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Psychosocial and Demographic Variables as Correlates of Patterns of Substance Abuse among in-Patients in Two Selected Neuro-Psychiatric Hospitals in South-West, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Author QAA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors COE and CCCA managed the analyses of the study. Authors ORO and OE managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Aims: The study main objective is to access psychosocial and demographic variables as correlates of patterns of psychoactive substance abuse among patients admitted to drug treatment centers in two federal mental health institutions in Nigeria.
Study Design: Descriptive correlational research design.
Place and Duration of Study: Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and Federal Neuro Psychiatric Hospital, Yaba, Lagos in February 2018.
Methodology: The sample size for this study comprises 224 patients admitted for treatment due to psychoactive substance abuse at the Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and Federal Neuro Psychiatric Hospital, Yaba, Lagos. A self-developed, pre-tested semi structured interviewer administered questionnaire was used to collect data on psychosocial and demographic

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variables that may explain the patterns of substance abuse among. Data were analysed using descriptive and inferential statistics at 0.05 level of significance.

Results: The study found that social, psychological and demographic factors have significant influence on psychoactive substance use (F (6, 213) =23.214, P=0.07), Adj R2 = .158 (F (3, 216) =33.193, P=0.000), Adj R2 = .104, (F (6, 213) =10.101, P=0.031), Adj R2 = .062 respectively. Social factors of accessibility, family usage, affordability and peer usage exerted positive impact on psychoactive substance use β = .81, P = 000, β =.127, P = .037, β = .118, P = 0.011 and β = .139, P = .009 respectively. The psychological factors of perception, impulsivity and self- gratification exerted positive and significant influence on psychoactive substance use β = .148, P = 047, β =.197, P = .000 and β = .107, P = 0.03 respectively. Demographic factors age (x2 = 21.347, P = .000); gender (x2 = 5.432, P = .013); marital status (x2 = 2.707, P = .034) and religion is (x2 = 4.119, P = .009) exerted significant effect on pattern of substance abuse.

Conclusion: The study concluded that social, psychological and demographic variables are the main correlates of psychoactive substance abuse among patients admitted and treated in sampled Neuropsychiatric Hospitals.

Keywords: Protean effect; social factors; psychological factors; demographic factors; psychoactive substance.

1. INTRODUCTION

According to the World health Organization [1], drugs are naturally supposed to be used for therapeutic purpose in the prevention, diagnosis, and treatment of disease and it is a chemical agent that can modify the functions of living organisms. Substance abuse applies to the using of any psychoactive substances, licit, illicit, or medically prescribed drugs that is used indiscriminately, inappropriately and other than what it is prescribed for which alters the physiology of living organisms. Several drugs used by people are: Hallucinogens, which cause addiction and anxious feelings, e.g. Bhang and hashish, depressants/sedatives depresses the central nervous system, and most times induce sleep, e. g, tranquilizers and barbiturates, stimulants mostly activates the central nervous system, for example caffeine and cocaine are active in the treatment of mild depression and sometimes induce insomnia. Narcotics initiate a calming effect, relieves pains and initiates pleasurable feelings. Drugs in this category include heroine and morphine.

The abuse of psychoactive substance continued to be on the rise despite the setting up of National Drug Law Enforcement Agency (NDLEA) by Decree 48 of 1989, and adolescents and young adults constitutes the high risk group. Drug abuse has been reported as common among school dropouts, and in those who take menial jobs as well as in market places. In beaming a searchlight on factors that may be responsible for such occurrence, indicators like, pressure to excel in school works, disorganised family settings, easy accessibility to drug, high social status, urban residence and sexual experience, desire to stay awake at night have contributed to the high substance abuse incidence according to Makanjuola et al. [2].

