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ORIGINAL PAPER

Nurses' and midwives' perspectives on psychological problems among women with infertility, family responses, and the need for nursing and midwifery interventions

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Abstract

Aim: This study aimed to explore nurses' and midwives' perspectives on the psychological problems experienced by women with infertility, family responses, and the need for nursing and midwifery interventions. *Design:* A qualitative study employing an empirical phenomenological approach. *Methods:* In-depth interviews were conducted with 13 infertility counselors, including nurses and midwives, selected through purposive sampling based on predefined inclusion criteria. Data saturation was achieved, and interview transcripts were analyzed using Colaizzi's method as adapted by Haase. *Results:* Three main themes emerged: (1) psychological problems and emotional conditions among women with infertility, such as stress, depression, anxiety, and social isolation; (2) diverse family responses, ranging from emotional support to neglect and lack of understanding; and (3) the urgent need for nursing and midwifery interventions, particularly structured psycho-counseling. Participants emphasized the crucial role of nurses and midwives in early identification of psychological distress and in providing continuous emotional support. *Conclusion:* Infertility presents a significant psychological and social burden for women. Nurses and midwives have a pivotal role in delivering holistic counseling and supportive care. Integrating technology-based psycho-counseling into nursing and midwifery practice may improve accessibility, individualization, and effectiveness of interventions, ultimately enhancing mental health outcomes for women with infertility.

Keywords: family response, female infertility, nursing and midwifery care, psycho-counseling, psychological distress.

Introduction

Infertility is a chronic and multifaceted disorder of human reproductive health that significantly affects individuals' biological, psychological, and social domains (Yokota et al., 2022; World Health Organization [WHO], 2021). The World Health Organization estimates that between 10% and 15% of couples worldwide experience infertility (WHO, 2021). Globally, more than 70 million couples are affected, with approximately two million new cases recorded each year, reflecting a rising global trend (Hanson et al., 2017; WHO, 2015). In Indonesia, infertility affects an estimated 60 million couples, with a prevalence rate of 15–20% (Riskesdas, 2018).

The country's Total Fertility Rate (TFR) remains well below the expected 1% growth target. In South Sumatra, the infertility rate reached 2.6% in 2020, falling below the national benchmark; approximately 8.6 million residents (around 10% of the population) are affected (BKKBN Sumatera Selatan, 2020). Beyond its biological implications, infertility is widely recognized as a profound psychological crisis. Women with infertility frequently experience a spectrum of emotional problems, including chronic stress, excessive worry, despair, feelings of helplessness, depression, and suicidal thoughts (Kiani et al., 2021; Kirca & Pasinlioglu, 2019; Temitope, 2022). These emotional difficulties are often compounded by prolonged treatment and social isolation (Massarotti et al., 2019). If left unaddressed,

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such distress may lead to a deterioration in quality of life and increased suicidality (Doyle & Carballedo, 2014; Nouman & Benyamini, 2019). The social context, particularly gender inequality, further amplifies women's vulnerability, as they often bear the majority of the blame and pressure associated with infertility (Anindhita et al., 2021). Anxiety has been identified as the earliest and most prominent emotional response among patients with infertility (Cao et al., 2022; Kiani et al., 2021).

Within Indonesian society, childbearing is deeply embedded as a symbol of happiness, success, and marital fulfillment (Damayanti et al., 2022; Priandono et al., 2022). Consequently, the inability to conceive often leads to stigma, particularly directed toward women, who may be perceived as infertile, incomplete, or a source of misfortune (Khusen, 2014). This social stigma contributes to heightened emotional distress such as guilt, fear, and depression (Maleki-Saghooni et al., 2017). Taebi et al. (2021) found that infertile women frequently encounter discrimination that undermines self-esteem, yet they strive to maintain balance through various coping strategies. Moreover, 56.6% of women undergoing infertility treatment report increased depression (Fatemi et al., 2012). Infertility thus constitutes a severe psychological stressor marked by sadness, anxiety, and loss of identity, which can reduce life satisfaction and elevate suicide risk if untreated (Kaya & Oskay, 2020; Zhao et al., 2022).

