Original Research Article

A Cross Sectional Study on Sexual Dysfunction and Quality of Life in Patients with Bipolar Affective Disorder

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Abstract

Introduction: Sexual dysfunction is one of the leading causes of psychological distress in bipolar affective disorder patients. The current study aims to study the relationship between sexual dysfunction and quality of life in patients with Bipolar affective disorder in remission.

Materials and methods: A cross-sectional study of purposively sampled bipolar patients in remission (N=60) was conducted in an OPD setting. After reinforcing confidentiality and privacy, data was collected and analyzed.

Results: 73% with BD reported impaired sexual function. About 51.7% and 48.3% of male and female participants, respectively, had at least one form of sexual dysfunction. Better sexual function was associated with a higher degree of satisfaction with sexual life and higher QoL score.

Conclusion: Sexual dysfunction is associated impaired quality of life, poor functioning and poor medication adherence. Hence, it should be made a routine practice to evaluate and address the problem of sexual dysfunction in patients with Bipolar affective disorder.

Key words

Sexual dysfunction, Quality of life, Bipolar affective disorder.

Introduction

Sexual dysfunction, (according to the World Health Organization and the American Psychiatric Association), is defined as a disorder of the sexual response cycle in sexual desire, arousal, resolution and orgasm during sexual intercourse that prevents the individual from having a desired sexual intercourse [1]. Though common and distressing, yet it's rarely assessed [2]. It affects both men and women equally [3]. When compared to healthy populations, those diagnosed with severe and chronic mental illnesses have more sexual dysfunction in various forms like poor sexual drive, erectile dysfunction and loss of orgasm [3].

Sexual dysfunction can be attributed to a variety of psychiatric conditions, and in some cases, even hypersexuality can be a source of distress [4]. It occurs partly due to the mental illness and partly due to psychotropic medications [4]. Bipolar disorder, personality problems, and substance use disorders can all have an impact on sexual function [5]. In light of the negative symptoms, people with schizophrenia may experience sexual dysfunction, such as decreased sexual drive or interest [4]. It has also been observed in depressed patients, and it may be exacerbated by the use of psychotropic medicines [6, 7].

Appropriate sexual expression plays a crucial role in human relationships and improves quality of life in a variety of physical, psychological, and social dimensions [2]. Quality of Life is defined by the World Health Organization as 'individuals' perceptions of their place in life in respect to their goals, expectations, standards, and concerns in the setting of the culture system in which they live [8]. Quality of life (QoL) assesses overall life satisfaction in a range of aspects, including physical and mental health, education, employment, economy, the environment, social relations, and sexual function [9].

Bipolar affective disorder (BPAD) is a multifaceted mental illness highlighted by episodes of depression, mania/ hypomania/ mixed states, and inter-episodic remission [10]. Poor quality of life is a predictor of relapse for bipolar affective disorder. Sexual dysfunction is known to affect the quality of life which in turn may trigger relapse. The association between these two factors has been less studied. Hence, this study was undertaken with an aim to study the relationship between sexual dysfunction and quality of life in patients with Bipolar affective disorder in remission. It was hypothesized that the occurrence of Sexual dysfunction will affect their Quality of life negatively.

Materials and methods

Study design and duration

The study was approved by the Institutional Human Ethical Committee, Chettinad Academy of Research and Education. This was a crosssectional observational study done to study the relationship between sexual dysfunction and quality of life in patients with Bipolar affective disorder in remission. This study was done for a period of 6 months among the patients attending the Department of Psychiatry, at a tertiary health care centre in Tamil Nadu.

Study sample

All inpatients and outpatients, between ages 18-65 years, diagnosed with bipolar affective according to ICD-10 criteria (F31) currently in remission and willing to give informed consent, were included in the study. All subjects with other co-morbid psychiatric disorders, medical co-morbidities and with history of sexual dysfunction prior to onset of bipolar affective disorder were excluded from the study.

Measurements

- All samples with bipolar affective disorder were diagnosed according to the international classification of diseases (ICD) DCR – 10th edition (F31).
- A semi-structured questionnaire was used for assessing the socio-demographic, clinical and treatment variables.
- WHO Schedules for Clinical Assessment in Neuropsychiatry (WHO-SCAN) version 2.1 was used to rule out other psychiatric disorders.
- Sexual dysfunction was assessed using The Changes in Sexual Functioning Questionnaire (CSFQ) - a 14-item version for Males and females. Each item was scored on a scale of 1(indicates severe) to 5(indicates not present) with two items (10 and 14) scored reversely. Total score is obtained by adding up the responses of all the 14 items. Subscale scores for Sexual Pleasure, Frequency, Interest, Arousal and Orgasm were obtained by calculating the individual scores for items that correspond to that particular subscale. If patient obtains a score at or below the cut off points on any of the scales, it is indicative of sexual dysfunction.
- Quality of life was assessed using The World Health Organization Quality of Life (WHO QOL BREF) scale – It is the short form of 100-item scale and comprises 26 items which assess the QOL in four domains of physical health, psychological status, social relationship, and environmental condition. Scoring of each question was done according to 5-point Likert style from 1 to 5. There is one item which explores about the satisfaction with one's sex life (item 21). The scoring of the instrument was done according the WHO manual for WHO QOL-BREF.

