Alcohol consumption and tobacco use among secondary school students in Ekiti State, Nigeria

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Abstract

The study investigated alcohol consumption and tobacco use among secondary school students in Ekiti State, Nigeria. It also assessed the students' awareness of the health effects of alcohol consumption and tobacco use. Descriptive research design of the survey type was adopted for the study. The sample comprised of four hundred (400) students selected using simple random sampling technique. A self-designed, close-ended questionnaire was used to collect data from the respondents. Research questions were answered with frequency count and simple percentage and Pearson Product Moment Correlation was used to test the hypotheses at 0.05 level of significance. The results revealed a low prevalence of alcohol and tobacco use. Also, significant relationship was found between alcohol consumption and tobacco use as well as, between knowledge of health effects and tobacco use. It was thus recommended that health educators should organize sensitization programme using mass media to educate students on effect of alcohol and tobacco on their health. School administrators should place bill boards in strategic places in the school condemning the use of alcohol in the school environment.

Keywords: Alcohol consumption, tobacco use, knowledge, Health effects, students, secondary school

1.1 Introduction

The menace of alcohol consumption and tobacco use among secondary school students seem to be on the increase. Studies have shown that smoking, binge drinking and illicit drug use remain common among college students (Schorling et al, 1994). Alcohol, a thin, volatile, colourless liquid with pungent taste is the constituents of wine, beer, spirits and some other drinks such as local gin. In Nigeria, many people consume alcohol under the pretence of taking medicinal drinks known as “opa” “ehin”, “paraga” or “fidigbodi”. These drinks are popular in many neighbourhoods and sold by vendors in motor parks where commercial drivers have access to it (Oluwadiya & Akinola, 2012). Tobacco on the other hand, is a preparation of a nicotine-rich leaves of American plant cured by a process of drying and fermentation for smoking or chewing. Tobacco is available in several forms such as
Evidence abounds that students consume alcohol and use tobacco. For instance, alcohol and tobacco were found to be the most commonly abused drugs among adolescents (Emiola, 1990). The fact remains that people who consume alcohol are more likely to indulge in the habit of using tobacco.

Alcohol acts by inhibiting neural and cerebral functioning and offers its peculiar form of pleasure, but at the cost of impaired thinking, memory, and decision-making (Ojiji et al. 2008). Alcohol consumption and tobacco use have been identified to be closely linked with behaviour, culture, and differences in risk perception (Hughes et al. 1992). The uncontrolled consumption of alcohol can result into addiction (Ejikeme, 2000). Tobacco is taken in different forms namely smoking, chewing, snuffing, licking and sucking (Donatelle, 2002). From observation, tobacco is a common psychoactive substance used by students. College students may smoke for various reasons such as deviance to parents, relaxed smoking standards in hostels, the need to belong or be accepted into a peer group.

The prevalence of alcohol consumption and tobacco use is high among students (Barbosa, Camps & Lopes, 2012). The current use and prevalence of tobacco among secondary school students was 14.3% and was exclusively abused by male students (Igwe and Ojinaka, 2010). College students, in many countries have been found to be at high risk for heavy drinking with serious health risks, such as drink-driving (Karam, Kypri & Salamoun, 2007). In most cases, the initiation into smoking overtime may increase into regular use and eventually the user becomes a heavy smoker. Also, various studies have proved that most of the substances use among youths start at early life (Awoniyi, 1998; Igwe and Ojinaka, 2010) as the urge to smoke starts through observation or imitation of those who smoke. Evidence abound that students initiated smoking at age 10 years or younger (Everett, et al, 1999).

The danger in alcohol consumption and tobacco use could be linked with the tendency of the younger generation wanting to try hard drugs because studies have revealed that alcohol and tobacco use are the gateway to other hard drugs with alcohol being the first drug ever tried by students (Kassaye, et al., 1999).

