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Cultural and Religious Practices Over Evidence-Based Science in Deciding the Range of Assisted Reproductive Technology Offered

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Abstract:

Background: Infertility affects approximately one in eight couples globally and is influenced by medical, sociocultural, and religious factors. Assisted reproductive technology (ART) offers hope to individuals facing infertility, yet cultural and religious norms significantly affect its accessibility, acceptance, and utilization worldwide.

Objective: To explore the impact of cultural and religious practices on the acceptance and application of evidence-based ART.

Methods: This narrative review analyzes recent literature; relevant published reviews on the topic were searched on PubMed, Google Scholar, Medline, and the Cochrane Library on ART usage patterns across diverse cultural and religious contexts. It examines the interplay between theological doctrines, ethical considerations, and societal norms in ART decision-making. Data from global studies support the findings.

Results: Cultural and religious beliefs dictate ART accessibility, with pronounced disparities between secular and theocratic regions. While Shi'a Islam, Hinduism, Buddhism, and Judaism demonstrate high acceptance levels for ART, Catholicism and Orthodox Christianity exhibit restrictive stances. These constraints lead to cross-border infertility tourism, where patients seek treatments unavailable in their home countries. Additionally, in settings like Bangladesh, financial and societal pressures amplify ART inaccessibility.

Conclusions: Cultural and religious frameworks significantly shape ART policies and practices. Bridging the gap between these frameworks and evidence-based science requires collaborative efforts among stakeholders, including medical professionals, religious leaders, and policymakers, to ensure equitable access to ART.

Keywords: Assisted Reproductive Technology (ART), Cultural practices, Cross-border infertility tourism, Evidence-based medicine, Infertility, Policy, Religious beliefs

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Introduction:

Infertility is a global health problem and a medical, sociocultural, and cultural issue related to gender-based misery. One in eight couples has fertility issues[1]. Infertility treatment—including assisted reproductive technology (ART)—is a human right. ART becomes important as people delay having children. Personal, national, and economic factors influence ART usage. Preference for ART is not just based on price. Cultural values may explain inequalities in ART use[2]. Most ART centres provide evidence-based techniques, although the utilisation of ART varies greatly[3].

Culture and religion hindered early ART acceptance. Religious beliefs and social acceptability influence people's ART treatment choices. ART consumption closely correlates with a country's Protestant, Catholic, Orthodox, Muslim, Hindu, and Buddhist religious communities[4].

Cultural views also affect its use in countries where ART is socially acceptable. In a society where ART is widely used, ART is a public good, and the government has helped LGBTQIA groups, singles, and low-income persons obtain services. Protestantism was linked to higher ART uptake. In countries where the Catholic

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Church opposes ART and wields political power, ART is rarely used or accessible[5]. This forces people to travel abroad for treatment.

Governments, medical organisations, and ART providers should acknowledge the impact of opinions and acceptability on accessibility, availability, and usage. However, local cultural and religious practices might shape ART policy to facilitate enhanced access to it worldwide [2].

Materials & Methods:

This narrative review explores the impact of cultural and religious practices on the acceptance and application of evidence-based Assisted Reproductive Technology (ART). To gather relevant data, recent literature on ART usage patterns across various cultural and religious contexts was reviewed. The following databases were searched for relevant publications: PubMed, Google Scholar, Medline, and the Cochrane Library. The review specifically focused on published studies, reviews, and articles addressing ART practices, cultural beliefs, and religious perspectives.

The data analyzed includes studies from global perspectives. Studies focused on the ethical, moral, and societal norms that influence ART decision-making and statistical insights into ART usage patterns across different religious and cultural groups. The literature review examined how theological doctrines and ethical considerations intersect with societal norms to shape ART acceptance.

Discussion:

Why is Local Culture and Religious Practice important in ART?

