

Research Paper



Factors Affecting Decisions for Surrogacy Among Nigerian Women After Failed IVF Cycles Using the Health Belief Model

Sadiat Iyabode Alliu^{1*}, Leonard C Orji², Dare Azeez Fagbenro¹, Abayomi O. Olaseni¹

1. Department of Psychology, Faculty of Social Sciences, University of Ilorin, Ilorin, Nigeria.

2. Department of Psychology, University of Agriculture and Environmental Sciences, Umuagwu, Nigeria.



Citation Alliu, S. I., Orji, L. C., Fagbenro, D. A., & Olaseni, A. O. 2025. Factors Affecting Decisions for Surrogacy Among Nigerian Women After Failed IVF Cycles Using the Health Belief Model. *Journal of Client-Centered Nursing Care*, 11(4), pp. 331-348. <https://doi.org/10.32598/JCCNC.11.4.1007.1>

doi <https://doi.org/10.32598/JCCNC.11.4.1007.1>

Article info:

Received: 19 Mar 2025

Accepted: 17 May 2025

Published: 01 Nov 2025

Keywords:

Psychological distress, Infertility, In vitro fertilization (IVF), Health belief model (HBM), Surrogacy decision-making

ABSTRACT

Background: Surrogacy is a complex reproductive option for women facing infertility, particularly in sociocultural contexts where biological motherhood is intricately linked with identity and status. This study explored the psychosocial, cultural, and contextual factors influencing surrogacy decision-making among Nigerian women with failed in vitro fertilization (IVF) experiences. The study investigated the factors influencing Nigerian women's decisions to pursue surrogacy after experiencing one or more failed IVF cycles, focusing on the constructs of the health belief model (HBM).

Methods: This study employed a qualitative content analysis approach (deductive and inductive), utilizing in-depth semi-structured interviews via WhatsApp with 20 infertile women recruited from 2 online fertility support groups ("voices of fertility and health" and "infertility, IVF and surrogacy") in Nigeria through purposive and snowball sampling. HBM provides a theoretical framework guiding data collection and directed content analysis. Data that did not fit under the constructs of HBM were classified using conventional content analysis.

Results: This study identified 6 emergent themes that complemented the constructs of the HBM (perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy). The emergent themes were sociocultural identity pressures, family and marital dynamics, religious and spiritual tensions, medical and legal mistrust, financial class reality, and emotional distress and identity threat. These themes highlight the complex interplay between individual health beliefs and broader sociocultural, emotional, and contextual factors shaping surrogacy decision-making. The findings of this study have provided suggestions for modifying the HBM.

Conclusion: The findings emphasize the need for holistic, culturally sensitive, and client-centered reproductive care. Fertility practitioners and health psychologists are suggested to acknowledge and respond to the sociocultural, emotional, and economic realities influencing surrogacy decisions.

* Corresponding Author:

Sadiat Iyabode Alliu, PhD.

Address: Department of Psychology, Faculty of Social Sciences, University of Ilorin, Ilorin, Nigeria.

E-mail: alliu.si@unilorin.edu.ng



Copyright © 2025 The Author(s);

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC-BY-NC; <https://creativecommons.org/licenses/by-nc/4.0/legalcode.en>), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

Highlights

- Women who experience IVF failures and perceive a high likelihood of permanent childlessness see surrogacy as a viable option.
- Infertility and repeated IVF failures have a profound emotional impact on Nigerian women, leading to feelings of distress, anxiety, and despair, which influence their consideration of surrogacy.
- Surrogacy provides hope and is viewed as a path to motherhood and social legitimacy.
- Financial barriers, legal aspects, religious beliefs, and fear of rejection hinder surrogacy acceptance.
- Support from partners, health care professionals, and positive stories from online influencers prompt consideration of surrogacy.
- Emotional resilience and autonomy empower women to pursue surrogacy despite barriers.
- Findings validate core HBM constructs while also revealing context-specific themes like cultural stigma, religious and spiritual influences, moral ambiguity and secrecy, distrust in health care, and unfamiliarity with surrogates, pinpointing the complex interplay of societal, emotional, and systemic factors in reproductive decision-making.
- The study emphasizes the need for comprehensive legal policy frameworks, psychosocial support, and health care advocacy to normalize and support surrogacy as a reproductive option in Nigeria.

Plain Language Summary

Infertility is a challenging experience for many Nigerian women, affecting their identity and social value. When in vitro fertilization (IVF) fails, surrogacy may be considered, but it is a difficult decision involving emotions, culture, religion, finances, and law. This study explores factors influencing the decision-making to pursue surrogacy in Nigerian women who have experienced failed IVF cycles. We found that while surrogacy offers emotional relief and a biological connection, cultural stigma, religious judgment, and legal and financial limitations are significant barriers. Support from doctors, media, or family helps women make decisions, and those who feel confident in their choices are more likely to pursue surrogacy. Our study highlights the need for better laws, public awareness, and support systems to help women make informed reproductive choices.

Introduction

Infertility presents not only a medical challenge but also a profound psychological, social, and emotional burden, particularly for women in societies where motherhood is central to female identity. The inability to conceive often leads to stigma, marital instability, and emotional distress (Marklund et al., 2025; Parvizi & Ghodrati, 2025). Despite advancements in reproductive medicine, infertility remains prevalent in Nigeria, reporting an infertility rate of 26.8% (Oguejiofor et al., 2023), predominantly secondary infertility resulting from delayed treatment and socioeconomic constraints. The causes of infertility are multifaceted, encompassing biological, environmental,

and sociocultural factors. Recent research highlights the detrimental effects of environmental pollutants, including pesticides and heavy metals, on reproductive health (Zecevic et al., 2025). Although infertility affects both men and women, societal norms in Nigeria disproportionately place the burden on women, intensifying their psychological and social struggles (Esan et al., 2025). Access to quality fertility treatments remains limited due to financial constraints, cultural reliance on spiritual and traditional healing, and inadequate availability of specialized reproductive services (Esan et al., 2025).

Many couples first pursue traditional and religious remedies, often delaying medical intervention until the reproductive potential is significantly compromised (Alliu & Orji, 2021; Oguejiofor et al., 2023). While in vitro fertilization (IVF) offers a viable solution, repeated failures can

be both financially and emotionally devastating, leaving women with limited reproductive alternatives. In response, surrogacy is gradually gaining recognition as an option for women who have experienced multiple IVF failures (Ezenwa, 2024; Nkolika, 2024). However, surrogacy acceptance in Nigeria is hindered by legal, ethical, religious, and cultural concerns (Ajulo, 2024; Esan et al., 2025). In many Nigerian communities, natural conception remains idealized, limiting open discussions and support systems for women exploring alternative reproductive options (Olowolafe et al., 2023). Traditional beliefs emphasizing the necessity of a woman physically carrying her child contribute to secrecy and fear of societal judgment (Ajulo, 2024; Esan et al., 2025), while the absence of a regulatory framework further complicates surrogacy arrangements. Critical issues such as parental rights, surrogate compensation, and ethical oversight remain unresolved, increasing the risk of exploitation, particularly in commercial surrogacy (Adelakun, 2018; Okenwa-Vincent, 2025; Omutoko, 2025; Attawet et al., 2024).

Several studies in Nigeria have focused on the medical, ethical, and legal dimensions (Alliu & Orji, 2021), with limited attention paid to the emotional factors influencing decision-making. Studies have also explored legal debates (Gheaus & Strahle, 2024) and the impact of celebrity culture on fertility choices. Ogunbola et al.'s (2024) study significantly contributes to this discourse by examining the effects of celebrity endorsements on Nigerian women's perceptions and decisions regarding assisted reproductive technologies (ARTs) like surrogacy and IVF. However, a significant gap remains in understanding infertile women's internal conflicts regarding surrogacy in Nigeria, particularly through a theoretical lens like the health belief model (HBM). The HBM offers a valuable framework for examining surrogacy decision-making, considering perceived severity, susceptibility, benefits, barriers, self-efficacy, and external cues (Rosenstock, 1974). This decision is particularly relevant given surrogacy's status as a last resort for biological motherhood, often marked by fears of rejection, identity loss, and ethical concerns (Parvizi & Ghodrati, 2025; Whittaker et al., 2025).

HBM framework allows for an analysis of how Nigerian women weigh the risks and benefits of surrogacy in the context of societal stigma, legal uncertainty, and religious constraints. Although HBM explains decision-making based on perceived health-related beliefs, its ability to fully capture the deeply embedded psychological factors that shape surrogacy decisions among Nigerian women who have experienced repeated infertility treatment, such as IVF, has not been explored. This study applies HBM to examine surrogacy decision-making among intended moth-

ers in Nigeria. The model offers a structured framework for understanding health-related behaviors, comprising 6 key constructs: Perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.

