

## Socio-demographic factors influencing the level of drug abuse among undergraduates in tertiary institutions in Ebonyi State

Jude N Nwafor <sup>1</sup>, Lois N Omaka-Amari <sup>2</sup>, Raphael E Ochiaka <sup>3</sup>, Eunice N Afoke <sup>2</sup> Christian O Aleke <sup>2,\*</sup> and Emeka M Osman <sup>2</sup>

<sup>1</sup> Department of Physical and Health Education, Ebonyi State University College of Education Ikwo, Nigeria.

<sup>2</sup> Department of Human Kinetics and Health Education, Faculty of Education, Ebonyi State University, Abakaliki, Ebonyi State, Nigeria.

<sup>3</sup> Department of Human Kinetics and Health Education, Enugu State University of Science and Technology, Enugu, Nigeria.

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### Abstract

This study examined the demographic factors influencing the level of drug abuse among undergraduates of Ebonyi State University. To achieve this, three objectives and corresponding research questions were posed and three hypotheses were formulated and tested at .05 level of significance. The study design was a descriptive cross-sectional survey. A sample of 943 students was drawn from a population of 18859 students. The instrument for data collection was a three-item questionnaire titled: Level of Drug Abuse Survey questionnaire (LDASQ) with a reliability coefficient of 0.93. Data were analyzed using Frequency, Percentage and chi-square statistic. The results of the study showed among others, that more males (56.7%) than females (35.2%) abused drugs. There was significant association between student gender and level of drug abuse among university students in Ebonyi state. It was recommended among others that the Ministry of Education (Federal and State) must as a matter of urgency add to their curricular drug education for both the primary and secondary schools to enable students understand the adverse effect of drug abuse and as well develop attitude that will help them resist the temptation to abuse drugs even as they enter into high institutions.

**Keywords:** Demographic factors; Drug abuse; Undergraduates; Ebonyi State

### 1. Introduction

Drug abuse is a global challenge with detrimental effects on health, wealth and security of all nations [1]. There is growing concern worldwide over the growing number of youths involved in drug abuse [2]. A study revealed that 4.8% of the global population consume illicit drugs [3]. The worrying fact is that those hooked are mostly the youth [3]. In Nigeria the problem of drug abuse is very high, it is further compounded by the absence of up-to-date records and the gross absence of infrastructural facility to handle the treatment of cases of drug abuse,[4]. Nigerian drug statistics based on the six geo- political zones of the country showed that the North West Zone ranked highest in drug addiction as it accounted for 755 arrested drug abusers or 47.45% of the total drug addiction in the country within the period. South West Zone came second with 347 arrested representing 27.32% The South East Zone placed third with 263 arrested representing 23.5% of the total drug addiction in the country within the period [4]. There is no doubt that those yet to be identified or arrested are twice more than the number already identified.

Drug can be viewed as a substance that could bring about a change in the body physiology through its action [5]. It is also considered as a substance that modifies awareness, cognition, disposition, manners and general body functions [6]. It

\* Corresponding author: Christian O Aleke

Department of Human Kinetics and Health Education, Faculty of Education, Ebonyi State University, Abakaliki, Ebonyi State, Nigeria.

is also a chemical substance that alters the function of one or more body organs or the course of a disease. Drugs include prescribed medicines, over the counter remedies and substances such as alcohol, tobacco and drugs that are used for none medical purposes [7]. National Agency for Food Drug Administration and Control, explains the term drug abuse as undue and continual self-administration of a drug without regard to the medically or culturally accepted pattern [4]. Other studies also agree that drug abuse is the use of drug for the function it is not meant, prescribed or recommended [7, 8]. It is a destructive pattern of using a substance that leads to significant problem or misery. For the purpose of this study, drugs are chemical substances that alter the function of one or more body organs or the process of a disease. They include prescribed medicines, over the counter remedies and substances such as alcohol, tobacco, and drugs of abuse that are used for no medical purposes. Drug abuse on the other hand, will be seen as the use of drug(s) for the function it is not meant, prescribed or recommended. Examples of these substances include prescribed medicines, alcohol, tobacco, cocaine, heroin, Valium 5, amphetamines, tramadol, and codeine among others. Studies have identified some socio- demographic variables that are related to attitudinal disposition towards drug abuse by university students to include gender, and parental drug use and peer pressure [9]. These variables will be investigated to determine how they relate to level of drug abuse among university students of Ebonyi State.

