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## Original Research Article

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# Psychosocial Characteristics of Patients Admitted to a Drug Rehabilitation Unit in Nigeria

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## Abstract

**Purpose:** To identify the pattern and psychosocial characteristics of alcohol and other psychoactive substance use among patients admitted to a drug treatment unit of a regional psychiatric hospital in Benin City, Nigeria.

**Methods:** A cross-sectional survey of 90 in-patients was conducted over a 6 month period, using a specially designed questionnaire to elicit socio-demographic and personality characteristics. Patterns of psychoactive substance use were obtained by self reporting and corroborated from case notes. Associated psychiatric diagnoses were recorded according to clinicians' diagnosis using to the ICD-10.

**Results:** Majority of respondents were single (86.7%), male (92.2%), and unemployed (62.2%) with up to 12 years formal education (52.2%) and raised by both parents (60%) in polygamous family settings. Most (52.2%) misused a combination of psychoactive substances. Some (41.1%) had been using these substances for over 7 yr prior to admission. Psychiatric co-morbidity was infrequent (60%) and the commonest psychiatric diagnosis seen was schizophrenia (23.3%). A minority reported a history of parental use of psychoactive substances. Shy, reserved and sociable traits were seen in a minority of respondents.

**Conclusion:** Combinations of psychoactive substances are usually misused by young males from polygamous family settings. Cannabis use accounts for a high proportion of in-patient admissions. The successful management of substance use disorders needs preventive social strategies among vulnerable groups in resource-poor settings like ours.

**Keywords:** psychoactive substance use, psycho-social, socio-demographic characteristics.

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## Introduction

Psychoactive substance use and its disorders constitute a major public health burden in Nigeria [1]. A recent national epidemiological survey of lifetime substance use showed that alcohol was commonly used or misused [2]. In this survey, benzodiazepenes, tobacco and cannabis were less commonly misused. It also revealed that induction into psychoactive substance use commonly occurred in late childhood to the early adolescent years. Respondents who are Christians compared to other faiths were more likely to abuse psychoactive substance, especially alcohol [2]. In Pakistan, psychoactive substance users were more likely to be males with low socio-economic indices [3]. Individuals who are shy and sociable have been reported to be more likely to misuse psychoactive substance [4].

Studies enumerating the socio-demographic and psycho-social demographics of substance users in treatment settings in Nigeria are few [5,6]. The extensive retrospective survey by Ohaeri and Odejide [6] was conducted over 17 years ago. In their survey, the majority of admissions into drug treatment units according to relative frequency of psychoactive substances were for cannabis use (77%), though most of the in-patients abused multiple substances. Research on this area is of vital importance to equip clinicians in formulating strategies to reduce the burden on families in the management of patients with substance use disorder. Identifying psycho-social correlates of substance use will be contributory in the effective design and implementation of preventive health policy in this area and in a developing country like Nigeria. This study therefore aims at elucidating the psychosocial characteristics as well as identifying patterns of psychoactive substance use among patients at a regional treatment facility in Nigeria.

## Methods

### Setting

The study was conducted at the Drug Rehabilitation and Treatment Unit of the Psychiatric Hospital, Benin City, Edo State, Nigeria. The Unit is a purpose built 21-bed facility, that offers in-patient psychotherapeutic, pharmacological, vocational and psychosocial treatment services for substance abuse patients covering a population of about 10 million persons across 3 States of the country. It caters for patients with either a combination of substance use and psychiatric disorders or substance use disorders alone.

### Study design

A semi-structured questionnaire was designed by the authors following focus group sessions involving patients, mental health nursing staff working at the drug unit, psychiatrists, social workers and a clinical psychologist. The first part elicited the socio-demographic data of patients and included age, sex, religion, occupation, presence/duration of unemployment, monthly income, marital and educational status. Occupational status was classified using the groupings by Borroffka and Olatawura [7]: class I (doctors, lawyers, teachers, scientists, high government officers); class II (teachers, administrators, clerical, supervisory personnel, large-scale farmers, entrepreneur and armed forces officers); class III (clerks, motor vehicle officers, mechanics, tailors, butchers, soldiers, policeman, small-scale entrepreneurs); class IV (cooks, barbers, domestic servants, gas station attendants, goldsmiths, palm wine tappers, small-scale farmers); class V (labourers and petty traders); and class VI (full time housewives, unemployed educated youths and apprentices). The next section elicited psychosocial variables. Two statements (Were you nervous as a child? and Were you regarded as odd and queer?) with dichotomous 'yes-no' responses, elicited patients' perceptions of their pre-morbid

mental health. Three statements (Do you consider yourself - a shy person, - a reserved person, - a sociable person) with 'yes-no' responses were used to assess personality traits. The personal history of the patients was also obtained with questions directed at determining the duration and type of parental care, history of substance use by parents, reason for using substance, number of siblings and occupational status of the parents. Case files of the patients were examined by the authors to determine type of substance(s) used, presence of psychiatric co-morbidity and family history of mental illness.

