MVP Journal of Medical Sciences, *Vol 2(1), 30–33, January-June 2015* DOI: 10.15306/mvpjms/2015/v2i1/58645

Study of Psychiatric Morbidity in Infertile Women

Rucha Sule[1] and Sunil Gupte[2*]

[1]Senior Resident, Department of Psychiatry, Lokmanya Tilak Municial Medical College and Sion Hospital, Mumbai, India

[2]Professor and HOD, Department of Psychiatry, Dr. Vasantrao Pawar Medical College, Nashik, India; sggupte2013@gmail.com

Abstract

Context: The WHO estimates that 8–12% of couples around the world experience difficulty conceiving a child. The impact of infertility on the psychological well being of couples involved has been the object of increasing attention in recent years. Most of the studies which have been conducted to identify the psychopathologies of infertile women have focussed their attention on depression and anxiety. **Aim:** The aim of the present study was to identify the prevalence of psychiatric disturbances in women suffering from infertility. **Settings and Design:** A cross sectional study was conducted in the Outpatient departments of Psychiatry and Obstetrics & Gynaecology. **Methods and Material:** One hundred and twenty infertile women were selected. They were interviewed using a special proforma and screened using Mini –international Neuropsychiatry interview English Version 6.0.0 **Statistical Analysis Used:** The data was analysed using SPSS version 19 &s EPI INFO software. **Results:** Psychopathology was found in 39.16% of the study population. Depression was the most common psychiatric morbidity found followed by generalized anxiety disorder. **Conclusion:** Infertile women should be routinely evaluated for psychological disturbances and psychiatric morbidity to maximise their health.

Keywords: Epidemiological Factors, Female Infertility, Psychiatric Morbidity

1. Introduction

Infertility is generally defined as 1 Year of unprotected intercourse without conception[1]. The district level household survey-3, in Indias, found eight percent women have an infertility problem of which 6% women have primary infertility & 2% have secondary infertility[2].

Studies have shown how infertility can give rise to psychological alterations like high anxiety, depression, low self-esteem, stress, anger, guilt feelings and a sense of loss of control over one's own life3. A study conducted by Thara et al conducted in 1986 found psychiatric morbidity to be present in 57.5% of the study group females4.

No similar studies have been conducted in Indian settings in recent times. Hence this study was conducted to identify psychopathology in infertile women.

2. Subjects and Methods

The study was undertaken in the Outpatient department of Psychiatry of Dr Vasantrao Pawar Medical College Hospital & Research Centre, Nashik, after approval from the institutional ethics committee. The study was conducted over a period of 18 months. Married women in the age group of 18-45 yrs who were unable to conceive after 1 year of regular sexual intercourse without contraception or who were unable to conceive following a previous pregnancy after 1 year of regular sexual intercourse without contraception were selected. Women desirous of conception after voluntary sterilization or those with documented evidence of absolute inability to conceive were excluded from the study.

*Author for Correspondence

The study population consisted of 120 women attending the infertility clinic. A patient proforma was prepared for collecting the demographic details, obstetric & gynaecological history and the history of infertility and the mental status examination of these women. The study subjects were then screened using the Mini – international Neuropsychiatry interview English Version 6.0.0 to indentify psychopathology[5].

The data obtained was pooled, tabulated and subjected to statistical analysis using the Statistical Package for Social Sciences, Version 19.0 and tests of significance using EPI INFO software were used.

3. Results

One hundred and twenty infertile women took part in this study. Demographic profile and psychopathology of the study group (Table 1) shows the socio-demographic and some clinical characteristics of these women.

