

## Original Research Article

## Prevalence and Association between Psychoactive Substance Use and Psychiatric Disorders among Adolescents in Rural Areas of Nigeria

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**Abstract: Background:** Psychoactive substance use causes significant social burden and is linked with a range of adverse outcomes. The critical age of onset is usually around adolescence, with affected youth experiencing higher prevalence of psychosocial problems compared with the general adolescent population. This study determined the prevalence and examined the association between psychoactive substance use and psychiatric disorders among adolescents in Ogbomoso, Nigeria. **Methods:** This study was an observational descriptive cross-sectional survey conducted among 394 adolescent students from five selected secondary schools in a rural area. A sociodemographic questionnaire was administered to all participants while the ASSIST and K-SADS instruments were used to assess substance and psychiatry disorder respectively. Subjects with scores above the screening cut-off point were subsequently interviewed. Data collected were analyzed using SPSS version 21. **Results:** Prevalence of lifetime substance use was 27.3% (n = 96). All the different types of psychoactive substances evaluated in the study were used by the respondents. The most predominant substance used was alcohol (19.9%), with 2.3%, and 0.6% of the respondents reporting monthly and weekly use respectively. There was a statistically significant association between family history of mental illness and lifetime use of substances among respondents, p-value = 0.007. The prevalence of psychiatric disorders was 17.6%. The prevalence of Depression and mania constituted 62.1% of the psychiatric disorders recorded among these respondents. There was no significant association between psychoactive substance use and psychiatric disorders among respondents in the study population. **Conclusion:** Psychoactive substance use was common among rural secondary school students with 1 in every of 4 having experienced it. Nearly one in five also had a psychiatric disorder but no significant association was found between the two. Given these high reported prevalence, relevant school mental health program is clearly needed to address these challenges.

**Keywords:** Substance Use, Psychiatry Disorders, Adolescents, Nigeria.

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## INTRODUCTION

Substance abuse is a public health issue of immense concern. We have chosen to represent substance related disorders according to DSM-5 manual, wherein they are classified based on the ten classes of drugs which are alcohol, caffeine, hallucinogens, inhalants, cannabis, opioids, tobacco, sedatives, hypnotics and anxiolytics, stimulants e.g., cocaine, other substances [1].

It is very important to understand the role of adolescence in substance use onset. Adolescence (10–19 years) is a unique and formative period associated with rapid biological, social and psychological transitions, which increases their predisposition to mental health problems compared to any age group [2]. Substance use usually begins in adolescence due to their vulnerability, coupled with the fact that adolescents have not yet matured, their executive functions and are very

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impulsive in their decision-making without considering the risks involved.

Why is this phase important? We know that having a mental disorder in childhood or in adolescence can increase the risk of later substance use and consequent development of substance use disorder. It is also possible that many young people with mental illness or issues may resort to substances abuse for solutions to their mental health problems.

There are about 1.2 billion adolescents worldwide, such that one in every five people in the world is an adolescent. This age group remains one of the largest groups of users and abusers of psychoactive substances [3], and a steady rise in the use of licit and illicit substances by these young people has been reported globally [4, 5].

As a developmental stage of transition from childhood into adulthood, adolescence has been labeled by many researchers as a delicate period in which most adolescents engage in risk related behaviors that may have detrimental effect on their future. Involvement in drug use at adolescence stage not only predisposes to health-related problems but also has detrimental effect on future possible achievement.

There are high rates of co-occurring mental illness and substance use disorders among adolescents and young people. Adolescents that abuse substances have higher prevalence of psychosocial problems compared with the general adolescent population. This study hereby seeks to identify the prevalence of substance abuse among a cohort of adolescents in Southwest Nigeria and identify associations with reported psychiatric conditions.

## METHODOLOGY

### Study Design

The study design was an observational descriptive cross-sectional survey and was conducted.

The study was conducted among adolescents that were in secondary schools in rural areas of Ogbomoso, Oyo state.

### Sample Size

The minimum sample size was determined using the formula by Fishers<sup>6</sup> for population greater than 10,000,  $n = z^2pq/d^2$ . Thus, the calculated minimum sample size was 328.

Adding a non-response rate of 20% ( $328 + 66 = 394$ ).

