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## Quality of life among the patients with sexual dysfunctions attending in psychiatric sex clinic of a tertiary care Hospital in Bangladesh

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### Abstract

**Background:** Sexual health, as defined by WHO, encompasses physical, emotional, mental, and social well-being. Sexual dysfunctions ranging from erectile disorder to female arousal disorders can significantly impair quality of life (QOL). Global and regional studies reveal high prevalence rates, with notable differences across countries. In Bangladesh, up to 67% of mental health patients reported sexual dysfunction. Factors such as depression, stress, and relationship issues are key contributors. QOL is closely linked to sexual satisfaction, with evidence showing decreased QOL in those with sexual dysfunctions. Measuring QOL is essential in understanding the broader impacts of these conditions, with WHOQOL-BREF being a widely used tool.

**Aim of the study:** This study aimed to assess the socio-demographic characteristics and quality of life among patients with sexual dysfunction attending a psychiatric sex clinic and to explore the association between clinical variables and quality of life domains measured by the WHOQOL-BREF instrument.

**Methods:** This cross-sectional, descriptive study was conducted from September 2019 to August 2021 at Sylhet MAG Osmani Medical College Hospital. Patients aged 18 and above with newly diagnosed sexual dysfunction (per DSM-5) and active sexual life were consecutively enrolled. Exclusion criteria included medical or psychiatric comorbidities and substance use. Data were collected through face-to-face interviews using a pretested, semi-structured Bangla questionnaire and the WHOQOL-BREF. Written informed consent was obtained, and confidentiality was maintained. Physical exams, investigations, and consultations ruled out organic causes. Data were analyzed using SPSS v25, with descriptive statistics and chi-square tests; p-values <0.05 were considered statistically significant.

**Results:** The study found that most psychiatric sex clinic patients were young (25-30 years), male (94.59%), Muslim (91.89%), urban residents (60.81%), and employed (54.05%), with higher secondary or graduate education. Premature ejaculation (43.24%) was the most common dysfunction. Quality of Life (QoL), assessed by WHOQOL-BREF, was higher among younger patients, postgraduates, and those earning >30,000 BDT, especially in physical, psychological, and environmental domains. Family history of psychiatric illness and longer disorder duration were linked to lower QoL scores. While smokers had slightly reduced QoL, this was not statistically significant. Education, income, and disorder duration were key QoL predictors.

**Conclusion:** Patients with sexual dysfunction experience lower quality of life, particularly in psychological and social domains. This highlights the need for clinicians to assess these areas and involve care partners. Emphasizing quality-of-life screening can improve outcomes and guide better management strategies for individuals with sexual dysfunction.

**Keywords:** Quality of life, sexual dysfunctions, psychological health

### Introduction

World Health Organization (WHO) defined sexual health as "a state of physical, emotional, mental and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity" [1]. Proper sexual functioning is one of the most important components of quality of life and maintaining a satisfying intimate relationship [2]. Thus, sexuality can be labelled as an important aspect of the personality of an individual, as well as it influences the psychological, physical, and social well-being of both men and women [3]. Sexual dysfunctions are a heterogeneous group of disorders that are typically characterized by a clinically significant disturbance in a person's ability to respond sexually or to experience

sexual pleasure. It includes Delayed Ejaculation (DE), Erectile Disorder (ED), Male Hypoactive Sexual Desire Disorder (HSDD), Premature Ejaculation (PE), Female Orgasmic Disorder, Female Sexual Interest/Arousal Disorder, Genito-pelvic Pain/Penetration Disorder, Substance/Medication Induced Sexual Dysfunction, Other Specified Sexual Dysfunction, and Unspecified Sexual Dysfunction. An individual may have more than one sexual dysfunction at the same time [4]. Studies in the US estimated the prevalence of sexual dysfunction to be 43% among women and 31% among men [5]. Similarly, a large-scale international collaboration of multidisciplinary experts reported that 40-45% of adult women and 20-30% of adult men suffer from at least one sexual dysfunction [6]. A Britain-based study revealed that at least 11% of males and 16% of females have suffered from one or more sexual problems [7]. In some Asian countries, >20% of men and >30% of women were found to be complaining of at least one sexual dysfunction. However, there were marked variations among the countries, with the lowest rates reported in Singapore (22% of men and 32% of women) and the highest in the Philippines (64%) [8]. A recent study in India suggested that one in five males (21.15%) and one in seven females (14%) were suffering from one or more sexual dysfunctions [3]. In Bangladesh, a study was conducted to assess the proportion and pattern of sexual dysfunctions among patients attending the National Institute of Mental Health (NIMH), Dhaka [9]. The result showed that the proportion of sexual dysfunction was 67%, and it was found more among males (70.3%) than females (62.9%) [10]. National Mental Health Survey reported that 0.1% of the population has sexual dysfunctions, among which 0.1% are male and 0.05% are female [9]. Several psychological and sociocultural factors, such as depression, anxiety, stress, partner factors, relationship factors, individual vulnerability factors, religious factors, marital status, and adverse situations, cause sexual dysfunction [11]. Quality of life is a comprehensive concept often applied in health care research, particularly in disability studies and mental health care. Several studies have found that quality of life is an important indicator of the impact of treatment, the need for health care, the evaluation of interventions, and the cost-benefit analysis [12]. Quality of life is defined as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and about their goals, expectations, standards, and concerns; quality of life is a broad-ranging concept, incorporating in a complex way the person's physical health, psychological state, level of independence, social relations, personal beliefs and relationship to the environment [13]. Fugl *et al.*, 1997 said that satisfaction with sexual life is an important predictor of overall satisfaction with life, so it is not surprising that quality of life (QOL) is decreased in men with sexual dysfunction [14]. A study with Erectile Dysfunction (ED) patients showed that in men with ED, the overall quality of life is diminished [15]. Another study revealed that the presence of ED can exacerbate the impaired quality of life in men with comorbid medical conditions [16]. Improvements in the quality-of-life domains of mental and social health and self-esteem have been reported in men receiving treatment for Erectile Dysfunction [17]. Ventegodt (1998) found in a representative sample of 2460 Danish citizens (age 18-88 years) that QOL with sexual problems was from 1.2 to 19.1% lower than the

