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Determinants of alcohol use among the youth in the Bosomtwe District, Ashanti Region- Ghana

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Abstract

Background: Alcohol consumption accounts for major health related morbidity and mortality in the world with more than 3 million deaths and increasing global disease burden. The use of alcohol among the youth is very crucial due to prolonged complications established throughout the entire life of the individual.

Objectives: This study aims to determine the factors that influence alcohol use among the youth in the Bosomtwe district of Ashanti Region, Ghana.

Method: A cross- sectional study design was used for this study. The sample size estimated was 383 using the StatCalc tool on Epi Info 7, for the estimated population size with a 5% error margin. P-value of ≤0.05 was considered statistically significant at 95% confidence interval. Responses were collected from participants who consented to the study. The participant selection was dependent on the eligibility criteria for the study. The data was processed and analyzed with STATA 14. Chi- squared analysis was done to establish association between the independent and dependent variables.

Results: 51.7% of the participants from the Bosomtwe district had consumed alcoholic beverage before with 71.86% currently consuming alcoholic beverage. Majority (63.70%) of the participants knew alcohol had adverse effect on the various organs of the human body. 50.51% were introduced to alcohol use by their peers with 51.51% of them being influenced by their peers on the choice of alcoholic beverage. Most of the participants (45.45%) consumed alcoholic beverage due to the content displayed during advertisement with 66.16% being influenced to consume alcoholic beverage following bereaved family member or friend. Almost 70% of the participants consumed their first alcoholic drink between the age of 20-24years. Majority (64.14%) of the participants consumed alcohol just for fun. The significant factors influencing alcohol use in the study were educational status of the participants, gender, information gathered about alcoholic beverages and during bereavement. There were significant association between information regarding alcohol use, policies on alcohol consumption, bereavement of family members and current alcohol consumption with p-values of 0.008, 0.019 and 0.001 respectively.

Conclusion: More than 70% of the participants in the Bosomtwe district were currently consuming alcoholic beverage with 53.55% of them engaging in binge drinking. Most of the participants had suffered some complications following alcohol use. There is the need for appropriate interventions in this area to reduce the morbidity and mortality related to alcohol use.

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1. Introduction

Alcohol, a psychoactive agent forms the basic active component in drinks such as beer, wine and distilled spirit and is the most frequent recreational substances used in the world. The consumption rate is as follows: spirit (44.8 %,), beer (34.3%), wine (11.7%) and when consumed in large quantities cause a spectrum of adverse effects on various organs of the body and affect close relations and the society [1].

Globally, Asia contributed more than 30% of alcohol sales in 2014 and is the fastest growing alcohol market, indicating six times increase over the period. Furthermore, the companies producing alcohol targets the youth because they seek to constitute drinking behaviors which will be attained and accelerated through middle age into adulthood [2]. The change in pattern, quantity and reasons why people use alcohol has shifted from the elderly to the youth and this has contributed to the ascending rise in alcohol related problems [3]. World Health Organization in 2018 estimated that about 3 million died following harmful use of alcohol in 2016. This depicts 1 in 20 deaths as well as more than 5% of the global disease burden. These deaths were found mostly among the young people.

A survey done in America, Western Pacific and Europe revealed that people start drinking alcohol before the age of 15 years and the prevalence among this age group ranged from 50-70% with little difference between boys and girls [1]. A study done in Ghana showed that 43.4% of the youth between the age of 15-35 years were currently engaging in alcohol use with up to 70% having once in their entire life consumed alcoholic beverages [4].

In a study done in 2012, alcohol utilization had stepped up from the eighth highest ranked cause of health-related morbidity and mortality in 1990 to fifth position in 2010 [5]. A United States study revealed that alcohol was the most frequently used drug among adolescents with 4300 deaths occurring annually among 15-20 years of age. Even though the youth consume alcohol in certain instances lower than the adult population, they usually drink larger amounts and are predisposed to binge drinking occasionally [6]. In England, it was noted that the prevalence of binge drinking was 14.3% liken to 20.1% internationally. In South Africa, binge drinking was estimated to be between 7-11% and this was noticed among the adolescent and the adult population [7].

