# Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE DOI:10.53555/jptcp.v30i17.2660

## ESTIMATION OF QUALITY OF LIFE AMONG INFERTILE WOMEN SEEKING TREATMENT IN SERVICES HOSPITAL, LAHORE

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#### **Abstract**

**Background:** Infertility in women profoundly affects their quality of life and emotional wellbeing. In developing countries like Pakistan, women with infertility bear the unprecedented consequences in every sphere of life.

**Objective of the Study:** This study was conducted to assess the quality of life among infertile women attending Gynecology OPD in Services Institute of Medical Sciences (SIMS), Lahore.

**Materials and Methods:** The nature of the study was cross-section and descriptive. By using non probability sampling, a number of 102 married women with infertility seeking treatment in OPD of Services Hospital, Lahore was sampled. The convenient approach was employed to draw the representative and equitable sample. Study was conducted for 05 months from January 2022 to May 2022. A well-structured questionnaire was used to collect the data from the participants ensuring their consent, privacy and confidentiality. The descriptive analysis was applied such as Mean with standard deviation for continuous variables and estimation of quality of life. Frequency and percentage was calculated for categorical variables. Moreover, Chi square test was used to analyze the causal-relationship.

**Results:** The results yielded that women with infertility led to a poor quality of life in emotional, physical and social domain. Speaking statistically, 66.66% women had low quality of life, 29.41% women had better quality of life and 3.93% women had good quality of life. Moreover, the results indicated that study participants had better quality of life in relational and environmental domain. Furthermore, the study participants who were younger with higher education level andbetter socioeconomic status depicted better quality of life.

**Conclusion:** In a nut shell, it was concluded that the infertile women had low quality of life. However, age, educational level and socio-economic status were the factors that enhanced the quality of life.

**Keywords:** Quality of life, Infertile Women, Emotional Well-being, Socioeconomic Status.

#### 1. INTRODUCTION

Infertility profoundly affects the quality of life for women. It is defined as the inability to conceive after two years of regular unprotected intercourse (ASMR,2013). Infertility impacts physical health, psychological well-being, personal beliefs, social relationships, and the surrounding environment. Infertility causes significant stress and emotional distress, particularly for women. They may experience feelings of incompleteness and face societal stigmatization (Mascarenhas et al., 2012). In patriarchal societies like Pakistan, infertile women often lack social support and are solely blamed for the condition (Abbasi et al., 2016, Ali et al., 2011).

Infertility has a detrimental impact on the quality of life, affecting emotional well-being, fulfillment, and satisfaction with work and relationships (Qadir,2015). Medical decision-making should consider quality of life as a predictor of treatment success. To alleviate the burden of infertility, it is essential to provide social support and appropriate medical care to women. Breaking societal myths and stereotypes surrounding infertility is necessary for a more compassionate and understanding approach (Boivin et al., 2007, Inhorn, 2015).

Quality of life plays a crucial role in an individual's well-being and is influenced by various factors, including personal goals, cultural context, and social expectations. However, for infertile women, the challenges they face can significantly affect their overall quality of life, leading to emotional distress and psychological trauma. The issue of infertility is highly alarming in terms of abusing women's emotional and physical well-being. There is need to uncover the socio-cultural factors and embedded mindset which posit the women's health at risk. There is need to seek distinct that being infertile is an issue of reproductive health and related to gynecology. And, consequences of this emerging issue are social and psychological just for women. Therefore, it is highly important to investigate the level of quality of life of women associated with infertility. Infertile women constitute a vulnerable group in society, often experiencing physical, emotional, and psychological turmoil. However, there is limited comprehensive research on infertility and its impact on quality of life among women in Pakistan.

This study will provide a comprehensive guidelines regarding social treatment of women with infertility in every sphere of life.

#### 2. OBJECTIVE OF THE STUDY

This study aims to investigate the quality of life among infertile women seeking treatment at the Gynae OPD in Services Institute of Medical Sciences (SIMS) in Lahore.

#### 3. MATERIALS AND METHODS

The nature of the study was cross-section and descriptive. By using non probability sampling, a number of 102 married women with infertility seeking treatment in OPD of Services Hospital, Lahore was sampled. The convenient approach was employed to draw the representative and equitable sample. Study was conducted for 05 months from January 2022 to May 2022. A well-structured questionnaire was used to collect the data from the participants ensuring their consent, privacy and confidentiality. The descriptive analysis was applied such as Mean with standard deviation for continuous variables and estimation of quality of life. Frequency and percentage was calculated for categorical variables. Moreover, Chi square test was used to analyze the causal-relationship. All married women under 20-40-year-old who came for seeking treatment in infertility

centers at SIMS Lahore were included in the study. They were trying for pregnancy since two years and never got pregnant (Primary infertility). Their socioeconomic status was middle class (Monthly income Rs 20,000-50,000). Women with any abnormality, dysfunction or infection (disease) were excluded from the study. The study design was approved by Ethical board of Services Hospital, Lahore.

