in his famous work, "Al-Burhan fi Ushul al-Fiqh," al-Juwaini exposes various basic concepts in ushul fiqh that are relevant for contemporary legal analysis such as IVF. Al-Juwaini emphasized the use of qiyas (analogies) to compare new situations with situations that have been regulated in Islamic law, as well as the importance of considering maslahat (public interest) in determining the law.

The writing method of al-Juwaini in "Al-Burhan fi Ushul al-Fiqh" is based on the Mutakallimun school or al-Syafi'iyyah, which focuses on the formulation of ushul fiqh rules logically and theoretically. This book is divided into two volumes and one supplement, covering various aspects such as introduction, legal sources, ijtihad, and fatwa. The al-Juwaini method includes the determination of the purpose of writing, the meaning of terms, and the comparison of the opinions of scholars with an emphasis on independent ijtihad. The systematics of writing involves an in-depth discussion of the Qur'an, Sunnah, ijma', and qiyas, with the aim of compiling legal rules that can be applied in new situations such as IVF, although this technology did not exist in its time.

Shari'i Evidences That Can Be the Legal Basis for Discussing IVF and Related to Al-Burhan Fi Ushul Al-Fiqh

To examine the law of IVF in the perspective of Islamic law, the ijtihad approach carried out by fiqh experts is very important to ensure its conformity with the principles of the Qur'an and Sunnah. This ijtihad requires an in-depth understanding of IVF techniques and processes, as well as references from Muslim scholars who are experts in their fields. This study must be carried out with a multidisciplinary approach, using the principles of Maqashid Shari'ah to find a proportionate and fundamental law.

The Qur'an and Hadith do not specifically discuss IVF because this issue did not exist during the time of the Prophet and his companions. However, general principles regarding progeny and marriage can be used as a reference. Surah an-Nisa' (4:1) affirms the purpose of marriage in Islam to obtain legitimate offspring and continue the generation. This is the basis for understanding that efforts to obtain offspring through IVF also have a basis in sharia. In addition, Surah Ali-Imran (3:38-40) narrates the prayer of the Prophet Zakariya to have children even under difficult conditions, showing that the effort to have children is recommended in Islam. A similar incident was also experienced by Prophet

Ibrahim who had a child at an old age. This shows that efforts to have offspring, including with modern technology such as IVF, are in line with sharia principles.

Surah An-Nahl (16:72) also underlines the importance of offspring as part of the benefits that are guarded by the Shari'a. Marriage is arranged to ensure human survival through offspring, and having children is one of the main goals of marriage. Thus, the IVF program assists married couples in obtaining offspring in accordance with the goals of sharia.

Based on these legal considerations, the IVF program can be considered legal in Islam. This is because the IVF program is a form of effort to fulfill wishes and realize maqashid nikah, namely obtaining offspring. Taking these principles into account, IVF programs can be accepted as an effort that is in line with sharia goals in a contemporary context.

Results of the Analysis of Islamic Law for IVF

In particular, there is no verse that explains in detail about IVF, because the problem of IVF did not exist during the time of the Prophet and during the time of the Companions, so that the problem of IVF is a big task of the jurists by means of ijtihad.

The study of Fiqh and Usul Fiqh in Islamic Studies is the second stage after the study of the Qur'an and Hadith, which the study in the first stage is often also called. with the study of sources. The study of the second stage in Islamic Studies is often also referred to as a compliment on the level of understanding (*thoughts*), which gives birth to various sciences, such as fiqh, kalam, and tasauf.

Especially in the field of fiqh, the essence of which is knowledge of sharia law formulated (*istinbat-kan*) from the Qur'an and Hadith using the ijtihad method, a separate discipline is needed that discusses the process and procedure in performing ijtihad. This science is the science of "Usul Fiqh" or Islamic *Legal Theory*. One of the main books of usul fiqh is the book *Al-Burhan fi Usul al-Fiqh*, written by Imam al-Harumain al-Juwayni, a great scholar of the 5th century H in the Shafi'i madhhab. One of the original theories from al-Juwayni is the theory about *Maslahah* and the *Istislah* method or popularly called *Maslahah Mursalah*.

Briefly, the results of the analysis of the study of IVF and Artificial Insemination on Humans based on Al-Burhan Fi Ushul Fiqh can be seen in the following table (Carolina, 2011).

