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Stigma experience of female infertility patients in China: A phenomenological study

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Abstract

Stigma is a psychological issue prevalent among patients with infertility. We employed qualitative research methods to explore the experiences of Chinese women with infertility-related stigma in the context of their cultural environment. We selected twelve participants who underwent infertility treatment at The First Affiliated Hospital of Gannan Medical University between March and April of 2024. Data collection involved semi-structured in-depth interviews, which we analyzed using Colaizzi's phenomenological seven-step analysis method. We identified ten subthemes across three main themes: emotional responses to stigma (anxiety, guilt, and feelings of inferiority), sources of stigma (self-stigma, family stigma, and societal stigma), and coping strategies (concealment, social withdrawal, spousal support, and optimistic coping). These findings highlight the pervasive effects of the stigma experienced by female patients with infertility in China. Targeted interventions should be developed to address and alleviate stigma and associated challenges for these patients. *(Afr J Reprod Health 2025; 29 [1]: 38-45).*

Keywords: infertility; stigma; qualitative study

Résumé

La stigmatisation est un problème psychologique répandu chez les personnes qui souffrent d'infertilité. Cette étude utilise une approche qualitative pour explorer l'expérience de la stigmatisation de l'infertilité chez les femmes chinoises dans un contexte culturel. Nous avons sélectionné 12 participants qui ont reçu un traitement pour l'infertilité au premier hôpital affilié de l'université médicale de gannan entre mars et avril 2024. La collecte de données a consisté en des entretiens semi-structurés en profondeur, que nous avons analysés à l'aide de la méthode phénoménologique en sept étapes de Colaizzi. Nous avons identifié dix sous-thèmes parmi les trois thèmes principaux: les réponses émotionnelles à la stigmatisation (anxiété, culpabilité et infériorité), les sources de la stigmatisation (stigmatisation personnelle, stigmatisation familiale et stigmatisation sociale) et les stratégies de lutte contre la stigmatisation (rétractation, retrait social, soutien conjugal et prise en charge optimiste). Ces résultats mettent en lumière l'impact généralisé de la stigmatisation vécue par les femmes qui souffrent d'infertilité en Chine. Des interventions ciblées devraient être mises en place pour traiter et atténuer la stigmatisation et les défis associés à ces patients. *(Afr J Reprod Health 2025; 29 [1]: 38-45).*

Mots-clés: Infertilité; stigmatisation; étude qualitative

Introduction

In recent years, the incidence of infertility has increased owing to changes in human lifestyle, environmental factors, heightened public awareness of contraception, and increased pressure on female employment. Infertility is the inability of couples to conceive within one year of marriage without using any contraceptive measures[1]. According to the World Health Organization, it has become a significant public health concern and is now considered the third largest health problem worldwide after tumors, cardiovascular disease, and cerebrovascular disease. Global data indicates that infertility affects approximately 10–15% of the population, with over 60–168 million couples impacted[2]. In China, a 2014 report released by the China International Infertility Summit Forum identified over 50 million cases of female infertility, accounting for 15% of women of reproductive age, and this number is rising annually[3].

Fertility is a fundamental concept in marriage. Patients with infertility, particularly women, face

various pressures from family members and societal expectations, often resulting in negative emotional experiences. Stigma is a prevalent psychological issue among patients with infertility, characterized by negative perceptions due to the undesired characteristics of infertility as well as fear of social alienation, isolation, insults, and lack of understanding[4]. 69% of women with infertility experience stigma, leading to negative effects such as increased negative emotions, reduced life satisfaction, and social isolation[5-7].

Currently, research on the experience of stigma among female patients with infertility is mostly quantitative in nature and lacks an in-depth exploration of the psychological aspects within the specific cultural context of China. Consequently, we aimed to enhance our understanding of the authentic experiences of stigma among female patients with infertility and provide valuable insights for the implementation of targeted interventions in clinical practice

Methods

Recruitment and sampling

Female patients with infertility were recruited from the Reproductive Medicine Department of The First Affiliated Hospital of Gannan Medical University in Ganzhou City between March and April 2024. The sample size was determined based on data saturation.

The inclusion criteria were as follows: (1) women diagnosed with infertility according to clinical standards and without biological children; (2) ability of the women to articulate thoughts accurately; and (3) provided informed consent and were willing to participate in the study.