Religion, culture, philosophy, and ethics worldwide debate the embryo's morality. Stem cell research has been controversial since cloning embryos. Religious concern for family formation and reproduction has again questioned human origins, identity, and dignity. ART has revived the issue of when to honor a new human life (6). The destruction of the ART conceptus 'incurs the karmic load of killing in religions like Buddhism and Hindu'. This view's ethics are the same as the Catholic idea that "ensoulment" occurs when the egg is fertilized, despite distinct metaphysics. From then on, embryos' rights—the right of every innocent human being to live—must be recognized (7). Catholicism, traditional Hinduism, and Buddhism consider embryoid murder. If the principle of double impact is used, it can also be considered manslaughter. This precludes sex selection, PGD, and hazardous embryo research (8). All involve innocent murder. Embryo freezing may kill the embryos or make them unneeded for the couple's requirements. In-vitro fertilization (IVF) is risky since it creates beings outside the mother's womb. The embryo is extremely defenceless and deserves our care (8). It also slows personhood, allowing ethical embryo annihilation for infertility treatments or scientific research.

Impact of local cultural and religious practices over evidence-based ART acceptance:

More than only its precepts, religion is complex. Emotional and commitment levels are involved. It is a "cultural system" passed down (9). It develops life thought by implementing a widely acknowledged set of moral and spiritual disciplines (10). Religion is practised most at home. Without offspring, traditional women lose status. Religion and culture affect decision-making everywhere. Even if it is in their best interests, patients choose treatments based on religion in medical science. As expected, religious intellectuals respond thoughtfully to this critique (11). Family formation will remain its main business as long as religion is a significant human activity. Religion and policymakers impact ART use in the country. The doctor must accommodate such amenities in that location (8).

Globally, demand for ART is rising for various reasons. ART is needed in numerous countries. Based on religious and cultural origins and current norms and regulations, ART provision and access vary greatly from country to country. Healthcare practitioners must understand patients' religious and cultural beliefs before administering ART (12). In some countries, ART practitioners may feel morally conflicted. If so, they must refer the patient to an institution that allows it (13).

Based on the information provided in Table 1 from Dutney's 2007 study, religious perspectives on infertility vary significantly across different traditions. The concept of procreation as a sacred duty is emphasised in Hinduism, Buddhism, and Judaism but not explicitly in Christianity or Islam. Infertility is often viewed through the lens of divine intervention or spiritual causality, with Islam and Christianity attributing it to God's will. At the same time, Hinduism and Buddhism relate it to the

Table-I

View towards infertility by participants from different religions[8]

	Islam	Christianity	Hinduism	Buddhism	Judaism
Reproduction is a sacred duty.			"	"	"
God enforces Infertility	"	"			"
Infertility is brought on by karma			"	"	
Unrighteous behaviour is punished by infertility.	"	"	"	"	"
A higher calling is indicated by Infertility.		"	"	"	

workings of karma. Across all examined religions, unrighteous behaviour is perceived as a possible cause of infertility, reflecting a shared moral dimension. Interestingly, infertility is also interpreted as a sign of a higher spiritual calling in Christianity, Hinduism, and Buddhism, suggesting a nuanced understanding of its significance beyond personal or social misfortune. This diversity underscores how religious doctrines shape attitudes towards infertility and its broader implications [8].

(IUI-intrauterine Insemination, ICSI-intracytoplasmic sperm injection, PGD-Preimplantation genetic diagnosis)

Based on Table 2 from Sallam et al. (2016), religious perspectives on evidence-based Assisted Reproductive Technologies (ART) vary widely across the world's religions. Shi'a Islam, Hinduism, Buddhism, and Judaism show the highest level of acceptance, endorsing all techniques, including IUI, IVF/ICSI, PGD, surrogacy, gamete donation, and fetal reduction. Sunni Islam generally permits ART but prohibits gamete donation, and debates on surrogacy remain ongoing. Japanese and Chinese perspectives align with cultural nuances, accepting many ART forms but restricting surrogacy and gamete donation. Christianity's branches exhibit significant divergence: Catholicism rejects all forms of ART, while Orthodox, Protestant, Anglican, and Coptic traditions allow limited practices, primarily those not involving third-party gametes or embryos. These differences highlight how cultural and theological frameworks shape religious stances on modern reproductive technologies[14].

