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To Examine the Relationship Between Sexual Dysfunction and Patients Taking Psychotropic Medications

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ABSTRACT

BACKGROUND: Psychotropic drugs are known to have a negative side effect called sexual dysfunction. Despite the fact that patients using psychiatric drugs frequently experience sexual issues, very few research have been conducted in India. Dysfunctional sexual function is a complex behavior that is influenced by a number of circumstances. It is very common among people with mental illness who take psychotropic drugs. The World Health Organization defines sexual health as a condition of sexuality-related physical, emotional, mental, and social well-being. It involves more than just the absence of illness, dysfunction, infirmity, and its consequences. A pleasant and respectful attitude toward sexuality and sexual relationships is necessary for sexual health. It also involves the opportunity to engage in pleasurable and secure sexual interactions free from compulsion, bias, and violence. The sexual rights of all people must be respected, defended, and upheld in order to achieve and maintain sexual health. Hippocrates was the first to analyze sexuality and keep notes on it. In recent years, it has become a bigger worry.

AIM: To study the prevalence and nature of SD among patients with mental illness receiving psychotropic medications under routine clinical conditions.

MATERIAL AND METHOD: A tertiary care hospital's department of psychiatry conducted this cross-sectional investigation there. The study included a convenience sample chosen from the psychiatry department's outpatient unit. 50 married men who met the DSM-V criteria for a diagnosis of mental disease made up the study sample. Participants in the study had to be between the ages of 18 and 50, be regularly taking psychiatric drugs for at least two months, have engaged in sexual activity during the previous month, and provide informed consent. The study excluded patients who had uncontrolled mental illness, co-morbid medical illnesses, or sexual dysfunction prior to starting psychotropic medication. Before the study began, authorization was acquired from the hospital's administrative staff.

RESULTS: Study sample consist of 50 married male patients, the mean age of study sample was 35.64 years, out of which most of the patients were from rural (63.1%) area. The education background reveals that 46.1% studied up to secondary level, while 27.2% primary level. In our study sample 62.3% were unemployed and majority pt had schizophrenia (67.9%) diagnosis and mostly was taking their medication on regular basis without any compliance issues. However, numbers of patients in the study on antipsychotics and on antidepressants were too small to draw definite conclusion about relative prevalence.

CONCLUSION: Patients using antipsychotic medications frequently experience sexual dysfunction brought on by psychotropic medications. For improved results and patient adherence to treatment, clinicians should be aware of this when prescribing psychiatric drugs and should create a treatment plan to handle psychotropic-induced sexual dysfunction. The knowledge learned will contribute to better patient compliance and a higher quality of life for those using psychiatric medications.

KEYWORDS: Sexual Dysfunctions, Mental Illness, Psychiatry Clinic, Follow Up Treatment and Ethiopia Psychotropics

INTRODUCTION

An essential aspect of human life, sexual functioning is influenced by a variety of physiological and psychological factors. It is described as the bodily ability to feel arousal, desire, and orgasm. Disorders of sexual desire/interest, arousal, orgasm, and sexual pain are the four main types of sexual dysfunctions. Sexual dysfunctions may have a variety of etiological factors, such as medical or mental illness, substance misuse, age, marital or relationship issues, and pharmaceutical use.[1] It might be challenging to determine how much each of these factors contributes to sexual dysfunction in a given patient. However, if the sexual dysfunction was brought on by a drug known to have sexual adverse effects, it is more pertinent to investigate whether a dosage reduction and a change in different The treatment of side effects as such, or changes in the pathophysiology of the sexual response cycle, are the features of sexual dysfunctions and can lessen the negative effects. While some drugs have relatively specific adverse effects, others have more general side effects that disrupt sexual performance, such as drowsiness, depression, motor dysfunction, weight gain, or dryness of the mucous membranes.[2,3]

