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Fertility-Related Stress and Mental Health Outcomes in Women with Reproductive Health Issues

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ABSTRACT

This study aimed to investigate the moderating effect of the family system while exploring the association between fertility-related stress and mental health outcomes among women experiencing reproductive health problems. Purposive convenience sampling was used to recruit married women (n = 500, M = 28.1, SD = 5.5) from fertility clinics and hospitals who had been diagnosed with reproductive health issues. Depression, anxiety, stress, and fertility-related stress were measured using standardized tools. The findings showed a positive correlation between fertility-related stress and mental health outcomes, and also individually with anxiety, stress, and depression, suggesting that higher fertility-related stress is related to poorer mental wellness. Family system acted as a positive predictor, as there is a significant difference, with women from nuclear families (M = 60.3, SD = 14.3) reporting higher infertility-related stress compared to women from joint families (M = 57.1, SD = 15.1). Furthermore, educational level was found to be a major factor; women with higher levels of education (M = 57.2, SD = 14.5) reported less fertility-related stress than women with lower or no education (M = 60.7, SD = 15.1). This highlights just how important social and educational support can be when it comes to coping with infertility. According to the study's findings, women who struggle with fertility problems may gain support from treatments that focus on minimizing stress, family involvement, and reproductive health awareness.

Keywords: *Fertility-related stress, depression, anxiety, stress*

INTRODUCTION

Fertility-related stress is the psychological strain experienced by people struggling with infertility and conception. It could also be the stress resulting from assisted reproductive therapy (Woods et al., 2022). Lazarus and Folkman proposed a transactional model of stress and coping, which states that stress kicks in when someone feels a situation is too much to handle and threatens their well-being. Their model primarily focuses on two key aspects: how people assess what's happening (cognitive assessment) and the strategies they employ to cope with it (coping strategies) (Lazarus & Folkman, 1984). When it comes to infertility or reproductive health problems, women often take a hard look at their situation right from the start. They see infertility as a major life stressor, something that shakes their sense of self, identity, and what society expects from them. If they don't feel like they have the resources to cope, anxiety, depression, and other emotional

struggles can follow. So, this is how stress tied to fertility takes root and shows up as real mental health challenges (Hayat et al., 2025; Tabassum et al., 2023).

In contrast, the American Psychiatric Association (APA) defines mental issues as a clinically significant disturbance in an individual's cognition, emotion regulation, or behavior reflecting a dysfunction in the underlying psychological, biological, or developmental processes, causing significant distress or disability and not merely an expected cultural response to stress or loss, like grief. The frequently found mental health issues due to infertility could be counted as Depression, Anxiety, and stress. The Biopsychosocial model defines mental health problems by tying together the social, psychological, and biological sides of health, pushing our understanding of fertility-related stress and its outcomes on mental health beyond just biology and medicine. Also, you can't really get the full picture without considering factors such as relationships and cultural expectations (Engel, 1977). The model highlights how social context matters here. Women living in joint families often have more emotional and practical support but in nuclear families, women can feel more isolated and stressed because they're missing that backup (Pallekona et al., 2025; Qadir et al., 2015; Batool & de Visser, 2014).

Plenty of research points to a clear link between fertility-related stress and mental health. Infertile women often deal with more stress, anxiety, and depression than women who haven't faced fertility issues (Lakatos et al., 2017; Yusuf, 2016). Systematic reviews and meta-analyses back this up: infertility-related distress predicts mental health problems across different cultures (Kiani et al., 2020; Almutawa et al., 2023). Infertility puts pressure on both mind and body, leaving many women emotionally drained and lowering their quality of life (Rooney & Domar, 2018). Also, how women handle this stress depends on their coping skills and self-esteem, and the situation can improve or worsen depending on their social and family support (Cui et al., 2021). The following research shows that fertility-related stress plays a big role in mental health challenges, and it's clear that a mix of personal outlook, coping style, and social context shapes women's psychological well-being when it comes to reproductive health.

LITERATURE REVIEW

Reproductive difficulties among women are becoming more common. According to the World Health Organization (2023), infertility affects about 17.5% of people globally, while another estimate puts it at 12.6%. In a cross-sectional study at public hospitals in Lahore, researchers surveyed a hundred married women, all of whom struggled with infertility. The findings showed that participants' ages ranged from 20 to 30 years old at the lowest to 30 to 40 years old at the maximum. 50% of women who had previously had treatment for infertility and 52 % of women who were having difficulties becoming pregnant were determined to be infertile. 45% of the participants had endometriosis, the most common cause of infertility (Khan et al., 2022). Another study was conducted in 2022 using surveys and interviews in private hospitals in Rahim Yar Khan, Pakistan. The results showed that polycystic ovarian syndrome (PCOS), caesarean section, and ovulation disorders were the most common risk factors (Ateeb et al., 2023; Yousaf et al., 2022).