Literature review

In this literature review, we found relevant empirical studies on surrogacy, particularly in Nigeria and comparable settings, to identify factors influencing the decision-making to use surrogacy among women struggling with infertility. The perceived susceptibility to infertility complications and the severity of childlessness are significant factors influencing the decision to use surrogacy. Infertility is often perceived as a socially and personally devastating condition, especially for women, in many African cultures. Studies have shown that infertility is a significant problem in Nigeria, with factors such as tubal blockage contributing to its prevalence (Omisakin et al., 2024). Women in Nigeria who experience infertility may perceive themselves as susceptible to the challenges posed by infertility, driving them to consider ARTs as a viable solution (Ajayi et al., 2025). Infertility is deeply stigmatized in Nigeria, with motherhood seen as a primary role for women within societal and familial structures. The sociocultural implications of infertility in Nigeria, including the significant stigma attached to being childless, contribute to the perceived severity of infertility (Bakare et al., 2024). When infertility is seen as a severe problem, the willingness to seek ART increases, particularly if there is a belief that ART can help overcome these deeply entrenched social challenges. Alabi (2021) highlights the Yoruba sociocultural expectation that equates womanhood with motherhood, exacerbating the emotional toll of infertility. This conclusion aligns with findings from Parvizi and Ghodrati (2025), who discuss the compounded emotional distress of women in Islamic societies, where cultural and religious norms place severe social pressures on childless women. The perceived severity of infertility is heightened by cultural norms that associate a woman's worth with her ability to bear children, leading to significant psychological distress (Gerrits et al., 2025). In the Nigerian context, this cultural burden exacerbates the emotional toll on women, underscoring the need for a solution from various sources (Alliu & Orji, 2021). The cultural stigma surrounding infertility in sub-Saharan Africa is explored by McCoy et al. (2024), who examined the medical risks associated with surrogacy, emphasizing that the perceived health complications during surrogacy (e.g. pregnancy-related risks for surrogates) add to the perceived severity of choosing surrogacy.

Despite the perceived risks and severity, perceived benefits play a central role in shaping the decision to pursue surrogacy. Surrogacy can offer significant emotional and psychological benefits, including the chance to have a biological child, fulfill the desire for parenthood, and overcome infertility. Research has shown that personalized ART treatments tailored to individual factors can enhance success rates for women undergoing IVF (Mohammed-Durosinlorun et al., 2024). The use of frozen embryo transfers (FET) has also been shown to be an effective solution with high success rates, enhancing women's belief in the benefits of ART as a fertility solution (Ajayi et al., 2025). Ezenwa et al. (2024) highlighted that surrogacy would offer hope for individuals who feel vulnerable due to infertility, with many women viewing it as a solution to the societal pressure of motherhood. Additionally, commercial surrogacy models often present financial benefits, offering surrogate mothers' compensation for their role (Chaitra & Hema, 2025). Piersanti et al. (2021) and Söderström-Anttila (2016) emphasize the positive emotional outcomes of altruistic surrogacy, suggesting that non-commercial surrogacy often leads to better psychological outcomes for both surrogates and intended parents. However, as D'Amore et al. (2024) pointed out, gay couples might see surrogacy as a means to fulfill parenting aspirations, providing them with the opportunity to experience parenthood in ways otherwise unattainable. Despite the challenges, these perceived benefits often outweigh the social stigma and legal challenges faced by those pursuing surrogacy.

Perceived barriers to surrogacy in Nigeria are multifaceted and include financial, legal, cultural, and medical obstacles. Financial constraints are a primary barrier, as surrogacy involves significant costs for medical treatments, surrogate compensation, and legal fees, which may be prohibitive in low-income settings. The high cost of IVF in Nigeria remains a major barrier to adoption, as described in several studies (Bakare et al., 2024; Omiakin et al., 2024). Cultural barriers, such as religious opposition to ART and surrogacy, also prevent many women from accessing ART. Alabi (2020) emphasizes the lack of awareness and accessibility of ART, which limits options for infertile couples. These financial and knowledge gaps contribute to the stigma associated with infertility, making surrogacy a less viable option for many women in Nigeria. Legal barriers are also prominent, with weak regulatory frameworks surrounding surrogacy in Nigeria, which increases the vulnerability of surrogates to exploitation (Adelakun, 2018). Gheaus and Strahle (2024) argued that surrogacy can be ethically problematic due to the potential for exploitation of women, particularly in regions with limited legal protec-

tions. Moreover, societal norms that view surrogacy as morally or religiously unacceptable further complicate the decision-making process. Gerrits et al. (2025) and McCoy et al. (2024) highlighted that these legal and cultural barriers often reinforce the perceived risks associated with surrogacy.

Cues to action play an important role in influencing individuals to consider surrogacy, particularly in contexts like Nigeria, where ART is not widely accepted. In this setting, health care professionals, support groups, educational campaigns, social media advocacy, and celebrity surrogacy success stories serve as crucial cues to action, promoting awareness and understanding of surrogacy options. Information from trusted health professionals, media representations, and personal experiences of others triggers motivation, influencing women's decisions to consider surrogacy. According to Marklund et al. (2025), health education and awareness campaigns can alter perceptions by providing clear, scientifically grounded information that may dispel myths about surrogacy and its risks. Support networks, including family and peers, also play a crucial role in influencing decisions and reducing the emotional toll of surrogacy decisions (Parvizi & Ghodrati, 2025). Additionally, the increasing global awareness of surrogacy, through media and international surrogacy arrangements, has been a driving force in changing perceptions of surrogacy in developing nations, such as Nigeria (D'Amore et al., 2024). The application of the HBM to surrogacy in Nigeria reveals complex layers of cultural, psychological, and legal dynamics that influence reproductive decisions. Women facing infertility must weigh perceived risks, benefits, and barriers while navigating a system where both legal and cultural structures are underdeveloped. For surrogacy to become a more viable and accepted option, there must be efforts to address legal uncertainties, provide adequate support for both surrogates and intended parents, and promote education to mitigate cultural stigma and misconceptions about surrogacy (Marklund et al., 2025; Piersanti et al., 2021). Legal reform and public health campaigns serve as cues to action for women considering IVF or surrogacy (Kigbu et al., 2024). Similarly, Gerrits et al. (2025) advocate integrating cultural considerations into reproductive health care policies to foster acceptance and mitigate stigma.

Self-efficacy, or an individual's belief in their ability to navigate the surrogacy process, is a critical factor in the decision to pursue surrogacy. Women in Nigeria may feel unsure about the success of ART due to a lack of trust in medical facilities or concerns about its cultural acceptability. However, the success of ART treatments, such as

FET, over a five-year period could help build confidence in their efficacy, thereby increasing self-efficacy (Ajayi et al., 2025). Jadva et al. (2003) argue that counseling and psychological support are essential for both intended parents and surrogates, as they help individuals build emotional resilience and feel more confident in their decisions. In Nigeria, where emotional and social support systems for ART users are limited, accessing guidance from healthcare providers, legal professionals, and peer networks becomes crucial for enhancing self-efficacy (Fantus, 2021). Women who perceive themselves as capable of navigating the surrogacy process, including its medical, financial, emotional, and legal challenges, are more likely to consider surrogacy as a viable option.

Materials and Methods

Research method

This study utilized a qualitative research design employing directed qualitative content analysis (DQCA), informed by the HBM and structured according to the analytical frameworks of Hsieh and Shannon (2005) and Assarroudi et al. (2018). The HBM's six constructs (perceived susceptibility, severity, benefits, barriers, cues to action, and self-efficacy) provided a deductive coding framework, operationalized through a categorization matrix (Rosenstock, 1974; Hsieh & Shannon, 2005). Concurrently, the analysis employed inductive coding to identify emergent themes related to cultural, emotional, spiritual, and societal dimensions, thereby facilitating an in-depth understanding of the phenomenon (Hsieh & Shannon, 2005; Kibiswa, 2019). This dual approach ensured theoretical coherence while maintaining a focus on participants' lived experiences.

