

1 Exploring the Relationship between Advertisement of Alcohol on  
2 Consumption and the Perceived Health Implications among  
3 Youth in the Ashaiman Municipality, Ghana

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7 **Abstract**

8 Introduction: Alcohol consumption is a key obstacle to sustainable human development. It is  
9 noted worldwide that alcohol consumption and use contribute to 3.3 million deaths every year.  
10 The United Nations classified individuals between the ages of 15 to 25 years as youths. The  
11 use of alcohol at this critical stage of life can lead to serious health outcomes, such as causing  
12 harm to vital body organs like the liver. Negative social and behavioral consequences such as  
13 unsafe sexual behavior are also consequences associated with alcohol use, and this has become  
14 a major public health issue globally. Various advertisements both in print and electronic  
15 media are contributing factors that encourage alcohol use among the youth. This study,  
16 therefore, aimed at determining the prevalence of alcohol use and also to identify the influence  
17 of exposure to advertisements of alcoholic beverages on consumption, perceptions, and  
18 knowledge on its health implications. Methodology: A quantitative cross-sectional descriptive  
19 study design was used in this study. A total of 297 youths were sampled in four (4) suburbs  
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23 **Index terms**— alcohol consumption, youth, Ashiaman municipality, Ghana.

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26 Stephen Manortey ? & Seyram Kugbega ? Abstract-Introduction: Alcohol consumption is a key obstacle  
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37 youths were sampled in four (4) suburbs within the Ashaiman Municipality in the Greater Accra Region of Ghana  
38 to participate in the study using a well-structured questionnaire. Participants were selected using a convenient  
39 sampling technique over a twomonth period. Study results were presented as frequency tables, Person's Chi-  
40 Square statistical tests, and multivariate logistic models.

41 Results: Alcohol use prevalence was 85.19%, with the revealed types of alcoholic beverage preferred by the  
42 respondents noted as spirits and beer. Advertisement and peer pressure are the principal influencing factor for  
43 alcohol use after controlling for all other covariates in the model. Alcohol consumption was significantly high  
44 among the ages 20-25 with a decrease as the age increases. Individuals who could afford to buy drinks for

45 themselves were about five (5) times more likely to go for an alcoholic beverage compared to those who had  
46 either a brother or sister doing the purchase adjusting for other covariates.

### 47 **1 Conclusion: Advertisements for alcohol via mass media in**

48 Ghana tend to have a statistically significant association with regards to the usage among the resident youth  
49 in the Ashaiman Municipality. Measures should be set in place by the oversight authorities to curb this public  
50 health threat.

### 51 **2 Introduction**

52 despite the negative health effect of alcohol, its use is legal and acceptable socially in most countries in the world  
53 and considered the most used drug worldwide. It is consumed mainly by individuals for relaxation, fun, and  
54 social reasons. Jernigan (2001), established the global burden of disease from alcohol to exceed that of tobacco  
55 in large part because acute consequences of alcohol use led to death and disability in the younger years of life [1].

56 Alcohol is a drug and also classified as a depressant [2]. It hinders vital functions controlled by the central  
57 nervous system, resulting in distortions in speech, unsteady movement, and impairing an individual's judgment  
58 and ability to think accurately. It has effects on every organ of the human body and depresses the central nervous  
59 system [3]. The metabolism of alcohol takes place in the liver, and this is accomplished by the liver enzymes. The  
60 liver metabolizes alcohol and the remaining leftover circulates throughout the human body. The real intensity  
61 of alcohol on the body is proportional to the amount/quantity intake. Hence, individual reactions to alcohol  
62 are varied, and this can be due to many reasons and factors such as age, gender, the physical condition (weight,  
63 fitness level, etc.) and the amount of food the person consumed before taking a drink. Other influencing factors  
64 include drugs or prescription of medications and family history on the alcohol problems [4].

65 The amount of pure ethanol in a standard drink is an important measure to regulate what goes into production  
66 for global consumption that will not affect the health status of the country. From one country to Alcohol use  
67 and consumption in most societies are considered a luxury and so the wealthier countries consume more alcohol  
68 than the rest of the world. The use and abuse of alcohol are widespread among students. According to the  
69 National Survey on Drug Use and Health (NSDUH) in 2013, approximately 24.6 million Americans aged 12 or  
70 older current illicit drug use [5].

71 another, the amount of pure ethanol in a standard drink varies. Interestingly, this concept of standard drinks  
72 is not common in Ghana. People who produce such alcoholic beverages use frivolous measures, which include  
73 the use of containers such as bottles, gourds, or calabashes, to indicate or count the volumes of alcohol they  
74 consume [6]. Locally produced alcoholic beverages in Ghana are often sold in a measure referred to as a "tot".  
75 Thus, people use the number of tots consumed to quantify the amount of alcohol they have drank.

76 However, the widespread abuse of alcohol has been recognized as an important public health problem among  
77 young people in many societies. According to the Centre on Alcohol Marketing and Youth (CAMY) 2010,  
78 alcohol drinking among the youth in the United States is growing rapidly where about 10.4 million young people  
79 aged between twelve to twenty-one years are reported to consume alcohol, and 6.9 million binge drink in 2009  
80 [7]. Similar trends were recognized in South Africa, which has been regarded as one of the highest alcohol  
81 consumption countries at the global stage, as stated by the World Health Organisation (WHO) report in 2011  
82 [8].

83 Alcohol advertisement is regarded as one of the influences that contribute to consumption and individual  
84 perception of alcohol. It is also widely criticized for creating a climate in which consumption is regarded as  
85 people who have not started to drink, expectancies are influenced by normative assumptions about teenage  
86 drinking as well as through the observations of drinking by parents, peers, and models in the mass media" [10].

