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Sexual Dysfunction among Males using Antidepressants

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ABSTRACT

Background: Depressed patients often have difficulties in sexual function including loss of sexual interest, and disturbance of sexual arousal or orgasm. Sexual dysfunction (SD) is an important underestimated adverse effect of antidepressant drugs. **Objective:** To determine the frequency of sexual dysfunction affecting depressed male patients using antidepressants. **Study Design:** Descriptive Cross-Sectional. **Settings:** The study was conducted at the Department of Psychiatry and Behavioral Sciences, J.P.M.C, Karachi, Pakistan; a tertiary care public hospital. **Duration:** Six months after approval of synopsis from 31st January 2017 to 31st July 2017. **Methods:** All consecutive patients who visited the Department of Psychiatry and Behavioral Sciences, JPMC, and on antidepressant treatment were included in the study. A semi-structured proforma was used to assess the patient's particulars and the outcome variables (i.e. types of sexual dysfunctions; impaired desire, erectile disorder, premature ejaculation, and delayed ejaculation. **Results:** Total of 294 patients the mean ± SD of age was 35.69 ± 7.174 years. Positive sexual dysfunction was found in 141 (48%) patients while 153 (52%) patients were diagnosed as normal. **Conclusion:** Sexual dysfunction is commonly presented in depressed male patients and there is a need to screen all antidepressant users for sexual dysfunction.

Keywords: *Sexual dysfunction, Depression, Antidepressants, Male hypoactive sexual desire disorder, Erectile disorder, Premature (early) ejaculation, Delayed ejaculation.*

INTRODUCTION

Sexual dysfunction is one of the problems most often under-reported and underestimated by the patients in general medical settings and more so in psychiatric settings among in and out-patients where it takes a back seat in the face of more haunting issues plaguing mental health service user's health. Mental health service users receive medications that may cause sexual side effects.[1] Sexual dysfunction is a prevalent problem with rates ranging from 20- 30% in adult men.[2] In a study, antidepressant-induced sexual dysfunction has been found to be 50% of patients taking antidepressants, ranging from 25.8% to 80% according to a meta-analysis. Among various side effects of psychotropic, effects involving sexual function are vastly an ignored area. Antidepressants induced sexual dysfunction affects up to 58-73% of those who receive these medications, potentially affecting antidepressant adherence in the long term.[3] Patients, especially males, tend to assign their impairments primarily to their medications.[4] Antidepressant induced sexual dysfunction can add to the stressors the patient is already going through and seeking treatment for, affecting negatively not only ones quality of life but treatment dropouts, marital discord and low self-esteem, leading to relapse of depressive disorder. Anxiety disorders or some other stresses as measured in previous studies of anxiety among some other urogenital issues[5] and same pattern may be observed in males having sexual dysfunction. Substance/Medication-Induced Sexual Dysfunction, which includes

antidepressant use, as described by the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) can present with impaired desire, impaired arousal, impaired orgasm or sexual pain.[6]

Determination of dysfunction depends upon age and the adequacy of sexual stimulation. Community estimates of male orgasmic disorder range from 0% to 3% across six studies.[7] Estimates from eight primary care samples across four studies range from 0% to 36% with a median of 9%.[8] The prevalence of moderate erectile dysfunction in the sample is 25%. In general practice settings, current estimates of erectile dysfunction range from 0.4% to 37% across seven studies. This wide fluctuation can be attributed to differences among assessment criteria and presence of important risk factors in the samples, including advanced age, medications, diabetes, and medicated hypertension. In sexuality clinics, current rates of erectile dysfunction range from 1% to 53% across seven studies.[9] Limited data of developing countries is available regarding such neglected side effect (Sexual dysfunction) of antidepressants which along with other socio-demographic factors of this region can play a significant role in drug compliance and prognosis of patients with Depressive Disorder. Due to wide variation in international literature about the prevalence of sexual dysfunction plus myriad of socio-cultural issues surrounding such a sensitive problem.

