Interpersonal Communication Channels and Alcohol Consumption among Students in Government Tertiary Medical Colleges in Kenya

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ABSTRACT
The study sought to evaluate how interpersonal communication channels influenced the consumption of alcohol among college students. Specifically, the study focused on public tertiary colleges in Kenya. The study was motivated by the increased cases of dropout, ill-health, poor performance, and other related effects of alcohol among college students. This is despite the continued efforts to curb alcohol abuse among students by agencies such as the United Nations Office for Drug and Crime, the National Authority for the Campaign Against Drug Abuse, and the school management, among other agencies. The study was anchored on social cognitive theory. Through a descriptive cross-sectional survey design, both qualitative and quantitative data were obtained using a questionnaire and interview schedule. Both quantitative and qualitative data were analyzed. The findings revealed that alcohol consumption among college students was significantly influenced by interpersonal communication channels (t = 14.381, p<0.05). The study recommended the need for stakeholders, including the government and other agencies, to spearhead campaigns to sensitize the students on the ills of alcohol consumption and uphold measures that reduce the encouragement of alcohol consumption through interpersonal communication channels.

Keywords: Alcohol Consumption, College Students, Drug Abuse, Interpersonal Communication Channel

I. INTRODUCTION

Interpersonal communication is a process of using language and non-verbal cues to send and receive messages between individuals that is intended to arouse particular kinds of meaning (Banerjee et al., 2015). It is an ongoing, ever-changing process that occurs when one person interacts with another, forming a dyad (Hendriks et al., 2014). Interpersonal communication is also regarded as the lifeblood of any transaction (Sethi & Seth, 2009). But it is the uniqueness of interpersonal communication compared to other forms of communication that is of interest to this study: fewer participants are involved, feedback is immediate, those interacting are in close proximity, many sensory channels are used, and it occurs between people who have known each other for some time, viewing each other as unique individuals (Hendrarso & Poernomo, 2017). Ramsoomar and Morojele (2012) analyzed the element of face-to-face communication in interpersonal communication, defining it as communication that is face-to-face and in which both the form and content of the communication reflect the personal characteristics of the individuals as well as their social roles and relationships. An understanding of how people communicate could help unravel the reason why alcohol is believed to inflict serious social and economic consequences for individuals other than the user and for society at large (Ackerson & Viswanath, 2009), despite a high level of knowledge about its dangers.

The abuse of alcohol across the world has been a menace, particularly among the youth, posing a threat to the future of the world’s most productive age. According to the World Health Organization (WHO), alcohol abuse has caused proliferating health effects in the global population, despite the wide range of policies and actions at global, regional, and national levels aimed at reducing the harmful effects of its use and abuse (WHO, 2022). The burden of disease and death resulting from unsafe alcohol consumption is a critical challenge in most countries around the world. Health problems associated with its consumption manifest themselves in the form of acute and chronic conditions, sometimes with adverse social consequences (Morojele et al., 2021). According to WHO (2014), alcohol killed about 3.3 million people in 2012, or 5.9 percent of all global deaths. Every year, 320,000 young people between the ages of
15 and 29 die due to alcohol (WHO, 2019), which kills more men than women. Of the 3.3 million deaths caused by alcohol in 2012, 7.6 percent were males and 4.0 percent were females (WHO, 2022).

Globally, alcohol is the third leading risk factor for poor health, causing a major burden of disease and injury (Lim et al., 2012). Alcohol is linked with a risk of developing health problems such as liver cirrhosis, alcohol dependence, cancer, and injuries (WHO, 2022; Felsher et al., 2021). Alcohol has not spared the youth, including college students. Though 61.7% of the population aged 15 years or older had not drunk alcohol in the past 12 months, about 16.0% of this age engage in heavy episodic drinking (WHO, 2022). Researchers estimate that in the United States, alcohol-related unintentional injuries, including motor vehicle crashes, kill 1825 college students aged between 18 and 24 (United Nations Office on Drugs and Crime [UNODC], 2018).