Study population

This study recruited 20 Nigerian women who had experienced at least one failed IVF cycle, utilizing a purposive sampling technique to capture rich and informed narratives from participants with firsthand experience of infertility, fertility decision-making, and surrogacy perspectives (Marshall & Rossman, 2011; Hossain et al., 2024). The participants were recruited from two online support networks: "Voices of fertility and health" (formerly "women in concerns") and "fertility, IVF, and surrogacy," both of which are hosted on Facebook and WhatsApp. These platforms, moderated by the lead author, provided a safe space for women to share their experiences, discuss fertility, surrogacy, IVF, and related health issues, and access free psychosocial counseling and information.

Sampling technique

A combination of purposive and snowball sampling was employed to recruit participants. Initially, 9 participants were recruited through the online platforms, and subsequent participants were referred through snowball sampling, where existing participants recommended others who met the inclusion criteria. This approach facilitated the recruitment of a sample of 20 women, providing in-depth insights into their experiences and perspectives on the decision-making process surrounding surrogacy.

Inclusion and exclusion criteria

Participant selection was based on specific criteria, where participants were included if they had experienced female infertility and had undergone at least one failed IVF cycle, were currently considering surrogacy, and were willing to engage in in-depth discussions about surrogacy perceptions. Conversely, participants were excluded if they had no prior experience of failed IVF treatment, were actively pursuing other fertility treatments not related to surrogacy, or were unwilling to participate in detailed interviews. This purposeful sampling approach is rooted in qualitative research principles, which emphasize the collection of rich, experiential narratives to provide in-depth insights into complex social phenomena (Lester, 1999).

Data collection methods

In-depth interviews were conducted via WhatsApp to safeguard participants' privacy and emotional well-being. This procedure offered flexibility and facilitated candid discussions about a sensitive and stigmatized topic like infertility (Smith et al., 2013). Participants were given the option to describe their journey with infertility and how it has affected their life, well-being, and decision to pursue surrogacy in writing via WhatsApp and SMS, or through voice notes and recorded phone calls, reflecting the diverse communication preferences reported in previous research (Hossain et al., 2024). All interviews were conducted with informed consent and were either audio-recorded or text-based, based on their preferred mode of communication. The interviews were transcribed verbatim, and in some instances, field notes were taken to capture the details and pauses, resulting in a rich collection of data and an in-depth understanding of the participants' experiences (See Appendix A for interview guide) (Creswell & Poth, 2018).

Data analysis

This study utilized DQCA following Assarroudi et al.'s (2018) 16-step framework and was guided by the HBM (Hsieh & Shannon, 2005). A deductive coding matrix was developed and applied to 20 interview transcripts using NVivo software, version 15 (Lumivero, 2025). The analysis integrated deductive coding (HBM constructs) with inductive coding for emergent themes, including sociocultural identity pressures and religious and spiritual tensions. A line-by-line open coding technique was employed, with double coding for overlapping categories. NVivo tools were used to explore code intersections and refine the boundaries of themes. Findings were interpreted through both HBM and inductive (thematic analysis) perspectives, highlighting factors shaping surrogacy decisions and exposing HBM's limitations. Rigor was ensured through member checking, audit trails, peer debriefing, and reflexive memos (Assarroudi et al., 2018; Hsieh & Shannon, 2005).

Results

Table 1 presents the demographic profile of the 20 participants, all of whom were married women aged 32-45 years, with diverse educational backgrounds (secondary school to master's degree) and occupations (teachers, traders, civil servants, healthcare workers, entrepreneurs, etc.). The participants identified as either Christian or Muslim, reflecting the religious diversity of the population.

Table 2 shows the themes, categories, and subcategories resulting from the data based on the HBM that was derived in the first stage of data analysis. The frequencies included in the Table indicate the repetition or importance of the relevant codes and subcategories.

Table 1. Demographic characteristics of the participants (n=20)

Participant ID	Age (y)	Marital Status	Education Level	Religion	Occupation
P01	34	Married	Bachelor's degree	Christian	Teacher
P02	40	Married	Secondary school	Muslim	Trader
P03	38	Married	Higher national diploma (HND)	Christian	Civil servant
P04	35	Married	Bachelor's degree	Christian	Banker
P05	42	Married	Master's degree	Christian	Lecturer
P06	37	Married	Diploma	Muslim	Nurse
P07	36	Married	Bachelor's degree	Christian	Public servant
P08	39	Married	Secondary school	Muslim	Caterer
P09	33	Married	Bachelor's degree	Christian	Entrepreneur
P10	41	Married	HND	Christian	Accountant
P11	45	Married	Master's degree	Christian	NGO worker
P12	32	Married	Bachelor's degree	Christian	Administrative officer
P13	44	Married	Diploma	Muslim	Market trader
P14	36	Married	Secondary school	Christian	Fashion designer
P15	43	Married	Bachelor's degree	Christian	Business owner
P16	39	Married	Master's degree	Christian	Health worker
P17	35	Married	HND	Muslim	Teacher
P18	38	Married	Bachelor's degree	Christian	Media practitioner
P19	40	Married	Diploma	Christian	Civil servant
P20	34	Married	Bachelor's degree	Muslim	Social worker

Table 2. Main themes, categories, and subcategories derived from the data based on the HBM

Main Theme	Category	Subcategory	No. (%)
Perceived susceptibility	Awareness of Infertility Risk	Acknowledging repeated IVF failure	11(55)
		Fear of lifelong childlessness	15(75)
	Limited treatment alternatives	Emotional fatigue from IVF	9(45)
		Perceived end of options	16(80)
Perceived severity	Emotional and social consequences	Marital strain, loss of identity, fear of abandonment	14(70)
	Societal and cultural stigma	Community pressure, negative labeling of infertile women	15(75)
Perceived benefits	Emotional fulfillment	Sense of motherhood	12(60)
		Emotional relief from infertility stigma	14(70)
		Improved mental well-being	9(45)
	Social acceptance	Strengthened marital relationships	16(80)
		Reduced societal pressure	8(40)
		Fulfillment of family expectations	10(50)
	Biological connection	Retaining genetic ties to the child	14(70)
		Overcoming adoption-related concerns	7(35)
		Perceived violation of cultural norms	9(45)
Perceived barriers	Cultural and religious opposition	Religious disapproval of surrogacy	15(75)
		Fear of societal judgment	13(65)
		High cost of surrogacy procedures	18(90)
	Financial constraints	Lack of government support or funding	17(85)
		Financial priorities and competing needs	13(65)
		Uncertainty about surrogacy laws in Nigeria	11(55)
	Legal and ethical concerns	Ethical dilemmas about surrogate rights	15(75)
		Fear of legal disputes over child custody	9(45)
		Fear of not bonding with the child	16(80)
	Psychological barriers	Anxiety about surrogate loyalty or commitment	14(70)
		Guilt about using another woman for reproduction	15(75)
Cues to action	Influence of healthcare providers	Encouragement from fertility specialists	12(60)
		Education on surrogacy options	14(70)
		Professional guidance on procedures	9(45)
Media and success stories		Exposure to surrogacy success stories	16(80)
		Positive portrayals of surrogacy in the media	8(40)

Main Theme	Category	Subcategory	No. (%)
Media and success stories		Influence of online forums and social media	10(50)
		Recommendations from other women with similar experiences	14(70)
Peer and family support		Support from close family or friends	7(35)
		Community acceptance of surrogacy	9(45)
Self-efficacy	Confidence in navigating the process	Awareness of surrogacy requirements	15(75)
		Knowledge of available clinics and professionals	13(65)
Availability of support systems		Confidence in legal and procedural safeguards	18(90)
		Access to financial resources	17(85)
		Emotional support from family and spouse	13(65)
		Guidance from advocacy or infertility support groups	11(5)
		Readiness to address societal judgment	15(75)
Overcoming fears and concerns		Ability to deal with potential emotional challenges	9(45)
		Trust in the surrogate and the health care process	16(80)

Client-Centered Nursing Care

Perceived susceptibility

Nigerian women's consideration of surrogacy was often precipitated by the painful acceptance of their infertility, particularly after multiple failed IVF cycles. Participants' experiences were marked by a sense of loss and diminishing chances of biological motherhood, as illustrated by the following quotes.

"After five failed IVF cycles, I had to accept that my chances of carrying a pregnancy were slim. Surrogacy became my only hope of having a biological child" (Participant [P]1). "Each time I lost a pregnancy, I thought maybe the next cycle would work, but after multiple failures, my doctor told me my uterus was too weak to carry a baby to term" (P5). "I kept hoping for a miracle, but my test results showed worsening fibroids and endometrial scarring. I had to face the reality that surrogacy might be my best option" (P10).

