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REPRODUCTIVE JUSTICE BEYOND THE BINARY: CRITICAL OVERVIEW OF TRANSGENDER PARENTHOOD, LAW, AND MEDICAL ETHICS IN INDIA

Moumala Bhattacharjee^{1*}, Souvik Chatterji², Indranil Banerjee³ and Samrat Samaddar⁴

¹Research Scholar, Department of Juridical Sciences, JIS University

²Associate Professor, Department of Juridical Sciences, JIS University

³Assistant Professor, Department of Humanities, JIS University

⁴Student, Department of Juridical Sciences, JIS University

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Corresponding Author: Moumala Bhattacharjee
(moumala.bhattacharjee@jisuniversity.ac.in)

ABSTRACT

The biological parenthood has historically been understood through a cisgender and heteronormative lens. However, increasing recognition of transgender identities and their rights has led to a broader and more inclusive understanding of parenthood, one that acknowledges the distinct experiences of transgender individuals. For many within the transgender community, the path to biological parenthood is often intricate, involving medical, psychological, and social challenges. This discussion highlights the importance of biological parenthood for transgender persons by examining the barriers they face, their underlying motivations, and the wider societal implications associated with their pursuit. For numerous transgender individuals, biological parenthood carries deep personal significance. While alternative forms of parenting, such as adoption, may offer fulfilment to some, others strongly aspire to have children with whom they share a genetic connection. This aspiration is frequently linked to a desire for continuity, identity affirmation, and the emotional bond associated with raising one's biological child. In particular, transgender men who retain reproductive capabilities may view pregnancy and childbirth as meaningful expressions of both parenthood and their individual journeys. Thus, biological parenthood can serve not only as a personal milestone but also as a powerful affirmation of identity and lived experience.

KEYWORDS: Biological Parenthood, Transgender, LGBT, Binary, Medical Ethics and India.

ABOUT TRANSGENDER PROTECTION ACT, 2021

The Transgender Protection Act, 2021, lays down an essential legal framework for safeguarding the rights of transgender individuals in India, including an implicit recognition of their right to form families. The legislation adopts an inclusive definition of “transgender person,” encompassing identities such as male-to-female (MTF), female-to-male (FTM), and non-binary persons. However, it remains largely silent on issues relating to reproductive autonomy, thereby creating uncertainty for transgender individuals who aspire to biological parenthood. This legislative gap presents both possibilities for progressive interpretation and challenges in securing explicit reproductive rights for the transgender community.

While the Act elaborates on gender identity and expression, it does not adequately address reproductive concerns. In the case of transgender men, the definition is broad enough to include individuals who may retain reproductive capabilities despite undergoing hormonal or surgical transitions. Consequently, some transgender men may have the physical capacity to conceive and bear children. Nevertheless, they often encounter legal ambiguities and societal resistance, as conventional notions of parenthood in India continue to be shaped by rigid, heteronormative assumptions.

Furthermore, the Act seeks to prohibit discrimination and promote equality, which can indirectly facilitate access to healthcare and support systems necessary for parenthood. Yet, the absence of specific provisions relating to fertility preservation, assisted reproductive technologies (ART), and legal recognition of biological parenthood creates substantial obstacles. These shortcomings highlight the pressing need for a more comprehensive and inclusive legal framework that explicitly affirms and protects the reproductive rights of transgender individuals.

The subsequent sections will examine these issues in greater depth by analyzing the social, medical, and legal dimensions that shape the pursuit of biological parenthood among transgender persons in India. This discussion will also explore how aspirations for biological parenthood intersect with broader rights under the Act, emphasizing the necessity for policies that recognize and accommodate diverse experiences of family and parenthood within the transgender community.

Biological Parenthood for Transgender Men: Emerging Perspectives

With the growing evolution in societal perceptions of gender, the prospect of biological

parenthood among transgender men has gained increasing attention in both medical and social discussions. Traditionally, pregnancy has been closely associated with cisgender women; however, transgender men who retain functional reproductive organs may also have the ability to conceive and give birth.

