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Review Article

Impact of culture and religion on assisted reproductive technologies in India: a comprehensive review

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ABSTRACT

Assisted reproductive technologies (ART) have emerged as important medical interventions for infertility; however, their acceptance and utilization are strongly influenced by cultural and religious beliefs, particularly in a diverse country like India. This review explores the impact of cultural diversity and religious perspectives on the perception and practice of ART in the Indian context. Indian society places significant importance on marriage, parenthood, lineage continuation, and family honour, which contributes to the social stigma associated with infertility, especially for women. Regional cultural variations across North, South, East, West, and North-East India further shape attitudes toward infertility treatment, access to fertility services, and acceptance of procedures such as in vitro fertilization (IVF), gamete donation, and surrogacy. Religious beliefs also play a major role in reproductive decision-making. Hinduism generally demonstrates a permissive approach toward ART, whereas Islam restricts third-party reproduction to preserve lineage. Christian perspectives vary across denominations, with Roman Catholic teachings opposing most ART procedures, while protestant groups may permit selected interventions. Buddhism and Sikhism are comparatively flexible, whereas Jainism adopts a cautious ethical stance emphasizing non-violence. The review additionally discusses the ethical and socio-legal implications of surrogacy and highlights the influence of recent Indian legislation, including the surrogacy (Regulation) Act, 2021 and the Assisted reproductive technology (Regulation) Act, 2021. Understanding these cultural and religious dimensions is essential for promoting culturally competent fertility counselling, ethical reproductive healthcare, and equitable access to ART services in India.

Keywords: Assisted reproductive technologies, Culture, Religion, Surrogacy, Infertility, Buddhism, Christianity, Hinduism, Islam, ICSI, IVF

INTRODUCTION

Infertility is a significant public health concern that affects millions of couples worldwide and has profound social, psychological, and cultural consequences. In India, parenthood is often regarded as an essential component of marriage and family life. The inability to conceive may lead to emotional distress, social stigma, marital strain, and reduced social status, particularly for women.¹ Advances

in assisted reproductive technologies (ART), including *in vitro* fertilization (IVF), Intracytoplasmic sperm injection (ICSI), gamete donation, and surrogacy, have transformed the management of infertility and provided new opportunities for individuals and couples seeking parenthood.² Despite these medical developments, the acceptance and utilization of ART are influenced not only by clinical considerations but also by cultural traditions, social norms, and religious beliefs. Indian society places

strong emphasis on family continuity, lineage preservation, and childbearing. In many communities, children are viewed as essential for maintaining family identity, fulfilling social expectations, and ensuring care in later life.³

Consequently, infertility is frequently associated with stigma and may disproportionately affect women, even when male-factor infertility is present.⁴ Such cultural pressures often motivate couples to pursue fertility treatment while simultaneously shaping their perceptions of acceptable reproductive options. Religion represents another important determinant of reproductive decision-making. Hinduism generally adopts a flexible approach toward ART, although opinions may differ regarding donor gametes and surrogacy.⁵ Islamic teachings permit ART only within the marital relationship and generally prohibit third-party reproductive involvement to preserve lineage and inheritance rights.⁶ Christian perspectives vary among denominations, with Roman Catholic teachings opposing most forms of ART that separate procreation from natural conception, whereas many Protestant denominations accept selected reproductive interventions under specific ethical conditions.¹⁰⁻¹² Other faith traditions practiced in India, including Buddhism, Sikhism, and Jainism, also provide distinct ethical frameworks that influence attitudes toward infertility treatment. The interaction between culture, religion, and reproductive healthcare is particularly important in India because of its

remarkable social and religious diversity. Although fertility services have expanded considerably in recent years, cultural expectations, religious values, and ethical concerns continue to influence treatment acceptance, healthcare-seeking behaviour, and patient experiences.¹³⁻¹⁶

Therefore, understanding the cultural and religious factors that influence attitudes toward ART is important for providing patient-centred fertility care, improving counselling services, and ensuring fair access to reproductive treatment. This review examines how cultural diversity and religious beliefs affect the perception, acceptance, and utilization of ART in India, and discusses the ethical and regulatory challenges that accompany their use.