Table 1. Islamic Law IVF Technique						
Types of Techniques	Sperm	Ova	Fertilization Medium	Law	Analogue Reason	
IVF-ET Type I	Husband	Wife	Wife's Womb	Halal	No Involvement of Others	
IVF-ET Type II	Husband	Wife	Others' Wombs/ Deposits/ Rentals	Haram	Involving Others / Analogous to Zina	
IVF Type III	Husband	Others/ Donors/Ovum banks	Wife's Womb	Haram	Involving Others / Analogous to Zina	
IVF Type IV	Husband	Others/ Donors/Ovum banks	Others' Wombs/ Deposits/ Rentals	Haram	Involving Others / Analogous to Zina	
IVF-ET Type V	Others /Donors /Sperm Bank	Wife	Wife's Womb	Haram	Involving Others / Analogous to Zina	
IVF-ET Type VI	Others /Donors /Sperm Bank	Wife	Others' Wombs/ Deposits/ Rentals	Haram	Involving Others / Analogous to Zina	
IVF-ET Type VII	Others /Donors /Sperm Bank	Others/ Donors/Ovum banks	Other wife/ Deposit/ 2nd, 3rd or 4th wife/ rental	Haram	Engaging Others and Being Perceived as Making Trouble and Making It Up	
IVF-ET Type VIII	Husband	Wife	Wife's Womb	Haram	No Involvement of Others	
Artificial Insemination with Husband's Sperm	Husband	Wife	Wife's Womb	Halal	No Involvement of Others	
Artificial Insemination with Donor Sperm	Donor	Wife	Wife's Womb	Haram	Involving Others / Analogous to Zina	

A book about the thinking of jurisprudence. Imam al-Haramaian al-Juwayni and the concept *of maslahah* that he introduced in the formulation or *istinbat* of law, so that Islamic law becomes dynamic and can solve all problems that occur and *up to date* throughout time (Nawir, 2007). Regarding IVF,

IJSSR Page 6

precisely on June 13, 1979, the leadership board of the Indonesia Ulema Council issued the following statement (Thayibbah, 2015):

"IVF with sperm and ovum from a valid married couple is legally permissible or mubah because this right includes efforts based on religious rules

- a. IVF from a married couple with the entrustment of the womb of another wife, for example from the second wife, is entrusted to the first wife, the law is haram based on the rule of *Saad Az-Zari'ah* (stipulating a law prohibiting a certain act that is basically allowed or prohibited to prevent the occurrence of other prohibited acts, because this raises complicated problems in relation to the issue of inheritance, especially among children born with mothers who has an ovum and the pregnant mother then gives birth to it or vice versa
- b. IVF from sperm frozen from a deceased husband is haram according to sharia rules because this will cause stingy problems both in relation to the determination of nasab and in relation to inheritance matters
- c. IVF whose sperm and ovum are taken from other than a legal married couple is haram because its status is the same as sexual relations between the opposite sex outside of a valid marriage or adultery and based on the rules of sharia alone, namely to avoid the occurrence of real acts of adultery."

Then the Decree of the Indonesia Ulema Council Number: Kep- 952/XI/1990 concerning artificial insemination/IVF dated November 26, 1990 states that artificial insemination/IVF with sperm and ovum taken from a legal married couple is multaram justified by Islam as long as they are in a valid marriage bond.12

The decision of the 21st Muhammadiyah Tarjih Congress in Klaten held from April 6-11, 1980 in the session of section A of IVF stated that IVF according to the process with sperm and ovum from husband and wife according to Islamic law is mubah with the following conditions (Keputusan Muktamar Muhammadiyah ke 21 di Klaten, 1980):

- 1) Technically, take semen (sperm) in a way that does not contradict Islamic law
- 2) Determination of zygota should be done by a female doctor
- 3) Recipients themselves
- 4) The status of the child of the PLTSI-RRI IVF (sperm and ovum of the legal husband and wife, the wife's own representative who has the ovum) is the legal child of the husband and wife concerned.

