

Sexual Dysfunctions Among Female Major Depressive Disorder Patients of Reproductive Age

Rezwana Habiba^{1*}, Sayed Sharif-ul-Alam², Md. Jasim Uddin³, Romendra Kumar Singha⁴, Md. Abdullah Sayed⁵, Ahmed Riad Chowdhury⁶

¹Assistant Professor, Department of Psychiatry, Sheikh Hasina Medical College, Habiganj, Bangladesh

²Junior Consultant, Department of Anaesthesia, Sylhet MAG Osmani Medical College Hospital, Sylhet, Bangladesh

³Assistant Professor, Department of Psychiatry, Rajshahi Medical College Hospital, Rajshahi, Bangladesh

⁴Associate Professor, Department of Psychiatry, Sylhet MAG Osmani Medical College Hospital, Sylhet, Bangladesh

⁵Assistant Professor, Department of Psychiatry, North East Medical College, Sylhet, Bangladesh

⁶Associate Professor, Department of Psychiatry, Sylhet MAG Osmani Medical College Hospital, Sylhet, Bangladesh

DOI: [10.36347/sjams.2024.v12i02.020](https://doi.org/10.36347/sjams.2024.v12i02.020)

| Received: 01.01.2024 | Accepted: 07.02.2024 | Published: 29.02.2024

*Corresponding author: Rezwana Habiba

Assistant Professor, Department of Psychiatry, Sheikh Hasina Medical College, Habiganj, Bangladesh

Abstract

Original Research Article

Background: Depression, a pervasive public health issue, is associated with substantial morbidity and mortality. Existing literature suggests a connection between depression and female sexual dysfunction, impacting the overall quality of life. Recognizing the prevalence of sexual dysfunction in Major Depressive Disorder (MDD) patients becomes crucial for holistic patient care. **Objective:** This cross-sectional observational study, conducted at Sylhet MAG Osmani Medical College Hospital from September 2018 to August 2020, aimed to assess the patterns and frequencies of sexual dysfunction in female MDD patients of reproductive age. The primary objectives included evaluating the correlation between the severity of depression and sexual dysfunction, as well as exploring the association between sexual dysfunction and socio-demographic variables. **Method:** Sixty-eight married, reproductive-age females diagnosed with MDD were included. Diagnosis followed DSM-5 criteria, with severity assessed using the Bangla version of the Depression Anxiety and Stress Scale (DASS-21) and sexual dysfunction evaluated via the Female Sexual Function Index (FSFI) scale. Statistical analyses employed Chi-square tests and Pearson's correlation coefficient tests. **Results:** Of the participants, 77.9% experienced sexual dysfunction, with 41.2% exhibiting extremely severe depression. Dysfunction in desire (72.1%), arousal (67%), and satisfaction (54.4%) were prevalent, while 51.5% reported lubrication difficulties. Dysfunction in orgasm (44.1%) and pain (45.6%) were less frequent. A significant correlation was observed between female sexual dysfunction and depression severity ($p < 0.001$), while no statistically significant correlation was found between the duration of MDD and sexual dysfunction ($p = 0.122$). **Conclusion:** This study underscores a high prevalence of sexual dysfunction in female MDD patients, emphasizing the necessity of routine inquiry into sexual health in the clinical management of Major Depressive Disorder. It highlights the need for increased awareness, early detection, and comprehensive interventions to address this often-overlooked aspect of mental health.

Keywords: Sexual Dysfunction, Major Depressive Disorder, Depression Severity, Socio-demographic Variables, Female Sexual Function.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Depression is a global epidemic that has garnered significant attention within the realm of public health. This debilitating mental health condition is characterized by symptoms such as persistent low mood, loss of interest in previously enjoyable activities, decreased energy levels, and diminished self-esteem [1]. According to the World Health Organization (WHO), an estimated 322 million individuals worldwide suffer from depressive disorders, making it the fourth leading cause of disability globally [2]. Moreover, WHO projections

suggest that by the year 2020, depression will ascend to the position of the second leading cause of disease burden worldwide, underscoring the urgent need for understanding and addressing this pervasive condition [3]. Depression's impact extends far beyond mood and emotional well-being; it can permeate various aspects of an individual's life, including their sexual health. Sexual dysfunction is a multifaceted problem that can manifest in individuals with depression, further exacerbating their suffering [4]. Notably, depression can lead to sexual problems such as erectile dysfunction (ED) and

Citation: Rezwana Habiba, Sayed Sharif-ul-Alam, Md. Jasim Uddin, Romendra Kumar Singha, Md. Abdullah Sayed, Ahmed Riad Chowdhury. Sexual Dysfunctions Among Female Major Depressive Disorder Patients of Reproductive Age. Sch J App Med Sci, 2024 Feb 12(2): 212-219.

lubrication difficulties, affecting both men and women. Moreover, age has been identified as a significant factor associated with declining sexual function, with older individuals experiencing a higher incidence of sexual issues [5].