CULTURAL DIVERSITY IN INDIA AND ITS IMPACT ON ART

In India, decisions related to infertility and ART are influenced not only by medical factors but also by cultural beliefs and social expectations. As a culturally diverse country with different traditions, languages, and lifestyles, attitudes toward infertility and fertility treatment vary across regions.

Family expectations, gender roles, cultural practices, economic conditions, and access to healthcare all play an important role in shaping how people perceive and accept ART.⁵⁻⁷

Table 1: Regional cultural influences on acceptance and utilization of ART in India.

S. no.	Region	Cultural characteristics	Impact on ART
1.	North India	Patriarchal family structures, emphasis on lineage and male heirs	Higher demand for ART but concerns regarding donor gametes and surrogacy
2.	South India	Better healthcare access and higher awareness	Greater acceptance and utilization of ART
3.	East India	Traditional beliefs combined with social change	Increasing awareness but financial barriers remain
4.	West India	Urbanization and advanced fertility services	Wider ART use and historical prominence of surrogacy
5.	North-East India	Tribal traditions, religious diversity, limited fertility infrastructure	Growing awareness but restricted access to specialized services

Table 2: Comparison of religious perspectives on assisted reproductive technologies.

S. no.	Religion	General attitude toward ART	Third-party reproduction	Key ethical concern
1.	Hinduism	Generally acceptable	Conditional acceptance	Karma, lineage
2.	Islam	Restricted	Generally prohibited	Preservation of lineage
3.	Christianity	Mixed views	Often restricted	Sanctity of life
4.	Buddhism	Flexible	Depends on circumstances	Intention and compassion
5.	Jainism	Cautious	Generally discouraged	Ahimsa (non-violence)
6.	Sikhism	Generally acceptable	Limited acceptance	Family integrity

North India

In North India, family and lineage are often given great importance, and having children is commonly viewed as an essential part of married life. In many communities, there is still a strong expectation to have a biological child, particularly a male heir.

As a result, infertility can lead to social pressure and emotional distress, especially for women, who are often blamed despite infertility affecting both partners. These social expectations encourage many couples to seek ART treatments. However, procedures involving donor sperm, donor eggs, or surrogacy may face resistance because of concerns about family lineage, inheritance, and social acceptance.^{5,7,20}

South India

Compared with other regions, South India generally demonstrates greater awareness and acceptance of fertility treatments.

Higher literacy levels, better healthcare facilities, and easier access to fertility clinics have contributed to the wider use of ART in states such as Kerala and Tamil Nadu. Although parenthood remains highly valued, infertility is often discussed more openly, and couples may be more willing to consider treatments such as IVF and other assisted reproductive procedures.^{4,6}

East India

In Eastern India, views on infertility and ART are influenced by both traditional beliefs and changing social attitudes. Awareness of fertility treatments has improved, especially in cities such as Kolkata, where more people are becoming familiar with available reproductive options.

However, the use of these treatments is still limited for many couples because of financial difficulties and unequal access to specialized healthcare services. In some communities, beliefs about fate, destiny, or karma may also influence decisions about seeking treatment, leading some couples to delay medical help.^{5,6}

West India

Western India reflects a blend of traditional family values and modern healthcare practices. Major cities such as Mumbai have become important centres for fertility treatment and have contributed to the growing acceptance of ART. The region also played a significant role in the development of commercial surrogacy in India. While this increased access to reproductive services, it also raised ethical concerns regarding exploitation and commercialization, eventually leading to stricter legal regulations.^{6,7,20}

North-East India

The North-Eastern states have a distinct cultural identity shaped by tribal traditions, community values, and religious diversity. Views on infertility and ART are influenced by local customs, traditional healing practices, and varying levels of healthcare access. Although awareness of fertility treatments has improved with increasing education and urbanization, access to specialized fertility services remains limited in many areas. As a result, many couples travel to larger cities outside the region to seek treatment. The religious and cultural diversity of the region further contributes to varying opinions regarding reproductive technologies.¹⁻³

Overall, the acceptance and use of ART in India are influenced by a complex interaction of cultural values, social expectations, economic factors, and healthcare accessibility. Understanding these regional differences is important for providing culturally sensitive fertility care and ensuring that reproductive services are accessible to individuals from diverse backgrounds.