According to government statistics in Kenya, the highest incidence of alcohol and drug abuse is observed among young adults aged 15 to 29, while the lowest rates are found in adults aged 65 and above. In urban areas, approximately 16.6 percent of the population consumes alcohol, in contrast to rural areas, where the figure is 11.4 percent. The regions with the lowest incidence of alcohol abuse, below 10 percent, are North Eastern and Central. Nairobi, the capital city, tops the list, with 15.7 percent of its population being consumers of alcohol. Changaa, a locally brewed traditional drink, is particularly popular due to its affordability and easy accessibility. It is most widely used in Nairobi Province and Western Province, with rates of 7.2 percent and 7.1 percent, respectively (National Authority for the Campaign Against Alcohol and Drug Abuse [NACADA], 2016). These statistics regarding alcohol consumption among the youth in Kenya present a concerning image of a nation where a significant portion of the population is grappling with alcoholism. The age group (15–29 years) most affected by harmful consumption of alcohol (Steele et al., 2019), including students of Kenya Medical Training College (KMTC).

1.1 Statement of the Problem
As the world’s most abused substance, alcohol continues to rescind many livelihoods across the globe. In Kenya, the abuse of alcohol is rampant across generational cohorts, but most prevalent among youths and college students (Nkonge, 2017; Gberie, 2016). Increased alcohol consumption and abuse among college students and youths in general is a major threat to the country’s future stability and continued development (Kendagor et al., 2018). One of the key concerns that have been blamed for the widespread and reckless drinking behaviour, especially among youths and college students, is the availability of information on alcohol. This has been subsequent to the increased interpersonal communication orchestrated by the high penetration of technology, such as social media. However, despite the empirical studies finding interpersonal communication to have mixed results on alcohol consumption, there is a lack of clear evidence in the local context, particularly among the college students, hence the motivation of this study.

1.2 Objectives of the Study
To determine the extent to which interpersonal communication channels influence alcohol consumption among students in Kenya Medical Training College in Kenya.

1.3 Research Hypotheses
\( H_0 \): Interpersonal communication channels have no significant influence on alcohol consumption among students in Kenya Medical Training College in Kenya
\( H_1 \): Interpersonal communication channels have a significant influence on alcohol consumption among students in Kenya Medical Training College in Kenya

II. LITERATURE REVIEW

2.1 Theoretical Framework
Albert Bandura first proposed the Social Cognitive Theory (SCT) in the 1960s, and this study is based on it (Bandura, 1988). According to this theory, individuals acquire knowledge by observing others within the context of social interactions, experiences, and external media influences. This type of learning is rooted in a dynamic and reciprocal interplay between an individual, their environment, and their behaviour (Pálsdóttir, 2013). Notably, the theory places significant emphasis on both social influences and internal and external social reinforcement, distinguishing it as a unique feature.

Within this framework, when individuals witness a model performing a behaviour and experiencing the subsequent consequences, they retain this sequence of events, utilizing it to inform their own future behaviours. Interpersonal communication channels play a crucial role in facilitating the transmission of this information to students,
who then mimic these behaviours. This suggests that people don't solely learn new behaviours through trial and error; rather, they rely on the replication of observed actions for survival (Dong et al., 2016). Through accessible channels, behaviours related to alcohol consumption can easily be imitated, potentially leading students to adopt alcohol consumption.

Additionally, the theory takes into account the distinctive manner in which individuals acquire and sustain behaviours while also considering the social context in which these behaviours occur (Peretti-Watel, 2006). It acknowledges a person's prior experiences, using them to forecast the likelihood of future behavioural actions. In this light, the theory underscores the significance of information availability through interpersonal communication in influencing alcohol consumption behaviours.

2.2 Conceptual Framework

This study conceptualizes that various interpersonal communication channels (the independent variable) such as face-to-face, internet-mediated, mobile phone calls, texts, and social media have a significant impact on alcohol consumption (the dependent variable), categorized into high, medium, and low levels. In this light, this study explores how different communication methods influence alcohol consumption habits across these three levels. The conceptual framework is presented in Figure 1.