87 Despite the criticism, the truth remains that many people rely heavily on both print and electronic media  
88 advertisements as a primary source of information and entertainment. In the contemporary landscape, the youth  
89 are exposed to alcohol advertisements at an extraordinary level from various sources, where massive exposures  
90 to advertisements are unavoidable. Apart from the traditional modes of advertising such as television, radio,  
91 and print media, the evolution and introduction of new digital technologies such as smartphones, the internet  
92 have opened new avenues for alcohol advertising. The alcohol industry is aggressively harnessing the potential  
93 of online advertising. The use of billboards and posters is another platform of advertisement that the alcohol  
94 industry harnesses, and this has flooded the streets of the country with peculiar characteristics that accompany  
95 it called the "blue kiosk".

96 Alcohol consumption has become a symbol of adulthood, acceptability, and identity among youth groups,  
97 especially for those who love to have fun. Advertisers and marketers of alcoholic beverages take advantage of  
98 this by depicting alcohol as the start of wild adventures and fun. Research has shown that the presence of older  
99 youths with drinking habits within the home and communities is copied by those less than 18 years of age, and  
100 this normalizes alcohol use [11]. Drinking has become a norm at social events such as sports, celebrations, and  
101 music events simply because everybody drinks has its acceptability by society. In most African countries, alcohol  
102 is indigenous to cultural believes and practices. During festive occasions, alcohol plays a key component, mostly  
103 among the youth. Marriage, naming ceremonies, festivals, and parties are not complete with the absence of  
104 alcohol. Thus, most youth on some occasions, bring along their drinks for consumption.

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105 The Government of Ghana took measures to combat the scourge of alcohol use and abuse among the youth,  
106 which in the long-term impact on the health of the country by the enactment of Ghana Alcohol Policy (2016)  
107 [12]. However, the advertisement on many media platforms is still a major menace and contributing greatly  
108 to the patronage of alcoholic beverages across the country. A case study by Amoateng (2013) in Ghana proved  
109 that the use of radio and television is a powerful tool in marketing to reach consumers of alcoholic beverages.  
110 Consumer preferences to a large extent, are affected by advertisements, especially among those who associate a  
111 celebrity with a brand as well as having actual knowledge about product performance or functions, labelling, and  
112 product ingredients [13].

113 The study, therefore, aimed at exploring the relationship between alcohol advertisements and consumption.  
114 Also, to determine the perception for consumption and knowledge on the health implications.

## 115 3 II.

### 116 4 Methodology a) Profile of Study Area

117 The Ashaiman Municipality is one of the sixteen (16) administrative districts and municipalities in the Greater  
118 Accra Region of Ghana. Its capital is Ashiaman. The municipal covers a total land area of about forty-five (45)  
119 square kilometers. It can be located about four kilometers north of Tema, the industrial city of Ghana and, about  
120 30 kilometers from Accra, the administrative capital. Ashaiman is a sprawling urban settlement with most of its  
121 suburbs exhibiting characteristics of a slum. The total population of Ashaiman, according to the 2010 National  
122 Population and Housing Census, was about 190,972, with an annual growth rate of 2.1%. It consists of about  
123 49.1 % males and 50.9% females. About 30% of the population comprising the youth between the ages of 15 to  
124 30 years [14].

125 Ashaiman is a multi-ethnic society with about fifty (50) tribes and twenty (20) documented tribal heads. There  
126 are four dominant ethnic groups being Ga-Adangme, Akans, Dagombas, and Ewes. With religious affiliation,  
127 Christians with few Muslims and traditionalists dominate the municipality. The study was conducted at Jericho,  
128 Asensu Ba, Lebanon, and Night Market, which are all suburbs in the Ashaiman Municipality. Individuals who  
129 were not permanent residents in any of the four listed suburbs, and were outside the chosen age brackets were  
130 excluded from participating in the study.

### 131 5 b) Study Design and Sample Size

132 A cross-sectional study design with a quantitative approach was employed to gather data among the youth in  
133 four suburbs. Both closed and open-ended questions were used for data collection in this study. Participants  
134 were located by a convenience sampling method in the various drinking pubs, youth groups and associations, and  
135 lorry parks in the communities. Pretesting of questionnaires was done in Official Town, another suburb of the  
136 Ashaiman Municipality with similar environmental characteristics as the study site.

137 The projected sample size for the study was 289 respondents. This was calculated using the Cochran Sample  
138 Size calculation formula [15], with a known alcohol consumption prevalence of 25.1% (Country Profile, 2004) on  
139 a 95% Confidence Interval with a margin of error of 5%.
$$n = \frac{Z^2 p(1-p)}{e^2} = \frac{1.96^2 \times 0.251 \times (1 - 0.251)}{0.05^2} = 289$$

141 Where,  $n$  = the required sample size,  $p$  = prevalence of alcohol consumption (25.1 %) [16],  $Z$  = score at 95%  
142 confidence level  $e$  = margin of error A 10% non-respondent rate adjustment brought the total estimated sample  
143 size to about 320.

### 144 6 c) Data Collection and Statistical Analysis

145 The study employed a quantitative approach to data collection in January-February 2019. The measurement tool  
146 used for the study was a selfadministered questionnaire made available in the English language. Where needed,  
147 the questions were translated into the local languages that the participants best understand. The questions were  
148 related to sociodemographic characteristics, socioeconomic characteristics, alcohol use, and means of getting  
149 alcohol, knowledge on the effects of alcohol use, and so on.

150 The data were imported into STATA statistical software package (StataCorp.2007. Stata Statistical Software.  
151 Release 14. StataCorp LP, College Station, TX, USA) for analysis. A comprehensive univariate, bivariate and  
152 multivariate analyses were respectively conducted to describe the pattern of distributions, assess the levels of  
153 statistical associations and predict the effects of selected indicators on the outcome variable (alcohol use).All  
154 statistical tests were done at a confidence interval of 95%.

