SUBSTANCE USE AND PSYCHIATRIC MORBIDITY AMONG STUDENTS OF EDO STATE POLYTECHNIC, USEN.

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ABSTRACT.

The objective of the study was to examine the common trend of substances used among a group of tertiary institution students, the presence of psychopathology and the relationship between them. The students of a tertiary educational institution in Edo State (Edo State Polytechnic, Usen) formed the study population. The instrument was designed for socio-demographic data collection and the 12 item General Health Questionnaire (GHQ 12) to screen for psychopathology with a cut off point of 0/1. A total of 172 respondents participated. Males were more (61.6%) with a mean age of 23.32±6.20. A percentage of 43.6 consumed alcohol, while smoking was found in 29.1% and 51.8% do not consume any psychoactive substance. Approximately 54.65% of the respondents had psychopathologies, but this did not have any statistically significant relationship with substance use. Substance use was not significantly associated with psychiatric morbidity in this study population.
***Key Words**; Substance, psychopathology, morbidity*

INTRODUCTION.

Substance use is defined as the consumption of psychoactive agents such as alcohol, tobacco, illicit drugs etc. Often times the individuals who use psychoactive substances are likely to abuse the substance. Substance abuse, also known as drug abuse, is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others (Nutt, King, Saulsbury & Blakemore, 2007) Psychiatric morbidity generally refers to the presence of either or both physical and/or psychological deterioration as a result of a mental or psychological condition (Arimiya'u, Obembe, Audu & Afolaranmi 2013). Psychopathology on the other hand refers to the behaviours or experiences that indicate the present of mental disorders. These psychopathologies predict the presence of a psychiatric morbidity. Thus, psychiatric morbidity and psychopathology could be used interchangeably (Heffner 2014).

According to the National Institute on Drug Abuse (NIDA) which is a United States federal governrnent research institute on substance,, marijuana is the most widely abused illicit substance in the late teenage individuals. This was closely followed, particularly in the United States of America by K2 or ''spice'' which is made up of a wide variety of herbal mixtures that produce an effect similar to marijuana. In Nigeria however, alcohol and coffee were the most commonly abused drugs among the undergraduate youths (Adeyemo, Ohaeri, Okpala & Oghale 2016) Different researchers have expressed diverse opinions about the relationship between substance use and psychopathology. These varied opinions could be due to the findings in the different groups of respondents studied (Brooks, Cohen & Brook 1998; White, Xie, Thompson, Loeber & Stouthamer-Loeber 2001; Ferdinand, Blum & Verhulst 2001).

The use and abuse of psychoactive substances is commonplace in Nigerian universities (Uwadiae & Adayonfo 2016). In some instances it is the " across the counter drugs'' that are dominant (Uwadiae 2010) and in some others the traditional drugs hold sway (Uwadiae & Osasona 2012).It is noteworthy to mention that one of the reasons adduced for substance use by students is to keep awake to read. Some other reasons include using

it as pastime, kill boredom and to feel high. However, for proper intervention on mediating on this anti-social behaviour, a proper profile of the characters involved such as the trend, etc should be studied. Findings from such research can be the basis for intervention strategies for curbing the act of drug use and abuse.. This study therefore sets out to examine the common trend of substance use among a group of tertiary institution students as well as the presence of psychopathology among them. The study also seeks to find out if any relationship exists between substance use and psychopathology in this group. This may add to the existing information pool for current enlightenment programs

MATERIALS AND METHOD

Setting: The Edo State Polytechnic Usen, the venue of our study is located in Ovia South West Local Government Area which is at the west end of the State. Usen town where it is situated is at the boundary between the local government area and Ovia North East. This makes it very accessible to two local government areas geographically. By virtue of this location it is also close to a private university – The Igbinedion University Okada which is located in Ovia North East LGA. The Edo State Polytechnic Usen, was chosen as the setting for this study because the school has been neglected by the state government for a long time. Thus, the students are disenchanted because of lack of intensive academic activities. As a result, there is a possibility that they may engage in the use of substances to fill up idle time. Furthermore, the close proximity of the Polytechnic to Igbinedion University Okada which has been earlier documented to have a high prevalence of the students who use psychoactive substance predicts the fact that the students of the polytechnic may also abuse substances (Uwadiae 2010).

The School provides a two year training course for the award of the Ordinary National Diploma (OND) certificate in the relevant discipline. The Higher National Diploma (HND) which offers further training in the relevant discipline is for now not accredited in the institution. The institution has 5 departments with a total population of 300 students.