population means [18]. In addition, the covariation (of intermediate size) between QOL and sexual problems suggested that such problems could be symptoms of reduced QOL rather than a medical problem requiring medical intervention. WHO is initiative to develop a QOL assessment arose for several reasons. In recent years, there has been a broadening in focus on the measurement of health beyond traditional health indicators such as mortality and morbidity to include measures of the impact of disease and impairment on daily activities and behaviour and perceived health measures and disability/functional status measures [19-21]. These measures, whilst beginning to provide a measure of the impact of disease, do not assess the quality of life per se, which has been aptly described as "the missing measurement in health" [22]. Many instruments measure QOL. The abbreviated World Health Organization Quality of Life Scale (WHOQOL-BREF), the 36-Item Short-Form Health Survey (SF-36), and the Duke Health Profile are critiqued. All address physical, mental, and social domains, while the WHOQOL-BREF also addresses the environment [23]. Although clinical observations indicate that sexual dysfunction impacts the QOL of those populations, there was no published data regarding this problem in aspect of our population. This study aimed to assess the socio-demographic characteristics and quality of life among patients with sexual dysfunction attending a psychiatric sex clinic and to explore the association between clinical variables and quality of life domains measured by the WHOQOL-BREF instrument.

### Methodology and Materials

This was a cross-sectional, descriptive study conducted at the Psychiatric Sex Clinic and the Outpatient Department of Psychiatry at Sylhet MAG Osmani Medical College Hospital (SOMCH) in Sylhet, Bangladesh. The study aimed to assess patients presenting with sexual dysfunction. The data collection period spanned from September 2019 to August 2021. Patients attending the above-mentioned departments with complaints of sexual dysfunction were consecutively enrolled in the study during the specified period. The study protocol was reviewed and approved by the Sylhet MAG Osmani Medical College Ethical Review Committee. All participants provided informed consent before inclusion in the study, and confidentiality of patient information was strictly maintained throughout the research process.

### Inclusion criteria

1. Newly diagnosed sexual dysfunction patients according to DSM-5 criteria
2. Patients who are married
3. Patients with active sexual life and the presence of ordinary sexual intercourse
4. Age 18 years or above

### Exclusion criteria

1. Sexual dysfunction with comorbid medical conditions, e.g., endocrine disorder (Diabetes Mellitus, Thyroid Disease, Hypogonadism, Hyperprolactinaemia), neurological (spinal cord lesion, pelvic autonomic neuropathy) and urologic disorder (Peyronie's disease), sexually transmitted disease who were excluded by an expert endocrinologist, internist, by history taking and general examination

2. Patients taking medication that causes sexual dysfunction
3. History of Substance-Related or Addictive Disorder
4. Presence of another major psychiatric disorder
5. History of previous surgery (pelvic and urethral surgery)
6. Presence of severe relationship distress, partner violence, or significant stressors

### Operational definition:

In this study, a patient was defined as an individual currently suffering from sexual dysfunction. Newly diagnosed patients were referred to those presenting with sexual dysfunction who had not received any prior treatment for their condition. Active sexual life was operationalized as being sexually active through the occurrence of regular sexual intercourse, as defined by Montejó *et al.* (2010)<sup>[24]</sup>. The term sex denoted the physical appearance of the individual, based on self-identification as reported by the respondent. A family history of psychiatric or medical illness was considered positive if any first-degree relative had a history of mental health or significant medical conditions. Smoking was explicitly defined as cigarette smoking, while drug addiction encompassed the use of addictive substances such as opioids, amphetamines, methamphetamines, cannabinoids, benzodiazepines, other sedatives, and inhalants like petrochemicals (e.g., "dandy"). The duration of illness refers to the time elapsed in months from the initial diagnosis of sexual dysfunction to the date of the interview. Major psychiatric disorders included clinically diagnosed conditions such as psychotic disorders, major depressive disorder, bipolar mood disorder, anxiety disorders, and post-traumatic stress disorder (PTSD). Lastly, the number of sexual dysfunctions was noted based on whether the patient was suffering from a single dysfunction or multiple co-occurring sexual dysfunctions simultaneously.

