



"A STUDY OF INCIDENCE AND NATURE OF SEXUAL DYSFUNCTIONS IN DRUG FREE MALE DEPRESSIVE PATIENTS"

Psychiatry

Abdul Sajid Mansoori

Associate Professor, Department of Psychiatry, American International Institute Of Medical Science, Udaipur

Krishna Kumar Carpenter*

Assistant Professor, Department of Psychiatry, American International Institute Of Medical Science, Udaipur *Corresponding Author

Divya Modi

Senior Resident, Department of Psychiatry, American International Institute Of Medical Science, Udaipur

ABSTRACT

Introduction: Adequate sexual expression is an essential part of many human relationships. Depression is associated with impairments of sexual function and satisfaction, even in untreated patients. Most antidepressant drugs have adverse effects on sexual function, but accurate identification of the incidence of treatment-emergent dysfunction has proved troublesome. **Aims:** To study the incidence, types and severity of sexual dysfunction in 50 male patients with depression prior to antidepressant treatment. **Methods and Material:** 50 male patients diagnosed as suffering from depression (according to ICD-10) attending Psychiatry department of AIIMS Udaipur were taken for study and 50 suitably age matched normal male subjects constituted the control group. Arizona Sexual Experience Scale applied which asked about change in sexual interest and function. **Results:** Sexual dysfunction was present in 72% of depressive patients and 24% of control subjects. In depressive patients most common sexual dysfunction was low desire disorder (34%) and second most common was erectile dysfunction (22%). Severity of sexual dysfunction among patients with depression was most correlated with the severity of the depressive dimension. **Conclusions:** Although limited by a relatively small sample of drug-free patients with depression, these results emphasize the importance of factors beyond specific drug effects in the assessment of sexual dysfunction in drug-naïve-depressed patients.

KEYWORDS

Depression, Sexual Dysfunctions, Low Desire.

INTRODUCTION

Sexual functioning is influenced by a number of factors, mental illness being one of them. Sexual dysfunctions are characterized by disturbances in sexual desire and in the psycho-physiological changes associated with the sexual response cycle in men and women.^[1]

Using the measure of disability-adjusted life years, it was found that unipolar depression was the fourth leading cause of disease burden in the world. It was also projected that, in the year 2020, unipolar depression would be the second leading cause of disease burden in the world.^[2]

Depression is characterized by loss of interest, reduction in energy, lowered self-esteem, inability to experience pleasure, this constellation of symptoms may be expected to produce difficulty in sexual relationship. Depressed patients have shown SD two to three times more than non-depressed individuals.^[3]

Sexual dysfunction in patients with depression has mostly been studied independently or in gender-specific studies. These studies have reported significant dysfunction in different areas of sexual functioning. However, a majority of these studies are uncontrolled and provide limited evidence about the baseline rates of dysfunction across depression. Furthermore, patients in affective disorders are usually prescribed antidepressant medications, which are known to cause substantial sexual dysfunction. Simply exemplifying the dysfunction caused by medications is imperfect unless the dysfunction caused by the disease is clearly demarcated. Most studies have highlighted the role of drugs used in the class of affective disorders which cause substantial sexual dysfunctions.^[4]

Thus, limited data exist on sexual dysfunction in depressive patients in Indian literature in rural or urban settings, so this study was planned with the aim to assess the sexual functioning in drug-free male depressive patients.

MATERIALS AND METHODS:

The present study was a single center, cross-sectional, single interview study that was approved by the institutional ethics board. 50 patients diagnosed as suffering from depression (according to ICD-10) attending Psychiatry department of AIIMS Udaipur were taken for study and 50 suitably age matched normal male subjects were constituted the control group. Subjects fulfilling the inclusion criteria were explained about the study and proper written consent was taken.

All the patients and controls were evaluated on the specially designed proforma to obtain Socio-demographic data, details of present illness, past illness, family history & personal history. All the patients were physically examined and relevant investigations were done to rule out organic causes of sexual dysfunction.