Evidence from research indicates that clear differences exist between women and men in their use of drugs. First women consume less alcohol than men when they drink, secondly, women drink alcohol less frequently than men and thirdly, women use illicit drugs far less than men and hence develop drug related problem less than men [10,11]. Studies also reported a greater occurrence of illicit substance use among males than among females [12, 13]. Both surveys have consistently documented this pattern over the years. NHSDA survey, further reported a higher rate of illicit substance use (any illicit drug) among men than women, 8.5% vs. 4.5%, nearly double. Men report higher rates of cocaine use 0.9 percent versus 0.5%, alcohol use (58% vs. 45%), binge drinking (23% vs. 8%), and heavy drinking (8.7% vs. 2.1%) [12]. The University of Michigan compiled yearly data on the substance use of 8th, 10th, and 12th graders, college students, and young adults in the MTF study [14]. They maintained that drug use is not equally distributed by gender. Males are more likely to use most illicit drugs. And they report using such drugs earlier and longer than females. Males also use all illicit drugs at a higher frequency and in larger amounts than females.

A number of school and college surveys in Nigeria that alcohol use is the most common among students, with many drinking students having had their first drink in family settings [15]. Study also posited that parental attitudes towards alcohol and drug use are associated closely with young children's attitude towards alcohol and drug abuse [16]. Many studies have singled out the family as the most significant determinant of substance abuse by the youth at the intrapersonal level. It is observed that exposure to alcohol in the family cause risky behaviors such as rebelliousness and having friends who drink [17]. In addition, literature shows that youths that have parents who drink heavily, and/or are tolerant of alcohol use, as well as having close acquaintances who drink, places youths at risk for heavy drinking. In other words, role modeling plays a significant part in the substance abuse space. Youths tend to imitate the behaviours of their parents, guardians or other influential people and quantitative and qualitative evidence suggests that those with adequate role models are less likely to indulge in substance abuse [18, 19]. On the other hand, a nurturing home environment, encompassing family supervision and monitoring, together with open communication lines between parents and children, has been empirically determined to be strongly associated with low substance abuse [20].

Peer pressure is the direct encouragement from one's age group to engage in activities that they may or may not want to engage in. Peers act as an influential model by introducing, providing or pressuring risky activities like drug use to other peers [21, 22]. By modeling these behaviours to peers, university students are viewing drug abuse as a positive and socially acceptable experience [22]. Empirical studies indicate that peer pressure is one of the most significant and most consistent predictors of substance use among youth [23, 24]. Peers encourage their uninitiated peers to use drugs, and more often drug or alcohol use is celebrated with those taking illegal substances held in high regard. Youth will then want to be accepted by their peers in these substance abuse networks at all costs. Peer pressure is rampant in youth gang networks and other marginalized groups such as street children [25]. Evidence also indicates that youth prefer to discuss issues with their peers more than they would with their family members, teachers, or medical doctors [26]. They value opinions or support of their peers more than any other social structure at their disposal [26]. The pressure to be recognized and accepted by peers and gain meaningful participation inadvertently increases vulnerability of the youth [27].

In Ebonyi State where the present study was carried out, the cultural practices of the area such as marriages, burial ceremonies, church weddings, house warming, family meetings, club and community meetings and so on, expose the people to the use of such psychoactive substances as alcohol, tobacco and cola nuts. During marriage ceremonies for example, tobacco and alcohol are compulsory ingredients and elderly family members are seen by the young ones drinking various forms of alcohol, smoking, snuffing or chewing tobacco and eating cola nuts. This forms the basis where the young in the area begin to try it out and go extra miles by trying other forms of illicit drugs like Indian hemp, cocaine,

heroin metamorphine, tramadol and the likes. A report showed that the prevalence of current use of psychoactive substance in Ebonyi State is more than 50% [28]. The prevalence rate of drug abuse in Abakaliki, the state capital stood at 49.9% with alcohol and Indian hemp being the most commonly abused substance especially among youths [29].