The longstanding history of substance related disorders in the world is well documented, and has become a serious global problem in recent times. Recent evidences show that prevalence of alcohol consumption and psycho active substances, especially new drugs such as “ecstasy”, is increasing among adolescents and young adults. Consumption of brain altering substances with its protean effect is a global phenomenon and is of utmost public health concern. It is almost impossible to calculate the effect of illegal substance use on the society, as these effects are various and widespread and may take several years to reveal themselves. However, we know that these effects have several impacts on the fabrics of the society [3]. There has been a growing trend in the use of psychoactive substances. Current data indicate that drug use cuts across diverse groups, with high risk groups including males aged 10 to 29 years, occupation, gender, marital status. However, studies in this area are limited in Western Nigeria.

The increase in crime rates and road traffic accident in Nigeria in the recent times has been attributed to consumption of psychoactive substance. World Health Organization also estimates that about 250 million children and adolescents who live in developing countries like Nigeria are likely to be killed by tobacco [4]. The increased prevalence of substance and drug abuse among adolescents in the Nigerian society

poses a great concern to health care providers who have seen increased admissions into mental health facilities recently. Drug abuse among Nigerian youths, constitutes one of the major social and academic problems in schools, as youths have had their lives frustrated and academics misdirected due to their involvement in drug use. The need to nib this condition in the bud therefore becomes imperative. One of the actions in the right direction is to gain understanding on patients patterns of psychoactive substance use and the reinforcing factors (demographic and psychosocial) both within and outside the victims. This study therefore seeks to assess the patterns and correlates of substance abuse among patients admitted to drug treatment centers in the two Federal Mental Health Institutions.

2. METHODS

2.1 Study Design

The design for this study was a descriptive correlational design, to assess all psychoactive substance abuse/use patients admitted and treated in both the Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and Federal Neuro Psychiatric Hospital, Yaba, Lagos in February 2018.

2.2 Population

The target population for this study comprised all psychoactive substance abuse/use patients admitted, and treated in Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and Federal Neuro Psychiatric Hospital, Yaba, Lagos. The sample size for this study comprises 224 patients admitted for treatment on psychoactive substance abuse/use or drug related cases in Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and Federal Neuro Psychiatric Hospital, Yaba, Lagos.

2.2.1 Inclusion criteria

Patients in both Neuropsychiatric hospitals, who were diagnosed and being treated for psychoactive substance abuse during the period of the study, and gave informed consent were included.

2.2.2 Exclusion criteria

All other patients in both Neuropscyhiatric hospitals, being managed for non-psychoactive substance abuse.

2.3 Sample Size and Sampling Technique

Two neuropsychiatric hospitals in south-west, Nigeria were randomly selected by balloting, with a grand total population of 556 in both hospitals. Using the Cochran (1977) formula, and adjusting for 10% attrition rate, the expected sample size for this study was determined to be 224. Thus a proportion of 141 subjects were randomly selected from Neuropsychiatric Hospital (Aro & Lantoro Annex) Abeokuta and another proportion of 83 subjects were randomly selected from Federal Neuro Psychiatric Hospital, Yaba, Lagos.

2.4 Instrumentation

The instrument used for data collection was a pre-tested, self-structured interviewer administered questionnaire titled “Questionnaire on Psychosocial and demographic variables as correlates of patterns of Psychoactive Substance Abuse” Items in the questionnaire were developed after a thorough literature search on the topic. The questionnaire was divided into six sections: Section A contained items that addressed the socio-demographic data of respondents; Section B contained items that were designed to collect data on psychoactive substance that are commonly abused; Section C contained items that were designed to collect information on history of intakes of psychoactive substances; Section D contained items that were designed to collect information on psychological factors that predisposes to psychoactive substance abuse, Section E contained items that were designed to collect information on social factors that predisposes to psychoactive substance abuse among respondents while Section F contained items that were designed to collect information on environmental factors that predisposes to psychoactive substance abuse among respondents.

Reliability of the questionnaire was ascertained by pre-testing the instrument among 20 patients with psychoactive substance abuse disorders at Community Mental Health Centre, Oke-Ilewo in Ogun State which was not in the same location with the sample for the study. Correlational coefficient of internal consistency test was computed and Cronbach Alpha value was found to be 0.88.