Research carried out in Rawalpindi reveals that infertility-related stress had a detrimental impact on infertile people's marital happiness and explained 7% of the variation (Tabassum et al., 2023). A two-month prospective, quantitative, descriptive research using a questionnaire was carried out on women receiving infertility treatment. Statistical analysis was used to stratify the gathered data of 23 women who were part of the study had an average age of 30 years. Nearly 75% of the patients included had severe levels of infertility-related stress. The remaining 25% were experiencing moderate stress (Taj et al., 2022). A study in which 205 women who received infertility treatments were recruited using a descriptive, cross-sectional research design from Facebook pages and support groups devoted to infertility. Participants filled out the Copenhagen Multi-Center Psychosocial Infertility test. Compared to women with only infertility, those who

had consecutive reproductive trauma had substantially lower emotional QOL and significantly higher social stress. Participants with existing reproductive trauma reported lower mind/body, relational, and social QOL ratings and high personal and marital stress scores than women with infertility alone (Swift et al., 2022). Another study was conducted to see if stress linked to infertility and marital satisfaction would significantly predict each other in married couples with infertility. The results show a significant correlation between infertility-related stress and marital satisfaction, which has a substantial impact on how individuals cope with fertility-related issues (Mushtaq & Ghafoor, 2024).

Infertile women face a higher risk of psychological and social troubles. They really need stronger social support to protect their mental health (Sonia et al., 2023). Also, a study showed that infertile PCOS patients had the highest prevalence of psychological illness. The prevalence of eating disorders, marital maladjustment, anxiety, depression, sleep apnea, poor quality of life, and migraine was higher in PCOS women than in the control group. Thus, compared to fertile PCOS patients, infertile individuals had higher levels of anxiety and depression (Mushtaq et al., 2022). In Bhawalpur, research was carried out, and depressive symptoms were detected in 56 of the 100 infertile women. 49 patients had mild and moderate depression, 5 patients had severe depression, and 2 patients had extremely severe depression (Akhtar et al., 2022). According to a study's findings, infertile women have a worse quality of life and experience depression as well as anxiety (Sultana & Nadeem, 2023). Infertile women also showed a notable negative correlation between resilience and depression (Saleem & Yaqoob, 2023). Perceived social support was also found to be a partial mediator between the negative relationship between psychological distress and QOL in women with primary infertility (Kareem et al., 2024).

Infertility is on the rise in Pakistan, and women bear the burden of the psychological impact that comes with reproductive health struggles. Yet, hardly anyone studies how infertility affects women's mental health in this context. Most of the research just sticks to the medical facts and overlooks the social, cultural, and emotional complexities these women face. A further gap lies in the absence of longitudinal research. As infertility-related stress is not a static phenomenon, it evolves and is influenced by many factors such as age, progress in treatment, socio-economic changes, and social support etc. Lack of integration between mental health and reproductive health facilities is equally problematic in Pakistan. There is little policy focus on the emotional needs and mental well-being of infertile women in a clinical setting.

In connection with the previously mentioned literature review, the current investigation hypothesized:

- **H1.** There might be a positive association between fertility-related stress and mental health issues (such as increased anxiety, depression, and stress) in women with reproductive health disorders.
- **H2.** There might be a significant difference in fertility-related stress among younger and older women.
- **H3.** Family system (joint vs. nuclear) will moderate the association between Depression and fertility-related stress, and Anxiety and fertility-related stress, such that the association will be stronger among women from nuclear families compared to those from joint families.
- **H4.** There may be a difference in fertility-related stress between well-educated women and less literate women.
- **H5.** Longer reproductive disorders may lead to increased fertility-related stress in women.

- **H6.** Societal pressure might cause more fertility-related stress as compared to personal expectations in women with reproductive disorders.

- **H7.** There might be a difference in levels of fertility-related stress among childless women and women having children before reproductive health issues.

