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

By Stephen Manortey & Seyram Kugbega

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Methodology: A quantitative cross-sectional descriptive study design was used in this study. A total of 297 youths were sampled in four (4) suburbs within the Ashaiman Municipality in the Greater Accra Region of Ghana to participate in the study using a well-structured questionnaire.

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Methodology: A quantitative cross-sectional descriptive study design was used in this study. A total of 297 youths were sampled in four (4) suburbs within the Ashiaman Municipality in the Greater Accra Region of Ghana to participate in the study using a well-structured questionnaire. Participants were selected using a convenient sampling technique over a two-month period. Study results were presented as frequency tables, Person's Chi-Square statistical tests, and multivariate logistic models.

Results: Alcohol use prevalence was 85.19%, with the revealed types of alcoholic beverage preferred by the respondents noted as spirits and beer. Advertisement and peer pressure are the principal influencing factor for alcohol use after controlling for all other covariates in the model. Alcohol consumption was significantly high among the ages 20-25 with a decrease as the age increases. Individuals who could afford to buy drinks for themselves were about five (5) times more likely to go for an alcoholic beverage compared to those who had either a brother or sister doing the purchase adjusting for other covariates.

Conclusion: Advertisements for alcohol via mass media in Ghana tend to have a statistically significant association with regards to the usage among the resident youth in the Ashaiman Municipality. Measures should be set in place by the oversight authorities to curb this public health threat.

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I. Introduction

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

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

Alcohol use and consumption in most societies are considered a luxury and so the wealthier countries consume more alcohol than the rest of the world. The use and abuse of alcohol are widespread among students. According to the National Survey on Drug Use and Health (NSDUH) in 2013, approximately 24.6 million Americans aged 12 or older current illicit drug use [5].

The amount of pure ethanol in a standard drink is an important measure to regulate what goes into production for global consumption that will not affect the health status of the country. From one country to
another, the amount of pure ethanol in a standard drink varies. Interestingly, this concept of standard drinks is not common in Ghana. People who produce such alcoholic beverages use frivolous measures, which include the use of containers such as bottles, gourds, or calabashes, to indicate or count the volumes of alcohol they consume [6]. Locally produced alcoholic beverages in Ghana are often sold in a measure referred to as a “tot”. Thus, people use the number of tots consumed to quantify the amount of alcohol they have drank.

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

Alcohol advertisement is regarded as one of the influences that contribute to consumption and individual perception of alcohol. It is also widely criticized for creating a climate in which consumption is regarded as a norm[9]. Anderson et al., (2017) stated that “For young people who have not started to drink, expectancies are influenced by normative assumptions about teenage drinking as well as through the observations of drinking by parents, peers, and models in the mass media”[10].

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

Alcohol consumption has become a symbol of adulthood, acceptability, and identity among youth groups, especially for those who love to have fun. Advertisers and marketers of alcoholic beverages take advantage of this by depicting alcohol as the start of wild adventures and fun. Research has shown that the presence of older youths with drinking habits within the home and communities is copied by those less than 18 years of age, and this normalizes alcohol use [11].

Drinking has become a norm at social events such as sports, celebrations, and music events simply because everybody drinks has its acceptability by society. In most African countries, alcohol is indigenous to cultural believes and practices. During festive occasions, alcohol plays a key component, mostly among the youth. Marriage, naming ceremonies, festivals, and parties are not complete with the absence of alcohol. Thus, most youth on some occasions, bring along their drinks for consumption.

