PREVALENCE AND FACTORS ASSOCIATED WITH ‘SACHET’ ALCOHOL USE AMONG SECONDARY SCHOOL STUDENTS IN KAMPALA.

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NOVEMBER 2019
DECLARATION

I, Masika Hope Mavis do hereby declare to the best of my knowledge that all the work presented in this dissertation is my original work unless otherwise acknowledged. This work has never been submitted either in part or in full for publication or award of a degree in any other university. I henceforth present it for the award of the degree of Master of Public Health of Makerere University.

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Mr. Eric Ssegujja
DEDICATION

This dissertation is dedicated to my husband Fredrick Musaali Bwikizzo and my two wonderful sons Gabriel Muganzi and Elijah Treasure for the motivation and support. You are my morale boosters.
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First, I thank the Almighty God for being my ever-present help during my studies and for sustaining me this far.

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OPERATIONAL DEFINITION OF KEY TERMS

**Sachet alcohol:** Alcohol packed in a small plastic bag or packet of approximately 30-100ml of various types of strong liquor, with an alcohol content, as stated on the sachets, ranging from 30-45%.

**Sachet alcohol use:** Any one time use of sachet alcohol.

**Current user of sachet alcohol:** Having consumed at least a sachet of alcohol in the last 12 months.

**Accessibility of sachet alcohol:** The ability to obtain sachet alcohol when needed.

**Affordability of sachet alcohol:** The capacity to pay for the available price of sachet alcohol.

**Abstainer:** Someone who does not take alcohol

**Occasional drinker:** A person who drinks alcohol occasionally and usually for social reasons.

**Moderate drinker:** A person having up to 2 drinks per day.

**Heavy drinker:** A person having more than 3 drinks per day
ABSTRACT

Introduction: There is global concern about drinking trends among young people. The age of initiation is getting younger and younger in terms of drinking. In Uganda, alcoholic spirit producers often package their product in small sachets of alcohol which increases access and convenience to even the youth population. As in other developing countries, the prevalence and associated factors of sachet alcohol use are not sufficiently studied in Uganda.

Objective: To determine the prevalence, associated factors and the effects of sachet alcohol consumption among secondary school students in Kampala.

Methods: The study was a cross-sectional survey with 625 respondents selected by stratified multi-stage sampling from three divisions of Kampala. Three schools were randomly selected, one school per division. Convenience sampling was used to select 52 students per class. 36 volunteers also participated in the six focus group discussions. Qualitative and quantitative methods of data collection were used. Quantitative data was analysed using STATA. Bivariate and multi-variate analysis were used to determine associations between the outcome and the independent variables. P-values and 95% CI were used to determine significance of the association. Qualitative data was transcribed and coded according to the themes.

Results: The prevalence of sachet alcohol use among secondary school students in Kampala was 35.0%. Gender and easy access to sachet alcohol were significantly associated with sachet alcohol use. Male students were more likely to consume sachet alcohol (OR; 2.21, 95%CI; 1.31-3.75) while the students who found it difficult to obtain sachet alcohol at school were less likely to drink sachet alcohol (OR;0.55, 95%CI; 0.014-0.72). Age, class, person staying with student and age at first intake of alcohol were not significantly associated with sachet alcohol use among secondary
school students. Other factors highlighted to facilitate sachet alcohol use among secondary school students included, family / parental and peer influence.

The most common associated negative effects experienced by the students due to sachet alcohol use were hangover (42%), sexual temptation (34.2%), sickness (33.3%), poor performance in school (30.6%), absenteeism from school (30.1%), doing something regrettable (32%), getting hurt (26.5%), skipping of lessons (26%), damage of property (21.9%) and getting into a fight after drinking alcohol (21%).

**Conclusion:** The findings from this study indicate that the prevalence of sachet alcohol use in secondary schools is high in part due to ease of access from their social networks calling for a need to regulate access to these drinks especially among school going children.
CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

There is a global concern about drinking trends among young people. Alcohol consumption is an important risk factor for morbidity, mortality and social harm worldwide leading to 2.5 million deaths each year. It is responsible for approximately 4% of the global burden of disease (WHO, 2011).

Many African countries have weaker systems to respond effectively against problems that are created by the availability and consumption of alcohol. Sachets are a relatively new phenomenon with regards to alcohol packaging and accessibility related problems in sub Saharan Africa in general and Uganda in particular. There is ample evidence of the negative effects of alcohol worldwide (WHO, 2014).

The youth population who constitute the largest proportion of the population in African countries is increasing rapidly and have become the specific target audience for alcohol advertisers seeking new and emerging markets. There is evidence of an emerging drinking pattern among the young, towards products branded and marketed to youths (WHO, 2001; Odejide and Ibadan, 2006).

Studies indicate that alcohol consumption at a young age increases the risk of developing alcohol related problems later in life (Hingson et al, 2006; Moore et al, 2009). Among youths, drinking often coexists with other problem behaviors such as poor academic performance and absenteeism which may impair healthy development and successful transition from adolescence to adulthood. Drinking among youths also occurs in risky environments that may accelerate risky sexual behaviors. (Mason et al, 2001).
Sachets are available in many African countries, including Uganda (Sekimpi et al 2015; Regina 2011). However, alcohol in sachets has now been banned in Uganda (Etukuri 2019). Packaging and price are two very influential alcohol marketing strategies, which are particularly relevant for the youths (Bruijn, 2011). Therefore, alcohol sold in small, cheap sachets has the potential to contribute to an increase in alcohol consumption among young people, which is particularly serious in an African context where young people make up the majority of most populations (Bruijn, 2011).

WHO (2004) indicates that Uganda was the highest drinking country in the world with alcohol consumed per capita at 19.47 litres though this has progressively decreased to 7.6 litres (WHO, 2018). The age is getting younger and younger in terms of drinking.

As in other developing countries, the distribution and consumption of substances including alcohol are not sufficiently studied in Uganda. In Uganda, alcoholic spirit producers often package their product in small sachets of alcohol. These small bags are convenient for customers to put in their pocket (Hoel et al 2014). In September 2009, Ugandan cabinet passed a resolution calling for the ban to all alcoholic products packaged in small sachets because it was assumed to have killed people (Ssebuyira, 2009). The importance of packaging the products in this way became obvious when the ban was discussed and imposed. Criticism and lobby of the alcohol industry was successful in withdrawing the ban (Mugerwa, 2009) but later reinstated ten years (2019) following initial attempts.
Alcoholism has already had a devastating impact on schools in Uganda. The recent increase of violent strikes and outbreaks of fire that have caused invaluable losses to schools has been partly blamed on the abuse of alcohol among students (Aboko 2013, Senkumba, 2015).

On many school regulation lists, alcohol use and abuse on school campuses is strictly prohibited, however, it usually goes unnoticed and/or unenforced by the administrators. A study conducted by Uganda Youth Development link on the magnitude of alcohol and drug use among secondary school students in Kampala and Wakiso districts in 2003 revealed that 71% of the respondents acknowledged the existence of alcohol and drug abuse in their respective schools. Students usually disguise alcohol by mixing it with fruit juice, tea and soft drinks like soda in order to avoid being noticed by the administration (UYDEL 2003). This trend shows that secondary schools are extremely vulnerable to the alcohol problem.

Some students drink when they go out for social events (e.g. dancing, football, study trips, leaver’s parties). During such gatherings, teachers do not care what students drink because it is supposed to be a big day out. At such events, they also fight and engage in sexual activities (Kacwamu, 2010). Other sources suggest that students sneak out of school either at night or even during day time to access alcohol (Pettigrew et al. 2012).

With the scarcity of empirical evidence on sachet alcohol use and resultant harms among children and young people in Africa in general and Uganda in particular, more research is urgently needed to address this gap and results of which can be used to inform appropriate interventions.
1.2 Background of the study area

Kampala has a population of 1,507,080 (UBOS, 2014). It is faced with enormous challenges due to the low socio-economic conditions of many of its residents. These include high levels of unemployment, especially amongst the youth and a high incidence of people living below the poverty line. The bulk of Kampala’s area (around 60%) is semi-urbanized and comprises 62 informal slums, housing an estimated 560,000 families. In these informal settlements alcohol is sold in kiosks, bars, shops and other outlets. Weaker enforcement of regulation has led to a social problem where people start drinking early in the day. While for the under-age, they access these alcoholic drinks despite availability of regulation restricting access to such groups. This has led to alcoholism that has affected some people with others ending up requiring medical interventions from the available service providers. There are a number of drop in centers that rehabilitate people, youths inclusive addicted to alcohol. Butabika National referral hospital with super specialized services in the areas of Alcohol/Drug abuse is located in Kampala.

