

# Correlates and Modalities of Tackling Substance Abuse Among Tertiary and Secondary School Students in Bayelsa State

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## ABSTRACT

Substance abuse is common among teens and young adults. It has become a public health problem in Nigeria and other parts of the world. This study aimed to determine the correlates and possible modalities of tackling substance abuse among tertiary and secondary school students in Bayelsa State of Nigeria. The study is a descriptive correlational cross-sectional study. The sampling technique used was simple random sampling. A sampling frame was made for six faculties in Niger Delta University. Likewise, this was done for the different classes in the Secondary School from junior secondary two to senior secondary three. The sample size for this study was 308 for secondary school and 384 for tertiary school. A structured questionnaire was used to collect participants' data. A total of 68.4% of males and 31.6% female participated in the study. Peer pressure, early drug use, social gatherings, academic failure, low grades, male gender neighbourhood, and low self-esteem were some correlates of substance abuse and inclusion of substance abuse programs in the school curriculum, restricting accessibility to substances of abuse, allowing professionals to handle medicines and introducing appropriate policies to curb the menace of substance abuse as modalities to reduce substance abuse. The institutions were associated with the correlates of substance abuse.

**Keywords:** Correlates, Modalities, Substance Abuse, Tertiary, Secondary Students.

## INTRODUCTION

Youth drug abuse has become one of the most alarming health-related issues in Nigeria and the rest of the globe [1]. Drug abuse continues to have a devastating impact on both the quality of life and the output of society. Drug overdoses killed an estimated 183,000 people in 2012, with a mortality rate of 40.0% (range: 20.8-49.3%) per million people between

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the ages of 15 and 64 [2]. Substance abuse is a worldwide epidemic that is rising at an alarming rate [3]. Seventy-five percent (75%) will have tried alcohol; half of them will use an illicit drug and over forty percent of them smoke cigarettes by the time they are in high school. More than twenty percent of them, however, use prescription drugs for nonmedical purposes [4]. Adolescent substance abuse has been linked to a variety of causes, including self-described experimental curiosity, peer pressure, parental absence, personality issues caused by poverty, the need for energy to work long hours, the availability of drugs, and the desire to avoid withdrawal symptoms [5]. Schools in Nigeria are plagued by drug usage, according to the Nigerian National Drug Law Enforcement Agency (NDLEA). Around 20% of students in Lagos State have used a psychoactive substance at some point in their life [6]. Students at Nigeria's secondary and tertiary institutions have been studied to discover the most often utilized drugs. According to the survey, the most often used drugs were cigarettes, alcohol, marijuana, tranquilizers, kola nuts, inhalants, and cough syrups [7-9].

Youths and adults who use drugs face a wide range of negative outcomes, including poor academic performance, physical health issues, stigmatization, family and social-economic difficulties, unemployment, and misbehavior [10]. Nigeria has seen a rise in drug abuse-related issues as a consequence of an increase in the manufacturing, distribution, advertising, and easy access of substances, as well as a shift in society's values [11,12]. Aside from child malnutrition [13], substance abuse has increased the mortality and mobility indices in Nigeria. This study was based on the hypothesis that there was no significant difference in the correlates of substance abuse among tertiary and secondary school students in Nigeria. Thus, the correlates and possible modalities of tackling substance abuse among tertiary and secondary school students in Bayelsa State of Nigeria were evaluated in the study.

## METHODS

### *Study Area and Population*

This study was conducted at Niger Delta University and Government Model Secondary School Sagbama all in Bayelsa State of Nigeria. The target population for this study is all regular students of Niger Delta University, boarding and non-boarding students of Government Model Secondary School Sagbama. In the 2018/2019 academic session the population of full-time students of Niger Delta University according to the Academic planning unit of NDU gives a total student population of 17169, while that of Government Model Secondary School Sagbama from the school register gives a total of 1342 students.

### *Study Design and Sampling Method*

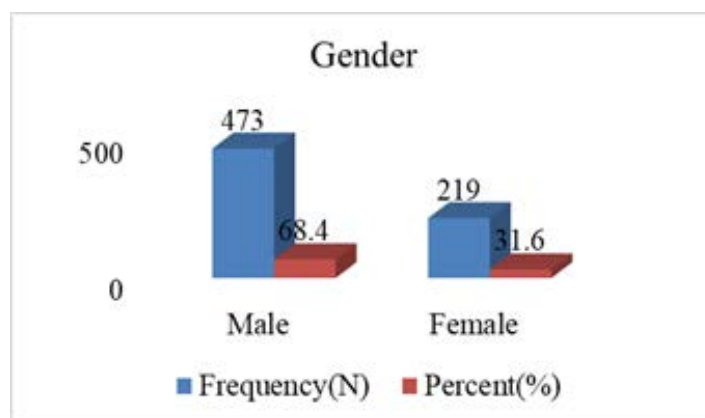
This study utilized a descriptive correlational cross-sectional design. A sampling frame was made for six faculties in Niger Delta University: Pharmacy, Engineering, Art, Social Sciences, Management, and Sciences. Likewise, this was done for the different classes in the Secondary School from junior secondary two to senior secondary three. Then random sampling was done for the various departments and levels in the university setting. Random sampling was also done for the various classes and in their arms in the secondary school. Yamane's (1967) formula was used to determine the sample size. Where 390 were obtained from the university and 308 from the secondary school, bringing the total of students sampled to 698.

