Original Research Article

Assessment of sexual dysfunction in patients with major psychiatric disorders

Sajal Ashish Nag[1*], Jyoti Shetty[2]

[1]JR III, [2]Professor and HOD, Department of Psychiatry, Bharati Vidyapeeth Medical College and Hospital, Dhankawadi, Pune, Maharashtra, INDIA.
Email: sajal1912@gmail.com

Abstract

Background: Sexual dysfunction is highly prevalent among psychiatric patients and may be related to both the psychopathology and the pharmacotherapy. Psychiatric disorders have a substantial impact on sexual function. **Aim:** To assess sexual dysfunction and their severity in patients with major psychiatric disorders such as schizophrenia, bipolar affective disorder and depression. **Material and Methods:** This study included 30 patients diagnosed with Sexual Dysfunction as per International Classification of Diseases (ICD-10).All patients receiving treatment for major psychiatric disorder i.e. schizophrenia/bipolar affective disorder/depression were assessed for sexual dysfunction, and screened and diagnosed using the ICD-10 criteria, FSFI, CSFQ-F-C and CGI-S scales respectively. **Results:** As per Arizona sexual dysfunction scale, sexual dysfunction was seen in 63.6% cases of schizophrenia, 78.6% cases of depression and 60% cases of Mania. Mean ASEX score of schizophrenia and depression cases was significantly higher than Mania cases, showing more sexual dysfunction in these illnesses ($p<0.05$). **Conclusion:** Treating doctors should try to identify the specific sexual dysfunction in patients with major psychiatric disorders. Psychiatrists and other doctors need to take the initiative to talk about the patient's sexual life in order to become informed about sexual dysfunction.
Key Words: Psychiatric disorders,Sexual dysfunction, Arizona sexual dysfunction scale, Schizophrenia, Depression, Mania.

[*]**Address for Correspondence:**
Dr. Sajal Ashish Nag, JR III, Department of Psychiatry, Bharati Vidyapeeth Medical College and Hospital, Dhankawadi, Pune-43, Maharashtra, INDIA.
Email: sajal1912@gmail.com
Received Date: 03/03/2018 Revised Date: 28/03/2018 Accepted Date: 16/04/2018
DOI: https://doi.org/10.26611/107612

Access this article online

Quick Response Code:

Website: www.medpulse.in

Accessed Date: 20 April 2018

INTRODUCTION

Sexual dysfunction refers to difficulty experienced by an individual or a couple during any stage of normal sexual activity, including desire, arousal or orgasm. There are four main categories of sexual dysfunctions: desire disorders, arousal disorders, orgasm disorders, and sexual pain disorders.[1] Sexual dysfunction is highly prevalent among psychiatric patients and may be related to both the psychopathology and the pharmacotherapy. Schizophrenia, affective disorders, anxiety disorders, eating disorders and personality disorders - all have a substantial impact on sexual function.[2] Studies focused on particular groups of psychiatric illness reveals that it is mandatory to identify the specific sexual dysfunction and to treat the patients according to his/her individual psychopathology, current pharmacotherapy and interpersonal relationships.[3-5] The present study thus aimed to assess sexual dysfunction and their severity in patients with major psychiatric disorders such as schizophrenia, bipolar affective disorder and depression.

MATERIAL AND METHODS

This cross sectional study was conducted at a tertiary hospital with a full-fledged Department of Psychiatry, associated to a Medical College having daily outpatient services, indoor facility of 40 beds with private and semi-private rooms, round the clock emergency services and vibrant consultation –liaison psychiatry. Patients with

major psychiatric disorders who have been diagnosed started on treatment 6 months prior to study inclusion.

Sample Size calculation: This research study included 30 patients diagnosed with Sexual Dysfunction as per International Classification of Diseases (ICD-10) – Diagnostic Criteria for Research.

Inclusion Criteria

1. Patients with major psychiatric disorders who were newly diagnosed with sexual dysfunction by ICD10 criteria.
2. Patients with major psychiatric disorders who have been diagnosed started on treatment 6 months prior to study inclusion.
3. Age group between 18-60 years.
4. Both male and female patients.
5. Both IPD and OPD patients.
6. All patients giving consent for the study.

