



Association of Sexual Dysfunctions and Substance Use Related Factors among Married Couples

S. M. Zikrul Islam^{1*}, Bipasha Mosharof², Md. Rafiqul Islam³, Ahmed Riad Chowdhury⁴, Taslima Rahman⁵, Md. Jasim Uddin⁶, Rahat Emam⁷, Shafiul Alam⁸

¹Assistant Registrar, Department of Psychiatry, Dhaka Medical College Hospital, Dhaka, Bangladesh.

Email: drzikrul48@gmail.com

Orcid ID: 0009-0009-5440-2076

²Resident, Department of Radiology and Imaging, Dhaka Medical College Hospital, Dhaka, Bangladesh.

Email: bipashamosharofjhilik@gmail.com

Orcid ID: 0009-0002-9067-8431

³Assistant Registrar, Department of Psychiatry, Rangpur Medical College Hospital, Rangpur, Bangladesh.

Email: rafiqul34rpmc@mail.com

Orcid ID: 0009-0001-9183-6086

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

Email: drriad68@gmail.com

Orcid ID: 0009-0007-2158-9917

⁵Assistant Inspector General (Health), Department of Inspection for Factories and Establishment Ministry of Labour and Employment.

Email: taslima_1993@yahoo.com

Orcid ID: 0009-0001-7735-0485

⁶Assistant Professor, Department of Psychiatry, Rajshahi Medical College, Rajshahi, Bangladesh.

Email: jasim46rmc@gmail.com

Orcid ID: 0009-0003-9812-6997

⁷Assistant Registrar, Department of Neurology, Jashore Medical College Hospital, Jashore, Bangladesh.

Email: imam.rahat@yahoo.com

Orcid ID: 0009-0006-5193-2395

⁸MBBS, MCPS (Psychiatry),

Email: arnab.sa0709@gmail.com

Orcid ID: 0009-0001-7197-254X

*Corresponding Author

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Abstract

Background: Sexual dysfunction is a significant health issue that can be exacerbated by substance use, affecting both individual well-being and marital relationships. This study aims to explore the association between substance use and sexual dysfunction among married couples in Sylhet, Bangladesh, and to identify the sociodemographic factors that influence this relationship. **Material & Methods:** This cross-sectional study was conducted at the Addiction Clinic, Outpatient and Inpatient Department of Psychiatry, Sylhet MAG Osmani Medical College Hospital, from September 2020 to August 2022. A total of 49 married patients with substance use disorders were selected through purposive sampling. Data were collected using a pre-designed structured questionnaire, the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), and the Bangla version of the Arizona Sexual Experience Scale (ASEX). Statistical analysis was performed using SPSS version 25, with Chi-square tests to assess the significance of associations. **Results:** The study found that 37% of participants reported sexual dysfunction. Among these, 61.11% had low sexual desire, 50.00% had arousal problems, 66.67% had difficulty in vaginal lubrication, 55.56% had difficulty reaching orgasm, and 83.33% had problems with orgasmic satisfaction. Duration of substance use was significantly associated with sexual dysfunction ($p=0.002$), with 66.67% of participants using substances for more than 10 years experiencing dysfunction. The type of substance used also showed a significant association ($p=0.01$), with higher prevalence among poly substance users (66.67%). Age, gender, and education level were significantly associated with sexual dysfunction, while occupation, monthly income, habitat, and family history of psychiatric illness were not. **Conclusions:** The study underscores the complex interplay between substance use and sexual dysfunction, influenced by various sociodemographic factors. These findings highlight the need for integrated treatment approaches that address both substance use and sexual health. Targeted interventions and public health policies are essential to improve the sexual health and overall well-being of individuals with substance use disorders.

Keywords:- Substance use, Sexual dysfunction, ASEX, Marital relationships, Bangladesh.