According to the study that was conducted among slum youths in Kampala City, close to half of the youths aged between 12 and 18 were reported to take alcohol while almost half had their first sexual intercourse at age 14 (Swahn 2014). Children who live in disadvantaged neighborhoods, specifically in the slums of Kampala, Uganda are at a great risk of experiencing maltreatment due to the poor living conditions of the slums, including high rates of substance use (Swahn et al 2014).

A study by Uganda Harm Reduction Network (UHRN) in Kampala found that 22 per cent of students used and abused substances; Alcohol being the most abused. The report further found that no school was free of substance abuse and the consequences of alcohol abuse were relentless and strongly correlated with poverty (UHRN, 2013). This has been attributed partly to the abundance
of sachet alcohol in Kampala which is easy to conceal by school youths (Kachwamu 2010). However, the prevalence and factors associated with sachet alcohol use among secondary school students in Kampala are not known.
CHAPTER TWO: LITERATURE REVIEW

Although information about the prevalence of alcohol abuse is abundant globally, that regarding prevalence of use of alcohol in sachets, associated factors and perceived negative related effects of sachet alcohol use among secondary school children is relatively scanty, especially in Kampala City. Thus, literature presented in this section is largely cited from scholarly works outside Uganda. This chapter reviews relevant literature in Uganda and other parts of the World. The chapter is organized according to the following themes: Alcohol use among young people and school children, Factors associated with sachet alcohol use, and Effects or negative outcomes of alcohol abuse.

2.1 Alcohol consumption and abuse among adolescents and school children.

There is global concern about drinking trends among young people. Alcohol consumption is an important risk factor for morbidity, mortality and social harm worldwide leading to 2.5 million deaths each year. It is responsible for approximately 4% of the global burden of disease (WHO, 2011).

Worldwide, alcohol consumption among school children is an important public health, social and economic concern. Age of onset of alcohol consumption is one of the major factors predicting a later long-term negative outcome. Studies have shown an alarming increase in early age of onset of alcohol consumption (Razanamihaja et al., 2013). According to a 2018 WHO report, results of school surveys indicated that in many countries alcohol use starts early in life, and before the age of 15 years. There was also high prevalence of alcohol use in many countries of the Americas, Europe and Western Pacific, and prevalence rates were in the range of 50–70%. In countries of
Africa which implemented the school surveys, the prevalence of alcohol use among 15-year-old students varied widely from 10% to 30% (WHO 2018).

Existing literature on alcohol consumption among adolescents in sub-Saharan Africa suggests that a significant proportion of adolescents have consumed or currently consume alcohol. Heavy episodic drinking was also prevalent among youths in several African countries (Siziya et al., 2009, Swahn et al., 2011; Hoel et al., 2014). In other sub-Saharan African countries like Ethiopia ever drinking prevalence of up to 22.2% was found among secondary school students and a study from Zambia also reported 26% among high school adolescents had taken alcohol a day before the survey. (Reda et al 2012). A study conducted in Malawi revealed that the introduction of sachets had contributed to an increase in alcohol consumption among young people. The sweet flavor and small packaging of alcohol in sachets had made it popular to underage drinkers (Hoel et al 2014).

In Uganda there is evidence indicating the widespread consumption of alcohol. Data from the 2004 WHO report showed that Uganda was the highest drinking country in the world with its 19.47 liters of recorded alcohol consumed per capita though this has decreased over a period of time to 7.6 liters of recorded alcohol consumed per capita (WHO, 2018). Kabwama et al (2016) in a countrywide survey in Uganda reveals that the overall prevalence of current alcohol was 26.8% with nearly 10% of the population having an alcohol use disorder.

There is also strong evidence that there is high prevalence of alcohol consumption among secondary school children in Uganda. According to a study conducted in 2016 in secondary schools in Northern and Central Uganda 23.3% of the students reported that they had ever drunk
alcohol (Abbo et al., 2016). A study by Uganda Youth Development Link – UYDEL in 2008 also indicated that 60% of students in secondary schools use/abuse alcohol. Regarding sachet alcohol use, a survey conducted among youths living in the slums of Kampala also revealed that 26% of the youths who had drunk alcohol preferred drinking alcohol packed in sachets (Swahn, 2014).

2.2 Factors associated with sachet alcohol use among school children.

Several factors are associated with alcohol use among students. Characteristics related to families, religion and relationships with friends are some of them. School and family have been emphasized when it comes to the use of alcohol by adolescents, since the first contacts with alcohol usually take place in known environments, with people who are part of relationship circles (Forthergill et al., 2008). Literature on alcohol use among youths in schools have also identified accessibility, affordability, packaging and marketing as significant correlates of alcohol use among students (Swahn et al., 2011; Vantamay et al., 2009).

2.2.1 Family/parental influence

Alcohol use by parents and home availability of alcohol is a powerful influence on some young people’s alcohol drinking habits (Komro et al., 2007 and Chan et al., 2017). Some youths in Uganda are brought up in homes where parents use or sell alcohol and sometimes the youths sell alcohol on behalf of the parents. This exposure predisposes some of the youths to alcohol use, and in due course they engage in alcohol drinking (Kacwamu, 2010). According to Mattick et al (2017), the attitude of parents towards alcohol will also affect how children will feel about the use of alcohol.
Several studies have also identified dysfunctional families as one of the factors that was contributing to alcohol use among adolescents. Consistently, many students who consume alcohol are from families where there are low levels of parenting and emotional support and also a lack of control and monitoring of a child's behavior, poor family communication, inadequate family problem solving and nagging at home. In which case, an individual's family background plays an important role in the attitude of the students' alcoholism (Hormenu et al., 2018 and Rusby et al., 2018).

2.2.2 Peer pressure

Young people join different peer groups and identify themselves with these groups by participating in their activities so as not to be rejected (Tome et al., 2012). According to Lam et al (2019) alcohol consumption among students was on the increase and they were mostly influenced to drinking alcohol by their friends at school. A young person who is attached to a peer group that values anti-social activities inevitably finds it difficult to resist the encouragement of peer group members in such negative behavior (Tome et al., 2012).

Peer pressure also influences youth to use stimulants such as alcohol to stimulate appetite for food, increase strength to perform heavy tasks at school, give wisdom, or instill courage to commit crime (Burk et al., 2012, Mercken et al., 2012). It is not uncommon to find students consume alcohol because of curiosity (Teixidó et al., 2019).
2.2.3 Availability and accessibility

Availability of alcohol was found to be an important predictor of early and excessive alcohol consumption by adolescents (Gosselt et al., 2012). Also, many countries have implemented age limits to prevent underage purchases of alcohol. However, shop compliance with these age limits appears to be problematic (Gosselt et al., 2012).

Adolescent alcohol use and heavy drinking are related to characteristics of the local alcohol environment. Previous studies have shown that increased alcohol availability is associated with an increased risk of alcohol consumption specifically for early adolescents (12 and 14 years) (Rowland et al., 2014; Huckle et al., 2008). In another study by Kavanagh et al. (2011), the number of off-premises alcohol outlets in a locality was associated with the level of harmful alcohol consumption in that area.

Several studies have pointed out communities around schools, shops and markets within school neighborhoods as being the main sources of alcohol in schools (Barnes et al, 2013; Onya et al., 2012). According to Ramorola and Matshidiso (2014), access of alcohol among adolescents is catalyzed by the societies that surround school premises. They argue that since schools are in the midst of social places, students easily access alcohol and spread it in school premises. Kacwamu (2010) also noted that adolescents smuggled alcohol especially alcohol in sachets into school premises by hiding them in their properties where teachers cannot suspect, usually at the beginning of school terms. Kacwamu further elaborates that boarding students rely on day-scholars to obtain alcohol from outside school premises. Other sources suggest that students sneak out of school either at night or even during day time to access alcohol (Pettigrew et al., 2012).
In Uganda, the sale of alcoholic beverages to children under the age of 18 years is prohibited. However, there is a laxity in the implementation of age limits factors on alcohol drinking. Uganda has no restrictions on the hours of sale, days of sale, or places where alcohol can be sold (Sekimpi et al., 2015, WHO 2018). Therefore, any age can easily buy alcohol.