![Figure 1: Conceptual Framework](image)

2.3 Empirical Review of Studies

Crawford et al. (2020) assessed nursing students’ perceptions of learning interpersonal communication skills in Australia. The study sought to establish whether the learners understood the need for interpersonal communication skills in aspects such as drug abuse. The findings revealed that most of the students perceived interpersonal communication skills as interrelated with real-life skills but felt that the communication channel had more influence on the role of interpersonal communication on life skills and experiences. Crawford et al. (2020) noted that the channel of interpersonal communication in modern society was recognized as the main driver of communication and determined the influence of interpersonal communication skills in social changes such as curbing drug and substance abuse.

Archiopoli et al. (2016) did a study on the factors of interpersonal communication influencing the health of medication self-efficacy and medication adherence. The study aimed at assessing the factors of interpersonal communication that influenced the behaviour of individuals towards behavioural norms such as drug abuse and adherence to medication for conditional diseases. The findings portrayed that one of the key factors of interpersonal communication influencing social and behavioural changes was the channel of interpersonal communication. According to Archiopoli et al. (2016), the channels of communication determine the ability of individuals to accept and perceive the information being shared. In Patil's (2020) examination, the impact of depictions of alcohol consumption in surrogate advertising and films in Malaysia was investigated. The findings indicated that images of alcohol consumption, primarily featured in movies and alcohol advertisements, exerted a notable influence on alcohol consumption and inappropriate behaviour, particularly among young individuals. Moreno and Whitehill (2014) conducted research on the impact of social media on alcohol consumption in adolescents and young adults. The research established that social media played a significant role in shaping the alcohol consumption patterns of young people and young adults. Given its extensive presence in the lives of many young individuals, social media possesses the potential to strongly sway their decision-making process.
III. RESEARCH METHODOLOGY

The research employed a descriptive cross-sectional survey design, incorporating both qualitative and quantitative data collection methods. Cross-sectional studies provide researchers with the ability to make statistical references to larger populations and generalize their findings to real-world scenarios, thereby enhancing the study's external validity.

This study was conducted at the Kenya Medical Training College (KMTC), a government-funded tertiary institution in Kenya. As of December 2019, the college operated across 71 campuses, spanning 43 out of Kenya's 47 counties. These 71 campuses served as the units of analysis, with students and staff at these campuses constituting the units of observation. According to the institution's annual report, there were a total of 46,750 medical students enrolled across the college's campuses in 2019.

The study focused on key informants who served as student counselors on the 71 campuses. Each campus had one designated counselor, resulting in a total of 71 counselors within the college. The assessment utilized a sample of 384 participants as informed by the Cochran's (1977) sampling form. A stratified random sampling technique was utilized to obtain the sample.

A self-administered questionnaire was used to obtain data from the sampled medical students. Interview guides were used to collect data from the key informants. The questionnaire was administered physically to the students, while one-on-one interviews were carried out with the key informants.

The collected data was analyzed qualitatively and quantitatively. The quantitative data was analyzed using SPSS for descriptive and inferential statistics. Qualitative data was analyzed using thematic content analysis and used to corroborate the quantitative data.

IV. FINDINGS & DISCUSSIONS

4.1 Response Rate

Out of the 384 questionnaires issued, 271 were duly filled out and given back for analysis. This represented a response rate of 70.6%, which was considered adequate for analysis.

