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PREVALENCE AND PATTERNS OF SEXUAL DYSFUNCTION AMONG MALE PATIENTS ATTENDING THE GENERAL OUT PATIENT CLINIC OF A TERTIARY HOSPITAL IN NIGERIA

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Keywords:
sexual, prevalence, dysfunction, dissatisfaction, association, subjects

Abstract

Background: The problem of sexual dysfunction constitutes a significant public health concern which is hugely underestimated. This study aims to determine the prevalence and patterns of sexual dysfunction among male patients attending the general outpatient clinic of a tertiary hospital in Nigeria within a 6 month period.

Methods: One hundred and forty one male patients who attended the general outpatient clinic during the study period were interviewed. Data was collected using a questionnaire containing socio-demographic and clinical variables. The International Index of Erectile Function (IIEF) questionnaire was used to assess for sexual dysfunction.

Results: The prevalence of sexual dysfunction was 48.9%. Sexual desire dysfunction was present in 34(24%) subjects, erectile dysfunction in 67(48%), orgasmic dysfunction 26(18%), intercourse dissatisfunction 41(29%) and overall dissatisfaction in 45(32%) subjects. Sexual dysfunction was significantly associated with the age group 30-39yrs, being married and unemployed.

Conclusion: Sexual dysfunction is a huge unmet need which portends an equally huge negative impact on the individual, family and society. The need for clinicians to raise their index of suspicion to increase accurate diagnosis of sexual dysfunction cannot be overemphasized and hence improve in reducing this health burden is imperative.

Introduction

Sexual dysfunction (SD) connotes impaired or dissatisfying sexual enjoyment or performance. A write range of medical conditions including endocrine conditions (such as diabetes mellitus, hyperthyroidism, Addison's disease), gynecological, cardiovascular, respiratory, arthritic, renal and neurological conditions as well as surgical conditions have been associated with sexual dysfunctions[(1)]. Similarly, many therapeutic agents including antihypertensives, neuroleptics, mood regulators, anxyolitics, hormonal agents and psychoactive substances have been implicated in the etiology of this condition [(1,2,3,4)].

A good number of patients are often either exposed to these medications in the process of treating their illnesses or indulge in them, especially alcohol and other psychoactive substances. In light of the foregoing and considering that sexual matters are rarely complained about in the clinics or openly discussed by patients in this part of the world, because ours is a conservative society, it will not be wrong for one to suspect that sexual dysfunction may be a common phenomenon among hospital attendees but which has not been sufficiently addressed.

The rejection one faces or the perception that a man who is suffering from a sexual dysfunction is not a "complete" man especially in the African society underscores the weight and the psychosocial consequences of this condition. Even though SD is a problem that many patients are not willing to discuss freely with their health care providers due to the associated stigma, yet it negatively affects the patient's quality of life significantly[(5, 6)].

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Varying estimates of erectile dysfunction have been reported from 57-81%, with a worldwide estimation of prevalence ranging from 2% in men younger than 40yrs to 86% in men 80yrs or older[7, 8].

The paucity of studies on prevalence and patterns of sexual dysfunction in the underdeveloped world where the stigma and social rejection is higher informed this study. It is hoped that this study will highlight this huge societal problem, underscore its magnitude and draw the attention of all stakeholders to address it effectively. The cascade of positive effects this initiative will have on the family in particular and society at large cannot be quantified.

Methods

Study, Design and Setting

This descriptive cross-sectional study was carried out among male outpatients who attended the general out-patient department (GOPD) of the Madonna University Teaching Hospital over a six month period (January – June 2016). The GOPD is the primary care department of the hospital. Patients are seen first there, except for emergency cases and is open five days every week (from Monday to Friday) for consultations. From the GOPD, depending on the severity of a patient's condition, he may be referred to any of the other departments for specialist care.

Every other male patient aged at least 18years who attended the GOPD within the study period was included in the study; except for persons who were mentally retarded or had a medical condition in which there was significant cognitive impairment, such that meaningful discussion between the patient and the researcher was not possible.

Instruments

The instruments administered to the participants include:

(1) A questionnaire drawn up by the researchers containing socio-demographic and clinical variables.
(2) A general Health Questionnaire (Version 12) developed by Goldberg and Williams to screen for psychiatric morbidity. It is a 12 item questionnaire which has been used by previous researchers in Nigeria [9, 10].
(3) The International Index of Erectile Function (IIEF) questionnaire. This 15-question questionnaire developed by an international panel of experts is a multidimensional, self administered instrument that has been found useful in the clinical assessment of erectile dysfunction and treatment outcomes in clinical trials [11].

