Psychoactive Substance Use Among Psychiatric Outpatients In a Nigerian Teaching Hospital

AKINSULORE A , FATOYE F.O., AWAA O.E. , ALOBA O.O., MAPAYI B.M, IBIGBAMI O.I.

ABSTRACT

Background: Psychiatric and substance-use disorders are serious problems for the individuals who have them as well as the society as a whole. There is dearth of studies enumerating the estimates of psychoactive drug use among psychiatric outpatients in Nigeria.

Aim: This study aimed at determining lifetime and current use prevalence of psychoactive substance among psychiatric outpatients.

Methods: Subjects from the psychiatric clinic of Obafemi Awolowo University Teaching Hospitals Complex were consecutively recruited for the study. Information on sociodemographic variables and drug use was obtained and data was subject to descriptive and inferential statistics.

Results: Data from 130 subjects were analysed. The mean age was 39.95 years and 53.8% of subjects were males. Life time and current use prevalence of any substance were 45.4% and 22.3% respectively. Concerning specific psychoactive substance, Stimulant (26.9%) was highest in lifetime use while alcohol (13.1%) was highest in current use among respondents. Patients with Schizophrenia had the highest lifetime rate of any substance (15.4%) while patients with seizure, dementia and other disorders had the lowest rate (2.3%).

Conclusion: Stimulants and alcohol were the substances more likely to be used by the mentally ill irrespective of their diagnostic category. These observations underscore the need to further study the important relationship between these psychoactive substances and these psychiatric disorders.

KEY WORDS: Psychoactive substance, psychiatry, outpatients.

INTRODUCTION

Psychoactive substance use and its disorders constitute a major public health burden in Nigeria (Odejide,1980). Psychiatric and substance-use disorders are serious problems for the individuals who have them as well as for the society as a whole.

Unfortunately, the presence of one greatly increases the risk for the other (Samet et al, 2004). People with severe mental illness are prone to dysphoric experience that makes them also prone to use psychoactive substances (Pristach & Smith, 1996). Furthermore, Leishner (1998) reported that these people use substances to mask unpleasant feelings before the process of addiction supervenes.

The use of psychoactive substances by persons with severe mental illnesses have been well established to have a wide range of adverse impacts on the course of menta lillness and psychosocial functioning, resulting in poor compliance with treatment, poor prognosis, and higher rates of utilization of emergency medical services leading to more costly care (Rachbeisel et al, 1999).

About 50 percent of individuals with severe mental illnesses will develop a substance use disorder at some point during their lives and about half of these will exhibit current substance abuse or dependence (Regler et al, 1990; Cuffel, 1996). International prevalence studies have revealed that persons with severe mental illness have significantly higher rates of substance use (particularly of alcohol, cannabis, and amphetamines) than the general population (Scot, 1993; Menezes et al, 1996).

Studies in Nigeria have reported prevalence of psycho-active substance use among individuals in substance abuse treatment programs (Ohaeri & Odejide, 1993; Adamson & Akindele, 1994), among prisoners (Adesanya et al, 1997; Fatoye et al, 2010) and among students (Makanjuola et al, 2007; Oshodi, Aina & Onajole, 2010). However, there is dearth of studies enumerating the estimates of psychoactive drug use among outpatients with mental disorder in Nigeria.

This study therefore aimed determining the lifetime and current use prevalence and socio-demographic factors associated with psychoactive substances use among outpatients with mental disorders attending the Mental Health Units of the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile Ife, Nigeria.

METHODS

Setting of the Study

The subjects were recruited from the outpatients' psychiatric clinic of the OAUTHC which has two units namely Ife State Hospital unit at Ile-Ife and Wesley Guild Hospital unit at Ilesa. The units provide psychiatric services to Osun, Ekiti, Ondo and neighbouring states in south-western Nigeria, which are

predominantly Yoruba speaking with a catchment population of about 10 million people (National Population Commission, 1998).

Study Population

The study sample was drawn from all patients attending the outpatients' psychiatric clinic of OAUTHC Ile Ife, Nigeria.

Sample Selection

All consecutive consenting Subjects with diagnosis of schizophrenia, affective disorder, and other major mental disorders who attended the outpatients psychiatric clinic of OAUTHC Ile Ife, Nigeria within the study period of three months (between February 2011 and April 2011) were interviewed.

Inclusion Criteria:

Subjects with diagnosis of schizophrenia, affective disorder, and other major mental disorders who had given informed consent. All patients presenting in the unit are interviewed and diagnosis is based on the ICD – 10 diagnostic criteria.