The total alcohol per capita usage in the world among the youth moved from 5.5 liters of pure alcohol in 2005 to 6.4 liters in 2016. The highest levels were seen in countries of the WHO European Region. Females were able to abstain better than males in consumption of alcohol in all the WHO regions [1]. Although many studies have discussed the adverse effects of alcohol, a 2011 study in England portrayed a decrease in diseases such as coronary heart disease, diabetes and ischemic stroke from mild to moderate alcohol consumption saving 15,000 to 22,000 lives yearly. There are various reasons why individuals drink alcohol. However, most people within African countries use it during socio-cultural activities [8]. This is evident during traditional marriages where it is presented as part of the bride price, used during child naming ceremonies, enstoolment and enthronement of chiefs, during festivals, and other social gatherings. Many people turn out to consume more than the allowable units per week and end up with binge drinking. In order to address this issue, the WHO's Alcohol Use Disorder Identification Test (AUDIT) was employed as an instrument for screening and puts the allowable standard drink at 14units per week [9]. In 2016, a study done in Africa involving 47 countries with Ghana been part showed that the proportion of men to women with alcohol related health morbidity and mortality was 4 to 1 and this was attributed to the fact that men do not just consume more drinks but rather engross in heavier drinking behaviors [10].

The increase in alcohol use is attributable to increase in advertisement, poor control or policy measures and quicker development within the alcohol world market [4]. There is increase inflow of advertisement on alcohol mostly on all television shows, radio stations, and social media platforms and on larger billboards within and along the principal streets of major cities and towns in Ghana. In 2017, a review done by the Ministry of Health in Ghana on alcohol and health showed that there are scattered alcohol policies in multiple legislature nationwide, no legal age at which one could purchase alcohol as compared to persons not able to purchase alcohol below 21years in the United States, below 18years in Australia and United Kingdom, no limitation on venue to purchase alcohol and periods of alcohol sales and no limitation on advertisement of alcohol in the entire country [11]. In Ghana, the minimum drinking age is 21years but most people begin drinking alcohol early in childhood [12]. Parental drinking behavior plays a major role in influencing alcohol use among the youth and it was noted that up to 40% of the youth were supplied with alcoholic beverage by parents as their first drink [13]. Bereavement of loved ones such as parents, siblings, close relations or friends influences drinking pattern of individuals especially the youth. This was demonstrated in a study in 2016 where bereavement after a sibling's demise increased the incidence of alcohol consumption many folds as compared to non-bereaved families [14]. The individual who loses either or both parents engage in higher amounts of alcohol consumption and end up with

major complications associated with alcohol use [15]. Most people are seen to consume more alcoholic beverages at funerals grounds and these places serve as fertile grounds in engaging in drinking.

Despite effort from the Ministry of Health (MOH) and Ghana Health Service (GHS) in conjunction with health professionals, alcohol consumption remains an increasing problem among the youth. The study therefore seeks to determine the factors that influence alcohol use among the youth in the Bosomtwe district in the Ashanti region of Ghana.

2. Methodology

2.1. Study design and setting

A cross-sectional study design was used to conduct the study in the Bosomtwe district of Ashanti Region. The district is estimated to have about 104,478 inhabitants and it represent about 3% of the region's total population. The population of the district is mostly youth (40.6%) representing a broad base population pyramid, which tapers off with a small percentage being elderly persons. The district shares common borders with Ejisu-Juaben district, Kumasi Metropolis, Bosome-Freho district, Atwima Kwanwoma District and Bekwai Municipality. For health care delivery, the district has been divided into four sub-districts namely, Amakom sub-district, Kuntanase sub-district, Pramso sub-district and Jachie sub-district. Predominantly, people living in the district are Asantes with few other tribes such as Dagomba, Ga, and Ewe.