METHODS

Descriptive Cross-Sectional study conducted at the Department of Psychiatry and Behavioral Sciences, J.P.M.C Karachi, Pakistan; a tertiary care public hospital from January 31, 2017 to July 31, 2017. Sample size was 294 and was obtained through W.H.O sample size calculator. Ethical approval was sought from IRB of the institute. Consecutive married adult male patient (aged 18-45 years) presenting complaints of sexual dysfunction with duration of marriage > 1 year and agreeing to give consent for the study. Already diagnosed cases of depressive disorder by psychiatrist, using antidepressants for a period of at least 3 months or more and normal sexual functioning prior to taking antidepressants (through history / personal account) were enrolled for study. Those patients suffering from organic brain disease e.g., epilepsy, space occupying lesion, stroke, dementia, frontal lobe syndrome, head injury (confirmed through medical records, history) were excluded from study. Those suffering from any co-morbid (e.g., HTN, DM, endocrine disorder, renal or hepatic disease, autoimmune disorders etc.) for 1 month or more (confirmed through medical records, history) were not included. Patients diagnosed as having substance use disorder (Substance of abuse e.g., amphetamine, cocaine, opioid, cannabinoid.) for 1 month or more (confirmed through history, medical records) or those suffering from florid psychotic symptoms (confirmed through history) were also excluded from study. The data was collected at the Department of Psychiatry and Behavioral Sciences, JPMC. An informed consent regarding the inclusion of patient's data in this study were obtained after assuring them confidentiality, and the right to withdraw at any point in study without mentioning the reason and informing them in simple and understandable language about the purpose and nature of the study. A semi-structured proforma was used to assess patient's particulars and the outcome variables (i.e. types of sexual dysfunctions; impaired desire, erectile disorder, premature ejaculation and delayed ejaculation. The collected data was analyzed using computer package SPSS version-20. Chi-square test was applied post stratification while $P < 0.05$ was considered as significant.

RESULTS

Among all 294 participants majority 160 (54.4%) were Urdu speaking followed by Sindhi 47 (16.0%), Pashto 40 (13.6%), Punjabi 24 (8.2%) and Balochi 23 (7.8%). Among all most of clients were educated above intermediate level as 88 (29.9%) were bachelors and 53 (18.0%) were masters while 49 (16.7%) were secondary passed and 31 (10.5%) were intermediate, 34 (11.6%) were primary passed and 22 (7.5%) had education from madras and only 17 (5.8%) were not educated formally. Most of the clients were having a mixed picture of occupational status as Self Employed were 52 (17.7%) while 96 (32.7%) were professionals, 12 (4.1%) were factory workers, 66 (22.4%) were shopkeepers, 28 (9.5%) were teachers while 29 (9.9%) were labor workers and 11 (3.7%) were students as shown in table 1.

Table 1: Demographics characteristics

Demographic Characteristics		Frequency	Percent %
Language	Balochi	23	7.8%
	Pushto	40	13.6%
	Punjabi	24	8.1%
	Sindhi	47	16.0%
	Urdu	160	54.5%
Educational Status	Bachelors	88	29.9%
	Masters	53	18.0%
	Intermediate	31	10.5%
	Secondary	49	16.7%
	Primary	34	11.6%
	Madrasa	22	7.5%
	Not formal education	17	5.8%
Occupational Status	Self Employed	52	17.7%
	Professional	96	32.7%
	Factory Worker	12	4.1%
	Shopkeeper	66	22.4%
	Teacher	28	9.5%
	Laborer	29	9.9%
	Student	11	3.7%
Total		294	100.0%

Sexual dysfunction was seen among 141 (48%) of clients. Among the majority 212 (72.1%) were using SSRI (Selective Serotonin Reuptake Inhibitors) while 64 (21.8%) were tricyclic antidepressant users and 18 (6.1%) were serotonin-norepinephrine reuptake inhibitors as shown in table 2.

