

## MEASURING THE LEVEL OF PSYCHOLOGICAL DISTRESS AND ITS IMPACT ON QUALITY OF LIFE AMONG INFERTILE WOMEN IN SOUTH PUNJAB, PAKISTAN

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### ABSTRACT

*This research study was planned to check the level of psychological distress in relation with the infertility among women. This study also explored the impact of this psychological distress with the level of quality of life among women. In this connection, a sample of (N=284) was approached by using purposive sampling technique. To measure the variables two valid and reliable scales were administered and the collected responses were further analyzed by using SPSS. The results revealed that the infertile women were facing moderate level of psychological distress. Both the level of depression and anxiety were at moderate level among the infertile women. Similarly, the quality of life was lower among infertile women. The analysis also showed that the women with anxiety and depression scored lower quality of life scale. Furthermore, there was a significant correlation between psychological distress i.e. depression and anxiety with the level of quality of life among infertile women. On the basis of results, the study concluded that infertile women are suffering from anxiety and depression with lower level of quality of life. Hence, there is a dire need to address this issue and implement some interventions to reduce the level of psychological distress and uplift the quality of life of infertile women in south Punjab, Pakistan.*

**Keywords:** Anxiety, Depression, Infertility, Quality of life, Psychological distress.

### INTRODUCTION

#### **Basic Concept of Infertility**

Inability of a couple who are sexually active and also not using any birth control, to get pregnant after one year is known as female infertility. If a woman wants to get pregnant then she must be able to develop an egg in her ovary. This egg releases every month in the fallopian tube. After that, there must be a male sperm which fertilizes the egg in the tube. The fertilized egg then reaches and implant in the lining of the uterus. A woman can never get pregnant if any of these events does not happen in her body which results infertility (Cedars & Jaffe, 2005). Furthermore, infertility also refers to the inability to give birth to a live baby. Woman can conceive a baby but before the birth of a baby if faces miscarriage, in other words a baby cannot complete the full cycle and it becomes impossible to give birth to live baby. About 40% cases of infertility are due to women, 30% are due to male and 20% cases of infertility are due to both male and female (Sule et al., 2008).

#### **Types of Infertility in Women**

Infertility in women refers to failure to achieve pregnancy after twelve months. There are two types of infertility in women. One is called primary infertility and the other is called secondary infertility. Primary infertility refers to not getting pregnant after twelve months of regular and

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unprotected sexual intercourse. Secondary infertility refers to not getting pregnant after one successful pregnancy (Cabre et al., 2014).

#### **Causes of Infertility in Women**

Infertility is a wide ranging issue. It is affecting about 8-10% of couples. It is multidimensional problem with economic, cultural and social implications. There are many causes of infertility in women. It can be due to the different diseases in women and women with the age of 35 and above can face infertility. It is also associated with geographical differences. For example in Africa the infertility rate is high as compared to European countries (Roupa et al., 2009).

#### **Psychological Distress and Infertility in Women**

Infertility is associated with psychological responses such as anxiety, depression social isolation guilt and self-esteem in female. Different healthcare professionals indicated that women faces depression while seeking treatment for infertility. It ranges from 8% to 54% in women (Zuraida, 2010). Experience of infertility is an interruption in parenthood. Most of the female suffer from anxiety and depression due to this unwanted interruption for becoming her mother (Mcquillan et al., 2003).

#### **Quality of Life and Infertility in Women**

Infertility reduces the quality of life in the women causing anxiety and depression. Therefore health professionals should also consider quality of life while treating these women (Kahyaoglu & Balkanli, 2015). As Women with infertility faces significant reduction in quality of life so they cannot live happily and most of their routine disturbs. This situation causes anxiety and depression in the women (Direkvand et al., 2014).

### **REVIEW OF LITERATURE**

In South Punjab, a culturally diverse area of Pakistan, there has been increased focus on the effects of psychological distress on the quality of life among infertile women. Infertility is a complex and multifaceted issue that has not only its medical consequences but has a substantial negative influence on women's mental, emotional, and physical health. This literature review investigates the complicated relationship that exists in this particular cultural context. This neglected and marginalized community can benefit from assistance, interventions, and holistic well-being by identifying prospective initiatives through a thorough examination of the available literature (Farid, S., 2017). The ways that psychological discomfort impacts quality of life may change over time as society standards, economic situations, and access to healthcare treatments change. This research seeks to give a thorough knowledge of the distinctive difficulties experienced by infertile women by linking the past and present. Infertile women in South Punjab, Pakistan, endure a significantly reduced quality of life due to psychological discomfort. Anxiety, despair, and social isolation are just a few of the unfavorable feelings that the burden of infertility can arouse. These unpleasant emotions hurt several aspects of these women's lives. In the traditional cultural environment of South Punjab, the stigma associated with infertility exaggerates women's sentiments of shame and poor self-esteem, as mentioned by Aamir et al. (2019).