2.2. Sampling procedure

A simple random sampling method was used in obtaining the sample population for the study. The sample size estimated was 383 using the StatCalc tool on Epi Info 7, for the estimated population size with a 5% error margin. P-value of ≤ 0.05 were considered statistically significant at 95% confidence interval. The expected frequency was estimated to be 50% due to the nature of findings from studies that have been referenced in this work. A list of all the houses in the communities were obtained from the district-planning department. For houses where there was more than one household, simple random sampling was used to select one. This was achieved by balloting Yes or No and the household that picked yes was selected. In households where there were more eligible participants, the simple random sampling method was still used. This was achieved through balloting and the participants who picked yes were chosen for the study. This procedure was repeated until the total sample size was obtained.

2.3. Data collection tool

The data was collected from inhabitants of Bosomtwe District using administration of questionnaires. The questionnaire was structured to gather information on demography, prevalence and frequency of alcohol use, knowledge and perception the youth had on specific complications attributable to alcohol use and the factors that influence alcohol use. A pre- test was conducted using 10 inhabitants from Ejisu-Juaben district. This was performed by the principal investigator to assess the strength and weakness of the questionnaires and corrections were made before they were finally sent for the actual study.

2.4. Data collection procedure

The data was collected using interviewer-administered questionnaires from 5th August 2019 till 1st August 2020 by the principal investigator and two trained health professionals. The questionnaire was written in English. For participants who were uneducated, the questions were interpreted in their local dialect. The administered questionnaire had both closed and open-ended questions.

2.5. Data Processing and Analysis

The data was processed and analyzed with STATA 14. Incorrect data were double checked with the raw data in the questionnaire and corrected. Data quality was validated using double entry. Association between the dependent and independent variables were tested using Chi- squared test. Questionnaires and information gathered were stored in safe and secured place on the laptop and backup done.

2.6. Eligibility Criteria

Participants in the study were the youth within the ages of 15-35 years in the Bosomtwe district, Ashanti Region. Individual's consent and voluntary participation forms part of the criteria for being eligible to participate in the study.

2.7. Study Variables

The dependent variable for this study was alcohol use and the independent variable were socio- demographics, structural factors, social influences such as parental influence, peer influence, advertisement, individual factors and influence from people within the community.

2.8. Ethical Considerations

Ethical clearance was sought from the Committee on Human Research, Publications and Ethics, KNUST ahead of carrying out the study. The study proposal, data collection tools, informed consent forms and other important documents were submitted to the committee for review. Information on requirement of the study was explained to the participants before the start of the study. Confidentiality and privacy were ensured throughout the entire study where participants' names were not included in the questionnaire.

3. Results

3.1. Socio-Demographic and economic characteristics

Table 1 Socio – demographic characteristics of the participants

Study Participants	N=383
Age Category[a]	
≤19years	24(6.27)
20-24	59(15.4)
25-29	174(45.43)
≥30years	126(32.9)
Religion[a]	
Christianity	290(75.72)
Islam	89(23.24)
Traditional	4(1.04)
Gender[a]	
Male	219(57.18)
Female	164(42.82)
Occupation[a]	
Unemployed	100(26.11)
Self- employed	167(43.6)
Civil servant	71(18.54)
Other	45(11.75)
Marital Status[a]	
Married	153(39.95)
Single	225(58.75)
Divorced	2(0.52)
Widow	1(0.26)
Other	2(0.52)
Educational background[a]	
No formal education	11(2.87)
Primary	32(8.36)
JHS	75(19.58)
SHS	128(33.42)
Tertiary	137(35.77)

a= n (percentage)

Table 1 shows the mean age distribution, standard deviation and comprehensive details of the demographic characteristics of the participants. A total of 383 participants were interviewed with the mean age of participants in the study being 27.4. The deviation from the mean value for the study was 4.46. The age groups for the participants were categorized as 19years and below, 20-24 years, 25-29 years, and 30 years and above. A larger proportion of the participants were between the ages of 25-29 years (45.43%). Most of the participants were Christian 75.72%, followed by the Islamic religion (23.24%) and then the traditionalist (1.04%). Out of the 383 participants, 57.18% were males and 42.82% were females.

