



**SUBSTANCE ABUSE AMONG STUDENTS OF BAYELSA STATE SCHOOL OF NURSING, TOMBIA**

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**ABSTRACT**

This research study is focused on the factors responsible for substance abuse among student nurses: a case study of the Bayelsa State School of Nursing, Tombia. The aim of the study was to assess the factors responsible for substance abuse among student nurses, the knowledge of the student nurses on substance abuse and frequently abused substances and their determinants. A sample size of 58 students was randomly selected from the three classes of the above mentioned institution. A self-structured questionnaire was used to collate relevant data. Data collected were analysed using tables and percentages. The findings of this study showed that peer influence is a major factor influencing substance abuse among the students. This study also revealed that despite knowledge of the negative effects associated with substance abuse, students are still committed to substance use in the form of alcohol consumption, self-medicated practices and caffeinated beverages. Suggestions and recommendations were made based on the findings from this study.

**KEYWORDS:** Student nurses, caffeinated beverages, alcohol, self –medication, Tombia.

**INTRODUCTION**

Substance use is a major public health concern in global setting and is very common during adolescent period leading to physical or mental health complications. This study assesses the factors responsible for substance abuse among student nurses: a case study of Bayelsa State School of Nursing, Tombia. Approximately 5% of the world's population (200 million people) between 15 and 64 years of age use one illicit drug at least once a year.<sup>[1]</sup> Statistics are staggering when considering cases of substance abuse in our society, with an estimated 16% of Americans suffering addiction and up to 20% of nurses end up clinically in bed. Chemical dependency may involve such substances as alcohol, unauthorized use of prescribed medications, narcotics and illicit drugs.<sup>[2]</sup> Substance abuse also known as drug abuse is a patterned use of a drug in which the user consumes the substances in amounts or with methods which are harmful to themselves or others in the form of substance related disorder.<sup>[3,4,5]</sup> Some studies have suggested that societies observe and imitate the health-related behaviours of nurses and physicians. It is therefore necessary that physicians, nurses, other health professionals and even medical students and students in nursing and midwifery should abstain from substance use.<sup>[6]</sup> Creating both individual and social problems, substance abuse is one of the most serious posing threats against public health,<sup>[7]</sup> American Psychiatric Association divides substance use disorder into two (2)

categories: substance dependence and substance abuse.<sup>[8]</sup> Substance dependence is defined as the inability to quit using a substance despite many efforts accompanied by an increase in the amount of substance used over time, presence of withdrawal symptoms upon quitting, persistent use of the substance despite the problem it causes, spending considerable time looking for the substance, strong desire and need to use the substance, and inability to resist using it. While Substance abuse is the use of substances in such a way that it does harm to oneself as well as others. Although many problems associated with substance abuse are experienced by the users themselves.<sup>[8]</sup>

However, student nurses' knowledge of the professional and personal implication of substance use is not wide spread. Researchers have observed the occurrence of substance use in the form of alcohol consumption, caffeinated beverages and self-medication, etc. among fellow students, prompting this research to want to ascertain the factors responsible for substance abuse among nursing students, determinants for substance use and its effect. Substance related disorders affects many individuals in our society and to be an effective health professional, student nurses must be able to interact with patients, family and friends whose substance use has caused problems in their lives and perhaps most importantly, they need to recognize and deal with such issues that have arise from them.

## METHODOLOGY

### Research Design

A descriptive cross-sectional survey to assess the prevalence of self-medication among clinical students of the Bayelsa state school of nursing, Tombia was utilized in this work.

### Setting for the Study

The research is carried out in the Bayelsa state school of nursing located in Tombia-Ekpetiama village on the way to Niger Delta University under Yenagoa Local Government Area, Bayelsa state. It occupies a landscape of about 120 hectares of low land in the rain forest of the Niger Delta. It is about 50km south of Yenagoa. There is regular road transport between Tombia and Yenagoa, and the school is accessible by land and water. The principal officers of the school are the principal, the vice principal (administrative), the vice principal (academic), the librarian, the student affair officer, guidance and counselling.

### Target Population

This study involved all clinical student of the Bayelsa State school of Nursing of about 145 students.

### Sampling Technique

The sample techniques used in this study was a simple random sampling method. The required sample size was randomly sampled. The figure for the study was gotten by using the percentage method of determining a sample size which states that if the population is a few hundreds, 40% of the total population was used, thus;

$$\frac{40 \times 145}{100} = 58$$

The sample size then is 58.

### Instrument for Data Collection

A self-structured questionnaire was used as the instrument of data collection in this study. It was developed from the literature review and research questions in line with the study objective to elicit detailed and correct information for the respondent.

### Validity of Instrument

Research questions were given to the supervisor for verification attestation, clarity and adequacy of question used.