METHOD

Sample

The sample consisted of married women (n = 500, M = 28.1, SD = 5.5) admitted to or visiting the outpatient departments for the treatment of reproductive health issues, including PCOS, endometriosis, tubal blockage, irregular menstruation, ovarian cyst, ovarian failure, unexplained infertility, ectopic pregnancy, uterine fibroids, and recurrent miscarriages from the gynae ward of different hospitals in Faisalabad. Information was gathered through purposive convenient sampling technique. The sample was categorized into two categories, i.e., younger women (20 to 30 years old) (n = 325, M = 85.0, SD = 15.5) and older women (31 to 40 years old) (n = 175, M = 59.5, SD = 13.4). Education levels were also categorized into two categories, i.e., Uneducated to Matric (n = 184, M = 60.7, SD = 15.1) and Intermediate to Masters (n = 316, M = 57.2, SD = 14.5). The family system was divided into joint and nuclear categories.

Instruments

All of the instruments used in this study were psychometrically sound self-report Likert scales in Urdu. The following research instruments were used to conduct the research

Infertility-Related Stress Scale (IRSS) (Urdu Version)

The Infertility-Related Stress Scale is a 12-item scale that assesses psychological stress specifically linked to infertility and reproductive health challenges. Items are rated on a 7-point Likert scale, with higher scores reflecting greater stress. The IRSS demonstrates high internal consistency, with Cronbach's alpha of 0.90. There's no reversed scoring item of this scale (Mushtaq & Ghafoor, 2024).

Depression Anxiety Stress Scales – 21 Items (DASS-21) (Urdu Version)

The DASS-21 is a self-report instrument consisting of 21 items, divided equally into three subscales: Depression items 3, 5, 10, 13, 16, 17, 21, Anxiety items 2, 4, 7, 9, 15, 19, 20, and Stress items 1, 6, 8, 11, 12, 14, 18. Respondents rate the extent to which each statement applied to them over the past week using a 4-point Likert scale. Higher scores indicate greater symptom severity. The DASS-21 has Cronbach's alpha of (α=0.93) Depression (α = 0.84), Anxiety (α = 0.86), and Stress (α = 0.83). There are no reversed scoring items in DASS-21 (Aslam & Kamal, 2018).

Procedure

A Purposive convenient sampling technique was used to collect the responses. After gaining consent from the hospital administration, data collection was conducted within the gynecology wards and the Outpatient Departments of different hospitals in Faisalabad. Eligible participants were approached individually, explained the study's purpose, procedures, and potential benefits/risks, and provided an informed consent sheet. Consent forms were provided to the participants, and data were collected only by the women offering consent. Necessary Information about the research was provided to them, and confidentiality was ensured.

RESULTS

IBM SPSS was used to calculate descriptive statistics, reliability alpha coefficients, and Pearson's correlation coefficients. The ages of participants were divided into two age groups, young age (20-30 years old, M = 85.0, SD = 15.5) and old age (31-40 years old, M = 59.5, SD = 13.4) years old and above.

Table 1

Descriptive Statistics and Alpha Reliabilities for all study variables (N=500).

Scales	*k*	*M*	*SD*	*a*	*Potential Range*	*Actual range*	*Skewness*	*Kurtosis*
IRSS	12	58.5	14.8	0.9	1-7	21-84	0.0	-0.92
DASS	21	47.8	10.2	0.8	0-3	13-63	-0.3	-0.24
Depression	7	16.9	3.4	0.6	0-3	4-21	-0.7	0.11
Anxiety	7	15.0	5.4	0.8	0-3	0-21	-0.6	-0.54
Stress	7	15.8	3.8	0.7	0-3	2-21	-0.3	-0.40

Note. IRSS = Infertility-Related Stress Scale, DASS = Depression, Anxiety, Stress Scale, *k* = Number of items, *M* = Mean, *SD* = Standard Deviation, *a* = Cronbach alpha

As show in Table 1, all measures affirmed a vivid level of inner consistency.

Table 2

Correlation Matrix for all variables used in the Study (N=500)

Scale	**1**	**2**	**3**	**4**	**5**
1	---	.68**	.38**	.75**	.42**
2		---	.78**	.84**	.77**
3			---	.46**	.54**
4				---	.42**
5					---

*Note.*1 = Infertility-related Stress scale; 2 = Depression Anxiety Stress scale; 3 = Depression;

4 = Anxiety; 5 = Stress. **$p < .01$.

The similarities between all of the constructs were in the predicted directions, as seen in Table.