In Uganda, Alcohol is available anytime and anywhere. Sachets are readily and openly available in shops, bars and on the streets (UYDEL 2008). This has been observed elsewhere in Africa. In a study done in Malawi, the research team observed empty sachets on the ground in school yards, market places and other public places (Hoel et al., 2014).

### 2.2.4 Pricing and packaging

Packaging and price are two very influential alcohol marketing strategies, which are particularly relevant for youths. Alcohol sold in small, cheap sachets has the potential to contribute to an increase in alcohol consumption among young people (Bruijn, 2011).

Evidence from previous studies shows that Increase in minimum prices of alcoholic beverages can substantially reduce alcohol consumption (Stockwell et al., 2006; Zhao et al., 2013; Treno et al., 2013). Also, significant health benefits were observed when minimum alcohol prices in British Columbia were increased (Stockwell et al., 2013).

The affordability of alcohol is therefore very important in determining consumption of alcohol. Wall and Casswell (2013) suggest that affordability needs to be considered by policy makers when determining tax and pricing policies to reduce alcohol-related harm.

Evidence has also been established in other places that sachets quickly become popular among children due to their low price and availability (Hoel et al., 2014). In a study conducted in the US
by Albers et al. (2013), both alcohol use and abuse were responsive to price, particularly among adolescents. Therefore, prevalence of low alcohol prices is always of concern. Several other studies have addressed the effects of alcohol prices on the drinking behaviors of youths and young adults. This population is of relevance because they exhibit relatively high levels of binge drinking and of alcohol-related problems. A study by World Bank in 2006 found out that high level of relative aggregate alcohol prices was inversely associated with all drinking variables except for volume of alcohol consumed. Also, that estimated 10% increase in the price of alcohol reduces the consumption of beer by 3% and distilled spirits by as much as 15 percent.

In Uganda, a wide variety of alcohol brands packaged in small packs, across many types of alcohol, are available at very low prices. Sachets containing spirits go for as cheap as Uganda shillings 500 (Sekimpi et al., 2015). Several studies have found out that high level of relative aggregate alcohol prices is inversely associated with all drinking variables except for volume of alcohol consumed (World Bank, 2006).

Although information about the relationship between pricing and alcohol consumption is abundant globally, the studies from which these causes have been compiled were conducted outside Uganda and in contexts very different from the context of this study. While many of the cited studies focused on alcohol use generally, this study was conducted to establish the factors associated with sachet alcohol use.

2.3 Effects of alcohol consumption

Use of alcohol is a big health care and economic cost to the country and poses a growing public health problem (WHO 2011). Alcohol consumption can tend to be very destructive especially
when initiated at an early age. In a study conducted among college students in Argentine, Early onset of drinking was associated with amount of consumption of alcohol including up to hazardous levels (Pilatti et al., 2013). Degenhardt et al. (2010) also noted that when consumption of alcohol begins in early stages of development, it increases the probability of poor school performance, history of impulsive behaviors and affiliation to groups with history of delinquency. Violence and injuries among young people have also been equally attributed to alcohol consumption (WHO, 2011).

Young people are at increased risk for harmful use of alcohol due to cognitive and physical factors such as reduced ability to process and assess risks and reduced physical control in potentially dangerous situations (WHO, 2010). As a result, young people are more vulnerable to alcohol related harm such as crime, violence, intentional and unintentional injuries as well as dropping out of school (Morojele et al., 2012). In addition, they are at greater risk of suffering negative health and social outcomes because alcohol can disrupt brain development in childhood and give physical health consequences (WHO, 2012) including academic failure, violence, involvement in physical fights, injuries, unprotected sexual intercourse, psychological distress and later excessive use, alcoholism and early mortality (Squeglia et al., 2012; Danielsson et al., 2011).

Escalation of use of alcohol leads to reduced productivity of users and they are vulnerable to health problems as well as the increased likelihood to commit crimes. As a result, they become a danger to the society and a burden to the health care system (Rehm et al., 2009). Results from a study conducted in Uganda showed a strong correlation between health risks and ingestion of alcohol in sachets. All the samples that were tested showed that no amount of sachet alcohol consumed in the study area was safe (Otim et al. 2019).
Alcoholism has had a devastating impact on schools in Uganda. The recent spate of violent
strikes and outbreaks of fire that have caused invaluable losses to schools has been blamed on the
abuse of alcohol (Aboko, 2013 and Senkumba, 2015). Evidence has also been established in
Kenya, associating strikes and arson in schools with alcohol abuse (Cheloti et al., 2014). The
spread of aberrant and clandestine behaviour like smoking, taking illicit drugs in schools has also
been attributed to alcoholism (Balinaine and Agaba, 2015).

Various studies done among young people in Uganda show that there is an association between
alcohol use and initiation and high prevalence of sex among youths and increased risk of new HIV
infections (Santelli et al., 2013, Santelli et al., 2015). In a study done among Ugandan university
students, alcohol consumption was associated with having multiple sexual partners and
inconsistent condom use (Choudhry et al., 2014).

Although there is evidence of young people taking alcohol in schools in Uganda, there is little
empirical evidence concerning alcohol in sachets among secondary school children in Eastern
Africa in general and in Uganda in particular. Studies from Uganda and elsewhere like India,
Malawi mention alcohol sachets, and suggest restriction or complete ban on the production and
sales of these products (Kafuko & Bakuluki, 2008; UYDEL 2008; Chowdhury et al, 2006). These
studies, however, focus little on the context of sachet alcohol consumption and consequences for
young people. Therefore, the objective of this study was to determine the prevalence, associated
factors and effects of sachet alcohol consumption among secondary school students in Kampala.
CHAPTER THREE: PROBLEM STATEMENT, JUSTIFICATION AND CONCEPTUAL FRAMEWORK

3.1 Problem statement

Current trends suggest that alcohol consumption is very rampant in schools in Uganda. The use of alcohol during adolescence has become a serious public health problem in the country (Abbo et al., 2016). There are many negative effects that have been associated with early onset drinking in adolescence including an increased likelihood of having problems in school, becoming involved in crimes, sustaining injuries, being in a motor vehicle crash, and death (Buchmann et al, 2009). In Uganda, the recent increase in repeated violent strikes and fire outbreaks in schools has been partly blamed on the abuse of alcohol among students (Aboko, 2013; Senkumba, 2015).

There is a growing recognition of the high cost of treatment of alcohol and substance use disorders and of the inability of existing treatment programs to keep up with increasing demand. Almost half of the admissions in the Ugandan National Mental Referral Hospital are young people with alcohol and substance use disorders (Kigozi et al., 2010). Annual statistics from UYDEL and other treatment centres also indicate an increasing number of parents seeking help for their students to overcome alcohol abuse related problems (UYDEL, 2008).

The Ministry of Education acknowledges alcohol abuse in schools and is addressing the vice in two ways: integrating substance abuse education into the syllabuses of primary schools and teacher training colleges and introduction of school rules and regulations which prohibit students from drinking alcohol at school (UYDEL, 2008). However, though Alcohol is strictly not for sale to persons under 18 years and many school regulation lists mention alcohol use and abuse on school campuses as strictly prohibited, young people can buy and consume alcohol without practical
restriction. It also usually goes unnoticed and/or unenforced by the school administrators (Kachwamu, 2010).

Elsewhere, availability and affordability of alcohol has been associated with its consumption (Gosselt et al., 2012). The abundance and low prices of sachet alcohol might be associated with its consumption especially among school adolescents. The burden and factors associated with consumption of sachet alcohol among secondary school students in Kampala is not documented or known. It is therefore with this background that the purpose of this study was to determine the prevalence, associated factors and effects of sachet alcohol consumption among secondary school students in Kampala.

