

Quality of Life and Stress Levels Among Infertile Women: A Narrative Review

Shorooq A.Alsulami^{1*}, Hala A.Thabet², Rasha R.Alsaigh³

¹MSc-Department of Maternity and Child Nursing, King Abdulaziz University, Jeddah 21589, Saudi Arabia.

^{2,3}PHD-Department of Maternity and Child Nursing, King Abdulaziz University, Jeddah 21589, Saudi Arabia.

DOI: <https://doi.org/10.36348/sjnhc.2025.v08i10.002>

| Received: 14.07.2025 | Accepted: 26.09.2025 | Published: 06.10.2025

*Corresponding author: Shorooq A.Alsulami

MSc-Department of Maternity and Child Nursing, King Abdulaziz University, Jeddah 21589, Saudi Arabia.

Abstract

Infertility is a distressing condition that can significantly affect women's quality of life, leading to emotional, psychological, and social challenges. Women struggling with infertility often experience elevated stress levels, anxiety, and depression, which can negatively influence their overall well-being and interpersonal relationships. The impact extends beyond mental health, as diminished quality of life may also affect physical health, marital satisfaction, and social functioning. This narrative review aims to examine the psychological stress and quality of life among infertile women, while highlighting the consequences of infertility and the supportive role of nursing in enhancing care and well-being.

Keywords: Female infertility, quality of life, psychosocial distress, stress, and marital dissatisfaction.

Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

1. INTRODUCTION

This review outlines the search strategy adopted to identify relevant studies and underscores the significance of examining the literature to assess the current body of evidence on infertility. It particularly focuses on the psychological stress experienced by women with infertility and its impact on their quality of life. The review further synthesizes findings on the psychological, marital, social, and financial consequences of infertility, while highlighting the critical professional and humanitarian role of nursing in supporting affected women and advancing the quality of care delivered to them.

2. SEARCH STRATEGY

A structured literature search was conducted to synthesize the psychosocial challenges faced by infertile women, including psychological distress, social stigma, marital dissatisfaction, and coping strategies. Several electronic research platforms (PubMed, Scopus, Web of Science, CINAHL Plus, and PsycINFO) enabled the researcher to obtain scientific publications and grey literature, among other types of scholarly works. The study relied on "female infertility," "quality of life," "psychosocial distress," "stress," and "marital dissatisfaction" as keywords and Medical Subject Headings (MeSH). Additional Boolean search parameters (AND, OR, NOT) enhanced search accuracy to collect suitable studies for review content analysis.

A set of concrete criteria was established to pick suitable studies. Both primary author and research focus were restricted to English language research published since 2019 up until the present (2025) to reflect current achievements in infertility research and treatment. Medical, psychological, economic, and social components related to human infertility comprised the identified studies. A manual review process of all selected article reference lists sought out new relevant research findings. The citation management software documented the search results with the elimination of all duplicate papers to maintain transparency and achieve reproducible findings. Researchers conducted the review in multiple sessions to review studies independently while working to eliminate bias and select only the most appropriate and high-quality research for final consideration. The research method combined iterative stages that adjusted the searching approach per new findings discovered during the reviews of available literature.

3. REVIEW FINDINGS

The following headings were used to categorize the findings:

3.1 Psychological Distress and Quality of Life

Although infertility is not a mortal condition, women in Saudi Arabia who are diagnosed with infertility or are not able to bear children describe the situation as nerve-racking (Webair *et al.*, 2023).

Infertile women often suffer from psychological distress due to concerns that they are unable to conceive, which might lead them to gain a lot of respect from other people in society. According to Hassan and his colleagues, infertility causes a significant level of psychological distress to women to the extent that they become predisposed to mental disorders like anxiety and depression (Hassan *et al.*, 2020).

Infertility was associated with significant psychological distress and a reduced quality of life. Bakhtiyar *et al.*, (2019) found that infertile women had lower QoL scores across physical, mental, and environmental health domains, while Hassan *et al.* (2020) noted that social stigma, fear of divorce, and intimate partner violence exacerbated psychological distress. Similarly, Iordăchescu *et al.* (2021) reported that infertility-related anxiety was prevalent, particularly at the onset of treatment, with maladaptive coping mechanisms heightening distress. Roozitalab *et al.* (2021) highlighted the inverse relationship between PTSD symptoms and QoL, reinforcing the need for psychological interventions.

