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The Prevalence of Psychiatric Morbidity in Women with Primary Infertility in Unnao Region (Nawabganj)

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Abstract

Infertility is a global health burden. Primary infertility and psychiatric morbidity have a bidirectional relationship. It is well known now from several epidemiological and clinical studies of patients seeking medical attention for infertility, that a significant proportion may have psychiatric morbidity, most commonly mood disorders and anxiety disorders. Psychiatric morbidity in women with primary infertility is a multi-factorial and multi-dimensional entity with bio-psycho-social determinants and impact. Enthused by numerous studies from the literature, as well as with a variety of methodology and contradictory data and results, the current study was thus developed to assess psychiatric morbidity among women with primary infertility and compare it with fertile women and correlating it with socio-demographic and clinical variables. A case-control comparative study was conducted from Jan 2022 to June 2023 on 300 married women purposively selected primary infertile women. Married women coming to infertility clinic Saraswati Medical College Unnao, satisfying the definition of primary infertility as per WHO and satisfying inclusion and exclusion criteria was included as cases. A married woman with at least one child satisfying inclusion and exclusion criteria was included as a control. Selected subjects were independently screened by a consultant for Hamilton's depression rating scale and Hamilton's anxiety rating scale for severity assessment of depression and anxiety respectively. The prevalence of psychiatric morbidity in women with primary infertility was 28% in comparison to 11% in women with fertility and the difference was statistically significant (p = 0.027). Most common disorders were generalized anxiety disorder (42.86%) and depressive episode (26.19%) among cases, in the study they were threatened to divorce by spouse or fear of husband getting remarried (34%), family and social stigma and discrimination due to infertility (34%) and lack of self-esteem (34.7%). The study shows that significant psychiatric morbidity is associated with women with primary infertility compared to women with fertility and that there is a significant correlation between psychiatric morbidity and duration of infertility, age, domicile, duration of the marriage, duration of infertility and presence of psycho social stressors among the cases with primary infertility. This emphasizes the need for early detection and effective management of both the disorders to achieve better outcomes in these patients.

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Key Words

HAM-D scale, HAM-A scale, infertility

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INTRODUCTION

World Health Organization (WHO) clinically defined infertility as "a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse". According to a systematic analysis of national health surveys, in 2010, at least 50 million couples worldwide experience infertility and among them, roughly 2% experienced primary infertility[1].Primary infertility is a significant distressing issue globally, nationally and regionally. Primary infertility as defined by WHO is "the inability of a women to ever bear a child is a multifaceted problem with deep medico-social roots. A District Level Household Survey-3 (2010), in India, found 8% of women had infertility problem out of which 6% had primary infertility and 2% had secondary infertility[2,3]. Motherhood is a significant life event in a woman. Infertility irrespective of cause, women are solely held responsible for the couple being childless in India and it is a socio-cultural concern. An infertile woman has a likelihood of 2.71 times more than infertile man to develop psychiatric morbidity more so in specific depression[4,5]. So many studies have reported a significant association between primary infertility and psychiatric morbidity, with prevalence ranging from 30.8-58% and also implied that most common psychiatric morbidity is depression and general anxiety disorder[6]. The other psycho pathology found are paranoid ideation, interpersonal sensitivity, social phobia, eating disorders, somatization, obsessive features and suicidal ideation[7]. Globally prevalence of depression in infertile women range from 10.9-79% and anxiety ranges from 14.8-70%[8]. Indian studies estimated an average of 18-57.1% for prevalence of depression and for anxiety from 16-50%[9]. Psychiatric morbidity is significantly associated with primary infertility than secondary infertility. Gender disparity was noted by studies concerning the association of psychiatric morbidity and infertility, inferring that women had more morbidity than men. On analysing various studies, contrasting and inconclusive results has been obtained concerning the association of psychiatric morbidity in women with primary infertility. There is a dearth of research in this aspect more so in developing countries like India where infertility rates are rising and socio-cultural impact is distressing compared to the western counterparts, necessitating the need for current study with main objective to correlate psychiatric morbidity in women with primary infertility and various other psycho-social factors influencing the association.

Aims and Objectives: To assess the prevalence of psychiatric morbidity in women with primary infertility and compare the psychiatric morbidity of women with primary infertility and fertile women.