### The procedure of data collection

After getting ethical approval, they were informed about the purpose of the study and ethical issues. Patients diagnosed by psychiatrists attending the Psychiatric Sex Clinic and outpatient department were included. Out of them, those who fulfilled the enrollment criteria were selected as a sample. Pretesting was done before that, and some modifications were made in the semi-structured questionnaire for socio-demographic and related variables (e.g., addition of age range) and checklist to exclude medical and surgical causes of sexual dysfunction. After the patient had given written consent, the researcher initiated the data collection procedure. Bangla and English versions of the questionnaire were made, but only the Bangla version was applied as they were fluent in Bengali. Data were collected through face-to-face interviews, and answers were recorded verbatim. The

procedure was taken about 20 minutes for each respondent. Then, the researcher applied the researcher applied the World Health Organization Quality of Life-Brief (WHOQOL-BREF) Bangla version. Regarding the WHOQOL-BREF English and Bangla versions, the researcher was trained by her guide and co-guide. A detailed history was taken, a physical examination, consultation-liaison (when required), and laboratory investigations (where indicated) were performed to rule out any physical comorbidity.

### Data processing and 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. Qualitative data were summarized as frequency and percentages. The chi-square ( $\chi^2$ ) test was used to see any relationship between the quality of life of different types of sexual dysfunction with socio-demographic and related variables. A probability (p) value of <0.05 was considered statistically significant.

### Results

The majority of patients attending the psychiatric sex clinic were males (94.59%), predominantly aged between 25-30 years (35.14%), Muslim (91.89%), and employed in service roles (54.05%). Most had higher secondary or graduate-level education (29.73% each), lived in urban areas (60.81%), and had a monthly income between 10,000 and 30,000 BDT (56.76%). Premature ejaculation (43.24%) was the most common sexual dysfunction, followed by erectile dysfunction (20.27%) and multiple male disorders (28.38%). In terms of Quality of Life (QoL), measured through WHOQOL-BREF domains and questions (Q1 and Q2), patients aged 25-30 showed relatively better scores across domains, especially in physical (DOM1: 61.2±9.7) and environment domains (DOM4: 56.1±9.3). Education and income showed significant associations with QoL. Postgraduates and those earning >30,000 BDT had higher scores in psychological and environment domains (DOM2: 50.0±12.6 and 48.8±6.1; DOM4: 62.7±5.1 and 62.8±9.3, respectively). Patients with a family history of psychiatric disorders had significantly lower scores in psychological and environmental domains (DOM2: 39.8±9.2; DOM4: 54.0±9.7). Duration of disorder was also significant patients with >5 years of dysfunction had lower psychological scores (DOM2: 41.8±15.6), whereas those with shorter durations (<1 year) had higher domain scores. Smokers had slightly lower QoL scores, though differences were not statistically significant.

**Table 1:** Socio-Demographic and Clinical Characteristics of the Study Participants (N=74)

Variables	Frequency (n)	Percentage (%)
<b>Age range (in years)</b>		
<25	3	4.05
25-30	26	35.14
31-35	20	27.03
36-40	12	16.22
41-45	7	9.46
46-50	3	4.05
>50	3	4.05
<b>Sex</b>		
Male	70	94.59
Female	4	5.41
<b>Religion</b>		
Muslim	68	91.89
Hindu	6	8.11
<b>Education</b>		
No formal education	1	1.35
Primary	10	13.51
Secondary	15	20.27
Higher secondary	22	29.73
Graduate	22	29.73
Post Graduate	4	5.41
<b>Occupation</b>		
Farmer	3	4.05
Service	40	54.05
Business	21	28.38
Unemployed	5	6.76
Others	5	6.76
<b>Income</b>		
<10000	16	21.62
10000-30000	42	56.76
>30000	10	13.51
Nil	6	8.11
<b>Habitat</b>		
Urban	45	60.81
Rural	29	39.19
<b>Family H/O psychiatric disorder</b>		
Present	24	32.43
Absent	50	67.57
<b>Family H/O chronic medical illness</b>		
Present	40	54.05
Absent	34	45.95
<b>Household composition</b>		
Nuclear	18	24.32
Joint	54	72.97
With others	2	2.70
<b>Smoker</b>		
Yes	39	52.70
No	35	47.30
<b>Duration of disorder</b>		
<1 year	15	20.27
1-3 years	38	51.35
3-5 years	12	16.22
>5 years	9	12.16

**Table 2:** Distribution of Sexual Disorders among the Participants

Sexual Disorder	Frequency (n)	Percentage (%)
Erectile Dysfunction	15	20.27
Premature Ejaculation	32	43.24
Delayed Ejaculation	2	2.70
More than one disorder of male	21	28.38
Female sexual disorder	4	5.41