### Study Instruments

The instruments used for this study include a *Sociodemographic Questionnaire that was designed by the investigators as a semi-structured questionnaire* which inquiries about socio-demographic variables. These include: age, sex, marital status, religion, and

ethnicity etc. thereafter we employed the *The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)*, which is a World Health Organization (WHO) Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) questionnaire is a questionnaire that screens for all levels of problem or risky substance use in adults. It consists of eight questions covering tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants (including ecstasy) inhalants, sedatives, hallucinogens, opioids and 'other drugs'. It was designed to be culturally neutral and usable across a variety of cultures [7]. In order to screen for mental health problems, we employed the *Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS)*. The K-SADS is a semi-structured tool to measure current and past symptoms of mood, anxiety, psychotic, and disruptive behavior disorders in children aged 6-18 years. It was designed to promote diagnosis of mental disorders in children by incorporating reports from both the child and parent and a clinician's clinical judgment. The K-SADS instrumentation gives more flexibility to the interviewer about how to phrase and assess symptom items, while still eliciting DSM criteria [8].

### Sampling Technique

We employed a multi-stage sampling method.

**Stage 1:** One local government out of the 3 local governments that are essentially rural was randomly selected by balloting.

**Stage 2:** Five Secondary schools were selected by simple random sampling method from a list of 27 secondary schools in the selected local government.

**Stage 3:** In the selected secondary schools, the 3 senior levels were selected (suggestion from the school management of most of the schools). All schools had only one class per level across all the selected schools.

**Stage 5:** The total sample size was distributed proportionally to the selected classes based on the total number of students in each class (total number of students in the class ( $N_i$ ) divided by total number of students in the school ( $N$ ) multiplied by the sample allocated the school proportionately ( $S$ ) from total sample size). This was calculated by dividing the total student in the school divided by the total students in the 5 selected school multiplied the total sample size.

**Stage 6:** In each class, students to be interviewed were selected by balloting of "Yes" and "No". Those who pick "Yes" were selected to participate in the study.

### Study Procedure

The study instruments were administered to the respondents during the lecture-free periods at the selected classes after a list of students and assignment of numbers randomly to each member of the study population of the selected class was made. Those that were above the screening cut off were evaluated using the diagnostic instrument (K-SADS). The cut off set was more than five positive responses for depression and a single positive response for other disorders.

The sociodemographic questionnaire and screening instruments (ASSIST and screening part of K-SADS) were distributed among the selected students with the help of research assistants. The research assistants ensured proper filling of the questionnaire and guided the participants as necessary. Those who were above the screening cut-off for the psychiatric disorders were interviewed using the K-SADS to make diagnosis. Also, twenty percent (20%) of those who screened negative were evaluated for diagnosis using K-SADS. Adequate information on the condition and treatment modalities available was fully explained to the participants. All questions raised by the participants were fully attended to.

### Data Management and Analysis

Data collected was summarized in tables, charts and percentages and analyzed using SPSS version 21.0 to find the association between the variables being measured. Sociodemographic details of respondents were reported using descriptive statistics such as frequency, means, proportions, bar chart and standard deviation. Medians was preferred as the measure of central tendency for data that were skewed. The sociodemographic and psychoactive substance use variables that were significantly associated with mental health disorders using bivariate statistics were further investigated by multivariate logistic regression. In this regression model, mental health disorders were treated as outcome variable while the associated factors were treated as independent predictors. Between-group differences in categorical variables were compared using Chi-Square statistics while differences in continuous

variables like age were compared using Independent Students T-test. The confidence level for all the tests was set at 95%. A p-value of less than 0.05 was taken as statistically significant.

### Ethical Considerations

Ethical approval was obtained from the Oyo state Research Ethics Review Committee before the commencement of the study. Administrative approval was sought from Oyo state Ministry of Education. Permission was also sought from the principals of the selected schools before proceeding to data collection. Also, parental consent was verbally sought for after parents were informed at an earlier Parents Teacher Association (PTA) meeting. Children whose parents declined consent were not involved.

## RESULTS

Respondents' ages ranged from 10 to 22 years, with more than half (53.4%) between 10 and 16 years, and 46.6% were between 17 and 22 years. The mean age of respondents was  $16.4 \pm 1.9$  years. As for sex distribution, there were slightly more male respondents (54.0%) than female respondents (46.0%). Majority of the respondents were from monogamous family (59.4%), and 40.6% were from polygamous setup.

