Sexual dysfunction in married female patients on antidepressants: A Cross Sectional Observational study from Patna medical college and hospital



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ABSTRACT

Background: Clinicians and patients now have a broad variety of antidepressants to choose from, due to an ever-growing pharmacopoeia. However, one of the most significant considerations preventing antidepressant use is their side effects, one of which is sexual dysfunction. This issue has a negative impact on the patient's quality of life which can contribute to clinical non-adherence in long-term therapies. Aims and Objectives: The objective of this research was to look into the characteristics of sexual dysfunction in married female antidepressant patients and patterns of sexual dysfunctions in female patients receiving antidepressants. Materials and Methods: It was Cross-sectional observational study. The study was conducted in the department of Psychiatry, Patna Medical College and Hospital at Patna. The Departmental Research Committee accepted the report, and 50 patients were enrolled after receiving written informed consent. Purposive sampling was used to pick the sample for the analysis, which had a cross-sectional study. The women contacted were in the outpatient psychiatric care of the department of Psychiatry and had been diagnosed with depressive disorder during the study period June 2018 to February 2019. Results: Seventy percent of patients were taking selective serotonin reuptake inhibitors (SSRIs), 20 % were taking tricyclic antidepressants (TCAs), and 10 % were taking other medications such as mirtazapine or desvenlafexine. Within six months, 44 % of patients were on therapy, and 22.0 % had been on treatment for more than two years. Patients taking Escitalopram (80 %) have less sexual activity than those taking Sertraline (66.7 %) or Fluoxetine (77.8 %), Patients observed a change in sexual activity in 58 percent of cases, a decrease in sexual desire in 70 % of cases (p = 0.0009*), a slight decrease in 14 percent of cases, and a slight decrease in only 8 % of cases (p = 0.0009). 18 % of patients reported a delay in orgasm, with 66 percent reporting a major delay, 8 % reporting a moderate delay, and 8 % reporting a slight delay (p = 0.0001). Conclusion: Our findings indicate that sexual dysfunction is common in married female patients taking antidepressants, and that antidepressants affect both aspects of sexual functioning.

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INTRODUCTION

Clinicians and patients now have a wide range of antidepressants to choose from, thanks to an ever-growing pharmacopoeia. However, one of the most significant factors preventing antidepressant use is their side effects, one of which is sexual dysfunction. This concern has a negative effect on the patient's quality of life which can contribute to clinical non-adherence in long-term therapies. Sexual dysfunction has been identified as a possible side effect in both antidepressant types (MAOIs, TCAs, SSRIs, SNRIs and newer antidepressants).²

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The incidences and prevalence rates of sexual dysfunctions have ranged considerably between trials, reflecting variations in methods such as the type of trial, the clinical condition for which the medications were administered, the baseline monitoring, and so on. In addition, there are evaluation approaches such as random reporting, open-ended queries, and validated assessment techniques. However, the common opinion is that patients taking selective serotonin reuptake inhibitors (SSRI),³ and monoamine oxidase inhibitors have a large rate of sexual dysfunction (range 30-65 %). (MAOI).⁴

Further research suggests that some antidepressants impair sexual functioning at all stages of the sexual cycle.⁵ Antidepressants such as mirtazapine, reboxetine, bupropion, and moclobemide have been linked to lower rates of sexual dysfunction (ranging from 0 % to 24 %).^{6,7}

In addition to antidepressants, studies have found that a variety of other causes affect the frequency and prevalence of sexual dysfunction in depressed patients. Depressive signs, environmental and social causes, and physical and mental co-morbidities are all examples of these.