Over the years, cases of rape of defenseless female students, armed robbery, violent attack on lectures, cult clashes leading to lose of lives and so on, were rampant among youths in Ebonyi State. These social vices are possible off springs of drug abuse. In view of the place of the youth in national development, coupled with the believe that the school is the factory where the society is produced, it is necessary to investigate the basis of drug abuse prevalent in the state with the aim of putting the problem in check. Of all the studies conducted in the area of drug abuse in Ebonyi State, none was done in the area of demographic factors influencing drug abuse among university students. It is the belief of the researcher that a careful investigation of the variables of this model of health behaviour, will better generate a suitable intervention that will address the problems of drug abuse in the state adequately hence the locus of the present study.

In order to achieve the objectives of the study the following research questions were formulated to guide the study.

- What is the level of drug abuse among university students in Ebonyi State by gender?
- What is the level of drug abuse among university students in Ebonyi state in relation to their parental use of drug (s)?
- What is the level of drug abuse among university students in Ebonyi State by peer use of drug(s)?

### 1.1. Hypotheses

The study was guided by the following hypotheses that was tested at .05 level of significance

- There is no significant association between student gender and level of drug abuse among university students in Ebonyi State
- There is no significant association between Parental drug abuse and level of drug abuse among university students in Ebonyi State.
- There is no significant association between peer drug abuse and level of drug abuse among university students in Ebonyi State.

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## 2. Material and methods

The descriptive survey research design was conducted from April 2019 to February 2020 among undergraduates of the two public universities in Ebonyi State. The population for this study consisted of all the female undergraduates from the two public universities in Ebonyi State. Based on the existing Data from the registrar's office 2019/2020 academic years, the total population of female students in the State universities is 18859.

### 2.1. Sample Size

A sample of 943 undergraduates were drawn for the study. This signified five per cent of the population. Five per cent chosen was considered adequate as it conformed to the rule of the thumbs as stated by Nwana, that when a population under study is in a few hundreds, the sample size should be 40 – 50 per cent, if it is in many hundreds, 20 per cent of the population should be used, where the population is in the few thousands, 10 percent will be representative of the population, but when in several thousands, 2 – 5 per cent of the population should be considered [30]. However, the population of the present study was in several thousands (18859), hence five per cent of the population was used.

### 2.2. Sample Technique

The Multi-stage sampling procedure was adopted in selecting the respondents for the study. In the first stage, two (2) public universities were selected from all the tertiary institutions in Ebonyi State, using simple random sampling technique of balloting with replacement. The second stage involved the use of purposive sampling to draw 472 undergraduates from each of the universities selected for the sample. At the end of the sampling, 943 undergraduates were drawn for the study.

### 2.3. Inclusions and Exclusion Criteria

The two universities in Ebonyi State were included in the study and only the students present during the time of data collection and willing to consent were included in the study. Other tertiary institution in the State were excluded, also, students who were absent, sick or refused to consent were excluded from at the study.

## 2.4. Instrument for Data Collection

The instrument for data collection was a three-item questionnaire titled: Level of Drug Abuse Survey questionnaire (LDASQ). The instrument was validated by experts in the Department of Human Kinetics and Health Education and Measurement and Evaluation of Science Education Faculty of Education, Ebonyi State University Abakaliki with a reliability Co-efficient of 0.93.

## 2.5. Statistical Analysis

All statistical analysis was done using the Statistical Package for Social Science (SPSS) software batch system. Data was analyzed using Frequency, percentage and Chi-square statistic. The level of significance was set at  $P < 0.05$ .

## 3. Results

Table 1 shows the level of drug abuse among university students of Ebonyi State by gender. More males than females indicated higher level of drug abuse. This was shown by 56.7% of males who abuse drugs at high level while 43.2% of females abuse drugs at low level. The females indicated 48.8% low level of drug abuse while the males showed 51.2% high level of drug abuse. This is a clear indication that the male students abuse drugs more than the female students.

Table 2 shows the level of drug abuse among university students of Ebonyi State by parental drug use status. Students whose parents use drugs indicated 62.6% high level of drug abuse and 37.4% low level of drug abuse while students whose parents are non-drug users showed 67.0% high level of drug abuse and 32.9% low level of drug abuse. Cumulatively 577 respondents representing 70.4% of the total population had parents who use drugs in one way or the other.