Participants and Procedure: It was a survey of the entire student population as all the students in the school were recruited into the study. No distinction was made between students in the respective departments because of the great overlap between courses in the 5 departments (only related courses were approved for accreditation) and the common approach the management has to the issues of the school which does not place a distinction between departments. All the students in the institution already have a secondary school leaving certificate. This means that they do not need any assistance to interpret simple phrases as would be found in the questionnaire

A lecturer in the institution was our research assistant. We had a discussion with him on the instruments used. Possible grey areas that may appear ambiguous(though not expected at this level)were addressed. He was then to enlighten the respondents should there be any questions arising. Permission for administration of questionnaire was obtained from the relevant authority through the help of the research assistant. The questionnaires were placed centrally and information disseminated to all the students through the school information dissemination system on the availability of the questionnaire and their need to fill them. The same central facility was employed in giving out the rules guiding the filling of the questionnaires.- they were to be filled individually and not in groups, confidentiality was needed, honesty was the hallmark of responses and completed questionnaires were to be returned immediately.

Participants were free to refuse enlisting into the process and were also free to opt out if dissatisfied.

Instrument: This was made up of two parts. The first was a socio-demographic data collection sheet. The second was the 12 item General Health Questionnaire (GHQ12). The first sheet which had the demographic details had 22 questions (questions on

substance use inclusive).The second sheet was the GHQ12. All together there were 34 items to respond to. From the pilot study the average student needed less than 10 minutes to complete a questionnaire. The analysis of the GHQ was done using the GHQ method of scoring where zero (0) is assigned to the first two columns and one (1) each to the last two. In this study a positive score was taken as significant because a total score of 1 was regarded as positive for GHQ[1]. The General Health Questionnaire identifies short term changes in mental health (depression, anxiety, social dysfunction). The instrument is reliable only to the extent respondents are willing to make honest responses.

Data Analysis: This was done using the Statistical Package for the Social Sciences (SPSS)

RESULTS

At the time of administration of the questionnaire for the study, the whole student population was not available. A total of 172 students were available to fill the instruments. This formed the number of respondents studied.

Sociodemographics.

Table 1:- Sociodemographic characteristics of the respondents.

Age of Respondents.					
	Number	Minimum.	Maximum.	Mean.	Std Deviation.
Age	172	17.00	52.00	23.32	6.20
Gender of the respondents					
Gender		Frequency		%	
Male Female		106 66		61.6 38.4	
Total		172		100	
Marital Status of the respondents.					
Marital Status		Frequency.		%	
Single Married Divorced.		148 21 3		86.1 12.2 1.7	
Total.		172		100	

The minimum age of the respondents was 17 years, while the maximum age was 52 years. The average age was 23.32 years. The gender distribution of the respondents showed 106 (61.1%) males and 66(38.4%) females. This showed a gender ratio of 1.6:1. The distribution of the marital status showed that they were mostly unmarried(86.1%), as compared with 12.2% who were married and 1.2% who were divorced.

Table 2:- Alcohol consumption by brand and quantity consumed per day.

Use of Alcohol	Frequency.	%
Present.	75	43.6
Absent.	97	56.4
Total.	172	100
Type of Alcohol.		
Type	Frequency.	Percentage.
Local brew (kainkain).	3	1.7
Beer.	43	25.0
Wine.	24	14.0
Gin.	5	2.9
Total	75	43.6
Do not take Alcohol.	97	56.4
Grand Total	172	100

Quantity (bottles) of Alcohol consumed per day.

	No who responded	Minimum.	Maximum.	Mean.	Std. Deviation
Quantity/day	48	1	8	3.00	2.00

T= .619 , df=42 p=-.501

NB; A bottle of alcohol here represents a bottle of beer or a small bottle of gin which a student consumed in a single sitting.

A percentage of 43.6% of the students consumed alcohol, while 56.4% do not take alcohol. The commonest type of alcohol consumed was beer and wine, making 25% and 14% respectively out of the 43.6% who took alcohol. Only 48 out of 75 respondents who took alcohol, were able to state the quantity of alcohol they consumed per day. The findings showed that there was no statistically significant difference in the quantity of alcohol consumed. In terms of the duration of use of alcohol, the study revealed that 60% of the respondents who use alcohol have been on it for a period of 1 – 5 years.

Table 3:-Smoking and type of substance smoked.

Smoking.	Frequency.	Percentage.
Yes.	50	29.1
No.	122	70.9
Total.	172	100
Type of substance smoked.		
Type.	Frequency.	Percentage.
Cigarette.	29	16.9
Cocaine.	4	2.3
Heroine.	14	8.2
Others.	3	1.7
Non smokers	122	70.9
Total.	172	100

The larger majority of the respondents (70.9%) do not smoke in any form. Among the 29.1% of the respondents who smoked, the commonest substance smoked was cigarette. Cigarette smoking was found in 16.9% out of the 29.1% who smoked.

Table 4:-Smoking against use of alcohol

Alcohol use	Smoking.		Total.
	Yes.	No.	
Present.	43(25%)	33(19.2%)	76(44.2%)
Absent.	7(5%)	89(51.8%)	96(55.8%)
Total.	50	122	172(100%)

Among the respondents, 89 making 51.8% of them neither smoked nor consumed alcohol.
The group that smoked and consumed alcohol was 25% of the whole study population.

