

Impact of Infertility on Mental Health of Women

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ABSTRACT

This paper examined the impact of infertility on mental health of women. Moreover, it aimed to see the role of demographic variables in the relationship between these variables. The sample comprised of 60 married women, divided into two groups of 30 each i.e. fertile and infertile women. Purposive sampling technique was used for sample collection. The sample of infertile women was drawn from different Gynae Departments of Hospitals of Karachi and the sample of fertile women was drawn from different areas of Karachi. Depression, anxiety and stress was significantly observed more in infertile woman than in fertile woman. Further study must be conducted in multiple setups to know the exact figure in other regions of the country to address the variables which are responsible for depression, stress and anxiety among infertile women. This also included rehabilitation and capacity building programs among infertile woman so that they live with a normal routine of quality of life.

Keywords: *Infertile Woman, Depression, Score*

Infertility was defined by the World Health Organization (WHO) as “Inability to reach a clinical pregnancy after 12 months or more of systematic unprotected sexual interaction”.¹ Moreover being a medical state in itself, infertility may have a major influence on quality of life and wellbeing.²⁻⁵ Psychological problems related to infertility has a wide range from inferiority complex and stress to interpersonal relationships to major depression and anxiety.⁶⁻⁷ Along with the social, psychological and cultural significance, infertility has been classified as one of the greatest stressors of life. Authors have highlighted the negative impact of infertility on infertile patients who experience more depression, stress and anxiety in their life. They also highlighted the treatment of these disorders.^{2-5,8}

The incidences of infertility vary from country to country. The global prevalence of infertility is 15%.⁹ In developing countries the prevalence is greater than 30% whereas in developed countries the range is 17-28%.¹⁰ Infertility can be classified as primary and secondary infertility and it depends on whether a woman has had a previous pregnancy or not.¹¹ Infertility might be a result of complications in men and women.¹²

Regardless of whoever is infertile among the couple, infertility is very stressful mainly for women who are blamed for the infertility, most of the time.¹³ This affects their life socially,

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physically as well as psychologically.¹⁴ Not only this, it also affects the willingness and interest in the treatment of infertility.¹⁵ In some communities, the social stigma associated with being childless is so severe among women that they are ignored and kept socially isolated.¹⁶

Previous studies indicated that age, gender, duration of infertility, education, cause of infertility and incidences of previous infertility treatment failures are strongly linked with depressive disorders and anxiety among infertility patients.¹⁷⁻²¹

In societies where women are usually blamed to be the cause of couple's inability to conceive, the likelihood of women to develop psychological problems increases. Other factors contributing to these psychological disturbances include social and cultural pressure and the norms of the society. Whereas the employment status and the education level of the female is seen as influencing factor.^{17,22,23,24}

Prevalence of psychological problems among infertile females has not been studied in Pakistan so far. This study was designed to assess the level of depression, anxiety and stress among infertile females.

METHODOLOGY

Sample

Purposive sampling technique was used for sample collection. A case control study was conducted with the sample comprised of 60 married women, divided into two groups of 30 each i.e. fertile and infertile women. The sample of infertile women was drawn from different Gynae Departments of Hospitals of Karachi and the sample of fertile women was drawn from different areas of Karachi. The age range of the participants in both samples was from 20 years to 40 years.

Instruments

Depression Anxiety and Stress Scale (DASS): The DASS was administered which was developed by Lovibond and Lovibond (1995). It includes three self-report scales which were designed to measure depression, anxiety and stress. Each of the three scales contains 14 items with 2-5 items having similar content. Subjects were asked to use 4-point rating scales to rate the level of each state over the past one week. Scores for Depression, Anxiety and Stress are calculated by summing the scores for the relevant items.

Procedure

Each participant received a verbal explanation about the objectives of the study and verbal informed consent was obtained. Participants were recruited via direct contact by one of the study authors. The demographic characteristics included age, education, occupation, birth order and monthly income.

RESULTS

Data was entered and analyzed in SPSS version 21.0. Total cases were included in the study. Patients were randomly in two equal groups. Descriptive statistics of different demographic variables were assessed in the study.

