



Sexual Dysfunctions in Patients with Depressive Disorder

*Dr. Nubayra Tasneem¹, Dr. Mohammad Al Amin², Dr. Sinthia Alam³, Dr. Ishita Mou⁴, Dr. Shahla Shobnom⁵, Dr. M. Moniruzzaman Khan⁶, Dr. Shahnaz Sharmin⁷, Dr. Tania Sultana⁸

¹Consultant, Department of Dermatology, United Hospital, Dhaka, Bangladesh

¹Classified Orthopaedic Surgeon, Department of Orthopaedic Surgery, Combined Military Hospital (CMH), Ghatail, Bangladesh

³Assistant Professor, Dermatology & Venereology, United Medical College & Hospital, Dhaka, Bangladesh

⁴Registrar Department of Dermatology, BIRDEM General Hospital, Dhaka, Bangladesh

⁵Consultant, Department of Dermatology & Venereology, Labaid Aesthetic and Laser Lounge, Dhaka, Bangladesh

⁶Assistant Professor, Department of Dermatology, BIRDEM General Hospital, Bangladesh

⁷Registrar, Department of Cardiology, BIRDEM General Hospital, Dhaka, Bangladesh

⁸Registrar, Department of Cardiology, BIRDEM General Hospital, Dhaka, Bangladesh

Corresponding Author: Dr. Nubayra Tasneem, Consultant, Department of Dermatology, United Hospital, Dhaka, Bangladesh

(Received: 25 August 2025 Revised: 27 September 2025 Accepted: 14 October 2025)

KEYWORDS Sexual Dysfunction s and Depressive Disorder..	ABSTRACT: <p>Background: Sexual dysfunction is prevalent but frequently underdiagnosed comorbidity in depressive disorder patients. It has an important impact on quality of life and on the outcome of treatment, yet is still insufficiently evaluated in most clinical environments.</p> <p>Objective: The aim of this study was to assess the prevalence of sexual dysfunction in patients with Depressive disorder.</p> <p>Methods & materials: This cross sectional non-interventional study was conducted in Dermatology and Venereology Outpatient Department of Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh, over a period of six months, from February to July 2021. Total 30 patients who were diagnosed with Depressive disorders according to ICD 10 were included in the study.</p> <p>Result: The majority of the patients (60%) belonged to the age group 20–40, females (56.25%) outnumbering males. Most of the patients were married (95%) and had education beyond the 10th standard in more than half of them. A total of 61.25% of patients had sexual dysfunction, with elevation of the severity of depression: 18.3% in mild, 44.9% in moderate, and 57.1% in severe depression. In males, decreased desire (42.8%) and erectile failure (25.7%) were common, while in females, decreased desire (51.1%), orgasmic failure (40%), and dissatisfaction (44.4%) were more frequently noted.</p> <p>Conclusion: Sexual dysfunction is extremely common in depressive disorder patients and has a clear association with illness severity. Gender-specific patterns highlight the need for regular sensitive assessment and individual care in clinical practice.</p>
--	---



Introduction

Sexual expression is an essential component of Human life along with other basic needs. It provides a feeling of physical and psychological well being. Interest in human sexual function has increased considerably in the recent years, and this shift in social attitudes has increased the number of people who wonder whether their sexual performance is less than ideal and has consequently increased the need to consult a health professional.^[1] Epidemiological and clinical studies show that untreated depressive disorder is associated with impairment of sexual function and satisfaction.^[2] Major depressive disorder (MDD) is characterized by loss of interest, reduction in energy, lowered self-esteem, inability to experience pleasure, this constellation of symptoms may be expected to produce difficulty in sexual relationship. Depressed patients have shown Sexual dysfunction 2-3 times more than non-depressed individuals.^[3] Decreased libido commonly accompanies an episode of major depression. Casper et al.,^[4] in the classic study on a sample of moderate to severe hospitalized drug-free patients with major affective disorder, found that the majority of these patients (72% of unipolar depressed and 77% of bipolar depressed) experienced loss of sexual interest. Increasing severity of depression and anxiety was associated with loss of libido. Age and cognitive impairment also showed a strong correlation with the reduction in sexual interest. Depressed persons may also experience diminished ability to maintain sexual arousal or achieve orgasm. In males with severe depression, the rate of ED might reach 90%.^[5] Assessment of nocturnal penile tumescence has been used as a measure of erectile capacity. The relationship between sexual dysfunction and depression seems to be bidirectional, the presence of either one of these conditions may trigger or exacerbate the other, and the treatment of one condition may improve the other.^[6] Although sexual dysfunction and depression are highly comorbid, the causal relationship is unclear. Men who have depression have a nearly 2-fold greater likelihood of having erectile dysfunction compared with nondepressed men.^[7] Several studies have determined that major depressive disorder is associated with decreased libido, erectile dysfunction, and decreased sexual activity.^[8] In both men and women, having troubles with sexual health can worsen feelings of worthlessness and other depression symptoms. As mentioned above, dopaminergic, noradrenergic, and