### Method of Data Collection

The developed questionnaire was distributed to the respondents in the various classes. Questionnaire was explained to the participants before data were collected.

### Method of Data Analysis

Data collected was analyzed based on project objectives and was displayed in tables showing percentage of self-medication.

### Ethical Consideration

Before the distribution of this questionnaire, participants were informed about the research process, they were

told; the participation is voluntary and assured that their information will be treated as confidential.

## RESULTS

The results deals with the collation and analysis of data obtained from the respondents through the questionnaire. 58 questionnaires were distributed to student nurses of Bayelsa State School of Nursing, Tombia which were retrieved, calculated and presented in tables and in percentages.

**Table 4.1: Demographic Data :( Age of respondents).**

Age	Frequency	Percentage %
18 – 23	51	88
24 – 29	7	12
30 – 35	0	0
Total	58	100

Table 4.1 shows that 51 (88%) of the respondents are between the age range of 18 – 23 years, 7 (12%) are within the age range of 24 – 29 and no respondents fall within the age range of 30 – 35.

**Table 4.2: Gender of respondents.**

Gender	Frequency	Percentage %
Male	12	21
Female	46	79
Total	58	100%

Table 4.2 shows that 12 (21%) of respondents are males while 46 (79%) of the respondents are females.

**Table 4.3: Class of respondents**

Class	Frequency	Percentage %
Year 1	19	33
Year 2	20	34
Year 3	19	33
Total	58	100

Table 4.3 shows that 19 (33%) of respondents are year one students, 20 (34%) were year two students while the remaining 19 (33%) were year three students.

**Table 4.4: Marital Status of respondents.**

Marital Status	Frequency	Percentage %
Single	58	100
Married	0	0
Others	0	0
Total	58	100

Table 4.4 reveals that total number of respondents was single.

**Table 4.5: Religion of respondents**

Religion	Frequency	Percentage %
Christianity	58	100
Islam	0	0
Traditionalist	0	0
Total	58	100

Table 4.5 shows that the total number of respondents 58 (100%) was Christians.

**Table 4.6: factors responsible for substance abuse?**

Factors	SD	%	D	%	U	%	A	%	SA	%
Because friends use them, e.g. alcohol	3	5	7	13	2	3	41	71	5	9
Refusal to drink among friends makes one feel lesser.	1	1.72	18	31.28	6	10	31	53	2	3
To beat shyness, e.g. alcohol use	8	14	20	34	22	38	8	14	0	0
Because parents do.	3	5	5	9	32	55	18	31	0	0
For the excitement and pleasure of it	1	1.72	5	9	1	1.72	45	77	6	10
To escape from the stress of school and frustration from lecturers, e.g. use of alcohol	3	5	25	43	21	36	9	16	0	0
To stay alert in class, e.g. caffeine	2	3	23	40	5	9	9	15	19	33
To study for impending exams, e.g. caffeine	1	1.72	6	10	0	0	22	38	29	50

Table 4.6 shows that 41 (71%) of the respondents agreed to using substances in the form of alcohol because their friends did too, 5 (9%) strongly agreed, 2 (3%) were undecided, 7 (12%) disagreed while 3 (5%) strongly disagreed. It also shows that 1 (1.72%) of the respondents strongly disagreed that refusal to drink among friends make one lesser, 18 (31%) disagreed, 6 (10%) were undecided, 31 (53%) agreed that refusal to drink among friends make one feel lesser while 2 (3%) strongly agreed. Also, 8 (14%) of respondents disagreed that they took alcohol to beat shyness, 20 (34%) disagree to this, 22 (38%) were undecided, 8 (14%) agreed, while no respondent strongly agreed. 3 (5%) strongly disagreed to abusing substances because their parents did, 5 (9%) disagreed, 32 (55%) were undecided, 18 (31%) agreed to using substances because their parents did while none

strongly agreed. 3 (5%) of the respondents strongly disagreed that they use substances to escape from the stress of school and frustration from lecturers, e.g. use of alcohol, 25(43%) disagreed, 21 (36%) were undecided, 9 (16%) agreed while none registered under strongly agree. 1 (1.72%) of the respondents strongly disagree to use of alcohol for the excitement and pleasure of it, 5 (9%) disagreed, 1 (1.72%) was undecided, 45 (77%) agreed while 6 (10%) strongly agreed. 2 (3%) strongly disagreed of the use of caffeine to stay alert in class, 23 (40%) disagreed to this, 5 (9%) were undecided, 9 (15%) agreed while 19 (33%) strongly disagreed. 1 (1.72%) of the respondents strongly disagreed to the use of caffeine to study for impending exams, nothing was registered under undecided, 23 (38%) agreed while 29 (50%) strongly agreed.