In the context of Major Depressive Disorder (MDD), a severe form of depression, the interplay between depression and sexual dysfunction becomes particularly noteworthy. MDD encompasses a range of debilitating symptoms that significantly affect an individual's daily life and overall functioning. Managing MDD typically involves a multifaceted approach, including psychological treatments, pharmacological interventions, and efforts to raise awareness about the condition [6]. Antidepressant medications are commonly prescribed to alleviate depressive symptoms. While they often lead to an improvement in mood and overall well-being, they can also introduce sexual dysfunction as a potential side effect. This underscores the critical importance of assessing sexual function when diagnosing MDD and initiating treatment to prevent or address any ensuing sexual issues.

While clinical observations suggest that sexual dysfunction is relatively common among individuals with MDD, comprehensive data on this issue within specific populations remains scarce. This study aims to fill this gap by exploring the prevalence and severity of sexual dysfunction in a particular group: female MDD patients of reproductive age in Bangladesh. As the cultural, social, and economic context can significantly influence the experience of both depression and sexual dysfunction, understanding these dynamics within the context of Bangladesh is of paramount importance. The significance of this study lies in its potential to shed light on the intricate relationship between MDD and sexual dysfunction in a specific population. By examining the prevalence and severity of sexual dysfunction in female MDD patients, we can gain valuable insights into the scope of this issue within this demographic. Additionally, exploring the connection between depression severity and sexual dysfunction will provide a more nuanced understanding of how these two conditions intersect.

Furthermore, socio-demographic factors, such as education, occupation, and income, influence mental health and sexual function. These variables can shape the experience of MDD and sexual dysfunction and may contribute to disparities in prevalence and severity. Consequently, examining the impact of socio-demographic factors on these conditions is essential for tailoring effective interventions and support systems. In the study, depression is a global public health concern with a profound impact on individuals and societies. This study focuses on the specific issue of sexual dysfunction within the context of female MDD patients of reproductive age in Bangladesh. By investigating the prevalence, severity, and socio-demographic correlates

of sexual dysfunction in this population, we aim to contribute to a more comprehensive understanding of the complex interplay between MDD and sexual health, ultimately informing targeted interventions and support strategies to improve the lives of those affected by these conditions.

OBJECTIVES

General Objective:

- To assess the prevalence and severity of sexual dysfunction among females of reproductive age suffering from Major Depressive Disorder.

Specific Objectives:

- To determine the frequency of sexual dysfunctions in female Major Depressive Disorder patients.
- To examine the relationship between the severity of depression and the presence of sexual dysfunctions in these patients.
- To explore potential connections between socio-demographic variables and the occurrence of sexual dysfunction among individuals with Major Depressive Disorder.

METHODOLOGY

Study Design

The study was cross-sectional, observational study was carried out in the Department of Psychiatry, Sylhet MAG Osmani Medical College Hospital, Sylhet. SOMCH is one of Bangladesh's oldest and most renowned tertiary-level hospitals. According to the outdoor register, around 100 patients take psychiatric services daily. On average, per day, 3-4 married female patients were diagnosed with Major Depressive Disorder. As patients come from the whole division and from the nearby district, patients can be said to be representative. This study was carried out from 1 September 2018 to 31 August 2020.

Inclusion Criteria

- Married female MDD patient of reproductive age group.

Exclusion Criteria

- Patients with co-morbid medical conditions such as endocrine disorders, neurological conditions, or pelvic disorders.
- Patients with a history of sexual dysfunction prior to the onset of substance use disorders.
- Pregnant and menopausal women.
- Simultaneous presence of other major psychiatric disorder.
- Patients who had taken any psychotropic medications in the last month.
- Patients with a history of previous surgery (e.g., colostomy, ileostomy, pelvic, or urethral surgery).