INTRODUCTION

Sexual dysfunctions are prevalent and debilitating conditions that significantly impact the quality of life and relationship satisfaction among affected individuals. These dysfunctions encompass a range of issues, including erectile dysfunction, inhibited orgasm, premature ejaculation, and lack of sexual desire. Erectile dysfunction refers to the inability to achieve or maintain an erection sufficient for satisfactory sexual performance, while inhibited orgasm involves a delay or absence of orgasm following a normal sexual excitement phase. Premature ejaculation is characterized by ejaculation that occurs sooner than desired, either before or shortly after penetration. Lack of sexual desire, or hypoactive sexual desire disorder, involves a persistent or recurrent deficiency or absence of sexual fantasies and desire for sexual activity. These conditions are not only physical but also psychological, affecting both men and women across various age groups.^[1,2] Substance use involves the consumption of psychoactive substances that can alter normal brain function and lead to dependency. Commonly abused substances include alcohol, marijuana, and opioids. Alcohol is a central nervous system depressant that, when consumed in excess, can lead to addiction, liver disease, and various other health problems. Marijuana, often used for its psychoactive effects, can cause dependency and cognitive impairments. Opioids, which include prescription painkillers like oxycodone and illegal drugs like heroin, are highly addictive and associated with significant morbidity and mortality. Substance use disorders (SUDs) are characterized by the compulsive use of these substances despite adverse consequences. SUDs are a major public

health concern globally, contributing significantly to the burden of disease.^[3,4,5] The prevalence of sexual dysfunctions worldwide is substantial. According to the Global Study of Sexual Attitudes and Behaviors, high prevalence rates of sexual dysfunctions, such as early ejaculation and erectile difficulties in men and lack of sexual interest, inability to achieve orgasm, and lubrication difficulties in women, have been reported across 29 countries.^[1] A systematic review and meta-analysis further highlighted significant rates of female sexual dysfunction (FSD) in premenopausal women, including hypoactive sexual desire disorder, orgasmic disorder, and sexual pain disorders.^[2] Substance use disorders are also widespread. The Global Burden of Disease Study 2010 found that mental and substance use disorders accounted for 7.4% of all disability-adjusted life years (DALYs) worldwide and were a leading cause of years lived with disability (YLDs).^[6] Another global analysis reported a prevalence of substance-use disorders at 2.2%, with alcohol-use disorders being the most prevalent at 1.5%.^[7] In Bangladesh, the prevalence of sexual dysfunctions and substance use is a growing concern. Studies on the mental health and functioning of female sex workers in Chittagong, Bangladesh, highlighted the high prevalence of sexual dysfunction and related mental health issues among this vulnerable population.^[8] Additionally, substance use among college students in Bangladesh has been reported at significant levels, indicating a public health issue that requires urgent attention.^[9,10] The societal perception of substance use varies, but it is generally stigmatized, leading to underreporting and challenges in addressing the issue effectively. Research has highlighted the association between sexual dysfunctions



and substance use in Bangladesh. Studies have shown that substance use significantly impacts sexual health, with high prevalence rates of various sexual dysfunctions among individuals with substance use disorders.^[11] Moreover, gender differences in the impact of substance use on sexual health have been documented, with women often facing more severe consequences due to societal and cultural factors.^[12] Globally, the link between sexual dysfunctions and substance use is well-established. Substance use is associated with a range of sexual dysfunctions, including erectile dysfunction, inhibited orgasm, and decreased sexual desire. These associations are influenced by various factors, including the type and duration of substance use, underlying health conditions, and psychological factors.^[13] Marital dynamics significantly influence sexual health. Studies have shown that trust, communication, and decision-making are crucial for marital satisfaction and sexual function. For instance, research on the impact of methadone maintenance treatment on marital relationships highlighted the broader impact of substance use on family dynamics and the importance of supportive marital relationships for sexual health.^[14,15] Additionally, violence against wives, sexual risk behaviors, and sexually transmitted infections among Bangladeshi men have been linked to marital dynamics, emphasizing the need for addressing these issues within the context of marital relationships.^[16] Understanding these complex interactions is essential for developing effective public health interventions. This study aims to explore the prevalence and types of sexual dysfunctions among married couples in Sylhet, investigate the relationship between substance use and sexual dysfunctions, and understand

the influence of marital dynamics on these associations. By addressing these issues, the study seeks to contribute to the development of effective public health policies and interventions to improve sexual health and relationship satisfaction in the Bangladeshi population.