Observation has shown that alcohol use has affinity for tobacco use. In Nigeria, many alcoholics are smokers. Studies have shown that dependence on alcohol and tobacco use is correlated as people who are dependent on alcohol are three times more likely than those in general population to be smokers (Grant et al, 2004). In a similar study a significant correlation was seen between the severity of alcohol and nicotine dependencies (Batel, Pessione, Maite & Rueff, 1995). Though, the study conducted among students revealed that students who use alcohol were higher than cigarette smokers (Awosusi & Adegboyega, 2013) while another study found tobacco use to be the most prevalent substance used among students (Ahmadi, Rayisi & Alishabi, 2003).

Alcohol and tobacco use contribute to the development of chronic health problems (Sturm, An, Maroba and Patel, 2013). The tendency of the duo to predispose adolescents to illicit drug use can explain why the use commonly serves as outlet for adolescent rebelliousness (Hoffman, 2001). Studies have revealed that alcohol and tobacco use can take a heavy toll on the human body because, many who are given to alcohol do smoke which put them at high risk of tobacco-related complications and diverse forms of cancers, lung disease and heart diseases (Grucza & Beirut, 2007). Alcohol consumption has been linked with liver problems such as fatty liver (Rothschild, Oratz & Schreiber, 1989), liver cirrhosis (Corrao, Bagnardi, Zambon & La Vecchia, 2004) alcohol hepatitis, jaundice and abdominal pain (Crabb & Lumeng, 1989). Other alcohol-related health problems include anaemia, malnutrition, gastrointestinal haemorrhage and ulcers that require surgery, chronic pancreatitis and social problems such as injuries, violence, loneliness (Corrao et al 2004). On the other hand, it has been discovered that the use of tobacco can predispose users to respiratory impairment such as lung cancer and diseases (Harwood, 2000). Other health implications of alcohol
consumption and tobacco use include cardiovascular disease such as hypertension (Peto et al., 2000). Many students who drink heavily have been discovered to be at high risk of mental disorders, alcohol abuse and dependence (Buddy, 2004). A growing body of evidence suggests that these substances might be especially dangerous when they are used together by dramatically increasing the risk of certain cancers (Pelucchi, 2007).

Majority knew about and understood the hazards of smoking (Al-Faris, 1995) while the knowledge of the perceived harmfulness did not appear to serve as a sufficient deterrent against substance use in the student population (Abiodun, et. al, 1994). The danger rests with those who do not perceive alcohol consumption as harmful or those that believe that regular consumption of a small quantity of alcohol could protect against cardiovascular diseases (Thun, et. al, 1997). The reason is that regular use may predispose user to addiction and studies have revealed that heavy consumption of alcohol has been associated with increased blood pressure (Bradley, et. al, 1998). It is believed that the knowledge of the dangers inherent in alcohol consumption and tobacco use could reduce or at best prevent students from engaging in the habit. Knowledge of the harm of a substance could be a deterrent to its use (Fatoye, 2007). The knowledge of health implications of alcohol and tobacco was found to be significantly associated with use as students with higher knowledge of the harm associated with the substances tend to be non-users (Makanjuola, Abiodun and Sajo, 2014). However, Euro Care (2011) discovered that many young people lacked adequate knowledge of the long-term consequences of alcohol consumption.

The fact that risk-taking behaviours that can have lifelong implications are often seen in adolescents and young adults (Dowdell, Posner & Hutchinson, 2011) justified the conduct of this study among secondary school students. Based on this background, the purpose of this study was to determine the prevalence of alcohol consumption and tobacco use, knowledge of the health effects of excessive alcohol consumption and tobacco use and the relationship between knowledge of health effects and usage of alcohol and tobacco among Secondary School Students in Ekiti State, Nigeria.

1.2 Research Questions

This study attempts to answer the following questions:

1.2.1 Do Secondary school students consume alcohol and use tobacco?
1.2.2 Are students aware of the health effects of excessive alcohol consumption and tobacco use?

