

## A Study of Prevalence of Sexual Dysfunction in Patients Receiving Psychotropic Drugs

Chaitanya Yadla<sup>1</sup>, Hari Manasa B<sup>2</sup> and Kota Suresh Kumar<sup>3\*</sup>

<sup>1</sup>Junior Resident, Department of Psychiatry, Katuri Medical College and Hospital, Guntur, AP

<sup>2</sup>Assistant Professor, Department of Psychiatry, Katuri Medical College and Hospital, Guntur, AP

<sup>3</sup>Hod & Professor, Department of Psychiatry, Katuri Medical College and Hospital, Guntur, AP

### ABSTRACT

**Background:** Sexual dysfunction is the most common side effect associated with psychotropic drugs. It is a threat to patient's quality of life and a major reason for non-compliance. Psychotropic agents can impair the sexual response in different ways due to their neurobiological mode of action. Prevalence rates of sexual side effects are extraordinarily difficult to estimate due to a variety of factors, such as the effect of the disorder being treated, co morbid disorders and baseline sexual dysfunction.

**Objectives:** To study the association between sexual dysfunction and psychotropic drugs in patients using various psychotropic drugs like antidepressants, anti-psychotics, anti-cravings and anxiolytics.

**Methods:** A cross sectional study was done among 200 patients. A self-designed semi structured questionnaire consisting of socio demographic details, relevant psychiatric history and Psychotropic – Related Sexual dysfunction questionnaire (PR Sex DQ – SALSEX) was used. The obtained data was entered in MS excel and analysed using SPSS software

**Results:** Among 200 patients, 62.5% of males and 38.5% of females felt that their psychiatric medications were causing sexual side effects. Out of them 41.7% of men and 30.03 % of women.

**Conclusion:** The most relevant groups for impairment are antidepressants and antipsychotics due to the serotonin agonistic and anti-dopaminergic properties as well as the prolactin increasing characteristics. The treatment of psychiatric disorders should follow a comprehensive treatment plan that anticipates a likely sexual dysfunction at the initiation of treatment.

### \*Corresponding author

Suresh Kumar Kota, Hod & Professor, Department of Psychiatry, Katuri Medical College and Hospital, Guntur, AP, India.

**Received:** May 20, 2024; **Accepted:** May 27, 2024; **Published:** May 31, 2024

### Introduction

Sexual dysfunction caused by psychotropic medications has become an increasingly important clinical topic. Only recently, we have acknowledged the extent to which many psychotropic medications, especially antidepressants, anti-psychotics, anti-cravings, anxiolytics cause sexual side effects [1].

Indeed, there is consistent evidence to suggest that a large number of psychiatric medications adversely affect one or more of the three phases of normal sexual response: desire, arousal and orgasm sexual dysfunction associated with psychotropic drugs is a menace to patient quality of life and a major reason for non-compliance [2]. Psychotropic agents can impair the sexual response in different ways due to their neurobiological mode of action [3]. Epidemiological studies and clinical studies show that often persons affected by depression, schizophrenia, substance abuse, anxiety can suffer from impairment of the sexual function [4]. Most of the antidepressants, anti-psychotics, anti-

craving drugs have adverse sexual side effects which may affect compliance and adherence to treatment. These clinical variables are often underestimated or not investigated in the course of follow-up of persons suffering from psychiatric disorders in treatment with psycho tropic medications.

### Aims and Objectives

To study the association between sexual dysfunction and various psychotropic drugs like anti-depressants, anti-psychotics, anti-cravings and anxiolytics.