### *Data Collection and Analysis*

Data were collected by using an anonymous self-administered questionnaire. Following a pre-test, the final data collected were analyzed with the aid of SPSS version 23.0, and a Chi-square t-test was used for association analysis.

## RESULTS

A total of 700 study instruments were distributed and 692 were retrieved properly filled and used for the analysis. This gives a response rate of 99 percent.

**Demographic Data of Respondents:****Figure 1.** Gender of Participants

A total of 68.4% of respondents were males and 31.6% were females, 23%, 31.1% and 21.5% were respectively aged 12-15, 16-18; and 25-35 years (Figure 1). The majority (94.5%) of

respondents were single, 55.5% were tertiary school students distributed among the 6 Faculties and 44.5% were secondary school students spread across class 3 (JSS3) to class 6 (SSS3).

**Table 1.** Socio-demographic data of respondents (n = 692)

Variable		Secondary		Tertiary		Mean
		N	%	N	%	
<b>Gender</b>	Male	208	67.5	266	69.3	68.4
	Female	100	32.5	118	30.7	31.6
<b>Age</b>	Dec-15	130	42.2	29	7.6	24.9
	16-18	149	48.4	66	17.2	42.8
	19-21	17	5.5	75	19.5	12.5
	22-24	8	2.6	69	18	10.3
	25-35	4	1.3	145	37.8	19.6
<b>Marital Status</b>	Single	305	99	349	90.9	94.9
	Married	2	6	20	5.2	5.6
	Cohabiting	1	3	15	3.9	3.5

*N = frequency, % = percentage*

**Correlates of Substance Abuse**

Responses on perspectives concerning the correlates of substance abuse from the different levels, departments, and faculties in the university and different classes in the secondary school were drawn. The data collected were carefully rated on a 5-point Likert scale of; 1 Strongly agreed, 2 Agreed, 3 Disagreed, 4 Strongly disagreed, and 5 Neutral. It was revealed that some respondents from both secondary and tertiary school students responded positively and negatively on their perspective on the correlates of substance abuse as shown in Table 2. Data showed that 87%, 83.7%, 81.2%,

and 74.4% of respondents respectively with a mean of 52.5 strongly agreed and agreed positively that peer pressure influence, early initiation to drug use, illicit manufacture, and disposal of drugs and certain social gatherings among others as factors associated with substance abuse among students in secondary school. Likewise, 88.1%, 81.3%, 78.9%, and 77.3% of respondents respectively with a mean of 52.4 strongly agreed and agreed positively that peer group influence, early initiation to drug use, illicit manufacture and disposal of drugs, and certain social gatherings (birthday parties, welcome parties) as factors associated with substance abuse among

respondents in tertiary school students as shown in Table 2. Also, data from the study revealed that 72.1%, 70.1%, 67.0%, and 64.6% of respondents respectively with a Mean of 37.1 disagreed and strongly disagreed with lack of commitment to

school, history of abuse or neglect, family history of problem behavior and family history of substance abuse are not factors associated with substance abuse among respondents in secondary school students.

**Table 2.** Correlates of substance abuse

Variable	Secondary		Tertiary		Secondary		Tertiary	
	Positive response		Positive response		Negative response		Negative response	
	n	%	n	%	n	%	n	%
Community neighborhoods are favorable	157	60.0	206	53.7	132	42.8	153	39.8
Family history of problem behavior	41	13.3	65	16.9	198	67.0	235	61.2
Family history of substance abuse	41	13.3	65	17.0	199	64.6	237	61.8
As a result of academic failure	223	72.4	268	69.8	34	17.5	62	18.7
Peer group influence	268	87.0	338	88.1	20	6.5	26	6.8
As a result of low school grades	225	73.1	272	70.8	54	17.5	72	18.7
Lack of commitment to school	43	13.9	69	17.9	222	72.1	260	67.8
History of abuse or neglect	59	19.1	82	21.3	216	70.1	254	66.1
Early initiation to drug use	258	83.7	312	81.3	41	13.3	61	15.9
Not living with one's parents	112	36.4	141	36.7	155	50.3	176	45.9
Certain social gatherings	229	74.4	297	77.3	68	22.1	75	19.5
As a result of low self-esteem	133	43.2	164	42.7	133	43.2	159	41.4
Male gender	195	63.3	236	61.5	73	23.7	90	23.5
Illicit manufacture of drugs	250	81.2	303	78.9	28	9.0	41	1.6
Mean		52.5		52.4		37.1		34.9

*Legend: n – number, % - percent*

While 67.8%, 66.1%, 61.8%, and 61.2% of respondents respectively with a mean of 34.9 disagreed and strongly disagreed with lack of commitment to school, history of abuse or neglect, family history of problem behavior, and family history of substance abuse among others are not factors associated with substance abuse among respondents in tertiary school students as shown in table1 above.