3.2 Marital Dissatisfaction and Quality of Life

Another key challenge that infertile women are likely to suffer is a high rate of marital dissatisfaction. Various studies indicated that infertility translates into increased stress and a reduction in affection among couples who have infertility problems. Many individuals who find themselves in such a situation are forced to reconsider their relationships (Iordăchescu *et al.*, 2021). Infertility is also identified as a common factor that might lead to poor sexual satisfaction in families, thus leading to marital dissatisfaction (Daud *et al.*, 2022).

Barnawi *et al.*, (2020) found that secondary infertility was linked to better QoL, whereas longer marriage and infertility duration negatively affected well-being. It is worth noting that the quality of life among infertile women decreases with an increase in the duration of infertility. This can be ascribed to the fact that infertile women tend to lose hope after going to different places to seek help in vain, and they are also surrounded by societal pressures throughout their duration of infertility (Ibrahim *et al.*, 2019).

Mahadeen and his colleagues claim that infertility in women has also been a major cause of separation and divorce in families, which is evidenced by the fact that the man might feel that he wants to get married to a woman who will give her children (Mahadeen *et al.*, 2020).

Jaber and his colleagues claim that infertile women tend to have a high rate of marriage dissatisfaction due to convictions that they are unable to achieve one of the critical components of marriage, which is parenthood (Jaber *et al.*, 2022). This serves as one of the reasons why they might get depressed or

stressed to the extent that they might prefer to leave their marriages. In fact, a significant proportion of women in Saudi Arabia prefer not to use contraceptives due to concerns that they might predispose them to infertility, which would make them to experience problems in their marriages (Alomair *et al.*, 2023).

Infertility is also identified as a common factor that might lead to poor sexual satisfaction in families, thus leading to marital dissatisfaction (Daud *et al.*, 2022). Prolonged duration of infertility has also been proven to have adverse implications on the quality of life of women, though some studies have never found any significant correlation between the two variables (Webair *et al.*, 2021). Kiani *et al.* (2020) also showed that females with infertility problems usually have fewer stable relationships as compared to those who are fertile. The condition is adversely related to an increased duration of infertility, advanced age, and failed IVF attempts in the past (Kiani *et al.*, 2020).

3.3 Social Aspect and Quality of Life

One of the prominent social aspects that significantly affects the quality of life among infertile women is social isolation. Numerous studies have reported that infertile women often experience feelings of isolation and exclusion from social gatherings and family events that predominantly revolve around children (Taebi, Kariman, Montazeri & Majd, 2021). Ozturk and his colleagues note that infertile women usually have a negative self-perception from other people, which leads to isolation, humiliation, stigma, and lack of social support (Ozturk *et al.*, 2021). The experience of attending baby showers, children's birthday parties, or family gatherings can be emotionally distressing for infertile women, as it serves as a constant reminder of their inability to conceive or bear children. This isolation is compounded by the stigma associated with infertility in various cultures. In societies where motherhood is highly valued and celebrated, infertility can carry a heavy social stigma, causing infertile women to feel like outsiders and inadequate (Taebi, Kariman, Montazeri & Maid, 2021).

This social isolation can have a profound negative impact on the overall quality of life for these women, leading to feelings of sadness, anxiety, and frustration. Infertility has been consistently linked to strains on various relationships, most notably marital relationships. The stress and emotional burden associated with infertility and fertility treatments can lead to conflicts between partners, which, in turn, negatively affect intimacy and overall relationship satisfaction (Billett, Sawyer, & Billett, 2019).

Couples grappling with infertility often experience high levels of stress, anxiety, and disappointment. The pressure to conceive can lead to increased tensions, communication breakdowns, and feelings of inadequacy on both sides (Zahra *et al.*, 2019).

The strain on marital relationships can result in decreased overall quality of life for infertile women. The emotional toll and conflicts within relationships contribute to a complex web of factors that influence the quality of life (Zahra *et al.*, 2019).

