

Rate of Depression among Infertile Women Presenting at Tertiary Care Hospital

Depression
among Infertile
Women

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ABSTRACT

Objective: To find out depression rate in infertile women presenting at B.V Hospital Bahawalpur.

Study Design: Transactional study

Place and Duration of Study: This study was conducted at the Bahawal Victoria Hospital, Bahawalpur from June, 2020 to August, 2020 for a period of three months.

Materials and Methods: It is a trans-sectional research of women with infertility married for one year, aged 19-49 years coming to this hospital. Every infertile women presenting during this period was included in the research.

Results: Total 100 women with primary infertility participated in the research. Their mean age was 32.57 ± 9.71 . Out of 100 infertile women, depression was found in 56 (56%) women. Mild to moderate depression was noted in 49 (87%) patients followed by severe depression in 5 (9%) patients and very severe depression in 2 (4%) patients.

Conclusion: Our study reports high percentage of depression among infertile women. Not a single patient included in the study was getting treatment for depression. So this group is not getting the diagnosis of depression nor its management. So a neglected group of patients needs help and support from the health professionals. Gynecologists should be encouraged to diagnose and treat them or to refer them to mental health professionals.

Key Words: Depression, infertile women, sexual intercourse

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INTRODUCTION

It has long been observed at psychiatric clinics that many women consulting for depression are infertile. Being infertile is stigma in our Pakistani society that leads to psychological and social problems for infertile women, her parent family and in laws. In-laws blame the woman. Woman remains fearful about the 2nd marriage of the husband. In laws taunt on her for being infertile. She may be blamed for being haunted and some in laws may force her to get treatment from faith healers and magician, which further leads to many social evils in our society. Many women may get divorced due to being infertile. All these factors frequently lead to depression in infertile women. Definition of infertility is to not get pregnant up till end of one year of regular sex.¹ According to international estimates, prevalence of infertility is about 9-15%.²⁻⁴

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In psychiatric illness, depressive illness is frequent in infertile women. Research has concluded that a significant number among women with infertility get depression.⁵⁻⁷ A study of States about rate of depression in women with infertility showed moderate depression in 19% and severe depression in 13%.⁵ In other study in Denmark showed severe depression in 15% infertile females.⁸ Another study conducted in Saudi Arabia showed depression in 53.8% of women with infertility.⁸ A Pakistani research showed major depression in 52.8% and minor depression in 37.7% of females with infertility.⁹ Another Pakistani study showed 53.2% depression in infertile females. Infertile women has double chance to get depression as compared to fertile women.¹⁰

In Pakistan infertility is a source of severe stress and source of psychosocial problems and even social evils especially at under developed areas. So we want to conduct this study at Bahawalpur to assess the severity of the problem.¹¹⁻¹²

MATERIALS AND METHODS

It is a trans-sectional research of women with infertility married for one year, aged 19-49 years coming to Gynecology and obstetrics out patients department of Bahawal Victoria Hospital, Bahawalpur from June to August 2020. Every infertile women presenting during this period was included in the research. All the patients agreed to participate in the study. Previously known psychiatric patients or who developed

depression before completion of criteria of primary infertility were excluded. Similarly patients having secondary infertility were also excluded. 100 patients participated in our research. Hospital anxiety and depression scale comprises of 7 item subscale of anxiety and 7 item subscale for depression and the total score is from 0 to 21, increased score means severe disease. Subscale score of more than 8 shows depression.

Demographic data including age, education and year of infertility was taken. We used Himaltion rating scale for depression and data was entered in SPSS version 16. The data was analyzed as percentages in to mild, moderate, severe and very severe sub types of depression. Rate of depression in females with infertility and relationship, between infertility and depression was assessed.