**Table 1** Frequency and Percentage Distribution of Level of Drug Abuse among University Students of Ebonyi State by Gender

Gender	Low level	High level	Total
Male	256(48.85%)	168(56.76%)	424(51.71%)
Female	268(51.15%)	128(43.24%)	396(48.29%)
Total	524 (100%)	296(100)	820 (100)

**Table 2** Frequency and Percentage Distribution of Level of Drug Abuse by University Students of Ebonyi State in Relation to their Parent's use of Drug

Parental use of drug	Low level	High level	Total
Users	361(62.6%)	216(37.4%)	577(70.4%)
Non Users	163(67.0%)	80(33.9%)	243(29.6%)
Total	524 (63.9%)	296(36.1%)	820(100%)

**Table 3** Frequency and Percentage Distribution of Level of Drug Abuse Among University Students in Ebonyi State by Peer's use of drugs Status

Peer Drug Use	Low Level	High level	Total
Peer drug users	335(63.00%)	188(37.00%)	524(100%)
Peer non drug users	189(63.6%)	108(36.3%)	296(100%)
Total	524 (63.90%)	296(36.10%)	820 (100)

Table 3 shows the level of drug abuse among university students of Ebonyi State by peer drug use. Students whose peers, abuse drugs at 63.00% high level and 37.00% low level while students whose peers are non-users of drugs, abused drugs at 63.6% high level and 36.3% low level. This indicates that students whose peers use drugs, abuse drugs more than those whose peers are non-users of drugs.

### 3.1. Hypothesis 1

**Table 4** Summary of Chi-Square Analysis of Association between Gender of Students and Level of Drug Abuse among University Students in Ebonyi State

Gender	Low Level	High level	Total
Male	256(270.0)	168(153.1)	424 (424.0)
Female	268(253.1)	128(142.9)	396(396.0)
Total	524(524.0)	296(296.0)	820(820.0)

$\chi^2$  4.72, p = 0.030, Decision, Significant

Table 1 shows that the cal  $\chi^2 = 4.72$  and the p = 0.030 is lower than 0.05. Therefore, the hypothesis of no significant association between gender and level of drug abuse among University Students in Ebonyi State is therefore rejected

### 3.2. Hypothesis 2

**Table 5** Chi-Square Summary of Analysis of Association between Parental Drug Use and level of Drug Abuse by University Students in Ebonyi State

Parental Drug Use	Low Level	High level	Total
Users	361(368.7)	216(208.3)	577(577.0)
Non users	163(155.3)	80(87.7)	243(243.0)
Total	524(524.0)	296(296.0)	820(820.0)

$\chi^2 = 1.5099$ , p = 0.219, Decision, Not significant

Table 2 shows that the cal  $\chi^2 = 1.509$  and the p = 0.219 was greater than 0.05. Therefore, the hypothesis of no significant association between parental drug use and level of drug abuse among university students in Ebonyi State was upheld.

### 3.3. Hypothesis 3

**Table 6** Summary of chi-square analysis of association between peer Drug Abuse and Level of drug abuse among University Students in Ebonyi state

Peer Drug Use	Low Level	High level	Total
Peer drug Users	335(334.2)	188(188.8)	523(523.0)
Peer non users	189(189.8)	108(107.2)	297(243.0)
Total	524(524.0)	296(296.0)	820(820.0)

Table 3 shows that the cal  $\chi^2 = 0.014$  and the p = 0.09 was greater than 0.05. Therefore, the hypothesis of no significant association between peer drug use and level of drug abuse among university students in Ebonyi State was up held.

## 4. Discussions

Findings in Table 1 revealed that more males than females abuse drugs among university students in Ebonyi state. This finding is expected and interesting because it would be a surprise to find the contrary. It is also widely supported by several studies who revealed males abuse drugs more than females [31-34]. However, this finding is at variance with the study who reported that female adolescents who live in urban areas abuse drugs more than males who live in rural

areas [35]. This finding is also supported by study who revealed that there was no significant difference between the level of drug abuse among males and female students in his study [36].

Results in Table 1 hypothesis 1 showed the summary of chi-square analysis of association between gender of students and level of drug abuse among university students in Ebonyi state. The result showed that the  $\chi^2$  value of 4.72,  $p = 0.030$  is not significant therefore indicating no significant association between gender of students and levels of drug abuse among university students in Ebonyi State was rejected. This result was expected going by the findings of other studies who revealed that clear variations exist between women and men in their use of drugs [10, 11]. First women consume less alcohol at a sitting, second, women drink alcohol less often than men and third, women use illicit drugs far less than men and hence develop drug related predicaments less than men. This finding is supported by the study conducted in Nairobi Kenya who reported that males abuse drugs more than females [31]. However, this finding failed to agree with the findings of other study who observed that there was no statistically significant difference between the levels of drug abuse between males and females in his study [36]. The implication of this finding is that both males and females abuse drugs and that the difference in the level of consumption between males and females may depend on the environment of the individual. However, one of the tasks of this study is how to ensure that this does not continue going by its health implications and the need to develop a society of high moral value.

