INTERNATIONAL JOURNAL OF TRENDS IN EMERGING RESEARCH AND DEVELOPMENT

Volume 3; Issue 5; 2025; Page No. 21-25

Received: 14-06-2025 Accepted: 23-07-2025 Published: 09-09-2025

Knowledge and Perception About Infertility and Its Psychosocial Impact on Couples: A Narrative Review

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DOI: https://doi.org/10.5281/zenodo.17085800

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Abstract

Background: Infertility-defined as failure to achieve a clinical pregnancy after 12 months or more of regular unprotected intercourse-affects millions globally and carries profound psychosocial sequelae for couples.

Objective: To synthesize current evidence on (1) public and patient knowledge and perceptions of infertility, and (2) the psychosocial impact on couples, including mental health, relationship quality, stigma, and financial toxicity; and to outline implications for clinical practice and policy.

Methods: Narrative review of international guidelines and peer-reviewed research (1997–2025).

Results: Knowledge gaps and misconceptions remain common across regions; stigma is pervasive and gendered. Infertility is associated with elevated depression, anxiety, stress, impaired quality of life, sexual difficulties, and relationship strain. Dyadic coping and evidencebased psychosocial care mitigate adverse outcomes. Financial barriers amplify distress and inequities in access to care.

Conclusion: Integrating routine psychosocial care, strengthening couple-focused interventions, and addressing affordability and stigma are crucial to improve outcomes.

Keywords: Infertility, psychosocial impact, depression, anxiety, stigma, dyadic coping, marital satisfaction, gender differences, health policy, financial toxicity

1. Introduction

Infertility is a common life-course health condition: the World Health Organization (WHO) estimates that around 1 in 6 people experience infertility during their lifetime, underscoring a substantial unmet need for affordable, highquality fertility care worldwide. Despite technological advances, global prevalence trends have shown only modest changes over the past decades, with regional heterogeneity. A landmark analysis of 277 surveys reported little evidence of global declines in infertility prevalence, with notable burdens in South Asia and Sub-Saharan Africa; Global Burden of Disease analyses also suggest small but significant increases in age-standardized prevalence since 1990. Beyond biomedical causes, infertility is a socially constructed experience intertwined with identity, gender norms, and kinship expectations-particularly pronounced in pronatalist cultures. Contemporary anthropological and sociological scholarship highlights shifting gender roles, transnational reproductive care, and persistent stigma that shape how infertility is understood and lived.

2. Methods (Narrative Review)

We conducted a targeted narrative review of peer-reviewed literature (English, 1997-2025) indexed in PubMed and major journals, supplemented by WHO and professionalsociety guidelines. Priority was given to systematic reviews/meta-analyses, large observational studies, qualitative studies in under-researched contexts, and guidelines on psychosocial care in infertility.

3. Knowledge and Perceptions of Infertility

3.1 General knowledge and misconceptions: Population and patient studies reveal persistent uncertainty about fertile windows, age-related decline, male factor contributions, and realistic success rates of assisted reproductive technology (ART). Misattributions to stress, fate, or divine will coexist with biomedical explanations, and men's reproductive health literacy is often lower than women's. Cross-regional data suggest that limited infertility literacy correlates with

delayed help-seeking and greater distress.

3.2 Cultural meanings and stigma

Qualitative work documents that infertility threatens social identity. marital stability. and perceived womanhood/manhood in many settings. Women commonly report social exclusion, blame, and self-silencing; men report threats to masculinity and role as a progenitor. Stigma operates at individual, interpersonal, and community levels, moderated by family/kin expectations and religious norms. Here's the conceptual framework diagram showing the relationship between infertility, mediating factors (knowledge gaps, stigma, financial barriers), resulting psychosocial impacts, and the role of interventions leading to positive outcomes.

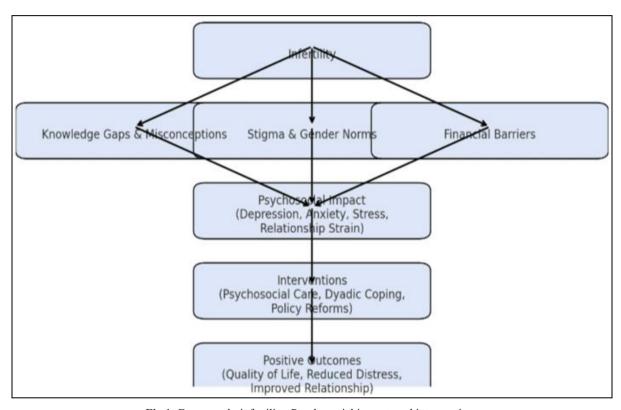


Fig 1: Framework: infertility, Psychosocial impact, and interventions

4. Psychosocial Impact on Couples

4.1 Mental health

Meta-analytic evidence shows elevated depression, anxiety, and stress among people experiencing infertility, with women generally reporting higher symptom burden and lower quality of life than men. Recent reviews confirm these gender differences and emphasize heterogeneity by measures and context. Men are also affected: pooled estimates suggest meaningful rates of depression in infertile men.

4.2 Relationship quality and dyadic adjustment

Infertility strains relationships through cyclical hopedisappointment, medicalization of intimacy, and scheduledriven sex. However, dyadic coping-how partners appraise and manage stress together-predicts better marital adjustment and quality of life, including at ART initiation and across treatment. Evidence from observational and

recent dyadic analyses indicates that positive dyadic coping buffers stress and supports sexual well-being.

