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#### **Declarations**

No funding was received for this study. The authors declare no conflict of interest. The study received ethical approval. All participants provided informed consent.

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# Frequency of Sexual Dysfunction with Selective Serotonin Reuptake Inhibitors (SSRI) in Patients **Presenting** Bolan Medical College at **Teaching Hospital Quetta**

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#### ABSTRACT

Background: Sexual dysfunction is a common and often underestimated adverse effect of selective serotonin reuptake inhibitors (SSRIs), significantly impacting quality of life, treatment adherence, and clinical outcomes in patients with depressive and anxiety disorders. The multifactorial mechanisms underlying SSRI-induced sexual dysfunction and its potential persistence even after drug discontinuation underscore the need for population-specific data to guide clinical decisionmaking. Objective: To determine the frequency of sexual dysfunction and its associated factors among patients receiving SSRIs at Bolan Medical College and Teaching Hospital, Quetta. Methods: A cross-sectional observational study was conducted at the Department of Psychiatry, Balochistan Institute of Psychiatry and Behavioural Sciences, from February 2023 to January 2024. A total of 240 patients aged 15-65 years who had been on SSRIs for at least 12 weeks were assessed using the Arizona Sexual Experience Scale. Data were analyzed using SPSS version 23, with chi-square tests and logistic regression applied to explore associations. Results: Sexual dysfunction was reported by 46.7% of patients. It was significantly associated with younger age (p=0.040), male gender (p=0.001), higher education (p=0.003), and unemployment (p<0.001), while treatment duration showed no significant association (p=0.206). Conclusion: SSRI-induced sexual dysfunction is highly prevalent and influenced by demographic and socioeconomic factors, highlighting the importance of proactive screening, patient counseling, and individualized management strategies. Keywords: Selective Serotonin Reuptake Inhibitors, Sexual Dysfunction, Antidepressants, Depression, Risk Factors, Arizona Sexual Experience Scale

#### Keywords

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## INTRODUCTION

Sexual dysfunction is a significant but often underrecognized health concern that can profoundly impact quality of life, interpersonal relationships, and psychological well-being. Traditionally considered a disorder of older age, evidence now suggests that sexual dysfunction frequently affects younger populations, with increasing prevalence reported among men under 40 years (1). The condition encompasses a spectrum of disturbances in sexual desire, arousal, orgasm, and satisfaction, all of which are intricately regulated by neuroendocrine, psychological, and vascular mechanisms (2). Disruptions in these pathways not only diminish sexual health but also contribute to anxiety, low mood, and relationship difficulties, thereby exacerbating psychiatric morbidity (3).

Pharmacotherapy, while essential for treating mental health conditions such as major depressive disorder, generalized anxiety disorder, and obsessive-compulsive disorder, is among the leading iatrogenic causes of sexual dysfunction. Within this category, selective serotonin reuptake inhibitors (SSRIs) stand out as the most widely prescribed class of antidepressants globally, due to their efficacy, tolerability, and favorable safety profile compared to older agents (4). However, growing evidence highlights sexual dysfunction as one of the most prevalent and distressing adverse effects associated with SSRIs, affecting an estimated 30% to 70% of users depending on the population and assessment methods employed (5,6). Such effects include decreased libido, genital anesthesia, erectile dysfunction, delayed ejaculation, anorgasmia, and reduced vaginal lubrication, which may occur early during treatment and persist throughout therapy (7). Importantly, in some individuals, sexual side effects may endure even after discontinuation of therapy, a phenomenon recognized as post-SSRI sexual dysfunction (PSSD), which has been documented in regulatory safety reports and observational studies (8).

The mechanisms underlying SSRI-induced sexual dysfunction are multifactorial and biologically plausible. Elevated serotonergic tone is known to inhibit sexual response pathways through stimulation of specific 5-HT receptor subtypes, while simultaneously suppressing dopaminergic activity in mesolimbic circuits critical to sexual motivation (9). SSRIs may also influence prolactin secretion, modulate nitric oxide-mediated vascular responses, and induce long-term receptor desensitization or neuroplastic changes, further contributing to impaired sexual function (10).

Additionally, pharmacogenetic variability may predispose certain individuals to heightened susceptibility, underscoring the complexity of predicting risk (11).