The exclusion criteria were: (1) severe organ dysfunction (e.g., heart, brain, and lungs); (2) history of significant disability or mental illness; and (3) an inability to complete the interview for various reasons.

We determined the sample size based on data saturation, which indicated that no new topics emerged. To enhance the representativeness of the respondents, we employed maximum differential sampling based on age, education level, duration of infertility, and place of residence of the selected participants. Ultimately, we included 12 patients in the study.

Data collection tools

We collected data using semi-structured in-depth interviews. Prior to the interviews, the researcher provided a thorough explanation of the study's purpose, significance, and precautions to the participants. The participants were informed that the interview would be recorded and that their real names would be substituted with a numerical code to ensure confidentiality. The interviews commenced only after obtaining participants' consent. To minimize disruption from external factors such as noise and interference from other patients, the interviews were held in a dedicated medical and nursing study room within the undergraduate department.

Based on an extensive literature review, we initially developed a draft of the interview outline, which consulting experts validated. The finalized interview outline comprised the following questions: Regarding your inability to conceive, what are your internal feelings? Have you experienced discrimination because of infertility? Can you provide detailed insights into these experiences? What were the sources of discrimination, disgust, rejection, and estrangement that you have encountered? How do you cope with discrimination, disgust, rejection, and alienation? With whom do you desire to share your experiences of infertility? During the interview, open-ended questions were posed to patients without correction, refutation, or guidance. Close attention was paid to non-verbal behaviors such as facial expressions, gestures, and eye movements. Each interview lasted approximately 30–60 minutes.

Data analysis

Within 24 hours of completing the interviews, the language materials were transcribed into written text, and non-verbal actions exhibited by the interviewees were noted. We employed Colaizzi's phenomenological seven-step analysis method to analyze the content[8]. The specific steps involved were as follows: (1) thoroughly read all interview materials from the participants; (2) identify meaningful sentences extracted from the materials; (3) encode significant statements that emerged repeatedly; (4) arrange and categorize the encoded perspectives to establish thematic clusters; (5) elaborate on the relationship between the identified

themes and the research phenomenon; (6) present the essential structure that constitutes this phenomenon; and (7) validate the authenticity of the findings through member checking with the interviewees.

Ethical considerations

We adhered to the principle of informed consent whereby participants were fully informed regarding the purpose, content, and other relevant details of the study. The potential risks and benefits were clearly outlined and the participants were informed of their right to decline participation or withdraw from the interview at any point. To ensure anonymity, we used numerical codes instead of names to protect their information. This study was approved by the Ethics Committee of The First Affiliated Hospital of Gannan Medical University. (No: 2024-110).

Results

Participants' characteristics

After interviewing 12 female patients with infertility, we reached data saturation as no new information emerged. The participants, aged 26–43 years, had undergone infertility treatment for durations ranging from 1–20 years, and had educational levels ranging from primary school to master's degrees. Participant characteristics are detailed in Table 1.

Main themes and sub themes

We extracted three main themes: emotional responses to stigma, source of stigma, and behavioral responses to stigma. Themes and subthemes are presented in Table 2.

Main theme 1: Emotional responses to stigma

Sub-theme 1: Anxiety

Women with infertility not only face the physical strain of medical procedures (such as medication, tests, and surgeries), but also endure prolonged periods of uncertainty and anxiety while awaiting treatment outcomes.

"Hey! Anyway, it is more anxious, and I will think how can I be the only one without children". (P1)

Preparing for pregnancy together, those of the same age, and those younger than me are all pregnant. My friends around me are either taking maternity leave or reporting good news. It's easy to see how pregnant they are. Why is it so difficult for me to handle this matter, and my mentality has collapsed. (P9)

I often perceive a pervasive sense of pregnancy throughout the world (with a wry smile) as I browse through my WeChat Moments. Over the course of three years, my emotional state has transitioned from a state of serenity to one of anxiety. I find myself pondering why those who are indifferent to parenthood seem to effortlessly conceive, while our desires remain unfulfilled. (P11)

Sub-theme 2: Guilt

The majority of women ascribed the inability to conceive to themselves, believing that their own problems deprived their spouse of the right to have biological children; consequently, they experienced a profound sense of guilt.