**Table 3:** Quality of Life (WHOQOL-BREF Domains and Questions Q1-Q2) by Age Group

Age range	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
<25 (n=3)	3.0±1.0	2.6±0.5	54.7±14.4	56.3±6.5	43.7±10.9	60.7±9.7
25-30 (n=26)	3.3±0.7	2.5±0.6	61.2±9.7	49.7±11.8	34.1±10.7	56.1±9.3
31-35 (n=20)	3.6±0.9	2.2±0.7	54.8±13.4	44.6±11.6	29.3±8.8	54.4±6.5
36-40 (n=12)	3.0±0.6	2.2±0.4	55.4±9.9	50.0±9.2	37.0±10.2	54.2±7.7
41-45 (n=7)	3.1±0.7	2.3±0.7	51.8±9.3	37.7±10.2	32.1±11.6	49.3±12.1
46-50 (n=3)	3.0±1.0	2.0±0.0	48.3±13.0	33.3±9.7	29.0±3.4	52.3±9.7
>50 (n=3)	2.7±0.5	2.0±0.0	37.7±18.5	42.0±3.4	35.33±7.5	58.7±7.5
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.5±11.6	33.36±10.1	54.8±8.6
p value	0.62	0.15	0.22	0.21	0.3	0.64

**Table 4:** Quality of Life by Religion

Religion of the patients	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Muslim (n=68)	3.2±0.8	2.4±0.6	56.6±11.6	47.2±11.2	34.1±9.9	54.9±8.7
Hindu (n=6)	3.8±0.9	2.2±0.7	48.0±16.5	39.5±15.0	25.2±9.7	54.2±8.5
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.7±11.6	33.3±10.2	54.8±8.6
p value	0.1	0.62	0.42	0.31	0.4	0.88

**Table 5:** Quality of Life by Educational Status

Education	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Illiterate (n=1)	2.0±0	3.0±0	56.0±0	25.0±0	25.0±0	44.0±0
Primary (n=10)	2.8±0.6	2.2±0.6	54.0±11.1	45.7±11.1	32.5±8.8	51.3±5.7
Secondary (n=15)	3.3±0.8	2.3±0.6	56.7±8.7	48.8±11.8	30.8±9.8	50.0±5.1
Higher secondary (n=22)	3.3±0.6	2.5±0.6	57.3±10.5	48.6±9.2	34.9±6.9	54.1±6.7
Graduate (n=22)	3.5±0.9	2.5±0.6	54.5±13.8	43.7±11.3	33.8±11.3	59.6±9.2
Post Graduate (n=4)	3.5±1.3	1.7±0.9	58.0±7.1	50.0±12.6	36.0±13.8	62.7±5.1
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.6±11.6	33.3±10.1	54.8±8.6
p value	0.12	0.04	0.27	0.01	0.57	0.01

**Table 6:** Quality of Life by Occupational Status

Occupation	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Farmer (n=3)	3.7±0.6	2.3±0.6	56.3±5.2	46.0±6.0	33.3±9.7	50.0±0.0
Service (n=40)	3.5±0.8	2.3±0.7	58.0±3.1	45.5±9.1	34.5±9.8	56.5±9.4
Business (n=21)	3.2±0.7	2.5±0.6	57.3±9.7	50.0±6.2	32.8±6.9	55.1±7.1
Unemployed (n=5)	2.6±0.9	2.0±0.7	45.0±9.2	38.6±3.5	26.4±8.6	46.4±6.8
Others (n=5)	2.8±0.8	2.4±0.5	44.0±4.2	48.8±5.0	33.6±5.8	51.2±5.0
Total (N=74)	3.3±0.8	2.4±0.6	55.9±2.2	46.5±5.9	33.3±7.3	54.8±8.6
p value	0.23	0.95	0.29	0.33	0.35	0.58

**Table 7:** Quality of Life by Monthly Income

Monthly income	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
10000-30000 (n=42)	3.3±0.7	2.3±0.6	55.5±3.6	45.4±2.4	33.3±6.8	55.2±8.4
>30000 (n=10)	3.8±0.9	2.6±0.7	60.8±6.6	48.8±6.1	34.3±8.5	62.8±9.3
Nil (n=6)	2.7±0.8	2.0±0.6	40.8±5.3	43.7±5.2	30.1±8.3	47.0±6.2
Total (N=74)	3.3±0.8	2.3±0.6	55.9±3.2	46.5±5.9	33.3±7.3	54.8±8.6
p value	0.02	0.58	0.03	0.89	0.84	0.03

**Table 8:** Quality of Life by Habitat (Urban vs. Rural)

Habitat	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Urban (n=45)	3.3±0.9	2.4±0.7	54.7±8.7	45.9±9.6	33.1±9.8	56.3±9.6
Rural (n=29)	3.2±0.6	2.2±0.4	57.7±9.4	47.5±8.2	33.8±9.1	52.4±6.1
Total (N=74)	3.3±0.8	2.3±0.6	55.9±8.9	46.5±9.6	33.3±7.3	54.8±8.6
p value	0.09	0.06	0.43	0.03	0.85	0.04