The data was collected by use of questionnaire. The questionnaire consisted of two parts; (i) Demographic data, and (ii) FertiQoL questionnaire. The demographic data consisted of name (Optional), age, education, time duration of marriage, time duration for trying for pregnancy, occupation, socioeconomic status, family system (nuclear or joint), and first consultant (Gynecologist, LHV, Dai etc).

The second part explained the instrument used in the current study(Appendix A). It was a self-administered questionnaire developed by (Boivin, Takefman, & Braverman, 2011)named FertiQoL. It was sub-divided into six major sections, 36 items scored according to 5 response categories at the Likert scale. The response scale has a range of 0 to 4 with a total score ranging 0 to 100. The higher scores mean higher quality of life.

After obtaining official permissions, data were collected over a period of 06 months starting from September 2021 to February 2022. It took 10-20 minutes in average for each women to fill in the questionnaire. All the data was analyzed by SPSS version 22. Descriptive data was presented as frequency and percentage. Mean and standard deviation was used to analyze quantitative data.

**Patient and Public Involvement**: Pilot study of 20% sample size was conducted to check reliability and validity of questionnaire. Written consent describing the purpose and benefits of the study was taken from study participants. Proper guidance was provided for understanding to the questions asked. Women were requested to answer as per their own understanding to the question. Results are disseminated to interested participants

#### 4. RESULTS AND DISCUSSIONS

**TABLE 4. 1: Demographic Characteristics of the Studied Sample (N=102)** 

Demographic Characteristics		Frequency	Percentage
Age	< 30 Years	28	27.45%
	> 30 Years	74	72.54%
Duration	< 10Years	86	84.31%
	> 10 Years	16	15.68%
Education	< Intermediate	76	74.50%
	> Intermediate	26	25.49%
<b>Monthly income</b>	<20,000 PKR	32	31.37%
	> 20,000PKR	70	68.27%
Occupation	House wife	72	70.58%
	Working women	30	29.41%
Family system	Joint family	66	64.70%
	Nuclear family	36	35.29%
Consultant	Doctor	48	47.05%
	Others (LHV, Dai, Nurse)	54	52.94%

The above table 4.1 shows that 72.5% patients were older than 30 years and 25.4% had a more than intermediate education, 68.2% had a monthly income more than Rs. 20,000, 29.4% were working women, 64.70% of the respondents were resided in the joint family system and 47% had doctor as their consultant

TABLE 4.2: Mean scores of Quality Of Life Questionnaire (FertiQol) (n=102)

FertiQol Subscales	Mean± SD	Minimum	Maximum
Emotional	46.07±10.75	29.16	70.83
Mind/ Body	49.75±11.92	25.00	87.50
Relational	50.39± 10.28	12.50	87.50
Social	$48.29 \pm 11.79$	12.50	75.00
Environmental	51.19±9.59	29.16	75.00
Tolerability	43.26±7.43	25.00	68.75
FertiQol	47.69±6.59	22.22	63.98

- Low QoL Mean FertiQol score less than 50%
- Better QoL Mean FertiQol score more than 50%
- Good QoL Mean FertiQol score more than 60%

The above table 4.2 presents the mean score of the quality of life of the sampled women with infertility seeking treatment in Service Hospital, Lahore. Regarding the emotional well-being, the mean score was  $46.07\pm10.75$  and that of body/mind was  $49.75\pm11.92$ . Better scores were noted for environmental and relational factors i.e.  $51.19\pm9.59$  and  $50.39\pm10.28$  respectively.

TABLE 4.3: Quality of Life (n=102)

QoL	Frequency	Percent	
Low QoL	68	66.66%	
Better QoL	30	29.41%	
Good QoL	4	3.92%	

The results of table 4.3 indicated that 66.6% of the respondents with infertility were living under the poor quality of life and only 3.9% of the respondents were living with a good quality of life.

