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A STUDY ON THE PREVALENCE OF SEXUAL DYSFUNCTIONS IN INFERTILE WOMEN

Medical Science

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ABSTRACT

INTRODUCTION: Infertility is a life crisis with invisible losses and its consequences are manifold. There is a complex association between sexual behaviour and infertility. Sexual problems may be caused or exacerbated by the diagnosis, investigation and management of infertility. Hence the purpose of the study is to assess the prevalence of sexual dysfunction in women with infertility.

MATERIALS AND METHODS: The study was conducted in the Obstetrics and Gynaecology outpatient department of a medical college hospital. Forty women who satisfied the inclusion and exclusion criteria were chosen for the study. They were analyzed using the Mini International Neuropsychiatric Interview, Hospital Anxiety Depression Scale, Female Sexual Dysfunction Index, Marital Quality Scale, Rosenberg Self Esteem Scale. The results of the study were analyzed using both qualitative and quantitative data. Statistical techniques include both analysis such as measures of central tendencies and distribution and inferential methods including parametric and non-parametric methods.

RESULTS: In our study, 37.5% of women had sexual dysfunctions. Regarding prevalence of sexual dysfunction in various phases, 37.5% had a lack of sexual desire, 57.5% had arousal disorders, 60% had problems in lubrication, 67.5% had anorgasmia, 60% had no satisfaction and 30% had dyspareunia. Depressive symptoms cause sexual dysfunction in all phases and particularly reduces sexual desire in infertile women. Poor quality of marital life is also significantly correlated with high degree of Sexual Dysfunctions.

CONCLUSION: Sexual dysfunctions are more prevalent in women with infertility. Sexual dysfunctions are higher when the quality of marital life is lower. Dysfunction in orgasm phase is common than dyspareunia in Infertile women.

KEYWORDS

Sexual Dysfunctions, Infertility.

INTRODUCTION

Infertility related stress had strong negative impacts on sense of sexual identity, self-efficacy and affected life quality directly through its impacts on the marriage factors[1]. Abnormalities of sexual dysfunction in infertile couples may have a cause and effect relationship with infertility or they may be incidental to infertility[2]. The most common sexual problems among infertile couples are dyspareunia, Progesterone inhibited sexual desire, poor body image, depression, guilt and ambivalence [3].The most common sexual problems in Infertile females were anorgasmia (83.7%), Decreased Libido (80.7%),dyspareunia(67.7%), and difficulty with sexual arousal (25%). Vaginismus and dyspareunia were more in women aged 20 – 24 years than other groups [4]. In a study on 200 Indian infertile women decreased frequency of intercourse and anorgasmia were the most common problems identified [5]. The prevalence of female sexual dysfunctions increased with increasing age of women [6]. Depression and sexual dysfunctions are prevalent in female partners of infertile couples [7]. The prevalence of female sexual dysfunction was highest and lowest in arousal – sensation (80.2%) and orgasm (22.8%) domains respectively[8].

AIMS

This study specifically aims to

1) Assess the prevalence of sexual dysfunctions in women with Infertility.
2) Correlate them with Physical variables and to know their clinical relevance

MATERIALS AND METHODS

The sample was chosen from Obstetrics and Gynaecology outpatient department of a Medical college hospital for a period of Nine months after getting Ethical committee clearance. Forty women meeting the WHO criteria for infertility who satisfied the inclusion and exclusion criteria were chosen for the study.

INCLUSION CRITERIA

- Couples who were unable to conceive for 2 years without the use of any contraceptives (as defined by WHO).
- Infertile women in the age group of 20 – 40 years.
- Women showing no gynaecological pathology.
- Couples who had consented to participate in the study.

EXCLUSION CRITERIA

- Women with past history of psychiatric illness or mental retardation.
- Women with medical or surgical causes of infertility.
- Women who are on psychiatric treatment at present.

TOOLS USED IN THE STUDY

The tools used in this study are Proforma, Mini International Neuropsychiatric Interview, Hospital Anxiety Depression Scale, Marital Quality Scale ,Female Sexual Function Index ,Rosenberg Self Esteem Scale.

1) PROFORMA:

Compiled for recording socio demographic variables, duration of infertility, age of marriage and family history of psychiatric illness.

2) MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW (MINI)[9]:

MINI is a short structured diagnostic interview and includes module for 23 disorders and features question on rule-outs, disorder subtyping and chronology.

3) HOSPITAL ANXIETY DEPRESSION SCALE [HADS][10]

The HADS comprises fourteen statements which the patient's rates based on their experience over the past week. Even numbered questions relate to depression and odd-numbered question relate to anxiety. Each question has four possible responses. The maximum scale is 21 for depression and 21 for anxiety.

