



ANXIETY AND DEPRESSION AMONG INFERTILE WOMEN ATTENDING TERTIARY CARE CENTRE IN CENTRAL INDIA.

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ABSTRACT

Background: Infertility is growing at an alarming rate affecting more and more people now a days. Infertile couples undergo various forms of psychological distresses rendering them susceptible to depression and anxiety.

Aim & Objective: To study anxiety and depression among infertile women.

Settings and Design: A cross sectional study was conducted at the outdoor patients' department (OPD) of a tertiary health care facility in central India

Methods and Material: All infertile women attending the Obstetrics and Gynaecology OPD during the study period of two months were included. Data was collected by interview technique using predesigned and pretested questionnaire based on Beck's Anxiety and Depression scale.

Results: Moderate to severe anxiety was found in 59.29%. Depression was present in 76% of study participants.

Conclusions: Varied severity of anxiety and depression was found among large majority of the infertile females in the present study. Age was found to be significantly associated with depression.

KEYWORDS : Anxiety, Depression, Infertile, Married Women

INTRODUCTION:

Reproductive health is priority global health area and infertility is a critical but much neglected aspect of it. Problem of infertility is increasing at alarming speed and assuming enormous proportion around the world. Infertility is a disease of reproductive system defined as failure to achieve pregnancy after 12 months or more of regular unprotected sexual intercourse.¹ Descriptive studies suggest infertile couples undergo various forms of psychological distresses, which may render them susceptible to depression and anxiety.²⁻⁶ In general psychological disorders are the by-product and not the cause of infertility, which infertile couples may experience during their infertility diagnosis, treatment cycles and outcome. Grief reactions are common among infertile couples which may turn into pathological grief leading to major depression.⁴⁻⁷ Depression may affect infertility treatment, follow-up and hope for the future; thus may influence the intensity and longevity of relationship of the affected couple.^{3,8} For many couples infertility is undeniably a major life crisis and psychologically stressful. The literature suggests that infertility is more stressful for women than for men.⁵ Although extensive research studies have been conducted on the aforementioned subject from western societies to evaluate the level of psychological stress of infertile women, very few studies are available from India, more so from central India. Hence the present study was conducted with the objectives to know the anxiety and depression in infertile women attending a tertiary care hospital in Central India.

MATERIALS AND METHODS:

The present study was conducted at a tertiary health care facility located in central India. The type of study was cross sectional. The infertile women attending the outpatient department (OPD) of obstetrics and gynaecology during the study period of two months of August and September were considered as the study subjects. Inclusion criteria applied was: women in the age group of 18-45 years and those with primary infertility with duration of infertility more than one year. All infertile women fulfilling the inclusion criteria who attended OPD during the study period were interviewed and thus universal sampling was applied. Those having any other major illness or psychiatric disorder were excluded.

An approval from the institutional ethics committee (IEC) was obtained before conducting the study. Permission was sought from the head of Obstetrics and Gynaecology department. A written informed consent was also obtained from the study subjects after explaining them about the nature and purpose of the study. Due care was taken to maintain the confidentiality of the data obtained.

Data was collected by face to face interview technique using a predesigned and pretested questionnaire based on the Beck Anxiety Inventory and Beck Depression Inventory.^{8,9} The reliability and validity of Beck questionnaire has been proven by several studies and researches.^{10,11}

Statistics: Data was entered in Microsoft excel. Mean and percentages were calculated. Analysis was done with open Epi info software. Chi square test was applied to prove the level of significance. The p-value less than 0.05 was considered as statistically significant.

RESULTS:

A sample size of 113 was achieved considering the inclusion criteria. The socio demographic characteristics of the study subjects are shown in table 1.

Table No.1 Socio Demographic Characteristics Of Study Subjects

Socio Demographic Characteristics	Number	Percentage	
Age group in years	20-25	38	33.63
	26-30	42	37.17
	31-35	26	23.01
	36-40	7	06.19
	Total	113	100.00
Area of residence	Rural	47	41.60
	Urban	66	58.40
	Total	113	100
Religion	Hindu	56	49.56
	Buddhist	34	30.09
	Muslim	14	12.39
	Others	9	08.04
	Total	113	100.00

Education	Postgraduate	11	09.73
	Graduate	29	25.67
	Higher secondary school(HSC)	62	54.87
	Functional Literate	9	07.96
	Illiterate	2	01.77
	Total	113	100.00
Socio economic status	I-Upper	12	10.63
	II - Upper Middle	27	23.89
	III - Lower Middle	40	35.40
	IV - Upper Lower	21	18.58
	V-Lower Lower	13	11.50
	Total	113	100

As seen in table 1, the study subjects were in the age group of 20 to 30 years, the range being 21 to 37years and the mean age being 28.38 years. Sixty six (58.40%) study subjects were from urban area and 47 (41.60%) were from rural area. Majority of the study subjects were Hindus followed by Buddhists and Muslims. Education status was up to Higher secondary school certificate in majority of study subjects followed by graduates. Most of the study subjects were either from middle category or lower category according to modified Kuppuswami and B. J. Prasad's scale for socioeconomic status.

