

## **Pattern of Substance Abuse among Senior Secondary School Students in a Southwestern Nigerian City**

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### **Abstract**

More young people are getting involved in substance abuse in Nigeria. The objective of this study is to determine the pattern of substance abuse among senior secondary school students. This was a cross-sectional study and multi-stage sampling technique was utilized in selecting 450 students in their fourth, fifth and final year of secondary school in four secondary schools in Osogbo, a town in Southwestern Nigeria. Data was obtained with self-administered questionnaires. Majority of the respondents were males (60.7%) and within the 16-19 year age group (65.5%). Respondents whose parents are married were 81.4%, while those with divorced/separated parents were 10.5% and those with single parents were 8.1%. Of the 420 interviewed respondents, 372 (88.6%) claimed awareness of existence of substances which can be abused. Majority of respondents had positive attitude towards substance abuse and 87.4% said they will do everything to ensure they discourage a friend from using such substances. Respectively, 52.1%, 30.5% and 21.7% claimed ever use, current use and past use of substances. The most commonly abused substances were analgesics, cannabis, tobacco, alcohol and sedatives. There is a need to develop viable substance abuse preventive programmes and a comprehensive data base on substance abuse among adolescents.

**Keywords:** adolescents, alcohol, drugs, smoking, youths.

### **Introduction**

The United Nation's division of narcotic drugs reported that never before have there been so many young people, even children, flirting with drugs and their associated hazards <sup>[1]</sup>. Drugs as defined by the International Convention of 1961 for Narcotic Drugs, and of 1971 for psychotropic substances, include all substances and chemicals that should not be used for any purpose other than for medical and scientific research. If used for purposes otherwise, they are called illicit drugs <sup>[2]</sup>.

Drug Abuse is therefore defined as a maladaptive pattern of substance use leading to clinically significant, impairment or distress as manifested by one or more of the following occurring within a 12 month period: recurrent substance use resulting in the failure to fulfill major roles like obligations at work, school or in the home; recurrent substance use in situation in which it is physically hazardous; for example driving automobile when impaired by substances use; recurrent substance related legal problems and continued substances use despite recurrent social and interpersonal problems<sup>[3]</sup>. Hence, drug dependence is therefore based on three or more of the following criteria within the previous year; a strong desire or compulsion to take the drug, subjective awareness of impairment in ones capacity to control the use of the drug, substance use to relieve withdrawal symptoms, withdrawal state, evidence of tolerance, a narrowing of the personal repertoire of pattern of drug use and progressive neglect of alternative ways of pleasure and persisting with drug used<sup>[3]</sup>.

The Nigerian National Drug Law Enforcement Agency (NDLEA) has stated that drug abuse is a major problem in schools<sup>[4]</sup>. For instance, about 20% of the school population in Lagos state, Nigeria had taken a psychoactive drug once in their lives<sup>[4]</sup>. Many of these behaviors are heavily tied to the peer culture, as children learn from and imitate the peers they like and admire. Wanting to be attractive to others becomes very important in adolescence, and this factor is significant in the development of eating disorders, alcohol consumption, tobacco and drug use, tanning, not practicing safe sex, and vulnerability to injury, among other behaviour. These adolescent who get involved in such risky behaviour often have high levels of conflict with their parents and poor self control, suggesting that they engage in such behaviour to manage a stressful life. Adolescents who abused substances typically do more poorly in school, and family problems, deviance, and low self esteem appear to explain this relationship. Parents and peers influence adolescent drinking by influencing attitude about alcohol and by acting as role models<sup>[5]</sup>. On the other hand, parental deprivation due to deaths, divorces, separation or discord has also been strongly associated with drug abuse<sup>[6]</sup>.