4.2 Interpersonal Communication Channel

The research aimed to examine how different channels of interpersonal communication impact alcohol consumption among students in government-funded tertiary institutions in Kenya. It sought to determine the significance of face-to-face interactions, mediated communication, mobile phone-based communication, and social media platforms in influencing alcohol consumption among students in these colleges. The participants were requested to indicate the degree to which they utilized these primary communication channels, and as the findings in Table 1 portray, face-to-face communication was the main channel used, with 69.8% of the respondents using it to a great extent, followed by mobile phone calls and text messages at 52.1%, social media channels at 32%, and other internet-mediated channels accounting for 31.1%. The findings imply that face-to-face communication channels are still the most preferred channel of communication, which could have the highest impact on the behaviour of the students. The study sought to establish the respondents’ level of agreement or disagreement with specific statements on interpersonal communication channels. The respondents were requested to use a 5-point Likert’s scale, and the results are summarized in Table 4.4. The findings imply that most of the respondents (students) prefer face-to-face communication, especially when discussing sensitive issues such as alcohol consumption and personal life matters. According to Wright et al. (2012), face-to-face communication remains one of the most preferred channels of communication among college students, particularly when discussing sensitive issues and matters that concern their behaviour.

<table>
<thead>
<tr>
<th>Communication Channels</th>
<th>Great Extent</th>
<th>Moderate Extent</th>
<th>Low Extent</th>
<th>No Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to Face</td>
<td>69.8%</td>
<td>23.4%</td>
<td>5.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Internet mediated</td>
<td>31.1%</td>
<td>52.3%</td>
<td>14.0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Mobile phones- calls, texts</td>
<td>52.7%</td>
<td>38.3%</td>
<td>7.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Social media channels</td>
<td>32.0%</td>
<td>38.7%</td>
<td>21.6%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Table 1: Extent of Using Communication Channels

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4.3 Alcohol Consumption

The research aimed to gauge the participants’ viewpoints on alcohol consumption. They were prompted to express their agreement or disagreement with particular statements related to high, moderate, and low levels of alcohol intake. As the findings in Table 2 portray, the majority of the respondents disagreed that they frequently consumed alcohol and that they never consumed alcohol but would wish to try someday. The respondents further disagreed that they frequently drank small amounts of alcohol.

Table 2
Descriptive Results on Alcohol Consumption

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I frequently consume alcohol</td>
<td>1.77</td>
<td>1.23</td>
</tr>
<tr>
<td>I have never taken alcohol but would wish to try someday</td>
<td>1.87</td>
<td>1.23</td>
</tr>
<tr>
<td>I take small amount of alcohol but frequently</td>
<td>1.80</td>
<td>1.20</td>
</tr>
<tr>
<td>I take alcohol because my friends are also taking</td>
<td>1.68</td>
<td>1.15</td>
</tr>
<tr>
<td>I have set limits on the amount of alcohol I can take at a go</td>
<td>2.25</td>
<td>1.56</td>
</tr>
</tbody>
</table>

4.3.1 Frequency of Alcohol Consumption

The respondents were further asked to indicate the number of times they had consumed alcohol. As the findings in Figure 2 portray, 29.3% of the respondents indicated that they took alcohol either monthly or sometimes in more than a month; 23.9% indicated that they took alcohol between 2 and 3 times a week; 25.7% indicated that they consumed alcohol between 2 and 4 times a month; 14% consumed alcohol 4 or more times a week; and 7.2% of the respondents indicated that they never consumed alcohol at all.

Figure 2
Frequency of Alcohol Consumption

4.4 Correlation Analysis

The correlation results between interpersonal communication channels and alcohol consumption are summarized in Table 3. The results revealed that interpersonal communication channels had a Pearson correlation coefficient of 0.659 when correlated with alcohol consumption among medical college students at a significance level of 0.000<0.05. This implies that with an increase in interpersonal communication channels, alcohol consumption among medical college students will increase.
Table 3
Correlation Results for Interpersonal Communication Channel

<table>
<thead>
<tr>
<th></th>
<th>Alcohol Consumption</th>
<th>Interpersonal Communication Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Consumption</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>271</td>
</tr>
<tr>
<td>Interpersonal Communication Channel</td>
<td>Pearson Correlation</td>
<td>.659**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

4.5 Hypotheses Testing

To test this hypothesis, $H_0$: There is no significant effect of interpersonal communication channels on alcohol consumption among students in government tertiary colleges in Kenya, a regression model of the form $Y = \beta_0 + \beta_1 X_1$ was used. The model summary results in Table 4 revealed a coefficient of determination ($R^2$) value of 0.435, an indication that a unit change in the interpersonal communication channel could explain up to a 43.5% increase in alcohol consumption.

