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Problematic hypersexuality: Findings among undergraduates in a Nigerian university

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ABSTRACT

Background

Available evidence suggests that African youths are participating in sexual activity earlier and more frequently yet no data exist on problematic hypersexuality in Nigeria.

The aim of this study was to determine the prevalence and demographic correlates of problematic hypersexuality among undergraduates in a Nigerian university.

Setting and Design

A cross sectional study of full time undergraduate students of the University of Calabar.

Materials and Methods

Using a multi stage sampling technique, 923 eligible students were recruited from each of the 10 faculties in the university. According to gender, each of these students had socio-demographic questionnaire and the validated version of Sexual Addiction Screening Test (SAST) / Women Sexual Addiction Screening Test (W-SAST) administered on him or her.

Results

Results showed that 132 (15.2%) of the respondents had problematic hypersexuality. Females were more affected than males (P = 0.007).

Conclusion

Problematic hypersexuality (sexual addiction) is not uncommon in Nigeria. Hence it is imperative that physicians and sexual health professionals should have it in mind when assessing young adult Nigerians for risky sexual practices.

Keywords: Sexual Addiction, Hypersexuality, Nigerian Youths, University Undergraduates, Calabar

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INTRODUCTION

It is increasingly recognized that contemporary African youths are participating in sexual activity earlier and more frequently.[1] Urbanization with its associated sexual sophistication can sometimes involve the adoption of risky sexual behaviors. Oluwatosin *et al* reported that 61.2% of Nigerian undergraduate students were engaging in risky sexual practices.[2] This should give health practitioners great cause for concern considering the efforts by the government and various non-governmental organizations at campaigning for safe

sex practices among students of secondary and tertiary institutions in Nigeria.

Risky sexual practices often occur in isolation but also in the context of problematic hypersexuality.[3] Problematic hypersexuality is a clinical syndrome characterized by loss of control over socially accepted sexual fantasies, urges and behaviours, which are accompanied by adverse consequences and personal distress.[4] Various terms have been used to describe problematic hypersexuality, including sexual addiction, sexual compulsivity, sexual impulse control disorder, non-paraphilic sexual addiction and paraphilia related disorder.[5,6] The 10th edition of the International Classification of Diseases (ICD-10) mentions the category excessive sexual drive which partly captures the construct of problematic hypersexuality.[7]

It has been observed that problematic hypersexuality has significant association with total number of sexual partners and likelihood of using alcohol / drugs in conjunction with sexual activity.[8] Furthermore, the problem of individuals with problematic hypersexuality often extends beyond sex and may include a feeling of shame, guilt, low self-esteem and increased risk of depression, anxiety disorders, substance abuse, suicide, unwanted pregnancy and sexually transmissible infections.[3] Physical abuse, high unemployment and under-education have also been associated with problematic hypersexuality.[9] In spite of all these, most cases of problematic hypersexuality go unrecognized even in specialist settings.[10]

Although there are an increasing number of studies on sexual disorders in the western countries, much less is known in Nigeria and other developing nations in sub-Saharan Africa where there is a relative paucity of such studies.[11] There appears to be no existing data on problematic hypersexuality in the Nigerian general population or clinic samples although studies have mentioned excessive sexual frequency when assessing for risky sexual behavior.[12,13] The present study therefore aims to take a preliminary snapshot at the prevalence and demographic correlates of problematic hypersexuality among undergraduates in a Nigerian university. It is hoped that in addition to adding data to the scanty database on problematic hypersexuality in Nigeria, findings from this study may assist in formulating appropriate interventions that will curb risky sexual behaviors among Nigerian youths.

