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Assessing The Acceptability of Assisted Reproductive Technology Among Expectant Couples: A Comprehensive Review

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Abstract

This study explores the acceptability of assisted reproductive technology (ART) among couples, focusing on the interrelated cultural, social, psychological, economic, and medical factors that influence their decision-making. ART offers a potential solution for couples facing infertility, providing hope for achieving parenthood, but also presents emotional, financial, and ethical challenges. As awareness of ART increases and its availability expands, particularly in societies where childbearing is highly valued, the acceptance of these technologies is expected to grow. However, challenges such as the high cost of treatments, cultural attitudes towards procedures like embryo freezing and surrogacy, and the psychological toll of ART cycles remain significant barriers to widespread adoption. This study concludes that while ART is increasingly viewed as a viable solution for infertility, its acceptability will continue to evolve as technological advancements, societal attitudes, and healthcare access improve. The growing recognition of ART's potential is expected to expand reproductive choices for couples worldwide. Additionally, the study highlights the importance of counseling and educational interventions to support couples through the complexities of ART. Recommendations include improving accessibility to ART through better financial support, enhancing educational resources, and addressing cultural and religious concerns. These measures can help reduce barriers, ensuring that couples are empowered to make informed decisions and increasing the acceptance of ART as a reproductive option.

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1.0 Introduction

The acceptance of artificial reproductive technology (ART) among prospective parents is a crucial topic in contemporary reproductive health. Infertility impacts roughly 10-15% of couples globally, and assisted reproductive technology (ART), which includes various medical procedures like in vitro fertilisation (IVF), artificial insemination, and embryo transfer, has become an essential remedy for reproductive difficulties (Zegers-Hochschild et al., 2017). For some couples facing challenges in natural conception, ART provides the opportunity for parenthood with sophisticated medical assistance. Although the efficacy of ART is increasing, its acceptability remains a complex topic shaped by various personal, cultural, religious, and ethical factors. Cultural ideas, cultural perceptions of motherhood, biological connections, and family dynamics significantly influence couples' opinions on ART as a feasible solution for infertility (Hammarberg & Fisher, 2012).

Although ART provides optimism for numerous individuals, its acceptance is not ubiquitous, as multiple factors hinder the decision-making process for prospective couples. Some individuals may perceive ART as empowering, as it corresponds with their aspiration to conceive a biological child. Nonetheless, some individuals may face ethical difficulties about donor gametes, embryo management, or surrogacy, which could affect their inclination to engage in ART (Blyth et al., 2018). Furthermore, societal conventions around family formation and genetic connections can influence a variety of perspectives on ART. In certain cultures, ART is seen as a valid means of achieving motherhood, whilst in others, it may be regarded as incongruent with conventional family perspectives (Inhorn, 2015). Certain theological viewpoints may allow ART solely under particular conditions, such as utilising the couple's own gametes, or may entirely forbid it due to concerns over the integrity of natural reproduction (Pallav & Kulshreshtha, 2015). The varying perspectives emphasise the intricacy of ART's acceptability and stress the necessity of comprehending the socio-cultural variables that influence individual and communal choices.

The legal and regulatory context also plays a key role in establishing the acceptability of ART. In places where ART is well-regulated and backed by clear rules, couples often enjoy higher accessibility and societal acceptance of the procedure (Macklon et al., 2017). In contrast, in nations with stringent regulations or restricted access to ART treatments, couples may encounter difficulties in accessing therapy, hence diminishing their inclination to pursue these alternatives. Moreover, the stigma surrounding infertility and assisted reproductive technology in some communities may dissuade couples from pursuing help or openly addressing their fertility challenges (Balen et al., 2010). The increasing acknowledgement of the necessity for culturally attuned counselling and precise information is essential for assisting couples in addressing these problems. Healthcare professionals, politicians, and support organisations must collaborate to deliver complete, educated treatment that honours the values and requirements of those contemplating ART.

1.1 Objectives of the Review

The objectives of the study were:

1. To review the different types of Artificial Reproductive Therapy (ART) methods, including IVF, ICSI, IUI, GIFT, ZIFT, egg and sperm donation, and surrogacy, and their relevance to addressing infertility challenges.
2. To explore the indications for the use of Intrauterine Insemination (IUI) as a treatment for infertility, focusing on its effectiveness for couples with unexplained infertility, mild male infertility, and cervical issues.

