Coping Strategies and Quality of Life Among Clients with Infertility: A Cross-sectional Study at a Nigerian Teaching Hospital

Mariam Jumoke Hassan[1*] and Kafilat Adekeye Ismail[2]

Department of nursing science, University of Ilorin, Ilorin, Nigeria

***Correspondence**

Mariam Jumoke Hassan

Email: hmariam877@gmail.com

Tel: 08130101379

ABSTRACT

Background: *Infertility affects over 70 million couples worldwide and can significantly impact psychological wellbeing and quality of life. This study investigated coping strategies and quality of life among clients attending a fertility clinic in Nigeria.*

Methods: *A cross-sectional study was conducted among 40 clients attending the fertility clinic at University of Ilorin Teaching Hospital between January-March 2024. Data were collected using an adapted Folkman and Lazarus Ways of Coping questionnaire and quality of life assessment tool. Descriptive and inferential statistics were analyzed using SPSS version 21.0.*

Results: *Among the 40 participants, 70% were female with a mean age of 36 ± 5.41 years. A majority (87.5%) had attained tertiary education, and 57.5% reported secondary infertility, with infertility duration ranging from 2 to 11 years (mean 5 ± 2.63 years). Problem-focused coping strategies were predominant (94%), including planning, seeking advice, and religious coping. Support mechanisms mainly involved spouses (95%), family (86.5%), counselors (55.6%), and online forums (37.5%). Equal proportions of respondents (45%) reported poor and good quality of life. No significant associations were found between infertility type and quality of life (p = 0.735) or between gender and coping strategies (p = 0.347).*

Conclusion: *While most clients utilized adaptive problem-focused coping strategies, nearly half reported poor quality of life. Healthcare providers should incorporate routine psychological assessment and counseling throughout fertility treatment to enhance coping and improve quality of life outcomes.*

Keywords: *Infertility, Coping strategies, Quality of life, Psychological support, Nigeria*

INTRODUCTION

Infertility is a medical condition characterized by the inability to achieve a clinical pregnancy after twelve months of regular, unprotected sexual intercourse.[1] According to the World Health Organization, infertility is defined as the failure to conceive after one year of regular, unprotected sexual intercourse in the absence of known reproductive pathology.[2] Epidemiological studies indicate that in a normal population of heterosexually active women not using contraception, 25% become pregnant within the first month, 63% within six months, and 80% within one year.[3] By the end of the second year, 85–90% of such women conceive (3). Globally, over 70 million couples are affected by infertility.[3] In sub-Saharan Africa, the prevalence varies significantly, ranging from 9% in The Gambia to 21.2% in north-western Ethiopia, 11.8% among women and 15.8% among men in Ghana, and between 20% and 30% in Nigeria.[3]

The societal implications of infertility are profound. In many cultures, children are perceived as blessings of marriage, often symbolizing divine approval and favor.[4] Parenthood represents a significant life transition for both men and women.[5] Consequently, the inability to fulfill this desire has been associated with various emotional challenges, including depression, diminished self-esteem, social isolation, and marital discord.[5] For couples, infertility is not just a physical condition but also a psychological and social burden. The stress becomes particularly acute when compounded by previous experiences of pregnancy loss, such as miscarriages, stillbirths, or neonatal deaths.[6] Infertility often leads to reduced quality of life, strained relationships, and an increased risk of sexual dysfunction.[6]

Coping with infertility presents unique challenges. Infertility is considered a chronic, unpredictable stressor that can exceed an individual or couple's coping resources.[7] Coping strategies adopted by couples often include distancing themselves from triggers such as families with children, seeking professional success to enhance self-worth, or sharing their burden with others.[7] For many, infertility represents a significant life crisis, marked by unfulfilled dreams and emotional isolation, as it is often a silent and invisible condition.[8] In Nigeria, fertility issues are the leading cause of gynecological consultations.[8]

This study sought to explore the coping strategies adopted by infertile couples, addressing questions such as: "What coping strategies do they use? Are there gender differences in these strategies? What support mechanisms are available to infertile couples?" By examining these questions, this study aimed to contribute to the existing body of knowledge and provide practical insights into improving the quality of life for couples experiencing infertility.