METHODOLOGY

Setting

The study was carried out at the University of Calabar (UNICAL), located in Calabar, the capital city of Cross-River state, Nigeria. The university was established on 1st October 1975 and currently offers undergraduate and postgraduate academic programs in ten faculties including Agriculture, Allied Medical Sciences, Arts, Basic Medical Sciences, Clinical Sciences, Education, Law, Management Science, Sciences and Social Sciences. With about 4000 courses in over 50 degree programs, UNICAL is well placed for undergraduate study. There are about 14,696 undergraduate students with slightly more male (7582) students who refer to themselves as Malabites than female (7114) students.[14] The student population cuts across most states of the nation. Campus life is rich with extracurricular offerings.

Study Design

It was a cross-sectional descriptive study.

Ethical Considerations

Approval to carry out the study was obtained from the research ethics committee of the Federal Neuro-Psychiatric Hospital Calabar. Introductory letters were written by the Head of Department of Psychiatry of the University and presented to all the Deans of the faculties used in the study. Consent was obtained from all the respondents after explaining the study aim and assuring confidentiality.

Inclusion Criteria

1) All full time undergraduate students of the university present in class at the time of the study.
2) Students Aged 18 years and above

Exclusion Criteria

1) Refusal to give consent for the study.
2) Students who participated in the pilot study.

Sample Size Calculation

Using the formula $n = z^2 p q / d^2$ [15]

Where n = the desired sample size

d = degree of precision

z = confidence limits of survey results

p = estimated proportion of the target population to have problematic hypersexuality.

q = 1 – p

$n = (1.96)^2 (0.22) (0.78) / 0.03^2$

$= 3.84 \times 0.22 \times 0.78 / 0.0009$

$= 739$

Adjusted sample size = 739 / 0.8

= 923

The sample size was calculated to be 739 but was adjusted to 923 to compensate for non-response or inappropriately filled questionnaires.[16]

Sampling Technique

A multistage sampling technique was used. In the first stage, simple random sampling (balloting method) was used to select one department from each of the ten faculties in the university. In the second stage, balloting was used to select a level (or more when a level cannot account for the total number of students required) from the sampled department. When the number of students in the randomly selected departmental level was less than the required size, questionnaires were administered to all eligible consenting students in that department. However, when the number of students in the randomly selected departmental level was more than the required size, Yes/No balloting was used to select respondents from the eligible students from that departmental level. Selection of study respondents was done in a manner that accounts for the relative contribution of the various faculties to the total number of full-time undergraduate students in the University. This was achieved using the National University Commission's undergraduate enrolment list.[14] For example, Faculty of Agriculture has 921(6.3%) out of the total number (14696) of full-time undergraduate students and thus contributed 58 students (6.3%) of the required sample size (923). Similarly Arts contributed 85 students (9.2%), Basic Medical Sciences, 55 students (5.9%), Clinical Science, 64 students (7.0%), Laboratory and Allied Health Sciences, 80 students (8.7%), Education, 143 students (15.5%), Law, 39 students (4.2%), Management Sciences, 74 students (8.0%), Science, 232 students (25.1%) and Social Sciences, 93 students (10.1%).

Data Collection

Data was collected using the following instruments.

Socio-Demographic Questionnaire

This instrument was designed by the investigators. It was used to obtain the socio-demographic information of the students such as age, gender, marital status, departmental level and faculty.

Sexual Addiction Screening Test (SAST) and Women Sexual Addiction Screening Test (W-SAST)

The SAST is a 25-item measure of sexual addiction.[17] Its validity as a screening tool for sexual addiction has been demonstrated among African youths.[3] Each of the 25 SAST items are scored 0 ('no', symptom absent) or 1 ('yes', symptom present). Item scores are summed up to obtain a total score. A score of 13 and above indicates the existence of a probable sexual addiction as well as the need to seek further evaluation.