serotonergic neurotransmitter systems are involved in sexual dysfunction: Desire and arousal function are increased by disinhibition of dopaminergic systems.^[9] The role of serotonergic neurotransmission is more complex, with serotonin likely modulating both excitatory and inhibitory pathways for sexual behavior and generally thought to impede sexual function.^[10] Sexual dysfunction is commonly associated with depression, and loss of libido is frequently associated with major depression.^[11] Sexual dysfunction is a source of additional suffering for depressed patients and may contribute to poor compliance.^[12] While sexual dysfunctions are independently associated with negative outcomes, they also commonly co-occur with emotional disorders, such as depressive and anxiety disorders and this comorbidity can have a particularly detrimental impact.^[13] For example, comorbidity between sexual dysfunctions and emotional disorders is associated with higher rates of suicidality, as well as increased chronicity and severity of the disorders, relative to either cluster of disorders alone.^[14-16] When the disorders are not treated together, this comorbidity is also associated with worse long-term treatment outcomes, such as higher dropout, poorer response, and poorer adherence.^[17,18] Given their strong negative impact when combined, more research is needed to understand the nature of the relationships between sexual dysfunctions, emotional disorders, and psychopathology more broadly. With this background, this study is taken up to evaluate the prevalence and types of sexual dysfunctions in patients attending the psychiatry OP with diagnosis of Depression for the first time.

Objectives

To assess the prevalence of sexual dysfunction in patients with Depressive disorder.

Methods & Materials

This cross sectional non-interventional study was conducted in Dermatology and Venereology Outpatient Department of Shaheed Suhrawardy Medical College Hospital, Dhaka, Bangladesh, over a period of six months, from February to July 2021. Total 30 patients who were diagnosed with Depressive disorders according to ICD 10 were included in the study. Patients aged between 20 to 60 years, meeting the diagnostic criteria for Depressive disorder for the first time and who had given consent for the study were eligible for this



study. Patients already on pharmacological management of any Psychiatric disorder who were on any other medication that could cause sexual dysfunction and with diabetes and hypertension. Sociodemographic and clinical data were collected using a structured proforma. For male participants, the International Index of Erectile Function (IIEF) was administered to assess different domains of sexual functioning, including erectile function, orgasmic function, sexual desire, intercourse satisfaction, and overall satisfaction. The assessment allowed for both the identification and classification of sexual dysfunction types within the study population. Informed consent was taken from all the patients. Ethical approval for the study was obtained from the institutional ethical review board. All collected data were systematically recorded and subsequently analyzed using Microsoft Excel and Statistical Package for the Social Sciences (SPSS) version 23.

Results

Table I presents the demographic characteristics of the study patients. The study population comprised 80 patients diagnosed with depressive disorder. The majority of patients (60%) were between 20 and 40 years of age, while 40% were in the 41–60 years group. Females represented a slightly higher proportion of the sample (56.25%) compared to males (43.75%). In terms of education, 15% of the patients were illiterate, 22.5% had education up to less than the 10th standard, and the largest group (62.5%) had education above the 10th standard. Regarding marital status, a vast majority (95%) were married, whereas only 5% were unmarried, as illustrated in Figure 1.