Female sexual dysfunction is defined as discomfort encountered by a woman or a couple at any stage of normal sexual activity, such as physical stimulation, desire, preference, arousal, or orgasm, resulting in a variety of distressing sexual health issues such as female sexual interest or arousal disorder, female orgasmic disorder, and genito-pelvic pain or penetration disorder. Sexual disorder is prevalent in women, and it can have a major effect on a person's sexual life quality and drug adherence. 9

Indian society is traditionally considered to be conservative in nature, especially with respect to discussion of sexual matters by females. Nevertheless, a recent study from our centre reported that the married females have adequate sexual knowledge and a fairly liberal attitude towards sex. Considering this fact and also the lack of enough data specifically for females, the present research was conducted with the aim to study the Sexual Dysfunction in Married Female Patients on Antidepressants at Presenting in Patna Medical College

Indian culture has a reputation for being conservative, especially when it comes to females discussing sexual matters. Nonetheless, according to a new study conducted by married women have sufficient sexual experience and a fairly liberal outlook toward sex. Due to this fact, as well as a lack of data specifically for females, the current study was conducted with the aim the Sexual Dysfunction in Married Female Patients on Antidepressants at Presenting in Patna Medical College.

MATERIALS AND METHODS

It was Cross-sectional observational study. The study was conducted in the department of Psychiatry, Patna Medical College and Hospital at Patna after approval from the Institutional Ethical Committee. The Departmental Research Committee accepted the report, and 50 patients were enrolled after receiving written informed consent. Purposive sampling was used to pick the sample for the analysis, which had a cross-sectional study. The women contacted were in the outpatient psychiatric care of the department of Psychiatry and had been diagnosed with depressive disorder during the study period June 2018 to February 2019.

They were informed about the study's intent and given the option to approve or decline participation in the study. They were also told that if they were discovered to have sexual addiction, they would be offered assistance by their practicing doctor, based on their willingness.

Patients were chosen using a convenient sampling method. Female patients who had been on antidepressants for more than 4 to 5 weeks, with or without benzodiazepines, and who had normal sexual function prior to therapy were informed about the study's intent and given the option to participate or not.

Inclusion Criteria

- Patients with a diagnosis of depressive disorder.
- Female patients who were married and cohabitating with their husbands.
- A stable dose of a single antidepressant for at least 3 months prior.

Exclusion Criteria

- Female patients, who were single, divorced or separated.
- Those with history of sexual dysfunction either prior to onset of depressive disorder.
- Patients with co-morbid psychiatric disorders.
- Co-morbid diagnosis of substance dependence.
- Consuming alcohol daily.
- Hypertension.
- Diabetes mellitus.
- Thyroid dysfunction,
- Cardiovascular disorders.
- Renal dysfunctions.
- Neurological disorders.
- Patients who had attained menopause were also excluded.

Assessment Tools

The patients were assessed using the DSM-IV-TR in a different room by a consulting psychiatrist, and all

sociodemographic correlates were recorded for each patient. The PRsexDQ-salsex scale10 was used to test the patients for sexual dysfunction. The PRsexDQ-salsex (Psychotrophic-Related Sexual Dysfunction Questionnaire) is a 7-item questionnaire about sexual dysfunction. The first item is a screening item to assess any sort of sexual dysfunction. The second issue investigates whether the patient immediately reveals sexual dysfunction to the psychiatrist.

The following elements measure five aspects of sexual dysfunction: decreased sexual appetite, delayed orgasm or ejaculation, inability to achieve orgasm or ejaculation, difficulties in achieving vaginal lubrication, and the patient's tolerance to sexual dysfunction based on intensity or frequency. The patient's lack of worry, including the presence of some kind of sexual dysfunction, defines good tolerance. Where sexual illness triggers concern or discomfort, but the patient does not plan to stop therapy as a result, the equal tolerance strategy was used. When the patient was really nervous with the side effects and is seriously considering stopping therapy, the low tolerance was used.

Statistical Analysis

The information was presented in the form of a frequency distribution and percentages. Important variations were found using the Epi cal and chi-square goodness of match test through different sociodemographic correlations, with a p-value of <0.05 considered relevant.

RESULTS

Out of 50 cases, 22 (44 %) were belong in 31-40 years of age group. 08 (16 %) cases were found in 25-30 years of age group, and 20(40 %) cases were found in 41-45 years of age group respectively (Table 1).