This section explores the multidimensional aspects of biological parenthood for transgender men, focusing on medical, psychological, and social dimensions. It examines the reproductive possibilities available to them, including considerations related to fertility and conception. It also addresses the medical implications of hormone therapy and its impact on reproductive health. Additionally, the discussion highlights the emotional complexities and societal challenges that transgender men may encounter when choosing to pursue parenthood, emphasizing the need for greater awareness, support, and inclusive healthcare practices.

Reproductive Options for Transgender Men - For transgender men who aspire to have biological children, a clear understanding of the medical and physiological aspects of conception is crucial. Individuals assigned female at birth may retain functional reproductive organs such as ovaries and a uterus, which makes pregnancy possible. However, the process is often complex and requires thoughtful planning due to intersecting medical, emotional, and social considerations. Broadly, transgender men may pursue biological parenthood through two main routes: natural conception and assisted reproductive technologies (ART).

Natural Conception: In cases where a transgender man is in a relationship with a cisgender male partner, conception may occur naturally, provided that reproductive organs are intact and hormone therapy – particularly testosterone – is temporarily discontinued to allow ovulation. Despite this possibility, many transgender men experience psychological challenges in this process, including gender dysphoria and discomfort associated with conventional methods of conception and pregnancy.

Assisted Reproductive Technologies (ART): ART provides alternative pathways such as intrauterine insemination (IUI) and in vitro fertilization (IVF). These methods can be used with a partner’s sperm or donor sperm, depending on individual circumstances. IUI is often considered a less invasive option, while IVF offers greater control over fertilization and embryo selection. For many transgender men, ART can help reduce emotional distress by offering a more structured and less

personally intrusive approach to conception. As a result, these technologies have significantly broadened reproductive choices, making biological parenthood more accessible beyond traditional means.

Experiences shared through case studies and personal accounts have further illuminated this journey. A notable example is Thomas Beatie, widely referred to as “the pregnant man,” whose pregnancy attracted global attention. His story played a pivotal role in demonstrating both the medical feasibility and social implications of pregnancy among transgender men, while also challenging conventional understandings of gender, family, and parenthood.

Medication and Hormonal Considerations – Hormone therapy, especially the administration of testosterone, is a key component in the gender-affirming process for many transgender men. However, testosterone has a direct effect on reproductive functioning, often inhibiting ovulation. As a result, transgender men who intend to pursue pregnancy may need to temporarily discontinue or modify their hormone treatment in order to restore fertility and enable conception.

Effect of Hormone Therapy on Fertility: The testosterone therapy commonly results in amenorrhea and may substantially diminish fertility. For transgender men who wish to achieve pregnancy, it is generally necessary to suspend testosterone use to allow the return of ovulatory function. Research suggests that ovulation may restart within a few months after discontinuation, although this timeline can differ from person to person, making medical guidance essential throughout the process.

Interrupting hormone therapy can pose both physical and emotional difficulties. As testosterone often plays a vital role in affirming gender identity, its withdrawal may lead to discomfort, including the resurgence of gender dysphoria and unwanted physical changes, which can be psychologically challenging to manage.

Fertility Preservation: Some transgender men opt for fertility preservation methods, such as oocyte (egg) or embryo freezing, prior to initiating testosterone therapy. This approach allows the possibility of having biological children later, even if long-term hormone use affects fertility. Although this can be a forward-looking strategy, the high costs and limited accessibility in certain regions often restrict its availability for many individuals.

Healthcare professionals typically advise transgender men to consult reproductive

endocrinology specialists when making decisions related to fertility. Such experts can design individualized plans, including carefully managed pauses in hormone therapy, and may suggest shorter interruptions to help minimise gender dysphoria while attempting conception.

Psychological and Societal Implications:

The decision to become pregnant can be a deeply personal one for transgender men, often accompanied by complex emotional and societal considerations. Pregnancy is traditionally viewed as a feminine experience, and for transgender men, the journey may amplify experiences of gender dysphoria or pose unique psychological challenges.

