ORIGINAL ARTICLE

The prevalence of alcohol consumption among undergraduates of Imo State University Owerri, Nigeria

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ABSTRACT

Background: Alcohol consumption implies the ingestion of any alcoholic drink or beverage. When digested, alcohol is metabolized by the liver to release its active ingredient, ethanol. Alcohol misuse is a very important global health problem with a pattern of abuse varying in different parts of the world. According to the World Health Organization (WHO), more than one-third of the world's population has tasted alcohol. The health and social effects are so enormous as it predisposes to, and causes or aggravates a wide range of diseases which can lead to death in some cases.

Objective: To determine the prevalence of alcohol consumption among undergraduates of Imo State University, Owerri, Nigeria.

Methodology: This was a descriptive cross-sectional study. Data were collected using a semi-structured, self-administered questionnaire, collated, analyzed and presented using tables, bar charts and pie charts.

Results: Of the 350 respondents, 63% consumed alcohol. Out of this, 42% were males, and 21% females. The average number of bottles of beer consumed per day was two, and 63% of those who drank alcohol were introduced to the act by friends and course mates, 21% by relatives, 12% assumed the habit based on personal decision and 3% were enticed by radio and television adverts. Amongst the respondents, 86% drank alcohol for personal enjoyment and satisfaction, 26% drank for relaxation with friends and 15% to cool off tension in times of anxiety or depression.

Conclusion: The prevalence of alcohol consumption among undergraduates of Imo State University Owerri was high, with more males involved than females.

Keywords: Beer, consequences, friends, intake, misuse, students

INTRODUCTION

Alcohol, primarily in the form of ethyl ethanol has occupied an important place in the history of mankind for at least 800years. In the Western society, beer and wine were main staples of daily life until the 19th century.¹

Today, alcohol is widely consumed like other sedative-hypnotic drugs, and in low to moderate amount it relieves anxiety and causes a feeling of wellbeing, or even euphoria. Alcohol is, currently, the most commonly abused drug in the world.²

People who continue to drink alcohol, are at the risk of developing diverse medical and social complications, which costs are staggering.³ Also, excessive intake of alcohol is associated with crimes such as petty stealing, driving offences, fraud, sexual offences and violent confrontations.⁴

It is, therefore, pertinent to identify the factors that influence the use of alcohol among youths, and make appropriate recommendations to curb the act.

METHODOLOGY

Study Area: The study was conducted in the Imo State University. It is a State-owned tertiary institution located in Owerri, the capital city of Imo State, Nigeria.

Study Population: This was made up of 14,356 students in the various faculties of the university: Education with a population of 4,329 students, humanities 3425 students, sciences 3531, law 2743 and clinical medicine 328.

Study Design: This was a cross-sectional descriptive study.

Sampling Method: The research was carried out using a simple random sampling technique.

Sample Size Determination: This was determined using this formula:

$$n = \frac{Z^2 x P < Q}{d^2}$$

for a population >10,000

n = Desired sample size

z = Standard normal deviate corresponding to 95%, confidence = 1.96

p = Proportion in the total population being estimated i.e. 65% = 0.65

q = 1 - p = 0.35

 $d = degree \ of \ accuracy = 0.05$

Substituting the values in the equation above:

$$n = (1.96)^2 \times 0.65 \times 0.35$$

$$(0.05)^2$$

$$n = 3.84 \times 0.65 \times 0.35$$

$$0.025$$

n = 349

Therefore, the sample size was 349, but this was projected to 350.

Data Collection and Analysis: Data was collected using a self-administered semi-structured questionnaire with a provision for non-response. The questions were on the respondents' bio-data, and use of alcohol. Data was analysed using *EPI-INFO* 2010 version.

Ethical Consideration: Written consent was obtained from the Ethical Committee of the University before the study was carried out. Also, verbal consent was obtained from the respondents and assurance of confidentiality given.

RESULTS

A total of 350 respondents were interviewed, out of which education students constituted the majority, 105 (30%) while medical students were the least 8 (2%), see Table 1. Most of the respondents 256 (73%), were males, see Table 2.

Table 1. Survey of respondents

Faculty	No.	0/0
Education	105	30
Humanities	84	24
Law	67	19
Nat. Science	86	25
Medicine	8	2
Total	350	100

Table 2. Gender of respondents

Sex	Frequency	0/0
Male	256	73
Female	94	27
Total	350	100

Figure 1 shows that majority of the respondents 126 (36%) were within the age range of 20-24years, followed by 105 (30%) in the range of 25-29years, while the least 7 (2%) were above 40years of age. Majority of the respondents 135 (39%) were in the second year of study, followed by 82 (23%) in their first year, while the least 2 (1%) were in their sixth year, see Table 3.