TABLE 4.4: Relationship between Quality of Life and Education Status of the Respondents (n=102)

(n-102)					
Domain	<b>Education Status</b>	Frequency	Mean± SD		
Emotional	< Intermediate	76	44.07		
	> Intermediate	26	43.58		
Mind/ Body	< Intermediate	76	43.63		
	> Intermediate	26	51.92		
Relational	< Intermediate	76	46.37		
	> Intermediate	26	52.15		
Social	< Intermediate	76	43.42		
	> Intermediate	26	50.63		
<b>Environmental</b>	< Intermediate	76	50.38		
	> Intermediate	26	51.51		
Tolerability	< Intermediate	76	41.9		
	> Intermediate	26	37.98		
QoL	< Intermediate	76	44.85		
	> Intermediate	26	44.98		
correlation coefficient-0.30736		p-0.44			

In comparison, the table 4.4 shows that females with education level more and less than intermediate revealed that a mind/body Qol of 51.92 was noted in females with more education as compared to latter i.e 43.63. Similarly relational, social and environmental scores were also better in high educated women i.e 52.15, 50.63, 51.51 respectively.

### 5. DISCUSSIONS

The study findings depicted an overall mean FertiQoL score of 47.69 which indicted low quality of life of women with infertility. The findings are consistent with a Chinese study in which quality of life of infertile women was lower as compared to fertile controls (Aarts et al., 2011). As infertility affects lives of couples and especially women, it has been identified that almost 66.66% (68) of the women have low quality of life, 29.41% (35) had better quality of life and 3.92% (4) have good quality of life. These findings are in-contrast for two values and similar in one value to a studies conducted by Iranian group of researchers. In this study, 34.6%, 63.3%, and 2.1% had a neutral quality of life, positive quality of life, and a completely positive quality of life (Maroufizadeh et al., 2017 and Omami et al., 2018). The results showed that women performed better in relational and environmental domain and they scored more than 50% in both of these domains, with a mean score of 50.39 and 51.19 respectively. Similar pattern could be seen in a Chinese study where women scored 62.5 in relational domain (Chi, et al., 2016).

This indicated that although overall quality of life was low in infertile women, the relations and environmental aspect was not affected by infertility. Moreover, the comparison of mean scores of quality of life with age groups it is find out that women less than 30 years' age have better quality of life than women aged more than 30. Their overall quality of life score of mind/body and environmental domains are more than 50 which indicated better quality of life. This finding is in resembling trend to a Korean study where they found no difference in depression, anxiety, and stress between younger (≤34) and older (≥35) participants (Jung & Kim., 2017). The time duration during which women were unable to conceive did not bring any significant change in quality of life. On the contrary, they performed better and scored 52.60 and 54.68 in mind/body and relational domains respectively It is alike to the finding of another study where researcher did not identify any relationship between duration of pregnancy and quality of life (Namdar, et al., 2017, Dural et al., 2016).

The researcher was able to identify that women who were more educated undergo crisis of infertility better than those who are less educated. Women with the education higher than intermediate level showed better quality of life scores in mind/ body 51.92, relational 52.15, social 50.63, and environmental 51.51. These findings are in congruent with an Iranian study where they find out people with higher education have higher quality of life as compared to those with low education (Masoumi et al., 2016).

The money usually affects standards of living. It has been highlighted that group of infertile women who have monthly income more than 20,000PKR have better quality of life 51.78(70) than those who have less monthly income. They also perform better in social and environmental domain and scored 52.39, 50.38 respectively. These findings are correspondent to an Iranian study where they find out that higher monthly income is associated to higher quality of life in infertile couples (Kumar, 2007).

#### 6. CONCLUSION

The findings of the current study can be summarized that quality of life of all infertile women has been affected. Women with more age suffer more as compared to younger aged women. It has been identified in current study that education plays important role in coping as highly educated women were able to cope better than less educated women. The study results suggested that the relational and environmental domain of life were not being negatively affected as compared to emotional, physical and social wellbeing.

**Implications:** The practicality aspect of this topic enhances the need of awareness about sufferings of infertility and development of policies and procedures for the wellbeing of this vulnerable group. These results guide practitioners to develop guidelines and protocols for early detection and intervention regarding physical and mental health problems of infertile women. It is need of the time to promote mental health nurse practitioners, LHVs, Midwives training and development to deal and

provide accurate guidance and counseling to infertile couples. It also contributes to the previous pool of knowledge about infertility and its related aspects.

**Competing Interest:** No competing interest

**Funding:** There are no funders to report for this submission.

What This study adds: This study adds that quality of life of infertile women in Pakistan is also affected but their relational and environmental aspects are not affected much. Women who are younger in age and more educated their quality of life is not affected as compare to elder group and less educated group.

How this study might affect future research, practice & policy: Infertility centers health care provider staff, nurses, physicians should get trainings and it must be indulged in treatment protocols to deal with this population. There is need to give more knowledge to the general public so their acuities can be shaped and it will be a more compassionate society for infertile women. This study also provides motivation to researchers so they can highlight the issues of these neglected groups of society.