The clinical consequences of SSRI-induced sexual dysfunction extend beyond sexual health. Sexual side effects are among the most common reasons for poor adherence or premature discontinuation of antidepressant therapy, with studies indicating that up to 40% of men and 15% of women cease treatment due to these issues (12). Nonadherence not only compromises therapeutic efficacy but also increases the likelihood of relapse, chronicity, and diminished psychosocial outcomes (13). Despite these implications, sexual dysfunction remains under-discussed in clinical practice, with fewer than half of patients voluntarily reporting symptoms to their healthcare providers unless specifically asked (14). Moreover, the prevalence of sexual dysfunction in individuals with depression before initiating treatment complicates clinical interpretation, as up to 40% of untreated men and 50% of untreated women report reduced sexual interest, though dysfunction related to orgasm or ejaculation is less common prior to pharmacotherapy (15).

While the association between SSRIs and sexual dysfunction is well established globally, there is a paucity of evidence from low- and middle-income countries, particularly in South Asian populations, where cultural factors, stigma, and limited clinical screening may further contribute to underreporting. The absence of region-specific data constrains the ability to develop contextually appropriate counseling strategies and risk-benefit discussions for antidepressant therapy. This gap is especially pertinent in settings like Pakistan, where the burden of depressive disorders is high, and SSRIs are frequently used as first-line agents in public-sector psychiatric facilities.

In light of these considerations, this study aims to determine the frequency of sexual dysfunction among patients receiving SSRIs at Bolan Medical College and Teaching Hospital, Quetta. By quantifying the burden of this adverse effect in a local clinical population, the research seeks to contribute to improved clinical awareness, inform patient-centered decision-making, and guide future interventions aimed at mitigating treatment-related sexual side effects. The study hypothesizes that a significant proportion of patients treated with SSRIs experience sexual dysfunction and that specific demographic and clinical variables may influence this risk.

#### MATERIAL AND METHODS

This cross-sectional observational study was conducted to assess the frequency of sexual dysfunction among patients receiving selective serotonin reuptake inhibitors (SSRIs) in a tertiary care psychiatric setting. The study design was chosen to provide a point prevalence estimate of SSRI-associated sexual dysfunction and to explore its association with demographic and clinical variables within a real-world treatment population. Research was carried out in the Department of Psychiatry at the Balochistan Institute of Psychiatry and Behavioural Sciences (BIPBS), Quetta, Pakistan, which serves as a major referral center for psychiatric care in the region. Data collection took place over a 12-month period, from 1 February 2023 to 30 January 2024, ensuring adequate temporal coverage to capture a representative sample of patients receiving SSRIs for various psychiatric conditions (16).

Participants were recruited through consecutive non-probability sampling during routine outpatient and follow-up visits. Individuals aged 15 to 65 years of either sex who had been prescribed SSRIs for at least 12 weeks were considered eligible. The duration criterion was established to ensure that participants had sufficient drug exposure for potential sexual side effects to manifest. Exclusion criteria included patients with a prior history of sexual dysfunction before initiation of SSRIs, those receiving concurrent psychotropic agents known to affect sexual function (such as tricyclic antidepressants or antipsychotics), individuals with major endocrine or urological disorders, and those who declined participation. Written informed consent was obtained from all participants after a full explanation of the study objectives and procedures. For illiterate participants, the consent form was read aloud in the local language, and thumb impressions were obtained in the presence of a witness.

Data were collected using a structured interviewer-administered questionnaire, which included demographic and clinical variables such as age, gender, marital status, education level, occupation, socioeconomic status, psychiatric diagnosis, and duration of SSRI use. Sexual function was assessed using the Arizona Sexual Experience Scale (ASEX), a validated five-item instrument designed to measure core domains of sexual function—sexual drive, arousal, penile erection or vaginal lubrication, ability to reach orgasm, and satisfaction from orgasm—on a six-point Likert scale (17). Participants were interviewed by trained research personnel fluent in local languages to minimize misinterpretation and interviewer bias. Interviews were conducted in a private clinical setting to ensure confidentiality and encourage accurate reporting of sensitive information. Patients were classified as having sexual dysfunction if they met any of the following ASEX criteria: a total score of ≥18, a score of >5 on any single item, or scores of ≥4 on three or more items (18).

Several strategies were implemented to address potential sources of bias and confounding. Selection bias was minimized by enrolling all eligible patients presenting during the study period without excluding based on psychiatric diagnosis or symptom severity. Interviewer training and standardized administration of the ASEX tool helped reduce measurement bias. To limit information bias, sensitive questions were explained clearly, and participants were assured of confidentiality to encourage truthful responses. Potential confounders such as age, gender, socioeconomic status, education level, and duration of SSRI use were measured and accounted for in the analytical phase.