2.5 Data Collection Procedure

A letter of introduction was obtained from the Dean, School of Nursing Sciences, Babcock Univeristy which was presented to the Health

Research and Ethics department of Federal Neuro Psychiatric Hospitals at Aro and Yaba to allow the researcher use their patients in the study for the period of one month. After approval was received, data was collected from patients during their stay on admission and during clinic days for follow up care. The questionnaires were distributed by the researcher, with other trained research assistants to patients on admission and to those that came for follow up visits. The purpose of the study and contents of the questionnaire were carefully explained to the participants and their confidentiality was assured. Interpreters were provided for patients who did not understand English Language. Completed questionnaire were collected by the researcher.

Analyses of the data gathered from the participants were processed employing Statistical package for the social science (SPSS), version 21. Participants' information was expressed via frequency table and descriptive statistics was used to answer the research questions after calculations of group means and standard deviations. Hypotheses were tested using inferential statistics of student t-test at 0.05 level of significance.

3. RESULTS

It should be noted that two hundred and twenty-four (224) participants were estimated and participated in this study. All questionnaires were distributed but only two hundred and nineteen (219) were adequately filled and used in the analysis. Thus, 97.8% questionnaire retrieval success was ensured.

Table 1 reveals that majority (58.4%) of the respondents were male. The respondents were within the 17 to 49 years age range with a mean age of 29.7 ± 2.01(SD). The majority (51.1%) was between 21 and 30 years, 53.4% were single. Moslems were in the majority (44.3%); 53.4% had between 1 to 3 children; 26% were still in school, and an overall majority (37.4%) had higher education.

Table 2 reveals that all the respondents in this study confirmed using one or more substances at one time or the other. Specifically, about 90.9% of the respondents were found to consumed alcohol. This is followed by cannabis (83.1%), codeine (53.4%), tramadol (48.4%), tobacco (45.7%) and caffeine (40.6%). The least consumed drugs in this study are cocaine/heroine (19.6%), morphine (19.6%), petrol/latex/nail polish/glue (29.9%). The commonest substance of abuse in the study population was alcohol (90.9%) and cannabis (83.1%).

Fig. 1 shows that the frequency of drugs/ psychoactive substance use reported among the participants of this study was 60% daily, 17.8% weekly, 15.1% occasionally, and 5% monthly. It could be said from the result presented in Fig. 1 that majority of the patients in the treatment centers abused drugs on daily basis.

In Fig. 2 we see that the frequently used method of consumption of drugs/ psychoactive substance by the patients indicate that 18.7% consumed it through eating, 12.3% through injection, 36.1% smoked and 23.7% sniffed/inhaled the substances. It could be said that majority of the patients smoked the drugs compared to ingestion, injection, and sniffing/inhalation.

Table 3 reveals that age of onset of use of substances by the patient illustrates that substance use initiation was as early as 10 years, peaking at 16-20 years and declining in the older age groups. However, the results revealed further that majority (37.4%) of the patients first sniffed/smoked/chewed the substance when they are in the higher institution; 33.8% at secondary school, 6.8% at primary, while the remaining 12.8% are without formal education. Majority of fathers (69.4%) and mothers (62.1%) were educated.

Results in Table 4 indicates that the chi-square value obtained for accessibility is (x^2 = 23.888, p = .000); affordability (x^2 = 4.321, p = .031); parental/family usage is (x^2 = 17.436, p = .023); Peer Usage is (x^2 = 12.654, p = .000); Self-gratification is (x^2 = 9.001, p = .009); impulsivity is (x^2 = 10.456, p = .017), and personal perception is (x^2 = 5.876, p = .000) all at the significant levels of less than 0.05. Since these p-values were equal to or less than 0.05 values, it could be said that all the psychosocial variables used in this study except availability are good correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals.

Results in Table 5 indicate that the chi-square value obtained for age is (x^2 = 21.347, p = .000); gender (x^2 = 5.432, p = .013); marital status (x^2 = 2.707, p = .034) and religion is (x^2 = 4.119, p = .009) at the significant levels of less than 0.05 for the three variables respectively. Since these p-values were equal to or less than 0.05 values, it

could be said that age, gender, marital status and religion are correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals. However, for education and occupation, the chi-square values obtained were 1.333 and .973 respectively at insignificant levels of .091 for education and .234 for occupation. It could be said that marital status, education, and occupation are not good correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals.