- Patients taking medications or contraceptives are known to cause sexual dysfunction.
- Patients with a history of substance and medication intake are known to cause sexual dysfunction.

Data Collection

The researcher has approached sixty-eight patients who attended the Psychiatry Outpatient Department of SOMCH. All were willingly consented to take part in the study. Previous treatment records were reviewed for preliminary selection. Major Depressive Disorder was assigned according to DSM-5 diagnostic criteria by a consultant psychiatrist. Socio-demographic information of the patient was obtained by using a semi-structured questionnaire. DASS subscale for depression was applied to assess the severity of depression. Then, the researcher interviewed the patient using the FSFI scale. It took about 30-35 minutes. One to Two patients were interviewed each day. Informed written consent was taken before data collection from patients. Confidentiality was maintained. Unintentional disclosure was avoided by consulting where they cannot be overheard and avoiding discussion between professional staff. The researcher periodically informed the guide and other consultants about the research findings. No compensation was provided where there were risks of loss of working time or privacy involved in any particular procedure. The subject was free to withhold the information during the study. The study did not involve any physical risk or social risk. Psychological risk and discomfort were minimized by an empathetic approach and by maintaining privacy. No drug or placebo was used for the study.

Data Analysis

Statistical analysis was performed using SPSS (Statistical package for social science) for Windows 25. All data were recorded systematically in a preformed

checklist and were checked and verified thoroughly to reduce inconsistency and for omission and improbabilities. The data was edited, coded, and entered into the computer. Quantitative data were summarized as mean and standard deviation, and the relationship between Major Depressive Disorder, its duration, and Sexual Dysfunction was assessed by Pearson's correlation coefficient test and scattered plot. Qualitative data were summarized as frequency and percentages. The chi-square (χ^2) test was used to see any relationship between Sexual Dysfunction and the socio-demographic variable of patients suffering from Major Depressive Disorder. A probability (p) value of <0.05 was considered statistically significant.

Ethical Considerations

Ethical approval was of utmost importance in this study. The research protocol received approval from the Ethical Review Committee of Sylhet MAG Osmani Medical College, ensuring adherence to ethical standards. Informed written consent was obtained from all participants, emphasizing their voluntary participation and understanding of the study's objectives, procedures, and potential risks and benefits. Participants were assured that their information would only be used for research purposes and would remain confidential, with no physical, psychological, or social risks imposed on them.

RESULTS

The study included a sample of 68 Major Depressive Disorder (MDD) patients. Socio-demographic data was collected using paper and pencil, and data were analyzed using SPSS version 25—the age distribution among depressed patients. The mean age was 32.34 years, with a standard deviation of 5.44. Most patients were in the 31-35 age group (38.2%), while the <26 age group had the lowest representation (13.2%).

Table 1: Association between Sexual Dysfunction and Demographic Characteristics of Major Depressive Disorder Patients

Demography	Sexual Dysfunction		P -Value
	Present	Absent	
Age			
<26	9 (100)	0 (0)	0.263
26-30	12 (70.6)	5 (29.4)	
31-35	21 (80.8)	5 (19.2)	
>35	11 (68.8)	5 (31.3)	
Religion			
Muslim	50 (80.6)	12 (19.4)	0.084
Hindu	3 (50.0)	3 (50.0)	
Education			
Illiterate	11 (78.6)	3 (21.4)	0.737
Primary	23 (82.1)	5 (17.9)	
Secondary	14 (73.7)	5 (26.3)	
Higher Secondary	3 (60)	2 (40)	
Graduate	2 (100)	0 (0)	

Occupation			
Housewife	47 (81.0)	11 (19.0)	0.059
Service	3 (75.0)	1 (25.0)	
Business	2 (100)	0 (0)	
Others	1 (25.0)	3 (75.0)	
Habitant			
Urban	30 (83.3)	6 (16.7)	0.255
Rural	23 (71.9)	9 (28.1)	
Monthly income			
<10000	29 (78.4)	8 (21.6)	0.977
10000-30000	18 (78.3)	5 (21.7)	
>30000	6 (75.0)	2 (25.0)	
Family History of Psychiatric Illness			
Present	10 (76.9)	3 (23.1)	0.922
Absent	43 (78.2)	12 (21.8)	
Parity			
Nulliparous	4 (100)	0 (0)	0.375
Primipara	11 (68.8)	5 (31.1)	
Multipara	38 (79.2)	10 (20.8)	

Table 2 demonstrates the association of Sexual Dysfunction with demographic characteristics of participants. Chi-square was used to assess the significance of the association. The age of the depressed patient was not significantly associated with sexual dysfunction (p=0.263). The p-value of the Chi-square study for the association of religion with Sexual

Dysfunction was not very significant (0.084). Similarly, education (p=0.737), occupation (p=0.059), and habitat (p=0.255) were not significantly associated with sexual dysfunction. Neither monthly income (p=0.977), family history of psychiatric illness (p=0.922), or parity (p=0.375) was associated significantly with Sexual Dysfunction.