3. To explore the merits of Intrauterine Insemination (IUI), including its affordability, simplicity, effectiveness for certain infertility issues, and its applicability for diverse patient groups, including same-sex couples and single women.
4. To review the demerits of Intrauterine Insemination (IUI), particularly its lower success rates compared to more advanced ART methods and its suitability for specific infertility diagnoses.

2.0 Methodology

A narrative review methodology was employed to explore secondary data on the acceptability of artificial reproductive therapy (ART) among expectant couples. A comprehensive search was conducted through various academic databases, including PubMed, Scopus, and Google Scholar, to identify relevant studies, articles, and reports published in peer-reviewed journals. The inclusion criteria focused on studies that discussed the different ART methods, their success rates, and their perceived acceptability among couples, particularly those experiencing infertility. Studies published in the last ten years were prioritized to ensure the relevance and up-to-date information. The selected articles were critically analyzed to synthesize key themes, trends, and findings related to ART, with a specific focus on patient perceptions, cultural influences, and the accessibility of these therapies.

Secondary data sources, including existing research papers, clinical reports, and systematic reviews, were extracted and reviewed in a narrative format. The review was structured around themes such as the types of ART methods, their indications, merits, and demerits, and the factors influencing their acceptability. Data were categorized and summarized in a way that highlighted the general attitudes of expectant couples towards ART, as well as the societal and ethical considerations associated with its use. Through this process, the narrative review provided a comprehensive understanding of the subject matter by integrating findings from a variety of studies, allowing for a broader perspective on the factors that impact the acceptability of ART among couples facing infertility.

3.0 Review and Discussion

3.1 Types of Artificial Reproductive Therapy

Artificial reproductive technologies (ART) comprise many medical procedures aimed at aiding individuals and couples confronting infertility issues. These procedures provide remedies for many reproductive challenges, including occluded fallopian tubes and male infertility. A prominent assisted reproductive technology (ART) procedure is in vitro fertilisation (IVF), which involves the extraction of ova from a woman's ovaries and their subsequent fertilisation with sperm in a laboratory environment. The resultant embryos are subsequently cultivated with precision prior to their implantation to the woman's uterus (Gardner & Lane, 2012). In vitro fertilisation (IVF) is especially advantageous for persons with obstructed fallopian tubes, significant male infertility characterised by low sperm count or motility problems, and those experiencing unexplained infertility (Lamb et al., 2016). This technique has transformed reproductive treatment, providing optimism to those who may not conceive normally.

A variant of IVF is intracytoplasmic sperm injection (ICSI), a technique in which a single sperm cell is directly inserted into an egg to enhance the probability of fertilisation. Intracytoplasmic sperm injection (ICSI) is frequently utilised in instances of male infertility, particularly in men exhibiting low sperm count, diminished sperm motility, or obstructive azoospermia, a condition characterised by the inability of sperm to access the egg due to

blockages in the male reproductive tract (Zegers-Hochschild et al., 2017). This method has markedly enhanced the success rates of IVF for couples facing male infertility. Another procedure, intrauterine insemination (IUI), involves the direct implantation of sperm into a woman's uterus, closer to the site of fertilization. IUI is generally employed for mild male infertility, unexplained infertility, or situations where cervical factors impede fertilisation (Hussain et al., 2014). IUI is less intrusive than IVF and may be a cost-effective alternative for many couples, although its success rates are often lower than those of more modern ART techniques such as IVF or ICSI.

Gamete intrafallopian transfer (GIFT) and zygote intrafallopian transfer (ZIFT) are infrequently employed assisted reproductive technology (ART) methods, however they remain viable options in specific situations. In GIFT, sperm and ova are directly introduced into a woman's fallopian tube, facilitating natural fertilisation (Cohen et al., 2012). This technique is typically utilised when IVF is neither feasible or desired, although it necessitates the presence of at least one operational fallopian tube in the woman. ZIFT resembles GIFT; however, it involves external fertilisation, after which the zygote is delivered into the fallopian tube (Sjögren et al., 2011). ZIFT can be utilised for fallopian tube dysfunction, although it is less frequently employed than IVF or ICSI because of its intricacy and diminished success rates.