One notable factor that can mitigate the negative social aspects of infertility is the presence of a strong support network. Friends, family, and participation in support groups have been identified as key sources of emotional buffering and coping resources for infertile women (Gazit & Amichai-Hamburger, 2021). These networks provide emotional support, understanding, and a safe space to express feelings and fears. The importance of social support in improving the quality of life cannot be overstated. Studies have shown that women with strong support networks report higher levels of emotional well-being and resilience in coping with the social challenges of infertility (Gazit & Amichai-Hamburger, 2021). Support networks help alleviate the feelings of isolation and provide a sense of belonging, contributing positively to the overall quality of life (Gazit & Amichai-Hamburger, 2021).

3.4 Economic and Cultural Aspects of Infertility

Economic and cultural influences played a significant role in infertility experiences. Jaber *et al.* (2022) noted that high treatment costs and cultural expectations increased stress among couples. Kiani *et al.* (2020) found that anxiety rates were higher in low- and middle-income countries, indicating resource-related disparities in access to care. Individuals and couples struggling to conceive face significant financial burdens through infertility treatments. In particular, assisted reproductive technologies (ART), such as in vitro fertilization (IVF), are particularly expensive, with the cost of a single cycle being around \$12,000, and many patients requiring multiple cycles before conceiving (Keller & Chambers, 2022).

Finances have become a primary reason why people fail to continue infertility treatments during the early stages. The results of a French study showed that about 22% of women stopped infertility care within three months after treatment failure, yet the poverty-stricken population displayed significant concentration rates (Ben Messaoud *et al.*, 2024). Direct treatment costs do not seem to be the sole cause of infertility care dropout, given that factors such as travel expenses and lost wages, combined with psychological stress, contribute to the problem. Infertility treatments create economic challenges that extend past treatment costs to limit access to reproductive healthcare while harming the financial standing of individuals in the future (Ben Messaoud *et al.*, 2024).

3.5 Stress with infertile women

Infertility is recognized as a major stressor, leading to significant psychological consequences such as depression, anxiety, and emotional distress. Women

are disproportionately affected compared to men due to societal expectations and cultural pressures (Iordachescu *et al.*, 2021). While global studies provide useful insights, local research from Saudi Arabia has also highlighted high levels of stress among infertile women. Studies in the region report that between 25%–60% of infertile women experience significant psychological distress, particularly anxiety and depression, often linked to cultural and religious emphasis on motherhood and family continuity (Kamışlı, Terzioğlu, & Bozdag, 2021). Similar patterns have been observed in international studies, such as the Chinese study where 28% developed depression and 42% became anxious (Cui, Wang, & Wang, 2021). These statistics suggest that infertile women in Saudi Arabia face comparable, if not heightened, psychological strain due to added stigma and societal pressures.

The stress experienced by Saudi women with infertility is compounded by several factors, including stigma and societal blame, as women are often unfairly held responsible for childlessness. Financial burdens from fertility treatments intensify emotional pressure, and marital strain frequently arises, with infertility leading to conflict, dissatisfaction, and emotional distance between partners (Iordachescu *et al.*, 2021). Moreover, lower educational attainment or unemployment has been shown to increase susceptibility to anxiety and depression in infertile women (Kamışlı, Terzioğlu, & Bozdag, 2021). These factors collectively make infertility a multidimensional burden, affecting personal well-being, marital stability, and social integration.

Evidence-based strategies have been shown to reduce stress among infertile women (Vioreanu, 2021; Teklemicheal, Kassa, & Weldetensaye, 2022). Cognitive-behavioral therapy (CBT), mindfulness practices, and peer support groups have proven effective in lowering anxiety, depression, and feelings of isolation. Social support systems and holistic lifestyle interventions such as regular exercise and proper nutrition further enhance resilience and psychological well-being (Bagade *et al.*, 2022). These approaches not only help women manage distress but also promote long-term emotional regulation and stability, which are vital when dealing with the ongoing challenges of infertility.