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

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

II. Methodology

a) Profile of Study Area

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

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

b) Study Design and Sample Size

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

The projected sample size for the study was 289 respondents. This was calculated using the Cochran Sample Size calculation formula\[^{15}\], with a known alcohol consumption prevalence of 25.1\% (Country Profile, 2004) on a 95\% Confidence Interval with a margin of error of 5\%.

\[
    n = \frac{Z^2p(1-p)}{e^2} = \frac{1.96^2 \times 0.251 \times (1 - 0.251)^2}{0.05^2} = 289
\]

Where,

- \( n \) = the required sample size,
- \( p \) = prevalence of alcohol consumption (25.1 \%) \[^{16}\],
- \( Z \) = score at 95\% confidence level
- \( e \) = margin of error

A 10\% non-respondent rate adjustment brought the total estimated sample size to about 320.

c) Data Collection and Statistical Analysis

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

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

d) Ethical Consideration

Ethical approval was obtained from Ensign College of Public Health’s Ethics Review Board, and administrative permissions were further sought from the due authorities. Informed consent of study participants was sought before administering the questions, making them aware of their rights to withdraw from the study. Participants below 18 years were given a parental assent form to access permission to proceed to participate. Participants were informed of the confidentiality of the study and the ability to withdraw when necessary. To elicit accurate information for the study, participants were not rewarded for participation but were given extensive information on some health issues related to alcohol consumption.

III. Results

a) Socio-demographic characteristics

A total of 320 questionnaires were administered and two hundred and ninety-seven (297) were appropriately completed and submitted, yielding a study response rate of 92.81\%. Out of the 297 total respondents, 193 were males representing 64.98\% of the sample, and one hundred and four were females representing 35.02\%. The majority of respondents were between the ages of 26-30 years (39.06\%), followed by 20-25 years (50.84\%) and lastly 16-19 years, accounting for 10.10\%. The study participants were mostly single made up of one hundred and ninety-two respondents (60.94\%), forty-one (13.47\%) co-habiting, and the rest married. 32.66\% of respondents had their educational level up to Junior Secondary School, with forty respondents making 12.12 percent with no formal education (Table 1).

| Variable (N = 297) | Categories | Frequency (n) | Percentage (%) |
|-------------------|------------|---------------|----------------|
| Gender            | Female     | 104           | 64.98          |
|                   | Male       | 193           | 35.02          |
| 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          |
Out of the total respondents, two hundred and sixty-nine (90.08%) have ever consumed alcohol, and out of this were two hundred and fifty-four (84.71%) who admit to currently consuming alcoholic beverages. The mean age of onset of consumption of alcohol was 19.76 years with a minimum of six (6) years and a maximum at 28 years. Males 185 (68.77%) consumed more alcohol than females 84 (31.23%). The number of respondents aged 26-30 years 106 (39.41%) consumed more alcohol than the other age groups, and those who were single also had a high consumption of alcohol 152 (59.94%).

b) Prevalence of alcohol use

The study showed that more than three third of the total respondents (269), attested that they had consumed alcohol. Assessment of their current intake revealed that the majority of the participants who had taken alcohol, still do, with only 5.58% of those who reported ever taken alcohol, admitting they no longer do the same (Table 2).

| Alcohol use (Ever) | Frequency (n) | Percentage % |
|--------------------|--------------|--------------|
| Yes                | 269          | 90.57        |
| No                 | 28           | 9.43         |
| Total              | 297          | 100          |

The kinds of alcoholic beverages that were reportedly taken by respondents include beer, spirits, and wine. About a third of the total respondents (33.0%) consume spirits which comprise of various “bitters” (alcohol-based drink) and “akpeteshie” (locally brewed alcoholic drink), followed by beer (25.59%) and 21.21% of the respondents acknowledging they consumed all alcoholic beverages that include wine, spirits, and beer. On average, respondents spent about $3.00 on alcohol per week. Sources of alcohol for use by the respondents were mainly from a purchase by oneself, representing 44.78%. Out of two hundred and fifty-three respondents who are current users of alcohol, thirty-nine of them smoke either cigarettes or wee. On the question of smoking, 42 of total the respondents accounting to about 14.14% were reported being current smokers (Table 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        |