With regards to occupation, most of the participants were self- employed (43.6%) with the rest being unemployed, working as civil servants and others preferred not to state their occupation. Majority of the participants were single (58.75%) followed by those who were married (39.95%). Few of the participants were either divorced or widowed (0.52% and 0.26% respectively). 35.77% of the respondent had attained tertiary level of education with 2.87% of the participants with no formal education.

3.2. Prevalence and Frequency of Alcohol use among the Youth

Table 2 Prevalence and frequency of alcohol use among the youth

Variable	N= 383 (%)
Have you taken alcohol before	
Yes	198(51.7)
No	185(48.3)
Type of Alcoholic beverage consumed	
Beer	66(33.33)
Wine	51(25.76)
Spirit	2(1.01)
All	45(22.73)
Other	34(17.17)
Currently consume alcohol	
Yes	142(71.86)
No	56(28.14)
Expenditure on alcohol	
0-15	93(46.97)
16-30	63(31.82)
31-45	14(7.07)
46-60	18(9.09)
61-75	4(2.02)
76-100	6(3.03)
Age when consume first alcohol	
19years and below	3(1.52)
20-24	138(69.69)
25-29	54(27.27)
30years and above	(1.52)

Drinks taken in a sitting	
One drink	49(24.74)
2-4 drinks	43(21.71)
5-8 drinks	42(21.21)
More than eight drinks	64(32.34)
Frequency of alcohol consumption	
Daily	3(1.55)
Twice a week	48(24.24)
3-4 times a week	16(8.25)
Once a month	45(23.2)
2-3 times a month	32(16.49)
Other	54(27.84)
Why do you drink alcohol	
Fun	127(64.14)
Stress relieves	20(10.10)
Appetizer	17(8.58)
Social drinker	32(16.16)
Other	2(1.02)

Table 2 gives a detailed response from the participants with regards to the prevalence and frequency of alcohol use. Out of 383 participants, 51.7% of them had taken alcoholic beverage before. 33.33% of the participants consumed beer, followed by wine (25.76%). 22.73% preferred all types of alcoholic beverage with others (17.17%) drinking locally made spirit with herbs. 71.86% of the participants currently consume alcoholic beverage. It was noticed that most of the participants who consume alcohol spent up to 15 cedis on their preferred beverage at a sitting followed by those who spend between 16-30 cedis. The least was recorded for those who spend between 61-75 cedis. Larger percentage of the participants (69.69%) consumed alcohol as early as between the ages of 20-24 years, followed by those between 25-29 years with the least among 19years and below and 30years and above.

The number of drinks consumed by the participants at a particular point in time was asked. It was noticed that 32.34% consumed more than 8 drinks at a time with 21.21% drinking at least 5-8 drinks. This amounts to 53.55% of the participants involving in binge drinking. Most of the participants (27.84%) consumed alcoholic beverages more than 6 times in a month. Majority of the participants consume alcohol just for fun (64.14%). This was followed by 16.16% who are social drinkers and then 10.10% who consume alcohol to relieve stress.

