A Cross Sectional Study on Psychiatric Morbidity and Intimate Partner Violence in Treatment Seeking Infertile Women Visiting a Tertiary Care Hospital

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ABSTRACT

Introduction: Infertility is the failure of a sexually active pair to conceive within 12 months of unprotected coitus. For a couple, experiencing infertility is profoundly stressful and affects the personal well-being of married women. Infertility is usually associated with psychological disturbances in the form of depression, anxiety, and psychosomatic symptoms. Intimate partner violence (IPV) is not uncommon in this group therefore the present study was initiated to study psychiatric morbidity and IPV in infertile women.

Material and methods: One hundred consecutive infertile women in the age group of 20-45 years who gave written informed consent were included in the study. Psychiatric morbidities were diagnosed according to DSM-5. Hamilton Anxiety Rating Scale and the Hamilton Depression Rating Scale were used to determine the severity of the anxiety and depression. Intimate Partner Violence was assessed using WHO violence against women instrument.

Results: The mean age of studied participants was 30.63±3.17 years. The mean duration of marriage was 6.20±0.92 years and the mean duration of infertility treatment was 4.147±0.83 in years. The prevalence of psychiatric morbidity was 70%. 51% of the patients gave a history of IPV: 56.86% had psychological violence, 31.37% had physical and 11.76% had sexual violence. In comparison to patients who didn't have IPV, duration of the marriage, duration of infertility treatment, HAM-D scores, and suicidal ideation was more in the IPV group and the difference was statistically significant.

Conclusion: Significant portion of married infertile women have psychiatric morbidity and IPV. The relationship between infertility and IPV should be investigated in different cultural contexts.

Keywords: Infertility, Psychiatric Morbidity, Intimate Partner Violence.

INTRODUCTION

Infertility is defined as the disease of the reproductive system characterized by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected coitus by a sexually active couple.[1] In this part of the world, not bearing children is a tragedy. The confluence of social, personal, interpersonal, and religious expectations bring a sense of failure, ruin, and rejection to those who are infertile.

According to WHO prevalence of primary infertility in India varies from region to region with nationwide prevalence ranging from 3.9 to 16.8 percent.[2] Estimated prevalence of primary infertility is 15 per cent in Kashmir.[3] Failure of a married women to become pregnant is a life crisis which not only affects an individuals social and emotional life but also status in society and marital harmony.[4]

Intimate partner violence (IPV) is defined by WHO as physical, sexual, social, economic, or psychological harm by a current or former partner or spouse.[5]

Each individual blames himself/herself and reflects his/ her anger to the other. This situation may cause conflict between the spouses, a decrease in self-esteem and frequency of sexual intercourse, and the development of feelings of inadequacy in a female or a male. As a result, the bonds of marriage are put under psychological pressure: therefore, it can be a reason for marital incompatibility and divorce.[6]

The factors reducing marital consonance and contentedness also, cause conjugal violence and are reported to increase the possibility of being subjected to marital violence for women more than two fold.[7]

Violence against women is a universal problem, in all cultures and societies. In general, this is the result of a male–dominant social structure. Additionally, violence is strengthened by the male-dependent, discriminatory mechanisms in legal, economic, traditional, political, and educational structures of society.[8]

The belief that women are the cause of infertility, and subsequently, they have to go through an emotional crisis and the domestic violence therefore the present work was started to determine the psychiatric morbidity and the prevalence and pattern of intimate partner violence in married women with the diagnosis of primary infertility.

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How to cite this article: Junaid Nabi, Rayees Ahmad Wani, Shabir Ahmad Dar, Nousheen Majeed. A cross sectional study on psychiatric morbidity and intimate partner violence in treatment seeking infertile women visiting a tertiary care hospital. International Journal of Contemporary Medical Research 2020;7(8):H1-H5.

DOI: http://dx.doi.org/10.21276/ijcmr.2020.7.8.1

MATERIAL AND METHODS

This was an analytical, cross-sectional, hospital based study conducted in the infertility center of a tertiary care hospital in northern India. It was a time bound study conducted for a period of 18 months from July 2018 to-December 2019.A total of 103 women with primary infertility visited our centre out of which 100 consented to participate in the study. After explaining the objectives of the study written informed consent was taken from all cases and each was given freedom of choice to accept or refuse participation in the study. Each case was interviewed in a separate room to facilitate privacy. Participants were assured of confidentiality of their personal information. The spouses of infertile women were not present at the time of interviews.