3.2 Study justification

Although alcohol abuse is extensively covered in the existing body of knowledge around the world (WHO, 2018; WHO, 2014; Abbo et al., 2016; Rukundo and Kibanja 2015), few studies have explored the prevalence, factors associated with sachet alcohol use among secondary school students. As in other developing countries, the distribution and consumption of sachet alcohol is not sufficiently studied in Uganda and the few examples in the so-called ‘grey literature’ of agency reports and non-peer reviewed publications have never been pooled to make generalizable findings. Yet prevention strategies might rely heavily on such knowledge for effective control of alcohol use in schools. Therefore, this study provides new knowledge in the area of students consuming alcohol especially alcohol in sachets.

Even with government effort to prevent underage alcohol consumption and concerted efforts to ban sachet alcohol in Uganda, the continued use of alcohol by the adolescents is still so high that
there is need for continued effort to find appropriate solutions suitable to the prevailing problem (Uganda Alcohol Policy Alliance, 2014). Therefore, this study adds to the existing body of knowledge regarding the magnitude and factors associated with sachet alcohol consumption among secondary school students in Kampala.

This study also comes at a time when the Parliament of Uganda is discussing ‘The Alcoholic Drinks Control Bill 2016’ (Kiwuwa, 2016) which makes it necessary to provide information that will help stakeholders to know the magnitude of the problem and strengthen any existing interventions to control the morbidity and mortality associated with use of sachet alcohol.
3.3 CONCEPTUAL FRAMEWORK

Figure 3. 2: Conceptual framework for factors associated with sachet alcohol use among secondary school adolescents in Kampala.

The conceptual framework above shows relationships between the different factors associated with use of sachet alcohol among secondary school children. They are categorized into environmental, social and demographic factors as well as outcomes.

According to Spooner (2009), the above factors do not operate in isolation they are interrelated and their combination makes the alcohol abuse problem for adolescents, secondary school children inclusive a more complex one.
Demographic factors affect social factors and vice versa. For instance, a student’s class, age affects the peers he interacts with. If they use alcohol, he is more likely to adopt the practice than a student whose peers do not engage in such practice. Studies show that gender and age are closely linked to lifestyle and the use of alcohol (Sanchez et al., 2017; WHO, 2010).
CHAPTER FOUR: STUDY OBJECTIVES

4.1 Main objective

To determine the prevalence, associated factors and the effect of sachet alcohol consumption among secondary school students in Kampala.

4.3 Research questions

1. What is the prevalence of sachet alcohol consumption among secondary school students in Kampala?
2. What are the factors associated with consumption of sachet alcohol among secondary school students in Kampala?
3. What are the effects of sachet alcohol consumption among secondary school students in Kampala?
CHAPTER FIVE: METHODOLOGY

This chapter explains how the study was carried out by describing the population, the procedure that was followed, the sample, how participants were recruited and the analysis of data.

5.1 Study design

An analytical cross-sectional study was conducted among secondary school students to assess sachet alcohol use and its associated factors. The research study combined both qualitative and quantitative techniques of data collection.

5.2 Study area

The study was conducted in the three divisions of Kampala district: Nakawa, Rubaga and Central divisions. 55.4% of the population aged 13 to 18 years in Kampala are in secondary school (UBOS, 2014). There is a total of 77 secondary schools in the three divisions of which 60 are private and 17 are government schools. Majority of the schools (76) are mixed and only one school is for girls only. Only two schools are purely boarding, 36 schools are purely day while most of the schools (39) are partially day and boarding.

5.3 Study population

Since the focus of this study was to determine the prevalence, associated factors and the effects of sachet alcohol consumption among secondary school students the target population was secondary school students aged between 13 and 19 years currently in school in Kampala.

5.4 Sample size

The sample for the quantitative survey was estimated to be 624 respondents using Kish and Leslie (1965) formula for cross-sectional studies with discrete outcomes as follows:
\[ n = \frac{Z^2 \cdot p \cdot q \cdot DE}{d^2} \]

Where:

- \( d \) is the precision (acceptable degree of error)
- \( z \) is the standard normal value corresponding to the 95% confidence level; \( z = 1.96 \).
- \( p \) is the proportion of the population who use alcohol.
- \( q = 1-p \) - those who do not use alcohol.

\( DE = \) Design effect = 2

A study by Swahn et al, (2009) estimated that 24.1% students, 13-16 year of age in Uganda had had at least one alcohol drink on one or more days in the last 30 days. Accordingly, \((1-p)\) which is the proportion of the study population with the undesired attribute, is given as \( 1 - 24.1\% = 75.9\% \).

Therefore:

\[ n = \frac{(1.96)^2 \times 24.1\% \times 75.9\% \times 2}{(5\%)^2} = \frac{1.4054}{0.0025} = 562 \]

To adjust for non-response of 10% (Swahn et al, 2011) we divided the estimated sample size by 0.9.

\[ 562/0.9 = 624 \]

Therefore, the sample size was 624 respondents.
5.5 Sampling procedure

Stratified multistage sampling was used. Three divisions (Nakawa, Rubaga and Central divisions) out of the five divisions of Kampala were randomly selected. Three schools out of the 16 government secondary schools in the 3 selected divisions were randomly selected, one school per division. All the government schools per division were written on pieces of paper, mixed up and one school was randomly selected from each division. The total sample of 624 respondents was equally distributed among the 3 schools, 208 students per school. The sample of the survey was picked from four classes of senior three, four, five and six. 52 students were conveniently picked at lunch time from each class until the desired number of respondents was obtained from each class.

Focus group discussions participants: 36 volunteers were requested to participate in the focus group discussions. Six homogenous groups from the three schools, three groups of female adolescents and three of male adolescents each comprising of 6 participants were involved in the focus group discussions. Each group of adolescents had six (6) volunteers, one from each class (senior one to senior six). According to Krueger and Casey (2000), focus groups can be conducted with 6 – 10 members with similar nature for instance similar age and sex.

5.6 Eligibility criteria

5.6.1 Inclusion criteria

All persons aged between 13 to 19 years in the selected classes in the selected schools that will be present at the time of data collection and will consent to taking part in the study.
5.6.2 Exclusion criteria

All persons aged between 13 and 19 years in the selected classes that declined to take part in the survey at the time of data collection. Also aged between 13 and 19 years in the selected classes students that were absent at the time of data collection.

5.7 Data collection tools

A structured questionnaire in English consisting of open and closed ended questions was developed based on a review of the literature and adaptation of the Global school-based student health survey questionnaire. The questionnaire focused on the following topics:

- Demographic characteristics of age, sex, class of participants.
- Social factors including peer pressure, family influence.
- Prevalence of sachet alcohol use among school children. For the purposes of this study, ‘sachet alcohol use’ was defined as any one time use of sachet alcohol and ‘current user of sachet alcohol’ as having consumed at least a sachet of alcohol in the last 12 months.
- Accessibility and availability of sachet alcohol to school children.
- Effects of sachet alcohol use by school children.

In the qualitative approach, question guides were used for the Focus group discussions. The same topics in the questionnaire were reflected in the question guides focusing on why the students preferred using sachet alcohol to supplement on what came out of the survey.
5.8 Data collection procedure

The researcher and the research assistants were introduced by a teacher to the students in the four classes at lunch time. 52 students in each class were requested to remain in class during lunch time and take part in the survey. The interviewer and research assistants distributed the questionnaires to the students and gave details of what each question was asking for. The students then filled in the questionnaires by themselves. The completed questionnaires were collected immediately at the end of each interview session.

In qualitative stage, each focus group discussion lasted for about forty-five minutes. The information was recorded through tape recording and reinforced by written notes. The audio tape recording was done with the consent of the participants. The questions in the focus groups were used in a flexible manner allowing for probing from hints arising from the discussions to be asked. The formulated questions were used only as a guide to avoid deviations. The facilitator made sure that each question was reformulated according to what was coming out of the discussion taking into account the objectives of the study and topics that were under investigation.
Participants who took part in completing the questionnaire were excluded from the focus group discussion.