### 155 7 d) Ethical Consideration

156 Ethical approval was obtained from Ensign College of Public Health's Ethics Review Board, and administrative  
157 permissions were further sought from the due authorities. Informed consent of study participants was sought  
158 before administering the questions, making them aware of their rights to withdraw from the study. Participants  
159 below 18 years were given a parental assent form to access permission to proceed to participate. Participants  
160 were informed of the confidentiality of the study and the ability to withdraw when necessary. To elicit accurate

## 13 D) PERCEPTION AND KNOWLEDGE OF THE HEALTH IMPLICATIONS OF ALCOHOL USE

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161 information for the study, participants were not rewarded for participation but were given extensive information  
162 on some health issues related to alcohol consumption.

### 163 8 III.

## 164 9 Results

### 165 10 a) Socio-demographic characteristics

166 A total of 320 questionnaires were administered and two hundred and ninety-seven (297) were appropriately  
167 completed and submitted, yielding a study response rate of 92.81%. Out of the 297 total respondents, 193 were  
168 males representing 64.98% of the sample, and one hundred and four were females representing 35.02%. The  
169 majority of respondents were between the ages of 26-30 years (39.06%), followed by 20-25 years (50.84%) and  
170 lastly 16-19 years, accounting for 10.10%. The study participants were mostly single made up of one hundred and  
171 ninety-two respondents (60.94%), forty-one (13.47%) co-habiting, and the rest married. 32.66% of respondents  
172 had their educational level up to Junior Secondary School, with forty respondents making 12.12 percent with  
173 no formal education (Table 1). Out of the total respondents, two hundred and sixty-nine (90.08%) have ever  
174 consumed alcohol, and out of this were two hundred and fifty-four (84.71%) who admit to currently consuming  
175 alcoholic beverages. The mean age of onset of consumption of alcohol was 19.76 years with a minimum of six (6)  
176 years and a maximum at 28 years. Males 185 (68.77%) consumed more alcohol than females 84 (31.23%). The  
177 number of respondents aged 26-30 years 106 (39.41%) consumed more alcohol than the other age groups, and  
178 those who were single also had a high consumption of alcohol 152 (59.94%).

### 179 11 b) Prevalence of alcohol use

180 The study showed that more than three third of the total respondents (269), attested that they had consumed  
181 alcohol. Assessment of their current intake revealed that the majority of the participants who had taken alcohol,  
182 still do, with only 5.58% of those who reported ever taken alcohol, admitting they no longer do the same  
183 (Table 2). The kinds of alcoholic beverages that were reportedly taken by respondents include beer, spirits,  
184 and wine. About a third of the total respondents (33.0%) consume spirits which comprise of various "bitters"  
185 (alcohol-based drink) and "akpeteshie" (locally brewed alcoholic drink), followed by beer (25.59%) and 21.21%  
186 of the respondents acknowledging they consumed all alcoholic beverages that include wine, spirits, and beer. On  
187 average, respondents spent about \$3.00 on alcohol per week. Sources of alcohol for use by the respondents were  
188 mainly from a purchase by oneself, representing 44.78%. Out of two hundred and fifty-three respondents who  
189 are current users of alcohol, thirty-nine of them smoke either cigarettes or wee. On the question of smoking, 42  
190 of total the respondents accounting to about 14.14% were reported being current smokers (Table 3).

### 191 12 c) Probable Factors that influence alcohol use

192 The majority of respondents 269 (90.57%), revealed they had access to at least a source of media. Out of  
193 two hundred and sixty-nine respondents who disclosed having access to mass media, 126 (46.84%) watched  
194 television only, and 46 (15.61) disclosed using the mobile phone as a means of getting information. A total of 38  
195 representing 14.13% of the study sample used television and mobile phone as a means of getting information. To  
196 assess if the advertisement was an influence on alcohol consumption, 222 (74.75%) of participants disclosed that  
197 advertisement on alcohol encourages their drinking behavior. As to what in the advertised brand that influenced  
198 them, 82 (36.94%) stated the musicals, and 77 (34.68%) stated the use of celebrities as a contributing factor to  
199 alcohol use. The majority 44 (18.82%), attest to the use of role models and animation to have some amount of  
200 effect on their choices. However, 13(5.86%) asserted that nothing in the advert influenced them but makes them  
201 aware of the latest brand available.

202 Further probing revealed below that peer pressure, advertisement, and accessibility/ availability of alcohol  
203 were acknowledged by more than a fifth of the respondents as probable contributors to alcohol use among the  
204 youth (Table 4).

### 205 13 d) Perception and knowledge of the health implications of 206 alcohol use

207 Per the findings, 21.21% believed alcohol use relaxes them and make them have fun, 18.52% also perceived  
208 makes them sexually active. The majority of participants 262 (88.22%) answered knowing of some health  
209 problems related to alcohol consumption. Further probe displayed a pattern of almost an even distribution  
210 of respondents stating that the listed diseases were associated with alcohol use and also likely associated with  
211 sexually transmitted diseases. About six out of every ten respondents (62.63%), stated alcohol was not associated  
212 with sexually transmitted diseases (Table 5).

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## 14 e) Test of Associations of Explanatory Variables

The bivariate analysis indicates there exists a statistically significant association between gender, level of education, and the tendency to take alcohol with observed p-values of  $<0.001$  in each case respectively among those who ever or currently used alcohol. However, there was no such level of a significant association between age, marital status, and tendency to use alcohol with observed p-values greater than 0.05 (Table 6 & 7). 8 indicates that there was a significant association between respondents' hearing of advertisements on both print and electronic media and the consumption of alcohol in Ashaiman. The observed p-value was  $<0.001$ , which is far less than the threshold of 0.05. Further probe into what component of the advert encourages respondents to drink 27.61% and 25.93% said the musicals and use of celebrities respectively encourage them to use alcohol.