**Table 4.7: Why do you use self-medication for minor illnesses?**

Reason	Frequency	Percentage %
Because it will save cost	31	53
Because I don't need to go to the hospital	9	16
Because I know the pharmacology of most drug	18	31
Total	60	100

Table 4.7 shows that 31 (53%) of respondents self-medicated because it will save cost, 9 (16%) to save trip to the hospital, and 18 (31%) did so because they understood the pharmacology of most drugs.

Table 4.9 reveals that 52 (90%) of respondents agree that substance abuse can cause organ damage, cancer, infertility and hormonal imbalance while 6 (10%) do not agree with this.

**Table 4.8: Are you aware of the negative effects associated with substance abuse?**

Response	Frequency	Percentage %
Yes	56	97
No	2	3
Total	58	100

Table 4.8 reveals that 56 (97%) of the respondents are aware of the negative effects associated with substance abuse while 2 (3%) are not aware.

**Table 4.10: Can chronic use of certain substances like heroine, tobacco and marijuana lead to mental impairment?**

Response	Frequency	Percentage %
Yes	57	98
No	1	1.72
Total	58	100

Table 4.10 shows that 57 (98%) of respondents affirms that chronic use of the above mentioned substances can lead to mental impairment while 1 (1.72%) does not agree.

**Table 4.9: Can substance abuse cause organ damage, cancer, infertility and hormonal imbalance?**

Response	Frequency	Percentage %
Yes	52	90
No	6	10
Total	58	100

**Table 4.11: Does substance use cause depression, anxiety, mood swings and aggression?**

Response	Frequency	Percentage %
Yes	54	93
No	4	7
Total	58	100

Table 4.11 shows that 54 (93%) of respondents agreed that substance use cause depression and mood swings and aggression while 4 (7%) disagree with this.

**Table 4.12: Can excessive use of caffeine cause peptic ulcer disease?**

Response	Frequency	Percentage %
Yes	55	95
No	3	5
Total	58	100

Table 4.12 shows that 55 (95%) of the respondents agreed that excessive use of caffeine can cause peptic ulcer disease while 3 (5%) believe otherwise.

**Table 4.13: When you consume alcohol, what do you usually drink?**

Response	Frequency	Percentage %
Never	25	43
Beer	28	48
Wine	5	9
Vodka	0	0
Rum	0	0
Others, specify	0	0
Total	58	100

Table 4.13 shows that 25 (43%) of the respondents say they have never consumed alcohol, 28 (48%) says they take beer as their drink of choice, 5 (9%) takes wine as their drink of choice, for the remaining drinks and others to be specified registered nothing.

**Table 4.14: How often do you take alcohol?**

Response	Frequency	Percentage %
Never	25	43
Everyday	0	0
In 2 weeks	2	3
Every month	21	37
Others, specified	10	17
Total	58	100

Table 4.14 shows that 25 (43%) of the respondents said they do not take alcohol, 2 (3%) supplied that they consume alcohol in 2 weeks, 21 (37%) offered that they took alcohol every month, 10 (17%) chose others while for everyday it registered nothing.

**Table 4.15: How often do you use anti-malarial without your physician/s prescription?**

Response	Frequency	Percentage %
Never	4	7
As soon as I feel ill	44	76
Whenever I want to	10	17
Others, specified	0	0
Total	58	100

Table 4.15 reveals that 4 (7%) of the respondents have never taken an anti-malarial medication without a physician's prescription, 44 (76%) admitted to taking anti-malarial as soon as they feel ill, 10 (17%) however, said they used anti-malarial whenever they wanted to; while others did not respond to the question.

**Table 4.16: How often do you use mild analgesic like paracetamol, Aspirin, Proxicam?**

Response	Frequency	Percentage %
Never	8	15
Everyday	6	10
Once a week	13	22
Once a month	31	53
Others, specified	0	0
Total	58	100

Table 4.16: reveals that 8 (15%) of the respondents have never used mild analgesics, 6 (10%) admitted to using mild analgesics everyday, 13 (22%) admitted to using it once in a week, 31 (53%) admitted to using mild analgesics at least once a month, others to be specified registered nothing

## DISCUSSION

This research was conducted to assess the factors responsible for substance abuse among student nurses; a case study of the Bayelsa State School of Nursing, Tombia. A descriptive cross-sectional survey was used through a self-structured questionnaire using the simple random sampling technique to collect data from 58 respondents and analyzed in frequency tables and percentages. The findings illustrated that though the respondents were aware of the negative effects associated with substance use, they are still committed to it. It also revealed that regardless of age or class of the respondents, self-medication practices were done mostly to save cost and increasing knowledge base of the pharmaco-dynamics of most drugs prompted the respondents to self-medication.<sup>[9]</sup> The key factors influencing substance abuse were identified as peer influence, family and social networks.<sup>[10]</sup> However, improved and conscious teaching should be made to student nurses about substance abuse and its negative effects.<sup>[11]</sup>

