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Undergraduate Students in a Tertiary Institution in Ekiti  
State, Nigeria**

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## Awareness, Knowledge and Pattern of Substance Use among Undergraduate Students in a Tertiary Institution in Ekiti State, Nigeria

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### Abstract

**Purpose:** The rate at which the young people are getting involved in drug abuse is alarming, good knowledge of these substances should be able to affect the risky behaviour of the youths. This study examined the awareness, knowledge and pattern of substance use among undergraduates in a tertiary institution in Ekiti-State.

**Materials and Methods:** A cross-sectional study among 460 undergraduates using multi-stage sampling technique. Pre-tested, semi-structured questionnaire was administered, and data analysed using SPSS version 26. Descriptive analysis was done with figures, tables and percentages and association between dependent and independent variable with binary logistic regression.

**Findings:** Mean age of the participants was 21.82±2.6 years. Almost all were aware of substance use 445 (96.5%) and 241 (52.8%) had good knowledge. Younger age and being a male were associated with good knowledge of substance use with p value < 0.05.

**Unique Contribution to Theory, Practice and Policy:** Awareness was good among participants while knowledge was average and being young and male gender were predictors. It is recommended that comprehensive education should be given starting from younger age group with more parental monitoring on the male child.

**Keywords:** Awareness, Knowledge, Pattern, Substance Use, Ekiti-State

*JEL Codes: I120*

## 1.0 INTRODUCTION

Substance use in the adolescent and young adult is a growing epidemic, and a global public health concern, with its attendant negative health consequences (physical, social, mental and emotional ill-health).<sup>1</sup> According to the World Drug Report 2021, about 275 million individuals has had at least one exposure to illicit drugs in the preceding year globally, while more than 36 million individuals suffered from substance use disorders.<sup>2</sup> Substance use is a major contemporary health issue affecting large parts of the developing countries, including Nigeria.<sup>3</sup>

Substance use is the harmful use of psychoactive substances and illicit drugs (includes alcohol, cannabis, amphetamine and other illicit drugs) in a manner that is legally and medically unacceptable to the individual and or society.<sup>4</sup> Adolescent and young adult remains a vulnerable target to increasing substance use and abuse, with increasing number of youth globally, especially in Sub-Sahara African where Nigeria is located.<sup>6</sup> Among the adolescent and young adult early onset of substance use is associated with higher risks of developing dependence, other health and non-health issues during adult life, with younger individuals being disproportionately affected by substance use compared with older adults.<sup>6</sup>

The awareness of substance use among the adolescent and young adult varies from 40.7-100%.<sup>7,8,9,10</sup> Study among nursing students in India reveals 40.7% awareness,<sup>10</sup> while 96.3% of university graduates were aware in Nigeria<sup>8</sup> and a study of undergraduates within a private university in southwestern part of the country shows high awareness level (100%).<sup>7</sup>

The knowledge level of adolescent and young adult also varies from country to country.<sup>9,11,12</sup> The findings from Lebanese medical students showed inadequate knowledge of substance use.<sup>11</sup> Knowledge and awareness regarding substance addiction was found to be very poor among medical students in India,<sup>9</sup> while another study in a different region of India among high school children, 94% have high knowledge level on health consequences of substance use.<sup>12</sup> In a study in Lagos Nigeria, 87.9% of the participants showed high knowledge of substance abuse.<sup>13</sup>

The pattern of substance use varies among different regions of the world.<sup>4,7</sup> This includes the types of substances use in the different regions of the world,<sup>4,7</sup> also different sources of information concerning substances abuse or use, different age of initiation and different causes or reasons for initiation of substance use.<sup>7,14</sup>

While studies have been done on substance use among students in Ekiti State,<sup>7, 14</sup> a paucity of information exists on the awareness, and knowledge level of substance use, and the pattern of substance use among undergraduates in the public tertiary institutions. Therefore, this study aimed to assess the awareness, knowledge and pattern of substance use among the undergraduate students of federal polytechnic, Ado-Ekiti, Ekiti, Nigeria.