Exclusion Criteria

1. Patients suffering from any chronic infectious disease e.g. HIV.
2. Previously diagnosed with sexual dysfunction.
3. Patients suffering from any organic mental disorders.
4. Patients who were on any medication for sexual dysfunction.
5. Patients suffering from substance use disorder such as alcohol, opioid.

Methodology: Approval from our institutional review board was taken before start of the study. All patients receiving treatment for major psychiatric disorder i.e. schizophrenia/bipolar affective disorder/depression in the outpatient department as well as those admitted in the indoor ward were assessed for sexual dysfunction, and screened and diagnosed using the ICD-10 criteria, FSFI, CSFQ-F-C and CGI-S scales respectively. Diagnosis of all the patients was confirmed by consulting Psychiatrist at Psychiatry Department, Tertiary care Hospital. Patients were informed about the study and a written informed consent was taken. They were interviewed face to face using the diagnostic tools.

Observers Scale

- ICD-10 criteria for Schizophrenia/Bipolar affective Disorder/Depression.[6]
- Clinical Global Impression Scale (CGI-S).[7]
- The Female Sexual Function Index (FSFI).[8]
- International Index of Erectile Function.[9]
- Arizona Sexual Experiences Scale.[10]
- Changes in Sexual Functioning Questionnaire (CSFQ-F-C).[11]

Statistical Analysis: All the data was entered in Microsoft Excel sheet and then transferred to SPSS software ver. 21 for statistical analysis using appropriate test. Qualitative data was presented as frequency and percentages and analyzed using chi-square test while quantitative data was presented as means and SD and analyzed using Kruskal Wallis test. Graphical presentation was made using Microsoft office Excel ver. 2013.

RESULTS

The present study included 30 cases of major psychiatric illness with two third of them were in their 3rd and 4th decade. Out of total 30 cases, 56.7% were males while remaining 43.3% were females.

Table 1: Distribution of subjects based on Age Group

Age group (yrs)	No. of patients	Percentage
21-30	2	6.7%
31-40	11	36.7%
41-50	9	30.0%
51-60	5	26.7%
Total	**30**	**100.0%**

As per ICD-10 classification, we had 11 cases of schizophrenia, 10 cases of Unipolar depression, 4 cases of bipolar depression and 5 cases of Mania.

Table 2: Distribution of study subjects based on severity of the patient's illness

ICD-10 Diagnosis	CGI- Severity Scale Score			Total
	Mild (2-3)	Moderate (4-6)	Severe (6-7)	
Schizophrenia	5	4	2	11
Unipolar Depression	4	5	1	10
Bipolar Depression	2	2	0	4
Mania	2	2	1	5

As per CGI-severity scale, 2 out of 11 cases of schizophrenia, 1 out of 10 cases of unipolar depression and 1 out of 5 cases of mania were suffering from severe disease.

Table 3: Association of type of psychiatric problem with Sexual Dysfunction

ICD Diagnosis	Sexual Dysfunction (ASEX)		Total
	No	Yes	
Schizophrenia	4 36.4%	7 63.6%	11 100.0%
Depression	3 21.4%	11 78.6%	14 100.0%
Mania	2 40.0%	3 60.0%	5 100.0%
Total	**9** **30.0%**	**21** **70.0%**	**30** **100.0%**
	p- value - 0.34		

As per Arizona sexual dysfunction scale, sexual dysfunction was seen in 63.6% cases of schizophrenia, 78.6% cases of depression and 60% cases of Mania.

Table 4: Comparison of mean ASEX score between psychiatric conditions

ASEX Score	Group	N	Mean	SD	p-value
	Schizophrenia	11	20.52	4.32	<0.01
	Depression	14	22.31	3.29	
	Mania	5	7.65	4.43	

Mean ASEX score of schizophrenia and depression cases was significantly higher than Mania cases, showing more sexual dysfunction in these illnesses ($p<0.05$).