Table 1. Demographic profile and psychopathology of the study population

Variable	Total No. of Women	Women with Psychiatric Morbidity	Statistical
AGE			
<20 YRS	17	7	Chi Square value X^2 = 0.5 p > 0.05 (not significant)
21 -30	82	34	
31-40	21	6	
>40 YRS	00	00	
EDUCATION			
Uneducated	13	5	Chi Square value X^2 =1.51 p > 0.05 (not significant)
Primary	16	6	
Secondary	67	29	
Graduate	24	7	
OCCUPATION			
Skilled	28	11	Chi Square value X^2 = 0.82 p > 0.05 (not significant)
Unskilled	21	7	
Housewife	71	29	
RELIGION			
Hindu	108	41	Chi Square value X^2 = 0.25 p > 0.05 (not significant)
Muslim	12	6	
TYPE OF FAMILY			
Nuclear	77	32	Chi Square value X^2 = 0.52 p > 0.05 (not significant)
Joint	43	15	
LIVING SITUATION			
Rural	43	15	Chi Square value X^2 = 0.52 p > 0.05 (not significant)
Urban	77	32	

Table 2. Psychopathology in the study population according to duration, cause and type of infertility

	Psychiatric morbidity	Duration of infertility			Cause of infertility			Type of infertility	
		1-3 yrs	4-6yrs	>6 yrs	Female	Male	Unexplained	Primary	Secondary
A	MDD (n=24)	18	4	2	10	3	11	16	8
B	MDD with comorbidities(n=6)	2	1	3	3	1	2	6	0
C	Affective spectrum disorders(A+B)(n=30)	20	5	5	13	4	13	22	8
D	GAD (n=10)	7	1	2	3	3	4	8	2
E	Agoraphobia with panic disorder (n=2)	2	0	0	1	0	1	2	0
F	Panic disorder (n=4)	4	0	0	3	0	1	4	0
G	OCD (n=1)	0	1	0	0	0	1	1	0
H	Anxiety spectrum disorders (D+E+F+G) (n=17)	13	2	2	7	3	7	15	2
I	Total women with psychiatric morbidity (C+H) (n=47)	33	7	7	20	7	20	37	10
J	Women without psychiatric morbidity (n= 73)	45	16	12	21	8	44	48	25
k	Total (I+J) (n=120)	78	23	19	41	15	64	85	35

There were no significant differences when the socio-demographic parameters of the group were compared in terms of age, educational level and employment status, religion, living situation and type of family.

Table 2 describes in detail the psychopathology in the study population according to the duration of infertility, the cause of infertility and the type of infertility. However, no statistically significant association was found between these variables and psychiatric morbidity ($p > 0.05$)

4. Discussion

The psychiatric morbidity found in the present study was 39.16%. The most common psychiatric morbidity found was major depression in 51.06 % women followed by generalized anxiety disorder in 21.28% In a study conducted by Thara et al, 57.5% of the females in the infertile group had psychiatric disturbance. Neurotic depression was the most common diagnosis followed by anxiety[4].

Similar findings have been noted in a study published by Volgsten et al. in the year 2008[6].

In the current study, women having infertility between 1 and 3 yrs (70.22%) had most psychiatric morbidity. A study by Domar et al[7] showed those who had 2–3 years infertility had more depression/anxiety. During first three years, infertility is accompanied by signs such as anxiety, depression, and loss of self esteem, impotence and maladjustment of marital status. After 3 years, optimistic attitude would change to despair and at last there will be some emotional changes to adopt a child or live without one, thereafter. Those who have social support, positive personal characteristics and have a satisfactory life with their spouse show no signs of anxiety/depression[7].

Out of all the women with psychiatric morbidity, more psychiatric morbidity was found in women with primary infertility 78.72%. A study conducted by Upkong et al, found that, women who have had children suffered less from depression than women with no children et al[8]. However, a study by Ogawa et al[9] did not find statistically significant differences in the rates of psychiatric morbidity in women with primary and secondary infertility.

In the current study, psychiatric morbidity was found highest in women who had undergone abortions. The study findings are in accordance with studies conducted by Dingle et al[10] and Fergusson et al[11] who found that women having an abortion had an increased risk of both lifetime and current DSM–IV diagnoses of alcohol; illicit substance use and current affective disorders but women giving birth had no such increased risk.