**Table 9:** Quality of Life by Family History of Psychiatric Disorder

Family H/O psychiatric disorder	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Present (n=24)	3.4±0.9	2.4±0.7	54.3±7.5	39.8±9.2	31.3±4.2	54.0±9.7
Absent (n=50)	3.2±0.7	2.3±0.6	56.7±4.5	49.8±8.2	34.3±9.3	55.2±8.1
Total (N=74)	3.3±0.8	2.3±0.6	55.9±9.3	46.5±9.6	33.3±7.3	54.8±8.6
p value	0.38	0.79	0.88	0.01	0.4	0.04

**Table 10:** Quality of Life by Family History of Chronic Medical Illness

Family H/O chronic medical illness	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Present (n=40)	3.4±0.9	2.3±0.6	55.1±7.3	42. ±4.4	32.3±9.1	55.1±9.9
Absent (n=34)	3.2±0.7	2.4±0.6	56.8±5.2	50.9±8.5	34.5±9.9	54.5±6.8
Total (N=74)	3.3±0.8	2.3±0.6	55.9±9.9	46.5±9.5	33.3±9.7	54.8±8.6
p value	0.22	0.76	0.54	0.07	0.73	0.38

**Table 11:** Quality of Life by Household Composition

Household composition	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Nuclear (n=18)	3.6±0.8	2.4±0.7	59.2±10.7	49.3±11.3	37.6±11.1	59.1±10.1
Joint (n=54)	3.2±0.8	2.3±0.6	54.9±12.7	46.2±11.4	32.2±9.6	53.8±7.6
With others (n=2)	2.5±0.7	2.0±0.0	53.0±4.2	31.0±0.0	28.0±4.2	44.0±0.0
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.5±11.5	33.3±10.1	54.8±8.6
p value	0.53	0.88	0.82	0.12	0.29	0.06

**Table 12:** Quality of Life by Smoking Status

Smoker	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
Yes (n=39)	3.3±0.8	2.3±0.7	54.2±12.1	44.1±11.9	32.6±10.1	54.5±9.2
No (n=35)	3.3±0.8	2.4±0.5	57.8±12.1	49.3±10.7	34.2±10.2	55.2±7.9
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.5±11.6	33.3±10.2	54.8±8.6
p value	0.84	0.23	0.83	0.47	0.54	0.5

**Table 13:** Quality of Life by Duration of Sexual Disorder

Duration of disorder	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
<1 year (n=15)	3.3±0.8	2.5±0.6	54.8±14.2	52.6±10.6	37.1±10.5	54.6±6.5
1-3 years (n=38)	3.3±0.8	2.4±0.5	56.0±10.8	45.7±10.1	31.7±9.7	54.9±8.3
3-5 years (n=12)	3.5±0.7	2.6±0.7	62.2±12.3	45.3±12.2	32.8±10.3	55.3±9.9
>5 years (n=9)	3.1±0.8	1.8±0.7	48.8±11.5	41.8±15.6	34.7±10.9	54.2±11.9
Total (N=74)	3.3±0.8	2.3±0.6	55.9±12.2	46.5±11.5	33.3±10.1	54.8±8.6
p value	0.91	0.01	0.09	0.47	0.04	0.35

**Table 14:** Quality of Life by Type of Sexual Disorder

Sexual Disorder	Q1	Q2	DOM1	DOM2	DOM3	DOM4
	Mean±SD					
ED	3.4±1.1	2.4±0.5	55.8±14.4	47.4±9.5	32.5±10.1	5.5±7.5
PE	3.3±0.7	2.4±0.6	58.8±9.9	48.1±11.7	34.1±11.7	5.1±9.1
DE	4.0±1.4	2.5±0.7	66.0±4.2	44.0±0.0	37.5±9.2	59.5±13.4
More than one disorder of male	3.1±0.8	2.1±0.8	52.6±13.5	44.1±13.2	32.3±8.8	4.6±8.9
Female sexual disorder	2.7±0.9	2.5±0.5	45.5±7.6	43.7±13.4	29.5±3.0	48.5±5.7

## Discussion

Sexual dysfunction has various impacts on a patient's life, including physical, psychological, social, and interpersonal relationships. This study applied the WHOQOL-BREF scale to determine the different types of sexual dysfunctions and the quality of life of hospital patients. It also aimed to delineate the possible association between quality of life and patient socio-demographic characteristics. In this study, the most frequently found single sexual dysfunction among male participants was Premature Ejaculation (PE) (43.2%), followed by Erectile Dysfunction (ED) (20.3%) and then Delayed Ejaculation (DE) (2.7%). More than one sexual

disorder of males was 28.4%. Only 4(5.4%) female participants were available during the whole study period, of which three were suffering from Female Sexual Interest/Arousal Disorder and only 1 was Female Orgasmic Disorder. These findings regarding the frequency of sexual dysfunctions were matched with the findings of some other studies from both national and international backgrounds. A USA-based study found that PE 30%, Hypoactive Sexual Desire Disorder (HSDD) in approximately 30% of females and 15% of males, ED in males and female sexual arousal disorder in females were found in 10% to 20% of males. Female Orgasmic disorder is relatively common in females,

