

Knowledge and prevalence of substance and drug abuse among secondary school students in a sub-urban area in Nigeria

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ABSTRACT

Drug and substance abuse is a menace and has negative effects on individuals, families, societies, and nations. Its prevalence has been reported in different regions of the world and efforts are being geared to address it. Nigeria has witnessed the prevalence of drug abuse also in the recent years. However, most studies have been conducted in urban areas. Few studies have been undertaken in the semi-urban and rural areas. This study aims to study the prevalence of drug abuse

in a sub-urban area that has neighbouring rural areas. The specific objectives are to assess the knowledge about, awareness, and use of, substance and drug of abuse among secondary students in these areas. The study is a descriptive survey of secondary school students in two selected secondary schools in Ipetumodu. Simple random sampling was employed for selecting the schools and convenience sampling was used for participant selection. A validated semi-structured questionnaire retrieved from 94 respondents out of the 102 administered questionnaires was used to obtain data from respondents. The data were analysed using descriptive and inferential statistics. The results revealed alcohol as the most known (58%), most seen (58%) and most used (15%). Morphine (5.3%) and pentazocine (5.3%) are the least known drugs and are also the least seen (4.3%). Additionally, the study showed that there is a significant association between the class level of the students and the most known, most seen, and most used – alcohol. Substantial knowledge of substances and drugs being abused exists among secondary school students in the sub-urban area, with alcohol being the most known and seen. Controlled drugs, like morphine and pentazocine, are rarely known or seen. The use of substances and drugs of abuse among secondary students should be kept low and reduced. A multi-disciplinary approach to counselling students is recommended to reduce use.

Keywords: *Substance, alcohol, drug abuse, knowledge, prevalence, semi-urban area, Nigeria*

INTRODUCTION

Globally, substance and drug abuse are on the increase (Kuehn, 2007; Lakhanpal and Agnihotri, 2007; Peacock et al., 2017; Nwogu, 2022). The abuse has been a menace to individuals, families, societies, nations, and the world at large. The World Health Organisation (WHO) having seen the danger inherent in the continuation of the drug abuse trend has taken steps to curtail these negative effects (WHO, 2000; WHO, 2008; WHO, 2024). Nations have launched program against drug abuse through both governmental and non-governmental organisations also (Thara and Patel, 2010; Narayanan et al; 2011; Tatmatsu et al., 2019). For instance, the War Against Drug Abuse (WADA) of the Nigeria National Drug Law Enforcement Agency (NDLEA) was launched to curtail drug abuse and illicit trafficking of drugs in Nigeria.

Drug abuse is being experienced in developed and developing countries and its prevalence is causing an increase in drug use disorders (Degenhardt et al., 2019). Laws have been enacted against it and enforcement agencies are saddled with the responsibility of enforcing these laws (Courtwright, 2004; Sacco, 2014; Adejoh et al., 2023). Such laws are being enforced within countries and across countries as drug trafficking from one country to another is being curtailed. In Nigeria, these laws include the Poisons and Pharmacy Act, Food and Drugs Act,

Counterfeit and Fake Drug Provision Act, National Drug Law Enforcement Agency Act. All these laws govern the manufacture, sale, distribution and use of drugs in Nigeria and their distribution to other nations.

Nigeria, a developing nation, has been experiencing drug abuse and efforts are being geared towards its reduction and elimination (Adejoh et al., 2023; Maccido, 2024). Laws have been enacted against drug abuse and enforcement strategies put in place, especially through the National Drug Law Enforcement Agency (Adejoh et al., 2023). A typical example is the banning of codeine use in the country after the codeine syrup saga experienced in the last decade (Ezenwa et al., 2020). Rehabilitation centers for drug addicts have been established to rehabilitate victims of drug abuse to make them return to their normal selves (Nwoga et al., 2021). These are steps in the right direction for curbing the menace of drug abuse.

Almost all age categories have been involved in one form of drug abuse or the other in Nigeria. Both male and female gender engage in drug abuse. However, youths and adults are known to have engaged in drug abuse most. Also, it has been observed that men and boys engage more in it than women and girls (Garba et al., 2017; Alabi et al., 2022).