Table 3

Hierarchical Regression Testing Family System as a Moderator between Fertility-related Stress and Depression (N=500)

Predictor	B	SE	β	t	p
Step 1					
Fertility-related stress	0.33	0.07	0.29	5.34	<.001
Family system (0=joint, 1=nuclear)	3.16	1.21	0.13	2.64	<.009
Step 2					
Fertility-related stress x family system	0.19	0.08	0.16	2.58	.011

In Step 1, fertility-related stress was found to strongly predict depression (B = 0.33, β =.29, t = 5.34, p <.001), indicating that higher levels of fertility-related stress were linked to higher levels of depression. Women in nuclear family units reported higher levels of depression than those in joint families (B = 3.16, β =.13, t = 2.64, p =.009).

In Step 2, the interaction term (Fertility-related stress × Family System) was entered into the model and was significant (B = 0.19, β = .16, t = 2.58, p = .011). This result suggests the family system mediated the relationship between depression and fertility-related stress. In particular, the women in nuclear families showed a stronger association between depression and fertility-related stress than did women in joint households.

Table 4

Hierarchical Regression Analysis Testing Family System as a Moderator between Fertility-related Stress and Anxiety (N=500)

Predictor	B	SE	β	t	p
Step 1					
Fertility-related stress	0.29	0.06	0.26	5.61	<.001
Family system (0=joint, 1=nuclear)	2.76	1.16	0.12	2.39	.017
Step 2					
Fertility-related stress x Family system	0.16	0.07	0.14	2.51	.013

In Step 1, fertility-related stress was found as a significant predictor of anxiety (B = 0.29, β =.26, t = 5.61, p <.001), showing that higher levels of fertility-related stress are associated with higher levels of anxiety. The family system (0 = joint, 1 = nuclear) significantly predicted anxiety (B = 2.76, β =.12, t = 2.39, p =.017). Women in nuclear families reported higher levels of anxiety than those in joint family structures. Step 2 revealed a significant interaction (Fertility-related stress × Family System) (B = 0.16, β =.14, t = 2.51, p =.013). The study found that the family system moderated the association between fertility-related stress and anxiety. Women in nuclear households had a larger positive relationship with fertility-related stress and anxiety than those in joint families.

Table 5

Mean, Standard Deviation, & t-values of Fertility-Related Stress by Demographic characteristics (N=500)

Variable	M	SD	t-value	p	Cohen's d
Age					
20-30	58.0	15.5	-1.13	0.25	-0.10
31-40	59.5	13.4			
Education					
Uneducated to Matric	60.7	15.1	2.51	0.13	0.23
Intermediate to Masters	57.2	14.5			
Family System					
Joint	57.0	15.1	-2.44	0.15	-0.22
Nuclear	60.3	14.3			
Disorder Duration					
2 years or less	57.4	15.7	-1.53	0.12	0.14
More than 2 years	59.4	13.9			
Source of Stress					
Societal Pressure	58.6	14.2	.122	0.90	0.01
Personal Expectations	58.4	15.9			
Number of Children					
No child	57.5	14.6	-2.50	0.01	-0.12
1 or more children	61.3	15.0			

Table 5 elaborates that there was no significant difference in infertility-related stress between the two age groups ($p > 0.5$). The women with low education ($M = 60.1$, $SD = 15.1$) reported significantly more infertility-related stress than women with higher education ($M = 57.2$, $SD = 14.5$), $t = 2.51$, $p = .13$. There is a significant difference ($p = .15$), with women from nuclear families ($M = 60.3$, $SD = 14.3$) reporting higher infertility-related stress compared to women from joint families ($M = 57.0$, $SD = 15.1$). However, there is no statistically significant difference in Infertility-related stress between the groups with a disorder duration of 2 years or less ($M = 57.4$, $SD = 15.7$) and those with a disorder duration of more than 2 years ($M = 59.4$, $SD = 13.9$). The "more than 2 years" group had a slightly higher average IRSS score, but the difference was not statistically significant. There is also no statistically significant difference found in IRSS scores between the two groups, $t = 0.122$, $p = 0.900$. The group indicating social pressure ($M=58.6$, $SD=14.2$) had a slightly higher mean IRSS score than the group citing personal expectations ($M=58.4$, $SD=15.9$). The table also indicated a statistically significant difference in IRSS scores between the two groups, $t = -2.50$, $p=.013$. Specifically, persons with children ($M=61.3$, $SD=15.0$) had a considerably higher mean IRSS score than those without children. ($M=57.5$, $SD=14.6$) The presence of children is consistently related to a little higher IRSS.