5.9 Data management and Analysis plan

5.9.1 Data management

After collection of the data, the data was checked for completeness and consistency. The data was coded, cleaned and entered using excel. Thereafter data was exported to STATA 14.1 for analysis.
For qualitative data, transcribed text was cleaned and reviewed for quality against the original audio.

5.9.2 Data analysis

**Uni-variate analysis:** All the variables listed in the conceptual framework were used. The population distribution was described in form of frequencies and percentages. The mean and median were used as measure of central tendency. Prevalence of sachet alcohol use was determined as a proportion of the population participating in the study.

**Bi-variate and multi-variate analysis:** Bivariate and multi-variate analysis was used to explain the relationship between each of the independent variables and the outcome variable (use of sachet alcohol). It was also used to determine the strength and significance of this relationship. The crude Odds ratio (OR) was used to measure the strength of association between the independent variable and the outcome variable (sachet alcohol use). One level of the independent variable was assigned as the reference variable. Values of the Odds Ratio close to 1 were interpreted as having no relationship to the outcome variable. Odds Ratio values less than 1 were interpreted as having a protective effect of the independent variable. OR values greater than 1 were believed to have a causal relationship between the independent variable and the outcome variable. The 95% confidence intervals were used as a measure of reliability of the estimate of the population parameter. The p-value was used to measure statistical significance and strength of the association between the independent variable and the outcome variable.

**Qualitative data:** Data from the focus group discussions was first transcribed and a code book was developed. Resulting transcripts were compared to bring out similar themes across groups. Themes related to the objectives were identified and findings that best represent each theme were
selected. After all information had been collected, the data was coded according to the themes. Quotes that exemplify themes were recorded noting details about the speaker, like class and gender. Analysis of qualitative data was done in comparison with the study objectives to further explain and support findings from the quantitative data.

5.10 Ethical considerations

Ethical clearance was obtained from the Higher Degrees, Research and Ethics Committee of Makerere University School of Public Health. Further approval was obtained from the administration of the surveyed schools. Permission was obtained from the school administration for the students that were below 18 years. The objective of the study was explained to the study participants. They were briefed about the confidentiality of their responses and the importance of providing correct and accurate information, and that participation was voluntary. In order to obtain informed assent and consent before participation in the study, students were informed about the study and then invited to give written assent (if they were below 18 years old); or written consent (if they were aged 18 years and above).
CHAPTER SIX: RESULTS

6.0 Introduction

A total of 625 students from three secondary schools in Kampala participated the survey in this study. Six focus group discussions with 36 students were also conducted. Out of the three schools selected, two were mixed schools with both boarding and day scholars while one school was mixed with purely day scholars. The results are presented in the following sections.

6.1 Background characteristics of the respondents

Most of the respondents were aged 18-19 years with a mean of 17.5 years with a standard deviation of 1.4 years. Slightly more than half (52.6%) of the respondents were males and 44.3% stayed with both parents. Most (66.6%) of the respondents were from a mixed day school with some students in boarding section (Table 6.1).
Table 6.1: Background Characteristics of the respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency N=625</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>296</td>
<td>47.4</td>
</tr>
<tr>
<td>Male</td>
<td>329</td>
<td>52.6</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior three</td>
<td>156</td>
<td>25.0</td>
</tr>
<tr>
<td>Senior four</td>
<td>156</td>
<td>25.0</td>
</tr>
<tr>
<td>Senior five</td>
<td>158</td>
<td>26.0</td>
</tr>
<tr>
<td>Senior six</td>
<td>155</td>
<td>24.0</td>
</tr>
<tr>
<td><strong>Type of school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day school</td>
<td>209</td>
<td>33.4</td>
</tr>
<tr>
<td>Day and boarding</td>
<td>416</td>
<td>66.6</td>
</tr>
<tr>
<td><strong>Person stays with the student</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both parents</td>
<td>277</td>
<td>44.3</td>
</tr>
<tr>
<td>Single mother</td>
<td>115</td>
<td>18.4</td>
</tr>
<tr>
<td>Single father</td>
<td>59</td>
<td>9.4</td>
</tr>
<tr>
<td>Relatives</td>
<td>140</td>
<td>22.4</td>
</tr>
<tr>
<td>Others</td>
<td>34</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Age category (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-15</td>
<td>74</td>
<td>11.8</td>
</tr>
<tr>
<td>16-17</td>
<td>177</td>
<td>28.3</td>
</tr>
<tr>
<td>18-19</td>
<td>374</td>
<td>59.9</td>
</tr>
</tbody>
</table>

6.2.1 Prevalence of alcohol consumption

Almost half (48.0%) of the respondents had ever drank alcohol of which 44.3% having ever drank sachet alcohol in their lifetime. The mean age at first drinking of sachet alcohol was 12.8 years. Almost a third (32.6%) of the respondents had drank sachet alcohol within the previous week before the survey. The prevalence of sachet alcohol consumption within the past 12 months was high at 35.0%. Most (44.75%) of the respondents described themselves as occasional drinkers (Table 6.2).
Table 6.2: Characteristics for drinking of alcohol

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency N=625</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever drank alcohol (n=625)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>300</td>
<td>48.0</td>
</tr>
<tr>
<td>No</td>
<td>325</td>
<td>52.0</td>
</tr>
<tr>
<td>Kind of alcohol drank the first time (n=300)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol in sachets</td>
<td>57</td>
<td>19.0</td>
</tr>
<tr>
<td>Beer in bottle</td>
<td>62</td>
<td>20.7</td>
</tr>
<tr>
<td>Local brew</td>
<td>50</td>
<td>16.7</td>
</tr>
<tr>
<td>Wine</td>
<td>113</td>
<td>37.7</td>
</tr>
<tr>
<td>Others</td>
<td>18</td>
<td>6.0</td>
</tr>
<tr>
<td>Description of oneself in terms of alcohol use (n=300)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstainer</td>
<td>87</td>
<td>29.0</td>
</tr>
<tr>
<td>Occasion drinker</td>
<td>134</td>
<td>44.7</td>
</tr>
<tr>
<td>Moderate drinker</td>
<td>50</td>
<td>16.7</td>
</tr>
<tr>
<td>Heavy drinker</td>
<td>29</td>
<td>9.6</td>
</tr>
<tr>
<td>Last time drank sachet alcohol (n=300)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have never drank sachet alcohol</td>
<td>23</td>
<td>7.7</td>
</tr>
<tr>
<td>Not in the past one year</td>
<td>58</td>
<td>19.3</td>
</tr>
<tr>
<td>More than 30 days ago, but in the past year</td>
<td>77</td>
<td>25.7</td>
</tr>
<tr>
<td>More than a week ago but in the past 30 days</td>
<td>44</td>
<td>14.7</td>
</tr>
<tr>
<td>Within the last week</td>
<td>98</td>
<td>32.6</td>
</tr>
</tbody>
</table>

From the qualitative data, it was reported from all the FGDs that some students take alcohol while at school. Participants also highlighted that sachet alcohol was the most common type of alcohol that was taken by students at school compared to alcohol packaged in bottles.

“Yes, some students here take alcohol. So common, alcohol that is used here is that one packaged in small polythene. They are very many, there is capital spirit, bond7, empire, coffee spirit, Uganda waragi. so basically, that would be like a whisky.” (Male FGD – Secondary school in Nakawa division).

“Students here take waragi, kitoko, students get it cheaply. I know some take whisky in sachets, green label there is even local brew.” (Female FGD – Secondary school in Central division).
6.2.2 Source of sachet alcohol

The main source of sachet alcohol was fellow students (33.3%), followed by parents / other relatives at home (27.9%), and bars (18.3%) (figure 6.1).

Figure 6. 1: Source of sachet alcohol

It was observed from all the FGDs that some of the students obtained sachet alcohol from peers at school. Participants from two FGDs in the secondary school in Nakawa division noted that this was worse during school parties. This is elaborated below;

“students can gather, you find them as if they are talking yet they are sharing alcohol”

(Female FGD – Secondary school in Central division)
“when it’s party time at school, it is weekend, no one cares, its worse any one can walk around with a tot pack (sachet alcohol) and share with others.” (Male FGD – Secondary school in Nakawa division).