3.1 Test of Research Hypotheses

3.1.1 Hypothesis one

Social factors will not significantly influence the use of psychoactive substances among the patients.

3.1.2 Hypothesis two

Psychological factors will not significantly influence the use of psychoactive substances among the patients.

3.1.3 Hypothesis three

Demographic factors will not significantly influence the use of psychoactive substances among the patients.

Going by the result presented in Table 6 above, it revealed that the use of psychoactive substances yielded a coefficient of multiple regression (R) of .397 and adjusted multiple correlation square of 143. This shows that 14.3% of the total variance in the use of psychoactive substances among the patients is accounted for by the social factors. The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value significant at 0.07 level ($F_{(6,219)}$ = 23.214; P = 007). Thus, social factors will significantly influence the use of psychoactive substances among the patients.

Going by the result presented in Table 7, the use of psychoactive substances among the patients yielded a coefficient of multiple regression (R) of .322 and adjusted multiple correlation square of .104. This shows that 10.4% of the total variance in the use of psychoactive substances among the patients is accounted for by the psychological factors. The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value signifycant at 0.00 level ($F_{(3,219)}$ = 8.765; P = .000). Thus, psychological factors will significantly influence the use of psychoactive substances among the patients.

Going by the result presented in Table 8, the use of psychoactive substances among the patients yielded a coefficient of multiple regression (R) of .248 and adjusted multiple correlation square of .062. This shows that 6.2% of the total variance in the use of psychoactive substances among the patients is accounted for by the demographic factors. The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value significant at 0.03 level ($F_{(6,219)}$ = 10.101; P = .031). Thus, demographic factors will significantly influence the use of psychoactive substances among the patients.

4. DISCUSSION OF FINDINGS

Use of alcohol, tobacco and illicit drugs are major public health issues in several countries, mainly among youngsters. Psychoactive drugs such as cannabis, alcohol, tobacco, can alter an individual's behaviour, perception, mood, and cognition and therefore have the potential to influence quality of life negatively. Various cross-sectional epidemiological studies have been designed to assess the prevalence of drug use among college students. But sincethose studies used different methodologies, a comparison of the data obtained by them is of little reliability. Nevertheless, epidemiological study of substance use among the youth can be extremely important regarding the delivery of mental health services.

Thus, this study assessed the patterns and psychosocial correlates of psychoactive substance abuse among patients admitted to drug treatment centers in two Federal Health Institutions in South West Nigeria. Two hundred and nineteen (219) patients were involved in the study. The data obtained was analyzed using Statistical package for Social Sciences (SPSS 21.0 version).

4.1 Discussion of Research Questions

4.1.1 Discussion on the drugs and psychoactive substance commonly abused by the patients

It was observed that all the respondents used one or more substances at one time or the other. The commonest substance of abuse in the study population was alcohol and cannabis. Other abused drugs are codeine, tramadol, tobacco,

and caffeine. The least consumed drugs are cocaine/heroine, morphine, petrol/latex/nail polish/glue. The main reason that can be given on the alcohol being the most abused substance stems largely from its relative ease of access compared to the other substances. The cultural and ceremonial use of alcohol also predisposes the abuse while the increasing awareness of

Table 1. Socio-demographic data of study participants

SN	Variable		N = 219	
			Freq.	%
1	Gender	Female	91	41.6
		Male	128	58.4
2	Age	Less than 20 years	33	15.1
		21-30 years	112	51.1
		31-40 years	72	32.9
		41 years above	2	.9
3	Marital Status	Single	117	53.4
		Married	102	46.6
4	Ethnicity	Yoruba	74	33.8
		Hausa	43	19.6
		Igbo	85	38.8
		Others	17	7.8
5	Religion	Christianity	89	40.6
		Islam	97	44.3
		African Traditional Religion	33	15.1
6	Number of Children	None	61	27.9
		1-3	117	53.4
		4 and above	41	18.7
7	Occupation	Unemployed	46	21.0
		Self-employed	51	23.3
		Civil servant	43	19.6
		Schooling	57	26.0
		Others	22	10.0
8	Education	No formal education	28	12.8
		Primary Education	15	6.8
		Secondary Education	74	33.8
		Higher Education	82	37.4