Table 5:- Alcohol use and psychopathology.

Use of Alcohol	Psychopathology.		Cumulative.
	Psychopathology absent	Psychopathology present.	
Present.	32(41.06%)	44(46.81%)	76(44.19%)
Absent.	46(58.97%)	50(53.19%)	96(55.81%)
Total	78	94	172
X^2 = .578 df= 1 p<.05			

The table above showed the relationship between the use of alcohol and the GHQ Scores of the respondents. (X^2 = .578, df= 1, p<.05)

The table above shows that 41.56% of individuals who had no psychopathology consumed alcohol, while 58.44% do not consume alcohol. Furthermore, among those who had psychopathologies, 53.68% do not take alcohol while 41.98% do consume alcohol. On the whole however , there is no statistically significant relationship between the use of alcohol and psychopathology among these subjects. (X^2 = .578, df= 1, p<.05)

Table 6:- Smoking vs psychopathology.

Smoking.	Psychopathology.		Total
	Absence of psychopathology	Presence of psychopathology	
Present.	25 (32.05%)	25(25.60%)	50(29.1%)
Absent.	53(67.95%)	69(73.40%)	122(70.9%)
Total	78(100%)	94(100%)	172(100%)

X^2= .615 df=1 p<0.05

The table above shows that 32.05% of the group without psychopathology smokes one form of substance or the other, while 67.95% of the group without psychopathology does not smoke. The table also shows that 25.60% of individuals with psychopathology smoke while 73.40% of this group does not smoke. On the whole, there is no statistically significant relationship between smoking and the presence of psychopathology. Consistently, 78(45.35%) of the respondents had no psychopathology, while 94 (54.65%) had psychopathology.

DISCUSSION

The average age of the respondents was 23years. This is not surprising because they are students at the undergraduate level of a higher institution. Furthermore, they were mostly unmarried which was expected. There were more males than females. Interestingly in this African environment, the girl child tends to have less privilege of going to school compared to the male child. The gender disparity in the school enrolment in Nigeria has been in favour of the male gender.(Enebeli 2014). This is in keeping with the findings in this study. The reasons put forward for this by Enebeli 2014, include socioeconomic reasons, sociocultural factors among others..Ihezue (1988) had documented that the male student was more likely to use substance in the Nigerian environment. For the individuals who have been using alcohol, they have been using the alcohol for duration of 1 to 5 years on the average up to the time of the study. Since the mean age of the respondents was 23 years, it can be inferred that most of the respondents began to consume alcohol between the age of 18years and 23 years. The age of onset of the consumption of alcohol in American population has been documented to be earlier than the findings in this study. Age 14 was found by Grant et al (1997).

The beer brand of alcohol was the commonest form of alcohol consumed by the population which took alcohol in this study. This is similar to the findings of Obot (2000). The possible reason could be that the beer brand is the most common brand available in the campus environment since the respondents were purely students. Another possible reason for the higher use of the beer brand could be because beer is said to be at the centre of the alcohol industry by Obot (2007). The preparation of alcohol commonly consumed after the beer was the alcoholic wine, while the locally brewed alcohol and the gin were least consumed. The level of education attained so far by the students, might play a role in discouraging them from taking the locally brewed alcohol and gin in addition to the fact that these brands may not be readily available in the campus environment. The majority (56.4%) of the respondents however, do not take alcohol. Again, this is not surprising because the study population comprises young adults who are students vigorously pursuing tertiary education. The undergraduate study status may bring some level of discipline to the majority of them, thereby making them to stay away from alcohol. In the same context, it is interesting to note that the majority of the respondents do not smoke in any form. It could be the impact of the campus environment and the education the respondents are exposed to that deters a lot of them from smoking.

In this study, neither the use of alcohol nor the smoking of substances was found to be statistically related to positive GHQ scores. This implies that the use of substances has no relationship with the presence of psychopathology in the respondents. The study by Brooks et al (199) showed that if individuals were followed up for a good length of time, a significant relationship was found to exist between earlier adolescent drug use and later development of psychopathology in adult life. Friedman et al (1987) hold the view that there is an additive or what was also referred to as a cumulative interaction between substance use and psychopathology. What this implies is that having a psychopathology contributes to the possibility of substance use, and the other way round can also occur ie the use of substance contributes to the tendency to develop psychopathology. Other researchers have however documented that a lot of factors interplay in a young person leading up to substance use and not just psychopathology alone (Ferdinand et al 2001).

Conclusion

The average tertiary institution student in this study is a male, half of them consume one form of substance or the other, commencing the habit between the age of 18 and 23 years. The beer brand was the commonest form of alcohol consumed, while cigarette was the commonest item smoked. Although approximately half of the respondents (54.65%) had psychopathology, however substance use was not found to be significantly associated with psychopathology in these respondents.

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