Another FGD elaborated how students got sachet alcohol from their homes and their neighborhood;

“Sometimes you find that parents have alcohol in the house, lots of alcohol. You steal some. In the neighborhood alcohol in sachets is plenty, it’s a matter of choice. Nobody will stop you” (Female FGD – Secondary school in Rubaga division)

6.3 Factors associated with the consumption of sachet alcohol among secondary school students in Kampala.

6.3.1 Bivariant analysis of factors associated with sachet alcohol consumption

The logistic regression analysis shows that sex and ease of obtaining sachet alcohol at school were statistically significant for drinking of sachet alcohol. Male students were 2.2 times likely to drink sachet alcohol compared to the female students (OR; 2.21, 95%CI; 1.31-3.75, p=0.003) while the students who found it difficult to obtain sachet alcohol at school were less likely to drink sachet alcohol (OR;0.55, 95%CI; 0.014-0.72, p=0.001). However, age (OR;0.99, 95%CI; 0.58-1.68), guardian (OR;0.93, 95%CI; 0.47-1.52), type of school (OR;0.89, 95%CI; 0.38-1.09), class [senior four (OR;1.35, 95%CI; 0.65-2.79), senior five (OR;1.25, 95%CI; 0.61-2.60), senior six (OR;1.30, 95%CI; 0.63-2.79)] were not statistically significant for drinking sachet alcohol (P>0.05) (Table 6.3).
Table 6. 3 Bivariate analysis of factors associated with drinking sachet alcohol.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Didn’t drink sachet alcohol in the previous year N=81</th>
<th>Drank sachet alcohol in the previous year N=219</th>
<th>OR (95% CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52(64.2)</td>
<td>98(44.8)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>29(35.8)</td>
<td>121(55.2)</td>
<td>2.21(1.31-3.75)</td>
<td>0.003***</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Three</td>
<td>22(27.2)</td>
<td>48(21.9)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Senior four</td>
<td>19(23.5)</td>
<td>56(25.6)</td>
<td>1.35(0.65-2.79)</td>
<td>0.416</td>
</tr>
<tr>
<td>Senior five</td>
<td>19(23.5)</td>
<td>52(23.7)</td>
<td>1.25(0.61-2.60)</td>
<td>0.542</td>
</tr>
<tr>
<td>Senior six</td>
<td>21(25.9)</td>
<td>63(28.8)</td>
<td>1.38(0.68-2.79)</td>
<td>0.377</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-17</td>
<td>29(42.4)</td>
<td>79(36.1)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>52(64.2)</td>
<td>140(63.9)</td>
<td>0.99(0.58-1.68)</td>
<td>0.965</td>
</tr>
<tr>
<td><strong>Person the student is staying with</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One or both parents</td>
<td>58(71.6)</td>
<td>160(73.1)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Relatives or others</td>
<td>23(28.4)</td>
<td>59(26.9)</td>
<td>0.93 (0.53–1.64)</td>
<td>0.580</td>
</tr>
<tr>
<td><strong>Type of school</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day school</td>
<td>27(33.3)</td>
<td>87(39.7)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Day and boarding</td>
<td>54(66.7)</td>
<td>132(60.3)</td>
<td>0.89(0.23-2.11)</td>
<td>0.781</td>
</tr>
<tr>
<td><strong>Age at first drinking (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;15</td>
<td>57(70.4)</td>
<td>144(65.6)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>15 and above</td>
<td>24(29.6)</td>
<td>75(34.4)</td>
<td>0.64(0.38-1.09)</td>
<td>0.099</td>
</tr>
<tr>
<td><strong>Ease of obtaining sachet alcohol at school</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td>33(40.7)</td>
<td>190(86.8)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>48(59.3)</td>
<td>29(13.2)</td>
<td>0.55(0.014-0.72)</td>
<td>0.001***</td>
</tr>
</tbody>
</table>

6.3.2 Multivariable analysis of factors associated with sachet alcohol consumption

After adjusting for any confounding factors, sex and ease of obtaining sachet alcohol at school was significantly associated with use of sachet alcohol. Male students were 2.3 times likely to drink sachet alcohol compared to the female students (OR; 2.29, 95%CI; 1.32-3.97, p=0.003) while the students who found it difficult to obtain sachet alcohol at school were less likely to drink sachet
alcohol (OR:0.58, 95%CI: 0.012-0.63, p=0.001). However, age, guardian, age at first drinking of alcohol and class were not statistically significant for drinking sachet alcohol (P>0.05) (Table 6.4).

Table 6.4: Multivariable analysis of factors associated with sachet alcohol use

<table>
<thead>
<tr>
<th>Variable</th>
<th>Didn’t drink sachet alcohol in the previous year N=81</th>
<th>Drank sachet alcohol in the previous year N=219</th>
<th>OR (95% CI)</th>
<th>AOR (95% CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52(64.2)</td>
<td>98(44.8)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>29(35.8)</td>
<td>121(55.2)</td>
<td>2.21(1.31-3.75)</td>
<td>2.29(1.32-3.97)</td>
<td>0.003***</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Three</td>
<td>22(27.2)</td>
<td>48(21.9)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Senior four</td>
<td>19(23.5)</td>
<td>56(25.6)</td>
<td>1.35(0.65-2.79)</td>
<td>1.68(0.70-4.01)</td>
<td>0.24</td>
</tr>
<tr>
<td>Senior five</td>
<td>19(23.5)</td>
<td>52(23.7)</td>
<td>1.25(0.61-2.60)</td>
<td>1.73(0.68-4.30)</td>
<td>0.24</td>
</tr>
<tr>
<td>Senior six</td>
<td>21(25.9)</td>
<td>63(28.8)</td>
<td>1.38(0.68-2.79)</td>
<td>1.79(0.67-4.77)</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-17</td>
<td>29(42.4)</td>
<td>79(36.1)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>52(64.2)</td>
<td>140(63.9)</td>
<td>0.99(0.58-1.68)</td>
<td>0.71(0.34-1.50)</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Person the student is staying with</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One or both parents</td>
<td>58 (71.6)</td>
<td>160 (73.1)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Relatives / others</td>
<td>23 (28.4)</td>
<td>59 (26.9)</td>
<td>0.93 (0.53–1.64)</td>
<td>0.85(0.47-1.52)</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>Age at first drinking (years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;15</td>
<td>57(70.4)</td>
<td>144(65.6)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>15 and above</td>
<td>24(29.6)</td>
<td>75(34.4)</td>
<td>0.64(0.38-1.09)</td>
<td>0.97(0.53-1.79)</td>
<td>0.94</td>
</tr>
<tr>
<td><strong>Ease of obtaining sachet alcohol at school</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td>33(40.7)</td>
<td>190(86.8)</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>48(59.3)</td>
<td>29(13.2)</td>
<td>0.55 (0.014-0.72)</td>
<td>0.58(0.12-0.63)</td>
<td>0.001***</td>
</tr>
</tbody>
</table>

6.3.4 Access of sachet alcohol at school

Regarding access, participants in the FGDs in the two secondary schools in Central and Nakawa divisions indicated that it was very easy to access alcohol in sachets at school. Day school
students buy sachet alcohol on their way to school and find it easy to smuggle it into the school as indicated in the following quotes;

“.... nearby areas where the students live, many people take alcohol that’s where many students buy alcohol from. Alcohol in sachets is in plenty, most of us are day scholars. I’m a day scholar from Najjera on my way here I buy my sachet” (Male FGD – Secondary school in Nakawa division).

“too easy to smuggle most of us here come for the ghetto where alcohol in sachets is sold anywhere in shops, they cannot check whether that you have alcohol or juice. Some is in the bottle, it may look like water and like now us the chicks they just check only the bags if we have clothes, shoes, gadgets like phones which are not needed at school.” (Female FGD – Secondary school in Central division).

Another participant in the FGD in the secondary school in Nakawa division stated that students who stayed in hostels were allowed to go out especially on weekends and therefore use the opportunity to buy and sneak sachet alcohol in school.