MATERIALS AND METHODS

This is a cross-sectional hospital-based case-control study of female patients diagnosed with primary infertility attending to Department of Obstetrics and Gynaecology in Saraswati Medical College, Unnao, Uttar Pradesh. In this study 300 samples collected, which was divided into two groups Case (150) and Control group (150). A self-designed Informed consent form which explained the nature of the study was used. It was explained in the language understood by the patient. Written consent was taken on the form. A self-designed semi-structured preforma to gather relevant socio-demographic and data related to primary infertility was used for all patients. The proforma collected details like basic socio -demographic data, details of primary infertility, such as duration of the marriage, duration of infertility, cause of infertility and any other psychiatric illness or medical comorbidities, relevant family history and psycho social stressors. Diagnosis of psychiatric morbidity was made as per ICD-10, the severity of depression according to HAM-D score and severity of anxiety according to HAM-A score.

Hamilton Depression Rating Scale (HAM-D): It has been considered as the 'gold standard' for assessing the severity of depression from the mid- 1960's[10]. It consists of 21 items with ten items rated on a scale of 0-4, two items from 0-3 and eight items from 0-2. One item, diurnal variation, has two sub-items each rated from 0-2. The 0 (zero) indicates the absence of the given item while the maximum score 2 or 3 or 4 indicates the highest severity of the given item. Thus the range of total score is from 0 to 66. The severity can be graded as follows[11]:

No Depression	0-7
Mild Depression	8-16
Moderate Depression	17-23
Severe Depression	>24

Hamilton Anxiety Rating Scale (HAM-A): The Hamilton Anxiety Rating Scale (HAM-A) is a widely used 14-item clinician- administered rating tool in the public domain used to measure the severity of anxiety symptoms among individuals previously diagnosed with anxiety disorders. The HAM-A was originally developed by Max Hamilton in 1959 as an assessment tool to evaluate anxiety symptoms among people diagnosed with "anxiety neurosis." Since that time, anxiety neurosis has been conceptualized and the HAM-A is used among individuals with a variety of anxiety disorders (panic, phobia, and generalized). The 14 items reflect 13 categories of anxiety- related symptoms including anxious mood, tension, fear, insomnia, intellectual /cognitive symptoms, depressed mood, general

somatic (muscular and memory symptoms), cardiovascular, respiratory, genitourinary and gastrointestinal symptoms, with one item capturing the rater's assessment of behaviourial symptoms[12]. Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0-56[13]. The severity grading of anxiety using the scale can be done as follows[14]:

No Anxiety	<7
Mild Anxiety	8-14
Moderate Anxiety	15-23
Severe Anxiety	>24

Modified Kuppuswamy's Socio-Economic Status Scale 2016: Kuppuswamy's socioeconomic status scale is an important tool in hospital and community- based research in India. It was proposed in 1976. These scales take into account education, occupation and income of the family to classify study groups. The income criteria undergo modification as there is steady inflation in the value of the rupee. Zakirhusain Shaikh and Rambha Pathak have modified the scale for the year 2016[15]. The patient should be married for more than one year and cohabitating with her husband (Enquired during the interview using a semi-structured proforma) aged between 18-40 years and who had consented for the study. Those were excluded, who suffering from systemic disease with under medication.

Sample Procedure: A purposive random sampling of female patients diagnosed with primary infertility, which satisfied the inclusion and exclusion criteria's was included in the study after obtaining a written informed consent after explaining about the nature and purpose of the study. The study was conducted from Jan 2022 to June 2023. Data were collected from all 300 samples whom attending the departmental OPD Saraswati Medical College, Unnao. Socio -demographic details of the subjects were collected using a special semi-structured proforma. Confidentiality and anonymity were ensured as part of the study protocol. Patients manifesting psychiatric morbidity were provided with the option of thorough clinical assessment and management in the department.

Statistical Analysis and Results: Descriptive analysis was carried out by mean and standard deviation for quantitative variables, frequency and proportion for categorical variables. Non-normally distributed quantitative variables were summarized by the median. Data was also represented using appropriate tables. A total of 300 subjects were included in the final analysis.

As showing in above table, total study population was 300, among the study population 150 (50%) participants were cases and remaining 150 (50%) participants were controls.

Above table shows, the mean age value in cases was 30.98±5.09 years and 30.86±6.53 years in controls.

As shown in the (Table 3), 76.7% of the population hailed from rural area and 23.3% of the sample hailed from urban background in cases, where as 75.3% of the population hailed from rural areas and 24.7% of the population hailed from urban background among the controls.