Findings in Table 3 showed that students whose parents use drugs have higher level of drug abuse than those whose parents do not use drugs among university students in Ebonyi state. This was shown by 577 respondents representing 70.4% of the total population while 243 respondents representing 29.6% indicated that their parents do not use drugs. This finding explains to some extent why there is high level of drug abuse among university students in Ebonyi State. Broody, Kata and Arians, revealed that parental attitudes towards alcohol and drug use are associated closely with young children's attitude towards alcohol and drug use [16]. This finding is supported by the study who revealed that parental drug use was associated with drug abuse among adolescents and young adults [37]. Although the propensity of use of psychoactive substance by youths has become a global emergency that requires desperate measures to curtail. According to Chukwujekwu, youths known to have parents who abuse drugs are known to show extreme level of drug abuse [38]. The implications of this finding is that whatever children learn from their parents, they hold on to it as good and as such parents should be taught to always show a very good example to members of their family so that their children can be good ambassadors of their family wherever they find themselves. This could be one of the reasons why Bronfenbrenner emphasized the interpersonal level of the socio-ecological theory of health behaviour [39].

Results in Table 4 hypothesis 1 show that there was no significant association between parental drug use and level of drug abuse among university students in Ebonyi State ( $\chi^2 = 19.77$ ,  $p = 0.001$ ). This finding is a surprise because according to Broody, Katx and Arians, parental attitudes towards alcohol and drug use are closely associated with young children's attitude towards drug use [16]. This was also supported by the findings of Branstetter, Sabina and Furman, who reported, that parental drug use was associated with increased drug abuse among adolescents and young adults [37]. In further support to the above, the study by Chukwujekwu found that youths whose parents use drugs are known to show extreme level of drug abuse [38]. This is expected because any form of life style copied at the family level will definitively make a significant impact on the future life of the child and drug use is not an exception.

Results in Table 5 showed a summary of chi-square analysis of association between peer drug use and level of drug abuse among university students in Ebonyi state. The results showed that there was no significant association between student's peer drug use and level of drug abuse among university students in Ebonyi State ( $\chi^2 = 0.014$ ,  $p = 0.90$ ). Although this finding is as astonishing as it is a surprise, it is supported by the findings who reported that peer group influence varies by individual characteristics including genetics and competency skills [40]. However, this finding is at variance with many research findings on adolescent and young adults peer pressure and drug abuse [41-45]. The implication of this finding is that something can still be done to reduce peer pressure among adolescents and young adults especially in the area of drug abuse.

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## 5. Conclusion

Based on the findings and discussions of the study, the following conclusions were reached. More males than females abuse drugs among university students in Ebonyi state. There was significant association between student gender and level of drug abuse among university students in Ebonyi state. Level of drug abuse was higher among students whose Parents use drug than those whose parents are non-drug users but this was not statistically significant. Student whose peers use drugs abuse drugs more than students whose peers do not use drugs. There was no significant association between students peer drug use and level of drug abuse among University students in Ebonyi state.

### *Recommendations*

On the basis of the findings of the study, the following recommendations were made:

- Drug education should start at the secondary school level so that students can develop attitude towards drug abuse that will enable them resist the temptation to abuse drugs at the University level.
- The ministry of Education should ensure that all secondary schools and Universities in Nigeria put in place a functional drug policy that will check drug abuse in our public and private institutions.

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### **Compliance with ethical standards**

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#### *Disclosure of conflict of interest*

The authors declare no conflict of interest.

#### *Authors' contributions*

J.N.N, C.O.A, and LNO., conceived and commissioned the study. J.N.N, performed the literature search and screened for the selected studies, extracted the data and wrote the first draft of the manuscript. ENA, REO, EMO, C.O.A, and LNO supervised all aspects of the study. All the authors have read and agreed to the final manuscript.

#### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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