4.3 Sexual health and intimacy

Couples frequently report decreased sexual satisfaction, performance anxiety, and reduced spontaneity due to timed intercourse and treatment regimens. Open communication and therapeutic interventions can help restore intimacy, though data are mixed and context-dependent.

4.4 Gendered experiences

Classical and contemporary reviews note that research historically emphasized women; yet men experience distinct burdens-shame associated with semen parameters, reluctance to seek support, and under-recognition in clinics. Emerging evidence highlights gender differences in anxiety, stress, and self-efficacy, with no consistent differences in self-esteem or sexual satisfaction.

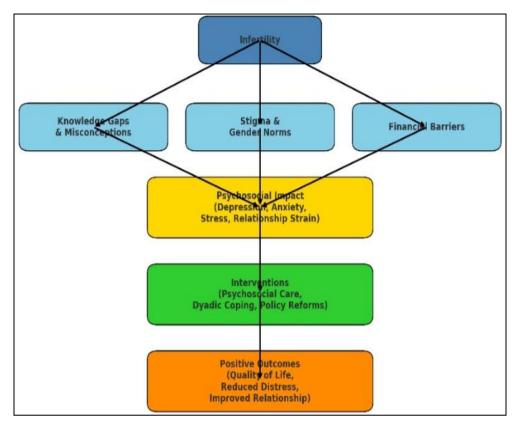


Fig 2: Graphical Abstract: Infertility, psychosocial impact, and interventions

Here is the graphical abstract illustrating the framework in a visually appealing way, with color-coded sections for main condition, contributing factors, psychosocial impacts, interventions, and positive outcomes.

4.5 Financial toxicity and access

The direct and indirect costs of diagnostics and ART often exceed average incomes, especially in low- and middle-income countries, generating debt and treatment discontinuation. Even in high-income settings, limited insurance coverage and opaque clinic pricing create substantial financial strain and inequities in access.

5. Interventions and Modifiers

5.1 Routine psychosocial care in fertility settings

Professional guidelines (ESHRE) recommend routine psychosocial care-screening for risks (e.g., SCREENIVF), information provision, and stepped care including counseling/CBT-delivered by all fertility staff, not only specialized psychologists. Such care can reduce distress, improve treatment knowledge and adherence, and may indirectly improve clinic outcomes.

5.2 Evidence on counseling and couple-based interventions

Meta-analytical data indicate that psychological interventions are associated with higher marital and sexual satisfaction and reduced distress among infertile individuals. Couple-based formats that target dyadic coping appear particularly beneficial.

5.3 Social support and kinship

Family and kin networks can buffer or exacerbate distress.

Supportive kinship increases dyadic coping; intrusive or blaming kin amplifies stigma and marital strain.

6. Regional and Equity Considerations

In resource-constrained settings, infertility carries severe psychosocial consequences due to strong pronatalist norms, limited services, and high out-of-pocket costs. Desk reviews from Eastern and Southern Africa and qualitative studies from South Asia show compounded stigma and vulnerability for women, including social isolation and intimate partner conflict. Policies prioritizing maternal-child health often overlook involuntary childlessness, despite its public-health relevance.

7. Implications for Practice, Programs, and Policy

- 1. Normalize and educate: Embed fertility literacy (including male reproductive health) into routine primary and reproductive care; provide clear, balanced information on age effects and ART realities.
- 2. Screen and step-care: Implement ESHRE-aligned psychosocial screening (e.g., SCREENIVF) with stepped interventions from brief counseling to specialized therapy.
- 3. Couple-centered approach: Train teams in dyadic frameworks; offer couple-based interventions to enhance coping, communication, and sexual well-being.
- 4. Address affordability and transparency: Advocate for coverage/financial support and transparent pricing to reduce financial toxicity and drop-outs.
- Anti-stigma strategies: Partner with community and faith leaders to reduce blame and promote inclusive narratives around family-building (including adoption and child-free living).

6. Equity lens: Prioritize services for underserved groups (LMICs, rural populations, marginalized communities) and integrate mental-health support within fertility programs.

8. Research Gaps

Longitudinal, couple-level studies to map trajectories across pre-conception, treatment, and outcomes (pregnancy/child-free).

Culturally adapted, scalable psychosocial interventions and implementation research in LMICs.

Comparative effectiveness of digital and hybrid support models for infertility-related distress.

Standardized reporting of financial outcomes and their mental-health impacts across systems.

9. Conclusion

Infertility is widely recognized not only as a biomedical issue but also as a deeply embedded psychosocial condition that influences multiple aspects of an individual's and couple's life. It transcends the realm of physiology and touches on emotional, relational, cultural, and societal dimensions. Persistent knowledge gaps regarding causes and treatment options, coupled with pervasive stigma and cultural misconceptions, continue to shape the way infertility is perceived and managed across the globe. Gendered expectations, particularly in patriarchal societies, further intensify the burden on women, often making them the primary targets of blame and social exclusion, while men's struggles remain underreported and poorly addressed. These psychosocial stressors-combined with financial barriers, limited insurance coverage, and the high cost of reproductive technologies-compound assisted psychological distress associated with infertility, resulting in elevated levels of anxiety, depression, and relationship strain among couples.

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