c) Probable Factors that influence alcohol use

The majority of respondents 269 (90.57%), revealed they had access to at least a source of media. Out of two hundred and sixty-nine respondents who disclosed having access to mass media, 126 (46.84%) watched television only, and 46 (15.61) disclosed using the mobile phone as a means of getting information. A total of 38 representing 14.13% of the study sample used television and mobile phone as a means of getting information. To assess if the advertisement was an influence on alcohol consumption, 222 (74.75%) of participants disclosed that advertisement on alcohol encourages their drinking behavior. As to what in the advertised brand that influenced them, 82 (36.94%) stated the musicals, and 77 (34.68%) stated the use of celebrities as a contributing factor to alcohol use. The majority 44 (18.82%), attest to the use of role models and animation to have some amount of effect on their choices. However, 13(5.86%) asserted that nothing in the advert influenced them but makes them aware of the latest brand available.
Further probing revealed below that peer pressure, advertisement, and accessibility/availability of alcohol were acknowledged by more than a fifth of the respondents as probable contributors to alcohol use among the youth (Table 4).

### Table 4: Influences to drink

| Influences                             | 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           |

**d) Perception and knowledge of the health implications of alcohol use**

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

### Table 5: Perceptions about alcohol use that influences to drink and knowledge of health implications

| 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            |

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).

### Table 6: Bivariate analysis of demographic characteristics and alcohol consumption (Ever)

| Characteristics                      | Ever Consumed alcohol | X²    | p-value  |
|--------------------------------------|-----------------------|-------|----------|
|                                      | Yes n (%)             | No n (%)   |          |          |
| 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)             | 5 (17.86) | 2.2292   | 0.328    |
| 20-25                                | 139 (51.67)           | 12 (42.86) |          |          |
| 26-30                                | 105 (39.06)           | 11 (39.29) |          |          |
| Level of education                   |                       |        |          |          |
| None                                 | 36 (13.38)            | 0 (0.00) | 18.46    | < 0.001* |
| JSS                                  | 94 (34.94)            | 3 (10.71) |          |          |
| SSS                                  | 79 (29.37)            | 10 (35.71) |          |          |
| Tertiary                             | 60 (22.30)            | 15 (53.57) |          |          |
| Religion                             |                       |        |          |          |
| Christian                            | 211 (78.15)           | 22 (81.48) | 1.37     | 0.505    |
Table 7: Bivariate - Socio demographic characteristics on alcohol consumption (current)

| Characteristics | N (297) | Current alcohol Use | \( \chi^2 \) | p-value |
|-----------------|---------|---------------------|---------|---------|
| **Sex**         |         |                     |         |         |
| Male            | 174(68.77) | 19 (43.18) | 10.79  | < 0.001*|
| Female          | 79(31.23)  | 25 (56.82) |         |         |
| **Age (Years)**|         |                     |         |         |
| 15-19           | 24(9.46)  | 6(13.64) | 0.74   | 0.690   |
| 20-25           | 129(50.99)| 22(50.00) |         |         |
| 26-30           | 100(39.53)| 16(36.36) |         |         |
| **Level of education** |         |                     |         |         |
| None            | 35(13.83) | 1(2.27)  | 15.65  | < 0.001*|
| JSS             | 90(35.57) | 7(15.911) |         |         |
| SSS             | 71(28.06)| 18(40.91) |         |         |
| Tertiary        | 57(22.53)| 18(40.91) |         |         |
| **Religion**    |         |                     |         |         |
| Christianity    | 195(77.08)| 38(86.36) | 3.05   | 0.218   |
| Muslim          | 45(17.79)| 6(13.64)  |         |         |
| Traditionalist  | 13(5.14) | 0(0.00)   |         |         |
| **Marital Status** |       |                     |         |         |
| Single          | 151 (59.68) | 30(68.28) | 2.15   | 0.342   |
| Married         | 65 (25.69)| 11(25.00) |         |         |
| Co-habiting     | 37 (14.62)| 3(6.82)   |         |         |
| **Ethnicity**   |         |                     |         |         |
| Ewe             | 88(34.78)| 18(40.91) | 3.99   | 0.262   |
| Ga-Adangme      | 59(23.32)| 8(18.18)  |         |         |
| Akan            | 85(33.60)| 11(25.00) |         |         |
| Others          | 21(8.30)| 7(15.91)  |         |         |
| **Occupation**  |         |                     |         |         |
| Unemployed      | 8(3.16)  | 0(0.00)   |         |         |
| Student         | 62(24.51)| 27(61.36) | 27.67  | < 0.001*|
| Civil servant   | 28(11.07)| 6(13.64)  |         |         |
| Artisans        | 91(32.02)| 5(11.36)  |         |         |
| Traders         | 41(16.21)| 4(9.09)   |         |         |
| Drivers         | 17(6.72)| 1(2.27)   |         |         |
| Others          | 16(6.32)| 1(2.27)   |         |         |