From this study, thirty-two respondents (9.1%) reported history of substance use by their fathers and 5.7% reported history of substance use by their mothers, while family history of mental illness was reported by 8.5% of the respondents.

**Table 1a: Socio demographic profile of respondents and history of substances use**

Variables	Frequency(n)	Percentage (%)
<b>Sex</b>		
Male	190	54.0
Female	162	46.0
<b>Age (Years)</b>		
10 - 16	188	53.4
17 - 22	164	46.6
<b>Tribe</b>		
Yoruba	305	86.7
Idoma	6	1.7
Egede	5	1.4
Hausa	4	1.1
Igbo	2	0.6
Others <sup>1</sup>	30	8.5
<b>Religion</b>		
Christianity	154	43.8
Islam	195	55.4
Others	3	0.9
<b>Religious participation</b>		
Daily	263	74.7
Weekly	86	24.4
Monthly/ceremonial occasion	3	0.9
<b>Father's occupation<sup>2</sup></b>		
Farmer	265	75.3

Variables	Frequency(n)	Percentage (%)
Driver	21	6.0
Trader	18	5.1
Artisans	11	3.1
Clergy/Cleric	8	2.3
Other occupations	22	6.3
Missing	7	2.0

1. Other tribes include Bassa, Egede, Fulani, Gaira, Igala, Tiv and Suru
2. Other father’s occupation includes police, security, and teachers

**Table 2b: Socio demographic profile of respondents and history of substances use**

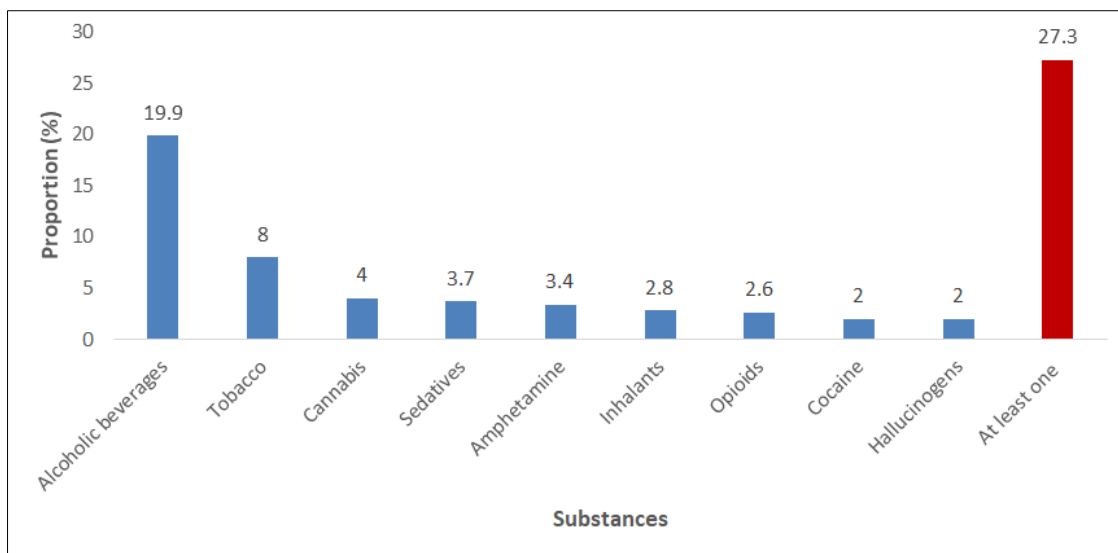
Variables	Frequency(n)	Percentage (%)
<b>Mother’s occupation<sup>3</sup></b>		
Trader	210	59.7
Farmer	80	22.7
Tailor/Hairdresser	24	6.8
Driver	6	1.7
Health care professional	4	1.1
Other mother’s occupation	14	4.0
Missing	14	4.0
<b>Family setup</b>		
Monogamous	209	59.4
Polygamous	143	40.6
<b>History of substance use by father</b>		
Yes	32	9.1
No	275	78.1
Don’t know	38	10.8
Missing	7	2.0
<b>History of substance use by mother</b>		
Yes	20	5.7
No	269	76.4
Don’t know	46	13.1
Missing	17	4.8
<b>Family history of mental illness</b>		
Yes	30	8.5
No	229	65.1
Don’t know	87	24.7
Missing	6	1.7

3. Other mother’s occupation includes food selling, teaching, and clergy

Prevalence of lifetime substance use in the study population was 27.3% (n = 96) (Figure 1). All studied substances were used by the respondents of which the predominant substance used was alcoholic beverage (19.9%), while 8.0% used tobacco products, 4.0% used cannabis, 3.7% used sedatives, 3.4% used amphetamine, 2.8% used inhalants, 2.6% used Opioids.