Emotional and Psychological Challenges: Pregnancy can be a deeply complex experience for transgender men, encompassing both affirming and difficult aspects. For some, the ability to conceive may reinforce a sense of fulfillment and connection to parenthood. For others, however, the physical changes associated with pregnancy—such as chest development and abdominal growth—may intensify feelings of gender dysphoria.

The temporary cessation of testosterone therapy can further contribute to emotional fluctuations, potentially affecting mood and overall mental well-being. In this context, having a reliable support network—including family members, friends, and mental health professionals who are sensitive to transgender experiences—plays a crucial role in helping individuals cope with these physical and psychological challenges.

Societal Perspectives and Support Frameworks: Societal responses to transgender pregnancies differ considerably, ranging from acceptance and encouragement to prejudice and exclusion. While some transgender men share positive experiences, highlighting supportive healthcare professionals and inclusive communities, others face significant stigma and discrimination. Public misunderstanding, intrusive curiosity, and insensitive questioning can intensify feelings of isolation, making the experience of pregnancy more difficult. Even within LGBTQ+ spaces, transgender men may encounter stereotypes or doubts about their decision to conceive, emphasizing the need for broader awareness and inclusive education.

Support networks are therefore vital for transgender men considering parenthood. Professionals such as healthcare providers, counsellors, and social workers, along with support groups focused on transgender reproductive health, can provide essential guidance and advocacy. In

regions with more advanced healthcare infrastructures, dedicated networks for transgender parents have developed, offering safe and understanding environments to share experiences and address challenges. Access to such systems not only promotes emotional well-being but also reduces isolation, helping transgender men navigate the complexities of biological parenthood with greater confidence and support.

Pathways to Biological Parenthood for Transgender Women

The journey toward biological parenthood for transgender women—individuals assigned male at birth who transition to female—is shaped by a distinct set of opportunities and challenges influenced by medical advancements, evolving social attitudes, and legal frameworks. In most cases, achieving biological parenthood involves the use of assisted reproductive technologies, though ongoing innovations continue to broaden available possibilities. This section examines the existing reproductive options, methods of fertility preservation, and the social and familial dynamics that affect transgender women pursuing biological parenthood.

ADVANCES IN REPRODUCTIVE TECHNOLOGY

For transgender women, the pursuit of biological parenthood generally relies on assisted reproductive technologies (ART), since gender-affirming treatments such as hormone therapy and surgical interventions can significantly impact fertility. ART has played a crucial role in expanding reproductive possibilities, allowing transgender women to preserve their fertility and retain the option of having biological children even after undergoing medical transition.

In Vitro Fertilization (IVF) and Surrogacy: In vitro fertilization (IVF) is one of the most commonly used reproductive options for transgender women. It allows sperm preserved prior to transition to be used for fertilizing an egg in a laboratory setting, with the resulting embryo later transferred to a surrogate. In the Indian context, however, surrogacy operates within a highly regulated legal framework. The Surrogacy (Regulation) Act, 2021 imposes significant restrictions, particularly excluding single individuals and members of the LGBTQ+ community from accessing surrogacy. As a result, transgender women in India encounter considerable legal obstacles when seeking biological parenthood through this route.

Emerging Reproductive Technologies: Emerging scientific developments hold the potential to expand

future pathways to biological parenthood for transgender women. Ongoing research in areas such as uterine transplantation—already successfully applied in some cases involving cisgender women with uterine factor infertility—offers a promising, though still experimental, possibility. While this technology is not yet applicable to transgender women, further advancements and adaptations may eventually make gestation a viable option. Similarly, innovations in genetic editing techniques, such as CRISPR, though currently in the experimental stage, may contribute to new reproductive possibilities in the future.

These advancements, alongside existing limitations, reflect the intricate and evolving nature of reproductive options available to transgender women. As scientific research progresses, there is growing optimism that future developments will create more inclusive and accessible avenues for biological parenthood.

Fertility Preservation:

For transgender women, preserving fertility is an important consideration prior to initiating hormone therapy or undergoing gender-affirming surgeries, as these interventions can greatly affect reproductive potential. By opting for fertility preservation—such as sperm cryopreservation before transition—individuals can retain the possibility of biological parenthood, even if subsequent medical treatments result in reduced or lost fertility.