DISCUSSION

Sexual problems are highly prevalent among patients with psychiatric disorders. They may be caused by the psychopathology of the psychiatric disorder but also by its pharmacotherapy.[12] The present study aimed to assess sexual dysfunction in patients with major psychiatric disorders such as schizophrenia, bipolar affective disorder and depression. The present study included 30 cases of major psychiatric illness (17 – males; 13 – females) with two third of them were in their 3rd and 4th decade. As per ICD-10 classification, we had 11 cases of schizophrenia, 10 cases of Unipolar depression, 4 cases of bipolar depression and 5 cases of Mania.

Sexual Dysfunction and Depression: As per Arizona sexual dysfunction scale, sexual dysfunction was seen in 78.6% cases of depression in present study. Depression is characterized by loss of interest, reduction in energy, lowered self-esteem and inability to experience pleasure: irritability and social withdrawal may impair the ability to form and maintain intimate relationships. This constellation of symptoms may be expected to produce difficulties in sexual relationships, and depression has long been associated with sexual problems. The prevalence of sexual dysfunctions is higher in persons with depression, particularly those treated with psychotropic medications. Zemishlany Z *et al*[13] reported sexual dysfunction in up to 78% of individuals with depression treated with antidepressants. Casper *et al*,[14] found sexual dysfunction in 72% of cases with unipolar depressed and most of these cases experienced loss of sexual interest. Increasing severity of depression was also observed to be associated with loss of libido. Thase *et al*[15] in their study observed that depression in men is associated with a potentially decrease in erectile capacity which may be associated with significant sexual dysfunction. These findings were replicated in a second sample of 51 depressed male outpatients.[16] Depression is widely treated with antidepressants. One of the salient side effects of SSRIs and TCAs was impairment of sexual function. The most prominent effect is inhibition of orgasm, but also impairment in desire and arousal, and as a consequence the feeling of satisfaction from sexual function is negatively affected. However in present study, association of medications with sexual dysfunction was not sought.

Sexual Dysfunction and Schizophrenia: As per Arizona sexual dysfunction scale, sexual dysfunction was seen in 63.7% cases of schizophrenia in present study. Patients suffering from schizophrenia are prone to experience sexual dysfunction with few interpersonal relationships and lack of sexual experience. Negative symptoms of the disorder severely harm the ability to enjoy sexual life. In addition, these patients face difficulties in establishing relationships due to recurrent psychotic episodes, obesity and low self-esteem. Schizophrenia patients are regularly treated with antipsychotics whose common mechanism (at least for the typical antipsychotics) is blockade of postsynaptic D2 dopaminergic receptors which further affects sexual functions. Few studies have investigated the prevalence of sexual dysfunction amongst schizophrenia patients. Zemishlany Z *et al*[13]in their study reported sexual dysfunction in as many as 60% of patients with schizophrenia. Aizenberg *et al*[17] examined two groups of treated and untreated male schizophrenia patients and found that both groups reported high prevalence of sexual dysfunction compared to a healthy control group.Untreated patients reported diminished sexual desire and poor sexual performance. Antipsychotic treatment was associated with further deterioration in erection, orgasm and satisfaction with sexual functioning. In a recent study by Macdonald *et al*[18] observed at least one sexual dysfunction was reported by 82% of men and 96% of women with schizophrenia. At baseline, prior to taking any medication, 37% of the patients reported some sexual dysfunctions. After being treated, patients receiving olanzapine showed the lowest rate of loss of libido and of sexual dysfunction.

Sexual Dysfunction and Mania: As per Arizona sexual dysfunction scale, sexual dysfunction was seen in 60% cases of Mania in present study. Mean ASEX score of Mania cases was significantly lower than schizophrenia and depression cases, showing relatively less sexual dysfunction in these patients ($p<0.05$). As per IIEF and FSFI, mean scores in males and females with mania cases was higher than controls showing increase in sexual desire among males and increased orgasm and satisfaction among females.