CONCLUSION

The research emphasizes the significance of understanding the principles of ushul fiqh, as explained by Al-Juwaini, in addressing contemporary fiqh issues like IVF. These principles, such as qiyas and consideration of benefits, are crucial in navigating legal and ethical issues related to reproductive technology. Scholars can use these principles to assess the benefits and risks of IVF, as illustrated by fatwas issued by religious institutions like DSN-MUI. The IVF program is permissible if sperm and ovum come from a married couple and are transferred to the wife's uterus, in line with maqashid of marriage and wishes. However, if sperm or ovum comes from a donor or is transferred to another woman's uterus, the law becomes haram due to potential harm. The study suggests further development, including further research on ushul fiqh principles, improved education and training for scholars, increased dialogue between scholars and medical practitioners, and developing fatwas responsive to technological developments. A multidisciplinary approach by Muslim scholars is encouraged to find a law in line with Islamic principles.

REFERENCES

- Al-Bar, M. A., & Chamsi-Pasha, H. (2015). Assisted Reproductive Technology: Islamic Perspective. In *Contemporary Bioethics*. https://doi.org/10.1007/978-3-319-18428-9_11
- Carolina, I. (2011). Inseminasi Buatan dalam Kajian dan Aturan Hukum Islam. *Jurnal Khatulistiwa Informatika*, *11*(2).
- Guzzo, K. B., & Hayford, S. R. (2020). Pathways to Parenthood in Social and Family Contexts: Decade in Review, 2020. *Journal of Marriage and Family*, *82*(1). https://doi.org/10.1111/jomf.12618
- Haider, W. A., & Ghaffar, A. (2023). Navigating Advanced Medical Technologies: Ethical Dimensions of Assisted Reproductive Technology (ART) in Islamic Jurisprudence. *Al-Qalam*, *28*(2).

- Houot, S. (2022). Chapter 2 ISLAMIC JURISPRUDENCE (FIQH) AND ASSISTED REPRODUCTION: ESTABLISHING LIMITS TO AVOID SOCIAL DISORDER. In *Islam and Assisted Reproductive Technologies* (pp. 53–69). Berghahn Books. https://doi.org/10.1515/9780857454911-007
- Inhorn, M. C., & Tremayne, S. (2012). *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives.* Berghahn Books. https://books.google.co.id/books?id=Bn_IIcTAceIC
- Johnson, W. G., & Bowman, D. M. (2022). Inherited regulation for advanced ARTs: Comparing jurisdictions' applications of existing governance regimes to emerging reproductive technologies. *Journal of Law and the Biosciences*, *9*(1). https://doi.org/10.1093/jlb/lsab034
- Keputusan Muktamar Muhammadiyah ke 21 di Klaten. (1980). *Bayi Tabung dan Pencangkokan Dalam Sorotan Hukum Islam*.
- König, A., & Jacobson, H. (2023). Reprowebs: a conceptual approach to elasticity and change in the global assisted reproduction industry. *BioSocieties*, *18*(1). https://doi.org/10.1057/s41292-021-00260-6
- Lie, M., & Lykke, N. (2021). Editorial Introduction: Assisted Reproduction Across Borders: Feminist Perspectives on Normalizations, Disruptions and Transmissions. In Assisted Reproduction Across Borders. https://doi.org/10.4324/9781315561219-7
- Mahmood, T. (2016). *The future of human reproduction; a 21st century phenomenon. A legal, theological and philosophical analysis* [Doctoral Dissertation]. The University of Manchester.
- Nawir, Y. (2007). Al-Burhan fi Ushul Fiqh, Kitab Induk Usul Fikih, Konsep Maslaha Iman Al-Haramain Al-Juwayani & Dinamika Hukum Islam. Citapustaka.
- Nazaré, P. F., Fernandes Pais, A. S., & Figueiredo-Dias, M. (2021). Postponing Motherhood: A Demographic and Contemporary Issue. *Current Women s Health Reviews*, *18*(1). https://doi.org/10.2174/1573404817666210208203220
- Thamrin, H. (2014). *Aspek Hukum Bayi Tabung Dan Sewa Rahim, Perpestik hukumPerdata dan Hukum Islam*. Aswaja Presindo.
- Thayibbah, S. (2015). Analisis Yuridis Perjanjian Sewa Rahim Menurut Hukum Islam. Jurnal Hukum Prodi Ilmu Hukum Fakultas Hukum Untan (Jurnal Mahasiswa S1 Fakultas Hukum) Universitas Tanjungpura, 3(3).
- Vertommen, S., Pavone, V., & Nahman, M. (2022). Global Fertility Chains: An Integrative Political Economy Approach to Understanding the Reproductive Bioeconomy. *Science Technology and Human Values*, 47(1). https://doi.org/10.1177/0162243921996460