The same proportion of respondents used cocaine and hallucinogens (2.0%). Figure 1.

The prevalence of substance use by the adolescents in the last three months was 13.6% of which alcoholic beverage was the commonest used at a prevalence rate of 8.9%, followed by tobacco products at a rate of 5.7%. The prevalence of cannabis use was 3.5%, opioids was 2.9%, cocaine and inhalants were 2.3%, hallucinogens was 2.1%, amphetamine was 1.5%, and 1.4% used sedatives.



**Figure 1: Life time prevalence of substance use among respondents in the study population**

There was a significant association between substance use and the gender of respondents in the study population,  $\chi^2 = 5.997$ , p-value = 0.014 with male respondents reporting more substance use than females. Proportion of respondents with life time use of substance was higher among male (32.6%) than female (21.0%) respondents. Contrarily, substance use among respondents was not associated with age of respondents,  $\chi^2 = 0.004$ , p-value = 0.948.

Although, proportion of respondents with lifetime substance use was higher among respondents from monogamous set up (27.8%) when compared with those from a polygamous set up (26.6%), the relationship between family set up and substance use was not found to be statistically significant, p-value = 0.807.

Furthermore, lifetime substance use among respondents was not associated with history of substance use by either parent i.e father, p-value = 0.060, and mother, p-value=0.137.

However, there was a statistically significant association between family history of mental illness and

lifetime use of substance among respondents, p-value = 0.007. Proportion of respondents with lifetime substance use was significantly higher among respondents with family history of mental illness (46.7%) compared to respondents with no family history of mental illness (23.6%).

There was no significant relationship between family set up and substance use, p-value = 0.635.

Further, use of substance in the past three months was associated with father’s history of substance use, p-value = 0.002. Contrarily, use of substance in the past three months was not associated with mother’s history of substance use, p-value = 0.337.

There was a statistically significant association between family history of mental illness and use of substance in the past three months among respondents, p-value = 0.039. Proportion of respondents with substance use in the past three months was significantly higher among respondents with family history of mental illness (26.7%) compared to respondents with no family history of mental illness (12.7%).

**Table 2a: Association between life time substance use and socio-demographic profile of respondents in the study population**

Variables	Substance use (lifetime)		Statistic $\chi^2$	p-value
	Yes	No		
<b>Sex</b>				
Male	62 (32.6)	128 (67.4)	5.997	*0.014
Female	34 (21.0)	128 (79.0)		
<b>Age (years)</b>				
10 - 16	51 (27.1)	137 (72.9)	0.004	0.948
17 - 22	45 (27.4)	119 (72.6)		
<b>Tribe</b>				
Yoruba	87 (28.5)	218 (71.5)	10.762	0.056
Idoma	2 (33.3)	4 (66.7)		
Egede	0 (0.0)	5 (100)		
Hausa	0 (0.0)	4 (100)		

Variables	Substance use (lifetime)		Statistic $\chi^2$	p-value
	Yes	No		
<b>Religion</b>				
Igbo	2 (0.0)	2 (100)		
Christianity	50 (32.5)	104 (67.5)	3.401	0.065
Islam	46 (23.6)	149 (76.4)		
<b>Religious participation</b>				
Daily	64 (24.3)	196 (75.5)	4.538	0.103
Weekly	31 (36.0)	55 (64.0)		
Monthly	1 (33.3)	2 (66.7)		
<b>Father's occupation</b>				
Farmer	68 (25.7)	197 (74.3)	7.299	0.294
Driver	3 (14.3)	18 (85.7)		
Trader	8 (44.4)	10 (55.6)		
Artisans	5 (45.5)	6 (54.5)		
Clergy/Cleric	3 (37.5)	5 (62.5)		
Other occupations	7 (31.8)	15 (68.2)		
<b>Mother's occupation</b>				
Trader	57 (27.1)	153 (72.9)	9.641	0.141
Farmer	24 (30.0)	56 (70.0)		
Tailor/Hairdresser	5 (20.8)	19 (79.2)		
Driver	4 (66.7)	2 (33.3)		
Health Care professionals	2 (50.0)	2 (50.0)		
Other occupations	3 (21.4)	11 (78.6)		