Given this psychological burden, comprehensive care should integrate both medical and mental health support. Depression and anxiety may act as both precursors to and consequences of infertility (Doyle & Carballedo, 2014; Naab et al., 2019). Evidence suggests that ineffective coping strategies can intensify stress and hormonal instability, thereby worsening infertility outcomes (Asyura et al., 2024; Mete et al., 2020). Counseling interventions are proven to alleviate emotional distress and promote adaptive coping mechanisms (Frederiksen et al., 2017). In Indonesia, limited family and social support systems further highlight the need for targeted, culturally sensitive counseling interventions (Romiko et al., 2023; Suzanna et al., 2022). Multidisciplinary counselling has demonstrated efficacy in reducing stress, anxiety, and depression among women with infertility who are managing social stigma (Alirezaei et al., 2022; Maleki-Saghooni et al., 2017; Njogu et al., 2022; Yazdani et al., 2017).

Nursing and midwifery professionals play a crucial role in addressing infertility through psycho-counseling interventions that provide emotional stability and holistic care (Frederiksen et al., 2017; Patel et al., 2020). With rapid technological advancement, cyber counseling has emerged as an effective, practical, and confidential approach, utilizing digital tools such as computers, smartphones, and tablets (Ramli et al., 2020). Technology integration in reproductive health facilitates broader information dissemination, secure data management, and equitable access to counseling (Lee, 2020; Yazdani et al., 2017). The ongoing digital transformation in health care enhances service efficiency and public satisfaction (Ford et al., 2020). In light of these developments, understanding infertility counsellors' perspectives on the use of digital technologies is critical to optimizing emotional support strategies. Infertility counsellors play a vital role in delivering information and providing specialized support that reinforces emotional well-being alongside medical treatment. Accordingly, this study employs a qualitative design using semi-structured interviews to explore counsellors' perceptions and experiences, with the aim of gaining an in-depth understanding of the psychological challenges faced by women with infertility and identifying appropriate counselling interventions (Boivin & Gameiro, 2015; Njogu et al., 2022; Safitri et al., 2024).

Aim

This study aimed to explore nurses' and midwives' perspectives on the psychological difficulties experienced by women with infertility, understand family reactions to infertility, and identify perceived needs for nursing and midwifery interventions to support affected women.

Methods

Design

The study employed a qualitative design using an empirical phenomenological approach (Creswell & Clark, 2010; Streubert & Carpenter, 2011).

Sample

The research was carried out between April 27 and July 28, 2025, through face-to-face interviews conducted at several infertility clinics and hospitals across South Sumatera Province, Indonesia.

Data were gathered through in-depth interviews and focus group discussions conducted at mutually agreed times between the research team and participants (Creswell, 2013). Participant recruitment used a purposive sampling technique, with inclusion criteria consisting of being an infertility counselor aged 20–55 years,

with relevant educational qualifications, and prior experience or training in infertility counseling. The final number of participants was determined by data saturation when no new themes or insights emerged. Thirteen infertility counselors participated, representing the saturation point.

Data collection

Data were collected following a structured and systematic process. Initially, the research team explained the purpose of the study and obtained informed consent without coercion. After providing consent, participants engaged in three sessions of in-depth interviews and focus group discussions at mutually agreed times. Interviews were audio-recorded using standard digital equipment. Data transcription and analysis were initiated within 24 hours to maintain accuracy and data integrity, and both interview and analysis teams reviewed all materials collaboratively.

Interview Guide

The interview guide was meticulously developed to capture the breadth of information from infertility counselors about the psychological problems and emotional challenges faced by their patients. It comprised several open-ended questions designed to explore the counselors' experiences when encountering patients' stories, the nature of the psychological difficulties observed, family responses to infertility, and their expectations of how nursing and midwifery interventions might assist in addressing these concerns. The study was conducted in accordance with the COREQ (Consolidated Criteria for Reporting Qualitative Research) checklist, which includes 32 criteria within three principal domains: (1) the research team and reflexivity, (2) study design covering theoretical framework, participant recruitment, study setting, and data collection, and (3) analytical processes and presentation of results (Knoblock, 2022; Tong et al., 2007).