MATERIAL AND METHODS

This cross-sectional study was conducted at the Addiction Clinic, Outpatient and Inpatient Department of Psychiatry, Sylhet MAG Osmani Medical College Hospital, Sylhet, from 1st September 2020 to 31st August 2022. The study was divided into two phases: the first phase involved problem identification, literature review, protocol writing, questionnaire preparation, and pre-testing, while the second phase focused on data collection, analysis, and report writing. The study population included married patients with Substance Use Disorder (SUD) who attended the Addiction Clinic. Purposive sampling was used to select 49 participants. Inclusion criteria were a diagnosed case of SUD of any duration, married patients living with their partner for at least the last six months, and aged between 18 to 65 years. Exclusion criteria included sexual dysfunction prior to SUD, co-morbid severe mental illness, co-morbid medical and previous surgical conditions (e.g., endocrine diseases like diabetes mellitus, thyroid disease, hypogonadism, hyperprolactinaemia; neurological diseases like spinal cord lesions, pelvic autonomic neuropathy; urological diseases like Peyronie's disease; sexually transmitted diseases; and history of previous pelvic surgery), and patients taking medication that causes sexual dysfunction. Data were collected using a pre-designed structured

questionnaire for socio-demographic and other relevant information. Substance Use Disorder was diagnosed using the DSM-5 criteria by a psychiatrist. Sexual functioning was measured using the Bangla version of the Arizona Sexual Experience Scale (ASEX), which assesses sexual drive, arousal, penile erection or vaginal lubrication, ability to reach orgasm, and satisfaction with orgasm over the past week.^[17] Total ASEX scores range from 5 to 30, with higher scores indicating greater sexual dysfunction. Sexual dysfunction is defined as a total score of 19 or more, a score of 5 or more on any item, or a score of 4 or more on three items. Data were processed and analyzed using SPSS version 25. All data were systematically recorded, checked, verified, edited, coded, and entered into the computer. Categorical data were expressed as frequency and percentage, and comparisons among variables were made using cross-tabulation and Chi-square (χ^2) test. The level of significance was set at 5%, with a p-value < 0.05 considered significant. Ethical considerations followed the Helsinki Declaration for Research Involving Human Subjects (1964, last amended in 2013). The research protocol was approved by the ethical review committee of Sylhet MAG Osmani Medical College, and permission was obtained from the appropriate authority. Informed written consent was obtained from all participants, who were informed about the nature, purpose, procedure, risks, and benefits of the study, and their right to withdraw at any time. Participants were assured that the information provided would be used solely for research purposes and would not be disclosed otherwise. They were also informed that they would not face any physical, psychological, or social risks from participating in the study.

RESULTS

The age distribution of the participants showed that 18.37% were under 25 years old, 59.18% were between 25 to 40 years old, and 22.45% were over 40 years old. A significant majority of the participants were male, accounting for 93.88%, while females represented 6.12% of the sample. Regarding religious affiliation, 73.47% of the participants were Muslim, and 26.53% were Hindu. Educational background varied among the participants, with 8.16% being illiterate, 36.73% having completed primary education, and equal percentages (18.37%) having completed secondary education, higher secondary education, and graduate-level education. In terms of occupation, 16.33% were farmers, 10.20% were in service jobs, 28.57% were involved in business, 4.08% were students, 28.57% were unemployed, and 12.24% had other types of employment. Monthly income levels showed that 32.65% of participants earned less than 3000 BDT, 46.94% had an income between 3000 to 20000 BDT, and 10.20% each earned between 20000 to 40000 BDT and 40000 to 60000 BDT. The habitat distribution indicated that 55.10% of the participants lived in urban areas, while 44.90% resided in rural areas. Lastly, a family history of psychiatric illness was present in 10.20% of the participants, whereas 89.80% had no such family history.

The substance use-related characteristics of the 49 participants revealed varied patterns. Regarding the duration of substance use, 26.53% of participants had been using substances for 1 to 5 years, while 36.73% had been using for 5 to 10 years, and another 36.73% for more than 10 years. In terms of the substances used, 34.69% of participants reported using cannabis, 4.08% used heroin,

16.33% used Yaba, and 8.16% consumed alcohol. Notably, 36.73% of the participants were involved in poly substance use. When examining the history of treatment for substance use, 48.98% of participants had previously sought treatment, while 51.02% had not.