The prevalence of substance use is increasing in Nigeria and the level of awareness and knowledge varies across the country. Substance use has medical and non-medical consequences which has deleterious impact on the life of adolescents and the young adults. Hence there is need to know the level of awareness, knowledge and pattern of substance use among the undergraduate students, this will help to inform policies and procedures that will help in reducing the prevalence among this group of individuals in our society.

## 2.0 MATERIALS AND METHODS

The study was done in the Federal Polytechnic, Ado Ekiti, Ekiti State, Nigeria. The school runs an Ordinary National Diploma (OND) and Higher National Diploma (HND), certificate and professional programmes.<sup>15</sup> It has 5 schools: Business Studies, Engineering, Environmental Studies, Science and computer Studies, School of Agriculture and Agricultural Technology, with 29 departments in total.<sup>15</sup>

The study was an institution-based, descriptive, cross-sectional in design. The study population was selected undergraduates in Federal Polytechnic, Ado-Ekiti that gave informed consent were included in the sampling, while non-consenting students were excluded. The sample size was determined using the Leslie Fisher's formula for calculation of single proportion for >10,000. The minimum sample size was determined using the standard formula for descriptive studies using normal standard deviation of 1.96, a P of 53.8%,<sup>16</sup> margin of error of 0.05. The minimum sample size calculated was 424, giving allowances for a 10% non-response rate, this was increased to 460.

Multistage (4-staged) sampling technique was used to select eligible respondents. Firstly, three of the five schools (Business Studies, Engineering, Environmental studies, Science and Computer Studies, Agriculture and Agricultural Technology) were randomly selected, by balloting. In the second stage, list of all the Departments in the chosen schools was obtained and two departments were selected from each school/faculty using simple random sampling. In the third stage, systematic sampling method was used to select respondents from all students in the selected departments. The sampling frame (list of students in selected departments) was divided by the sample size to get the interval and the first respondent was picked by simple random sampling (balloting).

### Data Collection Instrument and Method

The study was carried out using a semi-structured self-administered questionnaire, which was adapted from The World Health Organization (WHO) student drug use questionnaire for data collection. It was originally developed by the WHO in collaboration with the United Nations Fund for Drug Abuse Control for use in different socio-cultural settings<sup>17, 18</sup> Data was collected during school hours.

### Data Analysis

The questionnaire was sorted, coded and checked for errors and completeness. All data collected were analyzed using Statistical Package for the Social Sciences (SPSS) version 25. The outcome variables included the awareness level, knowledge level of substance use, and the pattern of substance use. In order to determine the knowledge level, a set of 10 questions from the questionnaire were used. Each correctly answered question was scored 1 point while a wrong response or no response was scored 0. A mean of the scores was taken (6) and anyone who scored less than 6 (0-5) were categorized as having poor knowledge while those that scored 6-10 were categorized as having good knowledge. Categorical variables were represented by frequencies and percentages while mean value with standard deviation was used for continuous variables. Association with socio-demographic characteristics was done using chi square.

### Ethical Consideration

Research approval was sought from Ethics and Research Committee of Ekiti State University Teaching Hospital, Ado-Ekiti. Permission to conduct the study was obtained from the Deans and HODs of the selected schools and departments. A written informed consent was obtained from each of the respondents. The participation in the study was voluntary, harmless and subjects were assured of confidentiality. To ensure confidentiality, there was no name on the questionnaire and the questionnaires are locked in a cabinet where only the researchers have access to them.

### 3.0 FINDINGS

Four hundred and eighty questionnaires were distributed and four hundred and sixty were found analyzable giving a response rate of 95.8%.