Majority of the cases and controls i.e. 49.3% and 42.0% of the sample population respectively had completed intermediate/post high school diploma and 4.0% and 6.7% of the sample were illiterate among cases and controls respectively as shown in (Table 4).

As shown in (Table 5), among the cases majority (46%) of them belonged to upper lower socio economic status and 1.33% of the sample belonged to upper socioeconomic status. Among the controls, majority (69.33%) of them belonged to lower middle socioeconomic strata and 9.33% of them belonged to upper middle socio economic strata.

(Table 6) show that among the cases 45.3% of the population belonged to nuclear family and 36.7% of them belonged to extended family. Among the controls, 47.3% of the population belonged to nuclear family and 36.7% of them belonged to extended family.

As shown above in (Table 12), among cases 37.3% of sample had duration of marriage 6-10 years followed by 30.7% of sample had duration of 11-15 years and only 2% had more than 25 years of duration. Among controls majority (36%) had 11-15 years of duration followed by 28.7% of sample had duration of 1 to 5 years and 6.0% had more than 25 years of duration.

Clinical Variables: As shown in (Table 8), 36.0% and 34.7% of cases had infertility from 1-5 and 5- 10 years respectively. Only 2.0% had infertility for more than 25 years.

The cause of Infertility among the sample population was predominantly ovulatory dysfunction (34%) followed by tubal and pelvic factors (26.7%), uterine pathology (22%) and lastly unexplained /functional (17.3%). (Table 9).

Majority of the cases had mild depression (7.3%) on HAM-D followed by moderate depression (4.0%). Among controls, 1.33% of controls had mild and moderate depression. (Table 10).

(Table 11) shows, majority of cases had mild anxiety (9.3%) on HAM-A score followed by moderate anxiety (5.3%). Among controls, 2.7% had mild anxiety and 2% had moderate anxiety.

Among the Psycho social stressors after diagnosis of infertility ,51 (34%) participants had fear of threaten to divorce by spouse /fear of husband second marriage, 78 (52%) participants had high personal

desire to have children, 98 (65.3%) participants had Social support from in-laws, 142 (94.7%) participants had Peer Support, 39 (26.0%) participants had Financial stressors for fertility treatments, 18 (12.0%) participants faced Domestic Violence, 38 (25.3%) participants had Sexual Maladjustment, 51 (34.0%) participants faced Family and social stigma and discrimination due to infertility, 110 (73.3%) participants had Strong spousal support and cordial relationship irrespective of infertility, 41 (27.3%) participants had Fairly to low spousal support with significant marital distress often due to infertility, 21 (14.0%) participants had Guilt and self-blame and 52 (34.7%) participants had Lack of self-esteem (feel inferior to other women due to childlessness).

RESULTS AND DISCUSSIONS

Infertility is considered to be an emotional turmoil due to cultural and familial issues. Having children is every couple's dream and for some families, continuity of progeny is of the highest importance. For a married woman being childless can be disastrous especially because of constant threat/fear of spouse to get remarried which is not very uncommon in our society. This socio-cultural pressure may act as a predictor along with other factors for the development of psychiatric symptoms in primary infertile women. The field of reproductive medicine has undergone drastic development in the past few decades. The depth of understanding the biomedical aspects of infertility is only increasing exponentially. The mental health of the infertile population has never been fully addressed. Physicians tend to be oblivious to the psycho social turmoil that the patients undergo. Studies regarding psycho social aspects of infertility have been sparse, worldwide and more specifically in South India. So the present study was conducted to assess the prevalence of psychiatric morbidity in women with primary infertility and to correlate the prevalence of psychiatric morbidity with socio-demographic and clinical variables of cases with primary infertility. A total of 300 subjects were included in the final analysis and all the participants were females. Among the study population, 50% of participants were cases and the remaining 50% of participants (Table 1) were age and education matched controls.

The average age among cases was 30.98±5.09 years and almost similar average age 30.86±6.53 years was observed among controls (Table 2). The mean age of the sample is near to Lakatos[16] 33 years, Verma K[17] 28-72 years. The reason for seeking infertility treatment around 30 years could either be because of more employed urban women prioritizing career over family and in rural, uneducated unemployed women seeking medical help can get delayed due to factors like ignorance, hesitation to open up, lack of time or money, lack of health care facilities or plain denial of the fact that they are infertile or unwillingness of male-factor evaluation.