Sperm Banking: Sperm cryopreservation, commonly known as sperm banking, is one of the most practical methods of fertility preservation for transgender women. Many choose to store sperm prior to starting hormone therapy to safeguard their future reproductive options. This process typically involves medical guidance to ensure optimal sample quality and proper long-term storage.

Sperm banking services are available in several regions, including India, where clinics such as Indira IVF and Delhi IVF provide preservation facilities, despite ongoing legal uncertainties surrounding reproductive rights for transgender individuals. This method is especially significant for those who wish to maintain a biological link to their future children while mitigating the potential effects of prolonged hormone therapy on fertility.

Legal and Financial Considerations: The financial burden associated with fertility preservation poses a significant barrier for many transgender individuals, as such services are frequently excluded from both public and private healthcare coverage, particularly in countries like India. Coupled with this, restrictive

legal frameworks governing access to assisted reproductive technologies further limit opportunities for transgender women to utilize these options.

In India, efforts to make fertility preservation more accessible remain limited. However, ongoing advocacy continues to emphasize the need for affordable and inclusive reproductive services that address the specific needs of the transgender community. Greater awareness and sustained policy efforts in this area have the potential to improve access over time, thereby enhancing reproductive autonomy for transgender women seeking biological parenthood.

SOCIETAL AND FAMILY PERCEPTIONS

The decision to pursue biological parenthood as a transgender woman is often influenced by broader societal perceptions and the reactions of family members, partners, and friends. Many transgender women face challenges rooted in societal norms that assume traditional gender roles, leading to misunderstandings and stigma around the concept of biological parenthood for transgender individuals.

Societal Acceptance and Challenges: Transgender women seeking biological parenthood often face significant societal barriers, including bias and discrimination that can undermine their recognition as parents. In societies where traditional notions of gender remain deeply entrenched, the legitimacy of transgender women as biological parents is frequently questioned, adding to their emotional and psychological challenges. In regions where acceptance of transgender identities is still developing, individuals pursuing parenthood may encounter social stigma, community disapproval, or even isolation. Such lack of acceptance can strongly influence their choices, leading many to suppress their aspirations for parenthood or reconsider their decisions altogether.

Effect on Family Dynamics: The choice to pursue biological parenthood can significantly affect family dynamics for transgender women, often involving complex emotional negotiations. Within traditional family settings, established expectations regarding parental roles may place additional pressure on transgender women seeking to have biological children. Family responses may vary widely—from acceptance and encouragement to resistance or rejection—thereby influencing both decision-making and lived experiences within the family unit. A lack of familial support can also extend into broader social contexts, where transgender women may encounter stigma or insufficient sensitivity within healthcare systems.

Although advocacy initiatives and increased media visibility of transgender parenthood are contributing to greater awareness, levels of acceptance continue to differ across cultural and social environments. The experiences of transgender women in this context highlight the need for sustained dialogue, improved representation, and stronger support systems to challenge prevailing attitudes and foster a more inclusive and supportive environment for transgender families.

Pathways to Biological Parenthood for Non-Binary Individuals: For non-binary individuals—those who identify outside the traditional binary of male and female—the path to biological parenthood can be both complex and deeply personal. Unique fertility needs, societal perceptions, and legal recognition issues intersect, making their journey to parenthood distinct from that of transgender men or women. In India and many other parts of the world, the lack of comprehensive legal and medical frameworks that recognize and support non-binary identities further complicates their access to reproductive assistance. This section delves into the specific fertility, social, and legal challenges non-binary individuals face when pursuing biological parenthood.

Distinct Fertility Considerations for Non-Binary Individuals: The non-binary individuals who seek biological parenthood encounter distinct challenges arising from the intersection of their gender identity, healthcare requirements, and reproductive options. The medical community and fertility services are still in the early stages of recognizing and addressing these specific needs, resulting in a lack of customized treatment approaches and inclusive care plans.

