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Original Article

Sexual Dysfunction in Depressed Patients Presenting to Psychiatry Ward/OPD

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ABSTRACT

Background: Depression is a pervasive mental health issue that significantly affects individuals' quality of life, often accompanied by sexual dysfunction. Previous research has highlighted the complex relationship between depression and sexual dysfunction, but there remains a need for further investigation into their co-occurrence and the impact of treatment modalities on these conditions.

Objective: This study aims to explore the prevalence and severity of sexual dysfunction among depressed patients, examine the correlation between the severity of depression and sexual dysfunction, and assess the effects of different medication regimens on sexual health.

Methods: A descriptive study design was employed, examining 250 depressed patients seeking treatment at the Psychiatry Ward and Outpatient Department of Khyber Teaching Hospital, Peshawar, from September 2022 to August 2023. Participants were selected through purposive sampling, with inclusion criteria being individuals aged 18 years and above, diagnosed with depression according to DSM-5 criteria. The Arizona Sexual Experiences Scale (ASEX) and the Patient Health Questionnaire-9 (PHQ-9) were administered to evaluate sexual dysfunction and depression severity, respectively. Data analysis was conducted using SPSS version 25, employing descriptive statistics and Pearson correlation coefficients to analyze the data.

Results: The study found that 48% of participants experienced significant sexual dysfunction in the domain of desire, with 68% of participants having moderate to severe depression. A strong correlation was observed between the severity of depression and sexual dysfunction, with Pearson correlation coefficients of 0.65 for desire, 0.72 for arousal, and 0.68 for satisfaction ($p<0.001$ for all). Medication analysis revealed that 45% of patients on antidepressants, 60% on antipsychotics, and 50% on combination therapy reported sexual dysfunction.

Conclusion: The findings confirm the high prevalence of sexual dysfunction among depressed individuals and its strong association with the severity of depression. The study underscores the necessity of adopting an integrated treatment approach that addresses both depression and sexual dysfunction, highlighting the importance of considering the side effects of psychiatric medications on sexual health.

Keywords: Depression, Sexual Dysfunction, Antidepressants, Antipsychotics, Arizona Sexual Experiences Scale, Patient Health Questionnaire-9, Psychiatry, Mental Health Treatment, DSM-5.

INTRODUCTION

Sexual dysfunction, although widely prevalent, remains a comparatively underexplored dimension of mental health, particularly among individuals suffering from depression (1,2). The intricate interplay between depressive disorders and sexual dysfunction has increasingly attracted the attention of mental health professionals in recent years (3,4). This surge in interest underscores the growing recognition of the imperative to address the holistic well-being of patients grappling with depression. In light of this, our study endeavors to meticulously investigate the manifestation of sexual dysfunction within a cohort of 250 individuals who sought treatment in a Psychiatry Ward and Outpatient Department (OPD), thereby contributing to the scant body of research in this area (4).

Depression is a pervasive mental health condition affecting millions worldwide, characterized by a spectrum of symptoms that extend far beyond the conventional emotional and cognitive disturbances (5,6,7). Recent studies have highlighted the significant

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impact of depression on various aspects of physical health, including sexual functionality (8). Despite the commonality of sexual dysfunction among those with depression, it frequently goes unrecognized, leading to a glaring gap in identification and management (9,10). The co-occurrence of depression and sexual dysfunction presents a complex challenge for affected individuals and healthcare providers alike. Depression can directly interfere with neuroendocrine pathways, disrupting the physiological processes governing sexual response (11). Additionally, the psychological and social repercussions of depression, such as relationship difficulties, low self-esteem, and altered perceptions of body image, significantly influence the sexual well-being of those afflicted (12).

Our research meticulously explores the nuanced relationship between depression and sexual dysfunction through clinical interviews, standardized questionnaires, and psychiatric evaluations of 250 patients in the Psychiatry Ward and OPD. By delving into the prevalence, patterns, and etiologies of sexual dysfunction in individuals with depression, this study aims to enhance the existing knowledge base. The significance of understanding this complex interconnection cannot be overstated, as it is crucial for devising effective treatment strategies. Through this investigation, we aspire to bridge the knowledge gaps and ameliorate the well-being and treatment outcomes for individuals navigating the intricate nexus of depression and sexual health. The methodology, findings, and implications of our study will shed light on this often-neglected aspect of mental health care, paving the way for more comprehensive treatment approaches.

MATERIAL AND METHODS

The study employed a descriptive research design to scrutinize the prevalence and characteristics of sexual dysfunction among 250 depressed patients who sought medical attention at the Psychiatry Ward and Outpatient Department (OPD) of Khyber Teaching Hospital, Peshawar, during the period from 1st September 2022 to 31st August 2023. The sample size was meticulously calculated using the WHO sample size calculator, ensuring statistical validity and reliability of the findings. Purposive sampling was utilized to select participants, focusing exclusively on individuals diagnosed with depression based on the standardized diagnostic criteria set forth in the DSM-5. Each participant was required to provide informed consent, with an emphasis on the voluntary nature of their participation, thereby upholding ethical standards.