3.3. Respondents' knowledge on adverse effects of alcohol use

Table 3 Respondents' Knowledge on adverse effect of alcohol

Variable	N = 383 (%)
Do you know alcohol adversely affect the human body	
Yes	244(63.70)
No	139(36.30)

Table 3 shows that out of the total number of participants interviewed, 63.70% of them knew that alcohol had adverse effect on the various organs of the human body with 42.82% stating that it causes liver problems, followed by 38.64% stating it causes kidney problems, and then 35.25% stated it causes heart problems. 33.68% of the participants mentioned it causes mental health problems.
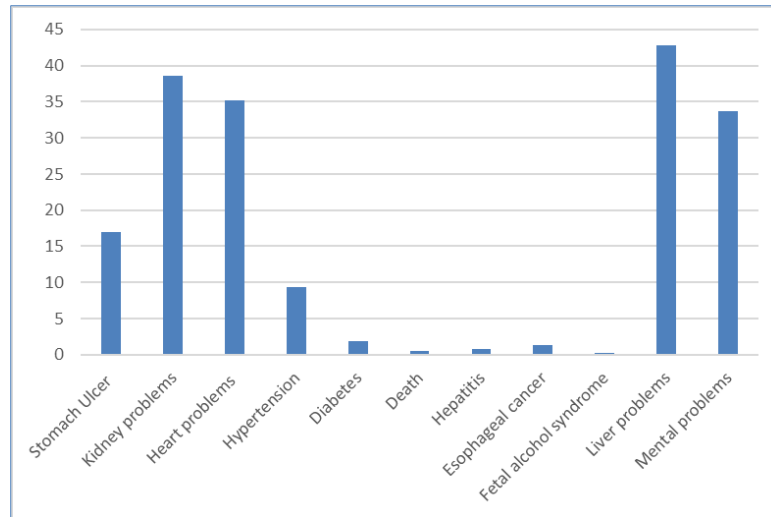
Figure 1 Adverse Effect of Alcohol use

3.4. Respondents' knowledge on effect of alcohol on individuals using it

Table 4 Respondents' knowledge on effect of alcohol on individuals using it

Variable	N= 198 (%)
Involved in a fight	
Yes	176(88.88)
No	22(11.12)
Been injured due to drinking	
Yes	171(86.36)
No	27(13.64)
Injury type	
Abrasions and cut	4(14.54)
Fracture	5(18.81)
Laceration	10(37.03)
Road accidents	6(22.22)
Sprain	2(7.40)
Cause injury to another person	
Yes	16(8.08)
No	182(91.92)
Injury caused to another person	
Abrasion	49(24.74)
Fracture	43(21.71)

Laceration	42(21.21)
Accident	64(32.34)
Regret after drinking	
Never	137(69.19)
Every time	15(7.58)
Occasionally	46(23.23)
Suicidal or homicidal ideas after alcohol	
Yes	127(64.14)
No	71(35.86)
Able to stop drinking	
Yes	127(64.14)
No	71(35.86)
Drinking caused problem at work, home or to close friends	
Yes	24(12.12
No	174(87.88)
Problems caused at work	
Financial burden	1(4.34)
Use of abusive words	3(13.04)
Lateness	2(8.69)
Low productivity	5(21.74)
Neglected/rejected	7(30.45)
Lay off from work	5(21.74)

Table 4 elaborates that out of the participants who consume alcohol, 88.88% have been involved in a fight. 86.36% of those involved in the fight after consumption of alcohol have sustained various forms of injury with majority been laceration of various parts of the body, followed by road traffic accidents. Larger percentage (69.19%) of the participants have never regretted drinking alcohol with 23.23% occasionally feeling regret after consumption of alcohol. 64.14% of the participants have had some form of suicidal or homicidal ideas after consumption of alcohol. 35.86% of the participants have over dependence on alcohol use. Majority of the respondent (87.88%) have not had any problem at work, home or to close friends after consumption of alcohol.

3.5. Factors that Influence Alcohol use

3.5.1. Medium of Introduction to Alcohol use

Table 5 Medium of introduction to alcohol use

Medium of introduction	N= 198 (%)
By parents	18(9.09)
Advertisement	5(2.53)
By peers	100(50.51)
Through social gathering	69(34.85)
Availability/accessibility	6(3.03)

Table 5 shows that majority of the participants were introduced to alcohol use by their peers (50.51%), followed by those introduced through attending social gatherings.