A female version W-SAST similarly has 25 questions like the SAST.[18] However, the W-SAST differs from the SAST because 5 questions in the SAST (3, 13, 14, 17 and 21) have been replaced with questions considered to be more user-friendly to women. Hence a W-SAST score of 7 or more indicates the existence of a probable sexual addiction as well as the need to seek further evaluation. The SAST and W-SAST serve as comfortable tools to systematically screen for probable problematic hypersexual behavior among university students.[19]

Validation of the SAST and W-SAST

The SAST and W-SAST have been validated in Nigeria using a sample of 44 male and 47 female subjects who had the questionnaires administered on them. These subjects were also assessed using the Carnes Sexual Addiction Criteria based interview to determine whether or not they have sexual addiction diagnosis. It was found that concurrent validity (from correlation of SAST/W-SAST scores with a diagnosis

of sexual addiction) was good for the SAST (rpb= .639, p=.000, N=44) and W-SAST (rpb=.528, p=.000, N=47). Both questionnaires also showed good accuracy at predicting a sexual addiction diagnosis with Area under the curve (AUC) values of .965 and .898 for the SAST and W-SAST respectively.[20] The investigators further reported that at a cutoff point of 14, the SAST showed optimal sensitivity [.833] and specificity [.947] while the W-SAST showed good sensitivity [.800] and specificity [.833] at an optimal cutoff point of 9.[20] Given the above, the present study employed a SAST score of 14 or more to screen for problematic hypersexuality among males while a W-SAST score of 9 or more was used among female undergraduates.

Pilot Study

A pilot study was carried out using 40 medical students of the University of Calabar doing their psychiatry clerkship. The SAST and W-SAST questionnaires were administered to the students. The aim of the pilot study was to see how subjects respond to sensitive sexual questions and identify possible logistic problems. Respondents used in the pilot study did not participate in the main study.

Procedure

Verbal permission was obtained from departmental heads following a formal notification from the head of department of Psychiatry of the university. Class representatives were also informed to facilitate easy collection of data. The purpose of the study was explained to the students. YES\NO balloting was used to select respondents from consenting students who met the inclusion criteria. Questionnaires were administered in the classrooms before or after a lecture (determined using a time-table) and the respondents were told not to discuss with one another while filling the questionnaires. Questionnaire administration time was about 20 minutes. Since the questionnaires were administered anonymously, a phone number and an email address were provided to study respondents who needed to contact the researchers about issues relating to the study.

Data Analysis

Data management and analysis were done using the Statistical Package for Social Sciences (SPSS) software 22nd version.[21] Descriptive statistics were calculated as appropriate. Chi-square analysis was used to investigate the relationship between categorical variables. A confidence level of 95% was used for statistical interpretations.

RESULTS

Sociodemographic Characteristics of Respondents

Out of the 923 questionnaires administered to those who consented for the study, 52 either had incomplete data or were inappropriately filled. A total of 871 questionnaires were subsequently analyzed with 447 [54.8%] male and 394 [45.2%] female undergraduates (See Table 1). The mean age of the students was 23.77 [SD 3.87] years with the majority of respondents 685 [78.6%] within the age range of 18-25 years. Most of the students 789 [91.6%] have never been married. From the proportionate sampling in the 10 faculties of the university, Faculty of Science 225 [25.8%] and Faculty of Education 130 [14.9%] contributed relatively more respondents than other Faculties. Faculty of Law was the least represented 37 [4.2%]. Of the four different departmental levels, level 100 students 82 [9.4%] were the least and level 300 students 302 [34.7%] the most represented in the study. These are presented in Table 1.

Prevalence of Problematic Hypersexuality

As shown in Figure 1, problematic hypersexuality was found in 132 [15.2%] respondents. More females (74 [18.8%]) than males (58 [12.2%]) had problematic hypersexuality using the W-SAST score of 9 or more and SAST score of 14 or more respectively.