## 15 g) Multivariate Logistic Regression model for relevant predictor variables

Results obtained showed a significant association between gender and alcohol consumption. Being female reduced the odds by 65.5% of alcohol consumption and thus was shown to be protective (0.345, 95% CI=0.18, 0.66).

Results obtained showed a significant association between gender and alcohol consumption in the unadjusted logistic model with females reduced the odds by 65.5% of alcohol consumption and thus was shown to be protective (0.345, 95% CI=0.18, 0.66). An observation on alcohol use and educational level showed adjusted odds ratio for current alcohol use and advertisement depicted a statistically significant odds of 3.92 times more likely to consume alcohol as there are exposed to advertisements compared to counterparts who did not know of the advertisement of alcohol.

On the other hand, the study data from study participants who had no known source of alcohol were 0.95 times less likely to consume alcohol compared to those who get from their brothers and sisters holding all other variables constant when adjusted for other covariates in the model. For educational unadjusted for other covariates showed that those with a tertiary level of education were 0.01 times more likely to use alcohol compared to those with no formal education holding all other variables constant. Thus, the likelihood of usage of alcohol tends to decrease with an increased level of education attained.

IV.

## 16 Discussion

The prevalence recorded in this study is similar to a study done in Accra by Oppong Asante et al. (2014), which reported 81.3% of their respondents admitting ever used alcoholic beverages [17]. It is, however, much higher than that of a national survey which indicated a 25.1% prevalence of alcohol consumption among the youth in Ghana [16]. The difference in these surveys can be attributed to the increase in the number of drinking bars and the easy access to the bars by the youth in communities in the Ashaiman Municipality, thereby increasing consumption.

The gender distribution in this study conforms to previous but similar studies conducted by Osei-Bonsu et al. (2017), whose study also reveals lesser female participation [18]. This was consistent with findings by Chauke et al., (2015) in a study conducted among high school students in South Africa even though there were just a few more females than males [19]. The high number of males who consume alcohol can be attributed to the acceptability of alcohol consumption by males as a social norm as compared to female alcohol consumption, which the very society frowns upon. Most of the respondents who consume alcohol were in their active and youthful ages (20)(21)(22)(23)(24)(25). Consumption of alcohol, however, recorded a decrease in the ages 26-30 years, which is supported by the findings from Osei-Bonsu et al., (2017) which also reported similar trend as age increases [18].

The revealed no significant association between the ages of respondents and possible alcohol use (p-value =0.955). The results are, however, contradictory to a study carried out in the Volta Region of Ghana by Osei-Bonsu et al., (2017), which recorded an association between alcohol use and consumption [18]. A relationship between the gender of the respondents and their tendency to use alcohol was established (p-value =0.001). A study by Adu-Mireku (2003), among Senior High School students in Accra, reported females to be less likely to use alcohol collaborate the findings of this study [16]. A significant association was also established between education level, occupation, and the tendency to use alcohol, respectively. There was no observed significant relationship between alcohol use on religion, marital status, and ethnicity of the respondents. This finding is in line with Michalak et al., (2007) assertion that religion is strongly associated with abstention from alcohol use [20].

Individuals with Junior Secondary School level of education had high usage of alcohol compared to those with Senior Secondary school and tertiary level of education. This finding also confirmed a similar study done by Osei-Bonsu et al., (2017) in the Volta Region of Ghana [18]. This could be attributable to the curious nature of these younger folks with the inner quest to try everything they have been cautioned against. A study by Obot et al., (2005) found that peer influence was a major factor that influences alcohol use. Thus, it agrees with the findings of this study. This can be attributed to the youth acceptability of the lifestyle of other peers who may be involved in drinking, hence this is done to please their peers [21].

272 Gender, education, and occupation were found to be significantly associated with alcohol use either in the  
273 past or at the time of participation in the study. It was further observed that peers influence, advertisement  
274 and accessibility/availability of alcohol respectively are responsible for the use of alcohol by youth. Respondents  
275 offered various reasons why they consume alcohol but one that stood out was the availability of these drinks  
276 which accounts for about 21.55%, and this should be a major public health concern. This phenomenon can be  
277 associated with the everyday social events like funerals, weddings among others where the use of alcohol by the  
278 youth is regarded as the norm and part of the celebrations. The response also showed that some of the study  
279 participants also see the consumption of alcohol as a way to have fun and relax. Some use it as appetizers  
280 to enable them to eat well. These findings were consistent with studies conducted by Oshodi et al., (2010) and  
281 Osei-Bonsu et al., (2017) who also found similar reasons associated with substance use among secondary school  
282 students [22], [18].

283 The results of this study showed "spirits" as the most consumed alcoholic beverage by the youth in Ashaiman,  
284 followed by beer. An overwhelming proportion also consumes all three beverages, namely wine, beer, and spirits.  
285 In this study, most of the spirits consumed are what is referred to as the "bitters". This observation, however,  
286 disagreed with the national consumption of alcohol according to the World Health Organisation (2014), which  
287 recorded the most consumed alcoholic beverage to be beer followed by wine, spirits and other alcoholic beverages  
288 [23]. This finding also disagrees with Odejide (2006), a survey in the Gambia among the youth, which found out  
289 that beer was mostly used by the youth, followed by wine and spirit. The trend observed can be attributed to  
290 the increased advertisement of locally manufacture alcoholic beverages which are called "bitters". These alcoholic  
291 beverages are retailed at prices as low as five (5) cents making it more accessible to the youth [24]. The high rate  
292 of alcohol consumption among the youth is a pointer to the development of disturbing health problems in the  
293 future. Developing lung cancer is a major concern as epidemiological evidence has been established on alcohol  
294 and lung cancer [25].