Exclusion Criteria:

(1) Subjects who do not give informed consent
(2) Subjects with the diagnosis of mental and behavioural disorder due to psychoactive substance use

Study Design: The study is a descriptive cross-sectional study.

Ethical Considerations: Approval for the study was obtained from the Ethical and Research Committee of the Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State. Consent was obtained from the respondents after the purpose of the study had been explained to them. The respondents were assured of confidentiality and security of data. They were also assured that they can decline participation in the research without any prejudice.

Instruments

The following instruments were used for the study:

Sociodemographic question - naire: This questionnaire inquired about subjects' age, sex, marital status, religion, ethnicity, level of formal education, occupation, diagnosis, age at first episode of illness, number of episodes and number of hospital admissions.

Drug use questionnaire: This questionnaire was designed by modifying the WHO−Alcohol Smoking and Substance Involvement Screening Test (ASSIST VERSION 3.0). ASSIST was developed in 1997 by the World Health Organization and specialist addiction researchers in response to the overwhelming public health burden associated with psychoactive substance use worldwide.

The questionnaire inquired about the frequency of use of cannabis, alcohol, tobacco products, hypnosedatives, opioids, cocaine and stimulants. Patients were assessed if they have ever used these substances as well as their use in the last one year, past 3 months and past one month or if they have never used the substances.

Data Analysis

The variables for analysis were coded for easy data entry. The Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze the data. Results were calculated using descriptive statistics such as frequencies, means and standard deviations. Inferential statistics such as Chi square was used to determine the relationships between drug use and relevant variable. Level of significant was set at p < 0.05.

RESULTS

Sociodemographic characteristics of the respondents are given in Table I. Out of the 140 patients with mental disorder who were recruited for the study, four had incomplete data and six refused consent leaving a total of 130 respondents whose questionnaires were analysed for this study. The mean age of respondents was 39.95 years (SD =14.46) and there was a slight preponderance of males (54.0%), compared to females (46.0%). Over three-quarters of the respondents were within the age range of 16 to 45 years. Majority of the respondents (53.1%) were single and 69.2% were Christians. Most respondents (97.7%) were Yoruba and 66.0% had up to secondary education. Table 2 shows the Diagnosis of Respondents. Thirty percent were diagnosed with Schizophrenia, 24.6% with other psychotic disorders, 19.2% with Bipolar Affective Disorder while 7.7% accounted for dementia and other disorders. Table 3 shows the summary of consolidated substance use (any drug) among the different diagnostic categories. Life time and current use prevalence of any substance were 45.4% and 22.3% respectively. Respondents with Schizophrenia had the highest lifetime rate of any substance (15.4%) while respondents with seizure disorder and dementia and other disorders had the lowest rate (2.3%). Respondents with Schizophrenia and other psychotic disorder had the highest current use rate of any substance (6.9%) while none of the respondents with seizure and dementia and other disorder currently use any substance.

Table 4 shows the relationship between sociodemographic characteristics of respondents and lifetime use of psychoactive substance. There were no statistically significant relationship between lifetime psychoactive substance use and age distribution, religion, and level of education of respondents. There were statistically significant relationship between lifetime alcohol, tobacco, and cannabis use and sex of the respondents. More males tend to

Table 1. Socio-demographic Characteristics of Respondents

Variables	Frequency (n = 130)	Percentage (%)
Sex		
Male	70	53.8
Female	60	46.2
Age group (years)		
16 – 25	36	27.7
26 – 35	36	27.7
36 – 45	29	22.3
46 – 55	17	13.1
56- 65	5	3.8
>65	7	5.4
Marital Status		
Single	69	53.1
Married	48	36.9
Separated/Divorced	9	6.9
Widowed	4	3.1
Religion		
Christianity	90	69.2
Islam	40	30.8
Ethnicity		
Yoruba	127	97.7
Others	3	2.3
Educational level		
Primary	43	33.1
Secondary	43	33.1
Non University tertiary	37	28.4
University tertiary	7	5.4

Table 2. Diagnoses of Respondents

Diagnoses	Frequency	Percentage (n = 130)
Schizophrenia	39	30.0
Other psychotic disorder	32	24.6
Bipolar Affective disorder	25	19.2
Depression	13	10.0
Seizure disorder	11	8.5
Dementia and other disorders	10	7.7

Table 3. Summary of Consolidated Substance Use (Any Drug) among the Different Diagnostic Categories