**Table 1: Socio-Demographic Characteristics of the Respondents**

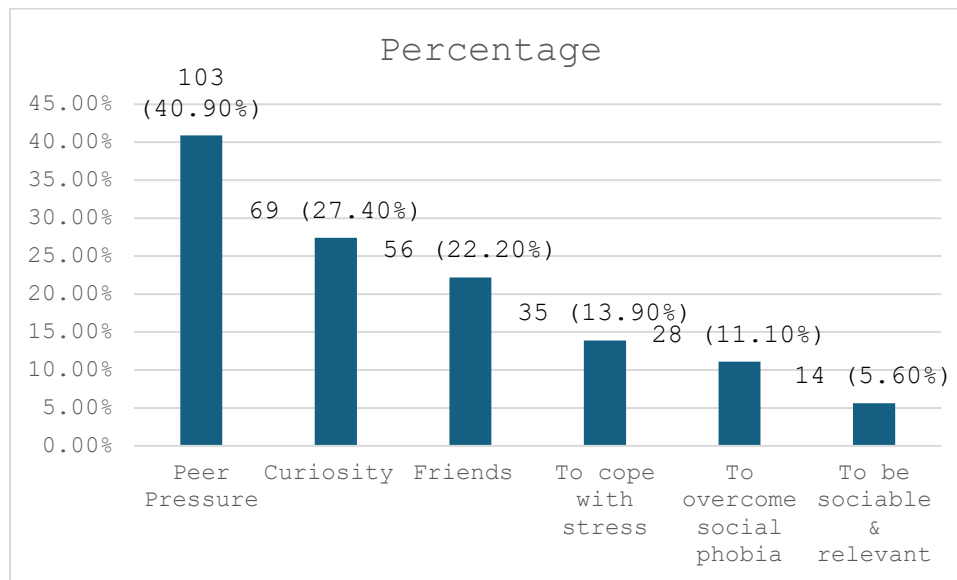
Socio-demographic Characteristics	Frequency n=460	Percentage
<b>Age (years)</b>		
15 -19	110	23.9
20-24	276	60.0
25-30	74	16.1
Mean Age (X ± S.D)	21.8±2.6	
<b>Sex</b>		
Male	238	51.7
Female	222	48.3
<b>Religion</b>		
Christianity	402	87.4
Islam	48	10.4
Traditional	10	2.2
<b>Tribe</b>		
Yoruba	388	84.3
Igbo	46	10.0
Others	26	5.7
<b>Level</b>		
Ordinary National Diploma (OND) 1	181	39.3
Ordinary National Diploma (OND) 2	37	8.0
Higher National Diploma (HND) 1	188	41.0
Higher National Diploma (HND) 2	54	11.7
<b>Father's occupation</b>		
Civil servant	143	31.1
Trader	129	28.0
Artisan	110	23.9
Professionals	42	9.2
Others	35	7.6
Unemployed	1	0.2
<b>Mother's occupation</b>		
Trader	279	60.7
Civil servants	99	21.5
Artisan	46	10.0
Professionals	23	5.0
Unemployed	8	1.7
Others	5	1.1
<b>Father's Highest Level of Education</b>		
No Formal Education	51	11.1
Primary	8	1.7
Secondary	197	42.8
Tertiary	204	44.4
<b>Mother's Highest Level of Education</b>		
No Formal Education	43	9.3
Primary	44	9.6
Secondary	183	39.8
Tertiary	190	41.3

Table 1 showed the socio-demographic characteristics of the respondents. Majority 386 (83.9%) of the respondents were between the ages of 15-24 years with a mean age of 21.8±2.6 years. There were 238 (51.7%) males, 402 (87.4%) of the respondents were Christians and 388 (84.3%) were of Yoruba ethnicity. Most of the respondents were in HND 188 (40.9%).