These accounts highlight how clinical diagnoses, repeated reproductive failures, and fading hopes of carrying a pregnancy shaped women's perceived susceptibility to surrogacy, ultimately leading to emotional acceptance of alternative options.

Perceived severity: Emotional and social consequences, societal and cultural stigma

Infertility was a profoundly personal and distressing experience for the participants, intensified by repeated IVF failures, societal expectations, and cultural stigma. The participants vividly described the emotional and social burdens as follows.

"I was sinking into depression after each failed IVF cycle. The emotional toll was unbearable. I knew if I didn't find another solution, I would lose myself completely" (P3).

"My marriage was suffering because of my inability to conceive. The stress of multiple failed IVF attempts made me fear losing my husband if I didn't find an alternative" (P8).

"At family gatherings, I felt invisible. I was always the 'childless woman' no matter what else I had accomplished. The weight of that stigma pushed me toward considering surrogacy" (P6).

These accounts illustrate the perceived severity of infertility as a threat to women's social identity, marital stability, and mental well-being, prompting them to seek alternative pathways like surrogacy. The emotional suffering, depressive episodes, and strained relationships underscore the complex and multifaceted nature of infertility's impact.

Table 3. Emergent themes beyond the HBM in surrogacy decision-making

Main Theme	Category	Subcategory	No. (%)
Sociocultural identity pressures	Societal expectations, stigma and misconception, social image and reputation	Perceived sociocultural norms and expectations, gender norms, cultural surveillance in decision-making, stigma of childlessness, public shaming, patriarchal expectations	15(75)
		Community gossip and judgment, reputational fear, fear of public embarrassment, and being labeled as barren	12(60)
Family and marital dynamics	Spousal and in-laws' authority, social surveillance	In-laws' and husband's authority	11(55)
		Cultural expectation of biological lineage	9(45)
Religious and spiritual tensions	Divine timing and faith alternatives, religious incompatibility,	Surrogacy as sin or moral/religious violation	16(80)
		Faith-based delay or rejection, divine timing	16(80)
Medical and legal mistrust	Misinformation and medical mistrust, Legal ambiguity	Misinformation and confusion about the surrogacy process, legal myths, and a lack of clarity	10(50)
		Distrust of fertility clinics and medical exploitation	14(70)
Financial class reality	Perception of elitism and financial need	Perception of surrogacy as elitist or unaffordable	8(40)
		Competing financial needs	9(45)
Emotional distress and identity threat	Identity and womanhood crisis	Affective states and identity threats, grief, shame, isolation, redefining motherhood beyond childbirth	15(75)
		Psychological healing post-failure	17(85)

Client-Centered Nursing Care

Perceived benefits: Emotional fulfillment, social acceptance, and biological connection

Surrogacy emerged as a source of renewed hope for Nigerian women, enabling them to fulfill their desire for biological motherhood and reclaim their sense of purpose and dignity. Participants shared the emotional, social, and cultural benefits of surrogacy as follows.

“For years, I have dreamed of holding my child. Even if I cannot carry the pregnancy myself, surrogacy gives me the chance to be a mother finally” (P2).

“Infertility made me feel broken, but surrogacy gives me hope. Just the thought of having my baby brings me peace” (P3).

“In this society, a woman without children is seen as incomplete. Surrogacy gives me a way to silence those judgments and live my life with dignity” (P12).

“Adoption is a beautiful thing, but I still want to see my own eyes or my husband's smile in my child. Surrogacy allows us to keep that connection” (P15).

These narratives demonstrate how surrogacy addressed the emotional void caused by infertility, aligned with the cultural desire for biological continuity, and provided societal validation, ultimately restoring women's sense of purpose and dignity.

Perceived barriers: Cultural, religious, legal, financial, and psychological concerns

Women's decision-making around surrogacy was complicated by numerous barriers, including cultural, religious, legal, financial, and psychological concerns. Participants expressed that as follows.

“My faith is important to me, and I have been told that surrogacy is against God's will. It's hard to go against what I've always believed” (P5).

“I have heard that surrogacy costs millions of naira. Even if I wanted to do it, where would I find that kind of money?” (P15).

“There are no clear laws in Nigeria, which makes me scared. I have watched online videos of surrogacy arrangements, where the surrogate mother ran away with the baby” (P9).

“I worry that because I did not carry the baby myself, I might not feel the same bond. What if I struggle to connect?” (P16).

“I feel uncomfortable asking another woman to go through pregnancy for me. It makes me wonder if I am being selfish” (P13).

These concerns highlight the complex interplay of emotional, spiritual, legal, and financial factors influencing women's perceptions of surrogacy, underscoring the multifaceted nature of decision-making in this context.

Cues to action: Influence of healthcare providers, media and success stories, peer and family support

Supportive cues, including health care professionals, media stories, and peer encouragement, empowered women to navigate surrogacy decisions with confidence and clarity, alleviating fears and misconceptions. The women shared their experiences on how external guidance opened their minds.

"My doctor explained it with so much care. She made me see that it's a real solution, not just something for foreigners" (P13).

"I used to think surrogacy meant giving my child to another woman. But after speaking with my doctor, I now understand that it's still my baby, just carried by someone else" (P5).

"I saw a woman on TV who had her baby through surrogacy, and it made me believe that it could work for me too" (P3).

"Joining an online group for women facing infertility showed me that others have gone through surrogacy and found happiness" (P1).

"When I mentioned it to my sister, she said, 'If this will bring you joy, go for it.' That gave me the strength to explore the option" (P1).

These external cues helped bridge the gap between uncertainty and acceptance, empowering women to consider surrogacy despite previous doubts.

Self-efficacy: Confidence in navigating the process, availability of support systems, overcoming fears and concerns

Finally, women's belief in their ability to manage the surrogacy process, termed self-efficacy, proved to be a defining factor in their decision-making. Through education, partner support, and emotional resilience, women gained the confidence needed to pursue surrogacy despite numerous hurdles. The women reported several factors that fostered their self-confidence in surrogacy decisions as follows:

"The more I learned about the process, the more confident I became. Knowledge was my greatest source of empowerment" (P11).

"Being part of a support group helped me believe in myself. Hearing others' experiences gave me the courage to take this step" (P9).

"Surrogacy is expensive, but with my husband's support and savings, we are making it possible" (P1).

"I know some people will talk, but I also know that their opinions won't raise my child. I am ready to do what is best for my family" (P11).

"I worried about not carrying the baby myself, but I've realized that love is not about pregnancy but about the bond we build after birth" (P10).

These narratives demonstrate that building self-efficacy through knowledge, support, and emotional strength enabled women to pursue surrogacy confidently.

Emergent themes beyond the HBM in surrogacy decision-making

While the HBM provided a foundational lens to examine cognitive and motivational determinants of surrogacy decision-making, several themes emerged from the data that extended beyond its conceptual boundaries. These themes reflect deeper sociocultural, structural, religious, emotional, and economic realities that shaped participants' reproductive choices. The themes are presented in [Table 3](#), supported by narrative interpretation, illustrative participant quotes, and frequencies.

The results presented in [Table 2](#) reveal that Nigerian women's surrogacy decisions are influenced by sociocultural, religious, economic, and emotional factors, beyond individual cognitive processes, and 6 major themes emerged, highlighting the complex context in which women make decisions.

Sociocultural identity pressures

The findings reveal that Nigerian women experience profound sociocultural pressures surrounding motherhood, intricately tied to their identity and societal expectations. As participants articulated, womanhood is often defined by the ability to conceive and bear children, re-

sulting in intense scrutiny and surveillance. This finding is as reported.

“Once you marry, they start counting. One year, two years, and no child, people start asking questions, whispering. It’s like you’re not complete” (P3).

Surrogacy is often met with suspicion and misconceptions:

“Some say it’s a white man’s thing or that the baby is not yours. They don’t understand it, so they judge you” (P8).

Fear of social ostracism and gossip is prevalent:

“Even if I want to do it [surrogacy], who will I tell? If people know, they will say I bought the baby. My husband’s family will never accept it” (P5).

These narratives highlight the complex sociocultural context and the need for culturally sensitive support and understanding to help women navigate surrogacy decisions.

Family and marital dynamics

The study reveals that family dynamics, particularly spousal and in-law authority, significantly influence women’s surrogacy decisions. Many participants lacked autonomy, deferring to their husband’s or in-laws’ opinions on surrogacy. Family dynamics, particularly spousal and in-law authority, significantly shape women’s surrogacy decisions. Findings include:

Women often depend on their husband’s or in-laws’ opinions on surrogacy.