Certain sets of people are particularly vulnerable to substance abuse. They include the abused or neglected youths, the homeless, the physically or mentally handicapped, school drop outs, children of substance abusers, street children and the economically disadvantaged<sup>[7]</sup> but generally, adolescents are badly misinformed about smoking. A study of 895 urban adolescents assessed attitudes and beliefs about smoking and found that most were poorly informed about the prevalence and risks of this habit<sup>[5]</sup>. Perhaps most significantly, these misperceptions were most common among adolescents who had already begun to smoke, who had friends or family members who smoke, or who intended to start smoking in the future. These points argue significantly against the tobacco industry's claim that smoking is an informed choice and, rather, suggest that an adolescent's decision to smoke may be based on considerable misinformation and poor assessments of personal risk<sup>[5]</sup>. In the same study, peer influence, social pressure, smoking parents and lower class were found to be other important factors in beginning smoking in adolescents<sup>[8]</sup>.

A study done in Ilorin Nigeria among undergraduate students showed a correlation between lack of religiosity and the use of alcohol, cigarette and cannabis<sup>[9]</sup>. There was a correlation between belonging to the Christian religion and reduced use of these substances<sup>[9]</sup>. This study also showed a relationship between parental use of illicit drugs and adolescent drug abuse<sup>[5]</sup>. This is in support of findings in other parts of the world. According to the surgeon general's report in the United State, if an older sibling and both parents smoked, then the child was 4 times more likely to smoke<sup>[10]</sup>. Also, there seems to be a correlation between religion and a decrease in prevalence of drug abuse. Studies in Tennessee, USA on 217 adolescents aged 12-19 years showed that as attendance of religious services increased, alcohol and other drug abuse decreased<sup>[11]</sup>. This study also showed that males (58%) were more likely than females (44%) to have smoked cigarette in the past month. Cigarette smoking was significantly more common in males than females while marijuana smoking was found to be twice as common in males as females<sup>[11]</sup>. In contrast to this, a study in Columbia focused on a sample population

aged  $\geq 12$  years showed that conditional prevalence of dependence on alcohol, marijuana and cocaine were significantly higher among females than males except for cocaine<sup>[11]</sup>. In the United Kingdom, male: female ratio of alcoholics, formerly 5: 1 has changed with alcohol problems being significantly increased among women<sup>[12]</sup>.

In Nigeria, research efforts into the problem of drug and alcohol abuse started in the late 1950s<sup>[13]</sup>. Since then, shifts in the pattern and types of drugs abused in the country have been reported and increasing female involvement and multiple drug use pattern have also been noticed<sup>[13]</sup>. Factors found to contribute to this changing trend include urbanization, industrialization, and increased exposure to western life-style, peer pressure, deficient family support, and increasing advertisement of such in the mass media etc<sup>[13, 14, 15]</sup>.

Survey of both in- and out of school adolescents reveal that psychoactive drug use is a common problem especially for the socially acceptable drugs like alcohol and cigarette<sup>[16]</sup>. In a study carried out in 2004 by Eneh et al on pattern of substance use among secondary school students in rivers state, the prevalence of alcohol use was found to be 65%<sup>[16]</sup>. In a similar study carried out in two cities, it was found that many students reported that they had their first drink of alcohol by the age of 8 years during family festivals<sup>[17]</sup> while in another research, the average age of drinking onset was found to be 13.2 years<sup>[18]</sup>. Also, a study of 2888 high school students in Lagos metropolis found that the most commonly used substance were alcohol (44%), cigarettes (21%),cannabis (11%), and stimulants(2%)<sup>[19]</sup>.

According to a study done on substance use among senior secondary students in rural and urban communities in Ilesa, south western Nigeria by Fatoye et al in 2002, the most commonly used drugs and their current prevalence rates were salicylate analgesics, 48.7%; stimulants, 20.9%; antibiotics, 16.6%; alcohol, 13.4%; hypnosedatives, 8.9% and tobacco, 3.0%. Current and lifetime use of alcohol as well as current, past and lifetime use of tobacco occurred significantly more commonly among the males<sup>[20]</sup>.