$\chi^2$ : Chi square, p-value < 0.05 indicates significance

**Table 2b: Association between life time substance use and socio-demographic profile of respondents in the study population**

Variables	Substance use (lifetime)		Statistic $\chi^2$	p-value
	Yes	No		
<b>Family set up</b>				
Monogamous	58 (27.8)	151 (72.2)	0.059	0.807
Polygamous	38 (26.6)	105 (73.4)		
<b>Use of substance (Father)</b>				
Yes	13 (40.6)	206 (74.9)	3.533	0.060
No	69 (25.1)	19 (59.4)		
<b>Use of substance (Mother)</b>				
Yes	8 (40.0)	12 (75.1)	2.207	0.137
No	67 (24.9)	202 (75.1)		
<b>Family history of mental illness</b>				
Present	14 (46.7)	16 (53.3)	7.273	0.007
Absent	54 (23.6)	175 (76.4)		

$\chi^2$ : Chi square, p-value < 0.05 indicates significance

Out of the total 352 respondents involved in the study, 172 screened positive for a psychiatric disorder which gave a rate of 48.9%. Of those that screened positive for psychiatric disorder, 29.1% were diagnosed with at least one psychiatric disorder. Additionally, of the total 180 respondents who screened negative, for psychiatric disorder, 30 (16.7%) were further subjected to standard psychiatric disorder diagnosis, to provide

opportunity for false negative cases to be evaluated, and 6.7% (n = 12) were diagnosed with at least one psychiatric disorder.

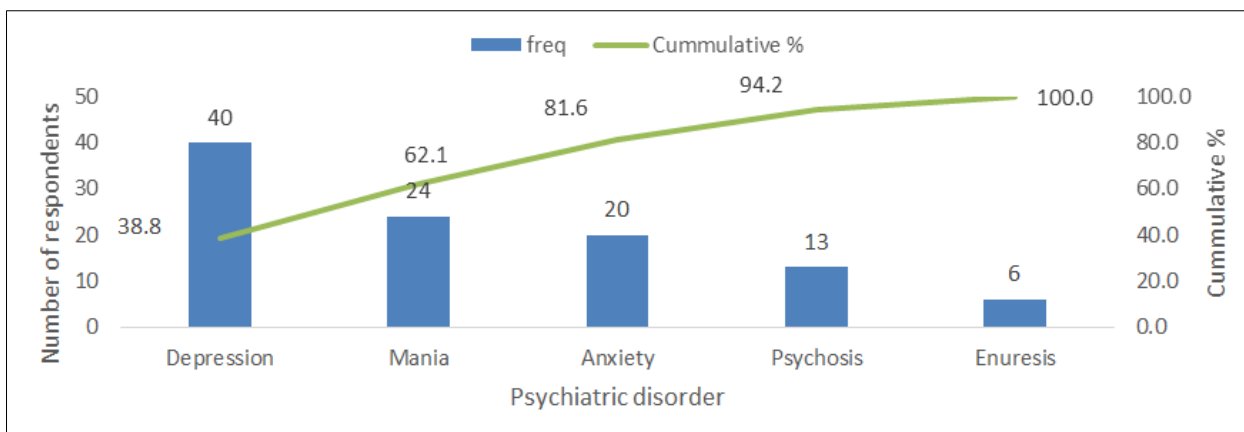
Summarily, of the total 352 respondents involved in the study, 62 respondents diagnosed positive for psychiatric disorders giving a prevalence of 17.6%.