Majority of the participants hailed from a rural area, 76.67% and 75.33% participants among cases and controls respectively (Table 3). Majority of patients seeking consultations, treatment in our hospital are predominantly from a rural background thus contributing to a higher proportion of rural participants. In this study, psychiatric morbidity was predominant (80.95%) in cases belonging to rural areas. Neurotic, stress-related and somatoform disorders were more prevalent in rural (64.7%) than urban (12.5%). Mood disorders were more prevalent in urban (87.5%) than rural (12.5%). The correlation was statistically significant (p = 0.015) (Table 25 and Figure 20). The results were in line with Sethi *et al.*, in which among 50 infertile couples 55.6% of women from the rural area had psychiatric morbidity[17]. Rural women have predictor's of psychiatric morbidity like poverty, financial dependence and limited access to health care, poor knowledge about conception, socio-cultural and family pressures. Rural women are found to have poorer coping mechanism compared to urban women[18].

Majority of the cases and controls in the study had cleared intermediate or post-high school diploma (Table 4). Pinar G *et al.* on studying 160 infertile women concluded that women with university education and more had lower anxiety and depression scores and higher quality of life scores ($p<0.05$)[19] similar to Verma P *et al.* ($p = 0.001$)[20]. Deepak Singh also found Phobic anxiety to be significantly associated with the 11-12th class of education which was similar to the current study[21]. Majority of women in this study had lesser education and hailed from rural setup, thus lesser understanding about conception, treatment modalities, unemployment so emotional and financial dependence on spouses and families. Housewives are not given choice usually in the decision making about infertility treatments and adoption. A total of 46% of cases and 69.33% of controls belonged to upper lower socio-economic strata as per modified Kuppuswamy classification of socio-economic status, followed by 41.33% of cases and 21.33% of controls to lower middle class (Table 5) which is nearer to Patel *et al.* where 50% belonged to middle-class[22] and Verma K *et al.* in which 68.57% belonged to middle class[23]. The dominance of lower and lower-middle socioeconomic strata is probably due to rural background and lesser education. Among cases, the majority (45.33%) of participants were living in a nuclear family, 36.67% were living in an extended family and remaining 27 (18%) participants were living in Joint family. Among controls, 47.33% of participants belonged to a nuclear family, 36.67% were living in an extended family and remaining 24 (16%) participants were living in Joint family (Table 6). The dominance of the nuclear family

Table 1: Distribution of the sample population (N=300)

Group	Frequency (n)	Percentages
Cases	150	50.0
Controls	150	50.0
Total (cases and controls) N	300	100

Table 2: Mean age distribution of the sample (N = 300)

Parameter	Group	
	Cases (n = 150) (Mean±SD)	Controls (n = 150) (Mean± SD)
Age	30.98±5.09	30.86±6.53

Table 3: Domicile status of the sample (N = 300)

Domicile	Group	
	Cases n (%)	Controls n (%)
Rural	115 (76.67)	113 (75.33)
Urban	35 (23.33)	37 (24.67)
Total (n)	150(100)	150 (100)

Table 4: Educational status of the sample (N = 300)

Education	Group	
	Cases n (%)	Controls n (%)
Illiterate	6 (4)	10 (6.67)
Primary School Certificate	5 (3.33)	9 (6)
Middle School Certificate	17 (11.33)	16 (10.67)
High School Certificate	31 (20.67)	23 (15.33)
Intermediate or Post High/School Diploma	74 (49.33)	63 (42)
Graduate or Post Graduate	17 (11.33)	29 (19.33)
Total(n)	150(100)	150(100)

Table 5: Socio-economic status of the sample (N = 300)

Socio Economic Status	Group	
	Cases n (%)	Controls n (%)
Upper	2 (1.33)	0 (0)
Upper Middle	16 (10.67)	14 (9.33)
Lower Middle	62 (41.33)	32 (21.33)
Upper Lower	69 (46)	104 (69.33)
Lower	1 (0.67)	0 (0)
Total(n)	150(100)	150(100)

Table 6: Family structure of the sample (N = 300)

Family Structure	Group	
	Cases n (%)	Controls n (%)
Nuclear	68 (45.33)	71 (47.33)
Extended	55 (36.67)	55 (36.67)
Joint	27 (18)	24 (16)
Total(n)	150(100)	150(100)

Table 7: Distribution of sample according to duration of marriage (N = 300)