295 Alcohol consumption is very often advertised as the quickest medium for relaxation and fun, a booster to one's  
296 sexual drive, the best appetizer for the hungry mouth, and the solution to forgetting personal problems.

297 Unfortunately, less is said about the side effects associated with this menace. With an overwhelming number  
298 of the study respondents upholding these perceptions, there is a strong likelihood that any excessive use will  
299 rather complicate their health conditions. The findings recorded that approximately 63% of respondents were  
300 not aware of the relation between alcohol use and STI's although various researches including Simbayi et al.,  
301 (2004) have confirmed this [26].

302 The findings of this study showed those exposed to advertisements of alcohol are 3.92 times more likely to  
303 use alcohol compared to their counterparts, holding all other variables constant. This corroborates the results  
304 of other similar studies done by Snyder et al. (2006); Koordeman, et al. (2012), and Amoateng (2013) which  
305 showed an association between exposure to the advertisement of alcohol and its use [27][28][13]. This trend can  
306 be said to be a result of the message portrayed in the adverts together with the use of celebrities, role models  
307 and the catchy nature of the music used. This is confirmed by the study of Chen et al. (2005) which identified  
308 that the humour and music associated with alcohol adverts contribute to alcohol consumption by youth [29].

309 V.

## 310 17 Conclusion

311 The prevalence rate of alcohol is significantly high among the youth in the selected suburbs in the Ashaiman  
312 Municipality, with a decrease in consumption as one age and the level of education increases. Generally, both  
313 males and females were found to be consuming alcohol, however, males were more likely to do so compared to  
314 their counterparts. This is a public health challenge and needs to be addressed. Religion was not seen to play  
315 any contributing factor to the use of alcohol in this study. Accessibility to alcohol and peer pressure has led many  
316 of the youth into alcohol use for social acceptability as this research confirms.

317 Advertisement of alcohol in various mass media is associated with alcohol use among the youth. Some youth  
318 consume alcohol for fun and entertainment to help forget their personal problems which are a major chronic  
319 problem in society. The many advertisements of alcoholic beverages on mass media are of great concern and need  
320 to be regulated as it is trapping the youth, the future and potential human capital for a developing country like  
321 Ghana into the vice of drinking.

## 322 18 VI.

## 323 19 Limitations of the Study

324 Recall bias is a limitation to this study as some respondents had difficulty recollecting the first time they had  
325 a drink containing alcohol. Also, the limited size of the sample used will make it impossible to generalize the  
326 finding to a larger population. Future research work should consider adopting a qualitative approach together  
327 and tease out in-depth views from respondents on the subject matter. <sup>1</sup>

1

Variable (N= 297)	Categories	Frequency (n)	Percentage (%)
Gender	Female	104	35.02
	Male	193	64.98
Age	16-19	30	10.10
	20-25	151	50.84
	26-30	116	39.06
Level of Education	None	36	12.12
	JSS	97	32.66

Figure 1: Table 1 :

2

Alcohol use (Ever)	Frequency (n)	Percentage %
Yes	269	90.57
No	28	9.43
Total	297	100
Current alcohol use		
Yes	253	85.19
No	44	14.81
Total	297	100

Figure 2: Table 2 :

3

Variable	Frequency (n)	Percentage %
Beer	76	25.59
Wine	24	8.08
Spirits	98	33.00
All	63	21.21
None	36	12.12

Figure 3: Table 3 :

4

Influences to drink (N=297)	Frequency (n)	Percentage (%)
Peer pressure	78	26.26
Advertisement	67	22.56
Social media	7	2.36
Parental/Sibling influence	15	5.05
Availability/ Accessibility to alcohol	64	21.55
None	50	16.84
Others (problems at home and death)	16	5.39

Figure 4: Table 4 :

5

Variable	Frequency	Percentage (%)
Perception of alcohol functions		
Makes sexually active	55	18.52
Feel strong and empowered	48	16.16
Makes me smart	47	15.82
Forget personal issues	47	15.82
For relaxation and fun	63	21.21
None	37	12.46
Knowledge on health implications		
Yes	262	88.22
No	35	11.78
Total	297	100

Figure 5: Table 5 :

6

Characteristics (297)	N	Ever Consumed alcohol	Yes n (%)	No n (%)	X <sup>2</sup>	p-value
Sex						
Male	185 (68.77)		8 (28.57)		18.01	< 0.001*
Female	84(31.23)			20 (71.43)		
Age (Years)						
15-19	25(9.29)	139(51.67)	5(17.86)	12(42.86)	2.2292	0.328
20-25						
26-30	105(39.06)		11(39.29)			
Level of education						
None	36(13.38)		0(0.00)			
JSS	94(34.94)		3(10.71)		18.46	< 0.001*
SSS	79(29.37)		10(35.71)			
Tertiary	60(22.30)		15(53.57)			
Religion	211(78.15)		22(81.48)		1.37	0.505

Figure 6: Table 6 :