### Methodology

#### Inclusion Criteria

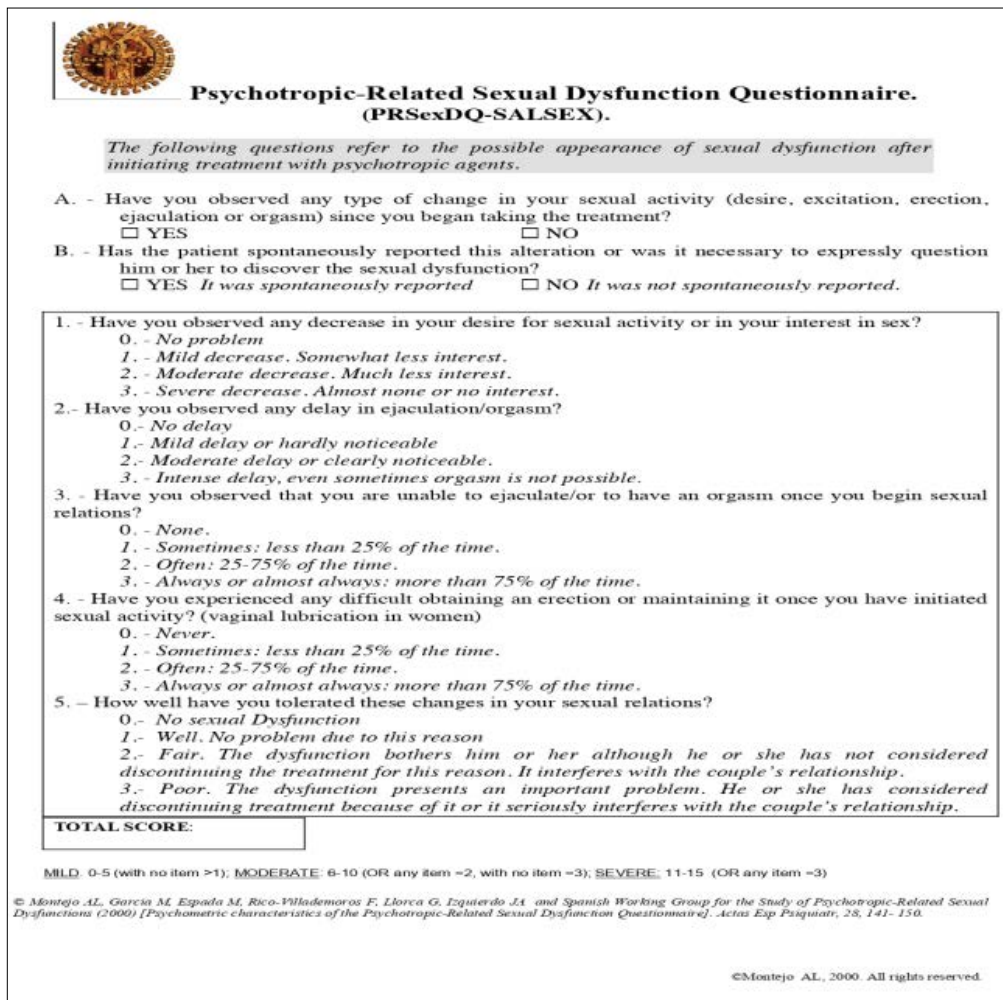
- Patients aged 18 to 50 years.
- Patients using antidepressants, anti-psychotics, anti-cravings, anxiolytics.
- Patients who gave informed consent.

### Exclusion Criteria

- Patients not willing to participate in the study.
- Patients with known medical co – morbidity.
- Pregnant and lactating woman.
- Patients with poor drug compliance.

### Study Tool

- A self-designed, semi-structured questionnaire consisting of information about demographic data, information, sexual dysfunction is assessed by ICD10 criteria and grading of sexual dysfunction done by psychotropic related sexual dysfunction questionnaire (PR SEX DQ- SAL SEX)



**Psychotropic-Related Sexual Dysfunction Questionnaire. (PRSexDQ-SALSEX).**

The following questions refer to the possible appearance of sexual dysfunction after initiating treatment with psychotropic agents.

A. - Have you observed any type of change in your sexual activity (desire, excitation, erection, ejaculation or orgasm) since you began taking the treatment?  
 YES  NO

B. - Has the patient spontaneously reported this alteration or was it necessary to expressly question him or her to discover the sexual dysfunction?  
 YES *It was spontaneously reported*  NO *It was not spontaneously reported.*

1. - Have you observed any decrease in your desire for sexual activity or in your interest in sex?  
 0. - No problem  
 1. - Mild decrease. Somewhat less interest.  
 2. - Moderate decrease. Much less interest.  
 3. - Severe decrease. Almost none or no interest.