All the patients were married, mostly illiterates (68 %) and literate 32 %, unemployed (82 %) and employed 18 %, belonging to nuclear family (84 %) and joint family 16 %, respectively (Table 2).

Out of 50 cases 66 % of patients on treatment qualify for diagnostic criteria (DSM-TR-IV) of Major depressive

Table 1: Age distribution among study population (n=50) Age group in Year Frequency Percentage 25 – 30 08 16.0 31 - 4022 44.0 41 – 45 20 40.0 Total 50 100 Mean & SD 39.42±2.14

disorder followed by Somatization disorder 22 %, panic disorder 08 %, OCD 04 % and others 02 %. We have found 76 % of the females were sexually active, with frequency of sexual activity more than 5 times per month in 57.9 % of females. 31.6 % cases of sexual activity were 3-5 times in a month and 10.5 % cases of sexual activity were 1-2 times in a month respectively. Forty-four percent of patents are undergoing treatment for 3 to 6 months, 20 % patients are undergoing treatment 7 to 12 months, 14 % patients are undergoing treatment 13 to 24 months and 22 % patients are undergoing treatment >24 months respectively (Table 3).

It was seen that the greatest number of patients were taking anti-depressants SSRIs. i.e. 35 (70.0 %) of the cases out of 50. 10(20.0 %) patients receiving TCA's and 05(10.0 %) patients received others anti-depressants (Table 4).

In patients treated with SSRIs sexual activity was changed higher in patients taking Escitalopram (80 %), followed by Fluoxetine (77.8 %), Sertraline (66.7 %), Fluoxamine (66.7 %) and Paroxetine (50 %). Regarding TCAs we found sexual activity was changed only in patients taking

Table 2: Distribution demographical characteristics (n=50)			
Demographical Characteristics	Frequency	Percentage	
Literate	16	32.0	
Illiterate	34	68.0	
Employed	09	18.0	
Unemployed	41	82.0	
Nuclear	42	84.0	
Joint	08	16.0	

Table 3: Patients depressive disorders and sexual activity (n=50)				
Depressive disorder	Frequency	Percentage		
DSM-TR-IV	33	66.0		
Somatization disorder	10	22.0		
panic disorder	04	8.0		
OCD	02	4.0		
Others	01	2.0		
Total	50	100.0		
Sexual activity	Frequency	Percentage		
Yes	38	76.0		
No	12	24.0		
Sexual activity per month				
1-2	04	10.5		
3 - 5	12	31.6		
>5	22	57.9		
Duration of the treatment				

Duration of the treatment			
Duration of the treatment	Frequency	Percentage	
3 months to 6 months	22	44.0	
7 months to 12 months	10	20.0	
13 months to 24 months	07	14.0	
>24 months	11	22.0	
Total	50	100.0	

Prothiaden (40 %) no sexual activity was changed in patients taking Clomipramine and Imipramine. Miratazapine showed change in sexual activity in 33.3 % patients. Patients taking Desvenlafaxine showed no change in sexual activity (Table 5).

Seventy percent of patients were taking selective serotonin reuptake inhibitors (SSRIs), 20 % were taking tricyclic antidepressants (TCAs), and 10 % were taking other medications such as mirtazapine or desvenlafexine. Within six months, 44 % of patients were on therapy, and 22.0 % had been on treatment for more than two years. Patients taking Escitalopram (80 %) have less sexual activity than those taking Sertraline (66.7 %) or Fluoxetine (77.8 %), Patients observed a change in sexual activity in 58 percent of cases, a decrease in sexual desire in 70 % of cases (p=0.0009*), a slight decrease in 14 percent of cases, and a slight decrease in only 8 % of cases (p=0.0009*). 18 % of patients reported a delay in orgasm, with 66 percent reporting a major delay, 8 % reporting a moderate delay, and 8 % reporting a slight delay (p=0.0001*). Only 20 % of patients were able to experience orgasm. Obtaining vaginal lubrication is difficult for 20 % of patients (p=0.0001*). Out of the 40 %, 28 % have tolerated the problem well, 24 % have complained that the dysfunction bothers them despite continuing their medication as normal, and only 8 % have not tolerated the dysfunction and have had it discontinued (Table 6).