Following Louise Brown's birth, ART became widely used but was complicated by cultural, ethical, social, and theological difficulties[15]. In the developed West, when adults' freedom to make their own worthwhile

Table-II

Summary of the prevailing religion in the world and their view toward evidence-based ART (14)

	IUI	IVF/ICSI	PGD	Surrogacy	Gamete Donation	Fetal reduction
Sunni Islam	"	"	"	Debating	X	"
Shi's Islam	"	"	"	"	"	"
Hinduism	"	"	"	"	"	"
Buddhism	"	"	"	"	"	"
Japan	"	"	"	X	Sperm only	"
China	"	"	"	X	X	"
Catholic	X	X	X	X	X	X
Orthodox	"	X	X	X	X	X
Protestants	"	"	X	X	X	X
Anglicans	"	"	X	X	X	X
Coptic	"	"	"	X	X	X
Judaism	"	"	"	"	"	"

decisions was only restricted by the law and religion, the concept of individual self-determination played an important role. Their situation, however, is distinct from that of the East and other areas. Many infertile couples have experienced ART limitations due to their religious convictions or have travelled across borders to receive ART limitations imposed by law or religion in their country. This emphasis on autonomy does not exist in the cultures of all nations.

Impact of Local Cultural and religious practices on infertility tourism:

Cross-border travel for commercially available ARTs like IVF, PGD, gamete procurement, surrogacy, and others are called "fertility tourism," "cross-border reproductive care (CBRC)," or "reproductive exile" (16). Cross-border ART, or reproductive tourism, is when couples or single women cross borders to get illegal ART in their home countries[17].

Governments enact laws and regulations that vary from nation to nation and do not adhere to all cultures and religions. Accepting or rejecting outside help in ART is a key area of distinction. Some countries forbid it for religious or legal grounds. Public funding, fertility preservation before cancer treatment, and third-party donation were the major legislative changes concerning religion and local (18).

Infertile tourism offers the chance to avoid waiting lists, regulatory barriers, and economic and accessibility issues. Depending on the service, international medical treatment may be sought for complex reasons (16).

All CBRC candidates want a genetically linked child, cannot conceive naturally, and are willing to spend much money despite having different reasons for CBRC.

Should medical personnel offer evidence-based ART options based on local Culture and religion?

Healthcare providers need to be knowledgeable about spirituality and religion, how they relate to family formation and infertility, and the prevalence of religious identification in their community and its various forms. They will be better able to provide appropriate care because a specific couple may not share the same beliefs as the organisation representing their religion. Support the patient's gradual "reframing" of faith in light of infertility instead of attempting to "correct" apparent wrongheadedness (such as "This is God's judgement on us because of the termination I had when I was nineteen"), such as "God has also given us access to ART and the wonderful people in this RMU and is with us as we work through this IVF cycle together." Find clergy or priests with experience in infertility who can offer patients pursuing IVF spiritual assistance despite religious or cultural barriers[8].

Impact of Local Cultural and Religious Practices on Infertility Care in Bangladesh:

In Bangladesh, the influence of local cultural and religious practices significantly shapes infertility care. Islamic principles, which dominate the religious landscape, generally support medical interventions for infertility as long as they align with Sharia law, such as prohibiting third-party involvement in ART like surrogacy or sperm donation (19). Cultural stigmatisation of infertility, often perceived as a social failure, compels couples to seek treatment. However, accessibility and acceptance of ART remain limited due to financial constraints, lack of awareness, and societal taboos (20). Societal pressure often directs couples towards traditional remedies or clandestine ART services, further complicating ethical and medical considerations (21). Addressing these barriers requires integrating culturally sensitive health education and policy adjustments to ensure equitable access to evidence-based infertility care.

Conclusion:

Human minds are built to encourage social perception. For the community's general health and cohesion, local cultural values and religious practice should take precedence over independent thought and intellectual conformity while embracing evidence-based research from various viable ART choices. The difficulties necessitate constructive communication between patients, medical personnel, governmental organisations, religious organisations, anthropologists, ethicists, and attorneys.

Conflict of interest: None

References:

1. Hasanpoor-Azghdy SB, Simbar M, Vedadhir A. The emotional-psychological consequences of infertility among infertile women seeking treatment: results of a qualitative study. Iran J Reprod Med. 2014;12(2):131–8.
2. Präg P, Mills MC. Cultural determinants influence assisted reproduction usage in Europe more than economic and demographic factors. Hum Reprod. 2017;32(11):2305–14. doi:10.1093/humrep/dex298.