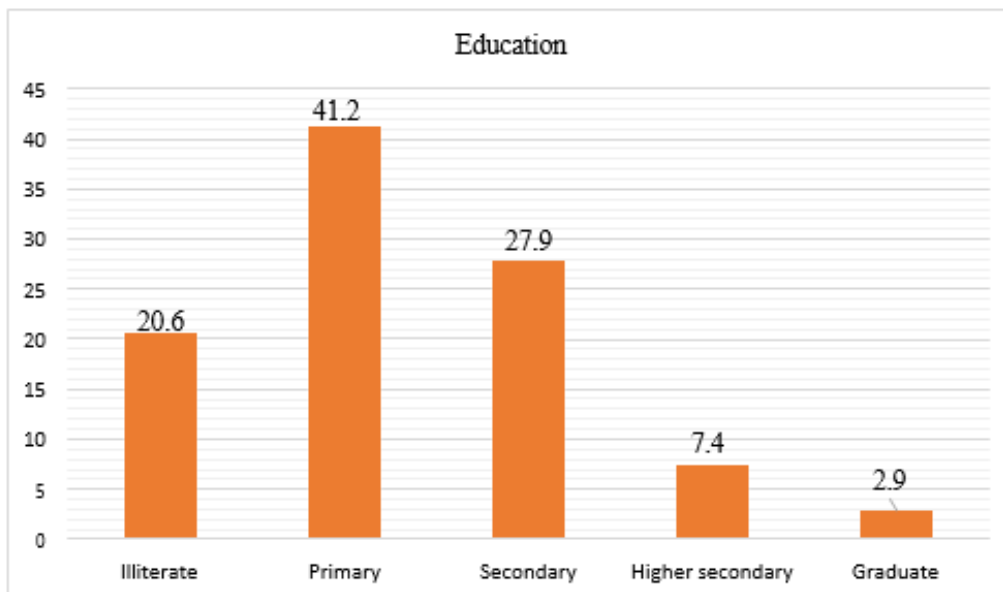


Figure 1: Distribution of education among the study population

Figure 1 demonstrates the education of depressed patients. Most patients (41.2%) completed up to the primary level. A good number of parents had completed up to the secondary level (27.9%). Fewer of

them were graduates (2.9%) or completed higher secondary education (7.4%). A good number of them were illiterate (20.6%).

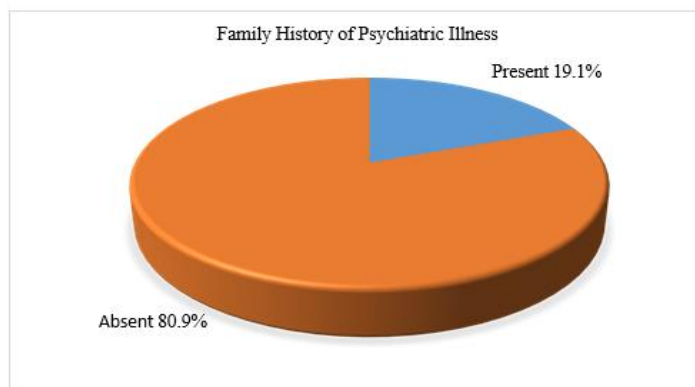


Figure 2: Distribution of study population according to family history of psychiatric illness

Figure 2 depicts the history of psychiatric illness. Among the depressed patients, 80.9% patient had

no family history of psychiatric illness, while 19.1% had a family history of psychiatric illness.