Source: Authors' results, outcome of SPSS, version 21

Table 2. Types and frequently consumed psychoactive subtances

SN	Variable		N = 219	
			Freq.	%
1	Consumed psychoactive substances	Alcohol	199	90.9
		Tobacco	100	45.7
		Cocaine/ heroine	43	19.6
		Cannabis	182	83.1
		Codeine	117	53.4
		Caffeine	89	40.6
		Morphine	43	19.6
		Petrol/latex/nail polish/glue	59	29.9
		Tramadol	106	48.4
2	Multiple consumption of the substances	Yes	219	100.0
		No	Nil	Nil

Source: Authors' results, outcome of SPSS, version 21

Table 3. Respondent's history of psychoactive substance abuse

SN	Variable		N = 199	
			Freq.	%
1	At what age did you start using psychoactive substance?	5-10years	9	4.1
		11-15 years	20	9.1
		16-20 years	99	45.2
		21-25 years	58	26.5
		26 years above	13	5.9
2	level of education when you first sniffed/smoked/ chewed the substance	No education	28	12.8
		Primary	15	6.8
		Secondary	74	33.8
		Higher education	82	37.4
3	Fathers' educational status	Educated	152	69.4
		Not-educated	47	21.5
4	Mothers' educational status	Educated	136	62.1
		Not-educated	63	28.8

Source: Authors' results, outcome of SPSS, version 21

Table 4. Association between the psychosocial variables as correlates of patterns of substance abuse

	Often	Sometimes	Rarely	Total	X^2	*P*
Accessibility	199 (90.9)	20 (9.1)	-	219 (100)	23.888	.000
Availability	100 (45.7)	63 (28.8)	56(25.6)	219 (100)	1.676	.097
Affordability	43 (19.6)	16 (7.3)	150 (68.5)	219 (100)	4.321	.031
Parental/family usage	152 (69.4)	30 (13.7)	37 (16.9)	219 (100)	17.436	.023
Peer Usage	117 (53.4)	49 (22.4)	53 (24.2)	219(100)	12.654	.000
Self-gratification	89 (40.6)	58 (26.5)	72 (32.9)	219 (100)	9.001	.009
Impulsivity	43 (19.6)	23 (10.5)	153 (69.9)	219 (100)	10.456	.017
Personal perception	50 (22.8)	50 (22.8)	119 (54.3)	219 (100)	5.876	.000

Source: Authors' results, outcome of SPSS, version 21

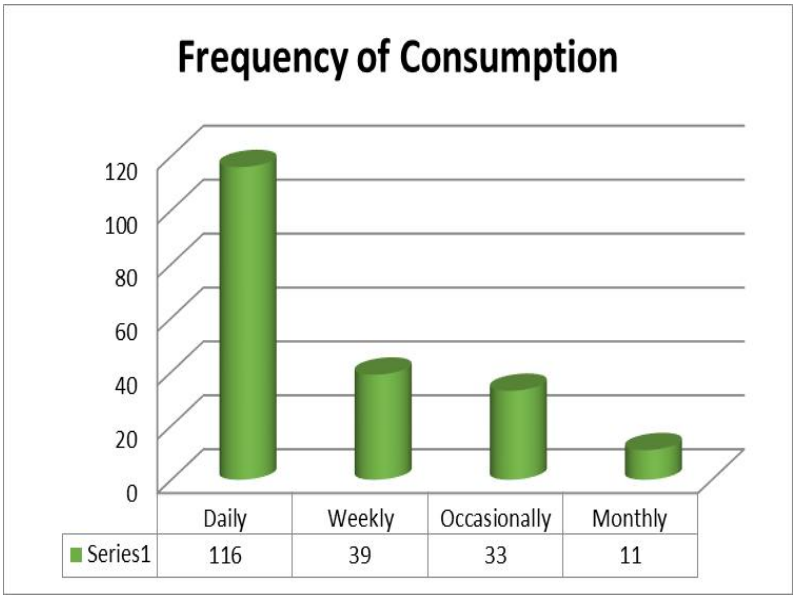

Fig. 1. Frequency of drug consumption by the patients

Table 5. The socio-demographic correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals

Socio-demographic variables		N = 219			
		Freq	%	X^2	P
Age	Less than 20 years	33	15.1	21.347	.000
	21-30 years	112	51.1		
	31-40 years	72	32.9		
	41 yrs and above	2	.9		
Gender	Female	91	41.6	5.432	.013
	Male	128	58.4		
Marital status	Single	117	53.4	2.707	.034
	Married	102	46.6		
Religion	Christianity	89	40.6	4.119	.009
	Islam	97	44.3		
	African Traditional Religion	33	15.1		
Education	No formal Education	28	12.8	1.333	.091
	Primary Education	15	6.8		
	Secondary Education	74	33.8		
	Higher Education	82	37.4		
Occupation	Unemployed	46	21.0	.973	.234
	Self-employed	51	23.3		
	Civil servant	43	19.6		
	Schooling	57	26.0		
	Others	22	10.0		

Source: Authors' results, outcome of SPSS, version 21

Table 6. Summary of multiple regression analysis of social factors influencing the use of psychoactive substances among the patients

Source of variation	Sum of Squares	Df	Mean square	F-Ratio	P
Regression	774.00	6	129.000		
Residual	1183.641	213	5.557	23.214	.007
Total	1957.641	219			

R = 0.397; Multiple R (Adjusted) = 0.158
Multiple R^2 (Adjusted) = 0.143; Stand error estimate = 8.342

Table 7. Summary of multiple regression analysis of psychological factors influencing the use of psychoactive substances among the patients

Source of variation	Sum of squares	Df	Mean square	F-Ratio	P
Regression	99.579	3	33.193		
Residual	806.631	216	3.787	8.765	.000
Total	906.210	219			

R= 0.322; Multiple R (Adjusted) = 0.104
Multiple R^2 (Adjusted) = 0.104; Stand error estimate = 10.201

Table 8. Summary of multiple regression analysis of demographic factors influencing the use of psychoactive substances among the patients

Source of variation	Sum of squares	Df	Mean square	F-Ratio	P
Regression	268.606	6	44.768		
Residual	944.016	213	4.432	10.101	.031
Total	1212.622	219			

R= 0.248; Multiple R (Adjusted) = 0.062
Multiple R^2 (Adjusted) = 0.062; Stand error estimate = 8.987

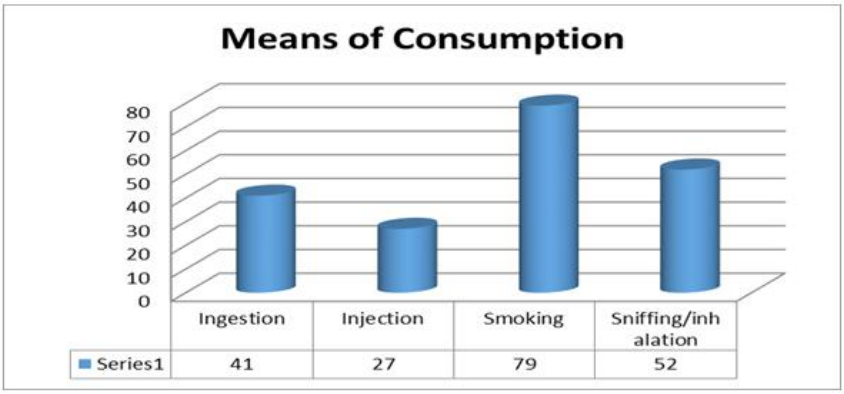

Fig. 2. Frequently used method of drug consumption by the patients

the ecstatic effects of cough syrup and tramadol and similar drugs very well explains why they are more abused like marijuana. Also, both cough syrup and tramadol are more readily available and accessible as drugs that can be bought over the counter from pharmacies. Also, the majority (60%) of the respondents abused drug daily while the frequently used method of consumption of drugs/ psychoactive substance by the patients is smoking (36.1%), followed by sniffing/inhaling, and consumption.