**Table 2: Awareness and Sources of Information about Substance Use among Respondents**

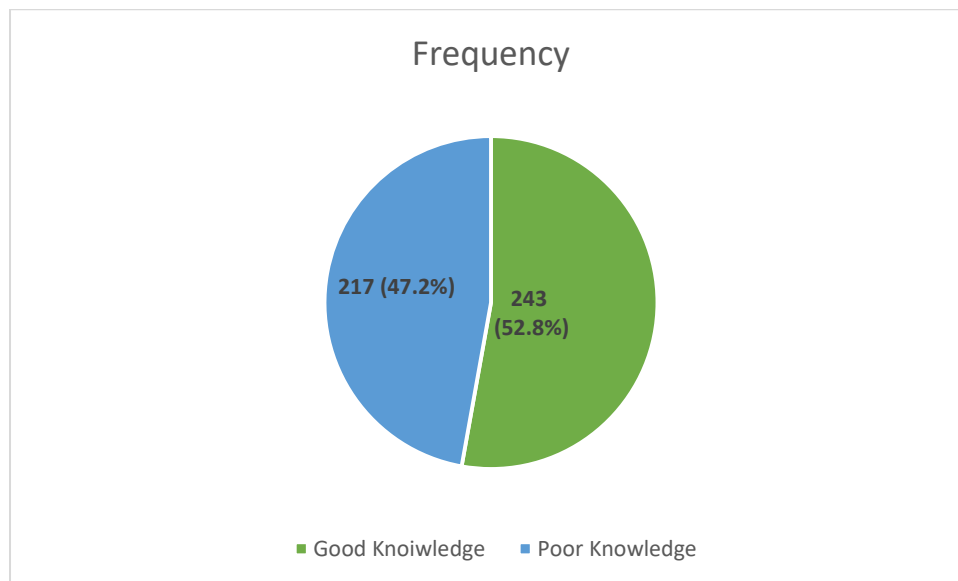
Variables	Frequency n=460	Percentage
<b>Awareness of substance use</b>		
Aware	445	96.5
Not aware	15	3.5
<b>Sources of information</b>		
School	153	33.2
Mass media	121	26.3
Social media	79	17.2
Friends	63	13.7
Internet	24	5.2
Family	15	3.3
Others	5	1.1

Table 2 showed the awareness of substance use among respondents and their sources of information. Majority of respondents were aware of substance use (96.5%). The most popular sources of information were the school 153 (33.2%), mass media 121(26.3%), and social media 79(17.2%). The most popular reasons for substance use among respondents were peer pressure 103 (40.9%), curiosity 69 (27.4%), and were offered by friends 56 (22.2%) and could not say no in order to be accepted. Some of the respondents 35 (13.9%) use substances to cope with stress (Figure 1)



*Figure 1: Reasons for Substance Use*





*Figure 2: Overall Knowledge of Psychoactive Substance Use among the Respondents*

Figure 2 shows the overall knowledge of substance use among respondents. Two hundred and forty-three (52.8%) of the respondents had good knowledge of substance use while 217 (47.2%) had poor knowledge.

Two hundred and fifty-two of the respondents used one substance or the other.

**Table 3: Types of Psychoactive Substances Used among Respondents (n=252)**

Psychoactive substance	Yes (%)	No (%)
Alcohol	250 (99.2)	2(0.8)
Cannabis	44(17.5)	208(82.5)
Tobacco products	41(16.3)	211(83.7)
Opium and other opiates	37(14.7)	215(85.3)
Substances such as gutter water, monkey tail	9(3.6)	243(96.4)
Cocaine	6(2.4)	246(97.8)
Sedatives	5(2.0)	247(98.0)
Non-tobacco smoked substances	3(1.2)	249(98.8)
Amphetamine or other stimulants	2(0.8)	250(99.2)

Table 3 shows the types of psychoactive substances used among respondents. The three most used substances were alcohol 250(99.2%), cannabis 44(17.5) and tobacco products 41(16.3).

**Table 4: Predictors of Knowledge of Substance Use**

Variables	Categories of Knowledge		OR	CI	p value
	Good	Poor			
<b>Age</b>					
15-19	58 (34.7%)	109 (65.3%)	1		
20-24	175 (64.1%)	98 (35.9%)	0.366	0.074 – 1.823	0.220
25-30	10 (50.0%)	10 (50.0%)	0.129	0.027 – 0.622	0.011
<b>Sex</b>					
Male	157 (66.0%)	81 (34.0%)	1		
Female	86 (38.7%)	136 (61.3%)	0.559	0.355 – 0.880	0.012
<b>Religion</b>					
Christianity	208 (51.7)	194 (48.3%)	1		
Islam	26 (54.2%)	22 (45.8%)	1.069	0.109 – 10.521	0.955
Traditional	9 (90.0%)	1 (10%)	0.457	0.04 – 5.056	0.523
<b>Tribe</b>					
Yoruba	192 (49.5%)	196 (50.5%)	1		
Igbo	37 (80.4%)	9 (19.6%)	1.250	0.533 – 2.931	0.607
Others	14 (53.8%)	12 (46.2%)	0.264	0.073 – 0.954	0.042