Additionally, research by Ahmad et al. (2020) highlights the reciprocal link between psychological well-being and physical health, indicating that the pain felt by infertile women might result in physiological changes that impair fertility and general quality of life. Psychological distress has effects on infertile women's quality of life that go beyond only the emotional. According to Khanum et al. (2018) research, mental stress brought on by infertility frequently damages marital relationships, resulting in arguments and a loss of intimacy. This may make people feel more alone and add to their discomfort.

Furthermore, the research by Javed and Farid (2017) shows that the difficulties experienced by infertile women in South Punjab are made worse by the absence of readily available mental health services. These women's capacity to deal with the psychological toll of infertility is further hampered by the dearth of qualified experts in psychological counseling and society's propensity to place more value on physical health than mental well-being.

Infertility is a complicated issue with both psychological and physiological components. Studies that were done to determine the prevalence of infertility have revealed prevalence rates ranging from 9% to 12%. Infertility was found to be 12% common in the United States, 9% common in the United Kingdom, and 12% common in Portugal (Louis JF, 2013). It is a serious health issue that can be managed, but only every infertile couple receives medical attention (Soares S, 2011).

The stigma around infertility is widespread. In addition to physical and sexual issues, infertility puts both men and women at high risk for significant psychological and emotional stress (Peterson BD, 2007). Loss of self-esteem, difficulties with their sexuality, mental stress, marital issues, depression, and anxiety are all common complaints. Due to the ambiguity surrounding the underlying reason for infertility, the indefinite nature of therapy, financial concerns, and familial pressure, anxiety and depression are the most prevalent mental illnesses among these (Boivin & Griffiths, 2011).

Infertility treatments may be more likely to be successful if psychological discomfort is lessened, according to research (Cousineau TM, 2007). Psychological issues have been shown to influence therapeutic success. Infertility-related stress may affect more women than males, according to evidence from the literature (Smeenk JM, 2001). According to statistics provided by de Klerk (2008), more than 50% of women undergoing infertility treatment rate it as the most difficult time in their life. In another study by El Kissi et al. (2013), women were more likely than males to have psychological distress symptoms.

Women's social, emotional, and psychological well-being are negatively impacted by the suffering of infertility. More significantly, research has to be done on anxiety and despair as psychological effects of infertility. In contrast to depression, which is both tied to creating infertility and related to its duration (Ramezanzadeh F, 2004), anxiety is not the cause of infertility but is rather correlated with how long it lasts. The length of infertility is the most important of several variables that have been linked to sadness and anxiety. According to Thoma et al. (2013), the third year of infertility was when depression peaked.

However, the current situation requires a sophisticated analysis that considers the changing socio-cultural dynamics and their effects on the psychological well-being of infertile women in South Punjab. After a thorough study of the literature, there is a complex relationship between psychological distress and the quality of life for infertile women in South Punjab highlighting the critical need for culturally appropriate psychological treatment and assistance systems to address their overall well-being (Aamir et al., 2019).

## **METHOD OF STUDY**

### **Participants**

In this research the participants were the females who were already diagnosed as infertile belonging from different demographic status were the participants in this study.

### **Sample Size**

The sample of this study was calculated by using online G. Power calculator. The total sample size of this study was (N=322) out of which only (N=284) met the study criteria and included in the final study.

### **Sampling Technique**

In this study the sample was approached by using purposive sampling technique.

### **Research Design**

In this study all the participants belongs to different cultures with different education, family and socio-economic backgrounds. Therefore, a cross-sectional research design was used to carry out the study.

## Measurement Tools Used in the Study

### **DASS 42**

To screen out the depression, anxiety and stress among infertile women DASS-42 items was used. This scale was developed by (Lovibond., & Lovibond., 1995). In this study Urdu translated version of DASS- 42 items was used. DASS-42 is comprised on 42 self reported items that are used to assess psychological distress. It is most widely used in clinical setting to screen out depression, anxiety and stress (Vajpeyee et al., 2022) . The internal consistency reliability coefficients for the overall scale and its subscales for depression, anxiety and stress were .91, .86, .74 and .86 respectively. The analysis for construct validity of U-DASS-42 revealed significant positive correlation between U-DASS-42 and its subscales i.e. depression ( $r = .91, p < .001$ ) anxiety ( $r = .97, p < .005$ ), and stress ( $r = .92, p < .001$ ) 1). In present study researcher only used the items of depression and anxiety.