Oocyte and sperm donation are significant elements of assisted reproductive technology (ART). Egg donation is utilised when a woman cannot generate viable eggs, often owing to ovarian insufficiency, suboptimal egg quality, or specific genetic issues. In this procedure, ova from a donor are fertilised with the sperm of the intended father or a sperm donor, and the resultant embryo is placed in the woman's uterus (Schmidt et al., 2017). This approach provides women with significant fertility challenges the opportunity to achieve pregnancy and childbirth. Sperm donation is frequently utilised when the male spouse has infertility or possesses genetic diseases that may be transmitted to offspring, as well as in circumstances involving same-sex female couples or single women desiring to conceive (Donnay et al., 2017). Thorough screening and ethical considerations are needed in both egg and sperm donation to guarantee the health and safety of donors and recipients alike.

Surrogacy is a notable assisted reproductive technology (ART) approach in which a surrogate mother gestates a pregnancy for another individual or couple. Surrogacy may utilise IVF, wherein the embryos of the intending parents are put in the surrogate's uterus (Berger et al., 2017). This procedure is frequently employed when a woman cannot sustain a pregnancy owing to medical issues or when gestation is considered excessively hazardous to her health. Surrogacy is a viable option for same-sex male couples desiring to conceive a biological child.

In addition to these treatments, cryopreservation—also known as egg, sperm, or embryo freezing—has become a vital aspect of ART, allowing individuals to save their reproductive material for future use. This is especially advantageous for cancer patients undergoing treatments that may impact fertility, as well as for those who intend to postpone childbearing (Timmerman et al., 2016). Cryopreservation offers protection, allowing individuals to establish families despite potential future reproductive difficulties.

Each ART approach possesses distinct applications, benefits, and obstacles contingent upon the type of infertility problem and the situations of the individuals or couples pursuing therapy. Although techniques like IVF and ICSI are commonly utilised because of their high success rates, treatments such as GIFT and ZIFT are applied more judiciously. As ART

progresses, technological breakthroughs and more medical comprehension are expected to increase success rates and provide more tailored treatments for individuals with infertility.

3.2 Artificial/Intrauterine Insemination

Intrauterine insemination (IUI), also known as artificial insemination, is a widely used fertility treatment that involves placing sperm directly into a woman's uterus during her ovulation period. The primary aim of IUI is to increase the chances of fertilization by bringing sperm closer to the egg, thereby bypassing certain obstacles that might hinder natural conception, such as issues with sperm motility or cervical mucus (Sundaram et al., 2018). IUI is generally considered one of the first-line treatments for infertility due to its relatively low cost and minimal invasiveness when compared to other assisted reproductive technologies such as in vitro fertilization (IVF) (Boivin et al., 2018).

This treatment is commonly recommended for couples dealing with unexplained infertility, mild male factor infertility, or cervical issues that impair sperm movement (Speroff & Fritz, 2015). Additionally, IUI may be combined with fertility medications to stimulate ovulation, further enhancing the chances of successful conception (Van den Broeck et al., 2020). Success rates for IUI can vary widely and are influenced by several factors, including the woman's age, the underlying cause of infertility, the quality of sperm used, and whether other fertility treatments are employed in conjunction with IUI (Moolenaar et al., 2019). While the procedure can be effective for certain couples, its success rates are generally lower than those of IVF, particularly for women over 35 years of age (Shah et al., 2018).

3.3 Indications for Intrauterine Insemination

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3.4 Merits of Intrauterine Insemination

Intrauterine insemination (IUI) is a widely used fertility treatment known for its numerous merits. One of its key advantages is that it is a minimally invasive and relatively simple procedure compared to other assisted reproductive technologies (ART) like in vitro fertilization (IVF). Unlike IVF, which requires the surgical retrieval of eggs from the ovaries, IUI involves the insertion of prepared sperm directly into the uterus during the woman's fertile window. This can typically be performed in a fertility clinic without the need for anesthesia, which makes the procedure less stressful and more accessible. The fact that IUI

does not require invasive surgery or the use of powerful hormones in the same way as IVF makes it a less costly and simpler option for many couples, particularly for those seeking a less intrusive approach to fertility treatment (Schwartz & Mayaux, 2021).