Reproductive and Clinical Options: The non-binary individuals seeking biological parenthood often rely on a combination of fertility preservation methods, hormone regulation, and assisted reproductive technologies (ART). Those assigned female at birth may retain the capacity to conceive and carry a pregnancy, while others may opt to preserve eggs or embryos prior to initiating hormone therapy in order to maintain future reproductive possibilities. In contrast, individuals assigned male at birth may consider options such as sperm cryopreservation, surrogacy, or in vitro fertilization (IVF) to achieve parenthood.

Because hormone treatments, including testosterone or estrogen, can influence fertility, some non-binary individuals may need to temporarily discontinue or modify their therapy. This process can be both physically and emotionally demanding, as changes in hormone use may affect gender

expression and psychological well-being, making the path to parenthood particularly complex.

Complications with Hormone Therapy and Fertility: The hormone therapy, which is often central to gender affirmation, can have significant implications for fertility among non-binary individuals. For example, testosterone may disrupt ovulation in those assigned female at birth, while estrogen therapy can decrease sperm production in individuals assigned male at birth. To preserve reproductive options, some individuals may need to temporarily discontinue hormone therapy in order to restore fertility before attempting conception or opting for preservation techniques. However, such interruptions can be challenging, potentially leading to gender dysphoria, physical discomfort, and psychological stress. In response, certain healthcare providers are beginning to adopt more gender-inclusive approaches to care, although these practices remain limited and are not yet widely standardized, especially in countries like India. The healthcare system's gradual recognition of non-binary needs is promising, yet non-binary individuals often report a lack of understanding and inclusive practices within healthcare settings, making it difficult to access compassionate and comprehensive reproductive care.

Social and Legal Challenges – Beyond the medical and reproductive complexities, non-binary individuals seeking biological parenthood also face considerable social and legal barriers. Prevailing societal norms surrounding gender and parenting often do not accommodate non-binary identities, while legal frameworks frequently fail to adequately recognize or accurately represent non-binary parents.

Legal Recognition of Non-Binary Parents: In India, the absence of explicit legal recognition for non-binary parenthood creates significant obstacles for individuals seeking to become biological parents. Although there have been important developments in acknowledging transgender identities—such as the 2014 NALSA judgment and the Transgender Protection Act, 2019—non-binary identities continue to receive limited formal recognition.

Most legal documentation, including birth certificates and parental records, still relies on binary gender classifications, which makes accurate representation difficult for non-binary parents. As a result, they often encounter challenges in asserting parental rights, handling custody matters, or identifying their gender in official documents related to their children. This gap in legal recognition can adversely affect the parent-child relationship and

may undermine the confidence and security of non-binary individuals in their role as parents.

Discrimination in Healthcare and Access Issues: Discrimination and lack of understanding within the healthcare system pose major hurdles for non-binary individuals pursuing biological parenthood. Studies have shown that non-binary individuals are often misgendered, denied appropriate care, or dismissed in reproductive healthcare settings. Indian healthcare institutions generally lack standardized training in non-binary inclusivity, which results in care providers defaulting to binary terms and failing to offer tailored guidance or support. Additionally, there are limited health insurance options covering fertility treatments, particularly for LGBTQ+ and non-binary individuals, making the financial aspect of biological parenthood a significant challenge. Many non-binary individuals are left without adequate financial resources or face higher costs due to the lack of public health coverage for reproductive services.

Social Impressions: The non-binary individuals often face considerable social stigma stemming from both their gender identity and their decision to pursue parenthood. In India, prevailing social norms continue to emphasize binary gender roles, resulting in limited acceptance and support from family members, peers, and the wider community. Misconceptions about non-binary identities and their capacity for biological parenthood can lead to judgment, exclusion, and marginalization, particularly in rural or more conservative settings. Such societal pressures and lack of support may discourage non-binary individuals from openly pursuing or sharing their experiences of parenthood.

Although support networks within LGBTQ+ communities and advocacy organisations are gradually expanding, broader societal acceptance is still a work in progress. Strengthening public awareness, encouraging inclusive education, and developing supportive legal and social policies are essential steps toward creating an environment that acknowledges and respects the parenting choices of non-binary individuals.