Table II shows the severity of depression vs sexual dysfunction. Out of the 80 patients assessed, 49 (61.25%) were found to have sexual dysfunction. The distribution of dysfunction varied with the severity of depression. Among those with mild depression, 18.3% reported sexual dysfunction. The prevalence was higher in moderate cases, with 44.9% affected, and was most pronounced in severe depression, where 57.1% of patients reported sexual dysfunction. This indicates a direct relationship between the severity of depressive symptoms and the occurrence of sexual dysfunction.

Table III highlights the types of Sexual Dysfunctions. The pattern of sexual dysfunction differed between male and female patients. Among men (n=35), the most

common dysfunction was reduced sexual desire (42.8%), followed by erectile dysfunction and intercourse dissatisfaction, each reported by 25.7%. Orgasmic dysfunction was less frequent, noted in 8.5% of men, while overall dissatisfaction was reported by 37.1%. In women (n=45), reduced sexual desire was also the most common dysfunction (51.1%), followed by intercourse dissatisfaction (40%) and orgasmic dysfunction (40%). Overall dissatisfaction was reported by 44.4% of women. These findings highlight that loss of sexual desire and dissatisfaction were prominent issues in both genders, with orgasmic dysfunction being particularly prevalent among female patients.

Table-I: Demographic characteristics of the study patients (N=80)

Characteristics	Number of patients	Percentage (%)
Age		
20–40 years	48	60%
41–60 years	32	40%
Gender		
Male	35	43.75%
Female	45	56.25%
Education		
Illiterate	12	15%
< 10th class	18	22.5%
> 10th class	50	62.5%

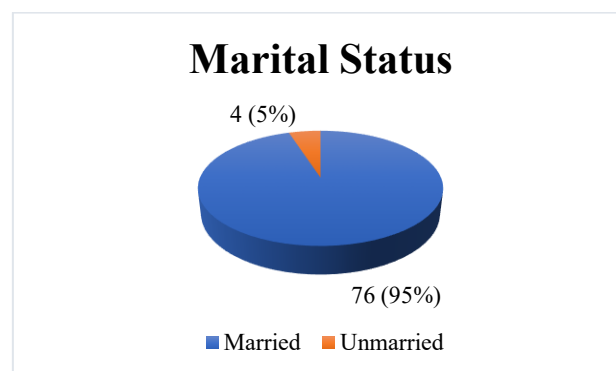


Figure 1: Distribution of marital status of the study patients (N=80)



Table-II: Severity of Depression vs Sexual dysfunction

Severity of Depression	Number of people with Sexual Dysfunction (%)
Mild	9 (18.3%)
Moderate	22 (44.9%)
Severe	28 (57.1%)
Total (N=80)	49

Table-III: Types of sexual dysfunctions

Type of Dysfunction	Men (n=35)	Women (n=45)
Sexual Desire	15 (42.8%)	23 (51.1%)
Erectile Dysfunction	9 (25.7%)	–
Intercourse Dissatisfaction	9 (25.7%)	18 (40%)
Orgasmic Dysfunction	3 (8.5%)	18 (40%)
Overall Dissatisfaction	13 (37.1%)	20 (44.4%)

Discussion

The present study investigated the incidence and nature of sexual dysfunction in depressive disorder patients with particular interest in sociodemographic features, severity of depression, and gender. Of the 80 patients assessed, the majority were 20-40 years old, with women outnumbering men slightly. Most of the patients were married, consistent with earlier findings that marital status would influence reporting sexual problems during depression.^[19] Similar demographic patterns have been reported by other researchers, with women constituting a larger proportion of depressive disorder groups and showing increased vulnerability to associated sexual dysfunction.^[20]