The lower cost associated with IUI compared to other ART options, such as IVF or intracytoplasmic sperm injection (ICSI), is another major benefit. IVF and ICSI are expensive procedures, often requiring extensive cycles of treatment, medication, and sometimes egg retrieval and embryo implantation, all of which contribute to high costs. In contrast, IUI is generally more affordable, making it an attractive option for couples facing fertility challenges but who may not have the financial resources for more invasive procedures (Johnson et al., 2020). The affordability of IUI makes it an accessible first-line treatment for many couples struggling with infertility, particularly those experiencing mild fertility issues, which leads to better patient satisfaction and reduced financial burden (Blake et al., 2019).

Another merit of IUI is its effectiveness in certain patient groups, particularly for those with mild infertility issues. When combined with ovulation-stimulating medications, such as Clomid, IUI can significantly increase the chances of conception. In cases where the male partner has mild sperm abnormalities, such as low sperm count or motility, or if the woman has cervical mucus issues, IUI can help bypass these barriers and improve the likelihood of sperm reaching the egg. Studies have shown that IUI can be especially successful in patients who are younger and have a good ovarian reserve, offering a higher conception rate compared to relying solely on natural conception methods (Jones & Norman, 2018). The combination of IUI with ovulation-inducing drugs can enhance fertility outcomes, making it a viable and effective option for couples with certain infertility diagnoses (Anderson et al., 2017).

In addition to its clinical benefits, IUI offers flexibility for different patient groups, extending beyond heterosexual couples with infertility problems. It provides a viable solution for single women and same-sex couples who wish to conceive but do not have access to sperm through natural means. For same-sex couples, IUI can facilitate conception through the use of donor sperm, making it a crucial component of assisted reproductive options for individuals and couples with diverse family-building needs (De la Cruz et al., 2019). This flexibility has made IUI a popular choice among a broader demographic, further increasing its accessibility and widespread use in modern fertility practices.

Finally, IUI offers a natural-like conception experience, which is particularly appealing for couples who are looking for a less medicalized approach to pregnancy. Unlike IVF, which involves the creation of embryos outside the body, IUI mimics the natural reproductive process by placing sperm directly into the uterus, allowing fertilization to occur internally. For some couples, the idea of natural conception is a significant psychological and emotional benefit, as it feels more aligned with the traditional way of becoming pregnant (Schellekens et al., 2021). This perception of a more "natural" path to conception can help reduce stress and anxiety often associated with more invasive ART procedures. As a result, IUI is seen by many as an attractive alternative to more complex treatments, offering a simpler and more natural option for those wishing to conceive.

Intrauterine insemination presents a variety of benefits that make it an appealing choice for many couples and individuals facing infertility. It is a minimally invasive, cost-effective, and flexible procedure that offers a natural-like conception experience, with improved chances of success in specific cases, particularly when combined with medication. As an accessible and

effective first-line treatment, IUI continues to be a valuable tool in the field of reproductive medicine.

3.5 Demerits of Intrauterine Insemination

Intrauterine insemination (IUI) is a widely used assisted reproductive technology (ART), but it comes with several drawbacks that can affect its success and suitability for certain individuals. One of the main limitations of IUI is its lower success rate compared to more advanced ART methods such as in vitro fertilisation (IVF). Research indicates that IUI success rates typically range from 10% to 20% per cycle, depending on various factors such as the woman's age, the underlying cause of infertility, and whether fertility medications are employed (Fertility and Sterility, 2020). For women over the age of 35 or those with specific infertility issues, IVF tends to offer better outcomes, making IUI less effective in these scenarios (Cooper et al., 2022).

Another significant drawback of IUI is the increased risk of multiple pregnancies, particularly when fertility drugs are used to stimulate ovulation. The use of these medications can lead to the release of multiple eggs, increasing the chances of twins or even higher-order multiples. While this may seem desirable for some, multiple pregnancies carry significant health risks for both the mother and the babies, such as preterm birth, low birth weight, and complications during delivery (De Neubourg et al., 2021). Furthermore, fertility medications used during IUI can cause side effects such as bloating, mood swings, nausea, and in rare cases, ovarian hyperstimulation syndrome (OHSS), which can be a serious condition requiring medical attention (Sharara et al., 2021).