4) MARITAL QUALITY SCALE [MQS][11]:

It consists of 50 items and gives total score on twelve separate dimensions. Higher scores are indicative of a poorer quality of marital life. The scale has an internal consistency of 0.91 and a test-retest reliability of 0.83.

5) FEMALE SEXUAL FUNCTION INDEX [FSFI][12]:

The FSFI is a 19-item questionnaire developed as a brief, multidimensional self-report instrument for assessing the key dimensions of sexual function in women. Based on factor analytic methods, five factors or domains of sexual function were identified.

a) Desire and subjective arousal
b) Lubrication
c) Orgasm

d) Satisfaction
e) Pain/discomfort. The factor loadings of the individual items fit the expected pattern, supporting the functional validity of this instrument.

6) ROSENBERG SELF ESTEEM SCALE [RSE][13]:

It was designed to be a Gutman scale, which means that the RSE items were to represent a continuum of self-worth statements ranging from statements that are endorsed even by individuals with low self-esteem to statements that are endorsed only by persons with high self-esteem. It is a 10 question scale ranges from 0-30, with 30 indicating the highest score possible.

STATISTICAL DESIGN

Statistical design was formulated using the data collected. For each of the scales and socio demographic variables, the central values (arithmetic mean) and dispersion tendencies (standard deviation) were calculated. 't' test was used for comparing the data for numerical variables. Chi square test was used for comparing the data for categorical variables. Correlation matrix was used for knowing the significance of psychopathological attributes.

RESULTS

TABLE 1 SEXUAL DYSFUNCTIONS AND SELF ESTEEM IN INFERTILE WOMEN

S. NO	VARIABLE		INFERTILE WOMEN (N=40)		STATISTICAL ANALYSIS
			n	%	
1	FSFI DESIRE	<4.28 >4.28	15 25	37.5 62.5	MEAN = 4.62 SD = 1.45 RANGE 0-6
2	FSFI AROUSAL	<5.08 >5.08	23 17	57.5 42.5	MEAN = 4.76 SD = 1.32 RANGE 0-6
3	FSFI LUBRICATION	<5.45 >5.46	24 16	60 40	MEAN = 4.79 SD = 1.37 RANGE 0-6
4	FSFI ORGASM	<5.05 >5.06	25 15	62.5 37.5	MEAN = 4.07 SD = 1.81 RANGE 0-6
5	FSFI SATISTACTION	<5.04 >5.05	24 16	60 40	MEAN = 4.67 SD = 1.34 RANGE 0-6
6	FSFI PAIN	<5.51 >5.52	12 28	30 70	MEAN = 5.11 SD = 1.50 RANGE 0-6
7	FSFI TOTAL	<26.55 >26.55	22 18	55 45	
8	RSES	<15 >15	5 35	12.5 87.5	MEAN = 21.3 SD = 5.73 RANGE 11-30

22 (55%) of the infertile women had sexual dysfunctions and the most common sexual problem among the women was anorgasmia . Data on self esteem reveal that 5(12.5%) of the infertile women had low self esteem.

TABLE 2 COMPARISION OF SEXUAL DYSFUNCTIONS WITH RESPECT TO PSYCHIATRIC MORBIDITY AMONG INFERTILE WOMEN.

S. NO	VARIABLE	PSYCHIATRIC ILLNESS ABSENT		PSYCHIATRIC ILLNESS PRESENT		't'
		MEAN	SD	MEAN	SD	
1	FSFI DESIRE	4.84	1.55	4.04	0.97	1.604
2	FSFI AROUSAL	4.97	1.40	4.20	0.88	1.680
3	FSFI LUBRICATION	4.91	1.49	4.28	0.89	1.312
4	FSFI ORGASM	4.34	1.90	3.35	1.39	1.586
5	FSFI SATISTACTION	4.86	1.45	4.17	0.85	1.464
6	FSFI PAIN	5.10	1.60	5.13	1.21	-0.057

TABLE 3 CORRELATION OF AGE, DURATION, PSYCHOLOGICAL SYMPTOMS, SELF ESTEEM, MARITAL QUALITY WITH SEXUAL DYSFUNCTION

S NO	VARIABLE	FSFI D	FSFI A	FSFI L	FSFI O	FSFI S	FSFI P
1	AGE	0.134	0.101	0.092	0.031	0.068	0.321*
2	DURATION OF INFERTILITY	-0.089	-0.122	-0.123	-0.154	-0.102	-0.194
3	HADS A	-0.182	-0.199	-0.172	-0.278	-0.216	-0.058
4	HADS D	-0.429**	-0.376*	-0.348*	-0.379*	-0.343*	0.053
5	RSES	0.402**	0.435**	0.356*	0.372*	0.378*	0.131
6	MQS	-0.438**	-0.374*	-0.431**	-0.463**	-0.354*	0.024

*p<0.05 ** p<0.01

All the scores in sexual functioning have been negatively correlated with duration of infertility but do not show any statistical significance.