All patients admitted into the drug treatment and rehabilitation unit of the hospital between January and August, 2005 who were 18 years and above and able to understand the nature of the study were recruited after they had given written informed consent. Questionnaires were self administered. After completion, respondents who had not completely filled the questionnaire and required clarification on some items were assisted by one of the authors.

### Data analysis

Data was analysed using the SPSS version 17.0 (SPSS, Chicago, IL, USA). Results were calculated and presented using descriptive statistics. The student's t-test was used to compare means of some sample characteristics and proportional data were analysed using chi-square test or Fisher's exact test as appropriate. At 95% confidence interval, p values less than 0.05 were considered significant.

### Results

A total of 101 patients met the inclusion criteria during the period of study. Of these, 4 declined to participate in the study, while 7 had incomplete data. Thus, 90 patients were included in the analysis given 89% as the participation rate.

The mean age ( $\pm$ SD) of the patients was  $27.45 \pm 8.43$  years, with a range of 18 – 64 years. Majority of them (92.2%) were males, had received up to 12 years of formal education (52.2%), Christian (86.7%), and employed (57.8%). There was no significant difference in the mean age by sex ( $df=88$ ,  $p=0.90$ ). Of those employed, a majority were professionals without university degrees (18.9%) and clerical staff (12.2%). Minority of them were married (13.3%), one was divorced, another separated and the rest were single (84.4%). Furthermore, a minority reported having children (17.8%).

Most of the patients received treatment for a combination of alcohol, cannabis and tobacco related problems (52.2%), while over a third (35.6%) had been misusing cannabis alone. A minority was admitted for misusing cocaine alone (2.2%), heroin alone (1.1%) and a combination of cocaine, heroin and tobacco misuse (2.2%). In terms of duration of drug use, most had been abusing psychoactive substance for over 7 years (41.1%). Though, most of the patients gave no reason for commencing psychoactive substance use, of those who had reasons, peer pressure was most implicated (23.3%). At the time of the study, most had no associated psychiatric disorder (60%). However, the psychiatric co-morbidity diagnosed were schizophrenia (23.3%), depression (12.2%) and bipolar disorders (4.4%). In 23 (25.6%) patients, it was observed that there was a prior history of a psychiatric disorder. Their socio-demographic and clinical characteristics are shown in Table 1.

Concerning their personality traits, some of them (37.8%) reported that they were often nervous in social situations as children, while a smaller proportion (33.3%) said peers and relatives considered them as odd or queer in their child and adolescent years. Forty four (48.9%) considered themselves as shy, 64 (71.1%) as sociable, while 14 (15.6%) had a combination of shy and sociable personality traits. Complete details of their personality characteristics are illustrated in Table 2.

**Table 1:** Socio-demographic characteristics of patients

Sociodemographic variable	Frequency n (%)
<b>Age class (years)</b>	
≤25	47 (52.2)
26 – 40	36 (40.0)
41 – 55	6 (6.7)
>55	1 (1.1)
<b>Sex</b>	
Male	83 (92.2)
Female	7 (7.8)
<b>Religion</b>	
Christian	78 (86.7)
Muslim	3 (3.3)
Traditional religion	9 (10)
<b>Education</b>	
< 6 years	15 (16.7)
6 – 12 years	47 (52.2)
>12 years	28 (31.1)
<b>Employment status</b>	
Employed	25 (27.8)
Unemployed	65 (62.2)
<b>Duration of employment</b>	
<3 years	13 (52)
3 – 5 years	10 (40)
>5 years	2 (8)
<b>Occupational class</b>	
Class I	4 (4.4)
Class II	17 (18.9)
Class III	11 (12.2)
Class IV	11 (12.2)
Class V	38 (42.2)
<b>Marital status</b>	
Married	12 (13.3)
Single	78 (86.7)
<b>Marriage type</b>	
Monogamous	10 (83.3)
Separated	1 (8.3)
Divorced	1 (8.3)
<b>Monthly income/allowance</b>	
≤N5,000	21 (61.8)
>N5,000	13 (28.2)

A majority of the patients (80%) reported that they were raised by their parents. Most were raised by both parents (86.2%). They were raised mostly in polygamous family settings (60%) and indicated that there was a history of alcohol or other psychoactive substance use in 25.6% of their fathers, and 7.8% of their mothers. Less than a third (30%) reported ever migrating out of the country.

Illustration of their psychosocial variables is shown in Table 3.