Figure 1. Bar chart of respondents

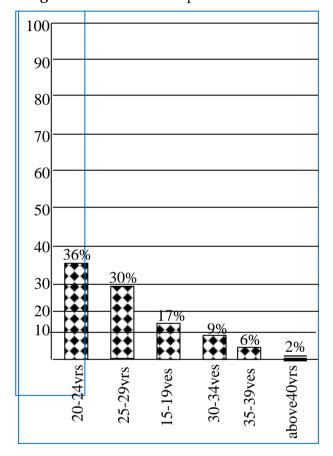


Table 3. Respondents' years of study

Year of study	Frequency	0/0
Second year	135	39
First year	82	23
Third year	57	16
Fourth year	46	13
Fifth year	28	8
Sixth year	2	1
Total	350	100

Out of the 350 respondents 221 (63%) consumed alcohol, out of which 147 (42%) were male consumers, see Table 4.

Table 4. Frequency of alcohol consumption

Number of years	Frequency	0/0
3	73	33
2	53	24
4	46	21
1	13	6
<u>≥</u> 6	9	4
Total	221	100

Table 5 shows that 82 (37%) respondents consumed two bottles of lager beer per day, 69 (31%) consumed 3 bottles per day, while 1% consumed 5 or more bottles per day.

Table 5. Average daily alcohol consumption (*Lager beer*)

Number of bottles per Day	Frequency	0/0
2	82	37
3	69	31
1	44	20
4	24	11
<u>≥</u> 5	221	1

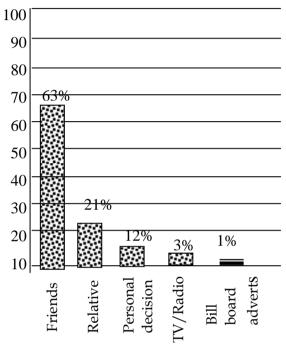
Of the total of 221 respondents who consumed alcohol, 73 (33%) had been drinking for 3years, 53 (24%) for 2years, 46 (21%) for 4years, 13 (6%) for 1year, while 9 (4%) were drinking for 6years and above, see Table 6.

Table 6. Number of years of alcohol consumption

Variable	Frequency	%
Male	147	42
consumers		
Female	74	21
consumers		
Non consumers	129	37
Total	350	100

Figure 2 shows that majority of the respondents 220 (63%) were introduced to the habit by friends and course mates, 74 (21%) by relatives especially drinking parents, while 10 (3%) were attracted by radio and television advertisements of alcohol.

Figure 2. Bar chart on introduction to alcohol consumption



All the respondents were aware of the dangers associated with alcohol use especially liver disease 124 (56%), nervous breakdown 62 (28%), peptic ulcer 27 (12%), and impotence 4 (2%), see Table 7.

Table 7. Knowledge of health effects of alcohol consumption

Health effect	Frequency	0/0
Liver disease	124	56
Mental nervous breakdown	62	28
Peptic ulcer	27	12
Impotence	4	2

Many of the respondents had experienced some social side effects of alcohol consumption such as predisposition to social vices e.g. truancy 157 (71%), fighting,

thuggery and hooliganism 144 (65%), constant lack of money 139 (63%), rejection by friends and relatives 49 (22%), and poor academic performance 24 (11%), with multiple responses allowed, as shown in Table 8.

Table 8. Effects of alcohol consumption on the respondents

Effects	Frequency	0/0
Predisposition to	157	71
social vices		
Violence	144	65
Constant lack of	139	63
money		
Social rejection by	49	22
friends and		
relatives		
Poor academic	24	11
performance		
Health problems	9	4
No effect	2	1

Table 9. Frequency of those who had sought help to quit alcohol consumption

Help	Frequency	%
No	61	73
Yes	23	27
Total	84	100

Table 9 shows that only 23 (27%) of those who drank alcohol, had actually sought help to quit the habit out of the 84 respondents who completed this section of the questionnaire, while 61 (73%) had not.

DISCUSSION

From the study, it could be seen that more males than females consumed alcohol. The prevalence of alcohol consumption among undergraduates of Imo State University Owerri is high (63%).

This seemingly high prevalence of alcohol intake in our environment can be attributed to the fact that unlike smoking, it is socially and

culturally acceptable the society. in Comparing this result with that of Obikwelu, it is worthy of note that the incidence of alcohol intake amongst females is on the increase, and this can be attributed to the new wave of socialization and intermingling between male and female undergraduates.2 More so, the perception that some brands of alcoholic drinks like Smirnoff ice and Gordon Spark (brands of larger beer) were specially designed for females as they contain a lesser percentage of alcohol than other beer brands, had contributed to the increase in alcoholic intake amongst female undergraduates.7

Similarly, in a study carried out in 2005, an equally high rate of alcoholic intake was found among both males and females at corresponding educational levels in Taiwan and Sweden.⁵

The above finding was a reverse of that from a research work done among British doctors in the year 2000 which revealed that alcohol intake among female doctors was higher than among male doctors.⁶

A greater percentage of the respondents consumed an average of two bottles of alcohol (beer) per day. Also, majority of the respondents had been drinking alcohol for up to three years. From the statistics gathered, most students were introduced to alcohol consumption by their friends and course mates (63%), while 86% viewed the habit as enjoyment.