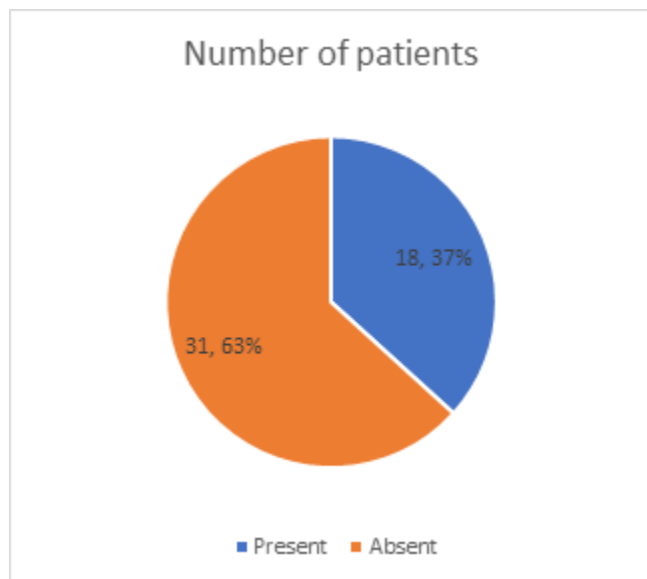


Figure 1: Distribution of participants by incidence of sexual dysfunction (N=49)

As depicted in Figure 1, 37% of the participants (18 individuals) reported the presence of sexual dysfunction, whereas 63% (31 individuals) did not report any sexual dysfunction.

Among the 18 participants who reported sexual dysfunction, various types of sexual dysfunction were assessed using the Arizona Sexual Experiences Scale (ASEX). Low sexual desire (Dom-1) was reported by 61.11% of the participants. Arousal problems (Dom-2) were experienced by 50.00% of the participants. Difficulty in vaginal lubrication (Dom-3) was the most common issue, affecting 66.67% of the participants. Difficulty reaching orgasm (Dom-

4) was reported by 55.56%, and problems with orgasmic satisfaction (Dom-5) were the most prevalent, affecting 83.33% of the participants.

A total of 61.11% of the participants had an ASEX total score of 19 or more. Additionally, 27.78% of the participants had a score of 4 on three domains but a total score of less than 19. Finally, 11.11% of the participants had a score of 5 on one domain while still having a total score of less than 19.

The age distribution indicated a significant association with sexual dysfunction, with 22.22% of participants under 25, 44.44% between 25 to 40, and 33.33% over 40 reporting sexual dysfunction, compared to 16.13%, 67.74%, and 16.13% respectively among those without sexual dysfunction ($p=0.025$). Gender showed a significant association, with 83.33% of males and 16.67% of females experiencing sexual dysfunction, while all participants without sexual dysfunction were male ($p=0.04$). Religion was not significantly associated with sexual dysfunction, although 61.11% of participants with sexual dysfunction were Muslim and 38.89% were Hindu, compared to 80.65% and 19.35% respectively among those without sexual dysfunction ($p=0.12$). Educational background revealed a significant association, with 16.67% of those with sexual dysfunction being illiterate, 50.00% having primary education, 22.22% higher secondary, and 11.11% graduate-level education, compared to 3.23%, 29.03%, 16.13%, and 22.58% respectively among those without sexual dysfunction. None of the participants with sexual dysfunction had secondary education, compared to 29.03% among those without ($p=0.04$). Occupation did not show a significant association with sexual dysfunction ($p=0.18$).



Among those with sexual dysfunction, 33.33% were farmers, 11.11% in service, 16.67% in business, 27.78% unemployed, and 11.11% in other occupations, compared to 6.45%, 9.68%, 35.48%, 29.03%, and 12.90% respectively among those without sexual dysfunction. Monthly income also showed no significant association ($p=0.18$). Participants with sexual dysfunction had incomes of <3000 BDT (27.78%), 3000-20000 BDT (61.11%), and 20000-40000 BDT (11.11%), compared to 35.48%, 38.71%, 9.68%, and 16.13% respectively among those without sexual dysfunction. None of the participants with sexual dysfunction had an income of 40000-

60000 BDT, while 16.13% of those without did. The habitat of the patients did not significantly influence the presence of sexual dysfunction, with 55.56% of participants with sexual dysfunction living in urban areas and 44.44% in rural areas, compared to 54.84% and 45.16% respectively among those without sexual dysfunction ($p=0.6$). Family history of psychiatric illness also showed no significant association, with 11.11% of participants with sexual dysfunction having a family history of psychiatric illness, compared to 9.68% among those without ($p=0.61$).