COMPARISON OF RELIGIOUS VIEWS ON ASSISTED REPRODUCTIVE TECHNOLOGIES

Religious beliefs play an important role in how people view infertility and fertility treatments. Different religions have different opinions about ART, especially regarding procedures such as donor sperm, donor eggs, surrogacy, and embryo handling. These beliefs can influence the decisions couples make about seeking fertility treatment and choosing specific reproductive options.

Table 3: Comparison of religious perspectives on ART.

Religion	General attitude toward ART	Third-party reproduction (donor/surrogacy)	Key ethical concern
Hinduism	Generally acceptable	Conditional acceptance	Karma, lineage, caste implications
Islam	Restricted	Not allowed	Preservation of lineage (NASAB)
Christianity	Mixed views	Often restricted (Catholicism)	Sanctity of life, natural conception
Buddhism	Flexible	Depends on intention and ethics	Moral status of embryo, intention
Jainism	Cautious	Generally discouraged	Non-violence (Ahimsa)
Sikhism	Acceptable	Limited acceptance	Family integrity, marital boundaries

The comparison highlights that religious perspectives on ART are diverse and are shaped by different ethical, social, and spiritual values. While some religions view ART as an acceptable means of overcoming infertility, others place restrictions on certain procedures, particularly those involving third-party reproduction. Concerns related to lineage, family structure, sanctity of life, and moral responsibility frequently influence these viewpoints.⁸⁻¹⁶

Overall, Hinduism, Buddhism, and Sikhism tend to be more accepting of ART when it is used to help couples achieve parenthood. In contrast, Islamic and Catholic Christian teachings impose stricter limitations, especially regarding donor gametes and surrogacy. Jainism adopts a cautious approach because of its emphasis on non-violence and respect for all forms of life. These differences demonstrate the importance of culturally sensitive fertility counselling, as patients often make reproductive decisions based on both medical advice and religious beliefs.^{1,3,16}

Hinduism and cultural acceptance of ART and surrogacy

Hinduism generally adopts a flexible approach toward assisted reproductive technologies. The desire to have children is closely linked to family continuity, social responsibility, and the fulfilment of dharma. As a result, infertility is often viewed as a condition that can be addressed through appropriate medical intervention, and most ART procedures are considered acceptable within marriage.⁵

Hindu traditions have historically emphasized the importance of lineage and progeny, which may contribute to the relatively positive acceptance of fertility treatments. Although donor gametes and surrogacy are often accepted, opinions may vary depending on family values, cultural practices, and concerns regarding lineage. Overall, the Hindu perspective reflects a practical approach that balances traditional values with advances in reproductive medicine.^{5,7}

Islamic perspectives on ART and surrogacy

Islamic views on ART are largely guided by the principle of preserving lineage and marital integrity. Procedures such as IVF and ICSI are generally permitted when both sperm and oocytes originate from a legally married couple and the treatment occurs within the marriage.^{8,9}

However, third-party reproduction, including sperm donation, egg donation, and surrogacy, is generally prohibited in Sunni Islam because it may create uncertainty regarding parentage and inheritance. Some Shia scholars permit selected forms of gamete donation under specific religious conditions, resulting in a more flexible approach in certain communities.^{9,10} These ethical considerations continue to influence reproductive decision-making among Muslim couples seeking fertility treatment.