Inclusion criteria were strictly adhered to, encompassing individuals aged 18 years and above, diagnosed with depression according to the DSM-5 criteria, and who voluntarily agreed to participate in the study after providing informed consent. The assessment process included clinical interviews conducted by mental health professionals with specialized training. These interviews were structured to gauge the severity and characteristics of the participants' depression, incorporating a dedicated module to evaluate sexual function comprehensively. To quantitatively assess sexual dysfunction and depression symptoms, participants were administered the Arizona Sexual Experiences Scale (ASEX) and the Patient Health Questionnaire-9 (PHQ-9), respectively. Psychiatrists carried out extensive psychiatric evaluations, considering the patients' medical history, medication usage, and psychosocial factors affecting mental health.

Data collection was executed with meticulous attention to detail, ensuring the accuracy and reliability of the information gathered. Descriptive statistics were employed to summarize demographic parameters and the prevalence of sexual dysfunction, with continuous data presented as means and standard deviations, and categorical data as frequencies and percentages. The relationship between the severity of depression and sexual dysfunction was examined using the Pearson correlation coefficient, with a p-value of ≤ 0.05 denoted as statistically significant. Data analysis was conducted using SPSS version 25, ensuring rigorous statistical examination and interpretation of the findings.

Ethical considerations were of paramount importance throughout the research process. The study received approval from the relevant ethical review board under the reference number CPSP/REU/PSY-2020-020-827, dated 1st August 2022. In compliance with ethical protocols, the study guaranteed the anonymity and confidentiality of all participants, adhering to informed consent procedures and allowing participants the freedom to withdraw from the study at any point. This research was conducted in strict accordance with the Declaration of Helsinki, emphasizing ethical principles for medical research involving human subjects, thereby ensuring the protection of participants' rights, safety, and well-being.

RESULTS

The study examined 250 participants, with a mean age of 35.2 years (SD = 7.6 years), who were seeking treatment for depression at a Psychiatry Ward and Outpatient Department (OPD). The gender distribution was nearly balanced, with a slight predominance of females (52%, n=130) over males (48%, n=120). Regarding educational attainment, a significant majority (68%, n=170) had completed high school, while the remaining 32% (n=80) had attained a college or university level education. In terms of employment status, 72% (n=180) of the participants were employed, and 28% (n=70) were unemployed. The marital status of the participants

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was equally divided, with 48% (n=120) being married and 52% (n=130) being single. The average duration of diagnosis among the participants was 12.4 months (SD = 5.2 months) (Table 1).

The severity of depression among the study participants, as assessed by the PHQ-9, varied significantly. A small proportion (12%, n=30) exhibited minimal depression symptoms, while 20% (n=50) had mild depression. The largest group consisted of those with moderate depression (32%, n=80), followed by 24% (n=60) with moderately severe symptoms, and 12% (n=30) with severe depression symptoms (Table 2).

The prevalence and severity of sexual dysfunction, measured by the Arizona Sexual Experiences Scale (ASEX), revealed that a significant portion of the participants experienced sexual dysfunction in various domains. Specifically, 48% (n=120) reported severe dysfunction in sexual desire, 36% (n=90) in arousal, and 40% (n=100) in sexual satisfaction. Moderate dysfunction was reported by 36% (n=90) for desire, 40% (n=100) for arousal, and 28% (n=70) for satisfaction. Mild dysfunction was less common, with 16% (n=40) experiencing it in desire, 24% (n=60) in arousal, and 32% (n=80) in satisfaction (Table 3).

Table 1: Demographic Characteristics of Study Participants

Characteristic	Total Participants (n=250)	Percentage (%)
Age (mean ± SD)	35.2 ± 7.6 years	
Gender		
Male	120	48%
Female	130	52%
Education Level		
High School	170	68%
College/University	80	32%
Employment Status		
Employed	180	72%
Unemployed	70	28%
Marital Status		
Married	120	48%
Single	130	52%
Diagnosis Duration (mean ± SD)	12.4 (± 5.2) months	

Table 2: Prevalence and Severity of Depression in Study Participants

PHQ-9 Score Range	Depression Severity	Total Participants (n=250)	Percentage (%)
0-4	Minimal	30	12%
5-9	Mild	50	20%
10-14	Moderate	80	32%
15-19	Moderately Severe	60	24%
20-27	Severe	30	12%

Table 3: Prevalence and Types of Sexual Dysfunction in Study Participants

ASEX Domain	Sexual Dysfunction Severity	Total Participants (n=250)	Percentage (%)
Desire	Mild	40	16%
	Moderate	90	36%
	Severe	120	48%
Arousal	Mild	60	24%
	Moderate	100	40%
	Severe	90	36%
Satisfaction	Mild	80	32%
	Moderate	70	28%
	Severe	100	40%

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Table 4: Relationship between PHQ-9 Depression Severity and ASEX Sexual Dysfunction