Table 1: Sociodemographic characteristics distribution among the participants (N=49)

Variables	Number of patients	Percentage (%)
Age range of the patients		
<25	9	18.37
25 – 40	29	59.18
>40	11	22.45
Sex of the patients		
Male	46	93.88
Female	3	6.12
Religion of the patients		
Muslim	36	73.47
Hindu	13	26.53
Education of the patients		
Illiterate	4	8.16
Primary	18	36.73
Secondary	9	18.37
Higher secondary	9	18.37
Graduate and above	9	18.37
Occupation of the patients		
Farmer	8	16.33
Service	5	10.20
Business	14	28.57
Student	2	4.08
Unemployed	14	28.57
Others	6	12.24
Monthly income of the patients		



<3000	16	32.65
3000 - 20000	23	46.94
20000 - 40000	5	10.20
40000 - 60000	5	10.20
Habitat of the patients		
Urban	27	55.10
Rural	22	44.90
Family H/O psychiatric illness		
Present	5	10.20
Absent	44	89.80

Table 2: Distribution of substance use related characteristics among participants (N=49)

Variables	Number of patients	Percentage (%)
Duration of substance use		
1 - 5 year	13	26.53
5 - 10 years	18	36.73
>10 years	18	36.73
Name of the substance use		
Cannabis	17	34.69
Heroin	2	4.08
Yaba	8	16.33
Alcohol	4	8.16
Poly substance	18	36.73
H/O treatment for substance use		
Yes	24	48.98
No	25	51.02

Table 3: Types of Sexual Dysfunction according Arizona Sexual Experiences Scale (ASEX) (n=18)

Domain	Number of patients	Percentage (%)
Low desire	11	61.11
Arousal problem	9	50.00
Difficulty in vaginal lubrication	12	66.67
Difficulty to reach orgasm	10	55.56
Problem in orgasmic satisfaction	15	83.33

Table 4: Cut of score of Arizona Sexual Experiences Scale (ASEX) among SD patients (n=18)

Cut off scores of ASEX	Number of patients	Percentage (%)
ASEX total score \geq 19	11	61.11
ASEX score of 4 on 3 domains but total score < 19	5	27.78
ASEX score of 5 on 1 domain but total score < 19	2	11.11

Table 5: Association of Sexual dysfunction with sociodemographic characteristics (N=49)

Variables	Sexual Dysfunction present (n=18)		Sexual Dysfunction Absent (n=31)		p-value
	n	%	n	%	
Age range of the patients					
<25	4	22.22	5	16.13	0.025
25 – 40	8	44.44	21	67.74	
>40	6	33.33	5	16.13	
Sex of the patients					
Male	15	83.33	31	100.00	0.04
Female	3	16.67	0	0.00	
Religion of the patients					
Muslim	11	61.11	25	80.65	0.12
Hindu	7	38.89	6	19.35	
Education of the patients					
Illiterate	3	16.67	1	3.23	0.04
Primary	9	50.00	9	29.03	
Secondary	0	0.00	9	29.03	
Higher secondary	4	22.22	5	16.13	
Graduate and above	2	11.11	7	22.58	
Occupation of the patients					
Farmer	6	33.33	2	6.45	0.18
Service	2	11.11	3	9.68	
Business	3	16.67	11	35.48	
Student	0	0.00	2	6.45	
Unemployed	5	27.78	9	29.03	
Others	2	11.11	4	12.90	
Monthly income of the patients					
<3000	5	27.78	11	35.48	0.18
3000 - 20000	11	61.11	12	38.71	
20000 - 40000	2	11.11	3	9.68	
40000 - 60000	0	0.00	5	16.13	
Habitat of the patients					
Urban	10	55.56	17	54.84	0.6
Rural	8	44.44	14	45.16	
Family H/O psychiatric illness					
Present	2	11.11	3	9.68	0.61
Absent	16	88.89	28	90.32	

Table 6: Association of Sexual dysfunction with substance use related factors (N=49)

Variables	Sexual Dysfunction present (n=18)		Sexual Dysfunction Absent (n=31)		p-value
	n	%	n	%	
Duration of substance use					
1 - 5 year	1	5.56	12	38.71	0.002
5 - 10 years	5	27.78	13	41.94	
>10 years	12	66.67	6	19.35	
Name of the substance use					
Cannabis	2	11.11	15	48.39	0.01
Heroin	0	0.00	2	6.45	
Yaba	3	16.67	5	16.13	
Alcohol	1	5.56	3	9.68	
Poly substance	12	66.67	6	19.35	
H/O treatment for substance use					
Yes	10	55.56	14	45.16	0.34
No	8	44.44	17	54.84	