Complexities posed in the society

The pursuit of biological parenthood for transgender individuals introduces complex medical and ethical challenges, both at the individual level and within broader social and legal frameworks. These challenges include potential health risks associated with hormone therapy modifications, ethical considerations in providing specialized reproductive care, and the need for legal clarity

within India's evolving laws, especially under the Transgender Protection Act, 2021. This section delves into the nuanced health, ethical, and legal considerations impacting transgender individuals' right to biological parenthood, especially in the context of medical advancements and ethical obligations in reproductive healthcare.

Health Hazards and Medical Ethics

For transgender individuals, the pursuit of biological parenthood frequently entails confronting distinct health risks and ethical challenges. As many undergo hormone replacement therapy (HRT) as part of their gender-affirming process, the need for fertility preservation and the possible temporary suspension of HRT introduce important medical concerns and ethical considerations.

Health Hazards of Hormone Therapy Suspension: Hormone therapy plays a vital role in supporting the mental health and overall well-being of transgender individuals by enabling gender-affirming physical changes. However, treatments such as testosterone for transgender men and estrogen for transgender women can gradually affect fertility, requiring modifications when biological parenthood is desired. Transgender men who plan to conceive may need to temporarily stop testosterone therapy to restore ovulation, which can result in the reappearance of undesired secondary sexual characteristics, such as menstruation, and intensify gender dysphoria.

Similarly, transgender women may be required to discontinue estrogen therapy and allow natural testosterone production to resume in order to facilitate sperm retrieval. These interruptions can lead to emotional and physical challenges, including mood fluctuations, discomfort, and possible health risks such as cardiovascular effects linked to hormonal changes. Consequently, healthcare providers must carefully balance these medical and psychological considerations while supporting individuals in their pursuit of biological parenthood.

Ethical Dilemmas in Reproductive Care: Delivering reproductive healthcare to transgender individuals involves a range of complex ethical considerations. A central concern is the need to ensure that patients are adequately informed about the possible physical and psychological effects of pausing hormone therapy or undergoing fertility-related procedures. While the principle of autonomy requires that individuals make informed and voluntary choices, the limited availability of long-term research on the impact of hormone interruption can make truly informed consent difficult to achieve.

Another key ethical issue relates to fairness in the

distribution of healthcare resources, particularly within public health systems where access to reproductive services is often constrained. Questions arise as to whether transgender individuals should receive the same priority for fertility treatments as cisgender patients and how such limited resources ought to be allocated. Furthermore, gaps in provider training and the persistence of bias in healthcare settings can lead to unequal or inadequate care, raising concerns about ethical standards in treatment and support. Addressing these challenges requires comprehensive professional training and a strong commitment to ensuring equitable and inclusive access to reproductive healthcare for transgender individuals.

Ethical and Legal Ambiguities in the Indian Context

India's legal framework on transgender rights—particularly in relation to parenthood—remains in a formative stage, marked by uncertainties and gaps that pose challenges for both individuals and healthcare professionals. The absence of clear legal provisions or guidelines on transgender parenthood has given rise to ongoing ethical debates and policy discussions surrounding reproductive rights.

Loopholes in Indian Legal System: The Transgender Persons (Protection of Rights) Act, 2019, together with its associated rules, does not expressly address reproductive rights or provide a comprehensive legal framework for transgender individuals seeking biological parenthood. While the NALSA judgment (2014) affirmed the right to self-identification of gender, it did not extend this recognition to include reproductive rights or establish clear mechanisms for legally recognizing transgender parenthood.

Consequently, transgender individuals who pursue biological parenthood often face legal ambiguities, particularly in being acknowledged as parents in official records such as birth certificates. This gap in the law leaves them susceptible to discrimination and denies them equal access to the rights and protections available to cisgender parents. In the context of evolving social awareness and medical advancements, there is an urgent need for legal reforms that clearly address these issues and ensure equitable recognition and protection of transgender parenthood.