CONCLUSION

Treating doctors should try to identify the specific sexual dysfunction in patients with major psychiatric disordersand to treat the patients according to his/her individual psychopathology, current pharmacotherapy and interpersonal relationships. Patients tend not to talk with their clinician about their sexual life. Psychiatrists and other doctors need to take the initiative to talk about

the patient's sexual life in order to become informed about sexual dysfunction.

REFERENCES

1. Masters WH, Johnson VE. (1970). Human Sexual Inadequacy. Toronto; New York: Bantam Books.
2. Zemishlany Z. The impact of psychiatric disorders on sexual dysfunction: An update. AS01-02. 20th European Congress of Psychiatry. 2017
3. Crisp AH. Sexual Psychopathology in the psychiatric clinic. Br JClin Practice 1979;(suppl)4:3-11.
4. Hallward A, Ellison JM. Sexual dysfunction.In: Antidepressants and sexual function.London: Harcourt Health Communication; 2001:28-57.
5. AizenbergD,ZemishlanyZ,Dolfman-EtrogP,Weizman. A Sexual Dysfunction in males Schizophrenic patients. J Clinic Psychiatric 1995; 56:137-141.
6. World Health Organization. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. World Health Organization; 1992.
7. Busner J, Targum SD. The Clinical Global Impressions Scale: Applying a Research Tool in Clinical Practice. Psychiatry (Edgmont) 2007; 4(7):28-37.
8. Rosen R, Brown C, Heiman J, Leiblum S, Meston CM, Shabsigh R, Ferguson D, D'Agostino R., Jr The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. Journal of Sex Marital Therapy. 2000; 26:191–208.
9. Rosen RC, et al. The International Index of Erectile Function (IIEF): a multidimensional scale for assessment of erectile dysfunction.Urology 1997; 49:822–830.
10. McGahuey CA, Gelenberg AJ, Laukes C, Manber R, McKnight K, Moreno FA, Delgado PL. (1997). The Arizona Sexual Experiences Scale (ASEX): Validity and reliability, 150th Annual Meeting of the American Psychiatric Association, San Diego, CA, NR # 184, May 19, 1997.
11. Clayton AH, McGarvey EL, Clavet GJ.The Changes in Sexual Functioning Questionnaire (CSFQ): development, reliability, and validity.Psychopharmacol Bull 1997; 33(4):731-45.
12. Waldinger MD, Hengeveld MW, Zwinderman AH, Olivier B. Effect of SSRI antidepressants on ejaculation: a double-blind, randomized, placebo-controlled study with fluoxetine, fluvoxamine, paroxetine, and sertraline. J ClinPsychopharmacol 1998; 18:274–281.
13. Zemishlany Z, Weizman A. The impact of mental illness on sexual dysfunction. InSexual dysfunction. Karger Publishers. 2008;29:89-106.
14. Casper RC, Redmond DE, Katz MM, Schaffer CB, Davis JM, Doslow SH. Somatic symptoms in primary affective disorder. Arch Gen Psychiatry 1985; 42:1098–1104.
15. Thase ME, Reynolds CF III, Jennings JR, Frank E, Howell JR, Houck PR, Berman S, Kupfer D. Nocturnal penile tumexcence is diminished in depressed men. Biol Psychiatry 1988; 24:33–46.
16. Thase ME, Reynolds CF III, Jennings JR, Frank E, Garamoni GL, Nofzinger EA, Fascizka AL, Kupfer DJ. Diminished nocturnal penile tumescence in depression: A replication study. Biol Psychiatry 1992; 31:1136–1142.
17. Aizenberg D, Zemishlany Z, Dorfman-Etrog P, Weizman A. Sexual dysfunction in male schizophrenic patients. J Clin Psychiatry 1995; 56:137–141.
18. Macdonald S, Halliday J, MacEwan T, Sharkey V, Farrington S, Wall S, McCreadie RG. Nithsdale schizophrenia surveys 24: Sexual dysfunction. Br J Psychiatry 2003; 182:50–56.

Source of Support: None Declared
Conflict of Interest: None Declared