Diagnoses	Lifetime use (%)	Current use (%)
All Patients	59 (45.4)	29 (22.3)
Schizophrenia	20 (15.4)	9 (6.9)
Other psychotic disorder	17 (13.1)	9 (6.9)
Bipolar Affective disorder	11 (8.5)	7 (5.4)
Depression	5 (3.8)	4 (3.1)
Seizure disorder	3 (2.3)	0
Dementia and other disorders	3 (2.3)	0

use alcohol, tobacco and cannabis than females among the respondents. Also, there were statistical significant relationship between marital status and the use of tobacco and cannabis. Respondents who were single tend to use tobacco and cannabis more than married respondents.

Table 5 shows the relationship between sociodemographic characteristics of respondents and current use of psychoactive substance. There were no statistically significant relationship between current psychoactive substance use and religion, and level of education of respondents. There were statistically significant relationship between current alcohol, tobacco, and cannabis use and sex of the respondents. More males currently use alcohol, tobacco and cannabis than females among the respondent.

Table 4.
The Relationship Between Sociodemographic Characteristics Of Respondents And Lifetime Use Of Psychoactive Substance

VARIABLE	STIMULANTS User (%) Non User (%)	ALCOHOL User (%) Non User (%)	TOBACCO User (%) Non User %	CANNABIS User (%) Non User (%)	ANY DRUG User (%) Non User (%)
N (%)	35 (26.9) 95 (73.1)			19 (14.6) 111 (85.4)	59 (45.4) 71 (54.6)
Age					
<25yrs	5 (3.8) 31 (23.8)	5 (3.8) 31 (23.8)	5 (3.8) 31 (23.8)	7 (5.4) 29 (22.3)	11 (8.5) 25 (19.2)
26-35yrs	9 (6.9) 27 (20.8)	11(8.5) 25 (19.2)	8 (6.2) 28 (21.5)	7 (5.4) 29 (22.3)	18(13.8) 18 (13.8)
36-45yrs	9 (6.9) 20 (15.4)	9 (6.9) 20 (15.4)	5 (3.8) 24 (18.5)	4 (3.1) 25 (19.2)	14 (10.8) 15 (11.5)
>45yrs	12 (9.2) 17 (13.1)	5 (3.8) 24 (18.5)	3 (2.3) 26 (20.0)	1 (0.8) 28 (21.5)	16 (12.3) 13 (10.0)
	X^2=6.506 df=3 p>0.05	X^2=4.437 df=3 p>0.05	X^2=1.863 df=3 p>0.05	X^2=4.259 df=3 p>0.05	X^2=4.722 df=3 p>0.05
Sex					
Male	22 (16.9) 48 (36.9)	24 (18.5) 46 (35.4)	19 (14.6) 51 (39.3)	17 (13.1) 53 (40.8)	39 (30.0) 31 (23.8)
Female	13 (10.0) 47 (36.2)	6 (4.6) 54 (41.5)	2 (1.5) 58 (44.6)	2 (1.5) 58 (44.6)	20 (15.4) 20 (30.8)
	X^2=1.565 df=1 p>0.05	X^2=10.734 df=1 P<0.01	X^2=13.522 df=1 P<0.01	X^2=11.365 df=1 P<0.01	X^2=6.529 df=1 P<0.05
Religion					
Christian	24 (18.5) 66 (50.8)	23 (17.7) 67 (51.5)	14 (10.8) 76(58.5)	12 (9.2) 78 (60.0)	38 (29.2) 52 (40.0)
Islam	11 (8.5) 29 (22.3)	7 (5.4) 33 (25.4)	7 (5.4) 33 (25.4)	7 (5.4) 33 (25.4)	21 (16.2) 19 (14.6)
	X^2=0.01 df=1 P>0.05	X^2=1.012 df=1 P>0.05	X^2=0.077 df=1 P>0.05	X^2=0.385 df=1 P>0.05	X^2=1.180 df=1 P>0.05
Education					
Primary	12 (9.2) 31 (23.8)	7 (5.4) 36 (27.7)	4(3.1) 39(30.0)	4(3.1) 39(30.0)	22 (16.9) 21 (16.2)
Secondary	11 (8.5) 32 (24.6)	12 (9.2) 31 (23.8)	9(6.9) 34(26.2)	9(6.9) 34 (26.2)	17 (13.1) 26 (20.0)
Tertiary(NU)	8 (6.2) 29 (22.3)	7 (5.4) 30 (23.1)	6(4.6) 31(23.8)	4(3.1) 33(25.4)	15 (11.5) 22 (16.9)
Tertiary (U)	4 (3.1) 3 (2.3)	4 (3.1) 3 (2.3)	2(1.5) 5(3.8)	2(1.5) 5(3.8)	5 (3.8) 2 (1.5)
	X^2=3.838 df=3 P>0.05	X^2=6.621 df=3 P> 0.05	X^2= 3.012 df=3 P>0.05	X^2= 3.868 df=3 P>0.05	X^2=3.439 df=3 P>0.05
Marital status					
Single	19(14.6) 63(48.5)	23(17.7) 59(45.5)	18(13.8) 64(49.2)	17(13.1) 65(50.0)	37(28.5) 45(34.6)
Married	16(12.3) 32(24.6)	7(5.4) 41(31.5)	3(2.3) 45(34.6)	2(1.5) 46(35.4)	22(16.9) 26(20.0)
	X^2= 1.589 df=1 P>0.05	X^2=3.093 df=1 P>0.05	X^2= 5.511 df=1 P<0.05	X^2= 6.657 df=1 P<0.05	X^2= 0.006 df=1 P>0.05

