FREQUENCY OF SEXUAL DYSFUNCTION AMONG PATIENTS RECEIVING SELECTIVE SEROTONIN REUPTAKE INHIBITORS

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ABSTRACT

OBJECTIVES

This study aims to determine the frequency of sexual dysfunction among patients undergoing SSRI treatment.

METHODOLOGY

A cross-sectional study was conducted at the Department of Psychiatry, MTI Lady Reading Hospital, Peshawar, from December 2023 to June 2024. Using non-probability consecutive sampling, 288 patients aged 20-40 years receiving SSRIs for at least 12 weeks for various psychiatric disorders were enrolled. Patients with severe medical illnesses, substance dependence, or pre-existing sexual dysfunction were excluded. Sexual dysfunction was assessed using the Arizona Sexual Experience Scale (ASEX). Data were analyzed using SPSS version 26. Chi-square test was applied, and $p \leq 0.05$ was considered statistically significant.

RESULTS

The mean age of the patients was 27.20±5.40 years. The mean duration of SSRI use was 2.61±1.12years. The p-value >.05 indicated that there is no statistically significant correlation between SSRI duration (1-3 years vs. >3 years) and sexual dysfunction. Among the participants who had sexual dysfunction, 56 (62.2%) were male, while 34 (37.8%) were female and aged 2-30 years, but the association was not statistically significant ($\chi^2 = 1.34$, $p = 0.246$, $\varphi = 0.07$). The chi-square result shows no statistically significant difference between demographic and clinical variables and sexual dysfunction, and the effect size shows a very small association.

CONCLUSION

A substantial proportion of patients receiving SSRIs experienced sexual dysfunction, highlighting the need for routine screening and counseling in psychiatric practice.

KEYWORDS: *Sexual Dysfunction, Ssri, Antidepressants, Selective Serotonin Reuptake Inhibitors*

INTRODUCTION

DSM-5-TR criteria define sexual dysfunction linked to drugs or other substances as either pain related to sexual activity or a disruption in the processes that make up the sexual response cycle (desire/arousal-excitement-orgasm-resolution). The use of medicine is the only explanation for the dysfunction, which causes significant discomfort or interpersonal issues; the symptoms appear within a month of starting the prescription, or the medication's usage is etiologically linked to the disturbance[1]. Selective serotonin reuptake inhibitors (SSRIs) are a common class of drugs that are mainly administered to treat depression and other mental illnesses. They work by raising the brain's serotonin levels, which are thought to improve mood and emotional stability. SSRIs are preferred over previous antidepressants due to their safety and tolerability, which makes them a first-line treatment option for illnesses like obsessive-compulsive disorder, anxiety disorders, and even rehabilitation from a stroke.[2,3,4] Selective serotonin reuptake inhibitors (SSRIs) have a well-established side effect of sexual dysfunction. Reduced libido, erectile dysfunction, trouble having an orgasm, and diminished sexual satisfaction are some of the ways this problem might show itself. Although the frequency and severity of these side effects vary from person to person, they can significantly affect patients' quality of life and adherence to therapy.[6] According to a study, sexual dysfunction affected 84% of female patients using SSRIs; the rates varied depending on the SSRIs, with sertraline (66.6%), fluoxetine (86.20%), and escitalopram (86.76%).[7] Another case study conducted on post-SSRI sexual dysfunction (PSSD) showed chronic sexual dysfunction with psychosocial repercussions. Patients expressed feelings of discomfort, low self-esteem, and strained relationships, highlighting the necessity for comprehensive management measures.[8] The probability of sexual dysfunction may vary depending on the type of SSRI taken. For instance, compared to other SSRIs, paroxetine has been linked to a higher rate of sexual dysfunction.[5] The significant impact of these side effects

is highlighted by the fact that patients with sexual dysfunction reported worse ratings in the social connections and environmental categories of quality of life.[7] Sexual dysfunction can create distress, which can result in pharmaceutical non-adherence and complicate treatment outcomes.[9] The measurement of general prevalence is complicated by the fact that certain patients may have post-SSRI sexual dysfunction (PSSD), which is persistent sexual dysfunction even after stopping SSRIs.[10] While there exists an abundance of research on sexual dysfunction caused by SSRIs, local data from Pakistan, particularly from Khyber Pakhtunkhwa, remain limited. Sociocultural factors and stigma may contribute to the underreporting of such side effects. Therefore, this study aimed to determine the frequency of sexual dysfunction among patients treated with SSRIs at Lady Reading Hospital, Peshawar. We hypothesized that a significant proportion of patients using SSRIs experience sexual dysfunction.