GHQ-12 was applied on age matched male subjects and who were not having any psychiatric illness taken as control group.^[5]

All 50 patients were rated for severity of illness with the 17-item Hamilton Rating Scale for Depression (HAM-D).^[6]

Sexual experience of subjects was assessed by using the Arizona Sexual Experience Scale (ASEX), a self-rated instrument for both genders. The ASEX rates sexual experience in the areas of desire, excitement, penile erection/vaginal lubrication, orgasm, and satisfaction from orgasm on a scale of 1 to 6. SD is defined as having either a score of 5 or more on any item or a total score of 19 or more.^[7]

The inclusion criteria for all subjects were patients attending Psychiatry OPD in Psychiatry department of AIIMS Udaipur and first time diagnosed drug-free male patients of aged between 18 years to 65 years fulfilling the criteria for depression (according to ICD-10) and patients ready to give informed consent.

The exclusion criteria for all subjects were patients having comorbid psychiatric illness, history of alcohol and other substance abuse, history of sexual dysfunction prior to present episode of illness, endocrinal disorders (thyroid dysfunctions, diabetes), local genital problems like hypogonadism, any major medical or surgical illness.

The data was pooled and suitable statistical analysis (mean, chi square tests) was done.

RESULTS:

Table 1: Distribution of study and control group according to socio-demographic characteristics

Characteristics	Study group (n = 50)	Control group (n = 50)
Age (Mean $\pm$ SD) years	35.72 $\pm$ 12.76	37.24 $\pm$ 13.73
Religion	Hindu 43 (86%) Muslim 7 (14%)	Hindu 40 (80%) Muslim 10 (20%)

Marital status	Married 38 (76%) Unmarried 8(16%) Divorced/Separated 4(8%)	Married 45 (90%) Unmarried 5(10%) Divorced/Separated (00)
Domicile	Rural 28 (56%) Urban 22 (44%)	Rural 32 (64%) Urban 18 (36%)
Family type	Nuclear 14 (28%) Extended nuclear 16 (32%) Joint 20 (40%)	Nuclear 8 (16%) Extended nuclear 16 (32%) Joint 26 (52%)

Table 2: Distribution of study group according to severity of depression by HAM-D Score

Severity of depression (HAM-D Score)	Study group (n = 50)
Mild depression (8-13)	33(66%)
Moderate depression (14-18)	7 (14%)
Severe depression (19-22)	7 (14%)
Very severe depression (23 or >23)	3 (6%)

Table 3: Distribution of study and control group according to presence and absence of sexual dysfunction by ASEX Score

Sexual dysfunction (by ASEX score)	Study group (n = 50)	Control group (n = 50)
Absent (Score 0-18)	14 (28%)	38 (76%)
Present (Score 19 or >19)	36 (72%)	12 (24%)

Table 4: Distribution of study and control group according to types of sexual dysfunction by ASEX Score

Type of sexual dysfunction (ASEX Items)	Study group (N = 50)	Control group (N = 50)	P-Value
Low desire disorder	Present 17(34%)	Present 3 (6%)	$\chi^2=12.25$ (P 0.0004) (Significant)
	Absent 33(66%)	Absent 47(94%)	
Excitement disorder	Present 5(10%)	Present 1(2%)	$\chi^2= 2.836$ (P 0.09) (Non-significant)
	Absent 45(90%)	Absent 49(98%)	
Erectile dysfunction	Present 11(22%)	Present 6(12%)	$\chi^2= 1.771$ (P 0.18) (Non-significant)
	Absent 39(78%)	Absent 44(88%)	
Orgasmic dysfunction	Present 8(16%)	Present 2(4%)	$\chi^2= 4$ (P 0.04) (Significant)
	Absent 42(84%)	Absent 48(96%)	
Orgasmic satisfaction disorder	Present 7(14%)	Present 2(4%)	$\chi^2= 3.052$ (P 0.08) (Non-significant)
	Absent 43(86%)	Absent 48(96%)	