This study contributes to the existing body of knowledge by identifying coping strategies employed by couples facing infertility and offering insights into improving their quality of life. Nurses, as primary healthcare providers, play a pivotal role from the initial diagnosis to the conception and delivery stages. They are instrumental in enhancing public awareness of infertility, emphasizing the importance of early diagnosis and treatment. Findings from this study equip nurses and other healthcare workers with actionable insights for health education and counseling, enabling them to provide both medical and psychological support to couples.

Moreover, this study serves as a resource for policymakers, non-governmental organizations, and fertility clinics. It guides the formulation of policies and programs that promote fertility treatment and addresses psychological well-being. Academics and researchers can leverage the findings to fill gaps in literature and pursue further research on infertility. Ultimately, healthcare personnel in fertility clinics can use these insights not only to assist in reproductive treatment but also to provide holistic support that addresses the emotional and psychological needs of patients.

Correspondence: Mariam Jumoke Hassan; Email: *hmariam877@gmail.com*

The study is anchored on the Transactional Model of Stress and Coping developed by Lazarus and Folkman.[9] This model posits that stress arises from the interaction between an individual and their environment, shaped by the appraisal of stressors and available coping resources.

Stressors influencing infertility include internal factors such as cervical incompetence, hormonal imbalances, and ovulatory disorders, as well as external factors like societal stigmatization and discrimination. These stressors are appraised by individuals and confronted through various coping strategies, categorized as:

1. **Problem-Focused Coping:** Includes actively addressing infertility by seeking medical help, adopting children, or pursuing assisted reproductive techniques.
2. **Emotion-Based Coping:** Involves strategies such as avoiding discussions about children, managing emotions, or accepting infertility as a personal challenge.
3. **Adjustment-Focused Coping:** Often involves spiritual practices, including worship, prayers, and seeking solace in religious beliefs.

The transactional model explains how individuals appraise and respond to stress. During primary appraisal, they evaluate whether the stressor is relevant, positive, or harmful. If deemed harmful, a secondary appraisal determines whether their resources are sufficient to cope. If resources are perceived as inadequate, negative stress ensues, leading individuals to engage in problem- or emotion-focused coping strategies. For instance, women often adopt positive reappraisal strategies, seeking personal growth and taking responsibility for infertility, which drives them to actively seek solutions.

By applying this model, the study provides a framework for understanding how infertile couples navigate the psychological, emotional, and societal dimensions of their condition.

METHODS

Study Design and Setting

This research, a cross-sectional descriptive study, was carried out at the fertility clinic of University of Ilorin Teaching Hospital (UITH), Kwara State. UITH is a tertiary health institution in Nigeria. The hospital covers a large landmass and is located along old Jebba road, Oke-ose, Ilorin. The institution serves as a teaching hospital for medical students, nursing students, and students of other health related courses and as a referral centre for neighbouring communities.

Target population, Sampling techniques and Size

The target population of this study were clients with infertility attending UITH fertility clinic who had come for routine check-up, diagnosis and treatment.

Sample size

Due to limited accessibility and availability, all 40 eligible and willing participants encountered during the study period were recruited. This census approach ensured full

participation of the accessible population, thus reflecting the real-world dynamics and constraints within the study setting.

Data collection

Data collection was done using adapted questionnaire from folkman and lazarus[5] questionnaire. The researcher administered questionnaires to clients with infertility who were available as at the time of the study. The questionnaires were administered and retrieved from the respondents on the spot with the help of other research assistants.

Data Analysis

Data were analysed after collection by imputing it into the computer and analysed using statistical product and service solution (SPSS version 21) and the results were presented using descriptive statistics in form of frequency/percentage tables, and bar charts. Inferential statistics in form of chi square was used to test the hypothesis.

RESULTS

Sociodemographic Characteristics of Participants

Among participants, 70% were female, with mean age 36±5.41 years. Most (87.5%) had tertiary education, and 57.5% had secondary infertility. Duration of infertility ranged from 2-11 years (mean 5±2.63 years).