The investigator completed survey forms through face to- face interviews with every woman through a semi structured proforma to collect socio-demographic details of the participants and their spouses. Participants were assessed for anxiety disorders or depression using the MINI-International Neuropsychiatric Interview Plus MINI-Plus.[9]

The severity of anxiety and depression was also assessed using the Hamilton Anxiety Rating Scale (HAM-A) [10] and Hamilton Depression Rating Scale (HAM-D 17). [11]

Collection of socio-demographic details and diagnosis of infertility were done by a consultant Gynecologist; interviewing the patient for IPV, making the psychiatric diagnosis and application of HAM-A and HAM-D were done by a consultant Psychiatrist.

IPV was assessed by WHO violence against women instrument. This was developed for use in the WHO Multicounty Study on Women's Health and Domestic Violence against Women. [12]

The women with IPV and cases having psychiatric morbidity were given the option of psychiatric help. The study was approved by the ethical committee of the institute. (IEC/PSY/IMHANS-K No 22/2018)

RESULTS

The average age of the patients was 30.63±3.17years. 28% were illiterates and approximately 2/3rd of them were from rural backgrounds. Most of them were housewives by occupation and belonged to a joint family. The mean duration of marriage was 6.20±0.92years and the duration of infertility treatment was 4.147±0.83 years. Most of them had been in an arranged marriage.

The mean age of the spouse was 32.09±2.46years.About 70% of the patients had some psychiatric morbidity.53% had a depressive disorder in comparison to 21% of patients who had an anxiety disorder. 51% of the patients gave a history of IPV: 56.86% had psychological violence, 31.37% had physical and 11.76% had sexual violence. [Table 1]

In comparison to patients who didn't have IPV, duration of the marriage, duration of infertility treatment, HAM-D scores, and suicidal ideation was more in the IPV group and the difference was statistically significant. [Table 2]

Age	30.63±3.17
Education	
Nil	28
Primary	39
High school	23
graduate	10
Place	
Rural	70
Urban	30
Occupation	
Housewife	81
Working	19
Type of Marriage	
Arranged	66
Love	34
Duration of marriage	6.20±0.92
Type of family	
Joint	70
Nuclear	30
Socioeconomic Status	
Low	32
Middle	56
High	12
Age of menarche	12.26±0.809
Duration of infertility treatment	4.147±0.83
Psychiatric comorbidity	
Nil	30
Depressive Disorder	53
Anxiety Disorders	17
Suicide Ideation	
Nil	83
present	17
HAM-D	13.69±6.88
HAM-A	10.85±4.25
Husbands age	32.09±2.46
Intimate partner violence	
Absent	49
Present	51
Psychological violence	29
Physical violence	16
Sexual violence	6
Frequency of IPV	
Nil	49
Daily	31
Weekly	15
Monthly	5
After how many years of marriage	
Immediately	5
< 1 year	10
> 1 year	36
Age of first encounter	25.6±1.51
Substance use in husband	
Absent	91
Present	9
Husbands Education	
Nil	28
primary	49
High school	16
graduate	7

Table-1: Socio-Demographic details and clinical variables of infertile females

Variables	IPV absent	IPV present	Statistical analysis P
Age	30.38±3.16	30.86±3.19	t=0.75, p=0.46
Education			
None	16	12	X^2=1.617
Primary	17	22	P=0.656
High school	12	11	
Graduate	4	6	
Place			
Rural	35	35	X^2=0.93
Urban	14	16	P=0.76
Occupation			X^2=2.85
Housewife	43	38	P=0.091
Working	06	13	
Duration of marriage	2.05±0.999	4.035±0.83	t=3.59 p=0.0001
Duration of infertility treatment	1.27±0.17	2.88±0.13	t=3.37 p=0.0001
Type of marriage			
Arranged	28	38	X^2=3.36
love	21	13	P=0.067
Socioeconomic status			
Low	17	15	X^2=0.37
Middle	26	30	P=0.83
High	06	06	
Type of family			^{2}=2.075
Joint	31	39	P=0.15
nuclear	18	12	
Psychiatric diagnosis			
Nil	30	0	X^2=61.57
Depression	07	46	P=0.001
Anxiety	12	05	
Suicidal ideas			X^2=8.057
Nil	46	37	P=0.005
present	03	14	
Husbands age	31.90±2.59	32.27±2.33	t=0.764 P=0.447
Husbands education			
Nil	13	15	X^2=2.41
Primary	25	24	P=0.50
High school	06	10	
Graduate	05	02	
Substance use in spouse			X^2=0.17
Nil	44	47	P=0.68
Present	05	04	