Institutions of learning in Nigeria have witnessed the menace of drug abuse by students (Obadeji et al, 2020; Okafor, 2020; Abikwi and Okafor, 2022). These have been reported in universities, secondary schools,

and primary schools. University students engage more in drug abuse than secondary and primary schools. Most university students are adolescents and young adults. Youthful exuberance at this age may be responsible for this. Peer influence and desire to have a sense of belonging can also be reasons for university students' involvement in drug abuse.

Cases of drug abuse have been reported in secondary schools in Nigeria, especially among senior secondary students (Obadeji et al, 2020; Olapegba et al., 2021). These students are in the formative stage of becoming university students. Most of them are in their teenage. Reports have observed peer pressure influence and inadequate parenting or bad influence from parents have contributed to involvement in drug abuse among these students (Ifeoma et al., 2020; Peter and Aina Joseph, 2020; Umukoro et al., 2021; Nyameh, 2023).

Reports on drug abuse among secondary school students in Nigeria have emanated more from schools in the urban areas (Anie, 2015; Abonyi et al., 2022; Esther, 2019). Urban areas have a higher population when compared with suburban and rural areas. In addition, urban areas have a higher level of exposure to dangerous drugs. Companies engaging in the production of drugs and substances that can be abused, like alcohol and tobacco manufacturing companies, operate in urban areas. As a result, exposure to drug abuse in urban areas is on the high (Rai, 2019; Kim, 2024)

Ipetumodu is a semi-urban area in the Ife North Local Government of Osun State in Nigeria (Oyedapo et al., 2021). Its neighbours are mostly rural areas. The villages include Yakoyo, Ologbo, Ashiba, Fagbore, Ogangan, Wasinmi, Lamikiri, Akingbode, and Agodo, among others. Ipetumodu has secondary schools which serve as institutions of learning for young people in the town and its neighbouring villages. Two prominent secondary schools are Origbo Community Unity School and Local Authority Secondary School. Origbo Community Unity School was established in 1958 while Local Authority Secondary School was established in 1960.

Drug abuse is a long-standing problem and a cause of public health concern in Nigeria (Udoh et al., 2020; Jatau et al., 2021; Nyameh, 2023). Studies have revealed that abuse is on the increase in society especially in urban areas. Secondary school students are not left out of engaging in the abuse. However, few studies have been conducted in semi-urban and rural areas. Moreover, no study has been conducted on drug abuse in Ipetumodu. Therefore, there is a need to study the prevalence of drug abuse in this semi-urban area, hence, this study. The specific objective/s of the study were to assess the knowledge about, awareness, and use of, substance and drug of abuse among secondary students in a sub-urban area and its neighbouring rural areas.

MATERIALS AND METHODS

The study was a descriptive survey of Secondary School students. It obtained information on the knowledge and prevalence of drug abuse among selected secondary school students in Ife North Local Government, Osun State. The selected Secondary Schools are Local Authority Secondary School, Ipetumodu, and Origbo Community Unity School, Ipetumodu.

The population comprised one hundred and twenty-one (121) students in the senior secondary classes of the selected secondary schools. Sixty-seven (67) were from Origbo Community Unity School while the remaining fifty-four (54) students were from Local Authority Secondary School. Students below 13 years of age and those who were absent on the day of the survey were excluded.

Simple sampling was employed as the sampling method for selection of the schools and convenience sampling was used for selection of participating students. Sample size was computed based on Yamane's (1973) formula for sample size determination of known population size.

where

n = sample size

N = population of the study

e = tolerable error

$$n = 121 / 1 + 121(0.05)^2$$

$$n = 93$$

Ten percent of the sample size was added to cater for attrition.

$$\text{Total number of questionnaire distributed} = 93 + (10\% \text{ of } 93) = 93 + 9.3 = 102$$

The research instrument employed was a semi-structured questionnaire. The items of the questionnaire were derived from literature reviews and were based on the research objectives to ensure the validity of the instrument. Input from an expert in the field of study was also sought.