Study procedure

All the participants were interviewed, and rapport was established. They were ensured adequate privacy during the interview and about confidentiality regarding the data to be collected. Semi-structured proforma was used to collect information about socio-demographic, clinical and treatment variables. A senior psychiatrist assessed the participants and diagnosed bipolar affective disorder using ICD-10 and Sexual dysfunction and quality of life was assessed using The Changes in Sexual Functioning Questionnaire (CSFQ) and The World Health Organization Quality of Life (WHO QOL BREF) scale respectively. Other psychiatric disorders were ruled out using WHO Schedules for Clinical Assessment in Neuropsychiatry (WHO-SCAN) version 2.1.

Statistical analysis

Statistical analysis was done using Statistical Package for the Social Sciences (SPSS) software v.21. Descriptive statistics was used to analyse the characteristics of study population i.e., sociodemographic variables, clinical and treatment compliance related variables. t-test was used to compare WHO-QoL BREF mean scores between individuals with and without Sexual dysfunction. For all statistical tests, p value significance was set at <0.05.

Results

A total of 60 participants were included in the study. The mean age of study population was 35.94 ± 12 . The proportion of males was 51.7% in the study population. Majority of the subjects were semi- skilled workers (33.3%), belonged to lower middle socioeconomic status. The type of family was nuclear family in 88.3% of the subjects and 61.7% of the subjects were married.

The study participants were evenly distributed across different levels of educational background. There were 7% of illiterates. The proportion of people educated till middle school and high school were 20% and 34% respectively. 14% were graduates (**Table - 1**).

Out of the study population 44 individuals had at least one sexual dysfunction based on the cut off scores of CSFQ questionnaire. Any score below

or equal to the cut off scores given indicates Sexual Dysfunction. Sexual Pleasure (n=12), Frequency (n=15), Interest (n=19) items of CSFQ showed higher prevalence of sexual dysfunction in males. Higher number of females had dysfunction in Sexual Orgasm (n=18) and Sexual Arousal (n=19) in CSFQ questionnaire compared to males. More number of females (n=20) had total CSFQ score below the cut off value indicating sexual dysfunction (**Table - 2**).

<u>**Table - 1**</u>: Socio-demographic details of study population.

Socio-demographic variable	Frequency
Gender	
Male	31(51.7)
Female	29(48.3)
Education	
Illiterate	4(6.7)
Middle School	8(13.3)
High School	17(28.3)
Intermediate/diploma	17(28.3)
Graduate	14(23.3)
Occupation	
Unemployed	8(13.3)
Semiskilled worker	20(33.3)
Skilled worker	15(25.0)
Semi Professional	14(23.3)
Professional	3(5.0)
Family type	
Nuclear	53(88.3)
Joint	7(11.7)
Marital Status	
Married	37(61.7)
Unmarried	23(38.3)
Socioeconomic Status	
Upper lower	7(11.7)
Lower middle	11(18.3)
Upper middle	7(11.7)

WHOQOL-BREF domain mean scores for females in the study population were lower compared to mean scores of males in psychological health (39.8+-8.8), Social relationships (34.7 ± 14), Environmental health (56.9 ± 7.8) whereas Physical health domain mean scores were almost equal in both females and males (57 ± 7) (**Table - 3**).

<u>**Table - 2</u>**: Prevalence of Sexual Dysfunction using various items of CSFQ.</u>

CSFQ Items	Female	Male
	(n=29)	(n=31)
Sexual Frequency	16	20
Sexual Interest	14	19
Sexual Pleasure	15	18
Sexual Arousal	17	18
Sexual Orgasm	18	15
Total CSFQ	20	19

<u>**Table - 3:**</u> WHO QOL-BREF domain mean scores for Females and Males.

WHO –QoL Domains	Female	Male	
	(n=29)	(n=31)	
Physical Health	39.8±8.8	39.7±8.4	
Psychological Health	64.9±10.0	65.5±28.9	
Social Relationships	34.7±14.0	35.0 ±15.2	
Environmental	56.9±7.8	57.1±6.8	

Mean scores of all the domains of WHOQOL-BREF were lower in individuals with Sexual dysfunction with physical health (p=0.010) and psychological health (p=0.028) domains showing statistical significance (**Table - 4**).