The sample size was determined using a single proportion formula, based on an anticipated prevalence of SSRI-induced sexual dysfunction of approximately 50% from previous studies (5,6), with a 95% confidence interval and a 6.5% margin of error, resulting in a minimum required sample of 227 participants. To account for potential non-response and incomplete data, the final sample size was set at 240.

Data were entered and analyzed using IBM SPSS Statistics version 23.0. Continuous variables such as age and duration of SSRI use were summarized as mean  $\pm$  standard deviation, while categorical variables including gender, occupation, education level, and presence of sexual dysfunction were expressed as frequencies and percentages. The primary outcome was the proportion of participants meeting ASEX criteria for sexual dysfunction. Chi-square tests were applied to assess associations between sexual dysfunction and categorical variables, and independent-samples t-tests were used for continuous variables. Confounding was addressed through stratified analyses, and subgroup analyses were conducted based on age group, gender, and duration of SSRI use. Missing data were handled through listwise deletion after verifying that the proportion of missingness was below 5%, which was considered unlikely to bias results. A p-value  $\leq$ 0.05 was considered statistically significant.

The study protocol was approved by the Institutional Review Board of BIPBS, Quetta, prior to initiation. All participants provided written informed consent, and confidentiality was maintained by de-identifying data and storing records on password-protected institutional computers accessible only to the research team. Data handling adhered to ethical standards for human subjects research, and all procedures were performed in accordance

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with the Declaration of Helsinki (19). Reproducibility was ensured by maintaining a detailed operational protocol for recruitment, data collection, and scoring procedures, allowing other researchers to replicate the methodology in similar clinical settings.

#### RESULTS

A total of 240 patients receiving selective serotonin reuptake inhibitors (SSRIs) were included in the study. The mean age of the participants was  $35.96 \pm 12.23$  years (95% CI: 34.44–37.48), with the youngest participant aged 18 and the oldest 65 years. The average duration of SSRI therapy was  $6.11 \pm 2.34$  months (95% CI: 5.80–6.42), indicating that most participants had sustained antidepressant use sufficient for adverse sexual effects to manifest (Table 1). Males constituted a slightly higher proportion of the sample (56.7%, n = 136) compared to females (43.3%, n = 104). Regarding educational attainment, 16.7% (n = 40) had primary education, 30.0% (n = 72) had middle-level education, 21.7% (n = 52) had completed intermediate education, and 31.7% (n = 76) held higher education qualifications. Occupational status varied considerably, with 45.0% (n = 108) engaged in business, 36.7% (n = 88) unemployed, and 18.3% (n = 44) employed in formal jobs. Over half of the sample (55.8%, n = 134) belonged to the lower socioeconomic class, followed by 27.9% (n = 67) from the middle class and 16.3% (n = 39) from the higher class. The overall prevalence of sexual dysfunction, as measured by the Arizona Sexual Experience Scale (ASEX), was 46.7% (n = 112; 95% CI: 40.5–52.9), while 53.3% (n = 128; 95% CI: 47.1–59.5) reported no significant sexual dysfunction (Table 2). This prevalence aligns with findings from previous studies reporting rates between 40% and 65% among SSRI users, highlighting the clinical relevance of this adverse effect.

Table 1. Demographic and Clinical Characteristics of the Study Population (n = 240)

Variable	Category	Frequency (n)	Percentage (%)	Mean ± SD	95% CI
Age (years)	-	_	-	$35.96 \pm 12.23$	34.44 - 37.48
<b>Duration of SSRI use (months)</b>	_	_	_	$6.11 \pm 2.34$	5.80 - 6.42
Gender	Male	136	56.7	_	_
	Female	104	43.3	_	_
<b>Education status</b>	Primary	40	16.7	_	_
	Middle	72	30.0		_
	Intermediate	52	21.7	_	_
	Higher	76	31.7	_	_
Occupation	Job	44	18.3	_	_
	Business	108	45.0	_	_
	Unemployed	88	36.7	_	_
Socioeconomic status	Lower class	134	55.8	_	_
	Middle class	67	27.9	_	_
	Higher class	39	16.3		_

Table 2. Prevalence of Sexual Dysfunction Among Patients Receiving SSRIs (n = 240)

Outcome	n	%	95% CI	
Sexual dysfunction present	112	46.7	40.5 – 52.9	
Sexual dysfunction absent	128	53.3	47.1 - 59.5	