2.- Have you observed any delay in ejaculation/orgasm?  
 0.- No delay  
 1.- Mild delay or hardly noticeable  
 2.- Moderate delay or clearly noticeable.  
 3. - Intense delay, even sometimes orgasm is not possible.

3. - Have you observed that you are unable to ejaculate/or to have an orgasm once you begin sexual relations?  
 0. - None.  
 1. - Sometimes: less than 25% of the time.  
 2. - Often: 25-75% of the time.  
 3. - Always or almost always: more than 75% of the time.

4. - Have you experienced any difficult obtaining an erection or maintaining it once you have initiated sexual activity? (vaginal lubrication in women)  
 0. - Never.  
 1. - Sometimes: less than 25% of the time.  
 2. - Often: 25-75% of the time.  
 3. - Always or almost always: more than 75% of the time.

5. - How well have you tolerated these changes in your sexual relations?  
 0.- No sexual Dysfunction  
 1.- Well. No problem due to this reason  
 2.- Fair. The dysfunction bothers him or her although he or she has not considered discontinuing the treatment for this reason. It interferes with the couple's relationship.  
 3.- Poor. The dysfunction presents an important problem. He or she has considered discontinuing treatment because of it or it seriously interferes with the couple's relationship.

**TOTAL SCORE:**

MILD: 0-5 (with no item >1); MODERATE: 6-10 (OR any item =2, with no item =3); SEVERE: 11-15 (OR any item =3)

© Montejo AL, Garcia M, Espada M, Rico-Pillademosos F, Llorca G, Izquierdo JA and Spanish Working Group for the Study of Psychotropic-Related Sexual Dysfunctions (2000) [Psychometric characteristics of the Psychotropic-Related Sexual Dysfunction Questionnaire]. *Actas Esp Psiquiatr*, 28, 141- 150.

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### Data Analysis

Data was composed and entered into Microsoft excel. It was analyzed using SPSS V20 by tests like chi-square and correlation. Results were expressed as means and frequencies. A P value of < 0.05 was indicated to be statistically significant.

### Results

**Table 1: Socio Demographic Data**

Sociodemographic Variables	Frequency	Percentage
<b>Gender</b>		
Male	122	61%
Female	78	39%
<b>Age</b>		
18-28	13	6.50%
29-38	84	42%

39-48	62	31%
>48	41	20.5%
<b>Marital Status</b>		
Married	135	67.5%
Un Married	38	19%
Others	27	13.5%
<b>Education</b>		
illiterate	23	11.5%
Primary	121	60.5%
secondary	56	28%

Table 1 Shows the distribution of socio demographic variables in the sample. It shows that the distribution of male is 61%, female 39 %. The age wise distribution was 6.5 % in between 18-28 years, 42 % in between 29 - 38 years ,31% in between 39 -48years and 20.5% above48 years while 67.5% were married and

19% unmarried while 11.5% were illiterates, 60.5% had primary education, 28 % had secondary education.

**Results**

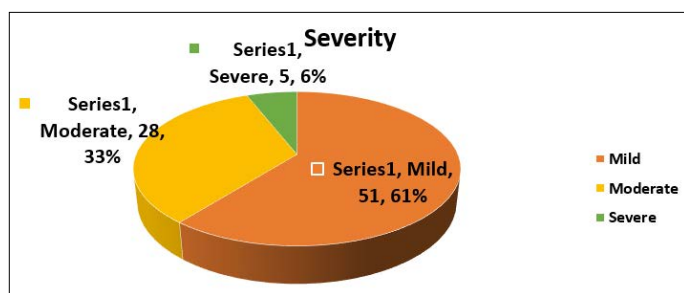
**Table 2: Sexual Dysfunction Observed in Total Sample**

Total sample	N (Number of Patients on Psychotropic Drugs with Sexual Dysfunction)	%
200	84	42

Table 2 shows the Distribution of Patients on Psychotropic Drugs with Sexual Dysfunction as 42 %