### **FertiQoL**

The FertiQoL is a validated tool to measure the quality of life among infertile women. It is a self-reported questionnaire developed by the researchers and clinicians of European Society of Human Reproduction and the American Society of Reproductive Medicine (ASRM). The FertiQoL questionnaire is designed to assess the quality of life of women who are experiencing fertility problems. The overall validity and reliability of this scale is satisfactory.

### **Objectives**

1. To check the prevalence of psychological distress among infertile women in South Punjab Pakistan.
2. To check the relationship of psychological distress with quality of life among infertile women in south, Punjab Pakistan.

### **Hypotheses**

1. There will be a higher level of psychological distress among infertile women in South Punjab, Pakistan.
2. The quality of life will be lower among infertile women having higher level of psychological distress.

### **Ethical Consideration**

In this study APA ethical guidelines were adapted. All the participants included in this study after getting informed consent. A brief procedure of the research and its purpose was discussed with the participants. They were assured that their responses will be kept as confidential and there is no any type of harm, injury or risk in this research.

## RESULTS OF THE STUDY

Table 1 Showing prevalence of Depression and Anxiety among Infertile Women

Illness Prevalence	Anxiety Level		Depression Level	
	Frequency	Percent	Frequency	Percent
Normal	143	50.4	128	45.1
Mild	23	8.1	27	9.5
Moderate	66	23.2	96	33.8
Severe	21	7.4	4	1.4
Extremely Severe	31	10.9	29	10.2
Total	284	100.0	284	100.0

Note: The above results showed the overall prevalence of psychological distress among infertile women.

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Table 2 Showing Quality of Life level among Infertile Women (n=284)

Quality of Life	Frequency	Percent
Very Low	23	8.1
Low	191	67.3
High	65	22.9
Very High	5	1.8
Total	284	100.0

Note: The above table depicts the quality of life of the respondents included in the sample.

Table 3 Showing Prevalence of Anxiety among participants in case of Quality of life

Prevalence of Anxiety	Quality of Life				Total
	Very Low	Low	High	Very High	
Normal	12	77	49	5	143
Mild	0	13	10	0	23
Moderate	1	60	5	0	66
Severe	4	16	1	0	21
Extremely Severe	6	25	0	0	31
Total	23	191	65	5	284

Note: The above table shows the quality of life of the respondents in case of Anxiety level.

Table 4 Showing prevalence of Depression among participants in case of quality of life

Prevalence of Depression	Quality of Life				Total
	Very Low	Low	High	Very High	
Normal	4	75	44	5	128
Mild	1	17	9	0	27
Moderate	11	73	12	0	96
Severe	2	2	0	0	4
Extremely Severe	5	24	0	0	29
Total	23	191	65	5	284

Note: The above table shows the quality of life of the respondents in case of depression level.

Table 5 Showing correlation matrix of depression, anxiety among the participants

Clinical variables	Age	Marriage years	Treatment duration	Anxiety	Depression	Quality of life
Age	1					
Marriage years	0.712**	1				
Treatment duration	0.582**	0.782**	1			
Anxiety	0.059	0.303**	0.345**	1		
Depression	0.017	0.221**	0.257**	0.536**	1	
Quality of life	-0.014	-0.281**	-0.268**	-0.425**	-0.440	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Note: The table shows correlation matrix of depression and anxiety among overall participants. In the table the values with star (\*) shows correlation is significant at 5% level and values with double star (\*\*) are significant at 1% level of significance.

## DISCUSSION AND CONCLUSION

This study was endeavoring to find out the level of psychological distress and its relation with quality of life among the infertile women in the south Punjab, Pakistan. In this connection the first hypothesis was designed to check the prevalence of psychological distress among infertile women. The core aim of this hypothesis was to check the level of depression and anxiety as a variable of psychological distress. It was hypothesized that there will be a higher level of psychological distress among infertile women. The findings of this hypothesis reported a significant numeric value that show a moderate to higher level of distress among the study participants. The results of this hypothesis are consistent with the past studies such as Ahmad et al. (2020) conducted a study to check the relationship of infertility with unsatisfactory psychological well-being. The results of their study revealed a lower psychological well-being among the infertile women. The second hypothesis was associated to check the relationship of psychological distress with quality of life among infertile women. The results of this hunch showed a significant correlation between the variables. There was a positive significant correlation between the higher level of anxiety and depression with lower level of quality of life among infertile women. The results are similar with the previous studies such as Thoma et al. (2013) concluded that higher level of depression is correlated with lower quality of life among infertile sample. They also reported lower level of life satisfaction among the infertile women.

## CONCLUSION

Based on the overall results this concluded that infertility is a disease which leads to different mental illness. One of the most common is depression and anxiety which further leads to lower level of quality of life. Hence, there is a core need of the time to address this issue to reduce the distress and improve the quality of life.