#### **Possible modalities to tackle substance abuse**

Data was collected from the respondents on their opinions concerning the possible modalities to tackle substance abuse from the various classes in the secondary school and the various levels, departments, and faculties in the university. These data collected were carefully rated on a 5-point Likert scale of 5. Strongly agreed, 4. Agreed, 3. Disagreed, 2. Strongly

disagreed and 1. Neutral. Data from the study revealed that 99.4%, 94.5%, 93.8%, and 91.3% of respondents respectively agreed and strongly agreed positively on the provision of counseling facilities, drugs to be handled by professionals, enforcement programs, and the addition of educational programs among others with a mean of 91.8 as possible modalities to tackle substance abuse from respondents from secondary school students. While 99%, 94.2%, 93.5%, and 92.4% respectively with a mean of 91.7 were reported as possible modalities to tackle substance abuse among tertiary school students such as the provision of counseling facilities, drugs to be handled by professionals, provision of recreational facilities and enforcement programs among others. As shown in Table 3.

**Table 3.** Possible modalities to tackle substance abuse

Variable	Secondary		Tertiary		Secondary		Tertiary	
	Positive		Positive		Negative		Negative	
	response n	%	response n	%	response n	%	response n	%
Provision of counselling facilities	306	99.4	380	99.0	1	0.3	2	0.5
Provision of recreational facilities	289	93.8	359	93.5	6	1.9	11	2.9
Frequent hostel checks and monitoring	270	87.7	229	85.7	24	7.7	37	9.7
Additional educational programs	280	90.9	347	90.3	25	8.1	33	8.6
Provision of enforcement program	287	93.2	355	92.4	20	6.5	27	7.0
Counselling sections for parents	252	88.8	348	90.7	6	1.9	18	4.6
Drug rehab programs/centers	281	91.3	353	91.9	22	7.1	25	6.5
Drugs to be handled by trained persons	291	94.5	362	94.2	13	4.2	15	3.9
Penalties and fines for offenders	267	86.7	336	87.5	29	9.4	34	8.9
Mean		91.8		91.7		5.2		5.8

Legend: n -number, % percent

There was no significant difference between the correlates of substance abuse among tertiary and secondary school students. Data showed that there was an association between the correlates of substance abuse among tertiary and secondary school students. All parameters given showed P-value = 0.00 as seen in Table 4.

**Table 4.** Chi-Square Analysis on the Correlates of Substance Abuse Stratified by Institutions

Institutions		My Community neighbor is in favor					Total	x <sup>2</sup>	df	P-value	
		1	2	3	4	5					
	1	0	0	0	0	0	1				
Secondary	1	31	126	118	14	18	308				
Tertiary	2	56	150	133	20	23	384	176.336	10	0.00	
Total	4	87	276	251	34	41	693				
		Family history of problems behavior and conflicts									
	1	0	0	0	0	0	1				
Secondary	1	11	30	104	94	68	308				
Tertiary	2	18	47	124	111	82	384	174.387	10	0.00	
Total	4	29	77	228	205	150	693				
		As a result of academic failure									
	1	0	0	0	0	0	1				
Secondary	0	83	140	42	12	31	308				
Tertiary	0	95	173	55	17	44	384	693.810	10	0.00	
Total	1	178	313	97	29	75	693				

<b>As a peer group influence</b>										
	1	0	0	0	0	0	1			
Secondary	0	158	110	15	5	20	308			
Tertiary	0	203	135	20	6	20	384	693.627	10	0.00
Total	1	361	245	35	11	40	693			
<b>Lack of commitment to school</b>										
	1	0	0	0	0	0	1			
Secondary	0	9	34	113	109	43	308			
Tertiary	0	14	55	135	125	55	384	695.240	10	0.00
Total	1	23	89	248	234	98	693			
<b>Early initiation to drug abuse</b>										
	1	0	0	0	0	0	1			
Secondary	0	159	99	24	17	9	308			
Tertiary	0	193	119	37	24	11	384	693.951	10	0.00
Total	1	352	218	61	41	20	693			
<b>Reduction in my income</b>										
	1	0	0	0	0	0	1			
Secondary	0	140	63	64	27	14	308			
Tertiary	0	178	75	85	29	17	384	693.567	10	0.00
Total	1	318	138	149	56	31	693			
<b>Poor communication with family members</b>										
	1	0	0	0	0	0	1			
Secondary	1	52	99	100	28	28	308			
Tertiary	2	67	122	126	30	37	384	173.046	10	0.00
Total	4	119	221	226	58	65	693			

Legend;  $\chi^2$  - Chi-Square,  $df$  - degree of freedom

## DISCUSSION

The study showed nearly two-thirds (67.5% & 69.3%) of respondents are mostly male for both institutions surveyed. Studies showed that males' entry to secondary and tertiary schools is higher than that of females. National Bureau of Statistics (2015) and other reported studies [14-17].