Data analysis

Data were analyzed using Haase's adaptation of Colaizzi's phenomenological method. The process began with repeated reading of transcripts to capture the overall meaning, followed by identifying significant statements and formulating meanings through team discussions. Emerging themes were grouped into categories and clusters to create a comprehensive thematic description (Patton, 2002; Sargeant, 2012). Two authors independently coded the data while bracketing preconceptions and comparing interpretations to reach consensus (Creswell, 2013). Credibility and transferability were established through cross-validation and detailed context descriptions.

To ensure trustworthiness, the research team invested substantial time in data collection and analysis. Credibility was achieved through prolonged engagement and triangulation. Transferability was supported by providing detailed descriptions of the research context, methods, setting, participants, and sampling, and by presenting diverse participant quotations (Mete et al., 2020). Dependability was maintained using qualitative software (ATLAS.ti 8), which helped systematically organize data and establish a clear audit trail. All methodological decisions and adjustments were documented to ensure confirmability.

Results

Characteristics of participants and analytical process

Thirteen infertility counselors voluntarily participated in this study after receiving full information about the study objectives and procedures. Participation was completely voluntary. Participants varied in professional background and years of experience in infertility counseling (see Table 1). Data saturation was achieved at the thirteenth interview, since no new codes or themes emerged during the final stage of analysis. The analytical process followed a systematic thematic approach. Audio-recorded interviews and focus group discussions were transcribed verbatim and repeatedly reviewed. Open coding was conducted independently to identify meaning units. Similar codes were grouped into subcategories, which were subsequently clustered into broader categories and core themes by means of constant comparison. Analytical decisions were discussed among the research team until consensus was reached. Figure 1 presents the structure of theme development from codes to core themes.

Three major themes were identified:

1. Psychological Impacts of Infertility
2. The Spectrum of Family Responses
3. The Need for Nursing and Midwifery Intervention

Each theme consisted of several categories and subcategories, as described below.

Theme 1: Psychological Impacts of Infertility

All participants described infertility as being associated with significant psychological distress among women. The reported experiences ranged

Table 1 Characteristics of infertility counselors (N = 13)

	N (%)
Age (years)	
< 25	5 (38.5)
25–35	6 (46.2)
> 35	2 (15.3)
Education level	
nursing diploma	2 (15.3)
midwifery diploma	7 (53.9)
ners (professional nurse)	4 (30.8)
Workplace	
clinic	9 (69.2)
hospital	4 (30.8)
Training in fertility counseling	
yes	10 (76.9)
no	3 (23.1)