affecting about 10% to 15%; sexual pain disorder has been reported in 10% to 15% of females and less than 5% of males [25]. A sex clinic-based study was conducted by Kendurkar *et al.* (2008) in India, which revealed PE at 37.4%, ED at 29.3%, HSDD of males at 2.2%, and Orgasmic dysfunction at 1.1% [26]. A hospital-based study was conducted in Bangladesh by Rony, Alam, and Khan (2017) [10], who figured that PE at 26.5%, ED at 23.5%, DE at 5.9%, Female Sexual Interest/Arousal Disorder at 44.4%, and Female Orgasmic Disorder at 22.2%. Another study was conducted in Bangladesh by Salam *et al.* (2017) [27], who found that PE was 69.0%, ED 23.9%, and HSDD 1.4%. These findings are consistent with the findings of the current study. Again, another study in India revealed that the prevalence of ED was 15.7%, PE 8.76%, HSDD 2.56%, and 26.75% of males suffering from more than one sexual disorder; Prevalence of female arousal dysfunction was found to be 6.65%, female HSDD 8.87%, female anorgasmia 5.67%, female dyspareunia 2.34% [3]. This is in contrast to the findings of the current study. Though ED is common among male sexual dysfunction, it is not being revealed in the current data. This might be due to medical conditions being one of the important causes of ED, which had been excluded in the present data. Also, ED increases with age, but most participants in the present study were younger adults. Following is the age distribution of the participants. Most of the participants were within 25-30 years of age (35.1%), followed by 31-35 years of age (27.0%), 36-40 years of age (16.2%) and then 41-45 years of age (9.5%). Around 87% of the participants were within the age limit of 25-45 years, and around 62% were within the age limit of 25-35 years, which indicates the highest proportion of sexual dysfunction among this age group of the population who were seeking help. This may be due to the assumed average age of marriage in Bangladesh, which is in and around this age group. This study's finding was more or less similar to some previous studies, which showed that the mean age of the respondents was 35.12(±8.22) years, and most of them (75%) were aged between 20-40 years [10]. Another study in a sex clinic in India showed nearly the same age group, which was 20-39 years (78%) [26]. So, sexual problems usually result from difficulties in the early years of conjugal life and anxiety related to relationships or marriage in the upcoming future drives them to seek help. Anxiety of upcoming marriage was also found to be an important cause for seeking help in another study, which found that 33 patients (66%) belonged to the age group of 26-35 years, 40 patients (80%) fulfilled the criteria for anxiety disorder where anxiety was manifested more in the age group below 35 years with mean age 30 [28]. However, a UK-based study opposed the current study finding, which showed that sexual dysfunction among the 16-34 years group was 36.4% and the 35-74 years age group was 63.6% [7]. This difference might be due to the emphasis on sexual dysfunction for everyday well-being in Western countries, even in the elderly age group. Among 74 participants, 70 were male (94.6%) and four were female (5.4%). This was because of the low rate of female patients attending. Female patients with sexual dysfunctions rarely attend a psychiatric sex clinic (PSC). Instead, they seek help in the Gynecology and Obstetrics department, which the social stigma could explain, passive role plays in sexual activity by female partners or strong cultural influence, which are very common in this part of Asia. This also might be due to the reluctance to seek medical treatment because of the lack of privacy, the

lack of a female doctor at the health facility, the cost of treatment, and their subordinate social status. These causes were also reflected by findings from Kendurkar *et al.* (2008) and Ravi & Kulasekaran's (2014) study [26, 29]. In this study, most participants were Muslims (91.9%), and no other religion except Hindu (8.1%) was attended. This is because of the demographic distribution of the population in Bangladesh. Regarding literacy and habitant, most were literate (98.6%) and from urban backgrounds (60.8%). These findings suggested that educated people and urban backgrounds are more concerned about their sexual health. These results were consistent with some previous findings. Kendurkar *et al.* (2008) found that sexual dysfunction among the illiterate was 2.2% and literate was 97.8%, and he explained that being more educated and from an urban background made one more comfortable in seeking medical advice, greater awareness about these types of speciality clinics among these populations and due to the location of these clinics in urban areas [26]. Salam *et al.* (2017) found that among the respondents, 3.5% were illiterate, 96.4% were literate, 68.3% were from urban areas, and 31.6% were residing in rural areas [30]. Some other study findings do not match the current study. Rony *et al.* (2017) argued that the proportion of sexual dysfunction was higher among those who were educated up to the primary level (79%) [10]. Moreover, a study in India showed that male sexual disorders were 2 to 3 times more prevalent among illiterates when compared with the literates [3]. Most participants were service holders (54.1%), followed by business people (28.4%) and the lowest among the unemployed. The most frequently found income of the participants was within the range of 10000-30000 (56.8%), followed by <10000 (21.6%), which reflected that people in these groups are more concerned and seek help for their problems. Most of the participants had no history of psychiatric disorders within their family (67.6%), and a family history of chronic medical illness was present in most of the participants (54.1%). Regarding household composition, most respondents lived in a joint family (73.0%), followed by a nuclear family (23.4%). These findings reflected that patients who were living in a joint family might be facing problems due to not getting adequate space and time to solve sexual problems by themselves. This study finding was consistent with an Indian study, which found that most participants lived in a joint family (63.9%) [26]. In contrast to these findings, another study showed that male sexual disorders were found to be more common in subjects belonging to a nuclear family (24.4%) compared to those in a joint family (16.4%) [3]. The present study showed that smoking history was present among 52.4% of respondents, and the remaining were nonsmokers. The majority of the participants (51.4%) had a duration of illness in the range of 1-3 years, and the second-highest duration of illness was <1 year (20.3%), and then 3-5 years (15.2%), and the lowest frequency were >5 years (12.2%). This indicates that people are now more concerned about seeking help at a relatively early stage to maintain a better marital relationship and healthy life. In the present study, the quality of life among different types of sexual dysfunction was assessed using the WHOQOL-BREF scale. The mean score of the overall perception of quality of life (Q1) in ED, PE, and more than one disorder of male patients was 3.4±1.1, 3.38±0.7, and 3.14±0.8, respectively. The mean score of the overall perception of health (Q2) in ED, PE, and more than one disorder of male patients was 2.47±0.5, 2.41±0.6, and