RESULTS

Total 100 women with primary infertility were included in the study. Mean age of the patients was 32.57 ± 9.71 . Out of 100 infertile women, depression was found in 56 (56%) women. (Fig. 1) Mild to moderate depression was noted in 49 (87%) patients followed by severe depression in 5 (9%) patients and very severe depression in 2 (4%) patients. (Fig. 2)

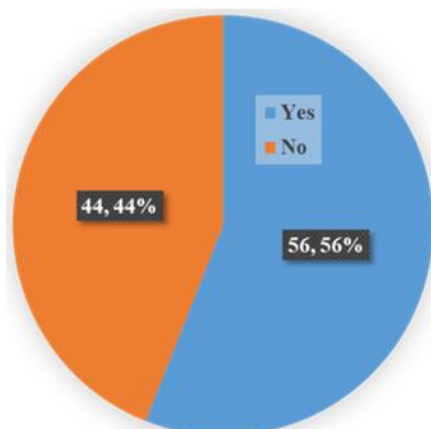


Figure No.1: Frequency of depression

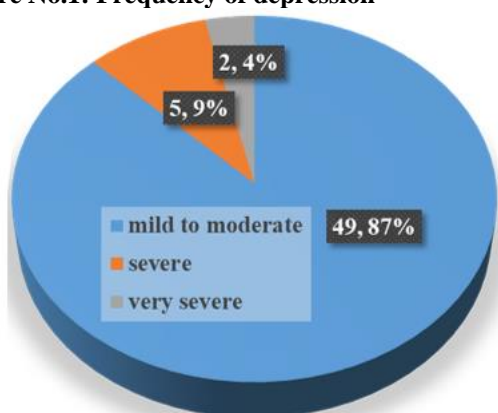


Figure No.2: Severity of Depression

Total 1 age groups were created i.e. age group 19-28 years, age group 29-38 years and age group 39-48 years. Total 38 (38%) patients belonged to age group 19-28 years, 51 (51%) patients belonged to age group 29-38 years and 11 (11%) patients belonged to age group 39-48 years. Depression was found in 19 (50%) patients of age group 19-28 years followed by 34 (66.67%) patients of age group 29-38 years and 3 (27.27%) patients of age group 39-48 years. Significant ($P = 0.037$) association of depression with age group was noted.

Table No.1: Association of depression with age group

Age group	Depression		Total	P. value
	Yes (%)	No (%)		
19-28	19 (50)	19 (50)	38 (38)	0.037
29-38	34 (66.67)	17 (33.33)	51 (51)	
39-48	3 (27.27)	8 (72.73)	11 (11)	
Total	56 (56)	44 (44)	100	

DISCUSSION

Being infertile is a stigma in our society and infertility leads to psychological and social problems in our society in Pakistan. Prevalence of psychological problems is estimated to 25-60% in infertile couples.¹³ It is proposed that depression can directly affect infertility through various biological changes like high prolactin level, dysfunctional immune system changes, hypothalamic pituitary adrenal axis and thyroid dysfunction.¹⁴ It is considered that stress directly effects cortisol level by increasing the release of hormones from pituitary gland and have a significant negative effect on fertility.¹⁵ So depression may be the cause of infertility or it may be an aggravating factor. Thus infertility may be causing depression or depression may be aggravating infertility. In this way association between depression and infertility is known.¹⁶ Our study showed increased rate of depression (65%) in infertile women. This is in line with other studies. For example, Guerrag D et al reported rate of depression of 69% in infertile women in china.¹⁷ Higher rates of depression in infertile women are shown in Japan and Gambia.¹⁸⁻¹⁹ There was depression and/or anxiety disorder in 33% in Hong Kong and 32% in Scotland in infertile women.²⁰⁻²⁶ Internationally, child bearing means femininity, as a result infertile female becomes sad and feels worthless, if she is infertile. Their infertility then leads to depression.²⁷ Our study assess rate of depression in infertile women at Bahawalpur in Pakistan. As Pakistan is Islamic country, child bearing is source of status and worth. Having a child makes the family ties strong and increase the

status of women and her satisfaction as being mother. In our country and region infertility is stigma. Being infertile may lead to marital conflicts for example separation of couple. Intervention of in laws cause depression in infertile women.

CONCLUSION

Our study reports high percentage of depression among infertile women. Not a single patient included in the study was getting treatment for depression. So this group is not getting the diagnosis of depression nor its management. So a neglected group of patients needs help and support from the health professionals. Gynecologists should be encouraged to diagnose and treat them or to refer them to mental health professionals.

Author's Contribution:

Concept & Design of Study: Saeed Akhtar
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 Data Analysis: Fariha Saeed
 Revisiting Critically: Saeed Akhtar, Azra Yasmeen
 Final Approval of version: Saeed Akhtar

Conflict of Interest: The study has no conflict of interest to declare by any author.

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