“Actually, they allow us (students staying in the hostel) to go out. I will go out, take my alcohol. I come with some few packed sachets, I also take and sleep. So how are you going to know or check me that I have 2% alcohol content.” (Male FGD – Secondary school in Nakawa division)

6.3.5 Affordability

The average cost of a sachet of alcohol was Uganda shillings 700.
Participants from all the FGDs observed that one of the reasons as to why students used sachet alcohol was that in most cases it was cheap and affordable for the students. This is highlighted in the quotes below;

“.... Kitoko is in a small polythene bag, those cheap ones of 600. Students get it cheaply.”
(Female FGD – Secondary school in Central division)

“They take whisky in small kaveera (sachet). They can’t afford bottles, so they buy those cheap ones in sachets” (Female FGD – Secondary school in Rubaga division).

6.3.6 Peer influence

Negative peer influence was also cited as a major contributor to taking alcohol in sachets.

“You hear students say Kitoko is sweet, tastes better with a coke or krest. It is the in-thing. It is trending. It makes you high quickly. you also want to try it”. (Male FGD – Secondary school in Rubaga division.

Respondents from other FGDs also indicated that students took alcohol in sachets in groups. Students also took alcohol in sachets to fit in certain groups as mentioned below;

“Most of them they take sachets in bandits. Even in class after classes, when you are going home you find them in the group in a corner they pretend like they are discussing but when they are boozing.” (Male FGD – Secondary school in Central division)
“...... Peer group pressure, someone wants to fit in a certain group and they do alcohol in sachets, so you have to do alcohol if at all you also want to be with them in the same group.” (Female FGD – Secondary school in Central division)

Participants in the FGD in a secondary school in Nakawa division explained how groups pool money together to buy a bottle or sachets of alcohol. But also, some students work and can afford to buy alcohol and share with friends.

“.... some make groups to buy that bottle or that polythene packet. They pool together money, 500 each to buy the bottle or that polythene with that drink. Some can afford it themselves, they work. In case I earn my 20,000 a day and am a drunkard obviously I find no difficulty in buying it. Then everyone takes a sip, if it’s a group of five everyone takes sips in turns.” (Male FGD – Secondary school in Nakawa division)

6.3.7 Parental and family influence

Responses from all the FGDs agreed that parental use of alcohol was a contributing factor to sachet alcohol use by the students. This was highlighted by the following responses:

“some students take alcohol because of their family background. For example, if you are coming from a family of drunkards and sachets are available at home, you are also going to start taking it (alcohol) thinking that its normal. If you have parents who are drunkards, why wouldn’t you take it because you are already influenced by your parents at home? So, by the time you come to school you don’t have that fear and can even carry a sachet from home” (Male FGD – Secondary school in Nakawa division)
“Madam, even others are just copying from their parents and relatives at home. Some parents drink a lot of alcohol, that one in kaveera (sachet alcohol)” (Male FGD – Secondary school in Central division)

6.4 Effects of sachet alcohol consumption among secondary school students in Kampala

The most common immediate associated negative effects experienced by the respondents due to taking sachet alcohol included: Hangover (42.0%) followed by sexual temptations (34.2%), sickness (33.3%) and doing something regrettable (32.0%). The most common long-term associated negative effect of taking sachet alcohol reported by the respondents was poor performance in schools (30.6%) (Table 6.5). Nearly a third (31.4%) of the respondents had ever had sex. The average age of first sexual encounter was 12.8 years. Of those who had sex, more than a quarter (28.1%) had taken alcohol before sexual intercourse and 45.5% of them had taken alcohol in sachets (Table 6.5).
Table 6. 5: Prevalence of associated effects experienced by students due to taking sachet alcohol

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate negative experiences associated with sachet alcohol use (n=219)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got into a fight after drinking</td>
<td>46</td>
<td>21</td>
</tr>
<tr>
<td>Damage property</td>
<td>48</td>
<td>21.9</td>
</tr>
<tr>
<td>Get hurt or injured</td>
<td>58</td>
<td>26.5</td>
</tr>
<tr>
<td>Have a hangover</td>
<td>92</td>
<td>42</td>
</tr>
<tr>
<td>Sickness</td>
<td>73</td>
<td>33.3</td>
</tr>
<tr>
<td>Do something I later regretted</td>
<td>70</td>
<td>32</td>
</tr>
<tr>
<td>Use of bad language or engaging in a bad argument</td>
<td>59</td>
<td>26.9</td>
</tr>
<tr>
<td>Sexual temptations</td>
<td>75</td>
<td>34.2</td>
</tr>
<tr>
<td><strong>Long-term negative experiences associated with sachet alcohol use (n=219)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Require medical treatment for an alcohol overdose</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td>Come to class after several drinks</td>
<td>45</td>
<td>20.5</td>
</tr>
<tr>
<td>Punishment</td>
<td>58</td>
<td>26.5</td>
</tr>
<tr>
<td>Skipping lessons</td>
<td>57</td>
<td>26</td>
</tr>
<tr>
<td>Absenteeism from school</td>
<td>66</td>
<td>30.1</td>
</tr>
<tr>
<td>Suspension from school</td>
<td>33</td>
<td>15.1</td>
</tr>
<tr>
<td>Expulsion from another school</td>
<td>13</td>
<td>5.9</td>
</tr>
<tr>
<td>Poor school performance</td>
<td>67</td>
<td>30.6</td>
</tr>
<tr>
<td><strong>Ever had sex (n=625)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>196</td>
<td>31.4</td>
</tr>
<tr>
<td>No</td>
<td>429</td>
<td>68.6</td>
</tr>
<tr>
<td><strong>Drank alcohol before sexual intercourse (n=196)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>55</td>
<td>28.1</td>
</tr>
<tr>
<td>No</td>
<td>141</td>
<td>71.9</td>
</tr>
<tr>
<td><strong>If yes, what kind of alcohol</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol in sachets</td>
<td>25</td>
<td>45.5</td>
</tr>
<tr>
<td>Waragi in bottle</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Beer</td>
<td>7</td>
<td>12.7</td>
</tr>
<tr>
<td>Wine</td>
<td>6</td>
<td>10.9</td>
</tr>
<tr>
<td>Local brew</td>
<td>5</td>
<td>9.1</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1.8</td>
</tr>
</tbody>
</table>
From qualitative data, participants mentioned a number of negative experiences by students due to taking sachet alcohol including hangover, feeling sick, sleeping in class, lack of concentration in class, involvement in fights and use of abusive language.

A respondent from the FGD in a secondary school in Nakawa division mentioned how they suffered a hangover after taking alcohol in sachets;

“...for me one time I took alcohol in sachets, several sachets, it was my first time. I did not feel anything on my head but at night I didn’t sleep. I had a very severe stomachache, vomiting the whole night. The next day I really had a headache and a hangover” (Female FGD – Secondary school in Nakawa division)

Participants from four out of FGDs also indicated that some students got involved in fights after taking sachet alcohol as stressed in the following response;

“The other day when I tasted that waragi in sachets, I felt that I’m energetic, even I tried to fight my sister. you see what happened I got burnt” (Male FGD – Secondary school in Nakawa division).

Another respondent from the FGD in a secondary school in Central division highlighted;

“strikes are not common but fights, even today morning. They first do a sachet, drink so that they can be strong.” (Male FGD – Secondary school in Central division).

Four out of six FGDs mentioned that some students sleep in class, others get confused and lack concentration in school because of taking alcohol in sachets;
“When they take that kaveera (sachet) alcohol, they just sleep, they normally doze in class. Sometimes they are taken up they don’t mind of their future and if you try to give them advice they just abuse you like you are just wasting your time.” (Female FGD – Secondary school in Central division)

“the other example we gave, the guy who was in our class, he took many sachets, instead of reading he would just sing the book instead of reading the notes he would just start singing the sentences into a song, making a song out of it.” (Male FGD – Secondary school in Nakawa division)

Respondents from the FGD in a secondary school in Nakawa division also explained how some students use their school fees to buy alcohol and end up being chased from school and thus skip classes. This was pointed out in the following responses;

“….. especially to those students who are so addicted to alcohol they don’t value education. Some because when they are addicted to alcohol they may constantly take that alcohol in sachets but when they don’t have money for alcohol they will resort to even use school fees and teachers will chase them because of fees. Because they used that money for alcohol they have no way again to go back to their parents and tell them that they want money for school fees, so they keep on loitering around. They don’t mind about copying notes and coming to school. You find that these students most of the time don’t focus on their studies.” (Female FGD – Secondary school in Nakawa division)

6.4.1 School management action to students taking sachet alcohol

All the FGDs pointed out that students that have been caught taking sachet alcohol in school have been suspended or expelled.
“some have been caught with sachets and they are suspended for some weeks from the school. They are sent away from the school.” (Male FGD – Secondary school in Rubaga division)

“…..most especially HSC (A level students), some have been sent away from the school because of alcohol” (Male FGD – Secondary school in Central division)

6.5 Seeking help for taking sachet alcohol.

More than a half (56.6%) of the respondents had tried to stop taking sachet alcohol. Only 36.1% of the respondents had sought help in the previous 12 months (Figure 6.2).