**Table 2:** Clinical characteristics of patients

Clinical variables	Frequency n (%)
<b>Psychoactive substance(s) used</b>	
Alcohol, cannabis and tobacco	47 (52.2)
Cannabis alone	32 (35.6)
Alcohol alone	6 (6.7)
Cocaine alone	2 (2.2)
Heroin alone	1 (1.1)
Cocaine, heroin and tobacco	2 (2.2)
<b>Psychiatric illness present</b>	
None	54 (60)
Schizophrenia	21 (23.3)
Depression	11 (12.2)
Bipolar disorder	4 (4.4)
<b>Duration of substance use</b>	
≤1 year	21 (23.3)
2 – 7 years	32 (35.6)
>7 years	37 (41.1)
<b>Reason for commencing substance use</b>	
None	51 (65.7)
Peer pressure	21 (23.3)
Enhance performance (work, social skills)	6 (6.7)
Frustration/anger	8 (8.9)
<b>Previous psychiatric illness?</b>	
Yes	23 (25.6)
No	67 (64.4)

## Discussion

The socio-demographic characteristics observed in this sample are similar to that in an earlier survey of southern Nigeria [5]. Young males are in a vulnerable position. They are prone to taking risks and have an increased tendency to experiment with drugs [8]. Experimentation often is due to peer pressure, though most of our respondents gave no reason for initiating the habit of psycho-active substance use. The high representation of Christians in our sample reflects the predominant faith practised in this environment. Though, most of our respondents had up to 12 years of formal

**Table 3:** psychosocial characteristics of patients

Psychosocial variables	Frequency n (%)
<b>Nervous as a child?</b>	
Yes	28 (31.1)
No	62 (58.9)
<b>Regarded as odd or queer?</b>	
Yes	24 (26.7)
No	66 (63.3)
<b>Consider yourself a shy person?</b>	
Yes	27 (26.7)
No	58 (63.3)
<b>Consider yourself a reserved person?</b>	
Yes	44 (48.9)
No	46 (41.1)
<b>Consider yourself a sociable person?</b>	
Yes	64 (71.1)
No	18 (18.9)
<b>Shy and sociable?</b>	
Yes	14 (15.6)
No	76 (84.4)
<b>Raised by parents?</b>	
Yes	72 (80)
No	18 (20)
<b>Raised by which parent?</b>	
Both	62 (86.2)
Mother alone	4 (5.5)
Father alone	6 (8.3)
<b>Marriage type of parents</b>	
Monogamous	36 (40)
Polygamous	54 (60)
<b>Substance use among parents ('indicated yes')</b>	
Father	23 (25.6)
Mother	7 (7.8)
<b>Previously emigrated?</b>	
Yes	27 (30)
No	63 (70)

education, this often does not translate to employment opportunities. A combination of unemployment, being single with small monthly income or allowance largely characterised this sample. It stands to reason that social programs like free education, vocational skills training and increased employment opportunities for the socio-economically disadvantaged will impact positively in reducing the prevalence of substance misuse and the health burden it constitutes on lean resources.

Unlike in the recent national survey where alcohol use was predominant [2], the higher representation of cannabis, used alone or in combination with alcohol and tobacco in our sample may be explained in terms of psychiatric co-morbidity. Oshodi et al [9], recently reported a high association between cannabis use and psychopathology. Many lay persons are unaware of available treatment facilities for substance use disorders in the country. Rather, when relatives observe that psychoactive substance use has precipitated or is complicated by a psychiatric illness, they may then present to these psychiatric services primarily to seek treatment for disruptive behaviour. Thus, surveys on substance use in treatment units may not provide a true picture of the prevalence of substance use in our environment.

Though, modelling significant others who use substances have been implicated as an aetiological factor [10], a minority reported a history of substance use in their parents. Furthermore, most were raised by both parents, but were from polygamous family settings. The questionnaire did not however explore other family dynamics such as upbringing style and degree of permissiveness in child training implicated in predisposing individuals to substance use. We also observed that most did not exhibit shy or reserved personality traits. A sizable number said they were sociable. A combination of shyness and sociability has been shown to be a predictor for eventual substance misuse in western cultures [4]; however a minority exhibited this combination of traits in this study.

### Limitations

This study was conducted at a single centre, thus the generalization of its findings are limited. We relied heavily on self report in data acquisition with the result that there might have been under or over reporting. Furthermore, the aspect of our questionnaire enquiring about personality traits was not

validated and limits its comparison or interpretation.

## Conclusion

This study found that although most patients abuse a combination of psychoactive substances, cannabis use appears to account for a large number of in-patient treatments. Unexpectedly, shy, reserved or sociable traits were least reported. This may be due to under-reporting as well as the use of a non-validated instrument. Substance use and its disorders remain a major public health concern. Socio-economically disadvantaged groups are more at risk. A relationship to psychiatric morbidity may explain this variation. Prevention strategies should be promoted as treating a combination of a substance use disorder and co-morbid psychiatric illness has poorer outcomes.

## Conflict of interest

There is no conflict of interest associated with this work.

## Author contributions

We declare that this work was done by the authors named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors. GOE and ROO conceived the study, GOE, BOJ and JOO designed the questionnaire, conducted the data analysis wrote the manuscript. All authors approved the final draft of the manuscript.

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