DISCUSSION

The study set out to see how fertility-related stress shapes mental health, focusing on depression, anxiety, and stress among women dealing with reproductive health problems. These results revealed that fertility-related stress goes hand in hand with worse mental health. The connection is pretty clear: the more stress people feel about fertility, the more psychological symptoms they have. In Pakistan, researchers saw that

women who couldn't have children faced far more stress, anxiety, and depression than those who could (Yusuf, 2016). Over in Hungary, women dealing with infertility reported much lower psychological well-being compared to women without fertility problems (Lakatos et al., 2017). Alhassan and colleagues (2014) found infertile women reported much higher depression levels than fertile women. The social and emotional burden of infertility leads directly to these feelings. Al-Homaidan (2011) noticed that women dealing with primary infertility, after long treatment cycles and constant societal pressure, showed clear signs of depression. There's a biological side to this, too. Lewinski and Brzozowska (2023) explained that chronic fertility stress can mess with the hypothalamic-pituitary-adrenal (HPA) axis, causing hormonal shifts that make mood problems worse. Rooney and Domar (2018) went further, showing that this ongoing stress doesn't just linger in the background it actually triggers physiological and cognitive changes that leave women even more vulnerable to depression. As a result, the observed association provides evidence to the broader theoretical conception that fertility-related stress serves as both a psychological and physiological risk factor for depression and anxiety (Bagade et al., 2023). In a recent cross-sectional study from the COVID-19 pandemic, a lot of Iranian women dealing with infertility reported extremely severe anxiety, actually higher than their levels of stress or depression. Financial problems and the extent to which the pandemic directly affected them also played a big role in these results (Afshari et al., 2023). Infertility stress seems to hit anxiety the hardest, so treatment might need to focus more on those anxious symptoms. Reproductive problems aren't just physical. They're major psychosocial stressors too, and they can seriously affect mental health (Ogawa et al., 2011). There's a moderate positive link between fertility-related stress and general psychological stress. So, when fertility stress goes up, overall stress rises too. This backs up earlier research that infertile women experience more stress because infertility is tough on all fronts: personal, marital, and social (Teklemicheal et al., 2022). Also, higher stress hormones can throw off both reproductive and endocrine systems, which just adds to the stress, creating a vicious cycle (Palomba et al., 2017).

The findings suggesting that age had no effect on fertility-related stress levels among women experiencing reproductive health issues. This result lines up with what Al-Homaidan (2011) and Alhassan and co-researchers (2014) studied. They found out that emotional distress around infertility doesn't really tie back to a person's age. Instead, it's shaped by things like how long someone has been dealing with infertility, the weight of cultural expectations, and whether they have social support. Gdańska and colleagues (2017) noticed that: stress levels in infertile women connect more to how they cope psychologically and feel social pressure, not to their biological age. This explains that the experience of infertility-related stress is multifaceted, influenced by psychosocial and relational rather than age factors.

Women in nuclear families felt a stronger tie between fertility-related stress and depression and anxiety than those living in joint families. The hierarchical regression results really underscored how much the family environment matters for women dealing with reproductive health issues. Basically, for women in nuclear households, the tie between mental health issues and fertility stress is even stronger than it is for women in joint families (Pallekona et al., 2025; Qadir et al., 2015). That isolation can make it harder to cope, and honestly, it just makes the whole fertility struggle feel heavier (Batool & de Visser, 2014).

Education seems to act as a shield, giving people better awareness, more ways to cope, and stronger support networks. That fits with earlier research. For example, Tabassum and colleagues in 2023 found that women with less education struggled more with infertility stress and had more trouble in their marriages, mostly because they lacked reproductive knowledge and coping strategies. Shafierizi's team, also in 2023, showed that education plays a big part in how women adjust and manage their mental health after infertility treatment. Later, Rong and Ouyang (2024) discovered that women with more education felt less stigma and handled infertility stress better. Mohamed and co-authors (2024) went a step further when women took part in educational programs during treatment; their stress dropped sharply, and their satisfaction went up.

Pulling all this together, it's clear: education doesn't just boost reproductive health knowledge. It also builds psychological resilience, easing the emotional weight of infertility. In short, education helps women cope, solve problems, and tap into healthcare resources more effectively (Alhassan et al., 2014).

Women in the longest-duration group showed a small uptick in stress, but it wasn't statistically significant. This clearly indicates that having a longer time since diagnosis or the beginning of a reproductive problem does not always mean increased levels of stress. This is indeed in line with the emerging evidence that psychosocial variables such as coping strategies, resilience, stigma, and social support are more important predictors of stress among infertile women than disorder duration (Bagade et al., 2023).