**Table 3: Prevalence of psychiatric disorder among respondents in the study population**

Screened	Result of Diagnosis n(%)	
	Positive	Negative
Positive (n = 172)	50 (29.1)	122 (70.9)
Negative (n = 180)	12 (6.7)	168 (93.3)
All (n = 352)	62 (17.6)	290 (82.4)

Depression and mania constituted 62.1% of the 103 psychiatric disorders. Twenty respondents (19.4%)

had anxiety disorders, 12.6% (n = 13) had psychosis and six (5.8%) were diagnosed with enuresis.



**Figure 2: Distribution of psychiatric disorder among respondents**

Although, psychiatric disorders were more among respondents with lifetime use of psychoactive substance (24.0%) than among respondents who had never used psychoactive substance (15.2%), there was no significant association between the lifetime prevalence

use of psychoactive substance and psychiatric disorder among respondents in the study population,  $\chi^2 = 3.662$ , p-value = 0.056.

**Table 4: Association between lifetime prevalence of psychoactive substance use and psychiatric disorder**

Variable	Lifetime psychoactive substance use		$\chi^2$	p-value
	Yes (n = 290)	No (n = 62)		
<b>Psychiatric disorder</b>				
Present	23 (24.0)	39 (15.2)	3.662	0.056
Absent	73 (76.0)	217 (84.8)		
<b>Total</b>	<b>96 (27.3)</b>	<b>256 (72.7)</b>		

$\chi^2$ : Chi square statistic, \*p-value < 0.05 indicates significance

## DISCUSSION

The overall lifetime prevalence of substance use by respondents in this study was 27.3%, which was lower than the combined prevalence in a study carried out among adolescents in seven countries, including Nigeria, across Africa, Asia and Europe, that reported 43.7% of the respondents reported any substance use [9]. Furthermore, in a study among adolescents in Ethiopia, 65.4% of the respondents reported lifetime use of any substance [10]. These prevalence rates are higher than the rate reported in this study and this might be due to difference in the population assessed or instrument used in assessment as well as the cultural differences in relation to psychoactive substance use.

In Nigeria, some studies reported lower rates among secondary school students. For example, studies conducted among secondary school students in Ekiti and Oyo states reported 17.3% and 15.3% respectively [11, 12]. This value is closer to the value reported in this study. However, a study carried out among secondary school students in Lagos reported lifetime prevalence of 87.3% while another study among adolescents in Osun state reported 65.7% [3-13]. The difference noted might

be due to difference in instruments used for the assessments and substance examined.

In this study, the commonest substance used was alcoholic beverage (19.9%) followed by tobacco (8.0%), cannabis (4.0%), sedatives (3.7%) and opioids (2.6%). This is similar to findings in most studies in Nigeria and a similar pattern is reported in the study carried out among adolescents in seven countries across Africa, Asia and Europe is alcohol (38.4%), tobacco (14.9%) and marijuana (8.7%) [9]. Also, the study conducted among adolescents in Ethiopia reported alcohol (59%), cigarette smoking (22.9%) and khat chewing (34.9%) as the pattern noticed [10]. Probably, khat chewing is more peculiar to that locality.

In Nigeria, the pattern noticed in some studies is largely similar with some minor differences. For example, a study carried out by Soremekun *et al.*, among secondary school students in Lagos reported alcohol (40.3%), opioids (13.4%) and tobacco (4.1%) [14]. Also, in a study by Obadeji *et al.*, carried out among secondary school students in Ekiti, alcohol was reported as the commonest (13.6%), followed by tramadol (3.8%) and tobacco (3.2%) [12]. Furthermore, in a study conducted

among adolescents in Osun state, alcohol was also reported as the commonest substance used followed by sniffing substance then tobacco [13].

In general, alcohol is the commonest substance used according to most of the studies. This is usually followed by tobacco but however, some studies in Nigeria, especially in the cities reported higher opioids compared to tobacco. This might be due to prescription opioids being readily available in urban areas compared to rural areas.

The overall current use prevalence of substance use is 13.6%. In relation to the current pattern of use of psychoactive substance in this study, alcohol was the commonest substance taken, followed by tobacco, cannabis and opioids at 8.9%, 5.7%, 3.5% and 2.9% respectively. The current use prevalence reported in various studies varies widely. In a study conducted among adolescents in Ethiopia, current use prevalence reported was 47.9% [10]. The lifetime use was also very high, invariably the current use prevalence rate too was relatively high. In the study above, alcohol is the commonest substance used, followed by khat chewing and tobacco use at rate of 40.9%, 13.8% and 6.8% respectively. Essentially the pattern remains the same compared to lifetime use.