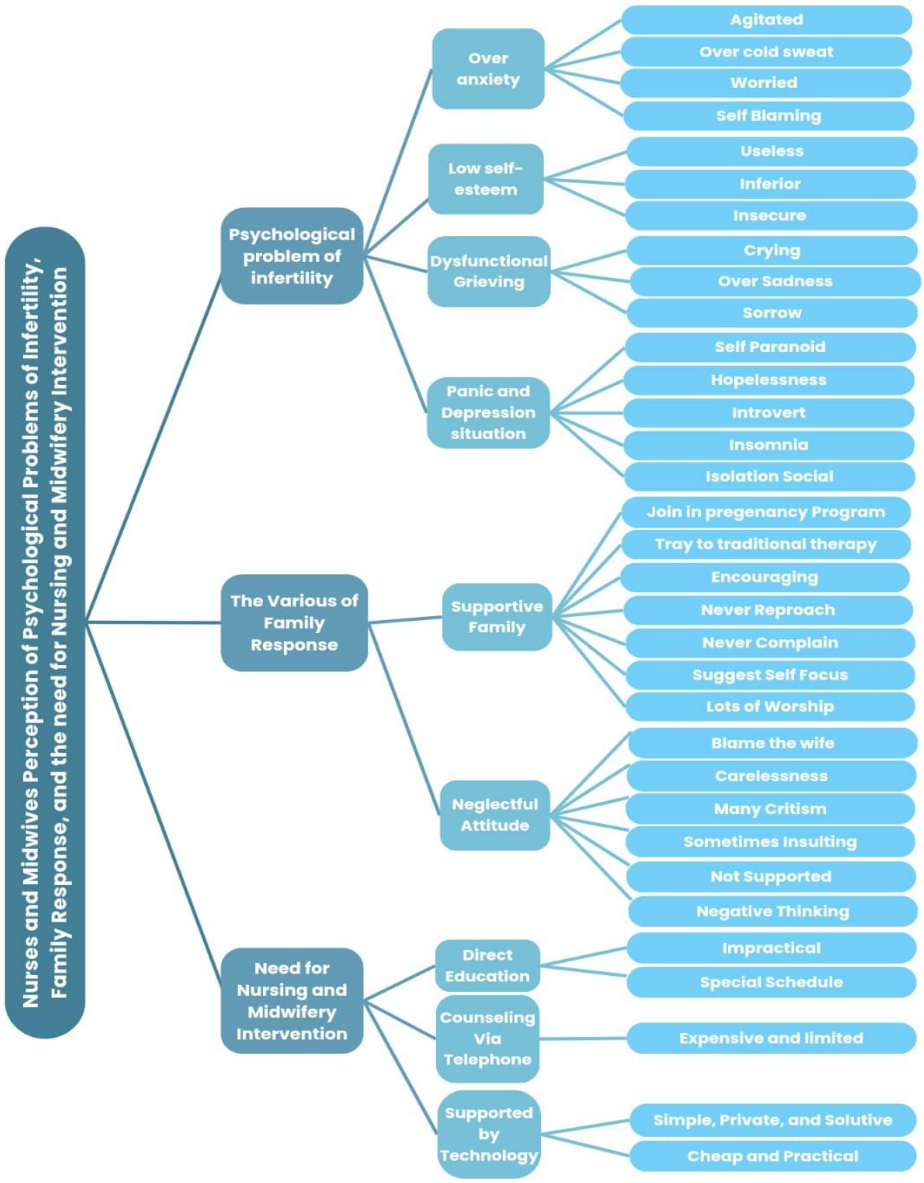

Figure 1 Results of theme analysis

from persistent emotional discomfort to more severe psychological symptoms. Four subthemes were identified.

Excessive anxiety

Anxiety was the predominant emotional response among women with infertility, often intensifying over time as conception failed to occur. Counselors reported that hormonal fluctuations may exacerbate these symptoms. Field observations reinforced this finding, revealing expressions of agitation, cold sweating, persistent worry, and guilt-driven self-blame.

"Patients often broke into a cold sweat while expressing their feelings." (Participant 3)

"Their stories were filled with worry and guilt." (Participant 7)

"Clients frequently expressed fear and anxiety openly." (Participant 5)

"Many admitted to blaming themselves." (Participant 10)

These accounts indicate that anxiety was a recurrent emotional response among women seeking infertility counseling.

Low self-worth

Low self-esteem emerged as a dominant theme, manifesting as feelings of worthlessness, shame, and insecurity. Counselors consistently reported that most women attending infertility counseling demonstrated diminished confidence and self-image.

"Nearly every patient I meet feels worthless and ashamed." (Participant 2)

"Many already struggle with a fragile sense of self-esteem." (Participant 4)

"I often feel useless and lack confidence." (Participant 9)

"I am ashamed and feel valueless because I cannot conceive." (Participant 11)

These descriptions were reported by the majority of participants and appeared consistently across data sources.

Complicated grief

Grieving processes varied depending on individual experiences. Some women had miscarried, while others had never conceived. Counselors observed that prolonged grief manifested through persistent sadness, crying, and self-reproach, indicating dysfunctional coping.