$\chi^2= 23.0769$ d.f=1 (P 0.00001) (Significant)

Table 5: Distribution of sexual dysfunction in study group according to severity of depression

Sexual dysfunction	Mild depression (n=33)	Moderate depression (n=7)	Severe depression (n=7)	Very severe depression (n=3)
Present	22(66.66%)	5(71.43%)	6(85%)	3(100%)
Absent	11(33.33%)	2(28.57%)	1(15%)	0(0)

Table 1 describes the socio-demographic characteristics of the study and control groups participating in the study. The study group had a mean $\pm$ SD age of 35.72 ± 12.76 years and control group had 37.24 ± 13.73 years. Most of the patients were from a rural background (56%), while 44% were from urban areas. 76% of the patients were married. 60% of the patients were having nuclear and extended nuclear family type.

Table 2 describes severity of depression in depressive patients, 66% of patients were having mild depression, 14% were having moderate depression, 14% were having severe depression and 6% were having very severe depression.

Table 3 depicts frequency of sexual dysfunction in depressive patients and control group. Sexual dysfunction was reported in 72% of depressive patients and 24% of control subjects. The difference in

sexual dysfunction of both groups was statistically significant.

Table 4 depicts types of sexual dysfunction in depressive patients and control group. In depressive patients low desire disorder (34%) was frequently reported followed by erectile dysfunction (22%). Orgasmic dysfunction (16%), orgasmic satisfaction disorder (14%) and excitement disorder (10%) were less reported. In control group erectile dysfunction (12%) was frequently reported followed by low desire disorder (6%). Orgasmic dysfunction (4%), orgasmic satisfaction disorder (4%) and excitement disorder (2%) were less reported. The difference in types of sexual dysfunction in both groups was statistically significant in low desire disorder and orgasmic disorder and statistically not significant in excitement disorder, erectile dysfunction and orgasmic satisfaction disorder.

Table 5 depicts sexual dysfunction in depressive patients according to severity of depression. Sexual dysfunction was reported in 66.66% of mild depressive patients, 71.43% of moderate depressive patients, 85% of severe depressive patients and 100% of very severe depressive patients. The difference was statistically not significant.

DISCUSSION:

The present study aimed to assess the sexual functioning in drug-free male depressive patients. The results from the present study indicate high rates of sexual dysfunction in drug-free male depressive patients (72%), which is comparable to the results of Rajarshi Guha et al.^[8] who found sexual dysfunction in 66.67% of drug free male depressive patients. Our findings are comparable to Kendurkar et al.^[9] who in 50 drug naive-depressed patients from India reported 74.2% baseline rates of sexual dysfunction in males. Our findings are also supported by Werneke et al.^[10] who reported sexual dysfunction was 70% among drug free male depressive patients.

Low sexual desire has frequently been reported with depression and the present study also indicates that low desire disorder (34%) is the most common sexual dysfunction in depressive patients which is supported by Rajarshi Guha et al.^[8] who found that 33.33% of patients were having low desire disorder. Similarly Kendurkar et al.^[9] found that 45.2% of patients were having low desire disorder. Kennedy et al.^[11] also found 40% of men reporting decreased sexual interest.

Difficulty in erection (22%) was the second most common dysfunction in depressive males which is supported by Rajarshi Guha et al.^[8] who found 29.16% of patients were having erectile dysfunction. This is also comparable to the findings of Kendurkar et al.^[9] who reported 32% dysfunction in the domains of erection using the same rating instrument in Indian population. A study by Kennedy et al.^[11] showed similar rates of dysfunction with erection difficulties in 34% of male subjects.

Orgasmic dysfunction (16%), orgasmic satisfaction disorder (14%) and excitement disorder (10%) were comparatively lower in this study population but corroborated with the findings of Rajarshi Guha et al.^[8] who found that 16.67% of patients were having orgasmic dysfunction, 16.67% of patients were having orgasmic satisfaction disorder and 8.33% of patients were having excitement disorder.