7

Year	Characteristics	N (297)	Current alcohol Use	Yes	No
2020			174(68.77)	19 (43.18)	79(31.23) 25 (56.82) 2
16					
Volume XX	Sex	Male			
Issue	Female	Age			
II Ver-	(Years)	15-19			
sion	20-25	26-			
I	30	Level of education			
Global	None	JSS	35(13.83)	90(35.57)	1(2.27)
Jour-	Religion	Christianity	71(28.06)	57(22.53)	18(40.91)
nal of	Muslim	Traditionalist	195(77.08)	45(17.79)	38(86.36)
Med-	Marital Status	Married	13(5.14)	65 (25.69)	37 6(13.64)
ical	Co-habiting	Ethnicity	(14.62)	88(34.78)	59(23.32)
Re-	Ewe Ga-Adangme	Akan	85(33.60)	21(8.30)	151 11(25.00)
search	Others	Single	(59.68)		3(6.82)
( D D					18(40.91)
D D )					8(18.18)
					11(25.00)
					7(15.91)
					30(68.28)
					18(40.91)
					7(15.911)
	Occupation				
	Unemployed		8(3.16)		0(0.00)
	Student		62(24.51)		27(61.36)
	Civil servant	Artisans	28(11.07)	81(32.02)	6(13.64)
					5(11.36)
	Traders		41(16.21)		4(9.09)
	Drivers		17(6.72)		1(2.27)
	Others		16(6.32)		1(2.27)

[Note: \*Denotes statistical significance at a 95% CI K f) Association between Advertisement and Alcohol Use Table]

Figure 7: Table 7 :

8

Variable (Advertisement)	Alcohol use	No	P-value
Yes	206	16	<
No	47	28	0.001*

\*Denotes statistical significance at a 95% CI

Figure 8: Table 8 :

9

Variables	Unadjusted (95% CI)	OR	P-value	Adjusted OR (95% CI)	P-value	Year 2020 17 Volume XX Issue II Version I D D D D ) ( Research  Global Jour- nal of Med- ical
Gender						
Male (Ref) Female	1 0.35(0.18, 0.66)	1	<	1 0.70(0.23,2.07)	1 -0.514	
Level of Education			0.001?		-	
None (Ref)			-			
J.S.S S.S.S Tertiary No	0.37(0.04,3.09)		0.357	0.57(0.05,6.26)	0.643	Global
(Ref) Yes Occupation	0.11(0.02,0.88)		0.037?	0.25(0.02,3.01)	0.277	Jour-
Unemployed (Ref) Stu-	0.09(0.01,0.71)	1	0.022?	0.80(0.05,11.87)	1 0.874	nal of
dent Civil servant Ar-	7.67(3.84,15.30)		<	3.92(1.29,11.94)	0.016?	Med-
tisans Influence of ad-	1 1.14(-0.02,1.13)		0.001?	1 0.26(0.01,8.17)	-0.445	ical
vertisement	0.29(0.03,2.64)		-0.066	0.43(0.01,16.84)	0.653	
	1.01(0.11,9.26)		0.273	0.84(0.03,26.46)	0.922	
			0.991			
Traders	0.64(0.07,6.17)		0.700	0.24(0.01,8.18)	0.431	
Drivers	1.06(0.06,18.45)		0.967	1.15(0.02,66.98)	0.945	
Others	1		-	-	-	
Sources of alcohol						
Brothers and sisters	1		-	1	-	
(Ref)						
From home without	2.80(0.26,30.17)		0.396	1.89(0.15,23.62)	0.620	
parents						
From friends	2.04(0.44,9.54)		0.365	1.58(0.29,8.48)	0.595	
Buy on my own	6.45(1.32,31.62)		0.022?	4.96(0.89,27.57)	0.067	
From friend & buy on	7.40(0.71,76.92)		0.094	3.17(0.25,40.67)	0.376	
my own						
None	0.05(0.71,76.92)		<	0.05(0.01,0.26)	<0.001?	
			0.001?			

[Note: ? Denotes statistical significance at a 95% CI K © 2020 Global Journals]

Figure 9: Table 9 :

328 .1 Authors' contributions

329 This work was carried out in collaboration between all authors. SK and SM participated in conceiving the study  
330 and in the development of data collection tools. SK carried out data collection. SM and SK participated in the  
331 data analysis and drafting of the manuscript. All authors read and approved the final manuscript.

332 .2 Conflict of Interest

333 All authors declare no conflict of interest.

334 [ ] , 10.1016/j.cpr.2005.06.002. <https://doi.org/10.1016/j.cpr.2005.06.002> 25 p. .

335 [ Center on Alcohol Marketing and Youth (CAMY) ] , [http://www.camy.org/resources/reports/ Center-](http://www.camy.org/resources/reports/Center%20on%20Alcohol%20Marketing%20and%20Youth%20(CAMY).pdf)  
336 [ter on Alcohol Marketing and Youth \(CAMY\)](http://www.camy.org/resources/reports/Center%20on%20Alcohol%20Marketing%20and%20Youth%20(CAMY).pdf) p. 2010.

337 [ Ed ] , Ed . [https://hwdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/General/](https://hwdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/General/14447.pdf)  
338 [14447.pdf](https://hwdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/General/14447.pdf) New York: Wiley. p. 428.

339 [Snyder et al. ( )] , L B Snyder , F F Milici , M Slater , H Sun , Y Strizhakova . 10.1001/archpedi.160.1.18.  
340 <https://doi.org/10.1001/archpedi.160.1.18> *Effects of Alcohol Advertising Exposure on Drinking*  
341 *Among Youth. Arch Pediatric Adolescent Med* 2006. 160 (1) p. .

342 [ World Health Organisation ( ) ] , [https://www.who.int/substance\\_abuse/publications/global\\_](https://www.who.int/substance_abuse/publications/global_alcohol_report/msbgsruprofiles.pdf)  
343 [alcohol\\_report/msbgsruprofiles.pdf](https://www.who.int/substance_abuse/publications/global_alcohol_report/msbgsruprofiles.pdf) *World Health Organisation* 2011.