"Every patient conveys feelings of deep sorrow." (Participant 6)

"Several have described unbearable sadness related to infertility." (Participant 7)

"Crying and grief are recurring emotional patterns." (Participant 11)

The data suggest that grief was not limited to a single event but often described as ongoing.

Panic and depression

Counselors frequently reported signs of panic and depressive symptoms among infertile women. These included paranoia, hopelessness, withdrawal, sleep disturbances, and social isolation.

"Some patients struggle with insomnia and paranoia about their relationships." (Participant 4)

"A few show tendencies to isolate themselves." (Participant 8)

"Infertility often drives them to despair and withdrawal." (Participant 13)

Although not reported by all participants, these symptoms appeared in multiple accounts and were described as significant emotional reactions.

Theme 2: The Spectrum of Family Responses

This theme reveals the range of family reactions that shape women's emotional experiences of infertility, as described by counselors. Family response emerged as a central factor influencing how women coped with the condition. Two distinct patterns were observed: supportive families who offered strength and encouragement, and neglectful families whose attitudes may intensify emotional distress.

Supportive family relationships

Families who provided care, understanding, and encouragement played a critical role in helping women navigate infertility-related stress. Counselors noted that emotional support – such as joining fertility programs, suggesting traditional therapy, or encouraging prayer and focus often strengthened women's resilience.

"Many women said their families helped them join pregnancy programs or try traditional approaches." (Participant 3)

"Some families are very encouraging and never complain or criticize." (Participant 9)

"One woman shared, 'My family told me to stay strong, pray, and focus on getting better'" (Participant 12).

These supportive interactions were described as present in a subset of cases.

Neglectful and blaming behavior

On the other hand, some families responded with indifference or even blame, which worsened

the women's emotional state. Counselors described how these attitudes ranging from lack of empathy to verbal criticism deepened patients' sense of isolation.

"Some families still blame the wife when she cannot conceive." (Participant 1)

"A few relatives ignore or think negatively about women with infertility." (Participant 6)

"I have heard families openly criticize infertile couples." (Participant 8)

These responses were reported by multiple participants and described as recurring situations in counseling encounters.

Theme 3: The Need for Nursing and Midwifery Intervention

The counselors' narratives revealed an urgent need to strengthen nursing and midwifery interventions in infertility services. Their experiences reflected three main areas of focus: direct education, telephone-based counseling, and the growing importance of technology in enhancing care delivery.

Direct education

Most counselors still rely on direct education in clinical and hospital settings to provide information to infertile couples. However, many found this approach demanding and time-consuming, requiring special scheduling.

"I find that in-person education and counseling are not always practical and can take up a lot of time." (Participant 3)

"Such sessions need to be scheduled carefully, often after doctor consultations." (Participant 10)

"Each education or counseling activity must be arranged through mutual agreement." (Participant 11)

Counseling by telephone

Telephone counseling emerged as an alternative mode of support, though not without constraints. Counselors explained that while it increased accessibility, it often incurred extra costs and was limited by short consultation times.

"Some of my patients prefer counseling by phone, but the time is usually short." (Participant 2)

"There is often an additional charge for telephone consultations." (Participant 5)

"The time limit for phone-based counseling makes it less effective." (Participant 7)

Technology-enhanced counseling

All counselors acknowledged that technological innovation was essential for improving infertility counseling services. They emphasized the need for systems that are simple, efficient, affordable, private, and solution-oriented.

"In this digital era, technology is key to providing simple, practical, and cost-effective services." (Participant 4)

"We need tech-based counseling that is more personal, user-friendly, and helps solve problems effectively." (Participant 6)

"There's a strong need for technological support to make counseling easier, cheaper, and more confidential." (Participant 13)

Discussion

The present findings confirm that infertility is experienced as a sustained psychological burden rather than merely a biomedical condition. Counselors consistently described anxiety, diminished self-worth, complicated grief, and depressive symptoms as recurring emotional patterns among women seeking infertility services. These findings reinforce the conceptualization of infertility as a chronic stressor embedded within complex social and relational contexts. Evidence from systematic reviews indicates that depressive symptoms affect a substantial proportion of infertile women, with pooled prevalence rates exceeding those observed in the general population (Kiani et al., 2021). In addition, network analysis studies reveal strong interconnections between anxiety, rumination, hopelessness, and social withdrawal among infertility patients (Cao et al., 2022). The present findings align with these models, suggesting that emotional responses to infertility are cumulative, dynamic, and mutually reinforcing rather than episodic.