Duration of Marriage	Group	
	Cases n (%)	Controls n (%)
1-5 Years	31 (20.67)	43 (28.67)
6-10 Years	56 (37.33)	54 (36)
11-15 Years	46 (30.67)	27 (18)
16-25 Years	14 (9.33)	17 (11.33)
>25 Years	3 (2)	9 (6)
Total (n)	150(100)	150(100)

Table 8: Distribution of cases according to duration of infertility (n = 150)

Total Duration of Infertility	Frequency (n)	Percentages
1-5 years	54	36.0
6-10 years	52	34.7
11-15 years	29	19.3
16-25 years	12	8.0
>25 years	3	2.0
Total (n)	150	100

Table 9: Distribution of cases according to cause of infertility (n = 150)

Cause Of Infertility	Frequency (n)	Percentages
Unexplained /functional	26	17.3
Tubal and pelvic factors	40	26.7
Ovulatory dysfunction	51	34.0
Uterine pathology	33	22.0
Total (n)	150	100

Table 10: Comparison of HAM-D score in sample (N=300)

Ham-D Score	Group	
	Case	control
0-7 (Normal)	131 (87.33)	146 (97.33)
8-13 (Mild)	11 (7.33)	2 (1.33)
14-18 (Moderate)	6 (4)	2 (1.33)
19-22 (Severe)	2 (1.33)	0 (0)
Total (n)	150 (100)	150 (100)

Table 11: Comparison of HAM-A score in sample (N=300)

Ham-A Score	Group	
	Case	Control
0-7 (Normal)	127 (84.67)	143 (95.33)
8-13 (Mild)	14 (9.33)	4 (2.67)
14-18 (Moderate)	8 (5.33)	3 (2)
19-22 (Severe)	1 (0.67)	0 (0)
Total (n)	150 (100)	150 (100)

Table 12: Psychosocial stressors after diagnosis of primary infertility in cases (n=150)

Psychosocial stressors after diagnosis	Frequency (n)	Percentages
Threaten to divorce by spouse /fear of husband second marriage		
Yes	51	34.0
No	99	66.0
High personal desire to have children		
Yes	78	52.0
No	72	48.0
Social support from in-laws		
Yes	98	65.3
No	52	34.7
Peer Support		
Yes	142	94.7
No	8	5.3
Financial stressors for fertility treatments		
Yes	39	26.0
No	111	74.0
Domestic Violence		
Yes	18	12.0
No	132	88.0
Sexual Maladjustment		
Yes	38	25.3
No	112	74.7
Family and social stigma and discrimination due to infertility		
Yes	51	34.0
No	99	66.0
Strong spousal support and cordial relationship irrespective of infertility		
Yes	110	73.3
No	40	26.7
Fairly to low spousal support with significant marital distress often due to infertility		
Yes	41	27.3
No	109	72.7
Guilt and self-blame		
Yes	21	14.0
No	129	86.0
Lack of self-esteem (feel inferior to other women due to childlessness)		
Yes	52	34.7
No	98	65.3

is due to the rapid urbanization in India. Neurotic, stress-related and somatoform disorders were highest among extended family and Mood disorders were common in a joint family.

The current study sample had the majority of the cases (37.3%) and controls (36.0%) with 6- 10 years of duration of marriage (Table 7) similar to the study by Verma K *et al.* where the mean duration of marriage was 5.84 years[9]. As the duration of marriage increases, the women lose hope and becomes more helpless due to increasing resentment among the couple, between her and the family and begins to blame herself for all the miseries around her.

Psychosocial stressors like threaten to divorce by spouse or fear of husband getting remarried (34%), family and social stigma and discrimination due to infertility (34%) and lack of self-esteem (34.7%) were predominantly found in women with infertility. More than 50% of women had a high personal desire to have children. 73% of women had strong spousal support with 12% of women undergoing domestic violence. A majority (65.3%) of the women reported social support from in-laws (Table 12). Similar results were observed by Sheoran et al in which participants expressed threat of second marriage of husband owing to their inability to provide an heir to his family and at time wives are expected to get their husbands to remarry[24]. Makanjoula *et al.* reported that the presence of psychosocial stressors such as the absence of support from husband and his relations, presence of discrimination, in the aetiology of psychiatric disorder in patients with infertility[25]. Absence of support from husband and his relations and presence of discrimination and unfair treatment by in-laws was shown to contribute to psycho social problems of women with infertility. The psycho social stress may affect Gonadotrophin Releasing Hormone (GnRH) pulsatility which may lead to anovulatory cycles. In the current study, 36.07% had duration of 1-5 years and 34.7% 6-10 years of duration of infertility (Table 8). In India, women are expected to conceive soon after marriage and the pressure from society builds in if the couple does not conceive within a year or two. This is evident by the similarity between the duration of marriage and duration of infertility. Neurotic, stress-related and somatoform disorders (90%) were more among cases with infertility for less than 5 years of duration. Mood disorders increased as the duration of infertility increased and commonly seen (73.3% and 85.7%) among 6-10 years and more than 10 years respectively.