The duration of substance use showed a significant association with sexual dysfunction ($p=0.002$). Among participants with sexual dysfunction, 5.56% had been using substances for 1-5 years, 27.78% for 5-10 years, and 66.67% for more than 10 years. In contrast, among those without sexual dysfunction, 38.71% had been using substances for 1-5 years, 41.94% for 5-10 years, and 19.35% for more than 10 years. The type of substance used was also significantly associated with sexual dysfunction ($p=0.01$). For participants with sexual dysfunction, 11.11% used cannabis, 16.67% used Yaba, 5.56% used alcohol, and 66.67% used multiple substances. There were no heroin users among those with sexual dysfunction. In comparison, among participants without sexual dysfunction, 48.39% used cannabis, 6.45% used heroin, 16.13% used Yaba, 9.68% used alcohol, and 19.35% used multiple substances. The history of treatment for substance use did not show a significant association with sexual dysfunction ($p=0.34$). Among those with sexual dysfunction, 55.56%

had a history of treatment for substance use, while 44.44% did not. For those without sexual dysfunction, 45.16% had a history of treatment, whereas 54.84% did not.

DISCUSSION

The current study examined the association between substance use and sexual dysfunction among married couples attending the Addiction Clinic at Sylhet MAG Osmani Medical College Hospital. The findings revealed significant correlations between the duration and type of substance use and the prevalence of sexual dysfunctions, as well as highlighted the sociodemographic characteristics of the participants. The age distribution of participants showed that a majority (59.18%) were between 25 to 40 years old. This is consistent with the findings of Kessler et al., who reported that substance use disorders typically onset in young adulthood, with the median age of onset being 20 years.^[18] This similarity supports the current study's



findings that substance use disorders are prevalent in this age group. The gender distribution indicated a higher prevalence of substance use among males (93.88%) compared to females (6.12%), which aligns with the global trends reported by Lev-Ran et al., who found that men have a higher prevalence of substance use disorders compared to women.^[19] This consistency suggests that the gender disparity observed in substance use disorders in Sylhet is reflective of broader global patterns. Regarding religious affiliation, 73.47% of the participants were Muslim and 26.53% were Hindu. This distribution mirrors the demographic composition of the region and highlights the need for culturally sensitive approaches in treatment programs. Educationally, a significant proportion of participants had primary education (36.73%) or higher. This finding contrasts with the study by Steingrímsson et al., which indicated that lower educational levels are associated with higher prevalence of substance use disorders.^[20] The difference may be due to the specific socio-economic and educational context of Sylhet. Occupational status indicated that a substantial number of participants were either businessmen or unemployed (28.57% each). This is comparable to the findings of Merline et al., who noted that substance use prevalence varies with occupational status and income levels.^[21] The similarity supports the notion that economic factors influence substance use patterns in both settings. The habitat distribution showed a slight majority of participants living in urban areas (55.10%), indicating a potential urban-rural divide in substance use prevalence and access to treatment facilities. Wu & Blazer's review highlighted similar findings, showing

significant differences in substance use patterns between urban and rural populations.^[22] A significant 37% of participants reported the presence of sexual dysfunction, with various types of dysfunctions identified. Low sexual desire was reported by 61.11%, arousal problems by 50.00%, difficulty in vaginal lubrication by 66.67%, difficulty reaching orgasm by 55.56%, and problems with orgasmic satisfaction by 83.33%. These findings are consistent with previous studies such as those by Ghadigaonkar & Murthy, who documented high rates of sexual dysfunction among individuals with substance use disorders.^[11] This agreement highlights the widespread nature of sexual dysfunction in this population. The ASEX scores indicated that 61.11% of participants with sexual dysfunction had a total score of 19 or more, highlighting severe dysfunction. This aligns with the findings of Mcgahuey et al., who confirmed the reliability of the ASEX in quantifying sexual dysfunction.^[17] This similarity supports the validity of the ASEX as a tool for assessing sexual dysfunction in the current study. Sexual dysfunction was significantly associated with age ($p=0.025$), with higher prevalence in participants aged over 40 years. This is consistent with the findings of Vasilenko et al., who reported that sexual dysfunction increases with age.^[23] The consistency across studies underscores the impact of aging on sexual health. Gender differences were also significant ($p=0.04$), with a higher prevalence among females. This finding is supported by the study by Lev-Ran et al., which reported higher rates of sexual dysfunction among women.^[19] The agreement suggests that gender disparities in sexual dysfunction are a common issue in substance use disorders. Education level was