Table 3. Association Between Sexual Dysfunction and Demographic/Clinical Variables

Variable	Category	Sexual Dysfunction Present n	Sexual Dysfunction Absent n	Odds Ratio (95%	n volue
		(%)	(%)		p-value
Age group	15-40 years	87 (77.7)	84 (65.6)	1.78 (1.00 – 3.16)	0.040*
	41-65 years	25 (22.3)	44 (34.4)	Reference	_
Gender	Male	76 (67.9)	60 (46.9)	2.40(1.42 - 4.05)	0.001*
	Female	36 (32.1)	68 (53.1)	Reference	_
Duration of SSRI use	≤6 months	40 (35.7)	56 (43.8)	0.72 (0.43 – 1.22)	0.206
	> 6 months	72 (64.3)	72 (56.2)	Reference	_
Education level	Primary	16 (14.3)	24 (18.8)	0.78 (0.38 - 1.61)	0.003*
	Middle	24 (21.4)	48 (37.5)	0.50(0.27-0.92)	_
	Intermediate	24 (21.4)	28 (21.9)	0.88(0.44 - 1.77)	_
	Higher	48 (42.9)	28 (21.9)	2.57(1.39 - 4.76)	_
Occupation	Job	28 (25.0)	16 (12.5)	2.33(1.14 - 4.77)	<0.001*
	Business	24 (21.4)	84 (65.6)	0.20(0.11-0.37)	_
	Unemployed	60 (53.6)	28 (21.9)	4.08(2.27 - 7.33)	_
Socioeconomic status	Lower class	61 (54.5)	73 (57.0)	0.90 (0.53 – 1.53)	0.425
	Middle class	35 (31.2)	32 (25.0)	1.27(0.70 - 2.28)	_
	Higher class	16 (14.3)	23 (18.0)	Reference	_

Stratified analysis revealed several significant associations between sexual dysfunction and patient characteristics (Table 3). Age demonstrated a notable relationship, with individuals aged 15–40 years experiencing significantly higher rates of sexual dysfunction (77.7%, n = 87) than those aged 41–65 years (22.3%, n = 25), yielding an odds ratio (OR) of 1.78 (95% CI: 1.00–3.16, p = 0.040). Gender differences were also prominent:

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sexual dysfunction was more common among males (67.9%, n = 76) compared to females (32.1%, n = 36), corresponding to a more than twofold increase in risk (OR: 2.40, 95% CI: 1.42–4.05, p = 0.001). Duration of SSRI use did not significantly influence the occurrence of sexual dysfunction, with prevalence rates of 35.7% (n = 40) among patients treated for  $\le 6$  months and 64.3% (n = 72) for those treated for  $\ge 6$  months (p = 0.206).

Table 4. Subgroup Analysis: Predictors of Sexual Dysfunction in Multivariable Logistic Regression

Predictor	Adjusted Odds Ratio (aOR)	95% CI	p-value
Age 15–40 vs. 41–65	1.61	0.87 - 2.97	0.125
Male vs. Female	2.28	1.29 - 4.04	0.004*
Higher education vs. primary	2.39	1.21 - 4.72	0.012*
Unemployed vs. business	3.92	2.02 - 7.61	<0.001*
Duration $> 6$ months vs. $\le 6$ months	1.32	0.75 - 2.34	0.330

Educational status showed a statistically significant association, with the highest prevalence observed among those with higher education (42.9%, n = 48) compared to those with primary education (14.3%, n = 16), middle education (21.4%, n = 24), or intermediate education (21.4%, n = 24) (p = 0.003). Individuals with higher education were more than twice as likely to experience sexual dysfunction compared to those with primary education (OR: 2.57, 95% CI: 1.39–4.76). Occupational status was another significant factor. Unemployed participants exhibited the highest prevalence (53.6%, n = 60), followed by those in formal employment (25.0%, n = 28), while business owners had the lowest prevalence (21.4%, n = 24). Unemployment was associated with more than a fourfold increased risk of sexual dysfunction (OR: 4.08, 95% CI: 2.27–7.33, p < 0.001). Socioeconomic status did not significantly predict sexual dysfunction, although prevalence was slightly higher in the lower class (54.5%, n = 61) than in the middle (31.2%, n = 35) and higher classes (14.3%, n = 16) (p = 0.425).