Sexual dysfunction (SD) is frequently underreported and is not easily disclosed. The fact that surveys of patients at London general practitioners' offices revealed that family practitioners saw a number of women or couples who appeared with sexual problems each year, and the numbers increased when the doctor asked patients about their sexual health, is evidence for this claim.[4] A review article by Baldwin and Mayers reported that SD attending the outpatient department (OPD) was between 19% and 50%.[5] Due to the male-dominated society and puritanical mindset, it is particularly difficult for women in India to disclose issues with their sexual functioning. Despite the fact that women frequently experience sexual issues, very few research have been conducted in India to yet.[6]

The most prevalent drugs linked to sexual dysfunction are antipsychotics, antidepressants, benzodiazepines, antihypertensives, diuretics, and antihistamines.[7] Sexual dysfunction brought on by psychotropics is now a frequent ailment in medical practice. The use of antipsychotic and antidepressant drugs in the treatment of mental problems is widely acknowledged to have the possible side effect of sexual dysfunction. Even Nevertheless, research from the past have shown that sexual dysfunction is a common and distressing side effect of using numerous psychiatric drugs and a significant contributor to a low quality of life. [8,9,10]

The routine therapeutic examination of psychological aspects, partner-related issues, setting, and life stresses is firmly supported by research. One is more likely to develop a sexual worry, to experience the onset of sexual difficulty, and to sustain sexual dysfunction over time as a result of psychological, interpersonal, and sociocultural factors.[11] It's critical to comprehend the frequency and incidence of various sexual dysfunctions in both sexes in order to set priorities for epidemiologic and clinical study.[12] The psychological, physical, and social wellbeing of both men and women is influenced by sexuality, which is a significant component of one's personality. Literature on sexuality and research articles are scarce.[13]

Despite the fact that sexual dysfunction is quite common, especially among those who take psychiatric medicines, the majority of victims avoid seeking help out of embarrassment.[14] Furthermore, Ethiopia lacks evidence, especially in the research area. In order to determine the extent of sexual dysfunction among those receiving follow-up treatment for

mental illness, the current investigation was carried out. It assists healthcare practitioners in offering these populations the proper interventions to address the issue. Therefore, the purpose of this study was to determine the frequency of sexual dysfunction among people taking psychiatric medications.

MATERIAL AND METHODS

A tertiary care hospital's psychiatry department conducted this cross-sectional study there. The study included a convenience sample chosen from the psychiatry department's outpatient unit. 50 married men who met the DSM-V criteria for a diagnosis of mental disease made up the study sample. Participants in the study had to be between the ages of 18 and 50, be regularly taking psychiatric drugs for at least two months, have engaged in sexual activity during the previous month, and provide informed consent. The study excluded patients who had uncontrolled mental illness, co-morbid medical illnesses, or sexual dysfunction prior to starting psychotropic medication. Before the study began, authorization was acquired from the hospital's administrative staff.

Inclusion criteria

- Married male patients between the ages of 18 years and 50 years
- Asymptomatic from current psychiatric illness for at least the past 1 month
- Patients on psychotropic medication during the study
- Patients who gave informed consent.

Exclusion criteria

- Age <18 years and >50 years
- Unmarried, divorced, or separated male patients
- Patients who had SD even before the onset of psychiatric illness
- Patients suffering from systemic illnesses which may cause SD
- Patients on commonly used non-psychotropic drugs were likely to cause SD.

DATA COLLECTION METHOD AND INSTRUMENT

Psychotropic-Related Sexual Dysfunction Questionnaire,[15] was used to assess the participant's sexual functioning. Psychotropic-Related Sexual Dysfunction Questionnaire is a brief and relatively nonintrusive questionnaire that has shown adequate psychometric properties in patients with psychiatric illness. Psychotropic-Related Sexual Dysfunction Questionnaire was very feasible and its internal reliability was satisfactory in patients with psychiatric illness experiencing sexual dysfunction. In addition, this questionnaire showed good convergent validity and sensitivity to tracking changes in sexual functioning. Clinical global impression (CGI) scale with scores ranging from 0 to 7 was used to assess the severity of the illness. Patients who scored between 1 and 3 were considered to be asymptomatic from the underlying psychiatric illness and were included in the study.[16]