3.5.2. Information on alcoholic beverage

Majority of the participants get information on alcoholic beverages from peers (56.57%), followed by 38.38% who get information through advertisement. With those who get information through advertisement, 58.59% are encouraged to drink alcohol and most of them do so because of the content of the message displayed by the adverts.

Table 6 Information on alcoholic beverage

Information on alcoholic beverage	N= 198 (%)
Peers	112(56.57)
Parents/Family members	10(5.05)
Advertisement	76(38.38)
Advert encourage drinking	
Yes	116(58.59)
No	82(41.41)
Aspect of advert that encourages drinking of alcohol	
The content of message	90(45.45)
Use of celebrities/Role models	51(25.75)
Musical animation	40(20.20)
Other	17(8.60)

3.5.3. Effect of bereavement on alcohol use

66.16% of the participants are of the view that bereavement influences alcohol use. Out of the participants interviewed, most of them have no thought of stopping alcohol consumption after the bereavement.

Table 7 Effect of bereavement on alcohol use

Bereavement influence alcohol consumption	N= 198 (%)
Yes	131(66.16)
No	67(33.84)
Thought of stopping alcohol use after the bereavement	
Yes	52(26.26)
No	83(41.92)
Sometimes	63(31.82)

3.6. Association between Dependent and Independent Variables

3.6.1. Association between socio- demographic variables and exposure to alcoholic beverage

Table 8 shows that there is a significant association between the ages of the participant and exposure to alcoholic beverage with a p-value of 0.012. There is also a significant association between educational background and exposure to alcoholic beverage with a p-value of <0.001. There is no significant association between gender, religion, occupational and marital status and exposure to alcoholic beverages.

Table 8 Association between socio- demographic variables and exposure to alcoholic beverage

Have you taken alcohol before					
Variable	Yes	No	Total	p value	Chi square
Gender					
Male	122(61.62)	97(52.43)	219(57.18)		
Female	76(38.38)	88(47.57)	164(42.82)		
Total	198	185	383	0.07	3.2945
Religion					
Christianity	146(73.74)	144(77.84)	290(72.72)		
Islam	48(24.24)	41(22.16)	89(23.24)		
Traditional	4(2.02)	0(0.0)	4(1.04)		
Total	198	185	383	0.127	4.1279
Age Range					
19years and below	14(7.07)	28(15.14)	42(10.97)		
20- 24	32(16.16)	42(22.70)	74(19.32		
25-29	107(54.04)	86(46.49)	193(50.39)		
30years and above	45(22.73)	29(15.68)	74(19.32)		
Total	198	185	383	0.012	14.6787
Occupation					
Unemployed	53(26.77)	47(25.41)	100(26.11)		
Self Employed	94(47.47)	73(39.46)	167(43.6)		
Civil servant	36(18.18)	35(18.92)	71(18.54)		
Other	15(7.58)	30(16.22)	45(11.75		
Total	198	185	383	0.055	7.5823
Marital status					
Single	112(56.57)	113(61.08)	225(58.75)		
Married	82(41.41)	71(38.38)	153(39.95)		
Divorced	1(0.51)	1(0.54)	2(0.52)		
Widow	1(0.51)	0(0.0)	1(0.26)		
Other	2(1.01)	0(0.0)	2(0.52)		
Total	198	185	383	0.5	3.3579
Educational background					
No formal education	10(5.05)	1(0.54)	11(2.87)		
Primary	19(9.60)	13(7.03)	32(8.36)		
JHS	53(26.77)	22(11.89)	75(19.58)		
SHS	61(30.81)	67(36.22)	128(33.42)		
Tertiary	55(27.78)	82(44.32)	137(35.77)		
Total	198	185	383	0.00	26.4937

3.7. Association between gender, age and reason for alcohol consumption

Table 9 shows that there is no significant association between gender, age and the reason for their consumption of alcoholic beverage.