another significant factor ($p=0.04$), with higher prevalence among those with primary education or lower. This contrasts with the findings of Steingrímsson et al., who indicated that lower educational levels are associated with higher prevalence of substance use and related dysfunctions.^[20] The difference could be attributed to variations in educational systems and socio-economic factors in different regions. The duration of substance use was significantly associated with sexual dysfunction ($p=0.002$), with 66.67% of participants using substances for more than 10 years experiencing dysfunction. This finding aligns with the study by Johnson et al., which highlighted the negative impact of prolonged substance use on sexual function.^[13] The consistency suggests a strong link between long-term substance use and sexual health issues. The type of substance used was also significantly associated with sexual dysfunction ($p=0.01$), with higher prevalence among poly substance users (66.67%). This finding supports the results of Martinotti et al., who found that poly substance use exacerbates sexual dysfunction.^[24] The agreement underscores the compounded effects of multiple substance use on sexual health. Interestingly, there was no significant association between the history of treatment for substance use and the presence of sexual dysfunction. This finding is supported by the study by Mattoo et al., which indicated that treatment for substance use does not necessarily alleviate sexual dysfunction.^[25] The consistency suggests the need for integrated treatment approaches that address both substance use and sexual health. In conclusion, the findings of this study underscore the complex interplay between substance use and sexual dysfunctions, influenced by various sociodemographic

factors. These insights are crucial for developing targeted interventions to address sexual health issues in individuals with substance use disorders. Future research should continue to explore these associations to inform better clinical practices and public health policies.

Limitations of The Study

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community.

CONCLUSIONS

The present study highlights the significant association between substance use and sexual dysfunction among married couples attending the Addiction Clinic at Sylhet MAG Osmani Medical College Hospital. The findings demonstrate that longer duration and poly substance use are strongly correlated with higher rates of sexual dysfunction. Additionally, sociodemographic factors such as age, gender, and education level also influence the prevalence of sexual dysfunction in this population. While males predominated the study, females exhibited a higher prevalence of sexual dysfunction. The lack of significant association between treatment history and sexual dysfunction underscores the need for integrated treatment approaches that address both substance use and sexual health issues. These insights are critical for developing targeted interventions and public health policies aimed at improving the sexual health and overall well-being of individuals with substance use disorders. Future research should continue to explore these complex interactions



to inform better clinical practices and support services.