The questions were rated on a Likert scale of 1-5 with 0 indicating no sexual activity or no attempt. The IIEF contains 5 domains: Erectile dysfunction (Question 1-5, 15), Orgasmic dysfunction (Q9, 10), sexual Desire dysfunction (Q 11, 12), Intercourse dissatisfaction (Q6-8) and Overall dissatisfaction (Q13-14). Each of these domains focuses on a particular dimension of sexual function. The total IIEF scores range from 0-30 and a higher score corresponds to better sexual functioning. Usually, responses to these questions are based on the respondent's experience over the past 4 weeks. This instrument has been validated for use in Nigeria and it has a reliability coefficient (Cronbachi's alpha) of 0.921 [12]. All the questionnaires were translated to Ibo (the predominant language in the locality of this study) through a back-translation method.

Procedure

Consecutive male outpatients aged between 18-60yrs who attended the GOPD within the study period and who met the inclusion criteria were studied. The participants must also be married and/or have a regular sexual partner. The three aforementioned questionnaires were administered to each willing participant. Five trained research assistants (resident doctors in Psychiatry) provided assistance to the respondents in completing the questionnaire where necessary.

Approval of the research ethical committee of the Madonna University Hospital, Elele, Rivers State, Nigeria was obtained to carry out the study. It is important to note that the study complied with the declaration of Helsinki protocol and informed verbal consent was obtained from the participants after a detailed explanation of the study.

Data analysis

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The data was analyzed using the Statistical Package for Social Sciences (SPSS), version 15 at 5% level of significance and 95% confidence interval. Chi-square (X^2) test was used to test for significance among categorical variables. The student t-test was used for continuous variables.

Results

One hundred and forty seven male out-patients met the inclusion criteria and therefore participated in the study. However 6 subjects did not complete the research. The data of the remaining 141 patients were analyzed. The mean age of the study cohort was 38.9 8.3 years and they were mostly within the age bracket of 30-39 years (59.6%). A greater proportion of the respondents had secondary education (41.8%), were married (58.9%), unemployed (56.7%), were predominantly Christians (96.5%), were aged between 26-35 years at the onset of their illness (33.3%), had no previous history of psychiatric illness (83.7%), had been exposed to other medications other than neuroleptics and antihypertensives (56.0%) and had suffered their present illness for less than 2 years (50.4%); (see table 1).

The mean age at onset of illness was 25.6 6.8 years and the mean age of duration of illness was 3.5 1.8 years.
At least one form of sexual dysfunction was found in 69 (48.9%). Some patients presented with more than one form of sexual dysfunction. Therefore, 48.9% represents the prevalence of sexual dysfunction in the sample studied.
The various forms of sexual dysfunction that existed among the sufferers include: sexual desire dysfunction 34(24%), erectile dysfunction 67(48%), orgasmic dysfunction 26(18%), intercourse dissatisfaction 41(29%) and overall dissatisfaction 45(32%) (see table 2).

Table 2 also shows that there is significant association between:

(a) Age group 30-39 yrs and desire dysfunction. ($X^2 = 9.504$, df = 1, $p < 0.05$)
(b) Being married and
- Desire dysfunction ($X^2 = 13.092$, df = 3, $p < 0.05$)
- Orgasmic dysfunction (X^2 12.03, df = 3, $p < 0.05$)
- Intercourse dissatisfaction ($X^2 = 9.706$, df = 3, $p < 0.05$)

(c) Being unemployed and
(d) Orgasmic dysfunction ($X^2 = 4.722$, df = 1, $p < 0.05$)
(e) Intercourse dissatisfaction ($X^2 = 8.975$, df = 1, $p < 0.05$)

Table 1: Demographic, clinical and medication related characteristics of the respondents

VARIABLE	FREQUENCY	(%)
AGE (YRS)		
18-29	14	9.9
30-49	84	59.6
4049	21	14.9
50-60	17	12.1
ABOVE 60 YRS	5	3.5
MEAN (SD) YEARS= 38.9(8.3)		
EDUCATION		
No formal education	7	5.0
Primary	40	28.4
Secondary	59	41.8
Tertiary	35	24.8
MARITAL STATUS		
Single	50	35.5
Married	83	58.9
Separate/divorced	5	3.5
Widowed	3	2.1
EMPLOYMENT STATUS		
Employed	61	43.3
Unemployed	80	56.7

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VARIABLE	FREQUENCY	(%)
RELIGION		
Christian	136	96.6
Muslim	4	2.8
Tradition worshippers	1	.7
AGE AT ONSET OF ILLNESS (YRS)		
<15	35	24.8
15-25	33	23.4
26-35	47	33.2
>35	26	18.4
MEAN (SD); 25.6 6.8		
HISTORY OF PSYCHIATRIC ILLNESS		
Positive psychiatric illness	23	16.3
Negative psychiatric illness	118	83.7
EXPOSURE TO MEDICATION		
Neuroleptics	25	17.7
Antihypertensives	37	26.2
Other medications	79	56.0
DURATION OF ILLNESS (YRS)		
<2	71	50.4
2-5	36	25.5
5-10	28	19.9
>10	6	4.3
MEAN= 3.5 1.8 YRS		

Table 2: Distribution of types of sexual dysfunction among the various socio-demographic categories