Christian perspectives on ART and surrogacy

Christian views on ART differ across denominations. The Roman Catholic church generally opposes procedures that separate conception from natural marital relations and raises concerns regarding embryo creation, storage, and destruction.^{13,14} Consequently, IVF, donor gametes, and surrogacy are often viewed as ethically unacceptable within Catholic teaching.

In contrast, many Protestant denominations adopt a more moderate position and may accept certain ART procedures when they are used responsibly within marriage. Nevertheless, ethical concerns remain regarding embryo handling, third-party involvement, and the welfare of the child.^{11,12} These differing perspectives illustrate the diversity of Christian responses to reproductive technologies.

Buddhism, Sikhism, and Jainism: ethical and cultural dimensions

Buddhism generally supports actions that reduce suffering and promote well-being. As a result, ART may be considered acceptable when it helps individuals overcome infertility and does not cause harm. Ethical concerns mainly focus on intention, compassion, and the treatment of embryos.¹⁵

Sikhism does not explicitly prohibit ART and is generally supportive of fertility treatment when practiced within an ethical and family-centred framework. Although donor involvement may raise concerns for some individuals, reproductive technologies are often viewed as acceptable when used responsibly.¹⁶

Jainism adopts a more cautious approach because of its strong emphasis on ahimsa, or non-violence. Procedures involving embryo manipulation or destruction may raise ethical concerns, and decisions regarding ART are often influenced by the principle of minimizing harm.¹⁶ Overall, these faith traditions demonstrate how ethical values can shape reproductive choices while allowing varying degrees of acceptance toward ART.

CULTURAL INFLUENCES AND THE INDIAN CONTEXT OF SURROGACY

Cultural factors play a major role in shaping the acceptance and use of ART and surrogacy in India. In many Indian communities, marriage and parenthood are closely linked to social identity, family expectations, and cultural values. As a result, couples experiencing infertility often face emotional distress and social pressure, which may encourage them to seek fertility treatment.⁵

The desire to have a biological child and continue the family lineage has contributed to the growing demand for ART services across the country. In many cases, cultural expectations surrounding parenthood influence

reproductive decisions as much as medical advice. These social pressures can affect how individuals and families perceive infertility, donor conception, and surrogacy.^{5,6}

India was once considered a major destination for reproductive tourism because fertility treatments were relatively affordable and widely available. The rapid growth of commercial surrogacy created new opportunities for infertile couples but also raised ethical concerns regarding the exploitation of economically vulnerable women, commercialization of reproduction, and inadequate legal protection for surrogate mothers.^{6,7,19}

To address these concerns, the Government of India introduced the Surrogacy (Regulation) Act, 2021, which prohibits commercial surrogacy and permits only altruistic surrogacy under specific legal conditions.²⁰ In addition, the ART (Regulation) Act, 2021 was enacted to regulate fertility clinics, improve transparency, and promote ethical practices in reproductive healthcare.²¹

Although these regulations were introduced to protect the interests of patients, children, and surrogate mothers, they have also generated debate regarding access to reproductive services. Critics argue that certain provisions may limit reproductive choices for unmarried individuals and other groups seeking fertility treatment. This highlights the continuing challenge of balancing ethical concerns, cultural values, legal regulation, and reproductive autonomy in contemporary India.^{20,21}

CONCLUSION

Even though ART has come a long way in the last few years, deeply held cultural and religious beliefs still affect how people feel about it. In a country as diverse as India, these views differ greatly from one community to the next. This affects how couples make decisions, get treatment, and feel emotionally. Some religions are more open-minded than others, especially when it comes to third-party reproduction. To deal with these differences, we need culturally sensitive counselling, more awareness, and medical practices that are moral. Healthcare providers can better help patients and make sure that ART services are respectful and available to everyone if they understand religious points of view.