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Table. No. 01 Descriptive statistics of variables

Characteristics		Infertile	Fertile
Age (years)		28.57+3.62	32.30+4.82
Occupation	teacher	1 (3.3)	0 (0.0)
	house wife	29 (96.7)	30 (100.0)
Monthly income	low	14 (46.7)	04 (13.3)
	middle	11 (36.7)	13 (43.3)
	high	05 (16.7)	13 (43.3)
Education	below matric	4 (13.3)	8 (26.7)
	matric	7 (23.3)	0 (0.0)
	intermediate	6 (20.0)	6 (20.0)
	BA	8 (26.7)	9 (30.0)
	master	5 (16.7)	7 (23.3)
Birth order	1st	2 (6.7)	6 (20.0)
	2nd	12 (40.0)	6 (20.0)
	3rd	5 (16.7)	8 (26.7)
	4th	7 (23.3)	5 (16.7)
	5th	1 (3.3)	0 (0.0)
	6th	0 (0.0)	2 (6.7)
	7th	2 (6.7)	2 (6.7)
	last	1 (3.3)	1 (3.3)

Mean age (years) of women among both the groups was 28.57+3.62 and 32.30+4.82 whereas majority of the patients were housewife among both the groups 29 (96.7%) and 30 (100.0%) respectively, as shown in Table. No. 01

Table. No. 02 Comparison of Depression, Anxiety & Stress among patients

	Infertile	Fertile	p-value*
Depression	10.83+8.37	4.17+3.21	0.000
Anxiety	11.60+8.48	5.50+4.24	0.001
Stress	19.67+8.40	12.10+6.76	0.000

*P<0.05 was taken as level of significance

Table. 02 showed the comparison of depression, anxiety and stress score were assessed among infertile and fertile woman. Mean depression score among both the groups was 10.83+8.37 and 4.17+3.21 respectively which showed that infertile women scored high on depression as compared to fertile women which statistically significant (p-value 0.000). Similarly, Anxiety score among both the groups was 11.60+8.48 and 5.50+4.24 respectively, showing that infertile women scored high on anxiety as compared to fertile women which was statistically significant (p-value 0.001) and whereas mean stress score among infertile and fertile woman was 19.67+8.40 and 12.10+6.76 respectively, showing that infertile women scored high on stress as compared to fertile women (p-value 0.000).

DISCUSSION

The present study aimed to explore the impact of infertility on the mental health of females. The incidence of psychiatric illnesses specially anxiety, depression and stress in infertile patients have been evaluated by many researchers, for example Jones et al (1993) in his study, found that 28.3% of infertile women were suffering from mild to moderate depression, 7.2% had moderate to severe depression whereas almost 1.2% infertile women were going

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through most severe depression²⁶. Another study explored anxiety among infertile women and found that 67% of infertile women suffered from anxiety²⁵ another study on anxiety among infertile women conducted by Oddens et al (1999) reported that 24.9% had depressive disorders²⁸. A study done in China was aimed to investigate anxiety among 130 infertile women, the results showed that 83.8% of infertile women faced different levels of mental pressures while moderate or severe types in 25%²⁹. A study conducted in Hong Kong found 33% infertile women suffering from anxiety and depression whereas in Scotland, the prevalence was 32%^{27, 28}. Consistent with our research, the infertile women show higher rates of depression, anxiety and stress than the fertile women. The mean score of depression was 10.83+8.37 in infertile women. The findings indicate that infertility has an impact upon the level of depression in women. The findings of the study are consistent with previous studies indicating that the level of depression is high in infertile women³⁰. The mean score of anxiety was 11.60+8.48, whereas for stress, the mean score was 19.67+8.40. Infertile women are more in stressful situation all the time as compared to fertile women. Infertile women report elevated levels of psychological distress and this distress may reduce their chances of conceiving³¹. According to some previous researches^{32, 33, 34} high rates of psychological symptoms were found in the infertile women as compared to their partners.

In eastern and Islamic states, childbearing is the most valuable and important part of family status. Having a child is considered as a symbol of marital satisfaction and a source of stabilization of the family. In our society and culture, the attitudes that are associated with the concept of infertility are so throbbing. For a woman, childbearing is psychologically very satisfying and important part of her. Whereas the feeling of not having a child or unable to give birth to a child cause an increase in personal dissatisfaction, marital issues that lead to divorce sometimes and even second marriage specially in Islamic society where men can marry more than one woman. Society and relatives usually intervene e.g. husband's family, their negative attitudes and the behavior of significant others are the main contributors of psychological problems in infertile women. Infertile women experience abuse, stigmatization and marital instability as a result of negative consequences by the society. Infertility can have a significant impact on social status and most importantly on mental wellbeing of women in our country.

CONCLUSION

The study concludes that depression, anxiety and stress was significantly observed more in infertile woman than in fertile woman. Further study must be conducted in multiple setups to know the exact figure in other regions of the country to address the variables which are responsible for depression, stress and anxiety among infertile women. This also included rehabilitation and capacity building programs among infertile woman so that they live with a normal routine of quality of life.

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Conflict of Interest

The authors carefully declare this paper to bear not conflict of interests

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