Adolescence is a period of transition from childhood to adulthood and this critical human developmental period is marked by several physical, psychological and social changes. Adolescents are a segment of the population with age range between 10-24 years. Most senior secondary school students in Nigeria are usually within the adolescent age range of 10-25 years<sup>[21]</sup>. Adolescence is a period of experimental exploration and curiosity in which students are prone to toying with various high risk social activities including the disruptive effect (physical and psychosocial) of drug and alcohol abuse<sup>[22]</sup>. According to the Centre for Disease Control, more than 15% of adolescents between the ages of 12 and 18 already smoked cigarette regularly and 11% of high school students have smoked a whole cigarette before age 13<sup>[23]</sup>.

In the United States most college students drink alcohol, and as many as 15-25% of them are heavy drinkers<sup>[3]</sup>. The prevalence of Alcohol abuse is on the increase as college women begin to drink as heavily as college men. Occasionally, binge drinking may involve as many as 43% of students while many college students do not see drinking as a problem<sup>[5]</sup>. It has also been noted that smoking begins early. The centers for Disease Control<sup>[5]</sup> indicated that more than 15% of the adolescent population between the ages of 12-18 already smoked cigarette regularly and considers themselves as smokers. It had been found out that 95% of regular smokers start to smoke during adolescence, and the question arise whether these young people have accurate information before taking the decision to start<sup>[5]</sup>.

In Nigeria, there has been an upsurge in the use of psychoactive substances. This upsurge has been characterized by an increase in the mental disorders, criminal acts and cult activities in both the higher institutions of learning, and also in secondary schools<sup>[24]</sup>. The high rate of road traffic accidents, increased violence and criminal behaviour are also partly attributed to alcohol and drug abuse<sup>[25]</sup>. The resultant loss to the nation on account of these problems afflicting her youth cannot be quantified in material terms.

In Nigeria, there is scanty data on patterns of drug abuse in specific groups in the community. Due to increasing urbanization of the country there is a tendency of changing patterns in illicit drug use therefore the need to constantly update information on the use of drugs among Nigerian adolescents. Linked to the above is a sharp increase in the cases of drug trafficking and abuse in Nigeria and the most affected group has been identified as the youth between the ages of 16 and 45years<sup>[26]</sup>.

The Objective of this study is to determine the pattern of substance abuse among senior secondary school students in Osogbo, Nigeria. Results of this study will serve as basis for planning appropriate intervention methods for the control of drug abuse among the youths.

## Materials and Methods

Osogbo is the capital city of Osun State in Southwest Nigeria. It is located about 95 kilometers North-East of Ibadan, the capital city of Oyo State. The city lies on latitude 7<sup>o</sup>47' north of the equator and longitude 4<sup>o</sup>33' of the Greenwich meridian and has 2 Local Government Areas (LGA); Osogbo LGA and Olorunda LGA. Osogbo is an urban centre with majority of the inhabitants belonging to the Yoruba Ethnic group.

The total number of secondary schools in Osogbo at the time of this study is 28. There are 24 state owned schools and 4 privately owned schools. Of the 28 schools, 2 are for single sex only. The total number of secondary school students in Osogbo is estimated at 34,523 while the total number of senior secondary school students is 16,511 which is 47.8% of the total number of students.

The respondents were drawn from 4 secondary schools; two from Osogbo LGA and two from Olorunda LGA. The selected schools were Ataoja high school and Fakunle comprehensive school in Osogbo LGA and CAC grammar school and Anglican commercial school in Olorunda LGA.

A cross-sectional study design was employed in the survey.

The sample size was determined using fisher's formula

$$= \frac{Z^2 pq}{d^2}$$

Z = Standard normal deviation (1.96)

p = Population in the target population estimated to have a Particular characteristic (in this case, prevalence= 0.51)<sup>[27]</sup>

q = 1.0 – p

d = degree of accuracy required (0.05)

$$N = \frac{1.96^2 p (1-p)}{0.05^2}$$

$$= \frac{1.96^2 \times 0.51 \times 0.49}{0.05^2}$$

$$= \frac{0.9600}{0.0025}$$

$$= 384 \approx (400)$$

The calculated sample size of approximately 400 was further increased to 450 to make up for cases of attrition.