#### REFERENCES

- 1. Omani-Samani, R., Ghaheri, A., Navid, B., Sepidarkish, M., & Maroufizadeh, S. (2018). Prevalence of generalized anxiety disorder and its related factors among infertile patients in Iran: a cross-sectional study. *Health and Quality of Life Outcomes*, 16(1), 129. doi:10.1186/s12955-018-0956-1.
- 2. Jung, Y. J., & Kim, H. Y. (2017). Factors Influencing Infertility-related Quality of Life in Women Undergoing Assisted Reproductive Techniques: Focusing on Depression and Resilience. *Korean J Women Health Nurs*, 23(2), 117-125.
- 3. Maroufizadeh, S., Ghaheri, A., & Omani Samani, R. (2017). Factors associated with poor quality of life among Iranian infertile women undergoing IVF. *Psychology, Health & Medicine*, 22(2), 145-151. doi:10.1080/13548506.2016.1153681.
- 4. Namdar, A., Naghizadeh, M. M., Zamani, M., Yaghmaei, F., & Sameni, M. H. (2017). Quality of life and general health of infertile women. *Health and Quality of Life Outcomes*, 15(1), 139. doi:10.1186/s12955-017-0712-y.
- 5. Masoumi, S. Z., Garousian, M., Khani, S., Oliaei, S. R., & Shayan, A. (2016). Comparison of Quality of Life, Sexual Satisfaction and Marital Satisfaction between Fertile and Infertile Couples. *International journal of fertility & sterility*, 10(3), 290-296. doi:10.22074/ijfs.2016.5045
- 6. Dural, O., Yasa, C., Keyif, B., Celiksoy, H., Demiral, I., Yuksel Ozgor, B., . . . Bastu, E. (2016). Effect of infertility on quality of life of women: a validation study of the Turkish FertiQoL. *Human Fertility*, *19*(3), 186-191. doi:10.1080/14647273.2016.1214754.
- 7. Chi, H.-J., Park, I.-H., Sun, H.-G., Kim, J.-W., & Lee, K.-H. (2016). Psychological distress and fertility quality of life (FertiQoL) in infertile Korean women: The first validation study of Korean FertiQoL. Clinical and experimental reproductive medicine, 43(3), 174.
- 8. Chi, H.-J., Park, I.-H., Sun, H.-G., Kim, J.-W., & Lee, K.-H. (2016). Psychological distress and fertility quality of life (FertiQoL) in infertile Korean women: The first validation study of Korean FertiQoL. Clinical and experimental reproductive medicine, 43(3), 174.
- 9. Abbasi, S., Kousar, R., & Sadiq, S. S. (2016). Depression and anxiety in Pakistani infertile women. Journal of Surgery Pakistan (International), 21(1), 13-17.
- 10. Inhorn, M. C., & Patrizio, P. (2015). Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. Human Reproduction Update, 21(4), 411-426. doi:10.1093/humupd/dmv016.

- 11. Qadir, F., Khalid, A., & Medhin, G. (2015). Social support, marital adjustment, and psychological distress among women with primary infertility in Pakistan. Women & health, 55(4), 432-446.
- 12. ASMR. (2013). Definitions of infertility and recurrent pregnancy loss: a committee opinion. ). ,. Fertil Steril, 99(1) 63.
- 13. Mascarenhas, M. N., Flaxman, S. R., Boerma, T., Vanderpoel, S., & Stevens, G. A. (2012). National, Regional, and Global Trends in Infertility Prevalence Since 1990: A Systematic Analysis of 277 Health Surveys. PLOS Medicine, 9(12), e1001356. doi:10.1371/journal.pmed.1001356
- 14. Aarts, J. W. M., Van Empel, I. W. H., Boivin, J., Nelen, W. L., Kremer, J. A. M., & Verhaak, C. M. (2011). Relationship between quality of life and distress in infertility: a validation study of the Dutch FertiQoL. Human Reproduction, 26(5), 1112-1118.
- 15. Ali, S., Sophie, R., Imam, A. M., Khan, F. I., Ali, S. F., Shaikh, A., & Farid-ul-Hasnain, S. (2011). Knowledge, perceptions and myths regarding infertility among selected adult population in Pakistan: a cross-sectional study. BMC public health, 11(1), 1-7.
- 16. Boivin, J., Bunting, L., Collins, J. A., & Nygren, K. G. (2007). International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. Human reproduction, 22(6), 1506-1512.
- 17. Kumar, D. (2007). Prevalence of female infertility and its socio-economic factors in tribal communities of Central India.