344 [ National Alcohol Policy ( ) ] , <http://www.moh.gov.gh/ghana-launches-national-alcohol-policy/>  
345 [National Alcohol Policy](http://www.moh.gov.gh/ghana-launches-national-alcohol-policy/) 2016.

346 [Ghana Statistical Service ( )] *2010 Population and Housing Census*, Ghana Statistical Service .  
347 [http://www2.statsghana.gov.gh/docfiles/2010\\_District\\_Report/Greater%20Accra/](http://www2.statsghana.gov.gh/docfiles/2010_District_Report/Greater%20Accra/ASHAIMAN%20MUNICIPAL.pdf)  
348 [ASHAIMAN%20MUNICIPAL.pdf](http://www2.statsghana.gov.gh/docfiles/2010_District_Report/Greater%20Accra/ASHAIMAN%20MUNICIPAL.pdf) 2014.

349 [Chen et al. ( )] 'Alcohol advertising: What makes it attractive to youth?'. M J Chen , J W Grube , M Bersamin  
350 , E Waiter . 10.1080/10810730500228904. <https://doi.org/10.1080/10810730500228904> *Journal of*  
351 *Health Communication* 2005. 10 (6) p. .

352 [Guo and Jun ( )] 'Alcohol and acetaldehyde in public health: From marvel to menace'. R Guo , R Jun .  
353 <https://dx.doi.org/10.3390%2Fijerph7041285> *International Journal of Environmental Research*  
354 *and Public Health* 2010. p. .

355 [Anderson and Baumberg ( )] *Alcohol in Europe -Public Health Perspective, Drugs: Education, Prevention,*  
356 *and Policy*, P Anderson , B Baumberg . 10.1080/09687630600902477. [https://doi.org/10.1080/](https://doi.org/10.1080/09687630600902477)  
357 [09687630600902477](https://doi.org/10.1080/09687630600902477) 2006.

358 [Chauke et al. ( )] 'Alcohol use amongst learners in rural high school in South Africa'. T M Chauke , H Van Der  
359 Heever , M E Hoque . <https://dx.doi.org/10.4102%2Fphcfm.v7i1.755> *African Journal of Primary*  
360 *Health Care and Family Medicine* 2015. 7 (1) .

361 [Simbayi et al. ( )] 'Alcohol use and sexual risks for HIV infection among men and women receiving sex-  
362 ually transmitted infection clinic services in Cape Town'. L C Simbayi , S C Kalichman , S Jooste  
363 . 10.15288/jsa.2004.65.434. <https://doi.org/10.15288/jsa.2004.65.434> *South Africa. Journal of*  
364 *Studies on Alcohol* 2004. p. .

365 [Obot and Room ( )] *Alcohol, Gender and Drinking Problems: Perspectives from Low and Middle-Income*  
366 *Countries, World Health Organization Department of Mental Health and Substance Abuse*, I S Obot ,  
367 R Room . [https://www.who.int/substance\\_abuse/publications/alcohol\\_gender\\_drinking\\_](https://www.who.int/substance_abuse/publications/alcohol_gender_drinking_problems.pdf)  
368 [problems.pdf](https://www.who.int/substance_abuse/publications/alcohol_gender_drinking_problems.pdf) 2005. p. 227.

369 [Cochran ( )] W G Cochran . *Sampling Techniques*, 1977. p. 3.

370 [Damsere-Derry et al. ( )] 'Determinants of drink-driving and association between drink-driving and road traffic  
371 fatalities in Ghana'. F Damsere-Derry , F Afukaar , G Palk , M King . 10.7895/ijadr.v3i2.135. [https:](https://doi.org/10.7895/ijadr.v3i2.135)  
372 [//doi.org/10.7895/ijadr.v3i2.135](https://doi.org/10.7895/ijadr.v3i2.135) *The International Journal of Alcohol and Drug Research* 2014. 3  
373 (2) p. 135.

374 [Bai et al. ( )] 'Ethanol fermentation technologies from sugar and starch feedstocks'. F W Bai , W A Anderson  
375 , M Moo-Young . 10.1016/j.biotechadv.2007.09.002. [http://doi.org/10.1016/j.biotechadv.2007.](http://doi.org/10.1016/j.biotechadv.2007.09.002)  
376 [09.002](http://doi.org/10.1016/j.biotechadv.2007.09.002) *Biotechnology Advances* 2008. p. .

377 [Forouzanfar ( )] M H Forouzanfar . *Global, regional, and national comparative risk assessment of*, 2016. p. 79.

378 [Jernigan ( )] 'Global Status Report : Alcohol and Young People'. D H Jernigan . [https://apps.](https://apps.who.int/iris/bitstream/handle/10665/66795/WHO_MSD_MSB_01.1.pdf;jsessionid=BCDEC3675473F495130ADC300567791F?sequence=1)  
379 [who.int/iris/bitstream/handle/10665/66795/WHO\\_MSD\\_MSB\\_01.1.pdf;jsessionid=](https://apps.who.int/iris/bitstream/handle/10665/66795/WHO_MSD_MSB_01.1.pdf;jsessionid=BCDEC3675473F495130ADC300567791F?sequence=1)  
380 [BCDEC3675473F495130ADC300567791F?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/66795/WHO_MSD_MSB_01.1.pdf;jsessionid=BCDEC3675473F495130ADC300567791F?sequence=1) *World Health Organization* 2001. 17 p. .

381 [Global status report on alcohol and health World Health Organisation ( )] 'Global status report on alcohol and  
382 health'. [https://www.who.int/substance\\_abuse/publications/alcohol\\_2014/en/](https://www.who.int/substance_abuse/publications/alcohol_2014/en/) *World Health*  
383 *Organisation* 2014. p. .