A multistage sampling technique was employed in drawing the sample size. In the first stage, 2 secondary schools each were randomly drawn from each of the two LGAs by balloting from a list of secondary schools located in Osogbo Metropolis, which had been obtained from the Osun State Ministry of Education. In the second stage, the senior secondary classes in the selected schools were stratified and a class was then randomly selected from each stratum by balloting. With equal allocation technique, 113 questionnaires were allotted to each of the four schools. The first two strata of each school were allotted 37 questionnaires each while the last stratum was allotted 39 questionnaires. In the third stage, systematic sampling method was used. Each class of the stratum had an average of 75 students; therefore every other student was given the questionnaire with the first student chosen at random since  $K=2$ , that is, sampling fraction is  $1/k=37/75$ .

A pre-coded self-administered substance use questionnaire with four sections was employed in the survey. The first section sought socio-demographic information of the respondents. The second section collected information on awareness of the students of drug and drug use of eleven drugs namely: alcohol, sedatives e.g. valium and piriton, caffeine, solvents, barbiturates, cocaine, tobacco, analgesics, heroin, inhaler and morphine. The third section collected information on the attitude of the students to drug abuse while the fourth section sought information on the practice of substance abuse.

The questionnaire was pre-tested using a total of 10 questionnaires given to senior secondary school students of Agbonran grammar school, Ede. The survey was conducted within a two day period in each of the selected schools, and a total of 8 visits were made to the schools.

Data were analyzed using a computer software; SPSS. Simple frequency tables were generated as well as cross-tabulation (as appropriate) to check for levels of statistical significance. 450 questionnaires were collected from the secondary schools although only 420 were considered valid for data analysis. The criterion for disqualifying a questionnaire for analysis was the presence of 4 or more missing data and/or inconsistency. The level of statistical significance was set at 5%. The respondents were grouped into two; those with a positive attitude and those with negative attitude to drug or substance abuse. To do this, grades of 0 and 1 were added to the 2 options of each of the attitude questions with a total score of 6. Respondents with a score of 0-2 were regarded to have a positive attitude, while respondents with score 3-6 were regarded to have negative attitude towards drug or substance use.

Permission to conduct the survey was sought and obtained from the school principals and the students. A formal introduction was done as a written opening statement at the beginning of the questionnaire and also verbally at the point of administration of the questionnaires. The students were briefed about the purpose of the study and were guided on how to fill the questionnaires correctly.

The completion of the questionnaire was carried out during a class hour and respondents were not allowed to confer with one another during the exercise. Confidentiality was assured verbally and also stated on the front page of the questionnaire. To further reassure respondents about confidentiality, only investigators and not class teachers supervised the completion of the questionnaires. Anonymity was strictly ensured as the respondents were not required to write their names.

The respondents also had problems in understanding some of the questions and some were not familiar with some names of drugs and other terminologies used as explicit as they were. Explanations therefore had to be made verbally to the satisfaction of the students.

## Results

There were a total of 450 distributed questionnaires in this study and only 420 were sufficiently completed to be used in analysis giving a response rate of 93.3%.

Majority of the respondents were between the age group of 16-19 years (65.5%); males (60.7%), Muslims (57.1%), those with married parents (81.4%) and students from a monogamous homes (72.1%) respectively.

