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Female sexual dysfunction during first episode of depressive

disorder: A cross-sectional study

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Abstract

Introduction: Female sexual dysfunction is underreported and paucity of Indian literature available. Depression is a

prevalent mental health issue and significantly affect the various stage of normal sexual cycle. Depression also

increases the prevalence and magnitude of female sexual dysfunction. Therefore, the objective of this study was to

assess the prevalence of female sexual dysfunction among individuals who have recently been diagnosed with their

first episode of depression.

Methods: A cross section study was conducted in tertiary care medical college hospital. 42 study subjects recruited

for study among 38 subjects completed the study. Study participants was first episode depressive patients and

willing to give informed consent to participants in study. Clinical assessment along with to assess the severity of

depression and assessment of sexual functioning with HAM D-17 and FSFI was used respectively.

Results: The mean age of study participants was 31.1 ± 4.7 year, and mean HAM -D score was 21.4 ±4.3 and

infemale sexual dysfunction was reported in 44.1% study participants.

Conclusion: The prevalence of female sexual dysfunction in individuals with depression has been noted,

highlighting the importance of conducting a thorough assessment of sexual dysfunction in all cases of depression.

Keywords: Female sexual dysfunction, Depressive episode, FSFI

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Introduction

Sexual function in humans plays a vital role in various aspects of life, encompassing both the propagation of the

species and overall quality of life. When sexual dysfunction occurs, it can have negative impacts on an individual's

quality of life and hinder potential advancements in procreation. The prevalence of male sexual dysfunction is 31%

and female sexual dysfunction is 43 % reported in world literature.3 In Indian a limited study was conducted in the

field of female sexual dysfunction in comparison to male sexual dysfunction and the area of female sexual

dysfunctionremains predominantly unexplored.

Etiologically female sexual dysfunction is multi-factorial, age, educational level, psychiatric illness, stress,

pregnancy is common factor for nonorganic female sexual dysfunctions.⁴ Female sexual dysfunction included

hypoactive sexual desire disorder (HSDD), sexual aversion disorder, female sexual arousal disorder, female

orgasmic disorder, dyspareunia, vaginismus.⁵

Previous studies have indicated that there is a link between depression and an increased risk of developing female

sexual dysfunction (FSD).⁶ Depressive episodes have a notable influence on various stages of the sexual cycle,

leading to the manifestation of sexual dysfunctions.⁷

In India, female sexual dysfunction is often underreported due to several social and cultural factors. 8 Moreover,

depression exacerbates the prevalence and severity of female sexual dysfunctions, yet limited research exists on the

topic of female sexual dysfunction in relation to depression. Therefore, the objective of this study was to assess the

prevalence of female sexual dysfunction among individuals who have recently been diagnosed with their first

episode of depression.

Material and Methods

A hospital-based, cross-sectional study was conducted at a Medical College Hospital from January 2016 to

December 2016. The study focused on female patients attending the Psychiatry outpatient department (OPD) of a

tertiary care teaching hospital.

Patients who were diagnosed with mild, moderate, or severe depressive episodes based on clinical interviews using

the International Classification of Diseases, Tenth Revision (ICD-10) were included in the study using purposive

sampling. The study focused on females between the ages of 18 and 40 who were sexually active, attended the

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psychiatric outpatient department, had recently been diagnosed with depression, and were willing to provide consent for participation in the study. They could either be taking antidepressant medications or not.

The participants were informed about the study and written informed consent was obtained. The interviews and assessments were conducted by a psychiatrist in a private consultation chamber.

Sociodemographic and clinical details were collected, and the following tools were utilized: the Hamilton Depression Rating Scale (HAM-D-17 item) and the Female Sexual Function Index Scoring Arizona Sexual Experiences (FSFI) Scale.

The HAM-D or HDRS is a 17-item depression assessment scale that is administered by a clinician and takes approximately 20 minutes to complete. Eight items are scored from 0 (not present) to 4 (severe), while nine items have a score ranging from 0 to 2. It has a sensitivity of 90% and specificity of 63% at a cutoff score of 7. This scale is widely used to assess the severity and changes in depressive symptoms among adult patients.^{9,10}

The FSFI is a 19-item questionnaire that women can self-report to assess the primary aspects of their sexual function. It is both easy to administer and demonstrates strong psychometric properties. The FSFI rating scale was developed by applying clinical interpretations to a principal components analysis, resulting in a six-domain structure. These domains, identified as desire, subjective arousal, lubrication, orgasm, satisfaction, and pain, form the basis of the FSFI rating scale. ¹¹

Statistical analysis:Descriptive analysis was performed, and the results were presented as mean and standard deviation (SD) for continuous variables, and frequency and proportions for categorical variables. IBM SPSS version 21 was used for the statistical analysis.