"We quarreled about this last week, sometimes I feel sorry for my husband, after all, it is my problem, I don't want to delay him, but my husband is not willing to divorce, he said let nature take its course, there really isn't one, so we'll adopt a child". (P5)

"I have experienced many tire stops. I am too tired to bear it. I want to divorce. My husband disagrees. He said that I can live without children, but I think he can change someone. Both sides are relieved". (P7)

Sub-theme 3: Inferiority

Women who exhibited higher levels of irrational beliefs about infertility typically considered their fertility to be significant. Consequently, upon discovering their own infertility, they usually thought that they were worthless and defective, and felt inferior because they could not meet their reproductive needs and family expectations.

"We have a group, and looking at the sisters in the group of good news, I kind of collapsed, I don't know if others will be like me, and I wonder why the pregnancy is not me, just like other children have new clothes to wear during the New Year but I have not, I now become inferior". (P10)

Table 1: Sociodemographic characteristics of the participants

Participant number	Age (year)	Duration of infertility treatment	Education level	Occupation	Place of residence
1	43	1	Senior high school	Freelancer	Countryside
2	26	2	Technical secondary school	Nurse	Urban
3	34	5	Technical secondary school	Freelancer	Countryside
4	31	6	Junior high school	Freelancer	Countryside
5	33	1	Master	Civil servant	Urban
6	30	2	Undergraduate	Teacher	Urban
7	29	2	College	Company employee	Countryside
8	41	20	Primary school	Freelancer	Countryside
9	27	3	Senior high school	Freelancer	Urban
10	38	2	Junior high school	Company employee	Countryside
11	32	3	Master	Teacher	Urban
12	35	5	College	Company employee	Urban

Table 2: Main and sub themes

Main themes	Sub themes
Emotional responses to stigma	Anxiety
	Guilt
	Inferiority
Source of stigma	Patients themselves
	Family members
	Surrounding environment
Behavioral responses to stigma	Conceal
	Social withdrawal
	Spousal support
	Optimistic coping

Main theme 2: Source of stigma

Sub-theme 1: Patients themselves

Infertility deprives women of their reproductive rights, and when the desire to have children cannot be realized, patients will think that they are "incomplete", resulting in self-deprecating cognition, and this "incomplete" sense of self develops into stigma.

"Having experienced multiple pregnancies without successful childbirth, I am left questioning whether we have made any mistakes that may have resulted in the unfortunate inability to preserve the life of our unborn child". (P4)

"I actually adopted a girl, but the village knows that this is not our own child, especially in the countryside, this kind of thing can not lift the head (sigh), in the village also have no face, people will say behind your family is dead". (P8)

Sub-theme 2: Family members

Unreasonable childbearing cognition and prejudice in the traditional social concept that childbearing is a woman's duty causes women with infertility to suffer from discrimination by their husbands, parents-in-law, and other relatives.

"My husband was in a bad mood when I menstruated, he always told me that his friend's wife was pregnant, and he had no children, and his grandparents were old and afraid of not seeing their great-grandchildren, which made me particularly anxious". (P3)

"When I get fat or wear loose clothes, my relatives will always ask if I am pregnant. It is enough to experience the worry, anxiety, disappointment and collapse of pregnancy preparation. I have to deal with these problems. I really feel that it is the greatest comfort for me not to ask too much". (P7)

Sub-theme 3: Surrounding environment

Individuals with infertility frequently encounter criticism and discrimination from others, resulting in heightened emotional distress. External public opinion, including the words and actions of those in one's immediate surroundings, can create

psychological anguish among women struggling with infertility.

"I'm from the countryside (sobbing). I haven't been pregnant for so long everyone knows. but our family is better off. Other people don't say it's hard to hear. They only say that I haven't been pregnant for so long. I need to go to the hospital and get cured". (P3)

"The workmates' Association who worked together joked that when we were old, we could just eat and wear warm clothes. Although we had a good relationship with her, I felt that she was discriminating against me for not having children. I felt very uncomfortable listening to that". (P8)

"My colleagues at work are very gossipy. They ask me every month if I'm pregnant, and every time I ask, I feel a lot of psychological pressure. She even looks like she's waiting to see a joke, and the next sentence starts introducing the doctors she knows. I hope you have any serious illnesses". (P12)

Main theme 3: Behavioral responses to stigma

Sub-theme 1: Conceal

During the interviews, some interviewees reported reluctance to reveal their true pregnancy status to others.