In the present study, more women, having either female factor infertility or infertility due to unknown factors had psychopathology. A study by Ramezanzadeh et al found that depression was more common in "unexplained cause" group comparing to other causes of infertility[12] Studies by Wright J[13], Sabourin S[14], Tarlatzis I[15], have also found that infertile women showed higher rates of psychiatric symptoms than their partners, especially in female and unexplained factor infertility.

The study was conducted in a tertiary hospital and is representative of the flow of patients at this hospital. So the findings from this study cannot be generalized. The sample size of the present study was small and the findings need to be explored further with a larger sample size.

Due to the medicalization of the problem of infertility, the priority of the specialized infertility centres is the treatment of the physical problems. The psychological problems are often neglected and not given their due importance. Ignoring the psychological factors and merely considering infertility as a medical problem will therefore create huge obstacles in understanding & treating such individuals from a holistic point of view. Hence, infertile women should be routinely evaluated for psychological disturbances and psychiatric morbidity to maximise their health.

5. References

1. Speroff L, Fritz MA. Clinical Gynecologic Endocrinology and Infertility. Lippincott Williams & Wilkins; 2005.
2. Ganguly S, Unisa S. Trends of Infertility and Childlessness in India: Findings from NFHS Data. Obstetrics and Gynaecology. 2010; 2(2):131–8.
3. Zuraida A. Psychological Distress Among Infertile Women: Exploring Biopsychosocial Response To Infertility. Malaysian Journal of Psychiatry. 2010:82.
4. Thara R, Ramachandran V, Hassan PP. Psychological aspects of infertility. Indian J Psychiatr. 1986; 28(4):329–34.
5. D. Sheehan JJ, Baker R, Harnett-Sheehan K, Knapp E, Sheehan M. Mini international neuropsychiatric interview (M.I.N.I.) English Version 6.0.0 ICD-10 USA: University of South Florida.
6. Fau VH, Skoog SA, Fau EL, Lundkvist O, Sundstro PI,. Prevalence of psychiatric disorders in infertile women and men undergoing in vitro fertilization treatment. 2008;1460–2350.
7. Domar AD, Broome A, Zuttermeister PC, Seibel M, Friedman R. The prevalence and predictability of depression in infertile women. Fertil Steril. 1992; 58(6):1158–63.
8. Upkong D, Orji E. Mental health of infertile women in Nigeria. Turk Psikiyatri Derg. 2006; 17(4):259–65.
9. Ogawa M, Takamatsu K, Horiguchi F. Evaluation of factors associated with the anxiety and depression of female infertility patients. BioPsychoSocial medicine. 2011; 5(1):15.
10. Dingle K, Alati R, Clavarino A, Najman JM, Williams GM. Pregnancy loss and psychiatric disorders in young women: an Australian birth cohort study. Br J Psychiatr: the journal of mental science. 2008; 193(6):455–60.
11. Fergusson DM, Horwood LJ, Ridder EM. Abortion in young women and subsequent mental health. Journal of child psychology and psychiatry and allied disciplines. 2006; 47(1):16–24.
12. Ramezanzadeh F, Aghssa MM, Abedinia N, Zayeri F, Khanafshar N, Shariat M, et al. A survey of relationship between anxiety, depression and duration of infertility. BMC Wom Health. 2004; 4(1):9.
13. Wright J, Duchesne C, Sabourin S, Bissonnette F, Benoit J, Girard Y. Psychosocial distress and infertility: men and women respond differently. Fertil Steril. 1991; 55(1):100–8.
14. Sabourin S, Wright J, Duchesne C, Belisle S. Are consumers of modern fertility treatments satisfied?. Fertil Steril. 1991; 56(6):1084–90.
15. Tarlatzis I, Tarlatzis BC, Diakogiannis I, Bontis J, Lagos S, Gavriilidou D, et al. Psychosocial impacts of infertility on Greek couples. Hum Reprod (Oxford, England). 1993; 8(3):396–401.