## REFERENCES

- Aamir, M., Aamir, D., & Irfan, N. (2019). Psychosocial Impact of Infertility on Women in Punjab, Pakistan. *The Professional Medical Journal*, 26(08), 1339-1344.
- Abbasi, S., & Kousar, R. (2016). The fertility quality of life questionnaire in Pakistani infertile women. *Journal of Bahria University Medical and Dental College*, 6(3), 170–173.
- Ahmad, S., Abbas, S. G., & Malik, A. B. (2020). Psychological Impact of Infertility on Women Seeking Fertility Treatment. *Pakistan Journal of Medical Sciences*, 36(7), 1456-1460.
- Boivin, C., Griffiths, E. Venetis, C. A. (2011). Emotional distress in infertile women and failure of assisted reproductive technologies: meta-analysis of prospective psychosocial studies, 342: d223.
- Boivin, J. Bunting, L. Collins, J. Nygren, K. G. (2007). International estimates of infertility prevalence and treatment-seeking. *The Journal of Infertility*, 22:1506-12.\
- Boivin, J. (2018). A review of psychosocial interventions in infertility. *Social Science & Medicine*, 44(2), 1990-2006.
- Cabry, R., Merviel, P., Hazout, A., Belloc, S., Dalleac, A., Copin, H., & Benkhalifa, M. (2014). Psychological distress among women. *Journal of Marriage and Family*, 65(4), 1007-1018.
- Cedars, M., & Jaffe, R. B. (2005). Infertility and women. *Journal of Clinical Endocrinology*, 33(55), 444-458.
- Cousineau, T. M. Domar, A. D. (2007). The psychological impact of infertility. *Best Pract Res Clin ObstetGynaecol*, 21:293-308.

- Direkvand-Moghadam, A., Delpisheh, A., &Direkvand-Moghadam, A. (2014).Effect of Ferti Qo L and the H ospitalAnxiety and D epression S cales. *Nursing & health infertility on the quality of life, a cross-sectional study. Journal of clinical and diagnostic research: JCDR*, 8(10), OC13.
- Javed, S., & Farid, S. (2017). Emotional Distress and Coping Strategies in Infertile Women. *Pakistan Journal of Psychological Research*, 32(2), 481-496.
- KahyaogluSut, H., &Balkanli Kaplan, P. (2015). Quality of life in women with infertility. *Journal of Medicine*, 33(3), 111-123.
- Khanum, A., Sultan, S., & Zaman, S. (2018). Emotional and Marital Adjustment of Infertile Women. *Journal of the College of Physicians and Surgeons Pakistan*, 28(8), 599-602.
- Kissi, Y. Romdhane, A. B, Hidar, S., Bannour, S., Idrissi, K. A. & Khairi, H. et al. (2013). General psychopathology, anxiety, depression, and self-esteem in couples undergoing infertility treatment: a comparative study between men and women,167:185-9.
- Louis, J. F, Thoma, M. E. Sørensen, D. N. McLain, A. C. King, R. B. Sundaram, R. et al. (2013). The prevalence of couple infertility in the United States from a male perspective, 5:741-8
- Mcquillan, J., Greil, A. L., White, L., & Jacob, M. C. (2003). Frustrated fertility: *Infertility and Medicine*, 205(1), 116-127
- Peterson, B. D. Newton, C. R. Feingold, T. (2007). Anxiety and sexual stress in men and women undergoing infertility treatment, 88: 911-4.
- Ramezanzadeh, F. Aghssa, M. M. Abedinia, N. Zayeri, F. Khanafshar, N. Shariat, M. et al. (2004). A survey of the relationship between anxiety, depression, and duration of infertility. *Jornal of Infertility*, 4(1):1.
- Roupa, Z., Polikandrioti, M., Sotiropoulou, P., Faros, E., Koulouri, A., Wozniak, G., & Gourni, *Journal of Social sciences*, 17(1), 84-89.
- Smeenk, J. M. Eugster, A. Van Minnen, A. Zielhuis, G. A. Braat, D.D. (2001). The effect of anxiety and depression on the outcome of in-vitro fertilization. *Hum Reprod*, 1:1420-3.
- Soares, S. Rodrigues, T. Barros, H. (2011). Infertility prevalence in the city of Porto. *The Journal of Health Psychology*, 24:699-706.
- Zegers-Hochschild, F. Adamson, G. D. Mouzon, J. Ishihara, O. Mansour, R. Nygren, K. et al. (2009). The International Committee for Monitoring Assisted Reproductive Technology and the World Health Organization (WHO) revised the glossary on ART terminology, in 2009. *Fertil Steril*, 92:1520-4.
- Zuraida, A. S. (2010). Psychological distress among infertile women: Exploring biopsychosocial response to infertility. *Malaysian Journal of Psychiatry*, 19(2), 82-92.