PROCEDURE

patients attending the psychiatry OPD were recruited for the study as per the inclusion and exclusion criteria. Patients included in the study were in remission and were continuously on prescribed psychotropic medications. The diagnosis was made as per the International Classification of Diseases 10th Edition Diagnostic Criteria for Research criteria. The type and dosage of the drug were at the discretion of the treating consultant. Based on the CGI score, only those patients who were asymptomatic (CGI score only those patients who were asymptomatic (CGI score <3) and who were still on psychotropic medications were included in the study and informed consent was obtained from each patient. The female investigator collected the required information about sexual functioning and sociodemographic data using the specially prepared proforma. General physical examination and systemic examination were conducted for each patient. Diagnostic and Statistical Manual of Mental Disorders 4th Edition Text Revision (DSM-IV-TR) was used to categorize the SD.

STATISTICAL ANALYSIS

Data were tabulated using version 17 of the Statistical Package for Social Sciences (SPSS Statistics for Windows, Chicago: SPSS Inc.) and were subjected to appropriate statistical

analysis. The value of $P < 0.05$ was considered statistically significant.

RESULT: -

Study sample consist of 50 married male patients, the mean age of study sample was 35.64 years, out of which most of the patients were from rural (63.1%) area. The education background reveals that 46.1% studied up to secondary level, while 27.2% primary level. In our study sample 62.3% were unemployed and majority pt had schizophrenia (67.9%) diagnosis and mostly was taking their medication on regular basis without any compliance issues.

Table 1: Demographic and Clinical Characteristics

Characteristic/Variable	**N = 50**
Age (years), mean (SD)	35.64 (10.212)
Residential Area, n (%)	
Rural	33 (63.1)
Urban	17 (35.8)
Occupation, n (%)	
Employed	19 (37.7)
Unemployed	31 (62.3)
Education, n (%)	
Illiterate	3 (5.7)
Primary	14 (27.2)
Secondary	24 (46.1)
Higher Secondary	5 (11.3)
Graduate	3 (5.7)
Post Graduate	1 (1.9)
Psychiatric diagnosis, n (%)	
Schizophrenia	34 (67.9)
Depression Bipolar	10 (20.8)
mood disorder	3 (5.7)
Delusional disorder	2 (3.8)
Mixed Anxiety Depression	1 (1.9)

The information in Table 1 shows that there was no significant difference in the presence or absence of SD based on the various groups created based on the demographics.

Table 2: Combination of psychotropic drugs used

Drugs	**Frequency**
Antidepressants + Benzodiazepines	28
Antidepressants + Antipsychotics	08
Antipsychotics + Benzodiazepines	05
Antidepressants + Antipsychotics + Benzodiazepines	03
Mood stabilizers + Antipsychotics	02
Mood stabilizers + Antidepressants + Benzodiazepines	02
Mood stabilizers + Antipsychotics + Benzodiazepines	01
Mood stabilizers + Antipsychotics + Antidepressants	01

The patients on combination of antidepressants and benzodiazepines showed lesser prevalence of SD than the patients on antidepressant alone. This finding is difficult to explain. The current study showed that all psychotropic medications cause SD when used alone or in combinations. However, numbers of patients in the study on antipsychotics and on

antidepressants were too small to draw definite conclusion about relative prevalence.

DISCUSSION

The findings show that alterations in sexual behavior are observed in patients who have been exposed to psychiatric drugs. In our study, it was shown that patients on antipsychotic medications had the highest rate of sexual dysfunction, followed by patients taking antidepressants. In the four groups, there was no discernible difference when sexual dysfunction was triggered. This finding is similar to studies done by **Kondrakonda et al.2014**[17] in past. Also found no difference in sexual dysfunction with use of different antipsychotics. Studies conducted by **Lucca et al.2016**[18] have also reported that the sexual dysfunction was more prevalent in patients who were on antipsychotic medications. Further, from the findings it can be concluded that all psychotropic medications cause sexual dysfunction when used alone or in combinations. There is similar finding from the earlier study by **Veda N et al.2016**[19]