REFERENCES

1. Nicolosi A, Laumann EO, Glasser DB, Moreira ED Jr, Paik A, Gingell C. Sexual behavior and sexual dysfunctions after age 40: the global study of sexual attitudes and behaviors. *Urology*. 2004;64(5):991-7. doi: 10.1016/j.urology.2004.06.055.
2. McCool ME, Zuelke A, Theurich MA, Knuettel H, Ricci C, Apfelbacher C. Prevalence of Female Sexual Dysfunction Among Premenopausal Women: A Systematic Review and Meta-Analysis of Observational Studies. *Sex Med Rev*. 2016;4(3):197-212. doi: 10.1016/j.sxmr.2016.03.002.
3. Fiellin LE, Tetrault JM, Becker WC, Fiellin DA, Hoff RA. Previous use of alcohol, cigarettes, and marijuana and subsequent abuse of prescription opioids in young adults. *J Adolesc Health*. 2013;52(2):158-63. doi: 10.1016/j.jadohealth.2012.06.010.
4. Frohe T, Beseler CL, Mendoza AM, Cottler LB, Leeman RF. Perceived health, medical, and psychiatric conditions in individual and dual-use of marijuana and nonprescription opioids. *J Consult Clin Psychol*. 2019;87(10):859-871. doi: 10.1037/ccp0000431.
5. Rimsza ME, Moses KS. Substance abuse on the college campus. *Pediatr Clin North Am*. 2005;52(1):307-19. xii. doi: 10.1016/j.pcl.2004.10.008.
6. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet*. 2013;382(9904):1575-86. doi: 10.1016/S0140-6736(13)61611-6.
7. Castaldelli-Maia JM, Bhugra D. Analysis of global prevalence of mental and substance use disorders within countries: focus on sociodemographic characteristics and income levels. *Int Rev Psychiatry*. 2022;34(1):6-15. doi: 10.1080/09540261.2022.2040450.
8. Hengartner MP, Islam MN, Haker H, Rössler W. Mental Health and Functioning of Female Sex Workers in Chittagong, Bangladesh. *Front Psychiatry*. 2015;6:176. doi: 10.3389/fpsy.2015.00176.
9. Moonajilin MS, Kamal MKI, Mamun FA, Safiq MB, Hosen I, Manzar MD, et al. Substance use behavior and its lifestyle-related risk factors in Bangladeshi high school-going adolescents: An exploratory study. *PLoS One*. 2021;16(7):e0254926. doi: 10.1371/journal.pone.0254926.
10. Sani M. Drug addiction among undergraduate students of private universities in Bangladesh. *Procedia - Soc Behav Sci*. 2010;5:498-501.
11. Ghadigaonkar DS, Murthy P. Sexual Dysfunction in Persons With Substance Use Disorders. *J Psychosexual Health*. 2019;1(2):117-121
12. Naved RT. Sexual violence towards married women in Bangladesh. *Arch Sex Behav*. 2013;42(4):595-602. doi: 10.1007/s10508-012-0045-1.
13. Johnson SD, Phelps DL, Cottler LB. The association of sexual dysfunction and substance use among a community epidemiological sample. *Arch Sex Behav*. 2004;33(1):55-63. doi: 10.1023/B:ASEB.0000007462.97961.5a.
14. Polenick CA, Han BH, Meyers SN, Arnold TD, Cotton BP. Associations between relationship quality and treatment-related stress among couples receiving methadone for opioid use disorder. *J Subst Abuse Treat*. 2022;132:108580. doi: 10.1016/j.jsat.2021.108580.
15. Ghoreishi FS, Assarian F, Rezaei M, Kermanshah Z. The Efficacy of Methadone Maintenance Therapy on the Quality of Life and Marital Satisfaction among Substance Users. *Int J Appl Behav Sci*. 2020;7(1):24-32.
16. Silverman JG, Decker MR, Kapur NA, Gupta J, Raj A. Violence against wives, sexual risk and sexually transmitted infection among Bangladeshi men. *Sex Transm Infect*. 2007;83(3):211-5. doi: 10.1136/sti.2006.023366.
17. McGahuey CA, Gelenberg AJ, Laukes CA, Moreno FA, Delgado PL, McKnight KM, et al. The Arizona Sexual Experience Scale (ASEX): reliability and validity. *J Sex Marital Ther*. 2000;26(1):25-40. doi: 10.1080/009262300278623.
18. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62(6):593-602. doi: 10.1001/archpsyc.62.6.593.
19. Lev-Ran S, Le Strat Y, Imtiaz S, Rehm J, Le Foll B. Gender differences in prevalence of substance use disorders among individuals with lifetime exposure to



- substances: results from a large representative sample. *Am J Addict.* 2013;22(1):7-13. doi: 10.1111/j.1521-0391.2013.00321.x.
20. Steingrímsson S, Carlsen HK, Sigfússon S, Magnússon A. The changing gender gap in substance use disorder: a total population-based study of psychiatric in-patients. *Addiction.* 2012;107(11):1957-62. doi: 10.1111/j.1360-0443.2012.03954.x.
21. Merline AC, O'Malley PM, Schulenberg JE, Bachman JG, Johnston LD. Substance use among adults 35 years of age: prevalence, adulthood predictors, and impact of adolescent substance use. *Am J Public Health.* 2004;94(1):96-102. doi: 10.2105/ajph.94.1.96.
22. Wu LT, Blazer DG. Substance use disorders and psychiatric comorbidity in mid and later life: a review. *Int J Epidemiol.* 2014;43(2):304-17. doi: 10.1093/ije/dyt173.
23. Vasilenko SA, Evans-Polce RJ, Lanza ST. Age trends in rates of substance use disorders across ages 18-90: Differences by gender and race/ethnicity. *Drug Alcohol Depend.* 2017;180:260-264. doi: 10.1016/j.drugalcdep.2017.08.027.
24. Kirabira J, Kagoya EK, Mpagi J, Atala CE, Ndamanywa K, Okibure A, et al. Burden of alcohol and other substance use and correlates among undergraduate students at Busitema University in rural Eastern Uganda after COVID-19 lockdown. *Sci Rep.* 2024;14(1):6194. doi: 10.1038/s41598-024-56861-1.
25. Mattoo SK, Ghosh A, Subodh BN, Basu D, Satapathy A, Prasad S, et al. Sexual dysfunction in men on buprenorphine - naloxone-based substitution therapy. *Indian J Psychiatry.* 2020;62(1):66-72. doi: 10.4103/psychiatry.IndianJPsychiatry_195_19.

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