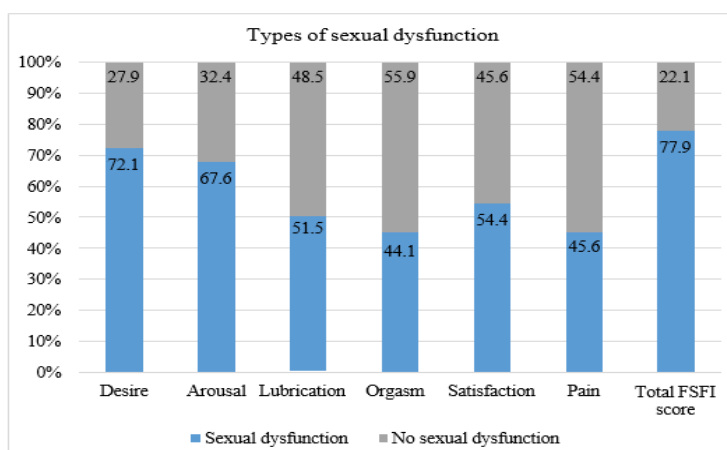


Figure 3: Distribution of Sexual dysfunction among subjects (n=68)

Figure 3 depicts the various and overall sexual dysfunction among the depressed patient. The patient had highest dysfunction in desire (72%) and arousal (67.6%). Many had dysfunction in lubrication (51.5%)

and satisfaction (54.4%). Fewer of them had dysfunction in orgasm (44.1%) and pain (45.6%). Overall, sexual dysfunction was very high among the respondents (77.9%).

Table 2: Pearson's Correlation between DASS Scale and FSFI Scores

	Correlation	DASS Score
Total FSFI Score	r	-0.454
	p-value	<0.001
Desire	r	-0.395
	p-value	<0.001
Arousal	r	-0.367
	p-value	0.002
Lubrication	r	-0.395
	p value	0.001
Orgasm	r	-0.487
	p-value	<0.001
Satisfaction	r	-0.241
	p-value	0.048
Pain	r	-0.315
	p-value	0.009
Duration of Depression	r	0.247
	p-value	0.043