The ANOVA analysis yielded a calculated $F$-value of 206.815 with a corresponding $P$-value of 0.000, indicating a significant predictive relationship between interpersonal communication channels and alcohol consumption. This implies that the model holds statistical significance.

Examining the regression coefficients, it was determined that approximately 73.4% of firm performance variability could be accounted for by a one-unit change in the interpersonal communication channel, as evidenced by the beta coefficient of 0.732. Consequently, the null hypothesis, positing no influence of interpersonal communication channels on alcohol consumption among college students, was rejected. The resulting model is represented as:

$$Y = 0.731 + 0.732 x 1.$$  

Additionally, the $P$-value associated with the interpersonal communication channel ($0.000<0.05; t = 14.381$) is lower than the standard threshold of 0.05, affirming that it exerts a positive and significant impact on alcohol consumption ($t = 14.381, p<0.05$).

Table 4
Regression Analysis Results on Interpersonal Communication Channel

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.659**</td>
<td>.435</td>
<td>.433</td>
<td>.54198</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Interpersonal Communication Channel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dependent Variable: Alcohol Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>60.751</td>
<td>1</td>
<td>60.751</td>
<td>206.815</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>79.018</td>
<td>269</td>
<td>.294</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>139.769</td>
<td>270</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: Alcohol Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Predictors: (Constant), Interpersonal Communication Channel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.731</td>
<td>.192</td>
<td>3.806</td>
</tr>
<tr>
<td></td>
<td>Interpersonal Communication Channel</td>
<td>.732</td>
<td>.051</td>
<td>.659</td>
</tr>
<tr>
<td>a. Dependent Variable: Alcohol Consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The findings revealed that the main communication channels upheld included face-to-face communication, internet-mediated communication, mobile phone communication through calls and texts, as well as social media communication channels. The respondents agreed that face-to-face was used to share experiences with alcohol consumption and that they preferred face-to-face as a means of information sharing when speaking about their personal life experiences. It was also established that most of the students shared their experiences as a way of enhancing their
social integration, which in most cases saw their peers adopt alcohol consumption behaviours. The findings portrayed that face-to-face communication remained one of the most preferred channels of communication among college students, particularly when discussing sensitive issues and matters that concern their behaviour. It was further revealed that the use of phone calls when discussing alcohol consumption and related matters and the ability of messaging and phone calls to influence the students to consume alcohol were not highly upheld among the students. Most of the respondents had viewed advertisements and posts on alcohol in their social media accounts, and some were influenced by the advertisements to start consuming alcohol.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The research aimed to determine how interpersonal communication channels impact alcohol consumption among students in government-funded tertiary institutions in Kenya. The results indicated that these communication channels wielded a noteworthy influence on alcohol consumption among students in these colleges. The study came to the conclusion that interpersonal communication channels influenced the kind of information shared and how its recipients perceived it, which in turn influenced their behaviour. Face-to-face communication, which is the most common channel of communication, is effective in influencing behaviour since the recipients can also observe the behaviour in addition to hearing the message. Intermediate communication and technology-based communication (social media, mobile phone texts, and messages) are also concluded to be critical in influencing the behaviour of the students since they pass on information regarding alcohol consumption and their experiences.

5.2 Recommendations

Interpersonal communication channels determine the extent to which students exchange information and influence others to copy their behaviour, such as alcohol consumption. It is the duty of the management in government tertiary colleges in Kenya to raise awareness of the need for the students to utilize the interpersonal communication channels responsively without engaging in sharing information about alcohol consumption. The students also have the duty to ensure that they do not engage in alcohol and other bad behaviour discussions and information sharing on the available communication platforms as a way of safeguarding themselves from getting influenced by alcohol and drugs.

REFERENCES