The present study indicates that severity of sexual dysfunction increases with severity of depression which is supported by Rajarshi Guha et al.^[8] who found that most important finding of their cross-sectional study is the strong correlation between HAM-D scores and all individual items of ASEX scale. This finding is also comparable with the Chiao-Fan Lin et al.^[12] who found that the severity of sexual dysfunction among patients with depression most correlated with the severity of the depressive dimension.

There are certain limitations with this study, firstly the small sample size and secondly the cross-sectional nature of this study limits the possibility to explore the cause and effect relationship between sexual dysfunction and depression. Lastly, since the data were collected from a specific population, the degree to which they represent the general population cannot be commented upon.

This study reports the baseline prevalence and types of sexual dysfunctions in drug free male depressive patients excluding the role of medication-induced dysfunctions. Also by excluding subjects with onset of sexual dysfunction prior to current episode and those with known physical conditions known to cause sexual dysfunction an attempt was made to obtain more unambiguous data.

CONCLUSION:

This study highlights the high rates of sexual dysfunctions in drug-free male depressive patients, involving all phases of sexual cycle. In depressive patients most common sexual dysfunction is low desire disorder followed by erectile dysfunction. Severity of sexual dysfunction among patients with depression is most correlated with the severity of the depressive dimension.

Early recognition of sexual dysfunction will lead to better choice of antidepressant medication and treatment plan with a favorable sexual side effect profile and use of pharmacologic agents wherever necessary to improve the functioning in depressive patients. Depression and sexual dysfunction have cause and effect relationship so it is better to inquire about sexual dysfunction when a depressive patient is seen and in patients with sexual dysfunction depression should always be ruled out.

REFERENCES

1. Laumann EO, Park A, Rosen RC. Sexual dysfunction in the United States: Prevalence and predictors. *JAMA*. 1999;281:537-44.
2. Murray CJ, Lopez AD. Boston, MA: Harvard University Press; 1996. The global burden of disease and global health statistics.
3. Baldwin DS. Depression and sexual function. *J Psychopharmacol*. 1996;10(Suppl 1):S30-4.
4. Balon R. Mood, anxiety, and physical illness: Body and mind, or mind and body? *Depress Anxiety*. 2006;23:377-87.
5. Golderberg D, Williams P: A user's guide to the General Health questionnaire. Windsor, UK: NFER-Nelson 1988.
6. Hamilton M. A Rating scale for Depression. *J Neurol Neurosurg*. 1960;23:56-61.
7. McGahuey CA, Gelemberg AJ, Laukes CA, Moreno FA, Delgado PI, McKnight KM, et al. The Arizona Sexual Experience Scale (ASEX): Reliability and validity. *J Sex Marital Ther*. 2000;26:25-40.
8. Rajarshi Guha Thakurta, Om Prakash Singh, Amit Bhattacharya, Asim Kumar Mallick, Paramita Ray, Sreyashi Sen, Ranjan Das. Sexual dysfunction in MDD and its impact on quality of life. 2012
9. Kendurkar A, Kaur B. Major depressive disorder, obsessive-compulsive disorder, and generalized anxiety disorder: Do the sexual dysfunctions differ? *Prim Care Companion J Clin Psychiatry*. 2008;19:299-305.
10. Werneke U, Northey S, Bhugra D. Antidepressants and sexual dysfunction. *Acta Psychiatr Scand*. 2006;114:384-97.
11. Kennedy SH, Dickens SE, Eisfeld BS, Bagby RM. Sexual dysfunction before antidepressant therapy in major depression. *J Affect Disord*. 1999;56:201-8.
12. Lin CF, Juang YY, Wen JK, Liu CY, Hung CI. Correlations between sexual dysfunction, depression, anxiety, and somatic symptoms among patients with major depressive disorder. *Chang Gung Med J*. 2012 Jul-Aug;35(4):323-31.