Table 1: Socio-demographic characteristics of respondents (40)

Variable Response	Frequency	Percent
Gender		
Male	12	30.0
Female	28	70.0
Age		
27-33	13	32.5
34-40	18	45.0
41-47	9	22.5
Religion		
Islam	21	52.5
Christianity	19	47.5
Educational level		
Secondary	5	12.5
Tertiary	35	87.5
Years of infertility		
2-6	28	70.0
7-11	10	25.0

Correspondence: Mariam Jumoke Hassan; Email: *hmariam877@gmail.com*

Declined response	2	5.0
Types of infertility		
Primary	17	42.5
Secondary	23	57.5

Coping Strategies and Support Mechanisms

Problem-focused coping strategies were predominant (94%), including planning, seeking advice, and religious coping. Support mechanisms included spouses (95%), family (86.5%), counselors (55.6%), and online forums (37.5%).

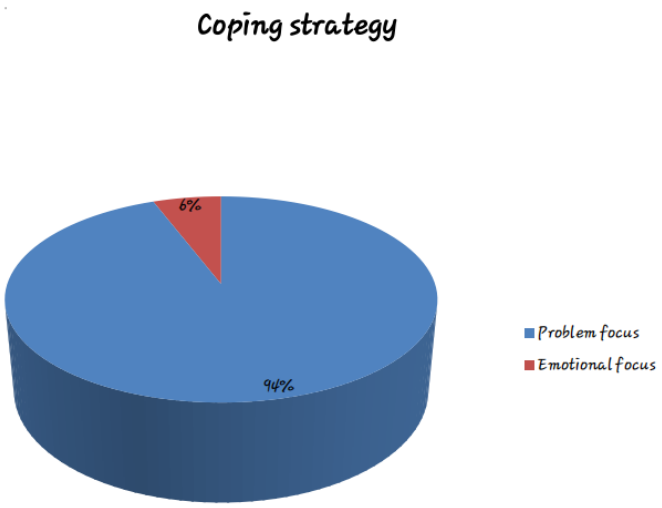

Figure 1: Distribution of coping strategies]

Equal proportions (45%) reported poor and good quality of life. No significant relationship existed between infertility type and quality of life (p=0.735) or between gender and coping strategies (p=0.347).

