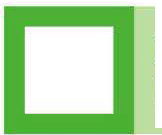


**ORIGINAL ARTICLE**



**FREQUENCY OF SEXUAL DYSFUNCTION IN FEMALES SUFFERING FROM MAJOR DEPRESSIVE DISORDER.**

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# ABSTRACT

**OBJECTIVE**

To findout frequency of sexual dysfunction in female patients suffering frommajordepressivedisorder.

# STUDY DESIGN

Descriptive Cross-sectional study

# PLACEAND OURATION OF THESTUDY

This study was conducted at Department of Psychiatry, Baqai Medical University, Karachi over the period of sixmonths (180days).

# SUBJECTS ANO METHODS

148 patients following the selection criteria, presenting to psychiatry department, Baqai Medical University were enrolled after informed consent. The Hamilton Depression Rating Scale (HAM-D) score was used to diagnose depression. All these patients were asked to read female sexual function index and mark their response on a 5 point scale.Patientswith score< 26 were defined as having sexual dysfunction. All the demographic data and relevant outcomes were recorded on the questionnaire administered in the nationallanguage(i.e.,Urdu).

# RESULTS

The mean age of these patients was 30.1±7.4 years. The mean age of their husbands was 35.6 ± 7.1 years.

The mean number of children of these patients was 4.0±3.0. 111 (75.0%) patients found their current relationship satisfactory. The results showed that sexualdysfunction was foundin 71(47.9%) patients.

# CONCLUSION

Depressive disorder has significant links with sexual dysfunction and we recommend future studies to make firm conclusions in order to start the early management of both,depressive disorder and sexual dysfunction.

# KEYWORDS

Depression, Sexual Dysfunction, Female, Epidemiology.

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# INTRODUCTION

The normal sexual response cyclecomprises four stages I) Desire, II) Excitement, 111) Orgasm and IV) Resolution. Problems of sexual response can involve any of these phases'-'. Sexual dysfunction is the problem experienced by individual or couple during sexualintercourse or any stageof the sexual response cycle in both genders, but female sexual dysfunction (FSD) is further subdivided into Hypoactive sexual dysfunction, Female sexual arousal disorder, Sexual aversion disorder, Female orgasmic disorder, Vaginismus and Dyspareunia'. ABrazilian study showed that the frequency of any type of sexual dysfunction ranges from 28 to 49%, while the prevalence of hypoactive sexual desire was 26.7% and female orgasmic disorder rangedfrom 18to29.3%'.

Thedepression, age and unnecessary use of medication are directly linked to sexual dysfunction. Further, sexual dysfunction can arise from physical conditions(chronic illness) and psychological factors such as poor interpersonal relationship and psychiatric disorders'.The most prevalent sexual dysfunction in females withmajor depression ishypoactive sexualdisorder'.

Depression is basically loss of enjoyment and interest in pleasurable activities and individual avoids the intimate relationships and goes into social withdrawal; it is anticipated to cause problems in sexual relationships'·". In developed countries 12 month prevalence of sexual dysfunction in sexually active male and female was between 30%and70%,basedon current epidemiologicalstudies"''.

No doubt depression is commonly linked to the sexual dysfunction and even the drugs that we prescribe to treat depression reduce the sex drive. In females, variations in sexual hormones affect the sexual function and it also modulates the neuro-chemical systems". A study was conducted in 47 adults depressed females who were compared with 47 adult non-depressed females, the researcher found that depressed females were not sexually gratified and they complained about some sexual issues of orgasm, arousal and pain as compared with the non­ depressed females".

TheIndian cultural study determinedthe frequency and form of sexual problems in depressed women and told that female sexual dysfunction is complex and polygenic disorder with multiple determinants and its prevalence is very high in depressionreaching upto 67.34%".

Theabovediscussion has highlighted the importance of sexual problemsin patients of depression. The discussion also highlighted more prevalence of sexual dysfunction in the female gender. Despite this there are few studies that have explored this issue,particularly in females.There areonly few studies nationally and internationally exploring the epidemiological data, and factors associated with sexual dysfunction in women who have depressive symptoms or have clinical depression.

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# SUBJECTS AND METHODS

## Participants

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years. Most of the patients {42.57 %) were above the age of 33 years

{see figure 7), The mean age of their husbands was 35.6 ± 7.1 years.

Majority of the patients' husbands {47.3%} were between 32 to 42 years of age as shown in figure 2. The mean number of children of

The required sample size was calculated using WHO software by taking the prevalence of 43%', confidence level 'C1'=95%, margin of error d=08%. The sample size came out to be 148. The sample was collected through non-probability Consecutive sampling technique from psychiatry department, Baqai Medical University were enrolled after informed consent. The inclusion criteria was females between 18-55 yearsof age,married and cohabiting with theirhusbands for at least 6 monthspriorto inclusion.The exclusion criteria wasasfollows;

Single,divorced orseparatedpatientswill beexcluded. Separated fromhusbands formore than 3months.