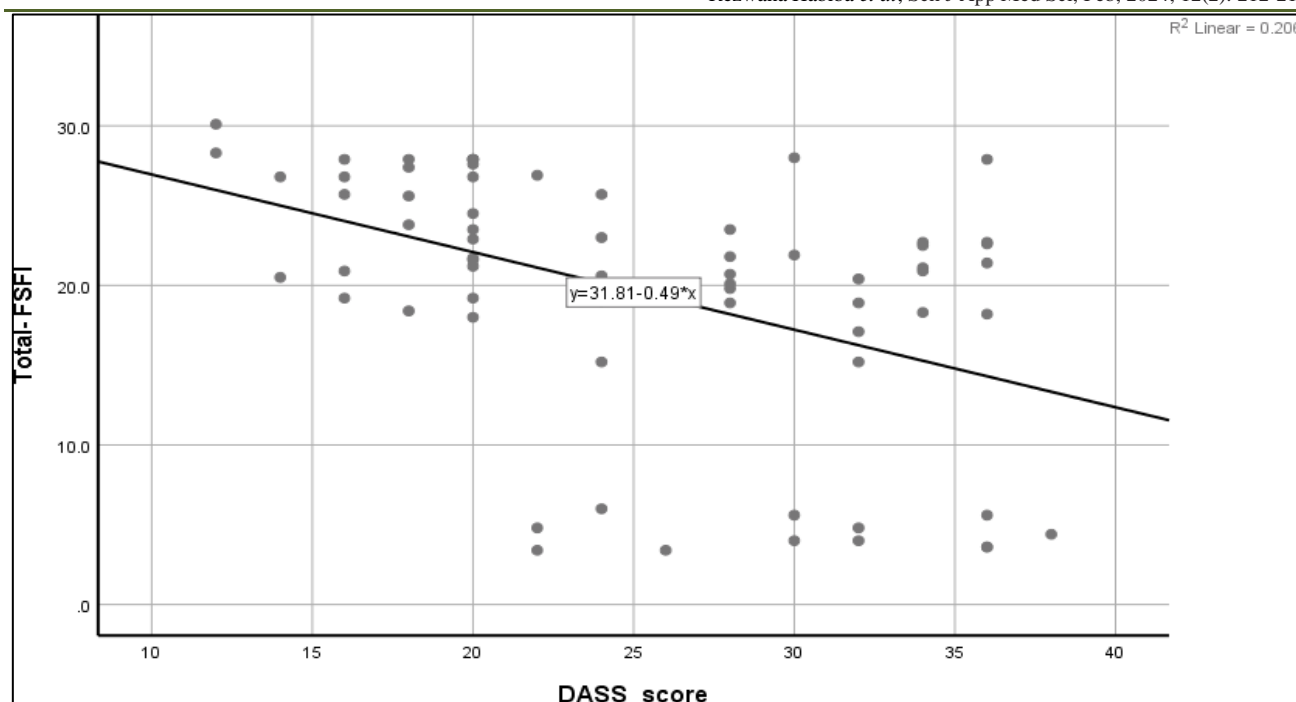


Figure 4: Relationship between DASS score and total FSFI scores

Figure 4 reveals the scattered plot illustrating the association of the DASS score and total FSFI score. It reveals the negative association. As the DASS score increases, the FSFI score decreases. It was due to a higher score of DASS revealing more severe depression and a lower score of FSFI revealing more severe sexual dysfunction.

DISCUSSION

Sexual dysfunction remains a globally sensitive issue, and this study addresses the scarcity of information on this topic, particularly in a country like Bangladesh. This cross-sectional observational study conducted in the Department of Psychiatry at Sylhet MAG Osmani Medical College Hospital aimed to assess the patterns and frequencies of sexual dysfunction among married females of reproductive age newly diagnosed with Major Depressive Disorder (MDD). The study involved interviews with 68 MDD patients to explore sexual dysfunction. The findings of the present study indicate a high prevalence of sexual dysfunction in women with Major Depressive Disorder, with 77.9% of participants reporting sexual dysfunction. This rate is consistent with similar studies conducted in Egypt [7] and India [8] and previous research in Bangladesh [9]. Additionally, an even higher rate of sexual dysfunction (90%) was reported in a study conducted by [10]. These results underscore the substantial impact of MDD on sexual health in women.

The severity of depression among the study participants varied, with 41.2% experiencing extremely severe depression, 35.3% moderate depression, 20.6% severe depression, and 2.9% mild depression. These

findings align with previous research, showing that depression severity often ranges from mild to extremely severe [11,12]. The prevalence of sexual dysfunction increased as the severity of depression increased, with none of the mildly depressed patients reporting sexual dysfunction. In contrast, 58.3% of moderately depressed patients and 92.9% of severely or extremely severely depressed patients reported sexual dysfunction. This observation is consistent with the findings of [13], further highlighting the connection between depression severity and sexual dysfunction. The Female Sexual Function Index (FSFI) scores indicated that all parameters of sexual dysfunction had lower scores among depressed patients, indicating a higher severity of sexual dysfunction. This aligns with the overall trend observed in the study, where increased depression severity was associated with a higher prevalence of sexual dysfunction. Sexual desire problems were the most frequently reported sexual dysfunction among the study participants, with 72.1% reporting low desire. This is consistent with studies conducted by Mahmoud *et al.*, [14,15]. The prevalence of desire disorders appeared to increase with the severity of depression, suggesting a potential link between depression severity and sexual desire disorder.

Sexual arousal problems were reported by 67% of the participants, which is consistent with the findings of [16] and Kennedy [17]. S. Lubrication difficulties were also prevalent among the study participants, with 51.5% reporting this issue. This finding is in line with the results of Mahmoud *et al.*, [18], who reported high rates of lubrication difficulties among moderately and severely depressed individuals. The study did not find a significant correlation between the duration of

depression and sexual dysfunction, contrasting with the findings of Thakurta *et al.*, [19]. The prevalence of difficulty in reaching orgasm was reported by 44.1% of the participants, consistent with the results of Maru *et al.* [20] and Hobb *et al.*, [21]. Satisfaction problems were experienced by 54.4% of the participants, in line with the findings of Maru *et al.*, (2019) and Mahmoud *et al.*, (2018). Sexual pain disorders were reported by 45.6% of the participants, consistent with the results of Maru *et al.*, [22] and Mahmoud *et al.*, [23]. One of the most significant findings of this study was the strong negative correlation between depression severity, as measured by the Depression, Anxiety, and Stress Scale-21 (DASS-21), and female sexual dysfunction (FSFI). All parameters of sexual dysfunction were significantly correlated with depression severity, indicating that as depression severity increased, sexual dysfunction became more pronounced. This finding reinforces the notion that sexual dysfunction is closely intertwined with the severity of Major Depressive Disorder.