3. Hiadzi RA, Boafo IM, Tetteh PM. 'God helps those who help themselves'… religion and assisted reproductive technology usage amongst urban Ghanaians. PLoS One. 2021;16(12):e0260346. doi:10.1371/journal.pone.0260346.

4. Campbell L, Masquillier C, Thunnissen E, Ariyo E, Tabana H, Sematlane NP, et al. Social and structural determinants of household support for ART adherence in low- and middle-income countries: a systematic review. Int J Environ Res Public Health. 2020;17(22):8290. doi:10.3390/ijerph17228290.

5. Tam MW. Queering reproductive access: reproductive justice in assisted reproductive technologies. Reprod Health. 2021;18(1):164. doi:10.1186/s12978-021-01214-8.

6. Edubirdie. Religious views on cloning and technology: analytical essay [Internet]. Available from: https://edubirdie.com/examples/religious-views-on-cloning-and-technology-analytical-essay/. [Accessed 12 Aug 2023].

7. Fortier C. Religious and non-religious issues of medically assisted reproduction in France: sexuality, incest and descent. Reprod Biomed Soc Online. 2020;11:73–81. doi:10.1016/j.rbms.2020.10.002.

8. Dutney A. Religion, infertility and assisted reproductive technology. Best Pract Res Clin Obstet Gynaecol. 2007;21(1):169–80. doi:10.1016/j.bpobgyn.2006.09.007.

9. Geertz C. Art as a cultural system. MLN. 1976;91(6):1473. doi:10.2307/2907147.

10. Lindbeck GA. The nature of doctrine: religion and theology in a postliberal age. Philadelphia: Westminster Press; 1984. Available from: https://archive.org/details/natureofdoctrine0000lind.

11. McGrath A. The twilight of atheism: the rise and fall of disbelief in the modern world. Colorado Springs: WaterBrook; 2007. Available from: https://www.amazon.com/Twilight-Atheism-Disbelief-Modern-World-ebook/dp/B0013380YG.

12. De Mouzon J, Chambers GM, Zegers-Hochschild F, Mansour R, Ishihara O, Banker M, et al. International Committee for Monitoring Assisted Reproductive Technologies world report: assisted reproductive technology 2012. Hum Reprod. 2020;35(8):1900–13. doi:10.1093/humrep/deaa090.

13. Serour GI, Serour AG. The impact of religion and culture on medically assisted reproduction in the Middle East and Europe. Reprod Biomed Online. 2021;43(3):421–33. doi:10.1016/j.rbmo.2021.06.002.

14. Sallam HN, Sallam NH. Religious aspects of assisted reproduction. Facts Views Vis ObGyn. 2016;8(1):33–48.

15. Feichtinger W, Kemeter P. Future aspects in human in-vitro fertilisation (SV). Berlin: Springer-Verlag; 1987. Available from: http://niilibrary.nii.res.in/cgi-bin/koha/opac-detail.pl?biblionumber=1684.

16. Deonandan R. Recent trends in reproductive tourism and international surrogacy: ethical considerations and challenges for policy. Risk Manag Healthc Policy. 2015;8:111–9. doi:10.2147/RMHP.S63862.

17. Inhorn MC. Right to assisted reproductive technology: overcoming infertility in low-resource countries. Int J Gynecol Obstet. 2009;106(2):172–4. doi:10.1016/j.ijgo.2009.03.034.

18. Calhaz-Jorge C, De Geyter C, Kupka MS, Wyns C, Mocanu E, Motrenko T, et al. Survey on ART and IUI: legislation, regulation, funding and registries in European countries. Hum Reprod Open. 2020;2020(1):hoz044. doi:10.1093/hropen/hoz044.

19. Saniei M, Kargar M. Modern assisted reproductive technologies and bioethics in the Islamic context. Theol Sci. 2021;19(2):146–54. doi:10.1080/14746700.2021.1910914.

20. Sayed Saikh Imtiaz, Rahman T, Boby HA, Chowdhury S, Sami S, Naser MA. Infertility in SRHR lens: policy & practices. Share-Net Bangladesh; 2021. Available from: https://www.share-netbangladesh.org.

21. The Daily Star. Couples struggle with infertility due to societal stigma and lack of treatment access [Internet]. 2021. Available from: https://www.thedailystar.net.