**Table 1:** Sociodemographic characteristics of respondents

<b>Characteristics</b>	<b>Frequency (%)</b>
<b>Age (Years)</b>	
10-15	125 (29.8%)
16-19	275 (65.5%)
≥20	20 (4.7%)
<b>Sex</b>	
Male	255 (60.7%)
Female	165 (39.3%)
<b>Religion</b>	
Islam	240 (57.1%)
Christianity	180 (42.9%)
<b>Parent's Marital Status</b>	
Married	342 (81.4%)
Divorced/ Separated	44 (10.5%)
Single	34 (8.1%)
<b>Family Type</b>	
Monogamy	303 (72.1%)
Polygamy	117 (27.9%)
<b>Total</b>	420 (100%)

There was nearly equal distribution of respondents in SS 1 (134); SS 2 (141) and SS 3 (140) constituting 33.1%, 33.6% and 33.3% respectively. Majority of the respondents were science students with a proportion of 46.4% while the arts and commercial students made up 19.3% and 34.3% respectively.

Majority of respondents lived with their parents making up 81.7% of those studied while 13.1% and 5.2% of them lived with their guardians and foster parents respectively.

Of the 420 interviewed respondents, 372 (88.6%) of them claimed awareness of people using substances. Most of the respondents were aware of Tobacco (88.4%), Alcohol (61.0%), Cannabis (49.5%), Analgesics (48.9%), Cocaine (48.1%) and caffeine (43.5%). They were less aware of solvents (17.5%), morphine (12.6%), inhalers (12.1%), sedatives (8.9%) and barbiturates (7.8%).

**Table 2:** Respondents' levels of awareness with respect to substance use

<b>Knowledge Variables</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Total (%)</b>
Narcotic drugs	308 (82.8%)	64 (17.2%)	372 (100%)
Unrecommended medical drugs	266 (71.5%)	106 (28.5%)	372 (100%)
Substance prohibited by law	290 (78.0%)	82 (22.0%)	372 (100%)
Psychoactive and Psychotropic substances	314 (84.4%)	58 (15.6%)	372 (100%)
Excessive use of alcohol	277 (74.5%)	95 (25.5%)	372 (100%)
Dependence on cigarette	252 (67.7%)	120 (32.3%)	372 (100%)
Excessive use of local seeds e.g. Kolanut	157 (42.2%)	215 (57.8%)	372 (100%)
Unregulated use of prescription drugs.	158 (42.5%)	214 (57.5%)	372 (100%)

Majority of respondents had knowledge of what inappropriate use of substances means with percentage ranging from 67.7% to 82.8%. However, less than half of them were aware of the excessive use of kola nut as stimulant (42.2%) or unregulated use of medical drugs without prescription by a qualified medical practitioner (42.5%).

Most of the respondents approve of the unregulated use of analgesics (73.1%) while 49.9% and 23.8% approve the use of caffeine and inhalers respectively. Only 15.2% and 9.0% approve of the use of alcohol and tobacco respectively. While a relatively small percentage (41.7%) of the respondents approve of substance use, a greater part of them would support sanctions (79.5%) and campaign (76%) against its use.

**Table 3:** Respondents' attitude to substance use

<b>Attitude</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Total (%)</b>
Approval of use	175 (41.7%)	245 (58.3%)	420 (100%)
Support sanctions	334 (79.5%)	86 (20.5%)	420 (100%)
Support Expulsion.	329 (78.3%)	91 (21.7%)	420 (100%)
Government prohibit	362 (86.2%)	58 (13.8%)	420 (100%)
Campaign against	319 (76.0%)	101 (24.0%)	420 (100%)
Discourage a friend on drugs.	367 (87.4%)	53 (12.6%)	420 (100%)

Only 21.7% of the respondents claimed past use of substances while 52.1% and 30.5% claimed ever and current use respectively.

**Table 4:** Ever, current and past use of substances by respondents

	Yes	No
<b>Ever Use</b>	219 (52.1%)	201 (47.9%)
<b>Current Use</b>	128 (30.5%)	292 (69.5%)
<b>Past Use</b>	91 (21.7%)	329 (78.3%)

The substances that were found to be commonly currently abused are analgesics (46.7%), cannabis (16.7%), tobacco (14.3%) and inhalers (14.0%) while 8.3%, 7.4%, and 6.4% of the respondents were found to be using alcohol, sedatives and solvents respectively.