Patients who had attained menopause, who are pregnant and those who are in postpartum period will beexcluded.

History of sexual dysfunction before the onset of depressive disorder

Taking hormones or other medication which are known to decrease sexual functioning.

Subjectswithco-morbidpsychiatricdisorders or substance use.

Chronic medical conditionswhich could cause sexual problems

{HTN, DM, hypothyroid, cardiovascular disorders like Ml, renal dysfunction and neurological problems like CVA and spinalcord lesions)

## Instruments

HAM-D (Hamilton rating scale for depression) was used to assess the depression and female sexual function index to assess sexual dysfunction. Patients were required to mark their response on a five point scale on the 19 item questionnaire of female sexual function index. Patients with score < 26 were defined as having sexual dysfunction. Both scales took around 25 to 30 minutes to be completed foreach patient.

## Procedure

Thisstudy wasconducted after seeking approval from Baqai Medical university hospital ethical review committee. Patients who fulfilled the inclusion criteria were selected. Informed consent and confidentiality was ensured. Questionnaires were administered and privacy was fully ensured.6-7 women were seen during each clinical setting. All data was entered and analyzed in SPSS version 20. Descriptive statistics were used to summarize the continuous variableslike age, number of children, age of husband and score on female sexual function index was presented as mean±S.D and categorical variables like education, current relationship with husband, pain during intercourse, use of contraceptives and current medications, sexual intercourse in a week and outcome variable i-e sexual dysfunction (yes/no). Stratification was done with respect to age, no. of children, age of husband, age at marriage, education, relationship with husband, pain during intercourse and current medications and sexual intercourse in a week to control the effect modifier and look for the effect of these on outcome variable applying Chi-square test taking p value< 0.05 assignificant.

**RESULTS**

TheResults showedthat the mean age of the patients was 30.1±7.4

these patients was 4.0±3.0.There were 81{54.7%) patients who had between 1to 3 children.83 (56.1%} patientswere morethan or equal to 18years at the timeof marriage.Nearly 111{75.0%} patientsfound theircurrent relationship satisfactory (see table 2for details).

The mean of the HAM - D score was 16.9 ± 4.7, the mean offemale sexual function index (FSFI} was 19.9 ± 11.3. All the patients had major depressive disorder and their HAM-D score was more than or equalto 8. Sexualdysfunction wasfound in 71(47.9%) of patients.

Thirty four {23.0%} patients reported pain during intercourse. Approximately 43 {29.1%} patients were using contraceptive while 42 (28.4%) had usedbenzodiapine drugs.Sixty two (41.9%) patients

had sexual activity between 1 to 2 times per week, 47 (31.8%) patients had a history of previous psychiatric illness, only 13 (8.8%) patients' husbands weresuffering fromsomeillness (seetable 1).

No significant difference in proportion of sexual dysfunction was observed (p-value> 0.05) among different categories of agegroupof the patient, age of husbands, age at marriage, educational status, pain during intercourse, use of contraceptives and use of any drugs on Chi square (see table 2 ). Chi square has shown a significant difference in proportion of sexualdysfunction wasobserved (p-value

< 0.05) among different categories of relationship and number of children (seetable2).

Table **1**

Characteristics of patients (n= 148)

|  |  |  |
| --- | --- | --- |
| **Chancterlstics** | **n (o/•)** | |
| Living with husbands | 148 | JOO |
| **Age at marriage** |  |  |
| <18 years | 65 | 43.9 |
| > 18 years | 83 | 56.1 |
| **Current relationship** |  |  |
| Satisfactory | 111 | 75.0 |
| Unsatisfactory | 37 | 25,0 |
| **Pain during** intercourse | 34 | 23.0 |
| Usjng contraceptives | 43 | 29.1 |
| Using any drugs | 42 | 28.4 |
| Benzodiapine | 42 | 28.4 |
| **Frequency of sexual intercourse in week** |  |  |
| No se-xual activity in a week | 43 | 29.J |
| 1-2 times/week | 62 | 41.9 |
| 3-5 times/week | 41 | 27.7 |
| 6-7 times/week | 2 | 1.4 |
| Previous history of psychiatric illness | 47 | 31.8 |
| Husband suffering from any illness | 13 | 8,8 |

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**Figure 1**

Distribution of age (n=l48)

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**Table 2**

Comparisons of different variables with female sexual dysfunction (n= l48)