Socio-demographic data revealed that the mean age of onset of female sexual dysfunction was 32.34 years, which is consistent with the findings of the Egyptian study by Mahmoud *et al.*, [24]. The study also found that the majority of patients were Muslim (91.2%), with 8.8% being Hindu, reflecting the religious composition of the region. Education levels varied, with 20.6% of participants being illiterate and the rest having completed primary or secondary studies. Occupation data indicated that most participants were housewives and lived in urban areas. Income levels varied, with 54.4% belonging to the lower-income group and 33.8% to the middle-income group. The study did not find any statistically significant relationships between socio-demographic variables and sexual dysfunction. In terms of family history, 80.9% of the participants had no family history of psychiatric illness. Parity did not show a significant correlation with sexual dysfunction in this study. These results contrast with the findings of other studies and suggest that different influencing factors may be at play in this population.

CONCLUSION

This study found a high prevalence of sexual dysfunction among Major Depressive Disorder (MDD) patients, with 77.9% affected. The severity of depression was significantly correlated with sexual dysfunction. Addressing sexual issues in MDD treatment is essential for improving patients' quality of life and overall outcomes.

Recommendations

- Include sexual dysfunction assessment in routine care for Major Depressive Disorder patients.
- Conduct additional multicenter studies in Bangladesh for a more comprehensive

understanding of sexual dysfunction in Major Depressive Disorder.

Acknowledgments

I express my sincere gratitude to Almighty Allah for granting me the strength to complete this research. My deepest appreciation goes to my esteemed guide, Dr. Ramendra Kumar Singha, for his unwavering support, guidance, and constructive criticism throughout the thesis. I also extend my thanks to Dr. Ahmed Riad Chowdhury, Dr. Kowsar Ahmed, Dr. Mubin Uddin, Dr. Sayed Inam, and others for their valuable contributions. Special thanks to my family, especially my husband Dr. Sayed Sharif-Ul-Alam, and my child Ryan for their inspiration and support.

Abbreviations

MDD - Major Depressive Disorder
 DASS-21 - Depression, Anxiety, and Stress Scale-21
 ED - Erectile Dysfunction
 FSFI - Female Sexual Function Index
 HAM-D - Hamilton Rating Scale for Depression
 ASEX - Arizona Sexual Experiences Scale
 DSM-5 Diagnostic and Statistical Manual for Mental Disorders

Study Purpose

To assess sexual dysfunction among female Major Depressive Disorder (MDD) patients of reproductive age in Bangladesh.

Key Findings

- Sexual dysfunction is highly prevalent (77.9%) among female MDD patients.
- The severity of depression correlates significantly with the severity of sexual dysfunction.
- Lower education levels, housewives, and lower income are associated with higher rates of sexual dysfunction.

New Findings Added to What Is Known

This study sheds light on the high prevalence of sexual dysfunction in a specific demographic of MDD patients in Bangladesh, emphasizing the need for further research and integrated assessment and management of sexual health in MDD patients.

Funding: No funding sources

Conflict of Interest: None declared

REFERENCES

1. Mahmoud, O. E., Ahmed, A. R., & Arafa, A. E. (2018). Patterns of female sexual dysfunction in premenopausal women with moderate to severe depression in Beni-Suef, Egypt. *Middle East Fertility Society Journal*, 23(4), 501-504.