Permission was sought for, and obtained, from the Local Inspector of Education Office, Ipetumodu, Ife North Local Government. The basic ethical principles of justice, beneficence, and respect for persons were adhered to. All students who were within the scope of the study participated in the study if they consented. The aim and objectives of the study were clearly revealed to the respondents. They were informed that no harm was attached to the research study. Informed consent was obtained from all respondents. Confidentiality and privacy were assured.

The primary data was collected by administering the questionnaire to the respondents. The respondents were served the questionnaire in English language. The questionnaires were self-administered with guidance from the researcher when necessary. Correctly filled questionnaires were returned to the researcher immediately and were verified for accuracy.

The data retrieved from the respondents were sorted, given identification numbers, coded, and loaded into a computer. The data were screened and cleaned before statistical

analysis was carried out. Data obtained were analyzed with the aid of Statistical Package for Social Sciences (SPSS) software (version 21). Descriptive and inferential statistics were used. Chi-square and Fisher's Exact Test were the inferential statistics employed.

RESULTS

A total of 94 out of the 102 administered questionnaire were retrieved for a return rate of 92.2%. The distribution of respondents

revealed female students being more than male students (Table 1). The majority of the students were below the legal age for adults (< 18 years) in Nigeria. Students in the Art and Science classes were more than the other classes. The difference between the number of students in the three class levels is minimal. Most respondents were from the Yoruba tribe, and many were from monogamous families. Table 1 details the socio-demographic profile of the respondents.

Table 1: Sociodemographic characteristics of respondents

Variables	Frequency	Percentage
Sex		
Female	51	54.3
Male	43	45.7
Total	94	100.0
Age		
< 18years	68	72.3
> 18years	16	17.0
No response	10	10.6
Total	94	99.9
Class		
Art	38	40.4
Commercial	16	17.0
Science	39	41.5
Social Science	1	1.1
Total	94	100.0
Level		
SS 1	27	28.7
SS 2	36	38.3
SS 3	30	32.0
Total	94	100.0
Religion		
Christianity	79	84.0

Islam	14	14.9
Traditional worshipper	1	1.1
Others	0	0.0
Total	94	100.0
Ethnicity		
Yoruba	86	91.5
Igbo	1	1.1
Hausa	0	0
Others	7	7.5
Total	94	100.0
Family setting		
Monogamous	73	77.7
Polygamous	21	22.3
Total	94	100.0

The results detailing the drugs that can be abused that the students know, have seen before, and are taken are presented in Tables 2, 3, and 4.

Table 2: Knowledge of substance and drugs that can be abused

S/N	Variables	Yes (%)	No (%)	Not sure (%)	Total (%)
1.	Do you know alcohol?	58 (61.7)	33 (35.1)	3 (3.2)	94 (100.0)
2.	Do you know cocaine?	30 (31.9)	54 (57.4)	10 (10.6)	94 (100.0)
3.	Do you know codeine?	27 (28.7)	58 (61.7)	9 (9.6)	94 (100.0)
4.	Do you know coffee/ caffeine?	30 (31.9)	56 (59.6)	6 (6.4)	92 (97.9)
5.	Do you know dexamethasone?	13 (13.8)	72 (76.6)	8 (8.5)	93 (98.9)
6.	Do you know heroine?	17 (18.1)	66 (70.2)	10 (10.6)	93 (98.9)
7.	Do you know marijuana?	27 (28.7)	55 (58.5)	10 (10.6)	92 (97.9)
8.	Do you know morphine?	5 (5.3)	74 (78.7)	15 (16.0)	94 (100.0)
9.	Do you know pentazocine?	5 (5.3)	75 (79.8)	14 (14.9)	94 (100.0)
10.	Do you know tramadol?	37 (39.4)	44 (46.8)	10 (10.6)	3 (3.2)

Table 2 reveals that alcohol is the most known drug of abuse (62%) with a percentage far exceeding the nearest drug (Tramadol) well known after it. Morphine (5%) and Pentazocine (5%) were the least-known drugs.