DISCUSSION

The bulk of trials that have looked at sexual dissatisfaction among antidepressant patients have used a diverse population of both genders and haven't looked at other

Table 4: Type of anti-depressants			
Type of Anti-Depressants	Frequency	Percentage	
SSRI's	35	70.0	
TCA's	10	20.0	
Others	05	10.0	
Total	50	100.0	

causes including psychopathology that may lead to sexual dysfunction when on antidepressants. Some of these findings focused on inaccurate and unvalidated measures of sexual dysfunction, such as random reporting, openended questions, or unreliable and unvalidated measures of sexual dysfunction.

It was Cross-sectional observational study. The study was conducted in the department of Psychiatry, Patna Medical College and Hospital at Patna. The Departmental Research Committee accepted the report, and 50 patients were enrolled. Married women who were sexually active (42 %) or inactive (58 %). Other studies¹¹⁻¹³ have discovered similar findings. However, only 12 % of patients spontaneously reported sexual dysfunction, while the majority did so after being asked questions about sexual dysfunction using a validated sexual function-specific instrument, and the outcome matched previous studies.¹¹ This may be due to cultural factors,¹⁴ as all patients were females, married, and unemployed, with a mean age of 39.422.14 years.

In this study majority patients were married, with the majority of them being illiterates (68 %) and unemployed (82 %) and belonging to a nuclear family (84 percent). Illiterates from a nuclear household with a social status of class IV. Sexual desire dysfunction was the most common among the multiple domains, followed by orgasmic dysfunction and difficulty obtaining vaginal lubrication. This is in concurrence with the study reported by Grover et al.15 The lack of a correlation between antidepressantrelated sexual dysfunction and most sociodemographic and clinical variables in this sample indicates that the incidence of sexual dysfunction can be due to antidepressants alone at best. Female sexual dysfunction is age-related and egalitarian, according to Berman et al.,16 Montejo et al.,17 found a similarity between patient age and a lower tolerance for sexual dysfunction, suggesting that when a patient gets older, he or she becomes more anxious with sexual dysfunction.

Table 5: Sexual dysfunction on antidepressant used of SSRI's, TCA,s and others				
SSRI's (n=35)	No of Cases Antidepressant Used	Sexual Activity Change	No Change Sexual Activity	P Value
Escitalopram	15(42.9%)	12(80%)	3(20%)	0.001*
Fluoxetine	9(25.7%)	7(77.8%)	2(22.2%)	0.029*
Sertraline	6(17.1%)	4(66.7%)	2(33.3%)	0.281
Fluvoxamine	3(8.5%)	2(66.7%)	1(33.3%)	0.499
Paroxetine	2(5.7%)	1(50%)	1(50%)	0.158
TCA's (n=10)	No of Cases antidepressant used	Sexual activity Change	No change sexual activity	P Value
Prothiaden	5(50%)	2(40%)	3(60%)	0.500
Clomipramine	3(30%)	0	3(100%)	0.05*
Imipramine	2(20%)	0	2(100%)	0.15
Others (n=5)	No of Cases antidepressant used	Sexual activity Change	No change sexual activity	P Value
Miratazapine	3(60%)	1(33.3)	2(66.7)	0.49
Desvenlafaxine	2(40%)	0	2(100%)	0.15

	Table 6: Nature of sexual dysfunction among study population			
Dec	rease in Sexua	al desire		
0	18(36%)	Chi-Square- 16.4	p<0.0009	
1	04(8%)			
2	07(14%)			
3	21(42%)			
Dela	y in Orgasm			
0	33(66%)	Chi-Square- 46.16	p<0.0001	
1	04(8%)			
2	04(8%)			
_3	09(18%)			
Una	Unable to attain orgasm			
0	42(84%)	Chi-Square- 93.2	p<0.0001	
1	04(8%)			
2	01(2%)			
3	03(6%)			
Vag	Vaginal lubrication			
0	40(80%)	Chi-Square- 81.6	p<0.0001	
1	06(12%)			
2	03(6%)			
3	01(2%)			
Tole	Tolerance			
0	20(40%)	Chi-Square- 10.48	p<0.01	
1	14(28%)			
2	12(24%)			
3	04(8%)			