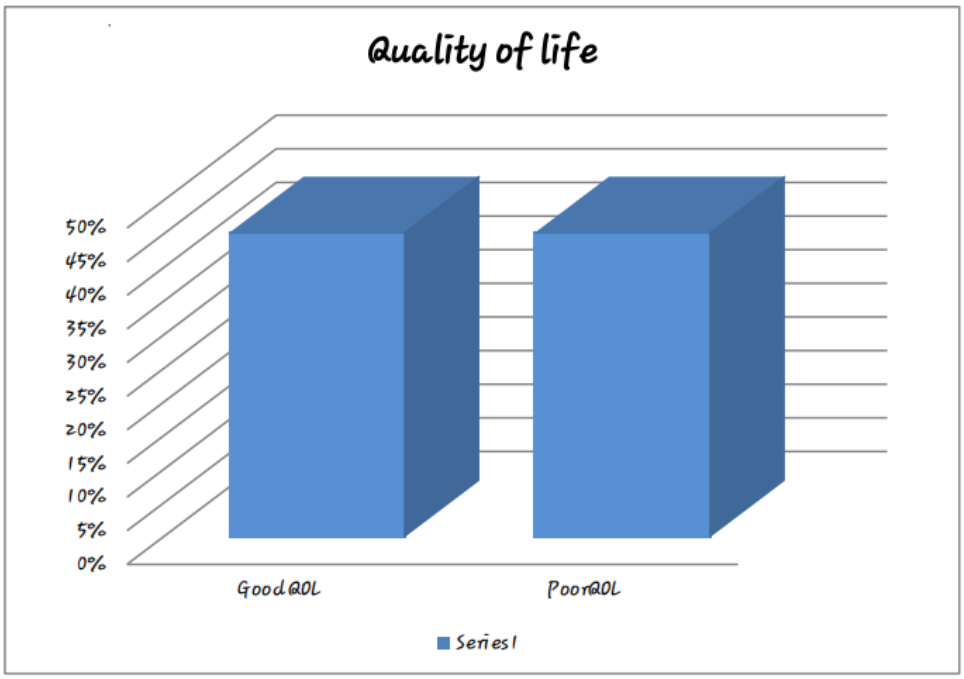

Figure 2: Quality of Life Assessment

DISCUSSION

The findings from the study revealed that majority of the respondents had their spouse, close friends and family support, while about half reported to have support from their counselor at fertility clinic and online forum while no one reported getting support from pets. This is in line with previous research which revealed that participants reported receiving emotional support from extended family[7].

It was revealed in this study that majority of the respondents use "planning, wishful thinking, religion, seeking advice, positive reinterpretation and suppression of competing activity to have time to deal with infertility" while few reported that they "are in denial, vent emotions, do not usually do something about their infertility and use substance" to cope with infertility. This is in line with previous research that states that the culturally adapted religious coping strategies of seeking the support of Rabbis and seeking the support of God had a strong correlation with reduced psychological distress among respondents with infertility[7]. The result of this finding contrasts previous research by Lola et al, (2018) that states that "57% of males and 31.1% of females drinks, smokes, and indulge in drugs as escape/avoidance coping strategy". Majority of the respondents (94%) of the respondents used problem focus coping strategy to deal with infertility, while others (6%) use emotional focus coping strategy.

***Correspondence:** Mariam Jumoke Hassan; Email: *hmariam877@gmail.com*

The study reflected 18 (45%) of the respondents each had poor and good quality of life. This is in line with previous research that states that infertility may result in a decrease in quality of life and an increase in marital discord and sexual dysfunction[10].

CONCLUSION

In conclusion, the study identified the coping strategies and quality of life of client with infertility. The result of this study showed that respondents had adequate support mechanism to deal with infertility, majority of the respondents used problem focused coping strategy to deal with infertility, although infertility was observed to decrease quality of life among respondents. This implies that provision should be made for availability of counseling unit for couples with infertility starting from the diagnosis stage to the treatment phase.

REFERENCES

1. Carroll JS, Robinson WD, Marshall ES, Callister LC, Olsen SF, Dyches TT. The family crucible of illness, disability, death, and other losses. In D. C. Dollahite (Ed), *Strengthening our Families*. Salt Lake City, UT: Bookcraft; 2011.
2. Dhont N, van der Wijgert J, Coene G, Gasarabwe A, Temmerman. Mama and papa nothing: Living with infertility among an urban population in Kigali. *Human Reproductive Health.* 2010;26(3):623-629.
3. National Collaboration Centre for Women and Children Health. Fertility assessment and treatment for people with fertility problems: London. RCOG. 2012;20.
4. Graham M. Is being childless detrimental to a woman's health and well-being across her life course? *Women's Health Issues.* 2015;25(2):176-184.
5. Jordan C, Revenson TA. Gender differences in coping with infertility: A meta-analysis. *Journal of Behavioural Medicine.* 2013;22(4):341-358.
6. Okonofua FE. Female and male infertility in Nigeria: Studies on the epidemiology of infertility in Nigeria with special reference to the role of genital tract infections and sexual and reproduction risk factors. Karolinska University Press; 2005. Available: https://openarchive.ki.se/xmlui/handle/10616/37978
7. Rouchou, Brittany. Consequences of infertility in developing countries. *Perspective in Public Health*, Royal Society for Public Health, Sage Publication. 2013;133(3).
8. Obeidat HM, Hamlan AM, Callister LC. Missing motherhood: Jordanian women's experience with infertility. *Journal of Advances in Psychiatry.* 2014. Article ID:241075.
9. Sameer V, Trupti B, Surendranths. An evaluation of the effect of infertility on marital, sexual satisfaction indices, and health-related quality of life in women. *Journal of Human Reproduction Science.* 2010;4(2).
10. Lazarus RS, Folkman S. Manual for the ways of coping questionnaire. Palo Alto, CA: Consulting Psychologists Press; 2005.