“My husband said no. He believes if God wants us to have children, it will happen naturally. I cannot go against him” (P2).

Social surveillance: The opinions and perceived opposition of extended family members added emotional tension.

“His mother said, ‘Is she the only woman who cannot have children? Tell her to pray harder.’ So, I just kept quiet about surrogacy” (P9).

These narratives show the complex family influences that impact women’s surrogacy decisions, underscoring the need to consider these dynamics in reproductive choices.

Religious and spiritual tensions

The study reveals that faith played a complex role in surrogacy decisions, serving both as a source of comfort and a barrier. Some participants delayed pursuing surrogacy, awaiting a divine miracle, as evident in their narration.

Some participants waited for a divine miracle, influenced by religious leaders.

“My pastor said I should wait, that God is testing our faith. I believed, so we kept praying for years” (P6).

Faith as a moral concern: Others viewed surrogacy as sinful or unnatural.

“To some people in church, surrogacy is like trying to play God. They say it’s not biblical” (P1).

Reevaluating beliefs: Prolonged infertility led some women to reconsider their views.

“I asked myself, what if God is giving us another way? Maybe this is also His plan” (P10).

These narratives revealed the impact and often conflicting role of faith in surrogacy decisions.

Medical and legal mistrust

The study highlights that mistrust in the medical system and lack of reliable information significantly deterred women from pursuing surrogacy. Misinformation about the surrogacy process often fueled fear and uncertainty.

Fear and uncertainty stemmed from misconceptions about surrogacy, such as the surrogate potentially claiming the baby.

“I heard stories that the surrogate can change her mind and claim your baby. That scared me” (P4).

Uncertainty surrounding custody rights and enforceable agreements in Nigeria fueled anxiety.

“There is no clear law, so you’re just doing trial and error contracts. What if the courts don’t support you?” (P7)

These factors created significant psychological hesitation, even among women who were prepared for surrogacy.

Financial class reality

The study reveals that financial constraints significantly impacted women's perceptions of surrogacy, with many viewing it as a luxury option accessible only to the wealthy. This perception of elitism led some to feel excluded from considering surrogacy, as evident in these narrations.

Many viewed Surrogacy as a luxury option for the wealthy, feeling excluded.

"Only celebrities and rich people can afford surrogacy. It's not for people like us" (P11). Basic needs took precedence over reproductive technology.

"We had to choose between paying rent and saving for IVF. How can I now talk of paying a surrogate?" (P3)

These narratives revealed the financial barriers and socioeconomic disparities that limit access to surrogacy.

Emotional distress and identity threat

The study reveals that infertility had profound emotional and psychological effects on women, extending beyond the cognitive dimensions of health behavior. Many participants experienced a crisis of womanhood and personal identity, questioning their self-worth. Women's narration includes:

"You start to question yourself: Am I a woman if I cannot carry a child?" (P12).

Insensitive remarks and social exclusion exacerbated grief, shame, and loneliness. "Sometimes I just cry alone. You go to weddings and baby showers and feel like an outsider" (P6).

Some participants found healing by broadening their definition of motherhood.

"Carrying the baby doesn't make you more of a mother. Love and sacrifice do. That's what I tell myself now" (P8).

This shift in perspective facilitated emotional healing and acceptance.

Discussion

The study explores factors influencing surrogacy decisions among Nigerian women with failed IVF, based on the constructs of the HBM. However, it highlights limi-

tations in capturing sociocultural identity, family dynamics, religion, legal uncertainty, and emotional resilience.

Perceived susceptibility and severity

In this study, as seen in [Table 2](#), participants reported experiencing profound psychological and emotional distress due to the increased risk of infertility and limited treatment alternatives, leading to emotional and social consequences ([Figure 1](#)). The experience of societal and cultural stigma following repeated IVF failures amplifies their perceived vulnerability to permanent infertility and intensifies the gravity of childlessness within a pronatalist culture. This finding is consistent with prior studies from Nigeria and other African countries ([Ajayi et al., 2025](#); [Alabi, 2020](#); [Ajulo, 2024](#); [Okonofua, 1999](#); [Araoye, 2003](#)). Also, in line with [Dyer et al. \(2005\)](#), infertility was perceived as a threat to marital stability, social standing, and personal worth, extending beyond a biomedical issue. This study further reveals that emotional exhaustion from failed IVF serves as a critical turning point in women's decisions to consider surrogacy, transforming it from a distant option to a necessary act of self-preservation.

Perceived benefits and barriers

Participants perceived surrogacy as fulfilling, having a biologically connected child, alleviating social scrutiny, and preserving marital harmony ([Figure 1](#)), consistent with findings by [Alabi \(2020\)](#), [Marklund et al. \(2025\)](#), and [Parvizi and Ghodrati \(2025\)](#). Surrogacy emerged as a redemptive path, capable of restoring feminine identity and familial legitimacy. However, substantial barriers persisted, including financial, psychological, cultural, and legal opposition ([Figure 1](#)) ([Araoye, 2003](#); [Teman, 2010](#)), which often triggered guilt, fear, and hesitation. Financial constraints and lack of legal clarity ([Alabi, 2021](#)) further limited access to surrogacy. Notably, this study reveals psychological barriers that extend beyond material constraints, including fear of emotional detachment and distrust toward surrogates, reflecting complex inner conflicts shaped by cultural narratives and prior reproductive trauma.

Cues to action

Health care professionals' influence, media success story, and peer and family support ([Figure 1](#)) significantly prompted action to consider surrogacy. This finding is consistent with [Marklund et al. \(2025\)](#) and [Parvizi and Ghodrati \(2025\)](#). Notably, this study highlights the empowering role of social media and online infertility

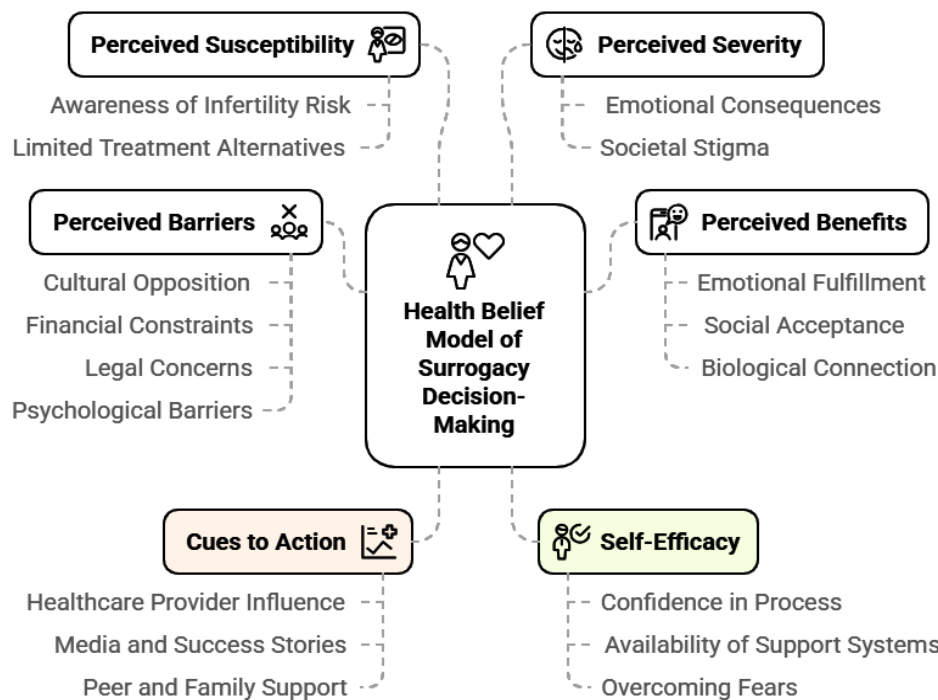


Figure 1. Schematic representation of factors affecting surrogacy decision-making based on the HBM

Client-Centered Nursing Care

forums, providing emotionally safe spaces for women to share experiences, gather information, and challenge the stigma of infertility and surrogacy. The rise of digital platforms is transforming reproductive autonomy, enabling individuals to access informed and empathetic guidance, particularly in environments where traditional support systems may be scarce or stigmatizing.

Self-efficacy

Participants' self-efficacy in pursuing surrogacy was bolstered by confidence in the process, a robust support system, access to reliable ART clinics, overcoming fears, financial stability, family approval, and legal knowledge (Whittaker et al., 2025; Piersanti et al., 2021). However, their confidence often hinged on social validation and collective acceptance, underrating the communal nature of reproductive decision-making in African contexts where surrogacy lacks widespread endorsement, and legitimacy that is frequently derived from others.