"It would be nice if the couple knew about pregnancy preparation. Every time I went back to my mother's house, my mother would say that I should have a baby. They didn't know that we were already preparing for pregnancy. I didn't want to tell them that they were afraid that they would pay too much attention to this matter, which would increase our pressure". (P9)

"Every time I come to the hospital to see a doctor, I always tell the leader to ask for leave because I have family problems, and I never say that I have to treat infertility, because I really don't want to deal with those unfriendly colleagues (sigh)". (P12)

Sub-theme 2: Social withdrawal

To avoid the external pressure imposed by relatives and friends as well as the discomfort arising from discussions regarding children in social interactions, the interviewees tended to isolate themselves and limit their communication with the outside world. Consequently, social withdrawal has become a common concern.

"I am now working while preparing for pregnancy, but also face all kinds of family and friend inquiries, it is really very annoying. I used to go back to my parents' home every weekend to see them, now inexplicably resistant, just want to stay in a small space". (P2)

"At that time, my relatives who married later than me, easily gave birth to children, to see her in the family group, my heart was really bad taste, fortunately, I withdrew from the group, out of sight, out of mind (wry smile)". (P4)

"In the past, I used to go out with my friends every weekend, and they would take the children with me. Although the children are really cute, I think I don't fit in with them. Now I'd rather stay at home alone than hurt myself". (P10)

Sub-theme 3: Spousal support

Infertility—a common stressor experienced by both spouses—necessitates a comprehensive management approach. Most patients emphasized the significance of mutual understanding and support from their partners as critically positive factors in alleviating the stress associated with infertility.

"I am especially grateful to my husband, who comforted me when I complained, encouraged me when I was depressed, and accompanied me when I was frustrated. Without him, I would have collapsed long ago. I believe that one day we will have a lovely baby (firm eyes)". (P5)

"I cried and broke down countless times and then slowly accepted it. My husband has been giving me great strength. He absorbs all my bad emotions and keeps persuading me that children are the icing on the cake for our lives". (P7)

"During this period of pregnancy, I was really under a lot of pressure, especially playing with urine (ovulation test paper) for a few days every month, being paranoid, eating Chinese medicine, pulling my husband to test semen vitality, trying various recipes, grateful for my husband's company and understanding, so that I could relax slowly". (P12)

Sub-theme 4: Optimistic coping

Confronted with reproductive pressure and psychological distress resulting from infertility, some participants employed constructive coping

mechanisms. They gradually embraced the reality of their infertility and proceeded to re-evaluate their future with an optimistic outlook.

"Preparing for pregnancy makes me feel unprecedented frustration and psychological anxiety, but I think the worst result is that there will be no children, we have to enjoy life, develop hobbies, distract ourselves, and only love life, life will love you more". (P3)

"I have had enough of all kinds of anxiety and tension in the past few years of pregnancy preparation. I want to learn to put it down slowly and enjoy life in the future. If I was destined to have no children in my life, I might be more free and live more for myself. It is also good to wait for two old people to provide for the elderly in the nursing home together. Everything goes as it goes, and happiness is the most important". (P11)

"I have been reading a book recently, and I am very grateful for it. It has helped me regain a state of calm and hope. Now I have let go of my obsession with children, and I believe that modern medical methods will eventually enable me to have children. I have a better mindset now". (P6)

Discussion

Our findings indicate that female patients with infertility commonly experience a sense of stigma that manifests as feelings of anxiety, guilt, and inferiority. These results are consistent with the outcomes of Fang *et al*[9]. While both men and women experience infertility, women tend to experience heightened psychological stress when coping with infertility. Within traditional social norms, women with infertility are often labeled as "useless" or "abnormal", perpetuating a deep-rooted stigma[10].

They are prone to self-blame and self-deprecation influenced by external public opinion. This not only harms their mental well-being but also impacts their quality of life, leading to instances of domestic violence, deteriorated marital relationships, and even delayes in seeking treatment seeking[11,12]. Hence, healthcare providers must recognize the pervasive experience of stigma among women with infertility and acknowledge the severity of its consequences. In response, targeted nursing interventions such as cognitive behavioral therapy, diverse forms of health education, and mindfulness therapy should be implemented alongside professional counseling services. These interventions aim to reduce patient stigma, alleviate fertility-related pressures, and enhance overall quality of life[13-15].