The overall prevalence of sexual dysfunction in this study was 61.25%, which is in line with previous reports of more than half of the patients with depressive

disorders experiencing some form of sexual impairment.^[21] Of note, the relationship between depression severity and sexual dysfunction was evident, as 18.3% of mildly depressed, 44.9% of moderately depressed, and 57.1% of severely depressed patients reported dysfunction. This pattern corroborates the observations of Fabre and Smith^[22], who demonstrated that increasing depression severity was associated with greater sexual functional impairment, particularly in women. Similarly, Fabre, Clayton, and Smith^[23] found that men who were more severely depressed exhibited more erectile and orgasmic dysfunction, once again showing a dose-response effect between depressive symptom severity and sexual function. Meta-analytic findings have also determined that sexual dysfunction is significantly greater with the severity of depressive disorders, reinforcing the linear correlation identified in this study.^[21]

In examining gender-specific trends, there were distinct differences. The most common dysfunction among men was reduced sexual desire (42.8%), followed by erectile dysfunction and dissatisfaction with intercourse, with each being reported by 25.7%. Orgasmic dysfunction was relatively unusual (8.5%), yet global dissatisfaction was reported by 37.1%. In women, reduced sexual desire was again the most common dysfunction (51.1%), with dissatisfaction with intercourse and orgasmic dysfunction coming next (40% each), and global dissatisfaction being reported by 44.4%. What these findings underline is that although loss of desire is the underlying issue for both sexes, women are more likely to report orgasmic issues and overall dissatisfaction. Liu et al.^[24] also found higher prevalence of desire and orgasmic dysfunction among women with depression, while erectile problems were more characteristic of male patients. Thakurta and Singh^[25] also observed this gender-differentiated trend, with male patients predominantly complaining about erectile problems while women more frequently reported orgasmic and satisfaction-related dysfunctions. The same findings from Lai^[26] and Goncalves et al.^[21] corroborate the fact that reduced sexual desire is the most consistent dysfunction in both genders, yet women experience a wider range of impairments, including orgasmic dysfunction and dissatisfaction.

Collectively, the findings of this study point to the bidirectional and complicated nature of the depression-



sexual dysfunction link. Demographic variables, severity of illness, and gender all significantly contribute to patterns of dysfunction experienced.

Limitations of the study

In our study, there was small sample size and absence of control for comparison. Study population was selected from one center in Dhaka city, so may not represent wider population. The study was conducted at a short period of time. Being a cross sectional study, long term changes in sexual dysfunction could not be estimated.

Conclusion

This study concludes that depressive disorders are more common in women than men. The prevalence of sexual disorders increased with the severity of depression. Reduction in sexual desire, intercourse dissatisfaction, orgasmic

dysfunction and overall dissatisfaction was more in females compared to males.