Beyond the HBM: Emergent themes and theoretical gaps

While HBM provides a valuable framework, its individual-centered perspective falls short in capturing the complex relational, moral, and structural factors that influence women's decisions.

Sociocultural identity pressure

Sociocultural identity and gender norms emerged as pivotal themes, with participants facing pressure to conform to traditional motherhood expectations and fearing gossip, marginalization, and status loss if they pursued surrogacy (Adeoye et al., 2025; Alabi, 2021). Important subthemes included cultural surveillance, patriarchal control, and reputational risk, reflecting the internalization of societal norms and expectations. These findings emphasized that surrogacy decisions involve complex identity management within a scrutinized sociocultural context, highlighting the need for culturally sensitive healthcare that affirms women's diverse reproductive choices without moral judgment.

Family and marital dynamics

Extending prior research (Kadirov et al., 2025), this study highlights the influential role of husbands and in-laws (Figure 2) as gatekeepers in reproductive decisions. Participants carefully balanced asserting their agency with maintaining family harmony, highlighting the importance of inclusive counseling that accommodates collective decision-making while protecting individual autonomy.

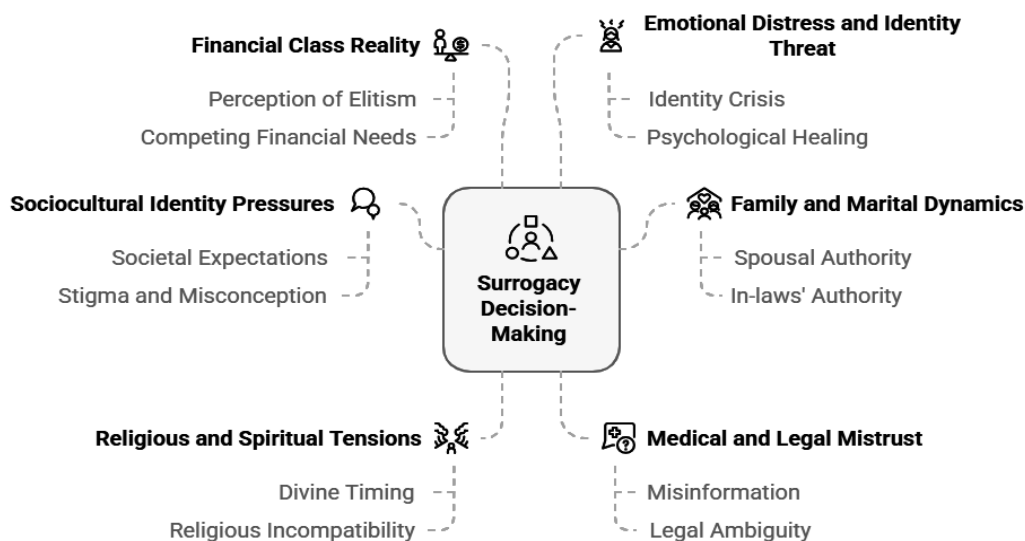


Figure 2. Schematic representation of the emerged themes for surrogacy decision-making

Client-Centered Nursing Care

Religious and spiritual tensions

Religion plays a complex role, offering strength yet also sparking moral conflict. Participants grappled with fears that surrogacy might contradict divine will or faith-based teachings (Figure 2) (Umeora et al., 2014; Oluwasegun, 2024), leading to delayed decisions or outright rejection, even with medical recommendations. This finding points to the need for faith-sensitive reproductive care, providing a non-coercive space for women to integrate their spiritual beliefs with informed fertility options.

Medical and legal distrust

Participants' distrust of fertility clinics and legal institutions stems from misinformation, conflicting advice, and exploitation concerns (Manvelyan et al., 2024). The unregulated fertility sector's lack of legal protection heightens women's emotional vulnerability. To rebuild trust and prevent re-traumatization, client-centered care should emphasize transparent communication, legal literacy, and ethical safeguards.

Financial class realities

Surrogacy was previously viewed as a luxury for the affluent due to its high costs, limited insurance coverage, and competing financial priorities (Berthonnet & Clos, 2024; Srivastava, 2025). This economic disparity perpetuates structural inequality in accessing reproductive technologies, underscoring the need for subsidized programs, financial counseling, and policy reforms to ensure equitable access to surrogacy services in Nigeria.

Emotional distress and identity reconstruction

Beyond medical concerns, women experience profound emotional pain, including shame, grief, and loss of self (Figure 2). However, some also reported transformative journeys of healing, resilience, and redefining motherhood beyond biological ties (Karmakar, 2024; Bar-Am, 2025). These experiences point to the need for integrating mental health support into fertility care, providing validation and support throughout the reproductive journey.

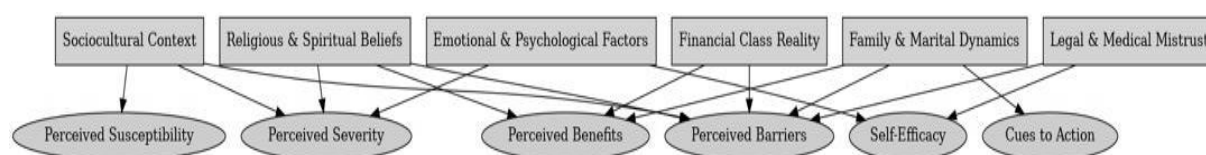


Figure 3. Relationships between the core themes of the HBM and the emerging themes

Client-Centered Nursing Care

Suggestions for a broader theoretical framework

This study confirms the HBM's utility in understanding reproductive decision-making, yet reveals its shortcomings in fully capturing the intricacies of surrogacy in Nigeria, where spiritual beliefs and sociocultural factors profoundly influence perceived susceptibility and severity. Perceived benefits are socially constructed, driven by potential social acceptance, marital bond maintenance, or religious fulfillment. In contrast, perceived barriers include moral dilemmas, institutional distrust, legal ambiguity, and fear of divine retribution (Figure 3). Cues to action are predominantly interpersonal, influenced by spousal, family, and religious factors, and self-efficacy is linked to emotional recovery, psychological resilience, and identity negotiation (Figure 3). These findings reveal a critical gap in the classical HBM, which overlooks socio-relational and moral-structural dynamics (Figure 3), leading to the proposal of an expanded HBM that embeds the original constructs within sociocultural norms, familial dynamics, spiritual conflict, legal-medical trust, financial realities, and psychological resilience, offering a more in-depth understanding of reproductive decisions in complex contexts.

Implications for health psychology practice

The study's findings have significant implications for health psychology practice, highlighting the need for a holistic approach that addresses the complex interplay between individual, family, and sociocultural factors influencing reproductive decisions. Health psychologists can play a crucial role in developing family-centered interventions that respect women's autonomy, providing faith-sensitive support and counseling, advocating for policy reforms and legal clarity, and integrating psychosocial care into reproductive treatment. By adopting this approach, health psychologists can help ensure that women receive comprehensive and supportive care, ultimately promoting more positive reproductive health outcomes.

Conclusion

Surrogacy decision-making among Nigerian women is not a simple health behavior but a profound negotiation of identity, morality, family, and survival. This study highlights the utility and limitations of the HBM in understanding surrogacy decision-making among Nigerian women experiencing infertility. While the HBM provided insights into women's perceptions of infertility's consequences and the benefits and barriers to utilizing surrogacy, it fell short of capturing the complex socio-

cultural, emotional, religious, and informational factors influencing the women's decisions. The findings reveal that surrogacy decision-making is embedded in broader contexts, necessitating a more in-depth and integrative theoretical lens. Expanding or integrating the HBM with complementary frameworks is warranted to enhance understanding of the dynamic between individual beliefs and structural realities. This study's findings have crucial implications for health psychology, highlighting the need for holistic, culturally sensitive, and emotionally supportive interventions. Key recommendations include enhancing public education on surrogacy, strengthening psychosocial counseling, establishing robust legal and ethical frameworks, and improving financial access to ARTs. Future research should explore the long-term outcomes of surrogacy, the impact of evolving societal norms, and the development of targeted support interventions. A more inclusive and compassionate approach can make surrogacy a dignified and empowering path to parenthood for Nigerian women experiencing infertility.