The finding of alcohol, cannabis and tobacco being the most abused substances obtained in this study, resonates with the findings of Anyanwu et al. [5]. Ahmad, Ismail, Ibrahim, and Nen [6] reported a higher abuse of tobacco, which was followed by alcohol abuse. However, Johnston et al. [7] reported that codeine and tramadol were more abused by tertiary institution students much more than cigarettes and marijuana.

4.1.2 Discussion on the history of psychoactive substance used among the patients

The outcome of this study revealed that age of onset of use of substances by the patient illustrates that substance use initiation was as early as10 years, peaking at 16-20 years and declining in the older age groups. However, the results revealed further that majority of the patients first sniffed/smoked/chewed the substance when they are in the higher institution. This is in line with the findings of Gudaji and Habib [8] who found that age, marital status, and having a father who smoked were significantly associated with psychoactive substance use. Participants who were singles were more likely to use inhalants, opiates, cannabis and stimulants.

4.1.3 Discussion on the association between psychosocial variables and patterns of substance abuse

The outcome of this study revealed that all the psychosocial variables (accessibility, parental/family usage, peer usage, self-gratification, impulsivity, and personal perception) used in this study except availability are good correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals. This finding is in contrary with the results of Donald [9] who reported an insignificant influence of family history of substance abuse on abuse of alcohol, cannabis, codeine, nicotine, and other substances. This finding supports the findings of Deressa and Azazh [10], Makanjuola [2], and Osman, et al. [11] whose various studies show that most of their respondents made use of psychoactive substances for self-gratification such as increase of pleasure during sex and relieve of stress. Also, Makanjuola [12] observed that indicators like disorganized family settings, easy accessibility to drug, high social status, sexual experience, desire to stay awake at night have contributed to the high psychoactive substance abuse incidence.

4.1.4 Discussion on association between demographic variables and patterns of substance abuse

The outcome of this research question revealed that age, gender, marital status, and religion are correlates of patterns of substance abuse among in- patients in neuropsychiatric hospitals while marital status, education, and occupation are insignificant. The outcome on the religion contradicts that of Aguocha et al. [13] that religious affiliation is not a significant factor

explaining substance abuse by tertiary institution students, while it is in line with the findings of Tesfaye et al. [14] that identified religion as a significant influence on substance abuse. Alcohol use was also reported to be significantly influenced by religious affiliation by Lasebikan and Ola [15].

It would seem that marriage had a moderating effect on substance use by the respondents, as use of cannabis, stimulants, inhalants and opiates was more among the respondents who were single. This is line with a study among 62 patients who use/abuse psychoactive substances, at the drug abuse unit of the Federal Neuropsychiatric Hospital, Aro, Abeokuta, where it was observed that the patients were mostly single [16].

This finding also corroborates a study by Ansari-Moghaddam et al. in Iran which found that singles were twice more likely to use substances compared to those who were married [17]. Gudaji and Habib [8] also found that Commercial motorcycle operators who used substances were found to be of younger age group, single and had a father who used tobacco. Participants who were single were more likely to use inhalants, opiates, cannabis and stimulants compared to those who were married.

The findings of no association with education and occupation sharply contradicts the study by Ansari-Moghaddam et al. [17] that showed the association between substance use and education. They found that those with higher levels of education were less likely to initiate, and were more likely to stop substance abuse compared to those with lower levels of education.