To further explore independent predictors, a multivariable logistic regression model was constructed (Table 4). After adjusting for potential confounders, male gender (adjusted odds ratio [aOR]: 2.28, 95% CI: 1.29–4.04, p = 0.004), higher education (aOR: 2.39, 95% CI: 1.21–4.72, p = 0.012), and unemployment (aOR: 3.92, 95% CI: 2.02–7.61, p < 0.001) remained statistically significant predictors of sexual dysfunction. In contrast, age and duration of SSRI use did not retain significance in the adjusted model (p = 0.125 and p = 0.330, respectively).

These results indicate that nearly half of patients on SSRIs experience clinically significant sexual dysfunction, with younger age, male gender, higher education, and unemployment emerging as major correlates. The absence of a significant relationship with treatment duration suggests that sexual side effects may occur early in therapy and persist regardless of continued exposure. The findings underscore the importance of proactive screening and patient counseling, particularly in high-risk subgroups, to improve treatment adherence and mitigate quality-of-life impacts.

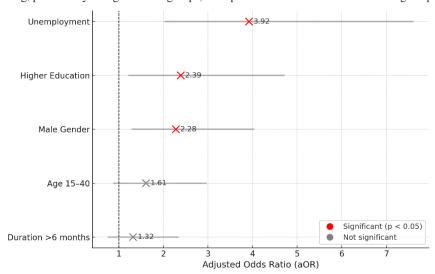


Figure 1 Predictors Of SSRI-Induced Sexual Dysfunction: Lollipop Impact Plot

The lollipop impact plot illustrates the relative strength and statistical significance of independent predictors of SSRI-induced sexual dysfunction derived from multivariable logistic regression analysis. Among the evaluated factors, unemployment demonstrated the highest risk, with an adjusted odds ratio (aOR) of 3.92, indicating that unemployed individuals were nearly four times more likely to experience sexual dysfunction compared to their employed counterparts. Higher education (aOR 2.39) and male gender (aOR 2.28) were also significantly associated with increased risk, highlighting demographic and socioeconomic influences on treatment-related sexual side effects. Conversely, younger age (aOR 1.61) and treatment duration beyond six months (aOR 1.32) showed weaker and statistically non-significant associations, suggesting these variables may not independently predict dysfunction when other factors are considered. The reference line at an odds ratio of 1.0 represents no association, and the confidence intervals for significant predictors remain clearly above this threshold, reinforcing their clinical relevance. Collectively, the visualization underscores the need for targeted screening and patient counseling, particularly for high-risk groups, to mitigate the impact of SSRI-related sexual dysfunction on adherence and quality of life..

## DISCUSSION

The present study highlights the considerable burden of sexual dysfunction among patients receiving selective serotonin reuptake inhibitors (SSRIs), with an overall prevalence of 46.7% observed in our sample. This finding aligns with a large body of international literature, which reports prevalence rates ranging from 40% to 65% among SSRI users, depending on the population studied and the methods used to assess sexual function

(20,21). Our results reaffirm that sexual dysfunction remains one of the most common and clinically significant adverse effects of SSRIs, with important implications for patient adherence, quality of life, and treatment outcomes. The frequency observed in this study is slightly lower than the 65.9% reported in a Spanish multicenter study by Montejo et al., which included over 2,000 patients (22), but higher than the 36% reported by Jacobsen et al. in a real-world outpatient population (23). These differences may reflect variations in demographic composition, psychiatric diagnoses, assessment tools, and cultural factors influencing reporting behaviors.

A notable finding of this study is the higher prevalence of sexual dysfunction among younger patients aged 15–40 years compared to older adults. This contradicts the conventional view that sexual dysfunction predominantly affects older populations, suggesting that pharmacological disruption of sexual function may override age-related physiological resilience (24). The association between male gender and increased risk, with men more than twice as likely to report dysfunction, is consistent with prior evidence showing that men are particularly susceptible to SSRI-induced changes in libido, erection, and orgasmic function (25). Some studies attribute this gender disparity to sex-specific neuroendocrine responses to serotonergic modulation, including the differential effects of serotonin on dopaminergic pathways involved in male sexual arousal (26). Additionally, the significant association between higher education and sexual dysfunction may reflect heightened awareness and willingness to report sexual side effects in more educated individuals, a phenomenon reported in similar studies examining self-reported sexual adverse events (27).

