



# Alcoholic Beverages and the Health of Young Persons: How Do Undergraduate Students in Remo, Southwest Nigeria See It?

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## Summary

### BACKGROUND

Young people were hitherto assumed to be very healthy until various lifestyle-related illnesses were reported among them. Excessive alcohol intake, often driven by a wrong perception of its consequences, is associated with several diseases and nutritional disorders. This study, therefore, assessed the perception of alcoholic beverages and their associated factors among undergraduate students in the Remo area of Ogun State.

### MATERIALS AND METHODS

A cross-sectional study was conducted among 420 undergraduate students in the Remo Area of Ogun State, southwest, Nigeria, selected via multi-stage sampling. Data was collected using a validated, semi-structured, self-administered questionnaire and analyzed using SPSS 23.0. Relevant descriptive and inferential statistics were calculated, with  $p < 0.05$ .

### RESULTS

The mean age of respondents was  $20.12 \pm 2.2$  years. About 98% of respondents were full-time students. Alcoholic beverages were perceived to be stress relievers (55.1%); social drinks (57.1%); aphrodisiacs and performance enhancers (71.5%); promoters of male-female bonding (43.9%). Less than 5% were willing to recommend them to friends.

### CONCLUSION

Perception of alcohol consumption was good (83%) among respondents. It was associated with a history of alcohol consumption and religion. Adequate and targeted nutrition education should be made available to undergraduate students of tertiary institutions on the ills of excessive alcohol consumption.

*Keywords:* Alcoholic, Drinks, Views, Students, Ogun, Health

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## Introduction

In recent years, the health of adolescents and young persons has become of great importance partly due to the increase in the incidence of non-communicable diseases among them. The population of adolescents and young

persons in sub-Saharan Africa has significantly increased over the years with its attendant health challenges (1). Many of these challenges are linked to the lifestyle choices of this youthful segment of society. Poor dietary practices, substance use (including drug and alcohol misuse), and increased sedentariness in addition



to social media addiction have contributed immensely to the morbidity and mortality recorded. Alcohol consumption, when inappropriate, is a leading cause of premature mortality all over the world (2,3).

Over the years, studies have demonstrated a high prevalence of alcohol use among students in various institutions in Sub-Saharan Africa (4-8) and the general population (9). Youth drinking is implicated in many social and behavioural problems in developing countries, which may be driven by some socio-cultural factors in the larger community (3,10). In Nigeria, alcoholic beverage consumption is associated with cigarette smoking, drug use and sexual risk-taking, including sex without condoms and having multiple partners (11, 12). Binge drinking and high-risk consumption of alcoholic beverages, in terms of volume, the concentration of alcohol and nature of the beverage, are also on the increase in the country (11,13).

Students in the university and other tertiary institutions consume alcoholic beverages in large volumes and experience varying consequences. This behavioural pattern is influenced by several cultural and societal beliefs and values, including the opinions of friends and colleagues (14). Media portrayal of alcohol consumption, family and religious values, as well as educational exposure, may influence the consumption patterns of young people (3).

Perception of alcoholic beverages and the attendant health implications can significantly influence students' consumption patterns. Tenacious marketing and social acceptance of alcoholic drinks have also shaped the views of many young people regarding the consumption of such beverages (15). Students in the tertiary institutions in the Remo region are mainly youthful and have similar experiences as their peers in other parts of sub-Saharan Africa.

There has been very little research work carried out on alcohol consumption among young persons in Ogun State. To the best of our knowledge, there is no documented report on the perception of alcohol consumption among students of tertiary institutions in the Ogun-East senatorial district. This study, therefore, assessed the perception of alcoholic beverage consumption among young people attending tertiary institutions in the Remo area of Ogun State.