1.3 Research Hypotheses

1.3.1 There is no significant relationship between alcohol consumption and tobacco use
1.3.2 There is no significant relationship between knowledge of the health effects and alcohol consumption
1.3.3 There is no significant relationship between knowledge of health effects and tobacco use

2.0 Methodology

2.1 Setting

This study was conducted in Ekiti State, Nigeria. The study population comprised of all senior secondary schools students.
2.2 Research Design

The study adopted descriptive survey research design because it examined the behaviour and views of students on alcohol consumption and tobacco use as they appear naturally without any manipulation.

2.3 Sample

Four hundred (400) senior public secondary school students were selected using simple random techniques. Ten senior secondary schools were selected using simple random sampling. Forty students were also randomly selected from each school giving a total of four hundred (400) students.

2.4 Instrumentation

A 10-item structured questionnaire on alcohol consumption and tobacco use based on related literature was constructed and used to collect data for the study. The questionnaire was divided into two sections. Section A elicited information on the demographic variables and Section B was used to gather information on Alcohol consumption and tobacco use as well as, knowledge of health effects. The validity of the questionnaire was ascertained by experts who have worked extensively on drug use and abuse. The coefficient of 0.94 obtained through the use of Cronbach’s Alpha determined that the reliability of the questionnaire was high. Four Hundred (400) copies of the questionnaire were administered to the respondents in their classrooms when they were not having lectures by the researchers and two trained research assistants after obtaining verbal consent from the schools management and class teachers. On the spot collection method was used to ensure high return rate.

2.5 Data Analysis

Data collected were collated and analysed. Frequency counts and percentages were used for the research questions while Pearson Product Moment Correlation was used to test the hypotheses at 0.05 level of significance.

3.0 Results

3.1 Research Question 1: Do Secondary school students consume alcohol and use tobacco?

Table 1 showed that 9.3% of the respondents in this study were regular users of locally brewed gin while 13.3% of the respondents consume locally brewed gin occasionally. Nearly one-quarter (24.8%) of the respondents reported that they are occasional users of Beer/Stout. Similarly, only a small number of the respondents (5.5%) had actually smoked tobacco regularly. However, a high number of respondents were not users of alcohol and tobacco.

3.2 Research Question 2: Are students aware of the health effects of excessive alcohol consumption and tobacco use?

Table 2 shows that majority of the respondents were aware of the health effects of alcohol consumption and tobacco use. The respondents knew that diseases of the lungs 357(90.2%), liver disease 351 (88.8%) followed by cardiovascular disease 345(87.1%) could result from usage of alcohol and tobacco. Also, responses to either or both substances affecting one’s finance 312 (78.9%) and lead one to unprotected pre-marital sex 316 (79.8%) though high but were the least on the table.
3.3 Hypothesis 1: There is no significant relationship between use of alcohol and cigarette smoking

In Table 3, the r calculated .622 at P=.000 is significant. The result made it obvious that a significant relationship exists between alcohol consumption and tobacco use. Consequently, the hypothesis was not accepted. This result clearly shows that the use of alcohol can influence tobacco smoking or vice-versa.

3.4 Hypothesis 2: There is no significant relationship between the knowledge of health effects and alcohol consumption

As shown in Table 4, r calculated -0.033 is not significant because P > 0.05. The null hypothesis is not rejected which denotes that there is no significant relationship between knowledge of health effects and alcohol consumption. This means that those who consume alcohol are less aware of the negative health effects.

3.5 Hypothesis 3: There is no significant relationship between knowledge of health effects and tobacco use

Table 5 shows that r calculated 0.110 is significant because P< 0.05. The stated null hypothesis that there is no significant relationship between knowledge of health effect and tobacco use is rejected which denotes that a significant relationship exists between knowledge of health effects and tobacco use. This denotes that respondents are aware of the health effects of tobacco use.