## 19 LIMITATIONS OF THE STUDY

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- 384 [Anderson et al. ()] 'Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A  
385 Systematic Review of Longitudinal Studies'. P Anderson , A De Bruijn , K Angus , Gordon R Hastings  
386 , G . 10.1093/alcalc/agn115. <https://doi.org/10.1093/alcalc/agn115> *Alcohol and Alcoholism* 2017.  
387 44 (3) p. .
- 388 [metabolic risks or clusters of risks, 1990-2015: A systematic analysis for the Global Burden of Disease Study The Lancet ()]  
389 'metabolic risks or clusters of risks, 1990-2015: A systematic analysis for the Global Burden of Disease  
390 Study'. 10.1016/S0140-6736(16). [https://doi.org/10.1016/S0140-6736\(16](https://doi.org/10.1016/S0140-6736(16) *The Lancet* 2015. 10053.  
391 388 p. .
- 392 [Osei-Bonsu et al. ()] 'Prevalence of Alcohol Consumption and Factors Influencing Alcohol Use Among the  
393 Youth in Tokorni-Hohoe'. E Osei-Bonsu , P Kyei Kubi Appiah , S Boadu . 10.11648/j.sjph.20170503.18.  
394 <https://doi.org/10.11648/j.sjph.20170503.18> *Science Journal of Public Health* 2017. 5 (3) p. .
- 395 [Michalak et al. ()] 'Religion and alcohol in the U.S. National Alcohol Survey: How important is religion for  
396 abstinence and drinking?'. L Michalak , K Trocki , J Bond . 10.1016/j.drugalcdep.2006.07.013. <https://psycnet.apa.org/doi/10.1016/j.drugalcdep.2006.07.013>  
397 <https://psycnet.apa.org/doi/10.1016/j.drugalcdep.2006.07.013> *Drug and Alcohol Dependence* 2007.  
398 87 (2-3) p. .
- 399 [Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, Substance Abuse, and Mental  
400 'Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, Substance  
401 Abuse, and Mental Health Services Administration'. [https://store.samhsa.gov/system/files/](https://store.samhsa.gov/system/files/nsduhmhfr2013.pdf)  
402 [nsduhmhfr2013.pdf](https://store.samhsa.gov/system/files/nsduhmhfr2013.pdf) *NSDUH Series H-41*, 2014. HHS Publication No. p. . US-Department of Health and  
403 Human Services
- 404 [Odejide ()] 'Status of drug use/abuse in Africa: A review'. A O Odejide . 10.1007/s11469-006-9015. <https://doi.org/10.1007/s11469-006-9015-y> *International Journal of Mental Health and Addiction* 2006.  
405 <https://doi.org/10.1007/s11469-006-9015-y>  
406 p. .
- 407 [Oshodi et al. ()] 'Substance use among secondary school students in an urban setting in Nigeria: prevalence  
408 and associated factors'. O Y Oshodi , O F Aina , A T Onajole . 10.4314/ajpsy.v13i1.53430. <http://dx.doi.org/10.4314/ajpsy.v13i1.53430>  
409 <http://dx.doi.org/10.4314/ajpsy.v13i1.53430> *African Journal of Psychiatry* 2010. 13 (1) p. .
- 410 [Oppong-Asante et al. ()] 'Substance use and risky sexual behaviours among street'. K Oppong-Asante , A Meyer-  
411 Weitz , I Petersen . 10.1186/1747-597X-9-45. <https://doi.org/10.1186/1747-597X-9-45> *Substance*  
412 *Abuse Treatment, Prevention, and Policy* 2014. 9 p. 45.
- 413 [Koordeman et al. ()] 'The effect of alcohol advertising on immediate alcohol consumption in college students:  
414 an experimental study. Alcoholism'. R Koordeman , D J Anschutz , R C M E Engels . 10.1111/j.1530-  
415 0277.2011.01655.x. <https://doi.org/10.1111/j.1530-0277.2011.01655.x> *Clinical and Experimental*  
416 *Research* 2012. 36 (5) p. .
- 417 [Amoateng and Poku ()] 'The Impact of Advertisement on Alcohol Consumption : A Case Study of Consumers  
418 in Bantama Sub-Metro'. F Amoateng , K Poku . [http://www.econjournals.com/index.php/irmm/](http://www.econjournals.com/index.php/irmm/article/view/300/pdf)  
419 [article/view/300/pdf](http://www.econjournals.com/index.php/irmm/article/view/300/pdf) *International Review of Management and Marketing* 2013. 3 (1) p. .
- 420 [Adu-Mireku ()] 'The Prevalence of Alcohol, Cigarette, and Marijuana Use Among Ghanaian Senior Secondary  
421 Students in an Urban Setting'. S Adu-Mireku . 10.1300/J233v02n01\_05. [https://doi.org/10.1300/](https://doi.org/10.1300/J233v02n01_05)  
422 [J233v02n01\\_05](https://doi.org/10.1300/J233v02n01_05) *Journal of Ethnicity in Substance Abuse* 2003. 2 (1) p. .
- 423 [Kuntsche et al. ()] 'Why do young people drink? A review of drinking motives'. E Kuntsche , R Knibbe , G  
424 Gmel , R Engels . *Clinical Psychology Review* 2005.
- 425 [Hackley et al. ()] 'Young adults and "binge" drinking: A Bakhtinian analysis'. C Hackley , A Bengry-Howell , C  
426 Griffin , W Mistral , I Szmigin . 10.1080/0267257X.2012.729074. [https://doi.org/10.1080/0267257X.](https://doi.org/10.1080/0267257X.2012.729074)  
427 [2012.729074](https://doi.org/10.1080/0267257X.2012.729074) *Journal of Marketing Management* 2013. 29 (7-8) p. .