*Denotes statistical significance at a 95% CI
f) Association between Advertisement and Alcohol Use

Table 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.

Table 8: A Bivariate test of association between advertisement and alcohol use

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

*Denotes statistical significance at a 95% CI


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.

Table 9: Logistic regression on alcohol consumption (current) and other significant variables

| Variables                        | Unadjusted | Adjusted |
|----------------------------------|------------|----------|
|                                  | OR (95% CI)| P-value  | OR (95% CI)| P-value |
| Gender                           |            |          |            |        |
| Male (Ref)                       | 1          | -        | 1          | -      |
| Female                           | 0.35(0.18, 0.66) | < 0.001* | 0.70(0.23,2.07) | 0.514 |
| Level of Education               |            |          |            |        |
| None (Ref)                       | 1          | -        | 1          | -      |
| J.S.S                            | 0.37(0.04,3.09) | 0.357    | 0.57(0.05,6.26) | 0.643 |
| S.S.S                            | 0.11(0.02,0.88) | 0.037    | 0.25(0.02,3.01) | 0.277 |
| Tertiary                         | 0.09(0.01,0.71) | 0.022    | 0.80(0.05,11.87) | 0.874 |
| Influence of advertisement       |            |          |            |        |
| No (Ref)                         | 1          | -        | 1          | -      |
| Yes                              | 7.67(3.84,15.30) | < 0.001* | 3.92(1.29,11.94) | 0.016* |
| Occupation                       |            |          |            |        |
| Unemployed (Ref)                 | 1          | -        | 1          | -      |
| Student                          | 1.14(0.02,11.13) | 0.066    | 0.26(0.01,8.17) | 0.445 |
| Civil servant                    | 0.29(0.03,2.64) | 0.273    | 0.43(0.01,16.84) | 0.653 |
| Artisans                         | 1.01(0.11,9.26) | 0.991    | 0.84(0.03,36.46) | 0.922 |
| 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(0.02,66.96) | 0.945 |
| Others                           | 1          | -        | -          | -      |
| Sources of alcohol               |            |          |            |        |
| Brothers and sisters (Ref)       | 1          | -        | 1          | -      |
| From home without parents        | 2.80(0.26,30.17) | 0.396    | 1.89(0.15,23.62) | 0.620 |
| 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 my own      | 7.40(0.71,76.92) | 0.094    | 3.17(0.25,40.67) | 0.376 |
| None                             | 0.05(0.71,76.92) | < 0.001* | 0.05(0.01,0.26) | < 0.001* |

*Denotes statistical significance at a 95% CI
**IV. 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 (20-25). 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 study 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 and collaboration of 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].

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

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

Alcohol consumption is very often advertised as the quickest medium for relaxation and fun, a booster to one’s sexual drive, the best appetizer for the hungry mouth, and the solution to forgetting personal problems.
Unfortunately, less is said about the side effects associated with this menace. With an overwhelming number of the study respondents upholding these perceptions, there is a strong likelihood that any excessive use will rather complicate their health conditions. The findings recorded that approximately 63% of respondents were not aware of the relation between alcohol use and STI’s although various researches including Simbayi et al., (2004) have confirmed this[26].