The findings showed that the infertility-related stress level was slightly higher for women citing social pressure than for those citing personal expectations, as one of the studies on infertile women in Jordan revealed that higher perceived societal scrutiny and cultural blame made their suffering worse, thus lowering self-esteem (Bawadi et al., 2024). Similarly, Al Sabbah and colleagues (2025) found that the stigma associated with infertility, one form of social pressure, was inversely related to fertility-related quality of life, but this effect was moderated by social support. Indian research proposes that social coercion and community pressure increase the fertility-related stress levels in women suffering from reproductive system disorders (Patel et al., 2018). A Pakistani study found that when women face strong social pressure, blame, and isolation, their fertility-related stress goes up (Sami & Ali, 2012).

Women with children had a higher mean infertility-related stress score than childless women, indicating that parenting might be associated with a somewhat higher stress burden in the setting of reproductive problems. Achieving motherhood brings a sense of relief, but it also increases the pressure to meet family expectations (Bagade et al., 2023; Al-Homaidan, 2011; Qadir et al., 2015).

CONCLUSION

The current study shows that fertility-related stress significantly contributes to depression, anxiety, and stress in women with reproductive health problems. The findings confirm that the family system and education level play crucial roles in shaping psychological outcomes, with joint family systems and higher education serving as protective factors. The results highlight the importance of integrated psychosocial therapies that address both emotional and cultural aspects of infertility. Overall, this study highlights the link between reproductive health and mental well-being among Pakistani women, opening the door for future research and clinical practices aimed at promoting comprehensive reproductive healthcare.

IMPLICATIONS

The findings have several significant implications. In theory, they emphasize seeing infertility as more than just a biological challenge; it tied up with emotions and social pressures too. For doctors, this means mental health checks need to be part of everyday care in reproductive and gynecological clinics. When clinics offer psychological counseling, stress management workshops, and support groups, women gain better coping skills to handle the infertility distress.

Public education campaigns can help break down the old stigma around infertility and encourage more understanding. Talking openly within families matters, especially for women in small, nuclear households. It prevents isolation and builds a safety net of support.

Researchers should dig into things like coping styles, how much support spouses give, and how long treatments last so we can really map out what's driving these outcomes. If we widen the research to cover different cultures and income levels, we get a fuller picture and can tailor solutions that actually work.

The findings also support the development of standardized national guidelines that incorporate psychiatric evaluation into fertility treatment methods. To address financial hurdles, policymakers may consider financing mental health services in reproductive healthcare settings. Establishing professional reproductive mental health facilities in public hospitals will assist in ensuring equal care for women from all socioeconomic backgrounds.

LIMITATIONS & SUGGESTIONS

The study had a limited sample size, which may restrict the findings' generalizability to the larger population. Data were acquired from a small number of hospitals and fertility institutions, which reduced the sample's diversity. The cross-sectional research design merely captures relationships at a single point in time, restricting causal inference. We employed self-report surveys, which could be influenced by personal bias, emotional state, or social desirability. The study's geographical scope was limited to one region of Pakistan, making it difficult to generalize findings across diverse cultural or societal circumstances. Some confounding variables, such as financial stress, kind of infertility therapy, and degree of marital or family support, were not controlled. Some confounding variables, such as financial stress, kind of infertility therapy, and degree of marital or family support, were not controlled. Only the family system's moderating role was investigated, with no consideration given to other potential moderating or mediating elements such as coping style, social support, or religious beliefs. Incorporating qualitative methods, such as interviews or focus groups, may provide more insight into women lived experiences with infertility-related stress.

Future researchers should look into other moderating or mediating elements, such as coping mechanisms, social support, and religious or cultural views. Comparative studies of urban and rural populations could reveal how social and environmental factors affect fertility-related stress. Incorporating male partners into future study could provide a more complete knowledge of how infertility affects both members in a partnership. To improve the accuracy of mental health assessments, clinical diagnostic methods are recommended in addition to standardized questionnaires. To alleviate infertility-related stress and promote psychological well-being, researchers should look into intervention programs such as counseling or stress management training. Future studies should account for external factors such as financial pressure, treatment length, and marital satisfaction, which can all influence stress levels. Cross-cultural research is recommended to uncover universal and culturally particular features of fertility-related stress and coping among women.

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