**Table 5:** Substances currently used by respondents

Substances	Frequency		Total
	Yes	No	
Analgesics	196 (46.7%)	224 (53.3%)	420 (100%)
Cannabis	70 (16.7%)	359 (85.0%)	420 (100%)
Tobacco	60 (14.3%)	360 (85.7%)	420 (100%)
Inhaler	59 (14.0%)	361 (86.0%)	420 (100%)
Alcohol	35 (8.3%)	385 (91.7%)	420 (100%)
Sedatives	31 (7.4%)	389 (92.6%)	420 (100%)
Solvents	27 (6.4%)	393 (93.6%)	420 (100%)
Cocaine	27 (6.4%)	393 (93.6%)	420 (100%)
Caffeine	17 (4.0%)	403 (96.0%)	420 (100%)
Morphine	17 (4.0%)	403 (96.0%)	420 (100%)
Barbiturates	0 (0%)	420 (100%)	420 (100%)
Others	17 (4.0%)	403 (96.0%)	420 (100%)

## Discussion

In this study, 420 questionnaires were sufficiently filled to be analyzed. The male sex constituted majority 60.7% of the respondents while female respondents were 39.3% a ratio of 1.5:1. This is in keeping with the male: female ratio of other studies done in Ibadan and Ilorin that reported ratio to be 1.4: 1 and 1.3: 1 respectively <sup>[27]</sup>.

A greater percentage of the respondents (81.4%) have married parents, 10.5% have separated/divorced and 8.1% have single parents. This is contrary to the pattern obtained in Nigeria as a whole where 59.4% of parents are married, 2.5% are divorced/separated <sup>[28]</sup>. The respondents from the monogamous family setting were 72.1% while 27.9% are from the polygamous family setting. This is in keeping with the national data where 77.3% and 22.4% of the population are from the monogamous and polygamous settings respectively <sup>[29]</sup>. Muslims respondents constituted 57.1% of respondents while Christians were 42.9%. This is also in keeping with what was obtained in the Nigeria demographic and health survey (2003) where 51.8% and 48.2% of Nigerians were Muslims and Christians respectively <sup>[29]</sup>.



Drug abuse was described as the use of any substance that has an adverse effect on the body or mind by 314 (84.4%) of the respondents. With this percentage, they can be said to be fairly informed about drug abuse. Fair because their knowledge could still be said to be inadequate about the various substances that can be abused as only 8.9%, 7.8%, 17.5%, 43.5%, 48.1% and 48.9% of the respondents were aware that sedatives, barbiturates and solvents e.g. glue and petrol, caffeine, cocaine and analgesics respectively can be abused. However, more respondents were aware that agents such as alcohol (61.0%), tobacco (88.4%) as substances that can be abused. The reason for this disparity in awareness can be the massive media advertisement for tobacco and alcohol that portrays those who drink as manly and sophisticated <sup>[28]</sup>.

Majority of respondents from the monogamous family setting (74.3%) had positive attitude to drug abuse while 25.3% of the respondent from polygamous family setting had a negative attitude towards drug abuse. This could be due to relative sense of belonging, love, care and supervision children in monogamous setting enjoy when compared to their counterparts in the polygamous family setting.

This study revealed analgesic e.g. paracetamol as the most commonly abuse drug current use being 46.7%. This is comparable to some studies <sup>[19,30,31]</sup> though contrary to some others that reported alcohol as the most abused drug <sup>[32,33]</sup>. The factors responsible for this could be the easy availability of analgesics in the country, access to over the counter drugs from patent medicine stores where there are no serious restrictive laws against its use.

The least abused drugs/substances in this study were caffeine and morphine each which 4% of respondents used. This is contrary to a study that showed tobacco to be the least abused substance <sup>[19]</sup>. This may be due to unavailability and inaccessibility of morphine and the respondents' inadequate knowledge of the stimulant effect of caffeine.