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

V. Conclusion

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

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

VI. Limitations of the Study

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

Authors’ contributions

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

Conflict of Interest

All authors declare no conflict of interest.

REFERENCES Références Referencias

1. Jernigan D. H. (2001): Global Status Report: Alcohol and Young People. World Health Organization, 17, pp. 735–743. https://apps.who.int/iris/bitstream/handle/10665/66795/WHO_MSD_MSB_01.1.pdf;jsessionid=BCDEC3675473F495130ADC300567791F?sequence=1
2. Bai F. W., Anderson W. A., Moo-Young M. (2008): Ethanol fermentation technologies from sugar and starch feedstocks. Biotechnology Advances, pp. 89–105. http://doi.org/10.1016/j.biotechadv.2007.09.002
3. Guo R., Jun R. (2010): Alcohol and acetaldehyde in public health: From marvel to menace. International Journal of Environmental Research and Public Health, pp. 1285–1301. https://dx.doi.org/10.3390%2Fijerph7041285
4. Kuntsche E., Knibbe R., Gmel G., Engels R. (2005): Why do young people drink? A review of drinking motives. Clinical Psychology Review; 25 (7): 841-61. https://doi.org/10.1016/j.cpr.2005.06.002
5. US-Department of Health and Human Services (2014): Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, Substance Abuse, and Mental Health Services Administration, pp. 1–143. doi: NSDUH Series H-41, HHS Publication No. (SMA) 11- 4658. https://store.samhsa.gov/system/files/nsduhmsfr2013.pdf
6. Damsere-Derry F., Afukaar F., Palk G., King M. (2014): Determinants of drink-driving and association between drink-driving and road traffic fatalities in Ghana. The International Journal of Alcohol and Drug Research, 3(2), p. 135. https://doi.org/10.7895/ijadr.v3i2.135
7. Center on Alcohol Marketing and Youth (CAMY) 2010.http://www.camy.org/resources/reports/
8. World Health Organisation (2011) https://www.who.int/substance_abuse/publications/global_alcohol_report/msbgsruprofiles.pdf
9. Forouzanfar, M. H. (2016): Global, regional, and national comparative risk assessment of 79
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behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: A systematic analysis for the Global Burden of Disease Study 2015. The Lancet, 388(10053), pp. 1659–1724. https://doi.org/10.1016/S0140-6736(16)31679-8

10. Anderson P., de Brujin A, Angus K, Gordon R, Hastings G.(2017): Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. Alcohol and Alcoholism 44(3), pp. 229–243. https://doi.org/10.1093/alcalc/agn115

11. Hackley C. Bengry-Howell A.,Griffin C., Mistral W., Szmigin I., (2013): Young adults and “binge” drinking: A Bakhtinian analysis. Journal of Marketing Management, 29(7–8), pp. 933–949. https://doi.org/10.1080/0267257X.2012.729074

12. National Alcohol Policy (2016). http://www.moh.gov.gh/ghana-launches-national-alcohol-policy/

13. Amoateng, F., Poku K, (2013): The Impact of Advertisement on Alcohol Consumption: A Case Study of Consumers in Bantama Sub-Metro.International Review of Management and Marketing, 3(1), pp. 28–36. http://www.econjournals.com/index.php/irrm/article/view/300/pdf

14. Ghana Statistical Service(2014). 2010 Population and Housing Census. http://www2.statsghana.gov.gh/docfiles/2010_District_Report/Greater%20Accra/ASHAIMAN%20MUNICIPAL.pdf

15. Cochran W.G. (1977). Sampling Techniques, 3rd Ed. New York: Wiley. 428pp. https://hwbdocuments.env.nm.gov/Los%20Alamos%20National%20Labs/G general/14447.pdf