Table 1 Sociodemographic Characteristics of Respondents

Variables	Characteristics	Frequency	(%)
		N=871	(100.0)
Faculty	Agriculture	59	(6.8)
	Allied Medical Sciences	73	(8.4)
	Art	81	(9.3)
	Basic Medical Science	54	(6.2)
	Clinical Science	60	(6.9)
	Education	130	(14.9)
	Law	37	(4.2)
	Management Science	69	(7.9)
	Science	225	(25.8)
	Social Science	83	(9.5)
Level	100	82	(9.4)
	200	248	(28.5)
	300	302	(34.7)
	400	239	(27.4)
Gender	Male	447	(54.8)
	Female	394	(45.2)
Age (Years)	Less than 22	224	(25.7)
	22 to 25	461	(52.9)
	More than 25	186	(21.4)
Marital Status	Never Married	798	(91.6)
	Currently Married	68	(7.8)
	Others	5	(0.6)

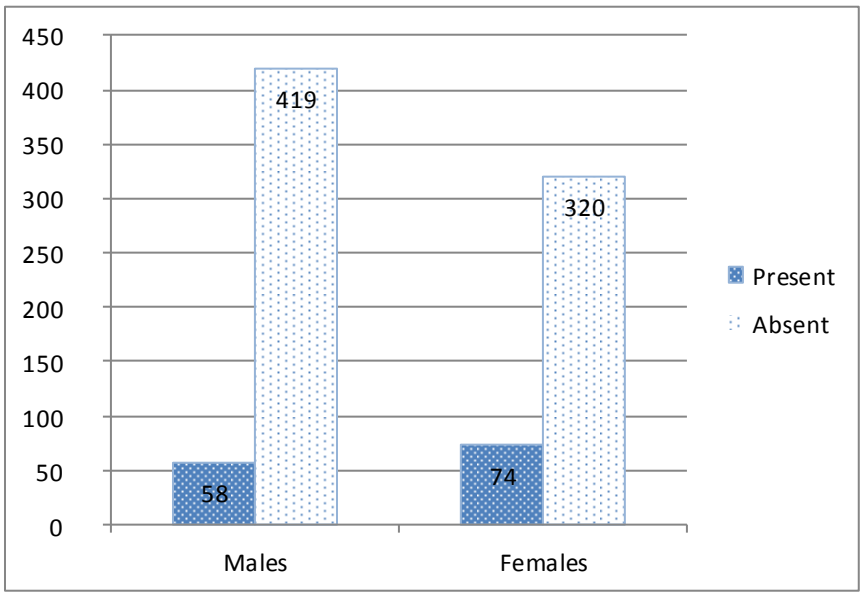

Fig 1 Bar Chart Showing the Prevalence of Problematic Hypersexuality

Problematic Hypersexuality in Relation to Sociodemographic Characteristics

Even though there were more male respondents in this study, significantly more females (18.8%) than males (12.2%) had problematic hypersexuality (X^2=7.359, p=0.007). For the different age groups, 41 [18.3%] respondents aged less than 22 years, 69 [15.0%] respondents aged between 22-25 years and 22 [11.8] respondents aged above 25 years had problematic hypersexuality. For the year of study, 15 [18.3%] respondents in level 100, 38 [15.3%] in level 200, 53 [17.5%] in level 300 and 26 [10.9%] in level 400 had problematic hypersexuality. There were no statistically significant relationships between problematic hypersexuality and the age, marital status and the departmental level of respondents. These are shown in Table 2.

Table 2 Sociodemographic Characteristics of Students with Problematic Hypersexuality

Variable	Without PH (%)	With PH (%)	Statistics		
			X^2	Df	P
Gender					
Male	419 (87.8)	58 (12.2)	7.359	1	0.007
Female	320 (81.2)	74 (18.8)			
Age (Years)					
Less than 22	183 (81.7)	41 (18.7)	3.341	2	0.188
22 to 25	392 (85.0)	69 (15.0)			
More than 25	165 (88.2)	22 (11.8)			
Marital Status					
Never Married	673 (84.3)	125 (15.7)	2.304	2	0.316
Currently Married	61 (89/7)	7 (10.3)			
Others	5 (100.0)	0 (0.0)			
Level of Study					
100	67 (81.7)	15 (18.3)	5.379	3	0.146
200	210 (84.7)	38 (15.3)			
300	249 (82.5)	53 (17.5)			
400	213 (89.1)	26 (10.9)			

Gender was the only statistically significant variable associated with problematic hypersexuality. It (gender) was therefore the only variable subjected to binary logistic regression in order to determine an independent predictor of problematic hypersexuality. Table 3 shows that the odds of having problematic hypersexuality among female respondents were 1.7 times higher than in male respondents (P=0.006).