METHODOLOGY

A cross-sectional study was conducted on 288 patients aged 2-40 years of both genders using SSRIs for more than 12 weeks for various psychiatric indications at the Department of Psychiatry, MTI Lady Reading Hospital, Peshawar. Although the minimum inclusion duration for SSRI use was 12 weeks, many participants had been receiving long-term treatment, resulting in a mean duration of 2.61 years. The age range of 20-40 years was selected to minimize the confounding effects of age-related sexual dysfunction and chronic comorbidities that are more prevalent in older populations. Patients with diabetes mellitus, hypertension, cardiovascular disease, gonadal injury, endocrine problems, substance misuse, and sexual dysfunction before starting antipsychotic medications (determined on history and medical record) were excluded. The study period was from 17 December 2023 to 17 June 2024. Approval was obtained from the hospital's ethical board [Approval No. 585/LRH/MTI]. Written informed consent was obtained from patients after the purpose of the study was explained. A non-probability consecutive sampling technique was utilized. Demographic details like age, gender, marital status, education, occupation, socio-economic status, indication of SSRIs, and duration of SSRI use were collected. Data regarding their presenting complaint(s), history of substance misuse, psychiatric illness, or medical illness, and what physical investigations they had undergone were noted. Confidentiality and anonymity of participants were strictly maintained. For assessment of the patients' sexual function, the 'Arizona Sexual Experience Scale' (ASEX) was used. The Arizona Sexual Experience Scale (ASEX) is a validated five-item instrument assessing sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm, and satisfaction from orgasm. Previous studies have demonstrated excellent internal consistency, scale reliability, and strong test-retest reliability of ASEX across various clinical populations.[11] Patients with sexual dysfunction were treated as per hospital protocol. Data were analyzed using SPSS version 26.0. The mean and standard deviation were calculated for quantitative variables, such as age and duration of SSRI use. Frequencies and percentages were calculated for categorical variables like gender, occupation, education status, indication of SSRI, and sexual dysfunction. Effect modifiers such as age, gender, education, employment status, socio-economic status, SSRI indication, and SSRI duration were addressed through stratification of the data. Post-stratification chi-square was applied, and a p-value ≤0.05 was taken as statistically significant.

RESULTS

The mean age of the patients in the study was 27.20±5.40 years. The mean duration of SSRI use was 2.61±1.12 years.

Table 1: Descriptive statistics of Demographic variables (N = 288)

	Variables	Frequency (n)	Percentage (%)
Age	20 to 30	223	77.4
	31 to 40	65	22.6
Gender	Male	171	59.4
	Female	117	40.6
Duration of SSRIs use (in yrs)	1 to 3 years	205	71.2
	> 3 years	83	28.8
Indication For SSRIs	Depression	138	47.9
	GAD	98	34.0
	OCD	52	18.1

Table 2: Frequency Distribution of sexual dysfunction

Sexual dysfunction	Frequency (n)	Percentage (%)
Yes	90	31.3
No	198	68.8

Table 3: Stratification of sexual dysfunction with Demographic variables

Variables		Sexual Dysfunction		χ^2	P-value	Effect Size
		Yes	No			
		n (%)	n (%)			
Age distribution	20 to 30	74(82.2)	149(75.3)	1.34	0.19	0.07
	31 to 40	16(17.8)	49 (24.7)			
Gender	Male	56(62.2)	115(58.1)	0.29	0.51	0.03
	Female	34(37.8)	83 (41.9)			
Indication for SSRI	Depression	42(46.7)	96 (48.5)	0.45	0.79	0.04
	Generalized anxiety disorder	33(36.7)	65 (32.8)			
	Obsessive-compulsive disorder	15(16.7)	37(18.7)			
Duration of SSRI use	1 to 3 years	60(66.7)	145(73.2)	1.00	0.25	0.06
	> 3 years	30(24.4)	53(26.8)			