The analysis and findings are based on the factors responsible for substance abuse among student nurses: a case study of the Bayelsa State School of Nursing, Tombia. Findings from this study based on our research questions shows that 41 (71%) of the respondents use substances in the form of alcohol because their friends did too, 31 (53%) admitted that refusal to drink among friends makes them feel lesser, 8 (14%) agreed to using alcohol to overcome shyness among peers, 18 (31%) agreed to using substances because their parents did too (Table 4.6). All these are consistent with a research work carried out by.<sup>[12:13]</sup> on the work titled "social epidemiology of substance use" which states that family, social network and peer pressure are key influences of substance abuse among adolescents. 9 (16%) of the

respondents agreed to using substances in the form of alcohol to escape from the stress of school and frustration from lecturers. This finding is in also in line with<sup>[14;15]</sup> research on substances used among secondary school students in an urban setting in Nigeria: prevalence and associated factors revealed that out of a total of 402 students of which 43.3% were males and 56.5% were females. 43.5% of the students use substances to relief stress, 46 (77%) of the respondents agreed to using substances for the excitement and pleasure of it, 19 (33%) of the respondents strongly agreed to the use of caffeine to stay alert in class and 29 (50%) strongly agree to using caffeine to study for impending exams. This finding is also in line with<sup>[14]</sup> were 14.9% of the students in their research used caffeine to stay awake for exams. Table (4.7) shows that 31 (53%) of the respondents undertake self-medication because it will save cost. This was congruent with the same research by<sup>[14]</sup> showing that mild analgesics (Paracetamol and Aspirin) were self-medicated to save cost and treat minor illnesses.

Findings from our research as shown in (Table 4.8) reveals that 57 (97%) of the respondents are aware of the negative effects associated with substance use while 2 (3%) are not aware of the negative effects of substance use. Table 4.9 shows that 52 (90%) agreed that substance abuse can cause organ damage, cancer, infertility and the host of others while 6 (10%) of the respondents do not agree with this. This is in agreement with earlier research by Summit Behavioural Health<sup>[16]</sup> 'titled consequences of addiction states' that some physical effectiveness of substance abuse include organ damage, hormone imbalance, cancer, prenatal and fertility issues. 57 (98%) of the respondents agree that chronic use of heroine, tobacco, marijuana can lead to mental impairment (Table 4.10). This is in line with Summit Behavioural Health.<sup>[16]</sup> which states that neurologic and emotional effects of substance abuse include the following mental health conditions like; depression, anxiety, aggression, mood swing, etc. which is consistent with this very research as seen in (Table 4.11) which reveals that 54 (93%) of the respondents agree that substance use causes depression, anxiety, mood swing and aggression<sup>[17; 18]</sup> Furthermore, Table 4.12 reveals that 55 (95%) of the respondents agree that excessive use of caffeine can cause peptic ulcer disease while 3 (5%) believed otherwise.

Table 4.13 shows that 25 (43%) of the respondents have never consumed alcohol, 28 (48%) says that they take beer as their drink of choice and 5 (9%) of the respondents take wine as their drink of choice. 25 (43%) of the respondents do not take alcohol, 2 (3%) agreed that they consumed alcohol in two weeks, 21 (37%) of the respondents says that they took alcohol every month, 10 (17%) shows others as specified (e.g. at parties). Table 4.14. However, our findings showed that 44 (76%) of the respondents admitted to take anti-malarial as soon as they feel ill, 10 (17%) use anti-malarial whenever they wanted to, 4 (7%) have never taken any anti-malarial,

others to be specified recorded nothing (Table 4.15). This finding is in consonant with the research work of<sup>[14]</sup> where the commonest substance use by subjects was anti-malarial with a life-time use prevalence rate of 65.7%. In addition, 31 (53%) of the respondents admitted to using mild analgesics at least once a month, 13 (22%) affirmed to using mild analgesics once a week, 6 (10%) admitted to using mild analgesics every day, 8 (15%) have never used mild analgesics (Table 4.16). This finding are consistent with earlier work done by<sup>[14]</sup> which found out that the subjects also use mild analgesics as the most commonest substance abuse drug.

## CONCLUSION

This study was designed to assess the factors responsible for substance abuse among student nurses: a case study of the Bayelsa State School of Nursing. Respondents were interviewed using structured questionnaires and findings illustrated by their use of substances e.g. alcohol occurred because of peer influence, for the excitement and pleasure of it while the use of caffeine is to study for impending exams. Their knowledge of the perceived effect of substance abuse though high, yet they still have differed reasons and committed to substance use.

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## Conflict of Interest

No conflict of interest among the authors.

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