This pattern is further supported by qualitative evidence across diverse sociocultural settings, where infertility is frequently described as a form of "silent grief" characterized by shame, invisibility, and perceived personal failure (Assaysh-Öberg et al., 2023). Studies conducted in Turkey demonstrate that stigma and hopelessness significantly predict maladaptive coping strategies (Kaya & Oskay, 2020; Taebi et al., 2021), while research in Kenya and South Africa highlights associations with chronic sorrow, social exclusion, and identity disruption (Njogu et al., 2022; Temitope, 2022). These cross-cultural consistencies suggest that, despite variations in sociocultural expression,

core psychosocial mechanisms particularly stigma, grief, and threats to identity remain universal components of the infertility experience.

Within the Indonesian context, infertility prevalence is estimated at 15–20% of couples (Riskesdas, 2018; WHO, 2021), underscoring its significance as a public health issue. National data indicate that infertility-related stress is strongly associated with loneliness and reduced quality of life (Anindhita et al., 2021; Damayanti et al., 2022), while local studies from Palembang document persistent stigma and community-level discrimination toward infertile women (Romiko et al., 2023; Suzanna et al., 2022). These findings position infertility within a broader sociocultural framework in which gender expectations and social identity play a central role. Moreover, psychological vulnerability may both precede and result from infertility (Boivin & Gameiro, 2015; Doyle & Carballedo, 2014), highlighting the bidirectional and complex nature of this relationship and reinforcing the importance of adopting an integrated biopsychosocial framework in infertility care.

Beyond individual psychological distress, the findings emphasize the pivotal role of family dynamics in shaping women's emotional adaptation to infertility. The dual pattern identified ranging from supportive to blaming or neglectful responses is consistent with family systems perspectives, which recognize relational dynamics as key determinants of psychological adjustment. Empirical evidence indicates that family cohesion and adaptability are associated with lower levels of infertility-related stress (Lei et al., 2021), while adequate emotional support reduces the risk of social withdrawal, hopelessness, and suicidal ideation (Ferreira et al., 2015; Kiani et al., 2021). Conversely, stigma, criticism, and negative labeling within the family environment exacerbate psychological distress and reinforce feelings of inadequacy and shame (Çapık et al., 2021; Yokota et al., 2022).

Cross-cultural studies further highlight the protective role of spousal emotional involvement and supportive parental relationships in enhancing coping capacity and marital resilience (Halkola et al., 2022; Jafarzadeh-Kenarsari et al., 2015). However, not all families possess sufficient psychological resources, communication skills, or knowledge about infertility to provide constructive support (Rimer, 2020), which may explain the variability observed in family responses. In Indonesia, sociocultural expectations that closely associate femininity with motherhood intensify family pressure and emotional burden (Priandono et al., 2022; Suzanna et al., 2022), while broader community stigma reinforces intra-family blame and social marginalization (Romiko et al., 2023). These findings reflect an interplay between universal psychosocial mechanisms and culturally embedded pressures, thereby strengthening both the global relevance and contextual sensitivity of the study.

The findings also highlight persistent structural limitations in infertility counseling services and underscore the need for stronger psychosocial integration within nursing and midwifery practice. Infertility counseling is widely recognized as a core component of multidisciplinary reproductive care, addressing not only psychological distress but also identity disruption, grief, and stigma (Boivin & Gameiro, 2015; Maleki-Saghooni et al., 2017). Meta-analytic evidence demonstrates that counseling interventions significantly reduce stress, anxiety, and depressive symptoms (Alirezaei et al., 2022; Yazdani et al., 2017), while qualitative research emphasizes deeper therapeutic processes, including identity reconstruction and resilience-building (Dube et al., 2021).