Nurses in Saudi Arabia can play a crucial role in alleviating stress among infertile women by integrating psychological support into fertility care. Routine psychological screening for anxiety and depression during treatment can allow for early identification and intervention (Cui, Wang, & Wang, 2021). Nurses can also provide emotional support and education by creating a safe environment where women feel understood, reducing stigma, and encouraging healthy lifestyle practices.

Facilitating peer support groups offers women opportunities to share experiences and learn coping strategies, thereby reducing feelings of isolation (Teklemicheal, Kassa, & Weldetensaye, 2022). Another important role is designing interventions that enhance self-esteem, given its protective effect against infertility-related stress (Cui, Wang, & Wang, 2021). Furthermore, nurses can promote couple-based interventions by supporting counselling sessions that improve marital adjustment and communication, reducing relational stress (Iordachescu *et al.*, 2021). Through these approaches, nurses can help mitigate the profound psychological burden of infertility and improve the well-being of women in Saudi Arabia.

3.6 Nursing Roles with Infertility

Nurses provide care and support to individuals who are experiencing infertility. As primary sources of emotional, psychological, and educational support, they assist patients with infertility treatments and their emotional consequences. Additionally, infertility is often associated with increased stress, anxiety and depression, thus requiring compassionate and individualized nursing care (Assaysh-Öberg *et al.*, 2023). By educating patients about common reactions to infertility and providing them with coping strategies to manage distress (e.g., stress management techniques), nurses help reduce the stigma attached to infertility and provide emotional support by recognizing and validating patient's feelings (Boivin *et al.*, 2022). Social isolation and feelings of failure are common among women undergoing infertility treatments (Taebi *et al.*, 2021) and the presence of a supportive healthcare provider is crucial for the mental well-being of those women.

Nurses play a critical role in addressing the challenges associated with infertility. Nurses are instrumental in raising awareness about the importance of emotional and social support for infertile women, which can help mitigate the risk of mental health disorders (Gazit & Amichai-Hamburger, 2021). Since the high levels of stress wrath to infertility, nurses also contribute to the stress management interventions. Vural Aktan *et al.*, (2025) found stress has a direct effect on fertility adjustment and it is so important for nurses to put strategies to reduce stress related to infertility. Mindfulness based interventions, relaxation techniques, and patient centered counseling with nurses allow individuals to become resilient in the face of infertility challenges.

Advocacy is another key role that nurses play. They believe in the patient's right to fair, ethical, and judgment-free care. Infertility stigma still persists in many cultures and can be a source of self-doubt and social exclusion. Nurses empower patients in making informed reproductive decisions by educating them on both their reproductive rights and the resources available for their care (Shayesteh-Parto *et al.*, 2023). In addition, they work closely with social workers and mental health

professionals to keep those who may struggle with infertility connected to comprehensive support services.

4. CONCLUSION

The impacts of female infertility cannot be underestimated as it predisposes women to mental disorders like depression and anxiety. As a result, the overall quality of life of the affected women is reduced by a significant margin, which implies that there is a high probability that most of them might end up dying prematurely. Additionally, infertility in women leads to marital dissatisfaction, which is evidenced by the fact that husbands tend to divorce or separate from their wives whenever the latter is unable to conceive. This is because having children is deemed as one of the key factors that are likely to enhance one's to having a happy and satisfying marriage.

Female infertility is also associated with a high rate of stigmatization, which means that women who are unable to give birth are usually humiliated or isolated by other community members. This means that infertile women might be unable to get adequate social support even in cases where they might be seeking the appropriate medical services, which might deter them from seeking healthcare assistance that might enable them to overcome the reproductive problems they might be facing. The lack of social support is one of the key factors that predisposes the affected women to psychiatric disorders, hence leading to a reduction in their quality of life.