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|  |  |  |  |
| --- | --- | --- | --- |
| **Female Sexual Female Sexual** | | | |
| **VarlabJes** | **d)'SfUJICtion** | **d,•sfunction** | **p-value** |
|  | Yes **n** (¾) | **Non(%)** | 0.878 |
| **Educational s1a111s** |  |  |
| No education | 10 (14.1) | 14 (18.2) |
| Primary | 16 (22.5) | 14(18.2) |
| Matric | 27 (38.0) | 26 (33.8) |
| Grnduate | 13(18.3) | 17 (22.1) |
| Postgraduate | *5* (7.0) | 6 (7.8) |
| **Current Relationship** |  |  | 0.000 |
| Satisfactory | 42 (59.2) | 69 (89.6) |
| Unsatisfactory | 29 (40.8) | 8(10.4) |
| **Pain during intercourse** |  |  | 0.067 |
| Yes | 21 (29.6) | 13 (16.9) |
| No | 50 (70.4) | 64(83.1) |
| **Using c-ontraceplives** |  |  | 0.189 |
| **Yes** | 17 (23.9) | 26 (33.8) |
| No | 54(76.1) | 51 (66.2) |
| **Using any drugs** |  |  | 0.433 |
| Yes | 18 (25.4) | 24 (31.2) |
| No | 53 (74.6) | 53 (68.8) |
| **Age groups (years)** |  |  | 0.141 |
| 18 -24 | 32 (45.1) | 46 (59.7) |
| 25-32 | 14(19.7) | 20 (26.0) |
| ;;;,33 | 25 (35.2) | II (14.3) |
| **Number of children** |  |  | 0012 |
| I - 3 | 31 (54.4) | 40 (62.5) |
| 4 - 6 | 7 (12.3) | 16 (25.0) |
| ;;;,7 | 19(33.3) | 8 (12.5) |
| **Age of husband (years)** |  |  | 0.523 |
| 20-31 | 23(32.4) | 29 (37.7) |
| 32-42 | 33(46.5) | 37(48.1) |
| ;;;,43 | 15 (21.1) | II (14.3) |

**Figure 2**

18-24 25-32

**Age Groups**

33+

Distribution of age of patients' husband (n= l48)



0

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40 -

-

20 -

10 -

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**DISCUSSION**

20-31 32-42

**AgeGroups of husband**

43+

depression on the occurrence of sexual dysfunction and consequences of intensity of depression and it showed that

Studies haveshown thatpatients,particularly women suffering from depression have more sexual dysfunction problems as compared with healthy populations.Sexual dysfunction isvery common and it iscreating a major burden onhealth services and the cost as around 2S% of suffering people arelooking for medical help.However, only few studies have explored this issue in our region in particular"·".

Our study recruited 148 patients who followed the selectioncriteria. The resultsshowed that the mean of the HAM - D score was 16.9 ± 4.7, the mean of female sexual dysfunction index (FSFI) was 19.9 ±

11.3.Further, sexual dysfunction was foundin 71(47.9%) ofpatients. A study was conducted by Fabre and Smith to see the impact of

Hypoactive Sexual Desire Disorder (HSDD) which is 17.7% with the highest prevalence followed by Female Orgasmic Disorder (FOD) 7.7%, Female Arousal Disorder (FAD) 5.8% and last Sexual Aversion Disorder (SAD) which is 3.4%18.Ourstudyresultsalso showed ahigh (48%) prevalence of sexual dysfunction in patients with major depressive disorder vsaround 36% in the above study. However, we did not classify the sexual dysfunction levels opposed to the above study. A study concluded that the severity of depression (increased HAM-D scores) is directly proportional to the sexual dysfunction".

A descriptive case control study was conducted in Pakistan to find out theprevalence of sexual dysfunction in patientswith depressive

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disorder. The study included 117 subjects having depression and a similar number of controls with the age group of 16-60 years and of bothsexes. It was concluded that statistically significant numbers of patients werehaving sexualdysfunction(49cases) ascompared with control group (13 cases)". An other research was carried out to find out the level of association between sexual problems and different symptoms of depression to clarify the dimension most closely suggestive of sexualdysfunction.The conclusion of this study of 135 patients with depression was showing that intensity of sexual dysfunction is directly proportional to the intensity of depressive domain but not the intensity of somaticsymptoms'".

Another study by Cyranowski and colleagues looked for a link between life time depression andsexual drive in females at midlife in society and they found decreased sexual arousal with negligible physical enjoyment and reduced emotional gratification within their recentsexualrelation".

In sum,the resultsshoweda greater prevalence of sexual dysfunction in depressive women presenting to tertiary care centre. The study findings support the previous related literature. Studies have shown a correlation of sexual dysfunction and depression, though with variable degree of strength and prevalence. This strength of evidence was consistent with the use of different measures of depression andsexualdysfunction. However, basedon studyresults, in particular the related findingsand the inability of the current study to explore other related factors and sexual dysfunction characteristics in detail, we recommend future studies to be conducted to further explore this relationship in multiple settings andwithlargersamplesize.

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