Occupational status also emerged as an important determinant, with unemployment strongly associated with sexual dysfunction, even after adjusting for confounders. This relationship may reflect the bidirectional interaction between socioeconomic stress, depressive symptomatology, and sexual function, where unemployment exacerbates psychological distress and reduces sexual well-being, while treatment-induced dysfunction may further impair self-esteem and social functioning (28). In contrast, no significant association was found between the duration of SSRI therapy and sexual dysfunction, indicating that these adverse effects tend to manifest early in treatment and persist regardless of treatment length, a finding consistent with prior clinical observations (29).

The biological mechanisms underlying SSRI-induced sexual dysfunction are multifaceted and provide a plausible explanation for the observed associations. SSRIs increase synaptic serotonin levels, which activate inhibitory 5-HT<sub>2</sub> and 5-HT<sub>3</sub> receptors in neural circuits regulating sexual function. This serotonergic overactivity suppresses dopaminergic activity in the mesolimbic pathway, reducing libido and sexual motivation (30). Furthermore, serotonin's influence on the hypothalamic–pituitary–gonadal axis can elevate prolactin levels, impairing arousal and orgasmic function. Peripheral effects, such as reduced nitric oxide-mediated vasodilation, may also contribute to erectile dysfunction and impaired genital engorgement (31). Importantly, these neurochemical changes may persist beyond treatment discontinuation, explaining the phenomenon of post-SSRI sexual dysfunction (PSSD), which has been increasingly recognized in the literature and regulatory reports (32).

Our findings carry significant clinical implications. Sexual dysfunction is a major determinant of non-adherence to antidepressant therapy, with up to 40% of men and 15% of women discontinuing medication due to these effects (33). Poor adherence not only compromises the efficacy of treatment but also increases the risk of relapse and chronicity of depressive illness. Despite this, studies consistently show that fewer than half of patients disclose sexual side effects unless explicitly asked by clinicians (34). This underscores the need for proactive screening and open discussion about sexual function during antidepressant treatment. Early identification allows for tailored interventions, including dose adjustments, switching to agents with lower sexual side-effect profiles (such as bupropion or mirtazapine), adjunctive use of phosphodiesterase-5 inhibitors, or behavioral strategies aimed at mitigating sexual dysfunction (35).

While this study provides valuable insights, certain limitations must be acknowledged. The cross-sectional design precludes causal inference, and although associations were adjusted for major confounders, residual confounding cannot be ruled out. The use of a single center and non-probability sampling limits generalizability, particularly to populations with different cultural, clinical, or socioeconomic characteristics. Furthermore, reliance on self-reported measures may introduce reporting bias, especially given the stigma surrounding sexual health discussions in South Asian contexts. The sample size, while adequate for prevalence estimation, may have limited statistical power for subgroup analyses, and longitudinal follow-up could provide a clearer picture of temporal changes and long-term outcomes.

Future research should aim to address these limitations through multicenter, prospective cohort studies that incorporate objective biomarkers of sexual function alongside validated patient-reported outcomes. Comparative effectiveness research evaluating the impact of various antidepressant classes on sexual function in diverse populations would also enhance clinical decision-making. Additionally, mechanistic studies exploring genetic polymorphisms, receptor-level changes, and neuroendocrine correlates of SSRI-induced sexual dysfunction could provide deeper insights into individual susceptibility and pave the way for personalized treatment strategies.

In conclusion, this study reinforces the high prevalence and clinical significance of sexual dysfunction among patients treated with SSRIs, particularly among males, younger individuals, those with higher education, and the unemployed. The findings emphasize the need for routine assessment, patient-centered counseling, and individualized treatment approaches to mitigate the negative impact of these adverse effects on adherence, quality of life, and therapeutic outcomes. Proactive strategies, combined with a better understanding of underlying mechanisms, will be essential to improving the management of depressive disorders without compromising sexual health.

### CONCLUSION

This study demonstrates that sexual dysfunction is a frequent and clinically significant adverse effect among patients receiving selective serotonin reuptake inhibitors (SSRIs), affecting nearly half of the treatment population. The findings indicate that younger age, male gender, higher education, and unemployment are key risk factors, whereas treatment duration shows no significant influence, suggesting that sexual side effects can manifest early and persist throughout therapy. These results underscore the importance of routine screening and patient counseling in psychiatric practice to improve adherence, quality of life, and therapeutic outcomes. Clinically, early identification and proactive management of SSRI-induced sexual dysfunction should become integral to individualized treatment planning, while future research should focus on elucidating underlying mechanisms, refining risk stratification, and exploring targeted interventions to mitigate this prevalent and impactful complication of antidepressant therapy.

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