Despite these benefits, practical barriers such as limited consultation time and scheduling constraints continue to restrict access to comprehensive psychosocial support. Similar service gaps have been reported in other healthcare contexts, including Korea, where counseling demand frequently exceeds service capacity (Lee, 2020). These constraints risk perpetuating a predominantly biomedical model of infertility care and highlight the urgent need to expand the roles of nurses and midwives in delivering holistic and patient-centered interventions.

In response to these challenges, technology-enhanced counseling emerges as a promising complementary approach. Digital platforms such as FertiStrong and MediEmo have demonstrated effectiveness in reducing anxiety and depressive symptoms (Domar et al., 2023; Robertson et al., 2022), while broader evidence suggests improvements in emotional regulation, treatment adherence, and service accessibility (Meyers & Domar, 2021; Patel et al., 2020). In contexts where infertility is highly stigmatized, cyber counseling offers additional advantages, including anonymity and flexibility (Ramli et al., 2020). However, digital interventions should complement rather than replace professional therapeutic engagement. Evidence-based approaches such as cognitive behavioral therapy (CBT), acceptance and commitment therapy (ACT),

and mindfulness-based interventions remain essential for strengthening coping strategies and emotional resilience (Njogu et al., 2022; Patel et al., 2020). Therefore, integrating technological innovations within professionally guided nursing and midwifery frameworks is critical to ensuring therapeutic quality, ethical integrity, and holistic care delivery.

From a clinical perspective, these findings highlight the need for a strategic transition in infertility care from a predominantly informational approach toward a structured psycho-counseling oriented framework that is systematically embedded within nursing and midwifery services. Routine psychological screening using validated instruments to assess distress, stigma, and emotional burden should be integrated into infertility care pathways to enable early identification of psychosocial vulnerability and timely intervention. In addition, nurses and midwives require advanced competencies in therapeutic communication, grief counseling, and stigma-sensitive care to effectively address patients' complex emotional and relational needs in alignment with international infertility counseling standards. The incorporation of family-inclusive counseling models is equally essential to strengthen dyadic and familial coping mechanisms, recognizing infertility as a shared relational experience rather than an individual condition. Furthermore, the development and implementation of structured digital psycho-counseling platforms offer opportunities to expand access to care while maintaining confidentiality, flexibility, and continuity of support. Collectively, these strategies support the advancement of a holistic, patient-centered model of reproductive healthcare that integrates biomedical management with comprehensive psychosocial care, consistent with global priorities in contemporary nursing and midwifery practice.

Conclusion

Infertility is viewed as both a chronic and a crisis condition that disrupts reproductive health and significantly influences different aspects of human life, leading to fertility, psychological, and social difficulties. The findings revealed three main themes reflecting the views of nurses and midwives: the psychological challenges experienced by infertile women and their spouses, the variety of family responses, and the growing need for nursing and midwifery interventions through counseling support.

Ethical aspects and conflict of interest

Ethical approval for this study was obtained from the Medical and Health Research Ethics Commission, Faculty of Medicine, Sriwijaya University (Ethical Clearance No. 085-2025). The research was conducted in accordance with fundamental ethical principles, including respect for autonomy, human dignity, beneficence, and non-maleficence. Prior to participation, written informed consent was obtained from all participants. To ensure confidentiality and data protection, all participants were assigned unique numerical codes in place of identifiable information. Interview transcripts were anonymized, and all audio recordings and research data were securely stored in password-protected files accessible only to the research team.

The authors declare that there are no conflicts of interest related to this study.

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Author contributions

Conception and design (SZ, SY), data analysis and interpretation (ACW, DH), manuscript draft (SZ, SY), critical revision of the manuscript (SZ, SY, ACW, DH, AL), final approval of the manuscript (SZ, SY, ACW, DH, AL).

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