DISCUSSION

Sexual dysfunction is the most common side effect of selective serotonin reuptake inhibitors (SSRIs) for depression, which has a major negative impact on patients' quality of life and adherence to therapy. Research demonstrates that sexual dysfunction varies among SSRI users, with reports ranging from 27% to 84%.[7,5,12,13] The purpose of this study was to ascertain the frequency of sexual dysfunction in patients at Lady Reading Hospital in Peshawar who were using selective serotonin reuptake inhibitors (SSRIs). The result of this study was in agreement with a study which showed a prevalence of 39%.[14] However, it is in contrast with several earlier studies that discovered that many patients reported experiencing sexual dysfunction with an overall incidence of 58% to 73%after receiving antidepressant therapy. The prevalence of Sexual dysfunction found in our study is lower than many international studies reported.[15,16] First, underreporting of sexual symptoms may be caused by cultural and socio-economic factors in Pakistan, especially since conversations about sexual health are often considered sensitive or stigmatized. Participants may have concealed or reduced symptoms despite assurances of confidentiality due to social norms that discourage open discussion of sexual functioning, embarrassment, or fear of being judged. The true prevalence of sexual dysfunction may have been underestimated as a result of this reporting bias. In contrast, other international studies used numerous assessment tools or more in-depth clinical interviews that could identify broader dimensions of sexual dysfunction.[17,18] Differences may also influence prevalence estimates across studies in SSRI type, dose, psychiatric diagnosis, severity of illness, and treatment duration. The study's findings regarding gender differences should also be taken into account. Males reported sexual dysfunction at a slightly higher rate than females, but the effect size was small, and the correlation was not statistically significant. Findings of the present study differ from some previous studies in which women, as compared to men, reported greater impairment in arousal and overall sexual satisfaction.[9] The present study also found no statistically significant difference between sexual dysfunction and duration of SSRI use. In one of the research studies, sexual dysfunction was reported by 95.6% of women and 97.9% of men who were SSRI patients. Women experienced more problems in the arousal phase (83.3%), but men displayed greater dysfunction in the desire (91.2%) and orgasmic phases (85.1%).[17] However, in our study, among the people who have sexual dysfunction(n=90), 62.2% (56) were male, while 37.8% (34) were female. According to another study, sexual dysfunction affected 31.03% of patients using selective serotonin reuptake inhibitors (SSRIs), with a higher prevalence in men (70.37%). Decreased libido was the most often mentioned problem, impacting 62.96% of dysfunctional individuals.[5] Unlike some previous studies demonstrating increased dysfunction with prolonged SSRI use, our findings did not reveal a significant association. Cultural stigma and reluctance to discuss sexual matters in conservative societies such as Pakistan may have contributed to underreporting of symptoms, potentially explaining the lower prevalence observed compared with international literature. In this study, there is no statistically significant difference in the duration of SSRIs (1-3 years vs. >3 years). A study showed that the duration of SSRI medication was significantly correlated, suggesting that longer SSRI use may be linked to higher levels of sexual dysfunction.[15] This requires further research, especially to find out if any confounding factors have influenced the current results. Although the associations between demographic and clinical variables and sexual dysfunction were statistically nonsignificant, the clinical importance of sexual dysfunction should not be underestimated. While SSRIs work effectively for dealing with depression, the sexual dysfunction they induce can cause severe distress and drive many to stop taking them. This underscores the need for regular screening and management to address these adverse effects effectively. Further longitudinal and multi-center research is needed to investigate the long-term effects of SSRIs on sexual function, the impacts of various SSRIs, and the efficacy of therapies for managing these side effects.

LIMITATIONS

This study was conducted at a single center; therefore, the results might not apply to different populations or healthcare environments in Pakistan due to cultural and healthcare variations. The sole assessment evaluation used for sexual dysfunction was a single validated screening instrument (ASEX); this instrument primarily assesses overall sexual functioning without a detailed exploration of such specific domains as relational satisfaction, partner-related factors, or psychological distress. The use of a single scale may, therefore, limit the depth of sexual dysfunction interpretation. Only univariate analysis was performed using the Chi-square test; multivariable logistic regression analysis was not conducted to adjust for potential confounding variables. Future studies are recommended to incorporate multiple assessment tools or qualitative interviews.

CONCLUSIONS

Sexual dysfunction was frequently observed among patients receiving SSRIs at a tertiary care hospital in Peshawar. Although no significant associations were found with duration of treatment or psychiatric diagnosis, the findings emphasize the importance of routine screening for sexual adverse effects in psychiatric practice. Addressing these symptoms through early counseling and individualized management may improve treatment adherence and quality of life.