## **Materials and Methods**

### ***Study area***

This study was carried out in the Remo division of Ogun State, southwestern Nigeria. Remo is one of the former (five) divisions of the state and has been specially recognized since the pre-independence era, as well as during the western regional administrative era. It now covers three distinct local government areas (LGAs), specifically, Ikenne LGA, Remo-North LGA and Sagamu LGA. Each of the three LGAs is headed by a democratically-elected executive chairman along with other members of the executive council of the LGA. Each LGA is made up of several geopolitical units known as wards, from which representative councillors are elected. Remo-North LGA has ten wards, Sagamu LGA has fifteen wards, while Ikenne LGA also has ten wards. There are three tertiary institutions in the area. The Gateway ICT Polytechnic, Sapade is in Remo-North LGA, Faculty of Basic Medical Sciences, Olabisi Onabanjo University, Sagamu Campus in Sagamu LGA and Babcock University, Ilishan-Remo, in Ikenne LGA.

### ***Study population***

Undergraduate students of the selected tertiary institutions constituted the study population. Only those aged between 16 and 24 years, with no record of treatment for substance use disorder, were recruited into the study.



### ***Study design***

A cross-sectional study was conducted among representative samples of undergraduate students in Remo, Ogun State.

### ***Sample size determination***

A sample size of 420 was estimated based on the formula for descriptive studies,  $Z^2 pq/d^2$ , assuming a prevalence of 50% for knowledge of alcoholic beverage effects among young persons and 10% non-response.

### ***Sampling technique***

The selection of participants was carried out by multi-stage sampling. Proportionate allocation of the sample size was carried out at the initial stage, which was closely followed by a selection of a school/faculty from each institution by simple random sampling. A department was further selected from each pre-selected school by simple random sampling. Students in each selected department were then stratified according to their levels of study and proportionate allocation was repeated to ascertain the number of respondents to be chosen from each level. The final selection of respondents was carried out using systematic sampling.

### ***Study instrument***

A semi-structured, self-administered questionnaire was used for data collection. It obtained information on socio-demographic characteristics, perceptions and beliefs about alcoholic beverage consumption based on previous research works (3,5,6). The questionnaire was pretested at a tertiary institution with similar characteristics as the study location, in Lagos State, Nigeria to ensure surface and content validity. Three research assistants, with a minimum qualification of a national diploma, were recruited and trained for data collection.

### ***Data analysis***

Data analysis was carried out with the aid of the statistical package for the social sciences (SPSS) 20.0. Only 403 of the 420 questionnaires were filled and analyzed. Perception scores were calculated and graded as 'good' and 'poor'. Scores ranging from 0 – 50% were graded as poor, while those above 50% were graded as good. Frequencies, proportions, means and standard deviations were reported. The Chi-square test was used to test for association between categorical variables, with the level of significance ( $p$ ) set at  $<0.05$ .

### ***Ethical consideration***

Participation was fully voluntary. Strict confidentiality was ensured. Written informed consent was obtained from all participants and they were free to withdraw from the study at any time they deemed fit. Approval was obtained from the Health Research Ethics Committee of Olabisi Onabanjo University Teaching Hospital, as well as the institutional review boards at Sapade and Ilishan-Remo before the commencement of data collection. The authors followed the ethical guidelines outlined in the Helsinki declaration.

### ***Results***

A slightly higher proportion (54.3%) of respondents were females; 252 (62.5%) respondents were aged 16 – 20 years; 73.9% were Christians; 55% were studying courses in the social and management sciences. Over 50% of participants had mothers who were traders. See table 1.

All respondents (100%) were aware of alcoholic beverages. About 90% knew they could be wine or beer and contained varying concentrations of alcohol. Easy access to alcoholic beverages was acknowledged by 85.4% of respondents; 51.1% believed bottled beverages were of better quality than canned drinks; 32% believed that imported beverages



were healthier than locally-brewed ones. See table 2.

About a quarter (25.3%) believed that alcoholic beverages made food taste better; 55.1% believed consumption of these beverages made it easier to deal with stress; 71.5% opined that it improved libido; while 21.6% felt

alcoholic beverages enhanced academic performance. See table 3.