Table 3: Drugs and substance of abuse seen before

S/N	Variables	Yes (%)	No (%)	Not sure (%)	Total (%)
1.	Have you seen alcohol before?	58 (61.7)	31 (33.0)	1 (1.1)	90 (95.7)
2.	Have you seen cocaine before?	25 (26.6)	59 (62.8)	5 (5.3)	89 (94.7)
3.	Have you seen codeine before?	21 (22.3)	67 (71.3)	5 (5.3)	93 (98.9)
4.	Have you seen caffeine before?	28 (29.8)	60 (63.8)	4 (4.3)	92 (97.9)
5.	Have you seen dexamethasone before?	14 (14.9)	74 (78.7)	4 (4.3)	92 (97.9)
6.	Have you seen heroine before?	21 (22.3)	66 (70.2)	5 (5.3)	92 (97.9)
7.	Have you seen marijuana before?	28 (29.8)	60 (63.8)	4 (4.3)	92 (97.9)
8.	Have you seen morphine before?	6 (6.4)	79 (84.0)	7 (7.4)	92 (97.9)
9.	Have you seen pentazocine before?	10 (10.6)	77 (81.9)	6 (6.4)	93 (98.9)
10.	Have you seen tramadol before?	28 (29.8)	58 (61.7)	2 (2.1)	88 (93.6)

Table 3 shows that alcohol ranked as the most seen drug (62%) that can be abused by a great margin to the nearest drugs to it. Tramadol (30%), marijuana (30%), and caffeine (30%) ranked second after alcohol. The least seen drug is morphine (6%).

Table 4: Drugs and substance of abuse being used

S/N	Variables	Yes (%)	No (%)	Not sure (%)	Total (%)
1.	Do you take alcohol?	15 (16.0)	76 (80.9)	2 (2.1)	93 (98.9)
2.	Do you take cocaine?	10 (10.6)	82 (87.2)	2 (2.1)	94 (100.0)
3.	Do you take codeine?	9 (9.6)	83 (88.3)	2 (2.1)	94 (100.0)
4.	Do you take coffee/ caffeine?	15 (16.0)	76 (80.9)	3 (3.2)	94 (100.0)
5.	Do you take dexamethasone?	4 (4.3)	86 (91.5)	4 (4.3)	94 (100.0)
6.	Do you take heroine?	6 (6.4)	84 (89.4)	4 (4.3)	94 (100.0)
7.	Do you take marijuana?	7 (7.4)	83 (88.3)	4 (4.3)	94 (100.0)
8.	Do you take morphine?	4 (4.3)	86 (91.5)	4 (4.3)	94 (100.0)

9.	Do you take pentazocine?	4 (4.3)	86 (91.5)	4 (4.3)	94 (100.0)
10.	Do you take tramadol?	6 (6.4)	84 (89.4)	3 (3.2)	93 (98.9)

Table 4 reveals that most students (76% - 86%) are not taking these drugs. Few students (16%) responded that they are taking alcohol and caffeine. The two drugs are seen as the most taken among all the listed drugs.

Table 5 shows the relationship that exists between the socio-demographic characteristics of the respondents and the most known, most seen, and most taken drugs that can be abused.

Table 5: Inferential Statistics – Relationship (Association) Between Demographics and Drug and Substance That Can Be Abused

	Drug of abuse most known (Alcohol)	Drug of abuse most seen (Alcohol)	Drug of abuse most used (Alcohol)	Drug of abuse most used (Caffeine)
Sex	0.741 ^a	0.904 ^a	0.630 ^a	0.200 ^b
Age	0.605 ^a	0.390 ^a	0.213 ^a	1.000 ^a
Class	0.286 ^a	0.262 ^a	0.678 ^a	0.563 ^a
Level	0.013 ^{a *}	0.005 ^{a *}	0.024 ^{a *}	0.838 ^b
Family setting	0.512 ^a	0.696 ^a	0.841 ^a	0.882 ^a

Key: ^a – Fisher's Exact Test; ^b – Chi-square; * - Significant at 0.05 level of significance

Table 5 reveals a significant association between the level of the students and the most known, most seen, and most taken drugs that can be abused with figures lesser than 0.05 significance level. Alcohol is most known, most seen and most used. Caffeine is also seen to be most used alongside alcohol. There is no observed significant association between sex, age, class and family settings of the students and these drugs and substances of abuse.