CONFLICT OF INTEREST: None

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REFERENCES

1. Bolan R. SSRI-associated sexual dysfunction. Am J Psychiatry. 2006;163(9):1504-9. https://doi.org/10.1176/ajp.2006.163.9.1504 PMID: 16946175.
2. Chu A, Wadhwa R. Selective serotonin reuptake inhibitors. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020. Available from: https://www.ncbi.nlm.nih.gov/books/NBK554406/ PMID: 32119345.
3. Bruggeman C, O'Day CS. Selective serotonin reuptake inhibitor toxicity. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021. Available from: https://www.ncbi.nlm.nih.gov/books/NBK534815/ PMID: 30521250.
4. Saad A, Nguyen P, Belagaje S. Selective serotonin reuptake inhibitors. In: Stroke Revisited: Diagnosis and Treatment of Ischemic Stroke. Cham: Springer; 2016. p. 209-16. https://doi.org/10.1007/978-3-319-17750-2_20
5. KC B, Vaidhya L, Ghimire R, Sharma R, Karki M. Sexual dysfunction in selective serotonin reuptake inhibitor receiving patients attending psychiatric outpatient department at a tertiary hospital in Pokhara: a cross-sectional study. J Patan Acad Health Sci. 2024;11(1):33-8. https://doi.org/10.3126/jpahs.v11i1.64495
6. Higgins A, Nash M, Lynch AM. Antidepressant-associated sexual dysfunction: impact, effects, and treatment. Drug Healthc Patient Saf. 2010;2:141-50. https://doi.org/10.2147/DHPS.S7634 PMID: 21701626.
7. Vasava KJ, Sharma MV, Shah AH, Doshi NH, Panchal BN. Sexual dysfunction and quality of life in female patients on selective serotonin reuptake inhibitors. 2023. https://doi.org/10.56018/20231210
8. Gargul K, Pastwa-Wojciechowska B. Psychological and sexual functioning of persons suffering from post-SSRI sexual dysfunction: a case study. Curr Issues Personal Psychol. 2024;13(1):35-41. https://doi.org/10.5114/cipp/193244
9. Rothmore J. Antidepressant-induced sexual dysfunction. Med J Aust. 2020;212(7):329-34. https://doi.org/10.5694/mja2.50522 PMID: 32270943.
10. Healy D, Mangin D. Post-SSRI sexual dysfunction: barriers to quantifying incidence and prevalence. Epidemiol Psychiatr Sci. 2024;33:e40. https://doi.org/10.1017/S2045796024000441 PMID: 39110462.
11. Elnazer HY, Baldwin DS. Structured review of the Arizona sexual experiences scale in clinical settings. Hum Psychopharmacol. 2020;35(3):e2730. https://doi.org/10.1002/hup.2730 PMID: 32100309.
12. Ghazizadeh S, Nikzad M. Botulinum toxin in the treatment of refractory vaginismus. Obstet Gynecol. 2004;104(5 Pt 1):922-5. https://doi.org/10.1097/01.AOG.0000142718.48249.d5 PMID: 15516379.
13. Penubarthi S, Kailash SZ, Sureshkumar K, Rajalakshmi AK. Sexual dysfunction in remitted female patients with depression on SSRIs: associated factors and relation to marital satisfaction and quality of life. Indian J Psychol Med. 2022;44(5):452-8. https://doi.org/10.1177/02537176221111954 PMID: 36203961.
14. AlBreiki M, AlMaqbali M, AlRisi K, AlSinawi H, Al Balushi M, Al Zakwani W. Prevalence of antidepressant-induced sexual dysfunction among psychiatric outpatients attending a tertiary care hospital. Neurosciences (Riyadh). 2020;25(1):55-60. https://doi.org/10.17712/nsj.2020.1.20190184 PMID: 31911777.
15. Prabhu PG, Devi S, Kar SK, Mishra S. Sexual functioning among drug-naive females with depression at a tertiary care unit of North India: a cross-sectional study. J Psychosex Health. 2025;7(1):48-54. https://doi.org/10.1177/26318318241301234 (PMID pending)
16. Lee KU, Lee YM, Nam JM, Lee HK, Kweon YS, Lee CT, et al. Antidepressant-induced sexual dysfunction among newer antidepressants in a naturalistic setting. Psychiatry Investig. 2010;7(1):55-9. https://doi.org/10.4306/pi.2010.7.1.55 PMID: 20396429.
17. Clayton AH, Keller A, McGarvey EL. Burden of phase-specific sexual dysfunction with selective serotonin reuptake inhibitors. J Affect Disord. 2006;91(1):27-32. https://doi.org/10.1016/j.jad.2005.12.044 PMID: 16460851.
18. Valeiro C, Matos C, Scholl J, van Hunsel F. Drug-induced sexual dysfunction: analysis of reports to a national pharmacovigilance database. Drug Saf. 2022;45(6):639-50. https://doi.org/10.1007/s40264-022-01178-8 PMID: 35419850.

AUTHORS CONTRIBUTION

Amir Wahab *- Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

Israr ud Din - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

Sumaira Mehreen - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*

The authors accept responsibility for all aspects of the work and will ensure that any concerns regarding the accuracy or integrity of any part are properly investigated and resolved.