References

1. Moreira ED, Glasser DB, Nicolosi A, Duarte FG, Gingell C; GSSAB Investigators' Group. Sexual problems and help-seeking behaviour in adults in the United Kingdom and continental Europe. *BJU Int.* 2008;101(8):1005–11.
2. Bartlik B, Kocsis JH, Legere R, Villaluz J, Kossoy A, Gelenberg AJ. Sexual dysfunction secondary to depressive disorders. *J Gend Specif Med.* 1999;2(6):52–60.
3. Baldwin DS. Depression and sexual function. *J Psychopharmacol.* 1996;10(Suppl 1):S30–4.
4. Casper RC, Redmond DE Jr, Katz MM, Schaffer CB, Davis JM, Koslow SH. Somatic symptoms in primary affective disorder. Presence and relationship to the classification of depression. *Arch Gen Psychiatry.* 1985;42(11):1098–104.
5. Feldman HA, Goldstein I, Hatzichristou DG, Krane RJ, McKinlay JB. Impotence and its medical and psychosocial correlates: Results of the Massachusetts Male Aging Study. *J Urol.* 1994;151(1):54–61.
6. Seidman SN, Roose SP. The relationship between depression and erectile dysfunction. *Curr Psychiatry Rep.* 2000;2(3):201–5.
7. Kennedy SH, Dickens SE, Eisfeld BS, Bagby RM. Sexual dysfunction before antidepressant therapy in major depression. *J Affect Disord.* 1999;56(2–3):201–8.
8. Araujo AB, Durante R, Feldman HA, Goldstein I, McKinlay JB. The relationship between depressive symptoms and male erectile dysfunction: Cross-sectional results from the Massachusetts Male Aging Study. *Psychosom Med.* 1998;60(4):458–65.
9. Meston CM, Frohlich PF. The neurobiology of sexual function. *Arch Gen Psychiatry.* 2000;57(11):1012–30.
10. Frohlich P, Meston M. Evidence that serotonin affects female sexual functioning via peripheral mechanisms. *Physiol Behav.* 2000;71(3–4):383–93.
11. Bartlik B, Kocsis JH, Legere R, Villaluz J, Kossoy A, Gelenberg AJ. Sexual dysfunction secondary to depressive disorders. *J Gend Specif Med.* 1999;2(6):52–60.
12. Bonierbale M, Lançon C, Tignol J. The ELIXIR study: Evaluation of sexual dysfunction in 4557 depressed patients in France. *Curr Med Res Opin.* 2003;19(2):114–24.
13. Laurent SM, Simons AD. Sexual dysfunction in depression and anxiety: Conceptualizing sexual dysfunction as part of an internalizing dimension. *Clin Psychol Rev.* 2009;29(7):573–85.
14. Dell'Osso L, Carmassi C, Carlini M, Rucci P, Torri P, Cesari D, Maggi M. Sexual dysfunctions and suicidality in patients with bipolar disorder and unipolar depression. *J Sex Med.* 2009;6(11):3063–70.
15. Michael A, O'Keane V. Sexual dysfunction in depression. *Hum Psychopharmacol.* 2000;15(5):337–45.
16. Rajkumar RP, Kumaran AK. Depression and anxiety in men with sexual dysfunction: A



- retrospective study. *Compr Psychiatry*. 2015;60:114-8.
17. Bossini L, Fortini V, Casolaro I, Caterini C, Koukouna D, Cecchini F, Fagiolini A. Sexual dysfunctions, psychiatric diseases and quality of life: A review. *Psychiatr Pol*. 2014;48(4):715-26.
18. Dobkin RD, Leiblum SR, Rosen RC, Menza M, Marin H. Depression and sexual functioning in minority women: Current status and future directions. *J Sex Marital Ther*. 2006;32(1):23-36.
19. Sreelakshmy K, Velayudhan R, Kuriakose D, Nair R. Sexual dysfunction in females with depression: a cross-sectional study. *Trends in psychiatry and psychotherapy*. 2017;39(2):106-9.
20. Mujawar S, Chaudhury S, Saldanha D. Sexual dysfunction in women with depressive disorder: A prospective, hospital based study. *Journal of Psychosexual Health*. 2019 Apr;1(2):129-39.
21. Goncalves WS, Gherman BR, Abdo CH, Coutinho ES, Nardi AE, Appolinario JC. Prevalence of sexual dysfunction in depressive and persistent depressive disorders: a systematic review and meta-analysis. *International Journal of Impotence Research*. 2023 Jun;35(4):340-9.
22. Fabre LF, Smith LC. The effect of major depression on sexual function in women. *The Journal of Sexual Medicine*. 2012 Jan;9(1):231-9.
23. Fabre LF, Clayton AH, Smith LC, Goldstein IM, Derogatis LR. Association of major depression with sexual dysfunction in men. *The Journal of neuropsychiatry and clinical neurosciences*. 2013 Oct;25(4):308-18.
24. Liu X, Feng Z, Galling B, Qi N, Zhu XQ, Xiao L, Wang G. Gender specific sexual dysfunction in patients with depression. *Frontiers in psychiatry*. 2023 Jun 15;14:1194228.
25. Thakurta RG, Singh OP, Bhattacharya A, Mallick AK, Ray P, Sen S, Das R. Nature of sexual dysfunctions in major depressive disorder and its impact on quality of life. *Indian journal of psychological medicine*. 2012 Oct;34(4):365-70.
26. Lai CH. Major depressive disorder: gender differences in symptoms, life quality, and sexual function. *Journal of clinical psychopharmacology*. 2011 Feb 1;31(1):39-44.