Reproductive technologies such as in vitro fertilization (IVF) and other forms of assisted reproductive technology (ART) raise significant ethical concerns in the context of transgender parenthood. In the absence of well-defined legal

frameworks, healthcare professionals often encounter ethical uncertainty when providing these services to transgender individuals. Key issues include the broader societal implications of transgender parenthood, such as whether access to these technologies aligns with prevailing cultural norms, and the extent to which practitioners should prioritise potential physical and psychological effects of ART on transgender patients.

Further ethical debates arise regarding the allocation of public healthcare resources, particularly where access to IVF and ART is already limited. Questions of fairness and inclusivity emerge in determining whether and how such services should be made available to transgender individuals within constrained systems. Addressing these challenges requires the development of inclusive reproductive policies that respond to the needs of transgender persons while avoiding the perpetuation of discriminatory practices.

For India to develop a fair and inclusive framework for transgender parenthood, a range of coordinated measures is necessary. Advocacy by human rights groups, LGBTQ+ activists, and healthcare professionals plays a crucial role in pushing for reforms in the Transgender Protection Act and related healthcare policies. Legal scholars have proposed amendments to explicitly recognise reproductive rights for transgender individuals, ensuring equal access to biological parenthood irrespective of gender identity. In addition, initiatives focused on sensitising and training healthcare providers in gender-affirming practices, along with broader public awareness efforts, are essential for fostering a more accepting and informed society.

The pursuit of biological parenthood by transgender individuals extends beyond personal health concerns and is closely linked to policy development and advocacy efforts. Inclusive and well-designed healthcare policies can significantly strengthen reproductive autonomy, yet the absence of clear legal protections and institutional support continues to pose challenges in India. This section therefore explores the role of existing healthcare policies, the contributions of non-governmental organisations and activists, and comparative insights from international approaches that support transgender reproductive rights.

Impact of Healthcare Policies on Transgender Reproductive Rights: In India, existing healthcare policies do not adequately cater to the reproductive needs of transgender individuals. Although the Transgender Persons (Protection of Rights) Act, 2019 marked an important milestone in recognising their

rights, it does not sufficiently address issues of reproductive autonomy. In the absence of clear guidelines and protective measures, transgender individuals often face systemic barriers when seeking reproductive healthcare, including discrimination, restricted access, and a lack of specialised services. This deficiency directly affects their ability to pursue biological parenthood, as many are unable to access essential options such as fertility preservation, in vitro fertilization (IVF), or appropriate management of hormone therapy without encountering stigma or potential denial of care.

In India, a number of non-governmental organisations and activists are actively working to address gaps in policy by advocating for more inclusive and gender-sensitive healthcare systems. Groups such as Naz Foundation, Humsafar Trust, and Transgender India have played a significant role in raising awareness, building support networks, and pressing for legal reforms to ensure fair access to reproductive healthcare. Activists like Gauri Sawant, through initiatives such as Aji Ka Ghar—a shelter and support space for transgender individuals—have also been instrumental in challenging social stigma and advocating for policy change. Through a combination of direct support services and sustained advocacy, these organisations and individuals contribute meaningfully to advancing the reproductive rights of transgender persons.

Their efforts include sensitising healthcare professionals, engaging with policymakers, and increasing public awareness, all of which are essential in fostering legal and institutional reforms that recognise and safeguard transgender reproductive rights.

International Perspectives and Policies

Across the globe, several countries have begun adopting policies that explicitly recognise and support the reproductive rights of transgender individuals, offering valuable models for India to consider. These approaches demonstrate how reproductive healthcare systems can be structured to be more inclusive and responsive to diverse gender identities.

In a number of jurisdictions, policies affirm the right of transgender persons to pursue biological parenthood. For instance, in the United Kingdom, the National Health Service (NHS) provides access to fertility preservation options—such as sperm and egg freezing—prior to the commencement of hormone therapy or gender-affirming procedures. Similarly, in Canada, certain provinces extend public

funding for fertility treatments, including IVF, which transgender individuals can access without facing discrimination. Countries like Argentina and the Netherlands have also adopted progressive frameworks that recognise reproductive rights irrespective of gender identity, alongside offering publicly supported fertility preservation services.