Conflicting results found on analyzing the studies regarding the association of duration of infertility and psychiatric morbidity due to socio-cultural and religious differences between various countries and regions. As duration increases the hope fades, unwillingness for adoption, social family pressure increases leading to increased morbidity. In the initial years of infertile period women have hope but are constantly anxious about conception, the outcome of diagnostic procedures and infertility treatments and anticipation of being criticized and ridiculed in social situations and by family members. Research showed a positive correlation between stress due to marital partner or peer group and genital pro-inflammatory cytokine levels in the female partner. IL-1beta increases NE utilisation and serotonin turnover and are locally synthesized in the hypothalamus and hippocampus areas which are involved in regulating responses to stress and coordinating neural and endocrine functions. CRH release and sensitization of pituitary gland to inflammatory cytokines are mediated by stress. IL-1, IL-6 levels are increased by stress[26]. Among the cases, the cause of Infertility was predominantly ovulatory dysfunction (34%) followed by tubal and pelvic factors (26.7%), uterine pathology (22%) and lastly unexplained/functional causes (17.3%). But in a study by Makanjuola *et al.* found that the commonest cause of infertility was a tubal factor (tubal occlusion and tubo-peritoneal adhesion) (27.5%).The reason for the difference in the frequency of causal factors could be due to the different population being studied. Majority with tubal and pelvic factors cause of infertility have mood disorders (93.73%) and with ovulatory dysfunction have neurotic, stress-related and somatoform disorders (94.44%). These study findings were in agreement with the study by Li S J *et al.* which pointed concerning somatisation, interpersonal sensitivity, obsessive-compulsive, anxiety, hostility and paranoid ideation symptoms in PCOS infertile women compared to non-PCOS infertile women. We couldn't find any literature to support or refute our finding. Women with infertility due to tubal and pelvic factors reported of undergoing repetitive invasive diagnostic procedures and were painful and long-standing treatment leading to the agony of the patient. This study also evaluated the severity of most common disorders of depression and anxiety on HAMD-D and HAM-A scales. Majority of the cases had mild depression (7.3%) followed by moderate depression (4.0%) and 1.3% severe depression. Among controls, 1.33% of controls had mild and moderate depression. The study was in par with other studies like Awoyinka MF[27], Al-asadi NJ[28] and Yusuf L[29] where mild to moderate degree of depression was predominant. Majority of cases had mild anxiety (9.3%) followed by moderate anxiety (5.3%) and 0.7% severe anxiety. Among controls, 2.7% had mild anxiety and 2% had moderate anxiety similar to the study by Pinar G *et al.* which reported of mild anxiety (62.5%), moderate (25%) and severe anxiety (12.5%)[30]. Shoaib A *et al.* in their study found 41% had moderate to severe anxiety and 29% extremely severe anxiety in comparison to 15% mild and 1% moderate anxiety in controls, the comparison is in par with the present study[31]. The wide variation in prevalence values could be due to methodology and the different scales used.

CONCLUSIONS

Infertility is a worldwide health issue impacting 60 to 80 million couples. Several studies have reported

various psychiatric disorders associated with primary infertility and it is two times more common in women with primary infertility than women with fertility. Evidence suggests that the outcome is better when both the disorders are managed simultaneously. Thus the current study was comparable with other Indian and western studies and this study further add to the current literature and validates that psychiatric morbidity is significantly more prevalent in women with primary infertility in comparison with women with fertility. Ignoring the psychiatric aspect and merely considering infertility as a medical problem will, therefore, create a huge obstacle in understanding and treating such individuals from a holistic point of view. Hence, infertile women should be routinely evaluated for psychiatric morbidity to ensure better pregnancy outcomes and managed efficiently by a liaison of multi-disciplinary team of professionals for holistic care.

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