Results

A total of 42 subjects were recruited for the study; however, 8 of them declined to participate as they were not willing to give informed consent. The mean age of the study participants was 31.1 ± 4.7 years. The majority of the subjects identified as Hindu, resided in urban areas within nuclear families, and were unemployed/ housewife by occupations.(Table 1) 56% of the study participants were married, while 44.1% of the participants were unmarried and reported being sexually active.

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Table 1: Socio-demographic characteristics

Variable	Participants (N)	N= 34 (%)	
Age, Yrs [Mean (SD)]		31.1 ± 4.7	
Sex			
Male	0	0%	
Female	34	100%	
Marital Status			
Unmarried	13	44.1%	
Married	19	55.9%	
Religion			
Hindu	26	76.5%	
Muslim	8	23.5%	
Family type			
Nuclear	31	91.2%	
Joint	3	8.8%	
Locality			
Urban	28	82.8%	
Rural	6	17.6%	
Education			
Professional	11	%	
High School	19	%	
Illiterate	4	11.8%	
Occupation			
Unemployed	24	70.6%	
Skilled	6	17.6%	
Professionals	4	11.8%	

The subjects in the study were diagnosed with a depressive episode for the first time. Clinical assessment of the study participants indicated that nearly 55% of the subjects had medical comorbidities such as hypertension, diabetes mellitus, hypothyroidism, and other non-communicable diseases at the time of assessment. Additionally, approximately 20% of the subjects had a history of substance abuse, with alcohol being the predominant substance. Around 18% of the subjects reported having a precipitating factor before the onset of their illness. 55% study participants had family history of psychiatric illness in first degree relatives. (Table 2)

Table 2: Clinical Characteristics

Variable	Participants (N)	N= 34 (%)
Substance abuse Absent Present	23 11	80 % 20 %
Precipitating factor Absent Present	24 10	82% 18%

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Co morbid medical illness		
Absent	18	45%
Present	16	55%
F/H of Psychiatric illness		
Absent	30	88%
Present	4	12%
HAM-D score [Mean (SD)]	21.4 ±4.3	
HAM-D		41.20/
Mild (8-16)	14	41.2%
Moderate (17-23)	13	38.2%
Sever (>24)	7	20.6%
FSFI		44.10/
< 26	15	44.1%
>26 (No FSD)	19	55.9%
FSFI [Mean (SD)]		·
Desire	3.9 ±1.6	
Arousal	3.1 ±2.3	
Lubrication	3.5 ± 2.0	
Orgasm	3.3 ±1.8	
Satisfaction	3.4 ± 0.8	
Pain	4.8 ±2.9	

The severity of depressive episodes was assessed by using the HAM-D score, and the mean score was 21.4 ± 4.3 . The majority of the subjects were found to be experiencing mild to moderate levels of depression. Sexual functioning was evaluated using the FSFI score, and the data showed that 44.1% of the subjects experienced sexual dysfunction. The sexual dysfunction was reported in all the domain of sexual cycle, arousal and orgasm was affected predominantly.

Discussion

Social taboos, cultural barriers, and lack of awareness are important causes of underreported female sexual dysfunction in Indian society. Indian study reported the prevalence of female sexual dysfunction ranging from 33.3% to 72.3% due to different methodological approaches.¹²

This study was intended to assess the prevalence of female sexual dysfunction in treatment seeking depressed female. In this study conducted on depressed subject involved 42 female subjects was recruited for study and 34 female subject was participated and completed the study. The average age of the participants was 30 years, and they exhibited mild to moderate levels of depression.

According to the FSFI score, approximately 44% of the female participants reported sexual dysfunctions, which is higher than the normal prevalence of female sexual dysfunctions. Domain analysis of FSFI scale shows that all the

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domain of sexual cycle affected in depression. The world literature reported female sexual dysfunction in depressed

subjects ranging from 17% to 76 %.¹³ Previous study reported that the occurrence of self-reported sexual

dysfunction among depressed females was found to be 14%. However, when doctors actively solicited the

information from the same group, the percentage skyrocketed to an astonishing 58%. 14 This finding was crucial to

conclude the Indian setup of study because of social taboo, cultural sanctioned and poor understanding of female

sexual dysfunctions may be the possible reason for lower prevalence of sexual dysfunction in comparison to other

world literature.

Conflict of interest: None

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