2.19±0.8, respectively. Domain1 (physical health) score of ED, PE, and more than one disorder of male patients was 55.8±14.4, 58.8±9.9, 52.6±13.5. In the psychological health domain (DOM2), the mean scores were ED 47.5±9.5, PE 48.3±11.7, and more than one disorder of male patients 52.6±13.2. In the social relationships domain (DOM3), the mean score of ED was 32.5±10.1, PE was 34.7±11.7, and more than one disorder of male patients was 32.3±8.8. Moreover, in the environment domain (DOM4), ED, PE, and more than one disorder of male patient's scores were 55.5±7.5, 55.2±9.1, and 54.6±8.9, respectively. The implication of WHOQOL-BREF in determining QOL in different domains is that a higher score denotes a higher QOL. So, it can be concluded that participants of these three types of sexual dysfunction patients (ED, PE, and more than one disorder of males) scored higher in physical health (DOM1) and environment domain (DOM4) than in psychological health (DOM2), and social relationships domain (DOM3). Moreover, the impact of sexual dysfunction on the social relationship (DOM3) was overwhelming. It should be mentioned that questions related to sexual function are included in the social relationships domain (DOM3), and the lowest mean score was noticed in domain 3 in the present study, which justified the implication of the scale in this study. Though a similar article was not available using the WHOQOL-BREF scale in different types of sexual dysfunction patients, individual sexual dysfunction was assessed regarding this issue. A study was conducted by Harun, Z. & Ahmad, S. (2018) using the WHOQOL-BREF scale on PE patients, which showed that PE patients had lower median scores in quality of life in all four domains, namely physical health, psychological, social relationship, and environment [31]. Another study was conducted in Malaysia using the Sexual Quality of Life- Male (SQOL-M) scale to detect the effect of PE on patients' QOL. It found that PE affected patients and their wives negatively, causing physiological, psychological, cultural, and relationship dysfunctions. According to the QOL, the most reported issues were frustration, depression, anger, and worry [32]. Again, a study was conducted in Nigeria using the WHOQOL-BREF scale, which revealed that social relationships and psychological health indices of QOL were severely impaired in men with ED than in the general, overall, physical and environmental health domain [33]. Another study in the USA using Health-Related Quality of Life, Short Form (HR-QOL SF-36) to detect QOL among ED patients showed that sexual function correlated significantly with general health perceptions, role limitations due to physical problems, and role limitations due to emotional problems. The emotional domains of the SF-36 were associated with more profound impairment than were the physical domains in males with erectile dysfunction [34]. A UK-based study was conducted using the SQOL-M in ED and PE patients, which showed that ED and PE have a high impact on sexual QOL, and this impact appears to be similar across the two conditions. Males taking part in a clinical trial for ED scored a mean of 43.48 (SD 21.52) (p=0.0001), and males taking part in a clinical trial for PE scored a mean of 44.89 (SD 23.40) (p=0.0001). Males who had both ED and PE scored a mean of 43.91 (SD 22.09) (p=0.0001) [35]. In reviewing the literature, facts related to different types of sexual dysfunction and quality of life (QOL) are still scarce. However, the findings mentioned above are consistent with those of the present study. A total of 13 socio-demographic variables were