REFERENCES

- Alghamdi, A., Bahnsawy, N., Afefy, N., & Gouda, A. D. K. (2023). *Assessment of prevalence and risk factors of infertility among Saudi women: A cross-sectional study*. Indonesian Journal of Global Health Research, 5(1), 77–94. <https://doi.org/10.3728/ijghr.v5il.1601>
- Alomair, N., Alageel, S., Davies, N., & Bailey, J.V. (2023). Muslim women's views and experiences of family planning in Saudi Arabia: A qualitative study. *BMC Women's Health*, 23(625), 1-11. <https://doi.org/10.1186/s12905-023-02786-2>
- Assaysh-Öberg, S., Borneskog, C., & Ternström, E. (2023). Women's experience of infertility & treatment—A silent grief and failed care and support. *Sexual & Reproductive Healthcare*, 37, 100879.
- Bagade, T., Thapaliya, K., Breuer, E., Kamath, R., Li, Z., Sullivan, E., & Majeed, T. (2022). Investigating the association between infertility and psychological distress using Australian Longitudinal Study on Women's Health (ALSWH). *Scientific Reports*, 12(1), 10808
- Bakhtiyar, K., Beiranvand, R., Ardalan, A., Changae, F., Almasian, M., Badrizadeh, A., & Ebrahimpzadeh, F. (2019). An investigation of the effects of infertility on women's quality of life: A

- case-control study. *BMC Women's Health*, 19, 1–9. <https://doi.org/10.1186/s12905-019-0805-3>
- Barnawi, Y., Adetunji, H., Edris, F., BinHassan, R., & Fairaq, B. (2020). Quality of life among women with primary and secondary infertility attending a private fertility center in Jeddah, Saudi Arabia: A cross-sectional study. *Medical Science*, 24(105), 3061–3069.
 - Ben Messaoud, K., Bouyer, J., Guibert, J., & de La Rochebrochard, E. (2024). The burden of very early dropout in infertility care: a nationwide population-based cohort study. *Human reproduction (oxford,England)*, 39(1), 102–107. <https://doi.org/10.1093/humrep/dead226>
 - Billett, P., Sawyer, A. M., & Billett, M. (2019). *Infertility and intimacy in an online community*. Palgrave Macmillan.
 - Boivin, J., Vassena, R., Costa, M., Vegni, E., Dixon, M., Collura, B., ... & Domar, A. (2022). Tailored support may reduce mental and relational impact of infertility on infertile patients and partners. *Reproductive BioMedicine Online*, 44(6), 1045-1054.
 - Cui, C., Wang, L., & Wang, X. (2021). Effects of self-esteem on the associations between infertility-related stress and psychological distress among infertile Chinese women: A cross-sectional study. *Psychology Research and Behavior Management*, 14, 1245-1255.
 - Daud, S., Khadija, S., & Jabeen, F. (2022). Comparison study of infertility issues in rural and urban areas. *Saudi Journal of Medicine*, 7(1), 35–41.
 - Gazit, T., & Amichai-Hamburger, Y. (2021). Factors underlying engagement in Facebook support groups of female infertility patients. *Psychological Reports*, 124(3), 1150–1173. <https://doi.org/10.1177/0033294120934703>
 - Hassan, S. U. N., Siddiqui, S., & Friedman, B. D. (2020). Health status and quality of life of women seeking infertility treatments in Baluchistan, Pakistan. *The British Journal of Social Work*, 50(5), 1401–1418. <https://doi.org/10.1093/bjsw/bcz092>
 - Ibrahim, M. M., Awar, S. A. A. R. A., Nayeri, N. D., Al-Jefout, M., Ranjibar, F., & Moghadam, Z. B. (2019). Perceptions of infertility among women in the United Arab Emirates: A qualitative study. *Electronic Physician*, 11(2), 7544–7551. <https://doi.org/10.19082/7544>
 - Ibrahim, R., Al-Turki, H., & Khan, A. (2019). The emotional and social impacts of infertility in Saudi women. *Saudi Journal of Health Sciences*, 8(4), 213–221
 - Iordăchescu, D. A., Paica, C. I., Boca, A. E., Gică, C., Panaiteșcu, A. M., Peltecu, G., & Gică, N. (2021). Anxiety, difficulties, and coping of infertile women. *Healthcare*, 9(4), 466. <https://doi.org/10.3390/healthcare9040466>