**Table 3: Severity of Sexual Dysfunction**

Sexual Dysfunction	Frequency	Percentage
Mild	51	61%
Moderate	28	33%
Severe	5	6%



**Figure 1**

**Table 4: Number of Patients on Different Psychotropic Drugs**

Psychotropic Used	N (Number of Patients on Different Psychotropic Drugs in the Total Sample)
Anti-Psychotics	88
Anti-Depressants	62
Anti-Cravings	12
Anxiolytics	38

Table 4 shows the distribution of number of patients on different psychotropic drugs in the total sample. They are 88 on anti-psychotics, 62 on antidepressants, 12 on anti-cravings, 38 were using anxiolytics

**Table 5: Percentage of Sexual Dysfunction with Psychotropic Drugs**

Sexual Dysfunction	Frequency	Percentage
Anti-psychotics	34	41%
Anti-depressants	43	51%
Anti-cravings	2	2%
Anxiolytics	5	6%

Table 5 shows the distribution of frequency of percentage of sexual dysfunction with psychotropic drugs. 41 % with anti-psychotics, 51 % with anti-depressants, 2 % with anti-cravings, 6 % with anxiolytics.

**Table 6: Association of Sexual Dysfunction with Gender**

Gender	Sexual Dysfunction (Yes)	Sexual Dysfunction (No)	Total	P-Value
Male	58(47.5%)	64(52.5%)	122	0.047
Female	26(33.3%)	52(66.7%)	78	
Total	84(42%)	116(58%)	200	

Table 6 shows that there is a significant association between sexual dysfunction and male gender that is 47.5 %.

**Table 7: Association of Sexual Dysfunction with Age**

Age	Sexual Dysfunction (Yes)	Sexual Dysfunction (No)	Total	P-Value
18-28	2(15.5%)	11(84.7%)	13	0.005
29-38	49(58.3%)	35(41.7%)	84	
39-48	21(33.8%)	41(66.2%)	62	
>48	12(29.2%)	29(70.5%)	41	

Table 7 shows that there is a significant association between sexual dysfunction and age group of 29 - 38 years with 58.3 %.

**Discussion**

Data presented in this paper revealed a sexual dysfunction prevalence rate of approximately 42 %, regardless of gender, which was slightly more prevalent among males (61%) than that of females (39%).

This finding is lower when compared with the study conducted by Angel L Montejo with 62.4 % in males and 56.9 % in females with depression [5].

Whereas it is higher when compared with the study conducted by Angel L Montejo with 50 % in the males and 37 % in the females. The possible reason might be differences in the study design and variance in socioeconomic characteristics of participants.

On the other hand, our findings show that sexual dysfunction is higher in the age group 29 to 38 with 42 % which is higher when compared with Mekonnen Tsehay study with 39 % in the age group of 25 to 34 [6].

The prevalence of sexual dysfunction is slightly higher in the patients using anti-depressants with 51 % than anti-psychotics with 41 % This is slightly different and lower when compared to the study conducted by Jisha M Lucca where it is 65 % with anti-psychotics and it is 30% with antidepressants [7].

According to study done by A L Montejo, the overall incidence of sexual dysfunction is 59.1 % when all the anti-depressants were considered as a whole [8].

With the above study we got the significant association between sexual dysfunction between age group and gender.

According to Rothmore sexual dysfunction was more among the antidepressants with selective serotonergic properties. According to study atypical anti psychotics has potential benefits and less sexual dysfunction when compared with conventional anti psychotics [9].

## Conclusion

According to our study there is 42% prevalence of sexual dysfunction among patients using psychotropic drugs.

Current study has even highlighted sexual dysfunction with anti-craving drugs as there are only few studies regarding this.

Clinicians must be aware of drug induced sexual dysfunction which is a major reason for poor drug compliance. Clinicians should evaluate sexual dysfunction and early treatment needed to be done.

## Limitation

Short duration of the study

Study did not include types of sexual dysfunction.

We have not divided into sub groups of separate categories of drugs causing sexual dysfunction

**Conflicts of Interest:** No

**Type of Study:** Cross-sectional study

**Study Setting:** Katuri Medical College and Hospital, Guntur, Andhra Pradesh.

**Study Period:** 6 Months (1st June to 31st November)

**Sample Size:** 200

**Sampling Method:** Convenience Sampling

**Ethics Committee:** Approval was taken from the ethical committee of the institute

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