Table 4 revealed that the odd of younger age 15-19 years compared to 25 -30 years,  $p < 0.05$  and of male compared with the female  $p < 0.05$  having good knowledge is higher and significant.

### Discussion

Increasing prevalence of substance use among the youth is of public health concern globally. Knowledge of these substances among them varies across board due to different factors. This study examined the awareness, knowledge and pattern of substance use among the youth of a higher institution.

The level of substance use awareness in this study was high, about nineteen out of twenty of the respondents were aware. This is similar to other works done in Ogbomosho, southwestern part of Nigeria and in India which were among similar age groups.<sup>19, 20</sup> About one third of them claimed that the source of their information was from school, similar percentage from the study in Ogbomosho also said the source of their information was their teachers<sup>19</sup> other sources of information were social media, television, friends and family.<sup>20, 21</sup>

Almost all the respondents in this study were aware of substance use and almost all the respondents in this study using substances used alcohol. The proportion of alcohol users is comparable to other studies<sup>20, 21</sup> though other study reported a lesser prevalence.<sup>19</sup> It was equally documented in previous studies that alcohol was the most abused substance among the youths in Nigeria.<sup>14, 22</sup> Unfortunately, there is indifferent attitude towards the use of alcohol by the adolescents.<sup>20</sup> Some don't even take alcohol as a substance, to them it is a beverage drink, this is evidence from our result where 96.5% were aware of substance use and 99.2% were using alcohol. In this environment alcohol consumption is socially acceptable especially among those that are not religious. They take pleasure in serving alcohol during occasions, and daily in beer parlours, relaxation centers and club houses. To the youths, it's a sign of maturity, some of them were



introduced to alcohol as early as 15 years by their fathers or senior brothers. Celebrities are used for alcohol advertisement by the manufacturers, making it more appealing to the youth.<sup>19</sup>

Just barely more than half of the respondents had good knowledge of the substance used. There had been reports both in the northern and eastern part of the country where knowledge of illicit drugs was higher than our finding.<sup>21, 23</sup> A study conducted in India by Pragnesh documented a lower level of knowledge among the participants.<sup>9</sup> It is expected that good knowledge of illicit drug will affect the use positively. To change the behaviour towards substance use, the first thing is to increase the necessary and correct knowledge of the youth on illicit drug use.<sup>24</sup> In this study being a male and of younger age are predictors of good knowledge.

Despite the good knowledge among the younger age group it has been documented that abuse is higher amongst them for reasons like curiosity, peer pressure, social acceptance and to overcome stress as found in this study and supported by others.<sup>21, 24</sup> More of the males have good knowledge and still use substance than the females, most likely because parents pay more attention to the upbringing of the females.<sup>25</sup> The females are subjected to higher parental monitoring in most African countries because they believe they need more protection.<sup>25</sup> To stem this menace, there is need to start giving correct and adequate knowledge and higher parental monitoring to both sex at much younger age group.

As shown by the result in this study that the younger ones and the males had better knowledge, yet prevalence of substance use is more amongst them as documented in previous studies due to other reasons. Therefore, there is a need for other forms of interventions apart from increasing knowledge that will help in curtailing this menace among the youths.

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

The knowledge of drug use in this study was average and the most abused substance was alcohol. Younger age group and being of a male gender were predictors of good knowledge. We recommend that comprehensive health education should be given at much younger age and should be inculcated into the school curriculum.

#### **Limitation**

The data was based on self-reported information given by the respondent which might have introduced bias. It is a cross-sectional study; exposure and outcome were examined at the same time so causal relationship might not be determined.

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