All the phases shows statistical significance with increase in depressive scores and particularly significance has been high with desire phase.

Regarding self-esteem all phases of sexual functioning has been positively correlated and shows statistical significance.

Quality of marital life has negatively correlated with all phases of sexual functions and this is statistically significant

TABLE 4 COMPARISION OF PSYCHOLOGICAL SYMPTOMS, SELF ESTEEM, MARITAL QUALITY, SEXUAL DSYFUNCTION WITH FAMILY H/O PSYCHIATRIC ILLNESS

S.NO	VARIABLE	FAMILY H/O PSYCHIATRIC ILLNESS PRESENT		FAMILY H/O PSYCHIATRIC ILLNESS ABSENT		't'
		MEAN	SD	MEAN	SD	
1	HADS A	5.00	0.816	4.14	3.885	0.437
2	HADS D	8.25	5.56	6	5.08	0.774
3	RSES	19.25	9.29	21.53	5.36	-0.749
4	MQS	111	45.48	73.61	25.72	2.552**
5	FSFI D	3.6	0.98	4.73	1.45	-1.512
6	FSFI A	3.75	0.71	4.87	1.33	-1.64
7	FSFI L	3.75	0.90	4.85	1.38	-1.55
8	FSFI O	2.6	1.15	4.23	1.81	-1.75
9	FSFI S	3.92	0.56	4.75	1.38	-1.18
10	FSFI P	5.4	1.2	5.07	1.53	0.413

*p<0.05 ** p<0.01

Infertile women with family h/o psychiatric illness had poor quality of maritial life compared to those without family h/o psychiatric illness. The difference has been statistically significant.

On analysis of other variables including psychological symptoms, self-esteem and sexual functioning there were no significant differences.

DISCUSSION

In our study, both depressive and anxiety symptoms negatively correlated with sexual functioning. Depressive symptoms cause sexual dysfunction in all phases and particularly reduces sexual desire in infertile women and this association has shown statistical significance. These findings are similar to those reported by Shindel et al[7] that depression and sexual dysfunctions are positively correlated in infertile women.

Regarding sexual dysfunction, our study findings reveal that 37.5% of women had sexual dysfunction. Regarding prevalence of sexual dysfunction in various phases, in our study 37.5% had a lack of sexual desire, 57.5% had arousal disorders,60% had problems in lubrication,67.5% had anorgasmia, 60% had no satisfaction and 30% had dyspareunia.

Our study findings reveal relatively higher dysfunction in relation to all sexual stages.

Our study findings suggest dysfunction pertaining to orgasm phase (62.5%) as the commonest sexual problem followed by dysfunction on

lubrication phase, lack of sexual satisfaction and disturbances in arousal. The prevalence of lack of desire in our study has been lower accounting for 37.5% of infertile women and dyspareunia (30%) is the least common.

Reader et al [14] found that infertile women most commonly presented with anorgasmia. Tayebi et al[4] also reported that anorgasmia is the most common sexual dysfunction in infertile women followed by reduced libido, dyspareunia and difficulty in sexual arousal. Further they had found that vaginismus and dyspareunia were common in women aged 20-24 years than in other groups.

On comparison of prevalence of sexual dysfunction pertaining to presence or absence of psychiatric illness in infertile women, both groups showrelatively equal scores and the difference was statistically not significant. On correlation of sexual dysfunction with age there has been significant positive correlation of dyspareunia with advancing age. This finding is in contrast to Reader et al[14] who showed that dyspareunia is commoner in relatively younger women between 20-24 yrs of age. Our findings are in accordance with Ponholzer et al[6] who showed prevalence of pain disorders increased with increasing age in women.

On analysis of depressive symptoms, there has been negative correlation with all phases sexual functioning except pain and particularly depression significantly reduces libido. Regarding self-esteem, lower self-esteem has been positively Correlated with dysfunction in all phases of sexual life and particularly causes significant impairment in sexual desire and sexual arousal.

Similarly, poor quality of marital life also significantly correlated with high degree of sexual dysfunction.

These findings are in accordance with Monga et al[15] Who showed that infertile women with poor quality of marital life and low self-esteem had more sexual dysfunctions.

Duration of infertility do not influence sexual functioning.

This finding is in contrast with Nene et al[16] who showed that sexual activity decreased as the number of childless years increased.

LIMITATIONS

The follow up of infertile women periodically for a longer period could have enabled a more detailed understanding of the course and outcome of illness. The cross-sectional analysis involving a small sample size is the major limitation of the study.

CONCLUSION

Infertile woman have a higher prevalence of sexual dysfunctions. Sexual dysfunctions are higher when the quality of marital life is lower. Dysfunction in orgasm phase is common than dyspareunia in infertile woman. Early recognition and adequate intervention of emotional disturbance will have positive impact in infertility treatment.

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