Moreover, nations such as Denmark and Sweden have developed guidelines aimed at supporting transgender parents, including access to fertility counselling and reproductive assistance. These international practices serve as important reference points, illustrating how healthcare systems can uphold reproductive rights while ensuring inclusivity and dignity for individuals across the gender spectrum.

BEST PRACTICES

India's healthcare policy framework could be significantly strengthened by drawing on these international models. Important lessons include the need to (1) incorporate gender-sensitive reproductive rights within healthcare policies, (2) ensure public funding for fertility preservation and reproductive treatments, and (3) provide comprehensive training for healthcare professionals in transgender-specific reproductive care. Adopting guidelines similar to those in countries like Canada and the United Kingdom—where equitable access to reproductive services and fertility preservation is emphasised—would mark a substantial advancement in the Indian context.

Furthermore, introducing clear legal safeguards, akin to Argentina's gender recognition framework, could help prevent discrimination and ensure that transgender individuals can access reproductive healthcare without fear of prejudice. Implementing such measures would address existing policy gaps in India and create a more inclusive system that enables transgender individuals to pursue biological parenthood with dignity, adequate support, and without compromising their well-being.

AI-Driven Counselling Support in Assisted Reproductive Technology

Artificial Intelligence (AI) is emerging as a valuable aid in the field of assisted reproductive technology (ART), particularly in preparing individuals emotionally and providing counselling support throughout the parenthood journey. AI-enabled systems, including virtual assistants and data-driven platforms, can offer customized guidance, helping individuals understand treatment processes while also addressing psychological concerns. By analysing behavioural patterns and

emotional responses, these tools can detect stress, anxiety, or uncertainty, allowing for timely and more focused counselling interventions. Given that ART procedures can be both physically and emotionally demanding, AI-based support contributes to better mental readiness, informed choices, and overall emotional well-being. This is especially beneficial for individuals, including transgender persons, who may require more inclusive and sensitive guidance while navigating the complexities of biological parenthood.

SUMMARIZATION AND CONCLUSION

The idea of biological parenthood for transgender individuals represents a deeply personal yet multifaceted experience, shaped by medical, social, and legal factors. The findings discussed in this chapter demonstrate that, despite numerous obstacles, transgender persons actively pursue parenthood, though their journeys are often marked by varying levels of access, acceptance, and support.

The discussion on transgender men highlights the specific reproductive possibilities and medical considerations involved. Many transgender men retain the capacity for pregnancy but may need to discontinue hormone treatments such as testosterone to enable conception. Alongside these medical adjustments, they frequently encounter societal stigma and psychological challenges, particularly during pregnancy. Nevertheless, with proper healthcare support and a strong support system, successful parenthood is attainable, even though the process may involve significant emotional and social strain.

In the case of transgender women, developments in reproductive technologies, including in vitro fertilization (IVF) and sperm preservation, have created new opportunities for biological parenthood. However, these advancements are often accompanied by legal ambiguities and financial constraints, especially in the Indian context where explicit recognition and accessibility remain limited. As a result, transgender women must navigate both the medical aspects of fertility preservation and a legal framework that does not fully accommodate their reproductive rights.

Non-binary individuals encounter additional complexities, largely due to insufficient legal recognition and prevailing societal norms that fail to acknowledge diverse gender identities. Their experiences underscore the urgent need for inclusive and responsive healthcare systems that address the intersection of gender diversity and reproductive health. There is a clear requirement for collaboration

among medical professionals, lawmakers, and advocacy groups to bridge these gaps and ensure equitable access to parenthood opportunities.

Overall, this chapter establishes that while biological parenthood is a viable possibility for many transgender individuals, it is heavily influenced by access to healthcare, societal acceptance, and supportive legal policies. It highlights the pressing need for continued research, advocacy, and legal reforms to strengthen reproductive rights and create

a more inclusive framework for transgender parenthood.

Additionally, surrogacy emerges as an alternative pathway to parenthood, though it is accompanied by its own set of ethical concerns, regulatory challenges, and social perceptions, particularly within India. Addressing these issues will be essential in expanding reproductive choices and fostering a more inclusive understanding of parenthood for transgender individuals.

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