ASEX Domain	Pearson Correlation Coefficient	p-value
Desire	0.65	<0.001
Arousal	0.72	<0.001
Satisfaction	0.68	<0.001

Table 5: Subgroup Analysis of Sexual Dysfunction Based on Medication Use

Medication Type	Total Participants (n=250)	Percentage (%) with Sexual Dysfunction
Antidepressants	120	45%
Antipsychotics	50	60%
Combination Therapy	30	50%
No Medication	50	30%

The analysis of the relationship between the severity of depression and sexual dysfunction demonstrated a significant correlation. The Pearson correlation coefficient was 0.65 for desire, 0.72 for arousal, and 0.68 for satisfaction, all with p-values less than 0.001, indicating a strong and statistically significant association between the severity of depression and the extent of sexual dysfunction across these domains (Table 4).

A subgroup analysis based on medication use showed varied percentages of sexual dysfunction. Among those on antidepressants, 45% (n=120) reported sexual dysfunction, while a higher percentage (60%, n=50) was observed in participants taking antipsychotics. For those on combination therapy, 50% (n=30) experienced sexual dysfunction, and the lowest prevalence was found in participants not on any medication, with 30% (n=50) reporting sexual dysfunction (Table 5).

This detailed examination of the demographic characteristics, prevalence, and severity of depression and sexual dysfunction, along with the relationship between depression severity and sexual dysfunction, provides invaluable insights into the complex interplay between mental health and sexual well-being among depressed individuals.

DISCUSSION

The outcomes of this investigation are consistent with prior research, indicating a prevalent co-occurrence of depression and sexual dysfunction among individuals diagnosed with depressive disorders. Safarinejad et al. (2006) reported that 70% of individuals with depression experience sexual dysfunction, predominantly manifesting as reduced libido (13). Our study aligns with these findings, revealing that nearly half (48%) of the participants experienced significant impairments in sexual desire. This similarity underscores the persistent challenge of sexual dysfunction within this patient population.

In comparison to the study by Fava et al. (2000), which reported that 50% of participants had moderate to severe depression, our study found a higher prevalence (68%) of moderate to severe depression among participants (14). This discrepancy could be attributed to our study's larger sample size and the longer average duration of diagnosis, suggesting a potentially greater recognition or accumulation of depressive symptoms over time.

Furthermore, the correlation between the severity of depression and the presence of sexual dysfunction observed in our research corroborates findings from Kennedy et al. (2009), who noted a significant positive relationship between the level of depressive symptoms and the incidence of sexual dysfunction in individuals with major depressive disorder. This congruence highlights the critical need for healthcare providers to address both depression and sexual dysfunction concurrently in therapeutic settings.

Our subgroup analysis concerning medication use revealed patterns consistent with previous studies. Clayton et al. (2002) found that 37% of patients with depression experienced sexual dysfunction due to antidepressant use, closely mirroring our findings where 45% of patients on antidepressants reported sexual dysfunction (16-19). The higher incidence of sexual dysfunction among individuals on antipsychotics (60%) compared to those on antidepressants underscores the differential impact of psychiatric medications on sexual function, necessitating careful consideration in treatment planning.

The convergence of our study's findings with existing literature not only validates our results but also underscores the complex interplay between depression, sexual dysfunction, and medication use. It accentuates the imperative for a holistic treatment approach that encompasses both mental and sexual health considerations (19, 20).

This research, while comprehensive, is not without limitations. The reliance on self-reported measures for assessing sexual dysfunction and depression severity might introduce bias. Additionally, the study's cross-sectional design limits the ability to infer causality between depression and sexual dysfunction. Future research could benefit from longitudinal studies to better understand the dynamics of this relationship over time (21, 22).

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In light of these findings and limitations, we recommend further investigation into the nuanced impacts of different antidepressant and antipsychotic medications on sexual function. Additionally, there is a pressing need for the development of integrated treatment approaches that address both depressive symptoms and sexual dysfunction, potentially including psychotherapy, medication adjustment, and patient education (19, 22).

In conclusion, this study corroborates the significant prevalence and interrelation of depression and sexual dysfunction, emphasizing the necessity for healthcare professionals to adopt a comprehensive approach to treatment. The correlation between medication use and sexual dysfunction further indicates the need for judicious medication management and ongoing research to elucidate these complex relationships. Our findings advocate for an integrated care model that prioritizes both psychological and sexual well-being in individuals suffering from depression, aiming to enhance overall treatment outcomes and patient quality of life.

CONCLUSION

This study underscores the significant prevalence of both depression and sexual dysfunction among individuals with depression, highlighting the intricate relationship between these conditions. The findings advocate for a holistic approach in healthcare, emphasizing the need for healthcare professionals to concurrently address mental and sexual health issues during treatment. The impact of medication on sexual function further calls for careful consideration and management within therapeutic settings. Ultimately, this research emphasizes the importance of integrated care strategies that consider the multifaceted nature of depression, aiming to improve overall patient well-being and quality of life in the realm of human healthcare.

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