Table-2: Variable Comparison in IPV and Non IPV infertile women

DISCUSSION

Multiple studies have shown that depression and anxiety are common among infertile women. [13, 14] The disgrace associated with having difficulty conceiving a child or being childless is evident in nearly all societies, but some cultures subject infertile couples to more shame. [15]

Our patients with infertility exhibited high rates of psychopathology, with 70% of the sample suffering from a psychiatric condition. Major depressive disorder was the most frequent condition diagnosed (53%), followed by anxiety disorders (17%). Our study results contradict with the findings of Chen et al. [16] were reported prevalence of psychiatric disorders was 40.2%, major depression was present in 26.8% of cases and anxiety disorder in 23.2%. Alosaimi et al. in his study in Saudi Arabia also reported an overall psychiatric morbidity of 48.2% with depression in 26.2% and anxiety disorders in 22%. [17]

A study done in India by Bondade et al. reported psychiatric comorbidity in 46% of cases out of which 25% had depression and 21% had an anxiety disorder. [18]

Since there is a large variation in prevalence of depression in different studies which can be possibly explained by different methods and assessing tools used for screening and diagnosing, influence of culture on epidemiology of depression, geographical distribution and at the end use of medication like Estrogen. [19] A high level of anxiety can also be explained by the persistent fears of loss of libido, loss of fertility, and anxiety of not being able to bear children in the

future.

Multiple studies have reported a strong association between depression and infertility. A study by Arcuri and colleagues [20] reported an association between the activity of 11b-hydroxysteroid dehydrogenase, the ovarian family of enzymes to catalyze the conversion of inert 11 keto-products (cortisone) to active cortisol, and fertility.

The fact is that there are multiple biochemical mechanisms that may contribute to the relationship between anxiety disorders and infertility, including those mechanisms that are mediated through the changes in the hypothalamic–pituitary axis system or the biochemical changes in autonomic nervous system activity that are commonly seen in the anxiety disorders.[21] Our results show that infertile subjects with a history of intimate partner violence are more likely to exhibit a psychiatric disorder than women without any history of IPV. Our study sample also showed increased levels of Suicidality which is in concordance to study done by Alosaimi et al. in Riyadh in 2015. [17]

In this study, a statistically significant association was found between IPV an increase in duration of marriage and an increase in duration of infertility. A statistically significant difference was also found between psychiatric morbidity and suicidality. Similar findings were also reported by Ozgoli et al.[22] and Alazmy et al.[23] Living with infertility lead to aggression, anger, labile economic status, reprimand, divorce, public isolation, loss of social status, deprivation, disappointment and violence.[24] Violence is a disaster worldwide and women and girls are the prime victims of domestic violence. [25]

The prevalence of physical, emotional and sexual violence was 16%, 29% and 6%, respectively in this study. Ardabily et al. in Iran found the prevalence of psychological violence 33.8%, physical violence 14% and sexual violence 8% in infertile women which is in accordance to our results.[26] The 2005 WHO report had stated a worldwide rate of physical violence as high as 13–61% for women.[27]

Based on socioeconomic status, geographical distribution, and effect of culture and religion prevalence of DV varies widely among infertile married women. The quoted prevalence of DV from different countries is 31.6% in Turkey [28] 64% in Pakistan [29] and 77.8% in India.[30]

As per the WHO multi-country study on health of women and family violence, those who had ever been in an intimate partnership, 13–61% ever experienced physical violence by a partner; 4–49% cases reported having experienced severe physical violence; 6–59% reported sexual violence by a partner at some point of time in their lives; and 20–75% reported experiencing one emotionally abusive act, or more, from a partner in their lifetime.[12] In the WHO multi-country study, 19–51% of women who had ever been physically abused by their partner had left home for at least one night, and 8–21% had left two to five times.[12]

CONCLUSION

Our study results reveal that a significant portion of married infertile women has psychiatric morbidity and IPV. Several factors like personality disorders, young age, low level of education, witnessing or experiencing violence as a child can influence IPV that in turn adversely influence the mental health of infertile women. The relationship between infertility and IPV should be investigated in different cultural contexts, socioeconomic statuses and geographical locations. IPV is a major risk factor to the mental health of an individual and these individuals require special attention to overcome possible mental disorders.

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Source of Support: Nil; **Conflict of Interest:** None

Submitted: 23-06-2020; **Accepted:** 06-07-2020; **Published:** 26-07-2020