Discussion

This study was done to assess sexual dysfunction, quality of life and to assess the relationship between the min bipolar patients in remission attending a tertiary health care centre in Tamil Nadu.

Diminished sexual functioning that causes distress is classified as sexual dysfunction. The terminology has evolved throughout time, but the four categories of desire/interest, arousal, orgasm, and pain disorders have stayed consistent [11].

In our study 73% (n=44) out of 60 participants showed sexual dysfunction. About 51.7% (n=31) and 48.3% (n=29) of male and female

participants, respectively, had at least one form of sexual dysfunction. Patients who had sexual dysfunction before the onset of bipolar disorder were excluded. Sexual Pleasure, Frequency, Interest, Arousal items of CSFQ showed higher prevalence of sexual dysfunction in males except for the item Orgasm and total CSFQ score which showed higher prevalence in females.

<u>**Table - 4**</u>: Comparison of WHO-QoL BREF scores between individuals with and without Sexual dysfunction.

WHO –QoL	Sexual Dysfunction	Sexual Dysfunction	t - value	P value
Domains	Present (n =44)	Absent (n =16)		
Physical Health	38.22 ± 8.6	44.8±6.1	2.67	0.010
Psychological Health	63.72±11.9	70.1±8.1	2.29	0.028
Social Relationships	33.83 ± 14.6	40.5±13.6	1.51	0.135
Environmental	56.80±7.4	57.7±6.7	0.439	0.662

These rates of sexual dysfunction in individuals with bipolar disorder are significantly greater than those found in prior research [9]. Sexual Dysfunction rates were reported to be 35.3 percent in male patients who were stable on lithium in a prior study from India, which used ASEX to estimate the rates of SD in bipolar illness patients. Sexual Dysfunction was reported to be 33 percent in individuals with bipolar disorder in a previous Indian study [9]. However, the evidence for a classic notion of mania related with hypersexuality is insufficient. Eligibility criteria for selecting study participants and the questionnaires utilized are two factors that could account for the reported disparities in rates [12].

Lithium was used by 62 percent of the study participants. The remaining 38% was on Valproate. 68 per cent of bipolar disorder patients who were using mood stabilizer lithium had Sexual Dysfunction. The sexual function of 24 individuals with major depressive illness who received prophylactic lithium medication was compared to a control group. Nine patients (38%) reported a change in sexual function that they attributed to lithium therapy. In this group, four patients reported a good effect of lithium medication on sexual function, while five reported a negative effect [13].

WHO QOL-BREF domain mean scores for females were lower compared to mean scores of

males except for Physical domain which is equal in both females and males. This is in line with other studies where patients with affective disorders were found to have lower quality of life scores [9]. When comparing the relationship between Sexual dysfunction and Quality of life, mean scores of all the domains of WHOQOL-BREF were lower in individuals with Sexual dysfunction with physical health and psychological health domains showing statistical significance.

According to Sanders et al. (2011), worrying about one's sexual life increases the likelihood of developing decrease sexual dysfunction [14]. This is in accordance with a study that found that people who were better at communicating their sexual demands experienced less distress (Hayes 2008) [15]. Thea, et al. (2017) - Studied Sexual distress and quality of life among women with bipolar disorder in which 54% reported sexual distress. Non-sexually distressed Bipolar women reported higher QoL scores compared to sexually distressed group [16].

Patients with Bipolar disorder are more likely to be distressed, hence sexual distress could be a trigger for depression and/or mania. In any case, due to diverse definitions of sexual dysfunction and different time durations in questionnaires, comparing the prevalence of sexual dysfunction across research can be challenging.

However, our study had few limitations. This study is limited by a small sample size, hence results cannot be generalized. Also a questionnaire survey does not fully explain the causes of sexual dysfunction, affective symptoms and quality of life. Possibility of Untruthful responses to some of the perceived sensitive questions of questionnaires. The CSFQ does not assess hypersexuality which is seen in bipolar patients.

Conclusion

Sexual dysfunction (SD) is commonly encountered in active and remitted bipolar patients but its scarcely evaluated and treated. Low Quality of life which is positively correlated to sexual dysfunction is a predictor for relapse. Our findings suggest the importance of assessing sexual dysfunctions in patients with Bipolar Disorder in active and remitted state which when timely managed would improve quality of life in patients. Novel research is thus needed to address sexual symptomatology in Bipolar Disorder and longitudinal studies are important to know the causal relationship between sexual distress, affective symptoms and Quality of Life.

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