Note: NU: Non University, U: University

Table 5. The Relationship Between Sociodemographic Characteristics of Respondents and Current Use of Psychoactive Substance

VARIABLE	ALCOHOL		STIMULANTS		TOBACCO		CANNABIS		ANY DRUG	
	User (%)	Non User (%)	User (%)	Non User (%)	User (%)	Non User (%)	User (%)	Non User (%)	User (%)	Non User (%)
N (%)	17 (13.1)	113 (86.9)	15 (11.5)	115 (88.5)	12 (9.2)	118 (90.8)	11 (8.5)	119 (91.5)	29 (22.3)	101 (87.7)
Age										
<25yrs	3(2.3)	33(25.4)	0(0)	36 (27.7)	2(1.5)	34(26.2)	4(3.1)	32(24.6)	5(3.8)	31(23.8)
26-35yrs	7(5.4)	29(22.3)	3(2.3)	33 (25.4)	6(4.6)	30(23.1)	4(3.1)	32(24.6)	9(6.9)	27(20.8)
36-45yrs	6(4.6)	23(17.7)	5(3.8)	24 (18.5)	3(2.3)	26(20.0)	2(1.5)	27(20.8)	9(6.9)	20(15.4)
>45yrs	1(0.8)	28(21.5)	7(5.4)	22 (16.9)	1(0.8)	28(21.5)	1(0.8)	28(21.5)	6(4.6)	23(17.7)
	X^2= 5.841 df=3 P>0.05		X^2= 10.492 df=3 P<0.05		X^2= 4.156 df=3 P>0.05		X^2= 1.685 df=3 P>0.05		X^2= 2.941 df=3 P>0.05	
Sex										
Male	15(11.5)	55(42.3)	9(6.9)	61(46.9)	11(8.5)	59(45.4)	10(7.7)	60(46.2)	22(16.9)	48(36.9)
Female	2(1.5)	58(44.6)	6(4.6)	54(41.5)	1(0.8)	59(45.4)	1(0.8)	59(45.4)	7(5.4)	53(40.0)
	X^2= 9.307 df=1 P<0.01		X^2= 0.258 df=1 P>0.05		X^2= 7.609 df=1 P<0.01		X^2= 6.642 df=1 P<0.05		X^2= 7.280 df=1 P<0.05	
Religion										
Christian	14(10.8)	76(58.4)	10(7.7)	80(61.5)	9(6.9)	81(62.3)	8(6.2)	82(63.1)	20(15.4)	70(53.8)
Islam	3(2.3)	37(28.5)	5(3.8)	35(26.9)	3(2.3)	37(28.5)	3(2.3)	37(28.4)	9(6.9)	31(23.8)
	X^2= 1.581 df=1 P>0.05		X^2= 0.052 df=1 P>0.05		X^2= 0.207 df=1 P>0.05		X^2= 0.069 df=1 P>0.05		X^2= 0.001 df=1 P>0.05	
Education										
Primary	3(2.3)	40(30.8)	8(6.2)	35(26.9)	2(1.5)	41(31.5)	3(2.3)	40(30.6)	12(9.2)	31(23.8)
Secondary	8(6.2)	35(26.9)	4(3.1)	39(30.0)	5(3.8)	38(29.2)	4(3.1)	39(30.0)	8(6.2)	35(26.9)
Tertiary(NU)	4(3.1)	33(25.4)	3(2.3)	34(26.2)	4(3.1)	33(25.4)	3(2.3)	34(26.2)	7(5.4)	30(23.1)
Tertiary (U)	2(1.5)	5(3.8)	0	7(5.4)	1(0.8)	6(4.6)	1(0.8)	6(4.6)	2(1.5)	5(3.8)
	X^2= 4.209 df=3 P>0.05		X^2= 3.654 df=3 P>0.05		X^2= 1.695 df=3 P>0.05		X^2= 0.474 df=3 P>0.05		X^2= 1.522 df=3 P>0.05	
Marital Status										
Single	12(9.2)	72(53.8)	5(3.8)	77(59.3)	10(7.7)	72(55.4)	10(7.7)	72(55.4)	17(13.1)	65(50.0)
Married	5(3.8)	43(33.2)	10(7.7)	38(29.2)	2(1.5)	46(35.4)	1(0.8)	47(36.1)	12(9.2)	36(27.7)
	X^2= 0.474 df=1 P>0.05		X^2= 6.441 df=1 P<0.05		X^2= 2.329 df=1 P>0.05		X^2= 3.997 df=1 P<0.05		X^2= 0.318 df=1 P>0.05	