Data showed the predominant age range as 16-18 years which is similar to other reported studies by Adje DEU, et. al, [18] (11-20 years). Atoyebi, and Atoyebi [15] (16-19years). This is the period of adolescence and youthful activities start as an individual, exploration of self-potentials, curiosity to find out or do things on their own, and some form of independence from parents and guardians. Patton GC, et al. [19]. The majority (94.9%) of respondents were single, which is mostly the schooling stage of life and this is similar to other studies conducted by Njoku, and Nekede [20].

Data revealed the correlates of substance abuse both from secondary and tertiary schools have a positive perspective with 52.5% strongly agreeing and agreeing with peer pressure

influence, early initiation to drug use, illicit manufacture and disposal of drugs, certain social gatherings (birthday parties, welcome parties), as a result of low school grades, academic failure, male gender, community neighborhood is favorable, as a result of low self-esteem, not living with one's parents, history of abuse or neglect, lack of commitment to school, family history of substance abuse and family history of problem behavior. In summary, these above factors have been reported to be enabling or enhancing factors to substance use and abuse. This is consistent with studies conducted by Ongwae MN [21], Lawal and Marafa [22], and Oshodi et al [23]. This is also in line with developmental theorists such as Trucco EM [24], as adolescents and young adults are mostly influenced in using or abuse of drugs, based on risk-taking, peer pressure, sexual drives, and when academic performance is not to their expectations. Also, according to social interaction theory, drugs are being taken to build body mass (muscles) which they imbibe from advertisements from media houses and in social media using athletic-looking males, and bikini-clad women in their commercials. Most adverts, especially

those for alcohol and cigarettes associate substance use with high self-esteem, success, and happiness [25]. This study is similar to other empirical studies whereby related factors such as peer influence, academic pressure, social gatherings, environment, problematic family history, and male gender are commonly associated with substance abuse among students [9,26,27].

While several modalities have been suggested to curb the menace of substance abuse among students at different levels, this study has earmarked a few points drawn from the field experience. Introduction of counseling sections for parents and most drugs should be handled by trained professionals. This is in line with other studies conducted by Abikoye, and Adekoya [28], and Kanmodi KK, et al [29]. Also, the provision of counseling facilities, the addition of educational programs on drug and substance abuse, the introduction of counseling sections among students, the stipulation of penalties and fines for offenders, the establishment of drug rehab programs/centers in schools or related institutions, provision of enforcement programs, more frequent hostel checking/monitoring and provision of recreational facilities in schools were some techniques derived from the survey, which is in tandem with other studies conducted [27,30-34]. This also gives the place to medical professionals, especially pharmacists to utilize their counseling and pharmaceutical care roles and curb the menace of substance abuse [35-38]. Overall, the findings of this study are similar with previous reports [39].

These modalities if effectively put in place; will tackle the menace of substance abuse among tertiary and secondary school students and to a large extent of the society. Data from the analysis showed that there was a significant difference among the tertiary and secondary school students. Thus, the null hypothesis was rejected and an alternate hypothesis 'there is a significant difference in the correlates of substance abuse among tertiary and secondary school students' was accepted. This implies that there is a relationship between tertiary and secondary school students on the correlates of substance abuse such as the neighborhood being favorable to substance abuse, peer pressure, early initiation to drug use, and social gatherings [40,41].

## CONCLUSION

This study identified various correlates or factors that necessitate, enable, or enhance the use and abuse of substances from the home front, with friends, and neighborhood to various schooling activities. Whereas, the possible modalities put forward can curb or minimize the use and abuse of substances. Since substance use and abuse have become a public health menace affecting not only the individual but, the general society. Therefore, the government and all relevant agencies need to take appropriate steps in curbing this menace, putting strategic measures and formulation of interventional policies capable of curbing or minimizing substance abuse among tertiary and secondary school students; inclusion of drug/substance abuse programs in the school curriculum, setting up substance abuse clubs for students' enlightenment, regular substance abuse educational campaigns and appropriate laws should be put in place for the control and sale of these drugs to students and other users in the populace.

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None.

## CONFLICT OF INTEREST

There are no conflicts of interest among the authors.

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