considered to find out the impact of sexual dysfunctions on the quality of life of the patients. As regards the relationship between the QOL of PE patients and their ages, this study revealed a significant association with the overall perception of health (Q2) (p=0.04), social relationships (DOM3) (p=0.02), and environment (DOM4) (p=0.01). Most of the patients were within the age group of 25-35 years. A nearly consistent finding was found in an Egyptian study, although QOL among PE patients was assessed using the SQOL-M measurement scale. That study revealed a significant affection of QOL in the thirties age group compared to cases in the forties and fifties age group; there was a significant difference in some domains of the QOL of PE patients, such as feeling less like a man, embarrassed, guilty, rejecting partner and lost something in the fifties age group compared to the twenties age group [32]. Following other socio-demographic parameters of PE patients also had significant association: Education with overall perception of health (Q2) (p=0.04); Monthly income of the patients with overall perception of quality of life (Q1) (p=0.04), physical health (DOM1) (p=0.02), and environment (DOM4) (p=0.001); Habitat with psychological health (DOM2) (p=0.04); Duration of illness of the patients with psychological health (DOM2) (p=0.03). So, the current study revealed that PE has a deleterious impact on the quality of life concerning the patients' socio-demographic characteristics, which were reflected on various domains of the WHOQOL-BREF scale. Due to the scarcity of literature, no other study was found to compare with the current findings. When the WHOQOL-BREF scale was applied to patients with ED, statistical significance was noticed in the present study. As regards the relationship between the QOL of ED patients and smoking history, this study revealed that smoking was significantly associated with overall perception of health (Q2) (p=0.01) and social relationships (DOM3) (p=0.02). ED patients' illness duration was significantly associated with social relationships (DOM3) (p=0.03). So, the current study showed that ED had a detrimental impact on the quality of life concerning the patients' socio-demographic characteristics, which we reflected on the various domain scores of the HOQOL-BREF scale. Literature on the same issue was scarce, so a comparison could not be made with the current study findings. Statistical significance was found in multiple socio-demographic parameters of male patients with more than one sexual dysfunction. Religion was significantly associated with physical health (DOM1) (p=0.004), psychological health (DOM2) (p=0.004), and social relationships (DOM3) (0.001) in this patient group. Education was significantly associated with physical health (DOM1) (p=0.02), psychological health (DOM2) (p=0.02), and social relationships (DOM3) (p=0.03). Statistical association was found in the following socio-demographic and related parameters of this patient group: Habitat with overall perception of quality of life (Q1) (p=0.04); Family history of psychiatric disorders of the patients with the overall perception of quality of life (Q1) (p=0.04); Smoking with the overall perception of quality of life (Q1) (p=0.03); Duration of illness with social relationships (DOM3) (p=0.02). So, these findings indicated that more than one sexual dysfunction of males had a deleterious impact on the quality of life of various socio-demographic characteristics of the patients, which were reflected on the various domain scores of the WHOQOL-BREF scale. Due to the scarcity of literature, no other study was found to compare with the



current findings. All types of sexual dysfunctions were cumulatively seen in this study, which was categorized as 'Total' and searched out to see the disorder's impact on quality of life and socio-demographic characteristics. Education level was statistically significant with overall perception of health (Q2) ( $p=0.04$ ), psychological health (DOM2) ( $p=0.01$ ), and environment (DOM4) ( $p=0.01$ ). Monthly self-income was significantly associated with the overall perception of quality of life (Q1) ( $p=0.02$ ), physical health (DOM1) ( $p=0.03$ ), and environment (DOM4) ( $p=0.03$ ) total patients. Furthermore, subsequent socio-demographic parameters were statistically significant with total patients: Habitat with psychological health (DOM2) ( $p=0.03$ ), and environment (DOM4) ( $p=0.04$ ); Family history of psychiatric disorder with psychological health (DOM2) ( $p=0.01$ ) and environment (DOM4) ( $p=0.04$ ); Duration of illness with overall perception of health (Q2) ( $p=0.01$ ) and social relationships (DOM3) ( $p=0.04$ ). So, the present study revealed that sexual dysfunction deleteriously impacts the quality of life of various socio-demographic characteristics of the patients, which were reflected on the domain score of the WHOQOL-BREF scale. Due to a dearth of literature, no study was found to compare with the present findings.

**Limitations of the study:** Participants were predominantly male and from an urban background. The predominant societal and social taboo on female sexual dysfunctions can explain fewer female participants. This study was performed in a tertiary hospital in the northeastern region of Bangladesh, with a small sample size. Therefore, the results cannot be generalized to the entire population. A better result could have been achieved if it had been done at multiple sites and multiple levels of care.

### Conclusion and Recommendations

In conclusion, it can be concluded that patients with different sexual dysfunctions had lower quality of life (QOL) scores in all four domains of the WHOQOL-BREF scale, especially in the social relationship (DOM3) and psychological health domain (DOM2). Sexual dysfunction hampers different aspects of personal, psychological and social life as well as relationships with life partners, which demand great value when dealing with these groups of patients. Clinicians should be emphasized to assess this domain during the management plan of sexual dysfunction patients and the involvement of partners for a better outcome. Hence, this study may highlight the importance of quality-of-life screening among sexual dysfunction patients. No study has been conducted on this issue in Bangladesh, to the researcher's knowledge. This study's outcome can assist the concerned groups in focusing on the matter from a wider angle, enabling them to promote better patient lives. Conducting multicentred or community-based studies in this field is necessary to understand the actual scenario of sexual dysfunctions from a different perspective. Further research is required to clarify the causal direction between QOL, physical health, and sexual health. Outpatient department-based Psychiatric Sex Clinics at every medical college hospital in Bangladesh would improve sexual health-related difficulties.

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