IUI can also be emotionally taxing for couples, particularly if multiple cycles are required to achieve a pregnancy. The process may lead to disappointment, frustration, and stress, especially when cycles are unsuccessful. The emotional strain may also put a strain on relationships, as the repeated failures can take a toll on mental well-being (Domar et al., 2020). Finally, IUI has limited effectiveness for severe infertility cases, such as blocked fallopian tubes, severe male factor infertility (e.g., low sperm count or poor sperm motility), or advanced endometriosis. In these cases, more advanced treatments like IVF or intracytoplasmic sperm injection (ICSI) are often necessary for successful conception (Vander Borght et al., 2018).

3.6 Barriers to Intrauterine Insemination

Intrauterine insemination (IUI) is a widely used fertility treatment for individuals and couples facing challenges with conception. However, several barriers prevent its broader acceptance and use. One of the most significant obstacles is rooted in cultural and religious beliefs. Many cultures and religions hold specific views about reproduction, family structures, and natural processes, which can shape perceptions of assisted reproductive technologies like IUI. For instance, some religious groups see assisted reproduction as unnatural, considering it an interference with divine will or a violation of religious teachings regarding the sanctity of natural conception (Cunningham & O'Rourke, 2015). These beliefs often lead to moral or ethical concerns, further hindering the adoption of such medical procedures.

Additionally, lack of awareness and misconceptions about the procedure contribute to its resistance. People who are unfamiliar with IUI might view it as invasive or potentially harmful, often due to misinformation or limited access to accurate educational resources. In regions where health education on fertility treatments is scarce, misconceptions can thrive, and people may avoid seeking help despite infertility issues (O'Leary, 2018). This lack of knowledge often fuels resistance, as individuals may fear the potential risks of undergoing an

unfamiliar procedure without proper understanding. Furthermore, emotional and psychological concerns also play a significant role in limiting the acceptability of IUI. For many couples, infertility treatments like IUI may evoke feelings of personal inadequacy or stigmatization, especially when the process is seen as less intimate than natural conception. This emotional strain can be compounded by social stigma and the perception that using assisted reproduction is somehow morally or socially inferior (Golub, 2019).

Cost and accessibility are also critical barriers to the use of IUI. The procedure can be expensive, and in many regions, it is not covered by insurance or public health services. This financial burden limits access to IUI for individuals and couples who may benefit from the treatment but cannot afford it (HFEA, 2020). Additionally, the availability of fertility clinics offering IUI services can be scarce, especially in rural or low-income areas, further restricting access to this form of reproductive assistance. In some cases, ethical and moral concerns are also prominent. Critics of IUI may worry about its potential link to more controversial practices, such as the genetic modification or selection of traits, which could lead to a form of "designer babies" (Sullivan & Keegan, 2017). Such concerns highlight the broader ethical debates surrounding assisted reproductive technologies.

Legal and regulatory barriers also contribute to the limited acceptance of IUI in some regions. In certain countries, IUI is tightly regulated or even prohibited due to its potential social and ethical implications, such as the regulation of sperm or egg donors or the legality of sperm donation (Bankowski, 2019). These legal frameworks can significantly restrict access to fertility treatments. Finally, distrust in the technology itself is a pervasive concern. Some individuals may perceive IUI as experimental or risky, particularly in societies with limited exposure to or understanding of assisted reproductive technologies. As a result, traditional methods are often preferred over newer, less familiar options (Dube, 2021). Overcoming these barriers requires a multifaceted approach that includes increased education, regulatory reform, efforts to reduce stigma, and making fertility treatments more accessible and affordable for those in need

3.7 Limitations of Intrauterine Insemination

Intrauterine insemination (IUI) is a widely used fertility treatment, but it has several limitations that may impact its effectiveness for certain individuals. One key limitation is that IUI is primarily effective for cases of mild to moderate infertility, such as unexplained infertility, mild male factor infertility, or cervical issues. However, it may not be suitable for more severe conditions like significant male infertility, with very low sperm count or poor motility, or for women with blocked fallopian tubes or advanced endometriosis. In such cases, more advanced treatments such as in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI) are often recommended (Bhat et al., 2021). Furthermore, the success of IUI is also influenced by the age of the woman undergoing treatment. As women age, particularly after 35, the quality and quantity of their eggs decrease, which makes IUI less effective compared to younger women. This decline in fertility with age is a well-documented phenomenon that significantly reduces the likelihood of success (Haas et al., 2020).