In this study, the prevalence of drug use among the respondents was found to be 30.5%. This is contrary to two studies done in Oyo state and another in Abeokuta with prevalence of 69.3%, 51.6%, and 51.5% respectively. <sup>[31,32]</sup> This may be due to the effects of urbanization and westernization on these relatively 'more urban' cities.

This study also showed more males (52.9%) than females (47.1%) abused drugs. This is in keeping with other studies that reported drug abuse to be commoner in males <sup>[32]</sup>. This may be because males are more likely to be adventurous than their female counterparts and they are more likely to be experimenting during their adolescent years. Females on the other hand enjoy more supervision of parents/guardian because of the fear that their engagement in social activities could predispose them to being wayward.

The study also shows that majority (70.5%) of those from separated/divorced families abuse drugs. This is similar to other studies that linked drug abuse to children from dysfunctional families <sup>[32]</sup>. The reasons for this may be due to lack of parental love, care and supervision that children from dysfunctional families suffer.

The prevalence of lifetime use of alcohol was 15.2%, the percentage of ever use and current use of alcohol was 6.9% and 8.3% respectively. This is contrary to studies done in Ibadan, Oyo state and Ogun state that put the ever use of alcohol to be 56% and 51% respectively <sup>[31,32]</sup>.

Analgesics were noted to be the most commonly used drug in this study with a prevalence of 46.7%. This is similar to results of several other studies done in the country <sup>[19,27]</sup>. This indiscriminate use may partly result from easy availability, over the counter purchases being a common phenomenon in the country. With a male to female ratio of 1.1:1, comparison can be made with a similar study <sup>[27]</sup> in which no sex difference was noted.

Majority of our respondents (35%) were daily users. This is similar to a similar study<sup>[27]</sup> where almost half of the current cigarette smokers engage in daily use. The increased life time prevalence and current use of cigarette more than alcohol could be accounted for by the fact that cigarette is cheaper as the cheapest stick can be bought for as low as ₦10, while the cheapest cost of a bottle of beer can be as much as ₦80. Most of the respondents are from the low socioeconomic group, so it is more convenient for them to spend ₦10 than ₦80. Also, cigarette contains nicotine which is an addictive substance. So, once smoking starts, it is addictive and thus more difficult to stop the habit.

In this study majority of the respondents (37.3%) started using illicit drugs because their parents use it this is similar to a study which showed that adolescents are more likely to start smoking if their parents' smoke<sup>[5]</sup>. It was postulated that when parents or other adults in the environment use drugs, the adolescents around are more likely to use drugs this is however similar to our study. This can be attributed to the fact that parental attitude has a strong influence on the adolescent's decision making. They are at an impressionable and flexible age where they can be easily influenced by their parents' actions and behaviour.

## Conclusion

From this study, it was found that most of the respondents had adequate awareness on the issue of substance abuse (67.7- 82.8%), majority had inadequate knowledge of some specific substances like barbiturate and sedatives and most of the respondents showed positive attitude with respect to use of substance. The prevalence of substance abuse among respondents was 30.5%. Most commonly abused substances are analgesics, cannabis and tobacco and sedatives were abused more by females than males. The predominant reasons for indulgence of respondents in use of drugs are for 'academic' purposes, to feel high/good and for physical fitness.

There is a need to develop a viable substance abuse preventive programme and a comprehensive data base on substance abuse among adolescents. Programs should be instituted to introduce the subject of substance abuse into the school curriculum and the creation of youth social clubs should be encouraged to fight against substance abuse.

## Conflict of Interest

No conflict of interest associated with this work.

## Contribution of Authors

The authors must declare that they did the work by beginning this section with the following statement, "I(We) declare that this work was done by the author(s) named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors". In addition, a declaration of the role of each author mentioned in the manuscript should be provided. The author who conceived and designed the study as well as the person(s) who collected and analysed the data must be specified.

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