2. Greenberg, P. E., Fournier, A. A., Sisitsky, T., Simes, M., Berman, R., Koenigsberg, S. H., & Kessler, R. C. (2021). The economic burden of adults with major depressive disorder in the United States (2010 and 2018). *Pharmacoeconomics*, 39(6), 653-665.
3. Greenberg, P., Chitnis, A., Louie, D., Suthoff, E., Chen, S. Y., Maitland, J., ... & Kessler, R. C. (2023). The Economic Burden of Adults with Major Depressive Disorder in the United States (2019). *Advances in Therapy*, 40(10), 4460-4479.
4. Thakurdesai, A., & Sawant, N. (2018). A prospective study on sexual dysfunctions in depressed males and the response to treatment. *Indian journal of psychiatry*, 60(4), 472.
5. Roy, P., Gupta, B., Tripathi, A., Nischal, A., Dalal, P. K., & Kar, S. K. (2019). Sexual functioning in females with depression in remission receiving escitalopram. *The Indian Journal of Medical Research*, 150(6), 606.
6. Angst, J. (1998). Sexual problems in healthy and depressed persons. *International clinical psychopharmacology*, 13, S1-4.
7. Mojdeh, F., & Mohamadi, S. Z. (2013). The relationship between depression and sexual function index among married women. *Avicenna Journal of Nursing and Midwifery Care*, 21(1), 41-51.
8. Maru, R. K., Jadhav, B. S., Shah, B. R., & Dhavale, H. S. (2019). A study to assess sexual dysfunction in patients with major depressive disorder. *Open Journal of Psychiatry & Allied Sciences*, 10(1), 26-31.
9. Thakurta, R. G., Singh, O. P., Bhattacharya, A., Mallick, A. K., Ray, P., Sen, S., & Das, R. (2012). Nature of sexual dysfunctions in major depressive disorder and its impact on quality of life. *Indian journal of psychological medicine*, 34(4), 365-370.
10. Sreelakshmy, K., Velayudhan, R., Kuriakose, D., & Nair, R. (2017). Sexual dysfunction in females with depression: a cross-sectional study. *Trends in psychiatry and psychotherapy*, 39, 106-109.
11. Mujawar, S., Chaudhury, S., & Saldanha, D. (2019). Sexual dysfunction in women with depressive disorder: a prospective, hospital based study. *Journal of Psychosexual Health*, 1(2), 129-139.
12. Manohar, S. J., Sathyanarayana Rao, T. S., Chandra, S., Maheshwari, S., George, M., & Rao, S. S. (2017). Sexual dysfunctions in depression. *Clinical Depression*, 3(3), 125.
13. Merino, M. J., González, P., Muñoz, J., & Bobes, J. (2000). Sexual dysfunction in depressed patients undergoing treatment with antidepressants. *International Journal of Psychiatry in Clinical Practice*, 4(4), 311-317.
14. Eissa, M. F., Missiry, M. A., Kamel, K. F. W., & Mahmoud, D. A. M. (2022). Sexual dysfunction and quality of life in female patients with major depression disorder. *Middle East Current Psychiatry*, 29(1), 43.
15. Kennedy, S. H., Dickens, S. E., Eisfeld, B. S., & Bagby, R. M. (1999). Sexual dysfunction before antidepressant therapy in major depression. *Journal of affective disorders*, 56(2-3), 201-208.
16. Chandel, S., Kumar, R., & Rohilla, J. (2022). Prevalence of Sexual Dysfunction in Women with Depression: Need for Psychosexual Health Promotion Approach. *Journal of Psychosexual Health*, 4(3), 178-184.
17. SH, K. (1999). Sexual dysfunction before antidepressant therapy in major depression. *J Affect Disord*, 56, 201-208.
18. Azin, S. A., Golbabaei, F., Warmelink, J. C., Eghtedari, S., Haghani, S., & Ranjbar, F. (2020). Association of depression with sexual function in women with history of recurrent pregnancy Loss: descriptive-correlational study in Tehran, Iran. *Fertility Research and Practice*, 6, 1-9.
19. Krishna, K., Avasthi, A., & Grover, S. (2011). Prevalence and psychological impact of antidepressant-associated sexual dysfunction: a study from North India. *Journal of clinical psychopharmacology*, 31(4), 457-462.
20. Jacobsen, P. L. (2018). *Antidepressant-Associated Sexual Dysfunction in Patients with Depression: A Meta-Analysis of Sexual Functioning Data Collected via Prospective Questionnaires* (Doctoral dissertation, Loyola University Chicago).
21. Hobbs, L. J., Mitchell, K. R., Graham, C. A., Trifonova, V., Bailey, J., Murray, E., ... & Mercer, C. H. (2019). Help-seeking for sexual difficulties and the potential role of interactive digital interventions: Findings from the third British National Survey of Sexual Attitudes and Lifestyles. *The Journal of Sex Research*, 56(7), 937-946.
22. Manohar J, S., Koolwal, A., & Rao, T. S. (2019). Sex and depression. *Journal of Psychosexual Health*, 1(1), 52-56.
23. Sahin, S., ILCIOĞLU, K., & Unsal, A. (2018). Evaluation of Sexual Dysfunction, Depression and Quality of Life Among Married Women Presented to a Gynecology Polyclinic of a Training and Research Hospital in Sakarya. *Clinical and Experimental Health Sciences*, 8(3), 182-189.
24. Chandel, S., Kumar, R., & Rohilla, J. (2022). Prevalence of Sexual Dysfunction in Women with Depression: Need for Psychosexual Health Promotion Approach. *Journal of Psychosexual Health*, 4(3), 178-184.