4.1.5 Discussion on the influence of social factors on the use of psychoactive substances among the patients

The outcome of the second research hypothesis revealed that 14.3% of the total variance in the use of psychoactive substances among the patients is accounted for by the social factors (accessibility, availability, affordability, family usage, and peer usage). Thus, social factors will significantly influence the use of psychoactive substances among the patients. However, Family usage was the most potent followed by peer usage, affordability and accessibility. This result corroborates the findings of Osman, et al. [11], Gebrelassie, Feleke, and Melese [18], Dada [19] and Atwoli, et al. [20] that social factors like peer group influence play a significant role in psychoactive substance use initiation and continuation. Also, alcohol and psychoactive substance abuse by family and friends was found to be significant predictors of substance abuse, which corroborates the results obtained by Johnston et al. [7] that peer group use of substances significantly influences substance abuse.

4.1.6 Discussion on the influence of psychological factors on the use of psychoactive substances among the patients

The use of psychoactive substances among the patients was found in this to be affected by psychological factors (self-gratification, impulsivity, and perception). Some of the reasons given for psychoactive substance use were to relieve depression, to enhance alertness, to keep awake at night, temptation by peer groups, to relieve stress and to enhance sexual performance. This finding lend credence to the findings of researcher like Deressa and Azazh [10], Makanjuola, Daramola, and Obembe [21], and Osman, et al. [11] who their various study that psychological factors are potent factors for initiation of substance use and abuse. Majority of the respondents in their studies reported the use of drugs and psychoactive substances for to succumb academic pressure, temptation by peer groups, to relieve stress and to increase pleasure during sex.

5. CONCLUSION

From this study it can be concluded that substance abuse in this generation continues to be a significant problem and effective interventions seem to elude us. Alcohol, cannabis, codeine, tramadol, tobacco, and caffeine have been found to be the most commonly used. In addition, the pattern of their use indicates serious long term consequences if effective interventions are not developed. It is also evident that substance use starts at a relatively early age, at 10 years probably when children are in their Primary Schools; then it peaks at 21 to 30 years and thereafter declines with age.

It can also be concluded that accessibility, availability, and affordability of drugs are not the only factors associated with drug use behavior but a host of other demographic and psychological factors. Family usage, peer usage, age, gender, religiosity, self-gratification,

impulsivity, and perception regarding substance use were found to be significantly associated with substance abuse.

6. RECOMMENDATION

On the basis of the theoretical and empirical evidence provided in this study, the following recommendations are made by the researcher:

- Since parental role plays a strong factor, It is recommended that programs that enhance parenting skills be developed appropriate for this cultural context as a way of addressing the substance use problem at its core.
- Apart from starting school programs on substance use, there is a need to extend them to the high risk youths who are in the community.
- The high prevalence of the legal substances also partly implies that the laws, regulations and policies on substance use are not effectively implemented. The government through the Ministries of Internal Affairs and Ministry of Education through the Non Communicable Diseases and Drug Addiction Section should work towards making these policies implementable.
- In view of the significance influence of religious involvement on substance abuse by people, religious groups should be made to play a vital role by encouraging them to grant talks on substance abuse during their service meetings. Religious groups can also be liaised with, as they are also more poised to provide more non-judgmental help and support to willing members who want to deal their drug or alcohol abuse problem.
- The results of this study implies that nursing interventions to combat substance abuse within our society must put into consideration demographic, social, and psychological factors when designing interventions for patients who have abused or still abusing psychoactive substances.

7. LIMITATIONS OF THE STUDY

The study mainly covered patients of two Federal Health Institutions in South-West, Nigeria and as such, findings from this study may not be generalizable for the entire region or country. Risk of selection bias was considered a limitation because of the imbalance in number of participants from the 2 centres chosen.

ETHICAL APPROVAL AND CONSENT

Letters which requested permission to conduct the study was obtained from the Dean, School of Nursing and was sent to the ethics and research committee of Federal Neuro Psychiatric Hospital Aro and Yaba. The proposal for this study was sent to Babcock University Health Research and Ethical Committee (BUHREC) for review. Informed consent was presented to BUHREC for approval. Voluntary verbal and written informed consent was also obtained from the participant and the researcher ensured that all Information obtained from the participants remained confidential. No harm was suffered by the participants during the research study.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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