Table 9 Association between gender, age and reason for alcohol consumption

			Reason for alcohol consumption					
Variable	Fun	Stress Reliever	Appetizer	Social Drinker	Other	Total	p value	Chi square
Gender								
Male	73(58.4)	12(60.0)	11(64.71)	24(75.0)	2(50.0)	122(61.73)		
Female	52(41.6)	8(40.0)	6(35.29)	8(25.0)	2(50.0)	76(38.27)		
Total	125	20	17	32	4	198	0.063	3.1777
Age Category								
19years and below	13(10.4)	0(0.0)	0(0.0)	1(3.13)	0(0.0)	14(7.14)		
20-24	28(22.4)	0(0.0)	2(11.76)	2(6.25)	0(0.0)	32(16.33)		
25-29	64(51.2)	12(60.0)	11(64.71)	17(53.13)	4(100.0)	108(54.08)		
30years and above	20(16.0)	8(40.0)	4(23.53)	12(37.51)	0(0.0)	44(22.45)		
Total	125	20	17	32	4	198	0.529	25.3745

3.7.1. Association between medium of introduction to alcohol use, alcohol policy, information on alcohol use, bereavement and current consumption of alcohol

Table 10 Association between medium of introduction to alcohol use, alcohol policy, information on alcohol use, bereavement and current consumption of alcohol

	Current alcohol consumption				
Variable	Yes	No	Total	p value	Chi Square
Introduction to alcohol					
By Parents	16(11.19)	2(3.64)	18(9.09)		
Advertisements	5(3.50)	0(0.0)	5(2.53)		
By Peers	70(48.95)	30(54.55)	100(50.51)		
Social gathering	46(32.17)	23(41.82)	69(34.85)		
Availability/accessibility	6(4.20)	0(0.0)	6(3.03)		
Total	143	55	198	0.09	8.0308
Alcohol Policy					
Yes	37(25.87)	23(41.82)	60(30.30)		
No	106(74.13)	32(58.18)	138(69.70)		
Total	143	55	198	0.019	5.4601
Alcohol information					
Peers	71(49.65)	41(74.55)	112(56.57)		
Parents/Family members	8(5.59)	2(3.64)	10(5.05)		
Advertisements	64(44.76)	12(21.81)	76(38.38)		
Total	143	55	198	0.008	9.5848
Bereavement					
Yes	59(41.26)	8(14.55)	67(33.84)		
No	84(58.74)	47(84.45)	131(66.16)		
Total	143	55	198	0.001	11.956

Table 10 shows that there is no significant association between the medium of introduction to alcohol use and the current consumption of alcohol. However, there is a significant association between current consumption of alcohol and alcohol policy, information on alcohol use and bereavement.

4. Discussion

The study set out to find the determinants of alcohol use among the youth in the Bosomtwe district and came out with some significant associations. The study found that 51.7% of the participants had taken alcoholic beverage before. Out of these, 61.62% of them were males. This agrees with a study done by Peltzer and Ramlagan in 2009 which states there was an increase in the number of men who consume alcoholic beverage compared to the females in most of the developing countries. The study showed that there was a significant association between the ages of the participant and if they had taken alcoholic beverage before with a p-value of 0.012. Likewise, there was a significant association between educational background and whether they had taken alcoholic beverage before. This finding agrees with a study in 2013, which states there is a significant association between educational level and alcohol use [16]. The study pointed out no significant association between gender and consumption of alcoholic beverage. This concurs with a study which concluded there was no significant association between gender and alcohol use [17]. There was no significant association between religion, occupation and ever-consumed alcoholic beverage.

Out of the percentage that consumed alcoholic beverage, 69.69% of the participants consumed their first alcoholic beverage between the ages of 20-24years. This does not agree with a study done by WHO in 2018, stating that majority of people consume their first alcoholic beverage before age 15years. 51.7% of the participants had consumed alcoholic beverage before, which is supported by a study from Osei- Bonsu in 2017 that most people had once in their entire life consumed alcoholic beverage.