DISCUSSION

The distribution of respondents showing that the majority of the students are below the legal age for adults in Nigeria is

attributable to the 6-3-3 educational system being practiced in Nigeria (Saadu, 2023). The 6-3-3 educational system practiced in Nigeria has been planned in a way that most students may not reach the adult age before graduating from secondary level of schooling or reach the age immediately after graduation.

Students being more in the Art and Science classes may be so because most students like to become professionals in the future in these areas, especially in science disciplines (Cleaves, 2005; Iroaganachi et al., 2021). Christianity was noticed as the major

religion being practiced because this part of Osun State has been known to be dominated by Christians. Most of the respondents are from the Yoruba tribe make sense because Ipetumodu is a Yoruba land (Oyedapo et al., 2021). Many of the respondents were from monogamous family can be attributed to the religion being practiced. Christianity permits having only one wife (Ademiluka, 2020).

The study revealed alcohol as the most known 'drug' of abuse, most seen and most taken. This is in line with the study of Soremekun et al. (2020) that alcohol has been documented as having the highest prevalence of abuse in two Local Council District Areas located in Lagos State, Nigeria. Also, a fair knowledge and sight of Tramadol as a drug that can be abused is in tandem with the report of Nabofa (2021) that tramadol has become popular drug abuse among young people in many West African countries.

Alcohol being the most known and seen validated the report that alcohol is among the drugs of abuse prominently featured in the drug use scene in Nigeria (Edafiadhe, 2005, Mustafa-Shaibu and Igbino-Ojo 2022). Morphine and Pentazocine are the least-known drugs because they are strictly controlled, and access can be granted to them after being prescribed by a physician (Elumelu et al., 2012; Suleiman et al., 2016; Okaphor and Onah, 2024). These students may not have come up with illnesses that may warrant such prescription and access. Morphine being revealed as the least seen

drug also attests to this fact. The revelation that most students are not taking the drugs of abuse negates the report that there is a recent upturn with adolescents beginning experimentation with psychoactive drugs as early as the 8th grade equivalent to Junior Secondary School 2 in Nigeria (Soremekun et al., 2020). This can be partly due to the fact that Ipetumodu is a town that can be seen as a suburban area. It has several nearby villages where the students may be domiciled. Students from villages may not have exposure to these drugs like their colleagues in the city as a result of little access to many of the privileges as well as atrocities in the city.

Few students attest to the fact that they are taking alcohol and caffeine might be because they are readily available. Alcohol can be easily gotten from palm trees in the town and villages and caffeine is present in most 'tea'. In addition, alcohol is used in the making of some herbal decoctions that the students may have taken (Alamgir and Alamgir, 2017). The significant association between the students' level and the most known, most seen, and most taken drugs of abuse depicts that the higher the class level, the more knowledge of drugs that can be abused. It also reveals that as students reach higher classes, there is a higher tendency to engage in drug abuse (Bond et al., 2007). Such tendencies may increase as they reach higher institutions of learning. It may be attributable to why there are many reports of drug abuse by students in universities.

CONCLUSION

There is substantial knowledge about substances and drugs being abused among secondary school students in suburban areas. Alcohol is the most known and seen as most of the students have known and seen it. However, few of these students have taken alcohol. Narcotic drugs that are strictly controlled, like pentazocine and morphine, have rarely been known. The students in the semi-urban area have had little exposure to them. It is recommended that the use of substances and drugs of abuse among secondary school students in semi-urban and rural areas should be kept low and reduced. Students should be counseled on the danger

inherent in taking alcohol and any other substances and drugs of abuse, especially those who are already exposed to alcohol. This requires a multi-disciplinary approach. Teachers and healthcare professionals can engage in creating more awareness about the negative effects of drug abuse. Non-governmental organizations can also help create awareness.

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