A good percentage of the respondents were aware of the health implications of excessive alcohol consumption but only few (38%) desired to quit alcohol consumption. Among those that desired to quit the habit, only 27% of them had received help. This may be attributed to non-availability of rehabilitation centres in our environment.

Concerning the effects of excessive alcohol consumption, the respondents experienced more of the social side effects, with predisposition to social vices and violence ranking the highest. Alcohol use can lead to

an increase in sex drive, and when intoxicated, one is more vulnerable to rape and violence.³

Alcohol consumption can cause aggression towards others which can result in loss of friends and severing of relationships with the family and loved ones.³ And a woman under the influence of alcohol may attract acquaintances that she would not normally socialize with if she was not drinking. These people can persuade her to do things she would not do under normal circumstances.³

Family problems in the form of increased family tension, tendency to provoke quarrels and violence, destabilized relationships, mistrusts between spouses, anxiety, depression, social withdrawal, divorce and behavioural problems in children and under performance at school as a result of parental problems are common ill effects of excessive alcohol consumption.³

Other social effects include difficulties at work place such as deterioration in performance, truancy, repeated dismissals, ultimately leading to unemployment on the long run. ⁴

Medical problems associated with excessive alcohol intake include liver cirrhosis, Korsakoff's psychosis, Wernicke's encephalopathy, impaired judgment leading to increased risk of road traffic accidents, malformation of the foetus in utero, cardiomyopathy, heart failure and arrhythmias.^{7,8,9} However, only 1% of the respondents who attested to alcohol health consumption experienced had problems associated with excessive alcohol intake.

The study, therefore, illustrates the fact that alcohol intake is largely a behavioural problem, thereby, necessitating that the design of interventional methods should be modified and directed towards attitudinal and behavioural changes, which will make meaningful impact on the long run.

RECOMMENDATIONS

- To assist in reducing the prevalence of alcohol consumption, the following are recommended:
- 1. More enlightenment of the youths on the dangers of excessive alcohol consumption through seminars and public lectures, to further increase their awareness on the health and social effects of the act. This should be aimed at behavioural change.
- Adverts in the form of fliers, posters, billboards or radio-television jingles that encourage alcohol consumption should be prohibited within the university premises and environs, so as not to entice the students.
- 3. Stricter control on the sale and use of alcohol within the university premises.
- 4. Counseling and help centres should be provided in all the university faculties and the Teaching Hospital to assist those who want to quit the act to do so effectively.

CONCLUSION

The study revealed that the prevalence of alcohol consumption among undergraduates of Imo State University Owerri was high. Also, alcohol consumption is an addictive habit with varying health and social effects, some of which were reported by many of the respondents.

REFERENCES

- 1. Akuzu AN, Osindi JK. Development of Tobacco and Alcohol use. *Journal of Health* 2002; 18:108-115.
- Obikwelu SC. CNS effects of alcohol and long term hazard of prolonged use. A research work on biotechnology Department, of Biotechnology Nnamdi Azikiwe University Awka 2003.
- 3. Covellic G. Social impacts of excessive alcohol consumption. Available at eyow.com (*last accessed 20/6/2011*).
- 4. Social complication of alcoholism. *In:* standard treatment guidelines, Federal Ministry of Health 2008. Chapter 4:43.
- 5. Koong SL, Nakushima AK. Prevalence of behavioural risk factors in Taiwan. *International Journal of Epidemics* 2005; 11:38-41.
- 6. Alcohol use in the United Kingdom www.bbc.uk//news/health/21586566 (last accessed 21-8-2013).
- 7. Albeider JU. Harmful Effects of alcohol elaborated. *America Journal of Health* 2007; 3:50-55.
- 8. Chennet L, Mikee M. Alcohol and cardiovascular mortality in Moscow. *Journal of Epidemics and Community Health* 2002; 52:77-79.
- Kvenig W, Sund M. C-reactive protein, a sensitive marker of inflammation, predicts future risk of coronary heart disease in initially healthy middle aged men. Circulation Journal 1999; 237-242.
- 10. Falase AO. Alcohol induced neurological disorders. *In*: Compendium of Clinical Medicine, 23rd Edition. Olu Akinkugbe (*Ed*), Spectrum Books Publishers Ibadan 2003; 10: 792-796.