This study highlights that the stigma faced by patients with infertility stems primarily from themselves, their families, and the surrounding environment. Irrational fertility cognition and societal prejudices that regard women's roles primarily as mothers have led to criticism and discrimination against women with infertility. Consequently, these patients may feel socially isolated, alienated, and misunderstood, perceiving their inability to conceive as a fundamental failure and dereliction of duty. Such irrational beliefs, both within society and within the patients themselves, contribute to negative self-perceptions, including feelings of inferiority and shame[16,17]. Education is an effective tool for combating stigma[18]. Thus, healthcare professionals should enhance infertility education, raise awareness among women with infertility regarding their condition, connect them with peers who hold more rational views on fertility, and actively reshape their perspectives through peer support. Additionally, leveraging hospital network platforms can facilitate the dissemination of infertility-related knowledge, promote collaboration across multiple stakeholders, challenge traditional misconceptions about fertility, foster public acceptance, and genuinely reduce the stigma experienced by women with infertility.

Patients with infertility experience feelings of inferiority, loneliness, and self-blame due to the fear of social exclusion and the potential harm caused by gossip. They engage in self-isolation and marginalization to reduce the intensity of stigma, thus refraining from participating in social activities. This behavior leads to a lack of social support available to patients, leaving them to face difficulties alone and endure significant psychological pain. Our findings indicate that for most infertile women, their primary source of social support comes from their spouses. Effective social support can serve as a buffer against the negative effects of stigma, particularly when received from spouses and families[19].

Hence, a family-centered nursing approach should be implemented to actively involve family members in the care of patients with infertility[20,21]. This approach teaches family members to demonstrate complete acceptance and

understanding of patients, fosters a culture of mutual support and affection within the family, and helps patients gradually alleviate the pressure associated with infertility. Simultaneously, patients are encouraged to communicate with family members, openly express negative emotions, and feel the support and care of their loved ones, thereby gaining enhanced subjective support and reducing their sense of discrimination associated with infertility.

Strengths and limitations

This study had some limitations. First, the participants were primarily from the southern Gannan region of China, and the stigma they experienced may differ from that experienced by patients in other regions. This geographic specificity may limit the generalizability of the results, thereby constraining data universality. Additionally, we did not evaluate the stigma-related experiences of women with infertility who did not seek treatment. Despite these limitations, this study had several strengths. It is the first to use qualitative research methods in the Chinese cultural context to explore how female patients with infertility perceive the stigma associated with infertility. Moreover, we shared the same ethnic and cultural background as the participants, which may have helped them better express their experiences and feelings.

Implications for policy and practice

Our findings have significant implications for the management of stigma in women with infertility. Research has revealed that, under the influence of traditional Chinese culture, female patients with infertility generally face different degrees of stigma. To effectively mitigate or alleviate the substantial psychological pressure and negative emotions caused by stigma, a tripartite collaboration among medical staff, patients, and their families is essential. From the perspective of medical staff, we should pay attention to the psychological state of female patients with infertility, implement targeted nursing measures, channel patients' negative emotions, and encourage them to adopt positive coping mechanisms. Additionally, we should strengthen the publicity and popularization of infertility-related knowledge and improve the cognition of women with infertility as well as the public regarding this problem. From the patient's perspective, patients should establish a correct and rational concept of fertility and simultaneously develop other interests and hobbies to reduce their attention on childbearing. Family members should actively participate in patients' treatment and be more understanding and tolerant so that patients feel care from their families and receive more subjective support. By implementing these measures, the stigma experienced by female patients with infertility can be effectively reduced and the goal of providing holistic care can be achieved

Conclusion

Through semi-structured interviews, we investigated the stigma-related experiences of female patients with infertility and identified three themes: emotional responses to stigma, sources of stigma, and behavioral responses to stigma. Medical professionals should develop tailored nursing interventions based on the different experiences, sources, and responses to stigma among female patients with infertility. Examples of these interventions include establishing rational reproductive cognitions, promoting public scientific awareness, an improving social support systems for patients. Such interventions may mitigate patient stigma, reduce reproductive pressure, and enhance the psychosocial functioning of individuals affected by infertility.

Authors' contributions

All authors contributed to the study conception and design. Liling Jiang Participated in data collection and evaluation, drafting and data analysis. Liling Jiang and Yuan Zhong Reviewed and were involved in the qualitative data analysis. Liling Jiang and Lili Xiao Reviewed the first draft of the manuscript. All authors edited the final version of the manuscript, participated in the finalization of the manuscript and approved the final draft for submission.

Competing interests

The authors declare that they have no competing interests.

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