Ethical Considerations

Compliance with ethical guidelines

The study adhered to strict ethical guidelines, ensuring confidentiality, informed consent, and psychological support for participants through two online platforms ("women in concerns" and "fertility, IVF, and Surrogacy") (Creswell & Poth, 2018). Participants were assigned pseudonyms (P1-P20) to protect their identities (Denzin & Lincoln, 2011). Interviews were recorded with explicit permission, and respondents were assured data privacy (Bolderston, 2012). Given the emotional sensitivity of discussing infertility, participants were offered free counseling services through their platforms. Following a full committee review process, this study was approved by the Department of Psychology Ethics Committee, University of Ilorin, Ilorin, Nigeria (Code: UIL/PSY/EC/24/0034; the approval period spanned from May 1, 2024, to December 30, 2024). The participants were recruited from online support groups established by the lead author (Health Psychologist), and informed consent was provided after receiving detailed information about the study's purpose, procedures, and voluntary nature. Both verbal and written consent were obtained, ensuring adherence to Nigeria's National Code for Health Research Ethics and institutional guidelines concerning confidentiality and the protection of vulnerable populations. No identifiable data were collected to maintain anonymity, and pseudonyms were used in publications and presentations.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

Conceptualization and study design: Sadiat Iyabode Alliu and Abayomi O. Olaseni; Data collection and transcription: Leonard C Orji and Sadiat Iyabode Alliu; Data analysis and interpretation: Dare Azeez Fagbenro; Writing:: Abayomi O. Olaseni and Leonard C Orji; Final approval: All authors.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors thank the women who bravely shared their experiences to enrich this study.

Appendix A

Semi-structured interview guide

The following interview questions were designed to explore factors influencing women's decision-making regarding surrogacy following failed IVF experiences.

Can you describe your journey with infertility and how it has affected your life and well-being?

How did you first come to consider surrogacy after IVF attempts?

In your view, how serious is infertility in the context of your family and community?

What do you understand to be the benefits or advantages of using a surrogate?

What concerns or fears did you have about surrogacy as a reproductive option?

How did your past IVF experiences influence your view of surrogacy?

Who or what influenced your decision to consider or reject surrogacy?

Did you receive any support or guidance from health-care providers, religious leaders, family, or friends regarding this decision?

How confident did you feel in deciding on whether or not to use a surrogate?

What helped or hindered your ability to act on your reproductive choices?

How did cultural or societal expectations influence your thoughts about surrogacy?

What role did your spouse, in-laws, or extended family play in this decision?

Were you concerned about stigma or public judgment if you chose to use a surrogate?

What are your personal religious or spiritual beliefs about surrogacy?

Did faith play a role in delaying or influencing your decision to pursue or avoid this option?

How did your infertility experience and the idea of surrogacy affect you emotionally?

Can you describe any struggles you faced with identity, womanhood, or self-worth?

What helped you cope or heal emotionally during this process?

How did financial concerns influence your decision about pursuing surrogacy?

Were you aware of any legal protections or risks in choosing this option?

Did you perceive surrogacy as something accessible to all women or limited to certain social classes?

Is there any other information you wish to share regarding your experience with surrogacy?

Thank you for your time.

References

- Adelakun, O. S., 2018. The concept of surrogacy in Nigeria: Issues, prospects and challenges. *African Human Rights Law Journal*, 18(2), pp. 605-25. [DOI:10.17159/1996-2096/2018/v18n2a8]

- Adeoye, B. A., Adebayo, O. A. & Owoeye, T. P., 2025. Public perception and challenges of surrogate mothers and children in Lagos State, Nigeria. *African Journal of Gender, Society & Development*, 14(1), pp. 377-94. [Link]
- Ajayi, V., et al., 2025. Frozen Embryo Transfers in Sub-Saharan Africa: A Five-Year Retrospective Study at Nordica Fertility Centre, Lagos, Nigeria. *Tropical Journal of Obstetrics and Gynaecology*, 43(2), pp. 140-5. [Link]
- Alabi, O. J., 2020. A qualitative investigation of surrogacy as a panacea for infertility in Nigeria [version 1; peer review: 2 approved with reservations]. *F1000Research*, 9(103), pp. 1-19. [Link]
- Alabi, O. J., 2020. Perceptions of surrogacy within the Yoruba sociocultural context of Ado- Ekiti, Nigeria. *F1000Research*, 9, pp. 103. [DOI:10.12688/f1000research.20999.3] [PMID]
- Alliu, S. I & Orji, L., 2021. Help-seeking preferences for depression and anxiety among women undergoing infertility treatments in south-western Nigeria. *Journal of Management and Social Sciences*, 1(2), pp. 233-41. [Link]
- Araoye, M. O., 2003. Epidemiology of infertility: Social problems of the infertile couples. *West African Journal of Medicine*, 22(2), pp. 190-6. [DOI:10.4314/wajm.v22i2.27946] [PMID]
- Assarroudi, A., et al., 2018. Directed qualitative content analysis: the description and elaboration of its underpinning methods and data analysis process. *Journal of Research in Nursing*, 23(1), pp. 42-55. [DOI:10.1177/1744987117741667] [PMID]
- Attawet, J., Alsharaydeh, E. & Brady, M., 2024. Commercial surrogacy: Landscapes of empowerment or oppression explored through integrative review. *Health Care for Women International*, 45(1), pp. 1-15. [DOI:10.1080/07399332.2024.2303520] [PMID]
- Bakare, B., et al., 2024. In Vitro fertilization in Nigeria: A critical review of challenges, successes, and future directions. *International Journal of Gynaecology Sciences*, 6(2), pp. 56-60. [DOI:10.33545/26648393.2024.v6.i2a.42]
- Chorowicz Bar-Am, O., 2025. Surrogacy disruptions: Narratives of retired Israeli surrogates with an incomplete surrogacy experience. *Reproductive BioMedicine Online*, 51(2), pp. 104832. [DOI:10.1016/j.rbmo.2025.104832] [PMID]
- Bolderston, A. (2012). Conducting a research interview. *Journal of Medical Imaging and Radiation Sciences*, 43(1), 66-76. [Link]
- Berthonnet, I. & Clos, C., 2024. Compensating a contested labour: The price of commercial surrogacy in the United States. *Economy and Society*, 53(4), pp. 701-18. [DOI:10.1080/03085147.2024.2398948]
- Chaitra, V. & Hema, K., 2025. Navigating Human Rights and Ethical Challenges in Compensation Models of Commercial Surrogacy: Comparative Analysis. In M. Pucelj & M. Matusiak-Frączak (Eds.), *Global Perspectives on Reproductive Rights and Policies* (pp. 267-292). Pennsylvania: IGI Global Scientific Publishing. [DOI:10.4018/979-8-3693-7837-3.ch010]
- Creswell J. W. & Poth C. N., 2018. *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage. [Link]
- D'Amore, S., et al., 2024. European gay fathers via surrogacy: Parenting, social support, anti-gay microaggressions, and child behavior problems. *Family Process*, 63(2), pp. 1001-24. [DOI:10.1111/famp.12950] [PMID]
- Denzin, N. & Lincoln, Y., 2011. Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The Sage Handbook of Qualitative Research*. California: SAGE Publications. [Link]
- Dyer, S. J., et al., 2005. Psychological distress among women suffering from couple infertility in South Africa: A quantitative assessment. *Human Reproduction (Oxford, England)*, 20(7), pp. 1938-43. [DOI:10.1093/humrep/deh845] [PMID]
- Esan, D. T., et al., 2025. Women at the receiving end: Exploring Couples' experiences of infertility challenges in Nigeria. bioRxiv. [DOI:10.1101/2025.01.08.632060]
- Ezenwa, B. N., et al., 2024. The Growing Trend of Surrogacy in Nigeria: Implications for Quality Newborn Care: A Case Report. *Nigerian Medical Journal: Journal of the Nigeria Medical Association*, 65(5), pp. 792-79. [PMID]
- Fantus, S., 2021. Experiences of gestational surrogacy for gay men in Canada. *Culture, Health & Sexuality*, 23(10), pp. 1361-74. [DOI:10.1080/13691058.2020.1784464] [PMID]
- Gerrits, T., Whittaker, A. & Manderson, L., 2025. Fertility care in low and middle-income countries: Embryologists' practices of care in IVF-clinics in sub-Saharan Africa. *Reproduction and Fertility*, 6(1), pp. e240025. [DOI:10.1530/RAF-24-0025] [PMID]
- Gheaus, A. & Straehle, C., 2024. *Debating surrogacy*. Oxford: Oxford University Press. [DOI:10.1093/oso/9780190072162.001.0001]
- Hossain, M. S., Alam, M. K. & Ali, M. S., 2024. Phenomenological approach in the qualitative study: Data collection and saturation. *ICRRD Quality Index Research Journal*, 5(2), pp. 148- 72. [DOI:10.53272/icrrd.v5i2.4]
- Hsieh, H. F. & Shannon, S. E., 2005. Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), pp. 1277-88. [DOI:10.1177/1049732305276687] [PMID]
- Jadva, V., et al., 2003. Surrogacy: The experiences of surrogate mothers. *Human Reproduction*, 18(10), pp. 2196-204. [DOI:10.1093/humrep/deg397] [PMID]
- Kadirov, D., Jagdale, S. R. & Krisjanous, J., 2025. Resisting the market logic: Surrogate mother experiences of embodied service provision. *Journal of Services Marketing*, 39(5), pp. 513-30. [DOI:10.1108/JSM-03-2024-0141]
- Karmakar, M., 2024. Reproductive trauma, vulnerable mothers, and disenfranchised grief: Reflecting on the affective dimensions of surrogacy practice in Indian literary and film narratives. *Sexual and Reproductive Health Matters*, 32(1), 2477378. [DOI:10.1080/26410397.2025.2477378] [PMID]
- Kibiswa, N. K., 2019. Directed qualitative content analysis (DQI-CA): A tool for conflict analysis. *The Qualitative Report*, 24(8), pp. 2059-79. [DOI:10.46743/2160-3715/2019.3778]
- Kigbu, S. K., et al., 2024. Regulating assisted reproductive technology in Nigeria: An urgent need. *Global Journal of Politics and Law Research*, 12 (3), pp. 67-80. [DOI:10.37745/gjplr.2013/vol12n46780]
- Lester, S., 1999. An introduction to phenomenological research. Retrieved from: [Link]