4.0 Discussion

The revelation from this study that the prevalence of alcohol consumption ranges from 10 (2.5%) to 37 (9.3%) is lower than the finding of Barbosa, Camps & Lopes (2012) where the prevalence of alcohol ranged from 23% to 67%. The discrepancy in the prevalence rate may be attributed to the type of alcoholic drink that Nigerian adolescents do find affordable and accessible as it was revealed that the most regularly used alcoholic drink among respondents was locally brewed gin. Locally brewed gin in Nigeria is a volatile substance with high alcoholic content is easily available and affordable because it is been sold in the measurement which users could afford. The fact that the sale of the substance is not under any restriction may be the reason for the substance being the most prevalent alcoholic substance among students. Also, the use of tobacco 22 (5.5%) was found to fall within the range of 2.4%-22% discovered (Barbosa et al, 2012). The discovery that regular use of alcohol was slightly higher than tobacco in this study disagreed with the finding of Ahmadi et al (2003) where tobacco use was found to be more than alcohol consumption. The discrepancy could be attributed to the age difference between the two study groups.

The high knowledge of health effects of alcohol and tobacco use displayed by the students in this study agreed with Awosusi & Adegboyega (2013) but disagreed with studies of Nwakwo, Obi & Nwosu (2013) and Euro Care (2011) where students were found to have limited knowledge of the dangers associated with alcohol and tobacco use. Similarly, the finding that majority of the respondents (90.2%) in this study knew that tobacco use could cause diseases of the lungs corroborated the findings of Ehizele et al (2012) where majority of their respondents were aware of the health effects of tobacco use. This high knowledge may be attributed to the warnings in the advertisement of cigarette where smokers have been made to understand that they may die young. The knowledge of the health effects of tobacco use may be attributed to the minimal number of respondents using tobacco either regularly or occasionally.

A significant relationship was found to exist between alcohol consumption and tobacco use. This finding corroborates the submission of Bobo & Husten (2000) that people who smoke are more likely to drink alcohol as well as those who drink alcohol are more likely to smoke cigarette drugs and that both alcohol consumption and cigarette smoking have been identified as gateways to other drugs. Also, Hansel et al (2010) and katulanda (2014) found a positive relationship between tobacco use and alcohol consumption.
Further findings revealed that there was no significant relationship between knowledge of health effects and alcohol consumption. This result could be attributed to the numerous advertisements of alcoholic substances without warning of the health implication. There was no platform where users could know of the health effects of alcohol on their body. The discovered significant relationship between knowledge of health effects and tobacco use agreed with the finding in a similar study conducted among students of tertiary institution in Southwest, Nigeria (Awosusi & Adegboyega, 2013).

**5.0 Conclusion**

It can be concluded that has been shown from this study that there is a significant relationship between alcohol consumption and tobacco use. It was revealed that students’ knowledge of the health effects of alcohol consumption and tobacco use was very high yet few students still consume the substances. Furthermore, a significant relationship was found to exist between knowledge of health effects and tobacco use but no significant relationship was found between knowledge of health effects and alcohol consumption. Therefore, the findings of this study could be useful when planning preventive programme for alcohol consumption and tobacco use among secondary school students. The recognition of the importance of knowledge of health effect of alcohol and tobacco use implies that strategies of enhancing knowledge must focus on the youth.

**6.0 Recommendations**

Based on the findings, it was recommended that more educative health programmes should be organized on regular basis by health educators to sensitize students on the dangers inherent in alcohol consumption and tobacco use. Also, school authorities should place bill boards condemning the use of alcohol in school environment in strategic places in the school as well as adhere strictly to the laws forbidding the sales of alcohol and cigarette in school environment. Finally, the government should formulate a policy that would mandate that advertisements of alcoholic products should also inform users of the negative health implications of the substance.

**7.0 Limitation:** The instrument for this study was administered during classroom lecture which may result into under reporting of alcohol use and tobacco use. Therefore, prevalence of alcohol consumption and tobacco use may be higher than that reported in this study.