Table 3 Binary Logistic Regression Derived Adjusted ODDS Ratio for Problematic Hypersexuality by Gender

		B	S.E	WALD	*df*	*P*	ODDS Ratio	95% C.I. Lower	95% C.I. Upper
STEP 1[a]	GENDER	.529	.192	7.597	1	.006	1.698	1.165	2.474

a. Variable entered on step 1: Gender

B= B-Coefficient, S:E= Standard Error, df= Degree of freedom, P= Significance level, C.I= Confidence Interval.

DISCUSSION

A high completion rate was recorded in this study. It has earlier been reported that a high response rate is often achieved in the context of sexual research in developing countries.[22] It is possible that the brief explanation of what the study entailed before respondents were given the questionnaires may have contributed to the high response rate observed in this study.

Prevalence of Problematic Hypersexuality

Male respondents who scored 14 or more in the Sexual Addiction Screening Test [SAST] were

regarded to have problematic hypersexuality and same applied to females that scored 9 or more in the W-SAST. The overall prevalence of problematic hypersexuality in the present sample of university undergraduates was 15.2%. A higher prevalence rate was reported in a study conducted by Seegers in 2003 on a sample of college men and women in the United States. In that study, 27.9% of subjects had problematic hypersexual behavior as assessed by the SAST and W-SAST.[19] When compared with the study by Seegers, it is possible that the difference in settings coupled with the fact that Africans are usually unwilling to give an honest response to questions about sexuality contributed to the lower prevalence rate recorded in the present study.

Problematic Hypersexuality and Sociodemographic Characteristics

A significant relationship between gender and problematic hypersexuality was observed in the present study as there were significantly more females than males identified with problematic hypersexuality (P=0.007). A similar trend has been observed in other local studies for example, Okafor and colleague in a study among undergraduate students in Enugu, Nigeria reported that risky sexual behavior was more common in the females.[12] Since problematic hypersexual behavior contributes to risky sexual practices, it is not surprising to observe a similar gender distribution (in favor of females) among subjects with problematic hypersexuality. This pattern was also observed in a United States study where females significantly outnumbered males in that category.[19] This observation however differs with that of some previous researchers who reported that problematic hypersexuality was commoner in males.[23-26] The reason for this difference might not be unconnected with the fact that these previous researchers conducted their studies mainly among drug addicts and other criminal populations predominated by men. Besides this, the present study also found that female gender was an independent predictor of problematic hypersexuality among undergraduate students. The implication of all these is that female undergraduates in Calabar, Nigeria are at least equally if not more affected by problematic hypersexuality than their male counterparts. Apart from gender, other socio-demographic characteristics were not significantly related to problematic hypersexuality. Such were the findings of the present study.

CONCLUSION AND RECOMMENDATION

This study has revealed that sexual addiction or problematic hypersexuality is not a concept exclusive to the western world and that in Calabar, Nigeria; females are more likely than males to have problematic hypersexuality. Researchers and sexual health professionals should have problematic hypersexuality in mind especially when assessing for risky sexual practices among young adults in the African setting.

LIMITATIONS

This study did not specify the subtypes of problematic hypersexuality present among the respondents. Further research is needed to determine the subtypes of problematic hypersexuality (for example protracted promiscuity, compulsive masturbation, pornographic dependence) that university undergraduates mostly contend with.

The yes/no response options to the emotion laden questions in the instruments (SAST and W-SAST) used in this study may have accounted for the prevalence rate of problematic hypersexuality recorded. Had a diagnostic / clinical interview been used, a different prevalence rate may have been arrived at.

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