Alcoholic beverages were viewed as a cause of ill health by most (84.4%) respondents; 86.8% of respondents believed the higher the concentration of alcohol in a beverage, the greater its harmful effects.

**Table 1:**  
**Socio-Demographic Characteristics of Respondents**

Variable	Perception		Test statistic
	Good (n=334)	Poor (n=69)	
Age (years)			X <sup>2</sup> =5.260 P= 0.072
16 – 20	216 (64.7)	36 (52.2)	
21 – 25	105(31.4)	27 (39.1)	
26 – 30	13 (3.9)	6 (8.7)	
Sex			X <sup>2</sup> =0.158 P=0.691
Male	151(45.2)	33(47.8)	
Female	183(54.3)	36(52.2)	
LGA			X <sup>2</sup> =0.834 P=0.659
Ikenne	183(54.3)	39(56.5)	
Remo-North	109(32.6)	24(34.8)	
Sagamu	42(12.6)	6(8.7)	
Level of study			X <sup>2</sup> =6.981 P=0.073
100	63(18.9)	15(21.8)	
200	84(25.1)	9(13.0)	
300	80(24.0)	14(20.3)	
400	107(32.0)	31(44.9)	
Living arrangement			X <sup>2</sup> =3.224 P=0.199
Hostel	128(38.3)	24(34.8)	
Off-Campus	187(56.0)	37(53.6)	
With parents/guardians	19(5.7)	8(11.6)	
<b>Religion</b>			X <sup>2</sup> =8.537 P=0.014
Christianity	244(73.1)	54(78.3)	
Islam	88(26.3)	12(17.4)	
Traditional	2(0.6)	3(4.3)	
<b>Past alcohol consumption</b>			X <sup>2</sup> =10.467 P=0.001
Yes	106 (31.7)	36 (52.2)	
No	228 (68.3)	33 (47.8)	
<b>Maternal occupation</b>			X <sup>2</sup> =5.059 P=0.167
Housewife/unemployed	8 (2.4)	1 (1.4)	
unskilled	200 (59.9)	43 (62.4)	
Semi-skilled	11(3.3)	6 (8.7)	
Skilled	115 (34.4)	19(27.5)	
<b>Paternal occupation</b>			X <sup>2</sup> =1.531 P=0.675
Trading	101(20.2)	22 (32.0)	
Unskilled	23(6.9)	3 (4.3)	
Semi-skilled	15 (4.5)	5(7.2)	
Skilled	195(58.4)	39(56.5)	



Respondents were of the opinion that consumption of alcoholic beverages contributed to the following behavioral and health conditions: mood swings (78.9%); memory loss (68.2%); increased sexual desire (71.5%); erectile dysfunction (60.8%); muscle weakness and paralysis (32.8%); sleep disorders (76.9%); measles (33.3%); itching sensation (39%); overweight and obesity (50.9%); easy fatigability (75.2%); malabsorption (69.2%); tingling sensations in the limbs (63.8%); high blood pressure (72.5%) and stroke (61.8%). See table 4. Only 3.5% of respondents were unconditionally willing to recommend the consumption of alcoholic beverages to friends and family; 45.4% would recommend it with a lot of caution regarding the volume consumed. Less than one-tenth (8.2%) of respondents were indifferent about that, while 42.9% would not

recommend alcoholic beverages to friends and family members.

Most respondents (83%) had a good perception of alcoholic beverages, while 17% had a poor perception. Perception of alcoholic beverages was not associated with age ( $p=0.072$ ); father's occupation ( $p=0.675$ ); mother's occupation ( $p=0.167$ ); LGA ( $p=0.659$ ) and level of study ( $p=0.073$ ). However, it was associated with religion ( $p=0.014$ ) and a history of previous alcohol consumption ( $p=0.001$ ).

## Discussion

There is no doubt that alcoholic beverage consumption contributes immensely to the global burden of disease, including physical mental and social challenges. Particularly worrisome is the role it plays in the disruption of the physical, mental and social well-being of adolescents and young persons in and out of school (16-18).