71.86% of the participants currently consume alcohol with majority of them (72.73%) been males. This agrees with a study in 2011 which states that majority of current alcohol users were males [18]. 32.34% were involved in binge drinking following consumption of more than 8 drinks on a single occasion. This finding conflicts with a study in 2015 which states that the youth engage in binge drinking occasionally [19]. 27.84% consume alcoholic beverage more than 6 times in a month.

The preferred type of alcoholic beverage in the study was beer (33.33%). This is consistent with a study in 2017, which states that the most consumed alcoholic beverage is beer [20]. The reason for alcohol consumption was for fun (64.14%). There was no significant association between reason for alcohol consumption and gender as well as the age of the participants with p-values of 0.063 and 0.529 respectively.

63.70% had knowledge about the adverse effect alcohol use have on their organ system. Most of them knew alcohol use could damage the liver, kidney, heart and brain. A study done by Chikere and Mayowa supports this finding with alcohol consumption resulting in up to 30% damage to major organs.

A study in 2016 emphasized that mental health conditions are a major complication from alcohol use which ties in well with the findings in this study [21]. The study found out that 86.36% of the participants had been injured due to drinking with injury types spanning from laceration, road traffic accidents with major fractures of the bones. Several studies have shown increase in road traffic accident following consumption of alcohol with higher morbidity and mortality rates. [22]., [23]., [24].

50.51% were introduced to alcohol use through their peers. This is supported by a study in 2014 stating that the youth who associate more with their peers are swayed easily to engaging in alcohol use [25]. 56.57% of the participants get their information on alcohol use from their peers. The study concluded that 58.59% of the participants were encouraged to drink following advertisement on alcoholic beverage with 45.45% being influenced by the content of message displayed during the advertisement of the alcoholic beverage. This finding is consistent with a study by Osei- Bonsu in 2017, which states that increase in alcohol use is attributable to increase in advertisement.

There was a significant association between policy on alcohol consumption and participant's currently consuming alcoholic beverage with a p- value of 0.019. This concurs with a study by Xuan et al in 2015, which stated that alcohol policy influences alcohol consumption among the youth. There was a significant association between information on alcoholic beverage and the current consumption of alcoholic beverage with a p-value of 0.008. The study also displayed a significant association between bereavement and current consumption of alcoholic beverage with a p- value of 0.001. A study done by Bolton et al in 2016 supports this finding stating that bereavement of a family member increases the incidence of alcohol consumption.

Study Limitation

The main limitations of this study are as follows:

- Some participants were reluctant to volunteer information concerning their alcohol use. This made the participant skip most of the important questions needed to be answered or rather preferred to opt out of the research.
- Participants had some challenges reproducing information concerning the first time they consumed alcoholic beverage which may have contributed to recall bias.
- Participants had some challenges also reproducing information on the last time they stopped consuming alcohol, which may have also contributed to recall bias.
- Few studies were done in Ghana concerning determinants of alcohol use making it difficult to make comparisons within the Ghanaian context.

5. Conclusion

Alcohol consumption remains an urgently important public health problem, which needs to be addressed. It can be concluded that 51.7% of the participants from the Bosomtwe district had consumed alcoholic beverage before with 71.86% currently consuming alcoholic beverage. Majority of these participants responded they consume alcoholic beverage for fun. 33.33% of the participants preferred to consume beer as compared to the other alcoholic beverages with expenditure on drinking between 10 – 100 cedis per single occasion.

Binge drinking was seen among the participants with most people (53.55%) consuming more than 5 drinks. 86.36% of the participants had been injured following alcohol consumption with varied degrees of injury. 35.86% of the participants expressed over dependence on alcohol use.

Compliance with ethical standards

Disclosure of conflict of interest

The authors have no conflict of interest relevant to this article

Statement of informed consent

The authors certify that informed consent was obtained from all individual participants included in the study. The participants understand that their names and initials will not be published, and efforts will be made to always keep their identity and anonymity.

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