Table 2: Type of antidepressant use (n=294)

Types of Antidepressant use	Frequency	Percent %
Selective Serotonin Reuptake Inhibitor	212	72.1%
Tricyclic Antidepressant	64	21.8%
Serotonin nor Epinephrine Reuptake Inhibitor	18	6.1%
Total	294	100.0%

In the frequency of types of sexual dysfunction, erectile dysfunction was diagnosed in 71 (24.1%), male hypoactive sexual desire in 23 (7.8%), delayed ejaculation in 23 (7.8%), and premature (early) ejaculation was found in 23 (7.8%) patients as shown in table 3.

Table 3: Types of sexual dysfunctions

Types of Sexual Dysfunction	Frequency	Percent %
Delayed Ejaculation	23	7.8%
Male Hypoactive Sexual Desire Disorder	24	8.2%
Premature (Early) Ejaculation	23	7.8%
Erectile Dysfunction	71	24.1%
Total	141	47.90%

Statistically, types of antidepressants use were significantly associated with sexual dysfunction having p value of less than 0.05 as shown in table IV

Table 4: Stratification of type of antidepressant use (n=294)

Type of Antidepressant use	Total	Sexual Dysfunction		P value
		Yes	No	
Selective Serotonin Reuptake Inhibitor	212	93 (43.86%)	119	0.013
Tricyclic Antidepressant	64	41 (64.06%)	23	
Serotonin nor Epinephrine Reuptake Inhibitor	18	7 (38.89%)	11	
Total	294	141 (47.95%)	153	

DISCUSSION

The aim of the present study was to determine the frequency of sexual dysfunction affecting depressed male patients using antidepressants. Sexual dysfunction is both a common symptom of depression and an effect associated with antidepressants.[10] Approximately 48–55% of patients met the criteria for baseline sexual dysfunction in this study. This is similar to the level of baseline sexual dysfunction in the phase III Vilazodone study.[11]

In this study, we have assessed sexual dysfunction of any type among those on antidepressant treatment which has also been assessed in past studies and the results are comparable with other local and international studies.[12,13] The current study is quite comparable with the previous study showing sexual dysfunction of 62.5%[14] which is higher than ours but the difference is in methodology as the latter study assessed sexual dysfunction through Arizona sexual dysfunction scale and we assessed by ICD-10 criteria. This study showed that erectile disorder was the leading problem among types of sexual dysfunctions which was 24.1% in this study which is comparable with the study conducted in India showing (24.94%)[15] were patients with Erectile Dysfunction (ED) and (16.78%) were that of Premature Ejaculation and in Pakistan at Aga khan University which showed that 29% had the erectile disorder and 24%[16] had premature ejaculation while in our study premature ejaculation is 7.8%. In contrast, one case report also showed priapism with Citalopram (SSRI) which is rare with SSRIs.[17] Our sample was exclusively male. This is in accordance with a similar though a much larger study from this region in which the proportion of males among people presenting to a marriage and sex clinic in India was around 98%.[18]

There could be several explanations for this male preponderance. The sexual health clinic from which these data are reported is run by a male psychiatrist. Females may have been inhibited from seeking help from a male on sexual issues because of cultural reasons. There is also a dearth of female psychiatrists in Pakistan. It is possible that Pakistani females may be more comfortable seeking help regarding sexual health from gynecologists who are overwhelmingly female in Pakistan. In previous studies, it is shown that sexual dysfunction has been found more in those who are on active antidepressant treatment[19] but it is also evident that antidepressants do cause sexual dysfunctions.[20]

Here in our study sexual dysfunction is significantly associated with the use of antidepressants. There is a dire need to conduct a community-based study on a larger population and observe the side effects of differing antidepressants among patients with depressive disorder with specific presentations.

CONCLUSION

Sexual dysfunction is commonly presented in depressed male patients and there is a need to screen all antidepressant users for sexual dysfunction.

LIMITATIONS

This is a hospital based study and can't be generalized.

SUGGESTIONS / RECOMMENDATIONS

Through this study it is suggested that while prescribing anti-depressants to patients of depressive disorder, they should be screened for sexual dysfunction.

Further researches in this area should be encouraged.

CONFLICT OF INTEREST / DISCLOSURE

No conflict of interest

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