Note: NU: Non University,
U: University

DISCUSSION

From the results, four substances (Stimuants, alcohol, tobacco and cannabis) were the most commonly used substances among the respondents. In this study, the majority of respondents were diagnosed with schizophrenia and other psychotic disorders. The pattern of psychiatric morbidity seen in this study is similar to those reported in other studies in Nigeria (Ihezue, 1982; Binitie, 2001). Possible reason why schizophrenia and other psychotic disorders were the commonest presenting morbidity in the clinic may be due to the associated behavioural disturbances that are easily recognized in the society leading to referral to the hospital to avoid stigmatization and damage to property and life. Another possible explanation might be that these disorders cannot be managed effectively by traditional and spiritual healers (Makanjuola, 2003).

In this study, the life time prevalence of any substance use was 45.4% and this is similar to that obtained in a previous study among Swedish psychiatric outpatient that reported a life time prevalence of 48.3% (Cantor-Graae, Nordstrom & McNeil, 2001). In Nigeria, lifetime prevalence of any substance has been reported up to 87% among the

four most commonly used psychoactive substances. However, it is important to note that among the respondents, stimulant use increases with age and this is statistically significant among current users whereas cannabis use decreases with age. A statistically significant sex difference in frequencies was found in this study with lower frequencies of lifetime and current use of psychoactive substances among females. This supports the findings from previous studies (Fayne, 1993).

The frequency of psychoactive substance (lifetime and current use) decreases with increasing level of education, however this finding was not statistically significant. Patients who were single had a higher frequency of lifetime and current use of psychoactive substances except current stimulant use where married patients had a higher frequency of use which was statistically significant. It is also important to note that the higher frequency of current use of cannabis and lifetime use of alcohol and cannabis among the patients who were single is also statistically significant.

In conclusion, this study has shown that stimulants and alcohol were the substances more likely to be used by the mentally ill irrespective of their diagnostic category. These observations underscore the need to further study the exact relationship between these psychoactive substances and these psychiatric disorders.

There are some limitations of this study which need to be mentioned. First, this study was conducted in a single centre. Therefore, the result may not be representative of the rate of psychoactive substance use among different diagnostic categories of mental disorder in Nigeria. Secondly, the researchers used self report to obtain information on drug use. Although, this is one of the standard methods of evaluating drug use, it may lead to under-reporting, especially for illicit drugs. Estimating blood/urine levels of the substances could have improved the findings of this study.

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Correspondence: Akinsulore A, Department of Mental Health, Obafemi Awolowo University Ile-Ife. Osun State, Nigeria. E-mail: samilore@yayoo.com

Fatoye F.O Department of Mental HealthObafemi Awolowo University Ile-Ife. Osun State. Nigeria
AWAA O.E. Neuropsychiatric Hospital Rumuigbo, Port Harcourt Rivers State, Nigeria.
ALOBA O.O. Department of Mental Health Obafemi Awolowo University Ile-Ife. Osun State. Nigeria
MAPAYI B.M Department of Mental Health Obafemi Awolowo University Ile-Ife. Osun State. Nigeria
IBIGBAMI O.I Department of Mental Health Obafemi Awolowo University Ile-Ife. Osun State. Nigeria