Lifetime use of psychoactive substance was significantly associated with gender, family history of mental illness, age, religion. Study conducted among adolescents in Ekiti reported males to be of higher risk than females in both lifetime and current use of psychoactive substance [12]. Study among adolescents where males reported to be 1.52 times more likely to use substance compared to females [10]. Also, studies in Nigeria among secondary school students reported higher percentage of male students ever taking substance compared to female students [14, 15]. The reason for this might be social acceptance of substance use by males compared to females. Also, males are generally more extroverted and have more sensation seeking behavior which may account for their higher rates of substance use.

Furthermore, age of respondents has been found to be significantly associated with psychoactive substance use in this study because the higher the age the more likely the use of psychoactive substance is reported. This is similar to a study among adolescents in Lagos [14], and Enugu Nigeria [15]. This might be due to early age of initiation of use of psychoactive substance which is usually uncontrolled. We can also theorize that if there is persistence in use over the years, there will be increasing rate of use as age increases.

Our study found that the current use of psychoactive substance use was significantly associated with respondents' father's history of substance use. This correlates with a study carried out among adolescents in

Brazil, a positive association was reported between family history of substance use and respondents' history of use [16]. Also, study carried out among adolescents in Nigeria reported a significant association between parental use of psychoactive substance and respondents' use of it this might be due to learned behavior from father as a form of role [12]. modelling or a consequence of parent and children living in a cultural environment that permits use.

Furthermore, family history of mental illness is not only associated with lifetime use of psychoactive substance, but also significantly associated with current use of psychoactive substance by respondents in this study. Also, this has not been evaluated by most study but reflects the major role it is likely to play in the risk of substance use by adolescents.

Psychiatric disorders were evaluated using the screening part of KSADs to screen for some common disorders which included depression, mania, psychosis, anxiety and enuresis. About half of the respondents screened positive for at least one psychiatric disorder. After examining those who screened positive and a part of those who screened negative for diagnosis, about 17.6% of the total respondents was diagnosed for at least a psychiatric disorder. The distribution of the psychiatric disorders among respondents in this study revealed that depression was the commonest followed by mania, then anxiety, psychosis and enuresis.

The prevalence of psychiatric disorders among adolescents varies widely. A systematic review of studies conducted using screening questionnaire reported a value of 19.8% [17]. Furthermore, studies done among high school students in Saudi Arabia using screening instruments reported a value of 48%, while another study among high school students in Egypt reported about 51.7% [2-18]. Also, a study carried out among school-going adolescents in Ghana reported 53.6% screened positive for mental difficulties [19].

In Nigeria, there are very few studies evaluating psychiatric disorders among adolescents. A study among senior secondary school students in Ilesa reported a prevalence of 39.5% after screening [20]. Furthermore, a comparative study carried out among Almajiris and public-school students reported 57.7% of the Almajiris having at least a diagnosable psychiatric disorder compared to 37% of public-school students [21]. Also, psychiatric morbidity rate of 11.4% was reported in a study within paediatric primary care clinic in Ilorin.

The screening rate reported in this study is similar to rates reported in Saudi Arabia, Egypt and Ghana but higher than the screening rate reported in a previous study in Nigeria. While it is not clear that the observed difference is a true representation of difference in rate, we theorize that the difference might simply be due to differences in screening instruments used and also

the duration between the studies is much. The prevalence rate of 17.6% for diagnosed cases is similar to the rate of 11.4% in Ilorin but lower to the 57.7% and 37.7% in Zaria. The difference might be due to the different condition of living of respondents, while Almajiris are not staying with their parents and face stressful situation which can predispose them to having more psychiatric conditions, respondents in this study have relatively better living condition. Also, there might be geographical differences in the prevalence rate.

## CONCLUSION

This study has shown that psychoactive substance use is a common phenomenon in rural secondary schools and psychiatric disorders are significantly present among the adolescents in rural communities. Also, the study reiterated factors associated with psychoactive substance use such as male gender, age, family history of substance uses and extent of religious participation finally, the study found that there was significant association between family history of mental illness and substance use among respondents both for lifetime use and current use.

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