Bn AK et al.2017[20] found that Low educational qualification, initiation of alcohol at earlier age, longer duration of alcohol consumption and dependence and severe dependence appeared to be the most significant predictors of developing Sexual dysfunction. Depression with medical comorbidities was associated with a significant decrease in desire.[21] **Simiyon M et al.2016**[22] found that Negative symptoms scale of schizophrenia and side effects such as weight gain, menstrual disturbances, galactorrhea and dry vagina were significantly associated with Female Sexual Dysfunction. According to research, young adults with mental disorders usually struggle with issues surrounding intimacy, sexuality, and romantic relationships.[23] Sexual dysfunction after trauma exposure may be mediated by physiologic, cognitive, and emotional processes associated with PTSD.[24]

The various groups established based on the demographic characteristics did not significantly differ in terms of sexual dysfunction being present or not. Additionally, the clinical diagnosis hasn't really changed much. It is widely known that the progression and symptomatology of several mental illnesses also have an impact on the patients' sexual functioning; however, this study did not investigate psychopathology. Poor level of functionality may result from the patient having sexual dysfunction brought on by either a main illness or medication. In order to enhance both the quality of life and the result of the condition, it is crucial to recognize and treat sexual dysfunction. Patients taking psychiatric medications frequently experience sexual dysfunction. The most prevalent kind of male sexual dysfunction is erectile dysfunction, and antipsychotics are more likely to cause it than other psychotropics.

Park JE.2015[25] found that a relatively lower prevalence of sexual dysfunction than previously reported, but supports its strong association with psychiatric disorders among postmenopausal women. Along with anxiety and depression symptoms, sexual dysfunction is more common in hypertensive patients. The quality of life of the patient is significantly influenced by their sexuality, and effective follow-up with these patients requires a thorough grasp of female sexual function.[26] **Elyasi F et al.2015**[27] found the prevalence of sexual dysfunction was 78.7% and found high prevalence of sexual dysfunction in diabetic women, especially among those complaining depression. Clinicians' recognition and treatment of sexual dysfunction in schizophrenia patients may be crucial for the patients' quality of life and medication compliance.[28]

The functioning of the sexual organs and the quality of life of those who are affected can be improved by screening for sexual issues and taking into account contributory factors such neurobiology, reproductive life events, health issues, medication usage, and depression.[29] **McCabe MP et al.2016**[30] found that for women and men, diabetes, heart disease, urinary tract disorders, and chronic illness were significant risk factors for sexual dysfunction. Both men and women are at risk for sexual dysfunction due to depression, anxiety, and the drugs used

to treat them. Additionally, sexual dysfunction was linked to substance usage.[30]

At least one-third of patients were affected by SD and/or sexual disorder due to all drugs, whether taken alone or in combination. A definitive statement regarding the likelihood that a certain kind/combination of psychotropics will result in SD or a particular type of SD could not be made because there was no statistically significant difference and a limited number of patients receiving treatment with each particular type/combination of psychotropics. The study underlines the necessity to do research on a broader group of individuals taking a single psychotropic to have a better understanding of how the psychotropic interacts with its sexual side effects.

CONCLUSION:

According to our study, patients who took antipsychotics exhibited more sexual dysfunction than other groups. When recommending psychiatric drugs, the treating physician should regularly conduct clinical practice by asking about the patient's sexual history. A clear conclusion on the causal link between the particular drug and the type/prevalence of the SD could not be formed due to the small number of patients taking the single psychiatric medication. The study underlines the necessity to conduct similar studies on a larger population of individuals taking psychotropic medications in order to have a better understanding of the issue. The knowledge learned will contribute to better patient compliance and a higher quality of life for those using psychiatric medications. Therefore, during follow-up care, the physician needs to routinely ask about sexual symptoms and provide the necessary therapies, paying particular attention to patients with chronic medical illnesses and those who have been taking antipsychotics and psychiatric medications for a long time.

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