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REFERENCES

1. Ensafdaran F, Nejabat M, Sabetian S, Jahromi BN, Hemmati F. The effect of spiritual health on psychological distress of infertile women: the role of perceived social support as a mediator. *J Reprod Infertil.* 2024;25(4):290-8.
2. Kassa GM, Arowojolu AO, Odukogbe AA, Yalew AW. Attitude towards assisted reproductive

- technology: acceptance of donor eggs, sperms and embryos as treatment of human infertility: a systematic review and meta-analysis. *Reprod Health.* 2024;21:10.
3. Martin-Anatias N, Davies S. Exploring Muslim communities' experiences and barriers while accessing assisted reproductive technologies: a scoping review of international literature. *J Relig Health.* 2024;63:1-24.
4. Vijay AS, Syed F, Karri SK. Frontiers in fertility: a review of breakthroughs in assisted reproductive technology. *Int J Reprod Contracept Obstet Gynecol.* 2025;14(2):1-10.
5. Martin-Anatias N, Davies S. Exploring Muslim communities' experiences and barriers while accessing assisted reproductive technologies: a scoping review of international literature. *J Relig Health.* 2024;63:1-24.
6. Sarojini N, Marwah V, Sheno A. Globalisation of birth markets: a case study of assisted reproductive technologies in India. *Glob Health.* 2011;7:27.
7. Sharma RS. Social, ethical, medical and legal aspects of surrogacy: an Indian scenario. *Indian J Med Res.* 2014;140(1):S13-6.
8. Inhorn MC. Making Muslim babies: IVF and gamete donation in Sunni versus Shi'a Islam. *Cult Med Psychiatry.* 2006;30(4):427-50.
9. Shafi S. Islamic insights on assisted reproductive technology: navigating Sunni and Shi'a perspectives. *Res Rev Int J Multidiscip.* 2024;9(1):8-15.
10. Roberts RP. Religion and reproductive technology: Christian perspectives on assisted reproduction. *J Relig Health.* 2012;51(3):719-31.
11. Vijay AS, Syed F, Karri SK. Frontiers in fertility: a review of breakthroughs in assisted reproductive technology. *Int J Reprod Contracept Obstet Gynecol.* 2025;14(2):1-10.
12. Congregation for the Doctrine of the Faith. *Dignitas Personae: On Certain Bioethical Questions.* Vatican City: Libreria Editrice Vaticana, 2008. Available at: https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_en.html? Accessed on 23 April 2026.
13. Fehring RJ. A historical review of the Catholic scientists who answered the call of *Humanae Vitae*. *Linacre Q.* 2020;87(2):220-32.
14. Kassa GM, Arowojolu AO, Odukogbe AA, Yalew AW. Attitude towards assisted reproductive technology: acceptance of donor eggs, sperms and embryos as treatment of human infertility: a systematic review and meta-analysis. *Reprod Health.* 2024;21:10.
15. Sallam HN, Sallam NH. Religious aspects of assisted reproduction. *Facts Views Vis Obgyn.* 2016;8(1):33-48.
16. Halvaei I, Khalili MA, Ghasemi-Esmailabad S, Nabi A, Shamsi F. Zoroastrians support oocyte and embryo donation program for infertile couples. *J Reprod Infertil.* 2014;15(4):222-5.

17. Hackett C, Grim B, Stonawski M, Skirbekk V, Kuriakose N, Potancokova M. Methodology of the Pew Research global religious landscape study. In: Yearbook of International Religious Demography. Leiden: Brill; 2014:167-75.
18. Hanefeld J, Smith R, Horsfall D, Lunt N. What do we know about medical tourism? A review of the literature with discussion of implications for public healthcare systems. *J Travel Med.* 2014;21(6):410-7.
19. Government of India. The Surrogacy (Regulation) Act, 2021. New Delhi: Ministry of Law and Justice, 2021. Available at: <https://egazette.nic.in/WriteReadData/2021/230118.pdf?>. Accessed on 23 April 2026.
20. Government of India. The Assisted Reproductive Technology (Regulation) Act, 2021. New Delhi: Ministry of Law and Justice, 2021. Available at: <https://egazette.nic.in/WriteReadData/2021/230119.pdf?>. Accessed on 23 April 2026.

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