Another limitation of IUI is the need for precise timing of the procedure. For optimal success, the insemination must be performed during the woman's ovulation window, which requires careful monitoring through ultrasounds, blood tests, or ovulation predictor kits. This process can be stressful and demanding, especially for women with irregular cycles (Zhu et al., 2019). Moreover, achieving pregnancy with IUI often requires multiple cycles, as the success rate per cycle is relatively low, typically ranging from 10-20% (Gordts et al., 2019). This means that

couples may face the emotional and financial strain of undergoing several cycles before achieving pregnancy. The financial burden can increase with the use of fertility medications, which are commonly prescribed alongside IUI to stimulate ovulation (Sermondade et al., 2020). Although IUI is generally less expensive than IVF, repeated cycles can accumulate significant costs, which may be challenging for couples, especially when insurance coverage for fertility treatments is limited or unavailable (Steiner et al., 2021).

The emotional toll of IUI can also be considerable. The uncertainty and unpredictability of success rates often lead to stress, anxiety, and disappointment, particularly in cases of repeated failure. This can put strain on relationships and affect mental health (Verhaak et al., 2007). In addition, fertility medications used in IUI cycles can cause side effects such as mood swings, bloating, and headaches. In rare cases, these medications may lead to ovarian hyperstimulation syndrome (OHSS), which adds further physical and emotional challenges to the process (Tan et al., 2019).

4.0 Conclusion

the acceptability of assisted reproductive technology (ART) among couples is shaped by a variety of interrelated factors, including cultural, social, psychological, economic, and medical influences. For many couples, ART offers a glimmer of hope in overcoming infertility, enabling them to achieve their dreams of parenthood. However, for others, the emotional, ethical, and financial challenges associated with these treatments can create significant barriers. As awareness of ART increases and its availability improves, particularly in societies that place high value on childbearing, it is expected that its acceptability will continue to grow. This shift will likely be fueled by technological advancements and a greater societal openness towards assisted reproduction.

Despite the potential for increased acceptance, several challenges remain. One of the most significant obstacles is the cost of ART, which can be prohibitively expensive for many couples, particularly in regions where insurance coverage is limited or unavailable. In addition to financial concerns, cultural and ethical considerations, such as views on embryo freezing, gamete donation, and surrogacy, may impact the willingness of couples to pursue ART. Psychological factors, such as the emotional toll of treatment cycles, the stress of uncertainty, and the disappointment of unsuccessful attempts, also play a crucial role in decision-making. These challenges, however, do not diminish the growing recognition of ART as a viable solution for infertility. As societal attitudes evolve and support systems for individuals undergoing ART improve, acceptance of these technologies is expected to rise.

Furthermore, counseling and educational interventions can help couples navigate the complexities of ART, ensuring that they make well-informed decisions that align with their personal, cultural, and financial contexts. By providing guidance and emotional support, healthcare providers can help alleviate the psychological strain associated with ART and empower couples to approach the process with a clearer understanding of the options available to them. As medical advancements continue and societal perceptions of ART continue to evolve, the acceptance of these reproductive technologies is likely to expand, ultimately broadening the reproductive choices available to couples worldwide and improving their ability to achieve their desired family-building outcomes.

5.0 Recommendations

1. Healthcare providers and reproductive clinics have to elucidate ART alternatives, success rates, and prices in clear terms to enable couples to make educated decisions.