**8.0 References**


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9.0 TABLES

9.1 Table 1: Extent of alcohol consumption and tobacco use

<table>
<thead>
<tr>
<th>Types of substances</th>
<th>Used Regularly</th>
<th>Used Occasionally</th>
<th>Never Used</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Wine</td>
<td>18</td>
<td>4.5</td>
<td>22</td>
</tr>
<tr>
<td>Spirits (Whiskey, Schnapps or Dry gin)</td>
<td>10</td>
<td>2.5</td>
<td>36</td>
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<tr>
<td>Locally brewed gin (Alomo, Ogogoro, Gegemu, Opa-eyin etc)</td>
<td>37</td>
<td>9.3</td>
<td>53</td>
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<tr>
<td>Palm wine</td>
<td>26</td>
<td>6.5</td>
<td>35</td>
</tr>
<tr>
<td>Beer/Stout</td>
<td>22</td>
<td>5.5</td>
<td>99</td>
</tr>
<tr>
<td>Tobacco (cigarette, pipe or snuff)</td>
<td>22</td>
<td>5.5</td>
<td>12</td>
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9.2 Table 2: Health effects of alcohol consumption and tobacco use as perceived by respondents

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Liver disease</td>
<td>351</td>
<td>88.6</td>
</tr>
<tr>
<td>Cardio vascular disease</td>
<td>345</td>
<td>87.1</td>
</tr>
<tr>
<td>Diseases of the lungs</td>
<td>357</td>
<td>90.2</td>
</tr>
<tr>
<td>Peptic ulcer</td>
<td>328</td>
<td>82.8</td>
</tr>
<tr>
<td>Cancer of the mouth</td>
<td>345</td>
<td>87.1</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>339</td>
<td>85.6</td>
</tr>
<tr>
<td>Poor concentration</td>
<td>325</td>
<td>82.1</td>
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<tr>
<td>Poor academic performance</td>
<td>336</td>
<td>84.8</td>
</tr>
<tr>
<td>Cause one to be violent</td>
<td>341</td>
<td>86.1</td>
</tr>
<tr>
<td>Unprotected pre-marital sex</td>
<td>316</td>
<td>79.8</td>
</tr>
<tr>
<td>Affect one’s finance</td>
<td>312</td>
<td>78.9</td>
</tr>
<tr>
<td>Accident</td>
<td>320</td>
<td>80.8</td>
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</table>

9.3 Table 3: Pearson Product Moment Correlation analysis of alcohol consumption and tobacco use

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>r-cal</th>
<th>r-tab</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>Alcohol use</td>
<td>396</td>
<td>6.19</td>
<td>2.05</td>
<td>394</td>
<td>0.622*</td>
<td>.000</td>
<td>S</td>
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<tr>
<td>Tobacco use</td>
<td>396</td>
<td>1.14</td>
<td>0.48</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*P<.05
9.4 **Table 4:** Pearson Product Moment Correlation analysis of knowledge of health effects and alcohol consumption.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>df</th>
<th>r-cal</th>
<th>r-tab</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of health effects</td>
<td>396</td>
<td>22.14</td>
<td>3.34</td>
<td>394</td>
<td>-0.033</td>
<td>.517</td>
<td>NS</td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>396</td>
<td>6.19</td>
<td>2.06</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

$p>.05$

9.5 **Table 5:** Pearson Product Moment Correlation analysis of knowledge of health effects and tobacco use

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>df</th>
<th>r-cal</th>
<th>r-tab</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>Knowledge of health effects</td>
<td>396</td>
<td>22.14</td>
<td>3.34</td>
<td>394</td>
<td>.110*</td>
<td>.028</td>
<td>S</td>
</tr>
<tr>
<td>Tobacco Use</td>
<td>396</td>
<td>1.14</td>
<td>.483</td>
<td></td>
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*P<0.05