Table No.2 shows anxiety level of study subjects. Mild, moderate and Severe anxiety was present respectively in 40.71%, 52.21% and 07.08% of the study participants. Anxiety was found to be highest in 26-30 year of age group, however association between anxiety and age was not found to be statistically significant.

Table No.2 Age-wise anxiety and depression level of Infertile Women.

Age Group (Years)	Total		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
20-25	38	33.63	14	30.43	21	35.59	03	37.05
26-30	42	37.17	13	28.26	24	40.68	05	62.50
31-35	26	23.01	15	32.61	11	18.64	00	00.00
36-40	07	06.19	4	08.70	03	05.08	00	00.00
TOTAL	113	100.00	46	40.71	59	52.21	08	07.08

Chi square = 5.49, p value=0.09m df=1

Table No.3 shows age-wise level of depression of study subjects. In the present study depression was found to be 76%. Among this 15(13.27%) had mild depression, 56(49.56%) had moderate depression and 5(4.42%) had severe depression and it was highest among 26-30 year of age group. Age group was thus observed to be significantly associated with depression (p value is 0.003) and as age advanced depression level also increased.

Table No.3 Age-wise Level Of Depression Of Infertile Women

Age Group (Years)	Total		Normal		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%	No.	%
20-25	38	33.63	23	62.16	03	20.00	12	21.43	00	00.00
26-30	42	37.17	07	18.92	05	33.34	27	48.21	03	60.00
31-35	26	23.01	04	10.81	04	26.67	16	28.57	02	40.00
36-40	7	06.19	03	08.11	03	20.00	01	01.79	00	00.00
Total	113	100.00	37	32.75	15	13.27	56	49.56	05	04.42

Chi Square Value For Linear Trend Is 8.469 And P Value Is 0.003. Df= 3.

DISCUSSION:

Infertility cases are on a rise in India nowadays. There is a great degree of stigma in this context. The purpose of the present study was to assess the anxiety and depression among infertile women attending tertiary care clinic in central India. In India like other resource poor countries where 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. Motherhood is often the only way for women to enhance their status within their family and community. These societal pressures may have some psychological impact on the infertile women that may lead to the anxiety and depression.

In the present study we have found out that, out of 113 study subjects, almost two-fifth had mild anxiety, half had moderate anxiety and very few had severe anxiety.

Guerra D et al study showed that 67% infertile women suffered from anxiety which is similar with findings of present study whereas in the study of Ramezanzadeh F et al prevalence of anxiety was found to be 86.8%.^{4,3} Anxiety was found in 39.6% of the study participants in another study by EnikóLakatos from Hungary.²

Approximately 63% of the study participants had depression of some or the other level. This finding is consistent with the work of Guerra et al which also reported depression in 67% of infertile women and work of AbassAl et al, who found prevalence of depression to be 62%.^{4,5} The prevalence of depression in the present study is however higher than the findings of Enik Lakatos in a study from Hungary where depression was present in 44.8% of infertile women, Ramezanzadeh F et al which showed a prevalence of 40.8% among infertile women in Iran, Domar et al who reported that 24.9% of the infertile women had depressive disorders and Tuan M Voin a study from Vietnam reported 12.2%.^{2,3,6,7}

This may be because of higher importance and consequent societal pressure related with motherhood in India. However a case control study by Yusuf L showed that 79% of the patients with infertility had some degree of depression and 49% of the study group subjects had moderate to severe degree of depression and 10% had extremely severe depression.¹²

Age was observed to have a significantly higher association with depression in the present study.

This was not coherent with study by Ma F Cao who observed that there was no distinctive correlation between age and depression in female infertile patients.¹³

As depression and anxiety both were found to be rampant among the study participants it can be recommended that the couples and not just the women should be provided with regular counselling during their visits, also if needed an advice from a psychologist should be taken. Community based study should be conducted to study the exact nature of the problem in infertile couples some of whom may not be coming to a Gynaecologist due to the stigma associated with infertility as well as anxiety and depression.

CONCLUSIONS:

Moderate to severe anxiety was found in 60% infertile women and about two thirds of infertile women had depression. Older age group women had depression more commonly as compared with the younger women. In a nut shell the study concludes that in infertile women both anxiety and depression were present though of varying levels. This demands an immediate attention on the part of health authorities as well as the family systems.

Limitation Of The Study

The present study has the limitations of a cross sectional study. For the results of the study to be generalised it will need a further study in community also and on a larger sample size.

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