 - Jaber, D. J., Basheer, H. A., Albsoul-Younes, A. M., Elsalem, L. M., Hamadneh, J. M., Dweib, M. K., & Ahmedah, H. T. (2022). Prevalence and predictive factors for infertility-related stress among infertile couples: A cross-sectional study from Jordan and the occupied Palestinian territories. *Saudi Medical Journal*, 43(10), 1149–1156. <https://doi.org/10.15537/smj.2022.43.10.20220411>
 - Kanişlı, S., Terzioğlu, C., & Bozdağ, G. (2021). The psychological health of women with infertility: Hopelessness, anxiety and depression levels. *Journal of Psychiatric Nursing*, 12(1), 43-49.
 - Keller, E., & Chambers, G. M. (2022). Valuing infertility treatment: Why QALYs are inadequate, and an alternative approach to cost-effectiveness thresholds. *Frontiers in medical technology*, 4, 1053719. <https://doi.org/10.3389/fmedt.2022.1053719>
 - Kiani, Z., Simbar, M., Hajian, S., Zayeri, F., Shahidi, M., Saei Ghare Naz, M., & Ghasemi, V. (2020). The prevalence of anxiety symptoms in infertile women: A systematic review and meta-analysis. *Fertility Research and Practice*, 6, 1–10. <https://doi.org/10.1186/s40738-020-00076-1>
 - Mahadeen, A. I., Hamdan-Mansour, A. M., Habashneh, S. A., & Dardas, L. A. (2020). Sexual satisfaction among infertile couples: Demographics and psychosocial health factors. *Journal of Psychosocial Nursing and Mental Health Services*, 58(9), 40–47. <https://doi.org/10.3928/02793695-20200812-01>
 - Ombelet, W. (2020). WHO fact sheet on infertility gives hope to millions of infertile couples worldwide. *Facts, views & vision in ObGyn*, 12(4), 249
 - Ozturk, A., Aba, Y. A., & Sik, B. A. (2021). The relationship between stigma, perceived social support, and depression in infertile Turkish women undergoing *in vitro* fertilization-embryo transfer. *Archives of Psychiatric Nursing*, 35(5), 434–440. <https://doi.org/10.1016/j.apnu.2021.07.008>
 - Roozitalab, M., Mortazavi, F., & Mousavi, R. (2021). *The prevalence of PTSD among infertile women: A meta-analysis*. *Archives of Women's Mental Health*, 24(6), 813–823
 - Shayesteh-Parto, F., Hasanpoor-Azghady, S. B., Arefi, S., & Amiri-Farahani, L. (2023). Infertility-related stress and its relationship with emotional divorce among Iranian infertile people. *BMC Psychiatry*, 23(1), 666.
 - Taeibi, M., Kariman, N., & Majd, H. A. (2021). Infertility stigma: A qualitative study on feelings and experiences of infertile women. *International Journal of Fertility & Sterility*, 15(3), 189.
 - Vioreanu, A. M. (2021). The psychological impact of infertility. Directions for the development of interventions. *Mental Health: Global Challenges*, 4(1), 22-37.
 - Vural Aktan, G., Yücel Özçirpan, Ç., Uslu Şahan, F., & Koç, G. (2025). Does self-compassion play a mediating role between stress and fertility

adjustment in women undergoing infertility treatment: A structural equation analysis. *Journal of Advanced Nursing*.

- Wdowiak, A., Bakalczuk, G., Stec, M., & Muc-Wierzoń, M. (2021). *Quality of life in infertile women undergoing treatment*. International Journal of Environmental Research and Public Health, 18(3), 1268. <https://doi.org/10.3390/ijerph18031268>
- Webair, H. H. M. (2023). Exploring patient-centered care and help-seeking behavior among infertile females in Jeddah Governorate, Saudi Arabia: A mixed method approach Unpublished doctoral dissertation.
- Webair, H. H., Ismail, T. A. T., Ismail, S. B., & Khaffaji, A. J. (2021). Patient-centered infertility care among Arazb women experiencing infertility: A qualitative study. *BMJ Open*, 11(6), e044300. <https://doi.org/10.1136/bmjopen-2020-044300>
- Zahra, K., Goli, N., Masoumeh, S., & Shahla, H. (2019). Infertility-related stress is associated with quality of life through negative emotions among infertile outpatients. *International Journal of Women's Health and Reproduction Sciences*, 7(2), 173–179