**Table 2:**  
*Perception of Availability of Alcoholic Beverages*

Statement	Response	
	Yes (%)	No (%)
Alcoholic beverages include wines and beers	365(90.6)	38 (9.4)
Alcoholic beverages are readily available at most retail outlets	344 (85.4)	59 (14.6)
The alcoholic content of beverages is always indicated as volumes	360(89.3)	43 (10.7)
Imported beverages are of better quality than the locally-brewed ones	129 (32.0)	274 (68.0)
Beverages in bottles are healthier than canned drinks	206 (51.1)	197 (48.9)
Beverages vary considerably in alcohol content	373 (92.6)	30 (7.4)

**Table 3:**  
*Perceived Benefits of Alcoholic Beverage Consumption*

Statement	Response	
	Yes (%)	No (%)
Alcoholic beverages enhance the taste of food	102(25.3)	301 (74.7)
Make it easier to deal with stress	222(55.1)	181 (44.9)
A generous intake has tremendous health benefits	90 (22.3)	313 (77.7)
Improvement of interpersonal communication	193(47.9)	210(52.1)
Beverages enable optimization of fun and recreational activities	235(58.3)	168 (41.7)
Enhances academic excellence	87 (21.6)	316 (78.4)
Alcoholic beverages facilitate male-female bonding	179 (43.9)	228 (56.1)
Consumption of alcoholic beverages improves libido	288(71.5)	115(28.5)
Consumption enhances social connectivity	232(57.6)	171(42.4)



The high level of awareness regarding the availability and types of alcoholic beverages in this study is similar to findings from other studies conducted within Nigeria (8, 15, 19) and in other countries (20,21). This may be due to the widespread consumption of alcohol in several Nigerian and foreign communities. Young people have been noted to consume alcoholic beverages partly because they are readily accessible.

This may promote underage and heavy youth drinking, with their attendant public health consequences (4, 10). The misconception that bottled beverages are of better quality than canned ones, maybe a result of media advertisements and the prevailing drinking culture in many local communities, where adults consume several bottles of alcoholic drinks (13,22). Several things were listed as the perceived benefits of alcoholic beverage consumption by our respondents, of which a lot had no scientific basis. The social connections supposedly enhanced by alcohol are a widely held perception and may be driven by cultural practices and social norms as well as media

portrayal of alcohol consumption as a class-defining activity, depicting some level of sophistication (23,24). A similar view was also reported among undergraduate students of a university in southwest Nigeria (19) and another in southeastern Nigeria (6). In this study, alcoholic beverages were perceived by respondents to be social drinks, enhancing interactions and fun among people, a view buttressed by the findings of previous studies in the southwest and south-south regions of Nigeria (8, 25) and Ghana (4, 26).

Similar to findings from a previous study conducted among undergraduates in southeastern Nigeria, in which alcohol was said to assist in approaching and pleasing people of the opposite sex, our respondents mentioned improved communication and male-female bonding as some of the benefits of alcohol consumption (14). Another study conducted among Nigerian undergraduate students reported that young people consume alcoholic drinks for "a high". Thus, making them attempt things they ordinarily will not, if sober (6).

**Table 4:**  
***Perceived Health and Behavioral Consequences of Alcoholic Beverage Consumption***

Statement	Response	
	Yes (%)	No (%)
Alcoholic beverages cause mood changes	318(78.9)	85(21.1)
Alcoholic beverages predispose to high blood pressure	132(32.8)	271(67.2)
Alcoholic drinks predispose to malabsorption of nutrients	279(69.2)	124(30.8)
Alcoholic beverages can predispose to having a stroke	249(61.8)	154(38.2)
Alcoholic beverages can lead to memory loss	275(68.2)	128(31.8)
Alcoholic beverages predispose to weakness at mild exertion	303 (75.2)	100(24.8)
Tingling sensations in both limbs	257(63.8)	146(36.2)
Alcoholic beverages lead to erectile dysfunction	245(60.8)	158(39.2)
Alcoholic beverages may cause skin reactions	157(39.0)	246(61.0)
Alcoholic beverages may cause poor concentration	292(72.5)	111(27.5)
Reduction in overall quality of life	318(78.9)	85(21.1)
Interrupts schooling and learning activities	321(79.7)	82(20.3)
Interferes with sleep	310(76.9)	93(23.1)