2. Access to counselling and support groups can assist couples in managing the emotional strain of ART and enhance their preparedness for the process.
3. Expanding insurance coverage for ART would help more couples afford treatments.
4. Governments could provide subsidies or financial aid to cut prices, especially for low-income families.
5. Physicians and counsellors must approach ART with consideration for a couple's cultural or religious convictions.
6. Bringing community leaders and religious groups into discussions regarding ART could assist enhance acceptability.
7. Research can enhance ART success rates, reduce adverse effects, and render treatments less intrusive.
8. Innovating cost-effective ART alternatives will enhance the accessibility of these therapies, particularly in resource-constrained regions.
9. Governments should have clear rules around ART to address concerns including donor rights, surrogacy, and embryo use, preserving couples' rights.
10. Regulating ART techniques guarantees their safety and that couples are fully informed of their rights.

References

Anderson, R. E., Kallen, S. K., & Olsson, R. M. (2017). The role of ovulation induction in intrauterine insemination cycles: A review of the literature. *Human Reproduction Update, 23*(2), 203-215.

Bankowski, Z. (2019). *Legal regulation of assisted reproductive technologies: A global perspective*. Cambridge University Press.

Balen, A. H., Mohamed, H. A., & Williams, R. L. (2010). *Cultural differences and infertility treatment in the Middle East and North Africa*. Cambridge University Press.

Berger, M. L., Ramachandran, A., & Wajnberg, A. (2017). Surrogacy: An overview of the medical, legal, and ethical aspects. *Journal of Reproductive Medicine, 62*(5), 277-283.

Blake, D. E., Howard, M. L., & Horne, G. R. (2019). A cost comparison of IUI, IVF, and ICSI: Economic implications for fertility treatment. *Fertility and Sterility, 111*(5), 978-985.

Boivin, J., Bunting, L., Collins, J., & Nygren, K. G. (2018). The global prevalence of infertility: A systematic review. *Human Reproduction Update, 24*(1), 8-23.

Blyth, E., & Farrand, M. (2018). *Ethical dilemmas in assisted reproductive technology: A global perspective*. Springer.

Cohen, J., Lotz, M., & Kwan, I. (2012). Success rates and safety of gamete intrafallopian transfer. *Fertility and Sterility, 97*(2), 324-330.

Cooper, T. G., Noonan, E., & Bielecki, R. (2022). The success rates of assisted reproductive technologies: A comparison of IVF and IUI. *Fertility and Sterility, 117*(4), 792-801.

Cunningham, F. G., & O'Rourke, T. (2015). Ethical issues in fertility and reproduction. *Journal of Fertility Research, 22*(2), 133-142.

De la Cruz, M. P., Santiago, J. M., & Cabrera, S. A. (2019). Assisted reproduction for same-sex couples and single women: A review of current options. *Journal of Assisted Reproduction and Genetics, 36*(7), 1349-1356.

De Neubourg, D., Wisanto, A., & D'Hooghe, T. (2021). Multiple pregnancies after IUI: Risk factors and outcomes. *Human Reproduction, 36*(2), 380-388.

Donnay, S. S., Choudhury, S., & Sills, E. S. (2017). Sperm donation: Understanding ethical and legal challenges. *Human Reproduction, 32*(11), 2348-2354.

Domar, A. D., Scheiber, M., & LaCoursiere, D. (2020). Emotional distress and psychological stress in infertility treatment. *Fertility and Sterility, 113*(3), 563-570.

Dube, S. (2021). Public perception of assisted reproduction: Trust and concerns. *Reproductive Health Review, 9*(1), 45-59.

Fertility and Sterility. (2020). Assisted reproductive technology and its success rates: A review of IUI outcomes. *Fertility and Sterility, 113*(1), 135-142.

Gardner, D. K., & Lane, M. (2012). In vitro fertilization: A current perspective. *Reproductive Biology and Endocrinology, 10*, 89.

Golub, A. (2019). Emotional and psychological effects of infertility treatments. *Journal of Reproductive Medicine, 43*(4), 257-262.

Gordts, S., Sunkara, S. K., & Broekmans, F. (2019). Intrauterine insemination versus IVF: A meta-analysis of live birth rates. *Reproductive BioMedicine Online, 39*(5), 844-852.

Haas, J. L., Ginsburg, E. S., & Banerjee, S. (2020). The effects of age on success rates in assisted reproductive technology. *Journal of Assisted Reproduction and Genetics, 37*(6), 1593-1601.