We have found in 50 cases, 66 % of patients on care meet the diagnosis criteria for major depressive disorder (DSM-TR-IV), followed by somatization disorder (22 %), panic disorder (8 %), OCD (4 %), and others (2 %). We discovered that 76 percent of females were sexually active, with 57.9 % of females experiencing sexual intercourse more than 5 days a month. Sexual activity occurred 3–5 times a month in 31.6 percent of cases and 10.5 percent of cases in 1–2 days a month in 10.5 percent of cases. 44 percent of patents are undergoing treatment for 3 to 6 months, 20 % are undergoing treatment for 7 to 12 months, 14 % are undergoing treatment for 13 to 24 months, and 22 % are undergoing treatment for more than 24 months.

Antidepressants disrupt sexual functioning in all stages of the sexual response cycle, according to these findings.¹⁵ Patients taking serotonin reuptake inhibitors (SSRIs) have the highest rate of sexual dysfunction, with up to 80.0 percent of patients showing a reduction in sexual dysfunction, which is consistent with the findings of other studies.⁵

Patients taking Escitalopram (80 percent) had more improvements in sexual behavior than people taking Fluoxetine (77.8%), Sertraline (66.7 percent), Fluoxamine (66.7 percent), and Paroxetine (66.7 percent) (50 percent). In the case of TCAs, we discovered that sexual behavior was altered only in patients taking Prothiaden (40%) and

not in patients taking Clomipramine or Imipramine. In 33.3 percent of patients, miratazapine caused a decrease in sexual behavior. Sexual intercourse was unaffected in Desvenlafaxine patients.

Similar study by Grover et al., found that 46.63 % of SSRI patients, 50 % of SNRI patients, 42.85 % of TCA patients, and 16.66 % of mirtazapine patients had sexual dysfunction. These numbers are in accordance with what has been reported with this antidepressants.¹⁷

Patients taking Escitalopram had more sexual dysfunction than those taking Venlafaxine, Paroxetine, Desvenlafaxine, Sertraline, Fluvoxamine, Fluvoxetine, Clomipramine, Mirtazapine, Prothiaden, and Imipramine, according to Montgomery SA et al. ¹⁸ The majority of TCA users reported a decrease in sexual desire, orgasmic delay was common among SSRI users, and difficulty achieving vaginal lubrication was common among SNRI users. Similar research has discovered that selective serotonin reuptake inhibitors and serotonin noradrenaline reuptake inhibitors suppress desire, cause erectile dysfunction, and reduce vaginal lubrication.

Patients' orgasm is also affected.¹⁹ This side effect is used in medicine to prevent premature ejaculation. Sexual desire and orgasm are inhibited by tricyclic antidepressants.¹⁸

Limitations of the study

The limited sample size and cross-sectional nature of this analysis restrict its results. It only looked at married female patients who were seeking antidepressants with an underlying psychiatric disorder at a tertiary care hospital. We didn't try to evaluate the couple's marital transition until they started antidepressants, and we didn't gather any clear evidence on disagreements between the couples on different topics. The impact of antidepressant-related sexual dysfunction on care completion and adherence, marriage transition, and partner anxiety was not investigated.

The prevalence rates observed in this research cannot be extended since there were very few patients on any of the antidepressants.

CONCLUSION

Our findings indicate that sexual dysfunction is common in married female patients taking antidepressants, and that antidepressants affect both aspects of sexual functioning.

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Authors Contribution:

VPS-Concept and design of the study; prepared first draft of manuscript; APS- Interpreted the results; reviewed the literature and manuscript preparation; NPS- Concept, coordination, review of literature and manuscript preparation; APS- Statistically analysed and interpreted, preparation of manuscript and revision of the manuscript

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