

**A Comparative Study of Depression in Infertile and Fertile Women At Tertiary Care Centre In The Department Of Obstetrics And Gynaecology At S.M.S. Medical College Jaipur**

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**Abstract**

**Background:** The present study has attempted to focus on depression among infertile women as compared to fertile women and to see its relation with age of women and duration of infertility.

**Methods:** The study comprised of females with primary infertility at the time of their visit with an infertility specialist and control group coming for routine gynaecological examination.

**Results:** BDI SCORE in case group was 10.13+<sub>-</sub> 6.508 with median of 9.05. Whereas mean BDI SCORE in control group is 2.28 +<sub>-</sub>3.455 with median of 1.00.

**Conclusion:** The overall prevalence and severity of depression among infertile females are rising, and the number of depressive females was statistically significant among cases than control.

**Keywords:** BDI score, Infertile, Women.

**Introduction**

Being a mother is a passion and dream for each woman, that's the humanized effect and unconditional love between child and mother. Building family is the main target of marriage, it involves relationships between wife husband and children, but some of couples live a

distressing experience about bearing a child; one of this is the infertility.<sup>1</sup>

Depression is a common health problem in infertile women. The lifetime prevalence of major depression among women is approximately 14% to 21%. The patient may experience a loss of close relationship with his/her partner, might lose prestige in society and develop a low self-esteem and may lose hope for the future. These feelings may lead to depression, anger, anxiety or feelings of guilt<sup>2</sup>

Depression may affect infertility treatment, follow-up and hope for the future; it may also influence the intensity and longevity of relationship of the affected couple.<sup>3</sup> There are many studies in the literature which indicate that levels of depression and anxiety are high in infertile women.

Infertility and depression are both highly prevalent disorders that often co-occur in women of childbearing age .Whether depression may cause infertility, is caused by infertility, or the co-occurrence of these two phenomena is coincidental, is not clear. Some studies suggest that outcomes of infertility treatment might be enhanced by effectively treating co-occurring depression.<sup>3</sup>

The present study has attempted to focus on depression among infertile women as compared to fertile women and to see its relation with age of women and duration of infertility.

**Material and Methods**

**Study universe:** All women attending OPD in sms medical college

**Study population:** The study comprised of females with primary infertility at the time of their visit with an infertility specialist and control group coming for routine gynaecological examination.

**Place of Study :** Department of Obstetrics and Gynaecology, S. M. S. Medical College Jaipur, Rajasthan.

**Type of study:** Case control type of Analytical study

**Study Design:** Cross sectional study

**Selection Criteria**

**Inclusion criteria**

- Women diagnosed with primary infertility consenting to participate in the study.
- Age group 20-40 Years

**Exclusion criteria**

- Unwillingness to participate in the study.
- Age >40 years.
- Having secondary infertility.
- Inability to read and understand the questionnaire because of language difficulties.

**Statistical Analysis**

Continuous variable will be presented as mean and SD (Standard Deviation) and will be analysed by using unpaired t-test.

Nominal and categorical variable will be summarised as proportional and will be analysed by using chi-square test.

Ordinal variable will be expressed as median and range and will be analysed by using Mann-Whitney test. P-value <0.05 will be taken as significant.

**Observations and Results**

Table No. 1: Distribution According to Age of the Patients in Years

AGE (Years)							
Group	N	Mean	Std. Deviation	Median	Minimum	Maximum	P value*
Case	60	27.83	4.291	28.00	20	39	.108
Control	60	29.42	6.244	28.50	20	40	
<b>Total</b>	<b>120</b>	<b>28.63</b>	<b>5.394</b>	<b>28.00</b>	<b>20</b>	<b>40</b>	

The result suggest that severity of depression was max in 26-30 yr age group. While number of depressive females were more in age group of 31-35 yrs.

After comparing both the groups the mean age of infertile women was 27.83 and fertile women was 29.42 , the p value is 0.108 which is statistically significant.

Table No. 2: Distribution of Patients according to Their BDI Score

Interpretation	Case		Control		Total	
	N	%	N	%	N	%
Minimal	30	50.00%	56	93.33%	86	71.67%
Mild	19	31.67%	4	6.67%	23	19.17%
Moderate	7	11.67%	0	0.00%	7	5.83%
Severe	4	6.67%	0	0.00%	4	3.33%
<b>Total</b>	<b>60</b>		<b>60</b>		<b>120</b>	

Chi-square = 27.926 with 3 degrees of freedom; P = 0.000

Above tables shows that only 6.66% of patients were suffering from mild to severe depression in control group, while 50% of patients were suffering from mild to severe depression in case group.

On application of chi-square test patient with depression were significantly higher (p=0.000) in case group as compared to control group.

In this study group 31.67% having mild depression, 11.67% having moderate depression, 6.67% having severe depression.

Table No. 3: Distribution of patients according to their mean, median, SD of BDI Score

BDI SCORE							
Group	N	Mean	Std. Deviation	Median	Minimum	Maximum	P value*
Case	60	10.13	6.508	9.50	0	26	<0.0001
Control	60	2.28	3.455	1.00	0	16	
Total	120	6.21	6.516	5.00	0	26	

\*Mann-Whitney Rank Sum test

Above table shows that mean BDI SCORE in case group was 10.13+\_ 6.508 with median of 9.05.

Whereas mean BDI SCORE in control group is 2.28+\_3.455 with median of 1.00.

Mann-Whitney rank found that median BDI SCORE was significantly higher (p=0.0001) in case group as compared to control group.

### Discussion

Infertility is a stressful event in life of human being, not only for the couple but the society at large and a challenge to the medical fraternity. In resource poor countries, children are highly valued for cultural, social and economic reasons; childlessness often creates huge problems for couples; especially for the women who are generally blamed for the infertility. The stigma of childlessness is so great that infertile women are socially isolated and neglected even by the people who are suppose to support them such as their husbands and extended family. Motherhood is often the only way for women to enhance their status within their family and community.

The present study was carried out to determine the severity of depression in infertile and fertile women and its relation to duration of infertility. Both groups was comparable on the basis of the socio-demographic profile.

A higher level of depression severity was found in infertile females in 50% as compared to fertile females 6.66%. Our study supported by Domar et al among

infertile women depression occurred twice as frequently 36.7% as in the control group 18%.<sup>2</sup> Also supported by by Kamla Verma et al among infertile women depression 57% as compared to fertile women 11.4%.<sup>4</sup>

### Conclusion

The overall prevalence and severity of depression among infertile females are rising, and the number of depressive females was statistically significant among cases than control.

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