Hammarberg, K., & Fisher, J. (2012). Ethical and emotional aspects of assisted reproductive technology. *Human Reproduction Update, 18*(3), 321-329.

HFEA. (2020). Costs of assisted reproductive technologies and financial assistance. *Human Fertilisation and Embryology Authority*.

Hussain, I., Ali, A., & Azeem, M. (2014). Intrauterine insemination for unexplained infertility: A prospective study. *Journal of Clinical Gynecology and Obstetrics, 3*(6), 118-122.

Inhorn, M. C. (2015). *Infertility and patriarchy: The cultural politics of gender and family life in Egypt*. Temple University Press.

Johnson, N., Gell, L., & Fisher, J. (2020). Comparative costs and outcomes of assisted reproductive techniques. *Reproductive Health, 17*(1), 85-92.

Jones, H. E., & Norman, J. E. (2018). The effectiveness of IUI in women with ovulatory dysfunction: A review of the evidence. *Human Reproduction, 33*(6), 1115-1121.

Lamb, J. M., Barron, M. L., & Rogers, C. D. (2016). IVF for blocked fallopian tubes: An analysis of clinical outcomes. *Reproductive Biology and Endocrinology, 14*, 49.

Macklon, N. S., Fauser, B. C. J. M., & Sirbu, C. (2017). The regulation of assisted reproductive technologies and its implications for ART acceptability. *Journal of Reproductive Medicine, 62*(3), 126-131.

Moolenaar, L. M., Grol, R., & Lemmens, J. (2019). Factors influencing the success of intrauterine insemination: A review of clinical and psychological factors. *Fertility and Sterility, 112*(4), 728-737.

O'Leary, A. (2018). Infertility and assisted reproductive technology: A public health challenge. *Journal of Community Health, 38*(4), 617-623.

Pallav, K., & Kulshreshtha, A. (2015). Assisted reproductive technology: Ethical challenges in different cultures. *Journal of Medical Ethics, 41*(5), 373-377.

Schmidt, L., Danner, M., & Grollemund, C. (2017). The ethics of egg donation: Implications for recipients and society. *Fertility and Sterility, 108*(2), 214-220.

Schellekens, J., Vermeulen, K., & Lansink, J. (2021). Psychological outcomes of fertility treatments: A study of intrauterine insemination versus in vitro fertilization. *Fertility and Sterility, 115*(4), 789-796.

Sermondade, N., Martinez, F., & Chen, H. (2020). Impact of ovarian reserve on fertility outcomes. *Human Reproduction Update, 26*(5), 594-604.

Sharara, F. I., McClamrock, H. D., & Jindal, S. (2021). Ovarian hyperstimulation syndrome in IUI: Risk factors and management strategies. *Journal of Assisted Reproduction and Genetics, 38*(5), 921-928.

Shah, D. K., Hull, M. G., & Klentzeris, S. (2018). Intrauterine insemination and its indications in assisted reproduction: A clinical guide. *Human Reproduction, 33*(2), 277-284.

Steiner, A. Z., Norton, M. E., & Cumming, D. (2021). Cost and access to fertility treatments. *Fertility and Sterility, 116*(3), 667-674.

Sundaram, R., Mumford, S. L., & Buck Louis, G. M. (2018). Intrauterine insemination: Factors influencing success rates. *Fertility and Sterility, 109*(4), 667-673.

Sullivan, M., & Keegan, L. (2017). Ethical dilemmas in the use of assisted reproductive technologies. *Bioethics and Human Rights, 25*(1), 76-81.

Tan, Y., Lu, Y., & Lin, T. (2019). Ovarian hyperstimulation syndrome in women undergoing fertility treatment: Risks and management strategies. *Frontiers in Endocrinology, 10*, 107.

Timmerman, D., Haan, M., & Kuiters, P. (2016). Assisted reproductive techniques: Implications for women's health. *The Lancet, 388*(10060), 2415-2425.

Vlahos, N. F., Kalogiannidis, I., & Sgouras, D. (2017). Clinical outcomes in assisted reproductive technology: A focus on egg retrieval and embryo transfer. *Reproductive Biology and Endocrinology, 15*(1), 35.

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