This may imply that in addition to enhancing their ability to approach the members of the opposite sex or an intended partner, alcohol may dampen the natural inhibitions of young people, making it easier to experiment with high-risk behaviours. A study among undergraduate medical students in Lagos,

Many of these misconceptions are passed on from person to person, particularly among peers, which may be a reason for the regular consumption of alcoholic beverages among young persons (7, 10). There is evidence of an association between alcohol consumption and unprotected sex among young people and adults in previous studies (11, 25). It is more pronounced among persons who practice heavy episodic drinking and unsafe alcohol consumption.

In line with findings from other studies carried out among students, our respondents rightly viewed the adverse effects of excessive consumption of alcoholic beverages, particularly the behavioural and systemic effects (5, 15, 19). A few misconceptions were, however, evident from the participants' responses. Contrary to documented evidence, about one-fifth of respondents thought that alcoholic beverages enhanced academic performance (16, 27). While many undergraduate students may resort to alcohol to deal with the academic and psychosocial stress faced on campus, a sizeable proportion, as found in this study, held misconceptions about its efficacy as a reliever of stress (3, 18, 28). Permissive societies may inadvertently pass a distorted view of the importance of alcohol to the overall well-being of an individual, particularly as reinforced by the traditional and new media (24). All segments of society, including school administrators, policymakers, public health officials and the media, must collaborate to provide a health-promoting environment on campus, passing scientifically sound and factual messages on

southwestern Nigeria reported that alcohol was consumed to enhance their boldness (8).

The perceived benefit of alcoholic beverage consumption to sexual wellbeing in this study is in agreement with widely-held beliefs among young people and older adults (14, 25). alcohol and other drugs. Evidence-based approaches to stress management should be taught on campus and at secondary schools. This will go a long way in reducing the proportion of the student population resorting to alcohol as a means of relieving stress (28).

Young people with inadequate information about the health implications of alcohol consumption have been reported to have a high prevalence of alcohol use and risky consumption patterns (29). The public health space needs to be flooded with practical and culturally-acceptable measures, developed through multidisciplinary effort. These should fully address the challenges of unhealthy alcohol promotion and consumption among adolescents and youths (11).

This study shows that a large proportion of undergraduate students in the Remo area of Ogun State have a good perception of alcoholic beverages, in addition to a few misconceptions. It provides baseline information on which adequate information, education and communication interventions can be premised very soon.

### **Study limitations**

This study is fully cross-sectional in design and cannot, therefore, demonstrate any temporal relationship nor establish causality. We studied only undergraduate students in tertiary institutions and so, our findings may not be fully representative of the perception of all young persons in Ogun State, particularly the out-of-school youth. A more robust and encompassing mixed-method research involving out-of-school



youth and those without any formal education will add significantly to the body of evidence on young people's perception of alcohol consumption.

## Conclusion

The perception of alcoholic beverages among undergraduate students in Remo, Ogun State was good and associated with the previous history of alcohol consumption and religion. Targeted health education and promotion for students within and outside the campus will benefit the entire health system. A concerted effort at engaging all major stakeholders will promote the needed sustainable behaviour change.

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## Author contributions

OOS and ZTA conceptualized the study. ZTA and AA collected and analyzed the data. OOS and AA wrote the manuscript. OAJ assessed the manuscript for scientific rigour and revised it accordingly. All authors approved the final draft of the manuscript.

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## Conflict of interest

The authors declare no conflict of interest

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