16. Adu-Mireku S. (2003): The Prevalence of Alcohol, Cigarette, and Marijuana Use Among Ghanaian Senior Secondary Students in an Urban Setting. Journal of Ethnicity in Substance Abuse, 2(1), pp. 53–65. https://doi.org/10.1300/J233v02n01_05

17. Oppong-Asante K., Meyer-Weitz A. and Petersen I. (2014): Substance use and risky sexual behaviours among street-connected children and youth in Accra, Ghana. Substance Abuse Treatment, Prevention, and Policy, 9, p. 45. https://doi.org/10.1186/1747-597X-9-45

18. Osei-Bonsu, E Kubi Appiah P. Kyei Boadu S. (2017): Prevalence of Alcohol Consumption and Factors Influencing Alcohol Use Among the Youth in Tokorni-Hohoe, Volta Region of Ghana. Science Journal of Public Health, 5(3), pp. 205–214. https://doi.org/10.11648/j.sjph.20170503.18

19. Chauke, T. M., van der Heever, H. and Hoque, M. E. (2015): Alcohol use amongst learners in rural high school in South Africa, African Journal of Primary Health Care and Family Medicine, 7(1). https://dx.doi.org/10.4102%2Fphcfm.v7i1.755

20. Michalak, L., Trocki, K., Bond, J. (2007): Religion and alcohol in the U.S. National Alcohol Survey: How important is religion for abstention and drinking?, Drug and Alcohol Dependence, 87(2–3), pp. 268–280. https://psycnet.apa.org/doi/10.1016/j.drugalcdep.2006.07.013

21. Obot, I. S. and Room, R. (2005): Alcohol, Gender and Drinking Problems: Perspectives from Low and Middle-Income Countries, World Health Organization Department of Mental Health and Substance Abuse, p. 227. https://www.who.int/substance_abuse/publications/alcohol_gender_drinking_problems.pdf

22. Oshodi, O. Y., Aina, O. F. and Onajole, A. T. (2010) ‘Substance use among secondary school students in an urban setting in Nigeria: prevalence and associated factors. African Journal of Psychiatry, 13(1), pp. 52–57. http://dx.doi.org/10.4314/ajpsy.v13i1.53430

23. World Health Organisation (2014): Global status report on alcohol and health. pp. 1–392. https://www.who.int/substance_abuse/publications/alcohol _2014/en/

24. Ödejide, A. O. (2006): Status of drug use/abuse in Africa: A review. International Journal of Mental Health and Addiction, pp. 87–102. doi: 10.1007/s11469-006-9015-y https://doi.org/10.1007/s11469-006-9015-y

25. Anderson P., Baumberg B. (2006) Alcohol in Europe – Public Health Perspective. Drugs: Education, Prevention, and Policy. https://doi.org/10.1080/09687630600902477

26. Simbayi L. C., Kalichman S.C., Jooste S., (2004): Alcohol use and sexual risks for HIV infection among men and women receiving sexually transmitted infection clinic services in Cape Town, South Africa. Journal of Studies on Alcohol, pp. 434–42. https://doi.org/10.15288/jsa.2004.65.434

27. Snyder L.B., Milici F.F, Slater M., Sun H., Strizhakova Y. Effects of Alcohol Advertising Exposure on Drinking Among Youth. Arch Pediatric Adolescent Med. 2006; 160 (1): 18–24. https://doi. org/10.1001/archpedi.160.1.18

28. Koordeman R., Anschutz D. J., Engels, R. C. M. E. (2012): The effect of alcohol advertising on immediate alcohol consumption in college students: an experimental study. Alcoholism, Clinical and Experimental Research, 36(5), pp. 874–80. https://doi.org/10.1111/j.1530-0277.2011.01655.x

29. Chen M. J., Grube J.W., Bersamin M.,Waiter E. (2005): Alcohol advertising: What makes it attractive to youth?, Journal of Health Communication, 10(6), pp. 553–565. https://doi.org/10.1080/10810730500228904