- Lumivero., 2024. NVivo, version 15. New Yor: Lumiver. [\[Link\]](#)
- Manvelyan, E., et al., 2024. Navigating the gestational surrogacy seas: the legalities and complexities of gestational carrier services. *Journal of Assisted Reproduction and Genetics*, 41(11), pp. 3013–37. [\[DOI:10.1007/s10815-024-03289-1\]](#) [\[PMID\]](#)
- Marklund, A., et al., 2025. The complexity and challenges of fertility preservation in women with cervix cancer-A prospective cohort study reporting on reproductive outcome and overall survival. *Acta Obstetrica et Gynecologica Scandinavica*, 104(1), pp. 86–94. [\[DOI:10.1111/aogs.15007\]](#) [\[PMID\]](#)
- Marshall, C. & Rossman, G. B., 2011. *Designing Qualitative Research*. Thousand Oaks, CA: SAGE Publications. [\[Link\]](#)
- McCoy, D. E., Haig, D. & Kotler, J., 2024. Egg donation and gestational surrogacy: Pregnancy is riskier with an unrelated embryo. *Early Human Development*, 196, pp. 106072. [\[DOI:10.1016/j.earlhumdev.2024.106072\]](#) [\[PMID\]](#)
- Mohammed-Durosinlorun, A. & Wada, I., 2024. Factors associated with oocyte recovery rates during in-vitro fertilization among Nigerian women. *The Pan African Medical Journal*, 47, pp. 190. [\[DOI:10.11604/pamj.2024.47.190.38674\]](#) [\[PMID\]](#)
- Nkolika, E. B., et al., 2024. The growing trend of surrogacy in Nigeria: Implications for quality newborn care: A case report. *Nigerian Medical Journal*, 65(5), 792-799. [\[Link\]](#)
- Oguejiofor, C. B., et al., 2023. A Five-Year Review of Feto-Maternal Outcome of Antepartum Haemorrhage in a Tertiary Center. *International Journal of Innovative Research in Medical Science*, 8(3), pp. 96–101. [\[DOI:10.23958/ijirms/vol08-i03/1637\]](#) [\[PMID\]](#)
- Ogunbola, O., et al., 2024. Influence of celebrity endorsement on women fertility on social media. *SIASAT*, 9(3), pp. 175-87. [\[Link\]](#)
- Okenwa-Vincent, E. E., 2025. Ethics of Surrogacy: A review of the African Perspective. In L. Omutoko & W. Jaoko, (Eds), *Bioethics from the Global South. Advancing Global Bioethics*, vol 21. Cham: Springer. [\[DOI:10.1007/978-3-031-77669-4_8\]](#)
- Okonofua, F., 1999. Infertility and women's reproductive health in Africa/Infertilité et santé reproductive des femmes en Afrique. *African Journal of Reproductive Health*, 3(1), pp. 7-12. [\[DOI:10.2307/3583224\]](#)
- Olowolafe, T. A., et al., 2023. Shifts in age pattern, timing of childbearing and trend in fertility level across six regions of Nigeria: Nigeria Demographic and Health Surveys from 2003-2018. *PloS one*, 18(1), pp. e0279365. [\[DOI:10.1371/journal.pone.0279365\]](#) [\[PMID\]](#)
- Oluwasegun, B. A., 2024. Religio-ethical Perception to Surrogacy and its Applicability to Infertility in the 21st Century. *Crowther Journal Of Arts And Humanities*, 1(6), pp. 63-76. [\[Link\]](#)
- Omisakin, S. I., et al., 2024. Epidemiology of Infertility and Characteristics of Infertile Women Requesting Assisted Reproduction Techniques in a Low Resource Setting in Western Nigeria. *International Journal of tropical disease & Health*, 45(10), pp. 10-9734. [\[DOI:10.9734/ijtdh/2024/v45i101594\]](#)
- Omutoko, L., 2025. Ethical and legal perspectives of surrogacy in developed and Sub-Saharan Countries: Case of Australia and Kenya. In: L. Omutoko & W. Jaoko (Eds), *Bioethics from the Global South. Advancing Global Bioethics*, vol 21. Cham: Springer. [\[DOI:10.1007/978-3-031-77669-4_7\]](#)
- Parvizi, S. & Ghodrati, F., 2025. A comparative approach to the legitimacy of uterine surrogacy in jurisprudence in Iran and Some Muslim Countries in the Middle East: A systematic review. *Current Womens Health Reviews*, 21(2), pp. E190124225884. [\[DOI:10.2174/0115734048256307231124074455\]](#)
- Piersanti, V., et al., 2021. Surrogacy and “procreative tourism”. What does the future hold from the ethical and legal perspectives? *Medicina*, 57(1), pp. 47. [\[DOI:10.3390/medicina57010047\]](#) [\[PMID\]](#)
- Rosenstock, I. M., 1974. Historical origins of the health belief model. *Health Education Monographs*, 2(4), pp. 328-35. [\[DOI:10.1177/109019817400200403\]](#)
- Smith, J. A., Flowers, P., & Osborn, M., 2013. Interpretative phenomenological analysis and the psychology of health and illness. In: I. Yardley (Ed.), *Material Discourses of Health and Illness*, pp. 68-91. [\[Link\]](#)
- Söderström-Anttila, V., et al., 2016. Surrogacy: Outcomes for surrogate mothers, children and the resulting families-A systematic review. *Human Reproduction Update*, 22(2), pp. 260-76. [\[DOI:10.1093/humupd/dmv046\]](#) [\[PMID\]](#)
- Srivastava, K., 2025. The Health Risks for Women in Surrogate Motherhood: Insights from an Ethnographic Study in Anand and Gurugram, India. In M. Sivakami, A. Bhushan, S. F. Rashid & K. S. Khan (Eds), *Handbook on Sex, Gender and Health*. Singapore: Springer. [\[DOI:10.1007/978-981-97-2098-9_13\]](#)
- Teman, E., 2010. *Birthing a mother: The surrogate body and the pregnant self*. California: University of California Press. [\[DOI:10.1525/california/9780520259638.001.0001\]](#)
- Umeora, O. U., et al., 2014. Surrogacy in Nigeria: Legal, ethical, sociocultural, psychological and religious musings. *African Journal of Medical and Health Sciences*, 13(2), pp. 105-105. [\[Link\]](#)
- Whittaker, A., Gerrits, T. & Manderson, L., 2025. The divine in the clinic: Assisted reproduction and religious practice in Ghana and South Africa. *Journal of Religion and Health*, 64(1), pp. 369–84. [\[DOI:10.1007/s10943-024-02222-1\]](#) [\[PMID\]](#)
- Zecevic, N., et al., 2025. Detrimental effects of cadmium on male infertility: A review. *Ecotoxicology and Environmental Safety*, 290, pp. 117623. [\[DOI:10.1016/j.ecoenv.2024.117623\]](#) [\[PMID\]](#)