Age (yrs)	Desire dysfunction	Erectile dysfunction	Orgasmic dysfunction	Intercourse dysfunction	Overall dysfunction
18-29	1	4	1	3	4
30-39	23	35	17	25	26
40-49	4	15	2	5	4
50-60	5	10	5	7	7
>60	1	3	1	1	1
Total	34(24%)	67(48%)	26(18%)	41(29%)	45(32%)
Desire dysfunction: $X^2 = 9.504$, df = 1, p <0.05					
Educational level					
None	1	4	0	2	3
Primary	4	7	4	5	5
Secondary	20	36	14	23	21
Tertiary	9	20	8	11	9
Total	34	67	26	41	45

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Marital status					
Single	0	3	1	2	2
Married	24	35	18	28	25
Separated/ divorced	8	26	5	8	16
Widowed	2	3	2	3	2
Total	34	67	26	41	45
Desire dysfunction: X^2 13.092, df = 3, p<0.05, orgasmic dysfunction: X^2 = 12.052, p<0.05, Intercourse dysfunction: X^2 = 9.706, df = 3, p<0.05					

Table 2: distribution of types of sexual dysfunction among the various socio-demographic categories (contd.)

Employment status					
Employed	14	23	6	10	20
Unemployed	20	44	20	31	25
Total	34	67	26	41	45
Orgasmic dysfunction: X^2 = 12.052, df = 1 p<0.05, Intercourse dysfunction: X^2 = 9.706, df = 3, p<0.05					
RELIGION					
Christian	32	62	24	39	42
Muslim	1	4	1	1	2
Traditional worshipper	1	1	1	1	1
Total	34	67	26	41	45

Discussion

This study examined the prevalence and patterns of sexual dysfunction among male patients attending the general outpatient department of a tertiary hospital in Nigeria.

The result shows that about 49% of the subjects suffered from at least one form of sexual dysfunction. This figure is comparable with those reported in some earlier studies [13, 14, 15]. Some researchers have reported higher values [16]. In view of the fact that the largest percentage of the subjects were within the age bracket of 30-39 yrs and the mean age of the study cohort is 38.9yrs, people in the reproductive age group; problems with their sexual functioning most probably constitute a significant source of worry for them especially if unattended to.

In this study, erectile dysfunction was found to be the most common type of sexual dysfunction (48%), followed by overall dissatisfaction (32%), intercourse dissatisfaction (29%), orgasmic dysfunction (26%) and desire dysfunction (24%). While other studies equally reported erectile dysfunction as the most common type of sexual dysfunction among men, there are conflicting reports in the order of prevalence rates of the other types of sexual dysfunction [13, 17, 18, 19].

As has been observed, "poor penile erection interferes with subjective enjoyment of other stages of sexual intercourse" [13], this may be responsible for the high prevalence of intercourse dissatisfaction and overall dissatisfaction obtained in this study (29% & 32% respectively).

The stigma and the sense of how self esteem and failure associated with erectile difficulties negatively affects the patients quality of life, relationship with spouse and productivity in other sectors of life where the patient is involved in [20].

This study reported significant association between age group 30-39 years and desire dysfunction. This is significant considering that this is the first stage of the human sexual response cycle as described by William Masters and

Virginia Johnson [21]. An impairment of this initial stage in young people who should be at the height of their sexual process portends danger for relationships, especially between spouses.

Furthermore, this study shows that a being married is significantly associated with desire dysfunction, orgasmic dysfunction and intercourse dissatisfaction. This is not surprising because the majority of subjects are married and are at the peak reproductive age of 30-39yrs. This finding underscores the burden of unmet heed that spouses, though married are going through; it is an important cause of marital discord and can partly explain the increase in rates of divorce and instability of the family structure currently; and this has been well documented [22, 23]. This view was captured succinctly by Oyewo NA, who noted", men in our culture place a great deal of importance on their penises and often consider erection to be one of the trappings of masculinity; therefore experiencing erectile dysfunction can be devastatingly embarrassing and frightening for most men" [24].

It was further established that there's significant association between being unemployed and orgasmic and intercourse dissatisfaction. This is not surprising because others studies have documented an association between unemployment, depression and sexual dysfunction [25, 26].

Unemployment especially for the male in a relationship often results in role reversal [13]. This may present with a cascade of problems including feeling of shame, inadequacy as well as poor sexual performance, anxiety disorders, depression as well as psychiatric disorders.

Limitations

The cross-sectional nature of the study did not allow us to infer from the findings, the direction of causality between sexual dysfunction and the clinico- sociodemographic variables. The study did not explore the nature of the illness of the subjects nor the details of the medication taken by them.

The study was more concerned with the prevalence and types of sexual dysfunction the patients presented with.

Conclusion

Sexual dysfunction is a huge unmet need among many male patients attending most primary care centers. The effect on the individual, family and society is hugely underestimated. Therefore the need for increased awareness and high index of clinical suspicion among clinicians to mitigate this challenge cannot be overemphasized.

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