Figure 6. 2: Tried to stop taking sachet alcohol and seeking help in the past 12 months.
CHAPTER SEVEN: DISCUSSION

This study set out to determine the prevalence, associated factors and effects of sachet alcohol use among secondary school students in Kampala. The results indicate that the prevalence of those who had drank sachet alcohol in the previous year was 35.0%. Male students were 2.2 times likely to take sachet alcohol. However, age, class, person staying with student and age at first intake of alcohol was not significantly associated with sachet alcohol use among secondary school students. The most common associated negative effects experienced due to taking sachet alcohol included: hangover, sexual temptations, sickness, doing something regrettable and poor school performance.

7.1 Prevalence of sachet alcohol use

The prevalence of 44.3% of the students in secondary schools in Kampala who had ever drank sachet alcohol is very high in a country that has clear regulations regarding the age limit for drinking and thus children in this age group are not expected to be drinking alcohol (WHO, 2018). The prevalence of 35.5% of those who had drank sachet alcohol in the previous year was also higher than a survey conducted in 2014 which showed that 26% of the youths in the slums of Kampala ages 12 to 18 preferred consuming alcohol in the sachets (Swahn 2014). The difference could be related to the nature of the participant’s environment and living conditions since the previous study was done among youths in slums who were not in school.

A high prevalence of students taking alcohol in sachets is likely due to the fact that alcohol in sachets is more available, portable, affordable and easily concealed than other alcoholic drinks. A study conducted by Awosusi and Adegboyega (2015) revealed that Locally brewed gin and alcohol in sachets with high alcoholic content was commonly used by students because it was easily available and affordable and was being sold in the measurement which users could afford.
Therefore, the rising trend of alcohol consumption especially alcohol in sachets among secondary school students provides quantitative support to the concerns raised by local leaders regarding sachet alcohol use among youths. These findings support the decision made by Uganda to ban sachet alcohol (Etukuri 2019).

7.2 Factors associated with sachet alcohol use

Consistent with previous studies, there was statistical significance between gender and sachet alcohol use among adolescents in this study. Boys were 2.2 times likely to take sachet alcohol in the previous 1 year. These findings agree with a previous study in Ethiopia which reported that boys were more likely to use alcohol than girls (Reda et al 2012). They were also consistent with a WHO report that showed that drinking was higher among boys than girls in most countries and regions even though gender differences had decreased over time (WHO 2018). This gender difference is more likely due to the fact that boys are more likely to engage in certain risky behaviors such as sachet alcohol use than the girls. It could also be explained by higher exposure opportunities to alcohol by boys than the girls (Kullgren et al 2009). On the other hand, several studies have showed that gender differences in alcohol use have decreased over time and there is a possibility of a substantial number of girls drinking (Hormenu et al 2018, Doku et al 2012). The difference could be that the previous studies were conducted among a big sample size of over 1,000 students.

The current study also revealed that easy access to sachet alcohol was statistically significant to use of sachet alcohol by the students. This is consistent with many other studies that have shown that easy access to alcohol and its availability are some of the factors adolescents attributed to
alcohol abuse (Obradors et al 2019, Teixidó et al 2019). This is likely because alcohol in sachets is very easy to hide and sneak into the school. Several previous studies have also found that sachet alcohol is easy to sneak in the school during school parties. Alcohol was also readily available in the shops around schools and homes (Hoel et al 2014, UYDEL 2008, Kacwamu 2010). In Uganda, although the minimum legal drinking and purchasing age for alcohol is 18 years, this is not being implemented as it is reflected in the findings in this study and previous studies (Sekimpi et al., 2015). Therefore, the influence of access and availability of alcohol cannot be underestimated in terms of adolescents use of alcohol.

According to the findings of this study, age was not statistically associated with sachet alcohol use. This could possibly mean that even though the age limit for taking alcohol in Uganda is 18 years, the young adolescents in schools are consuming sachet alcohol. This is evidenced by the low mean age of onset of taking sachet alcohol in this study which was 12.8 years. A low age of onset of alcohol has been attributed by other studies to age being a non-significant factor in alcohol use among adolescents (Doku 2012). Literature indicates that, since alcohol is readily available in the homes, in places known and accessible to the children, children may begin to drink at an earlier age (Osaki et al 2018). These findings show that alcohol in sachets is available and accessible to all age groups among secondary school students. Nonetheless, other findings have found age as a predictor of alcohol use with older adolescents at a higher risk of drinking alcohol than the younger adolescents (Alvarez-Aguirre et al 2014). The difference could be because the previous study was conducted among rural secondary school students who are likely to have less exposure opportunities to alcohol. But also, the study population in the current study belonged to almost the same age group with no significant age variation.
Although previous research reports parental support as a significant predictor of alcohol use among adolescents (Kafuko and Bukuluki 2008, White et al 2010), the current research found otherwise. There was no statistical significance between sachet alcohol use and the person whom the students lived with which is consistent with the findings of study which was conducted among in school adolescents in Ghana (Hormenu et al 2018). This could be due to the abundance of sachet alcohol which can easily be purchased from the retail shops by the adolescents and availability from friends. Participants in the focus group discussions also revealed that alcohol was readily available in some homes, community and thus adolescents have access to plenty of alcohol. The other reason for this could be that parents are busy and have no time to monitor and bond with their adolescents which makes the adolescents prone to getting involved in substance use including sachet alcohol use. This view is supported by the findings of Hormenu et al (2018); Rusby et al (2018).

Elsewhere, parental provision of alcohol to students and home alcohol availability have been associated with significant increases in young adolescent alcohol use (Komro et al 2007, Chan et al 2017). More than a quarter of the students in this study reporting that their main source of sachet alcohol was their parents or other relatives at home is of concern. Most of the students in schools considered by the study being day scholars, they perhaps get access to alcohol at their will at home or as they commute between home and school. The study findings in part agree with Kacwamu (2010) in her findings that students in Uganda get alcohol from homes. Several studies elsewhere also concur with the present study and articulate that parents are a major source of alcohol to adolescents. Parental supply of alcohol and home availability plays a crucial role in adolescent use of alcohol (Mattick et al 2017, Chan et al 2017). Therefore, this data highlights the need for additional and targeted efforts towards parents to prevent alcohol consumption among school adolescents.
The main sources of sachet alcohol to the students in this study was fellow students (33.3%). Several studies have highlighted friends being the major source of alcohol to students (Asante et al 2014, Lam et al 2019). Peers have a direct influence in adolescents’ risk behaviours including use of alcohol (Tome et al 2012). All FGDs stated that students who take alcohol did it mostly in groups especially during the breaks between lessons. Students group up as if they are having an academic discussion on the school compound and yet they are taking alcohol. Students also noted that the groups preferred sachet alcohol since it was easy to hide in the pockets as they disguise to be in a discussion. This is consistent with findings from various studies that indicated that having friends who drink alcohol is a very strong predictor of alcohol use (Reda et al 2012, Bowden et al 2017). Drinking as a social activity is done in groups and adolescents select those adolescents they feel have a similar mind with them (Windle and Windle 2018). Apart from selecting similar minded peers, adolescents tend to conform to group influences just to fit in (Burk et al 2012, Mercken et al 2012). Hence, this calls for awareness campaigns that have more focus on peers.

7.3 Effects of sachet alcohol consumption among secondary school students in Kampala

The survey results indicated that respondents acknowledged having experienced problems due to sachet alcohol use. The four most common immediate negative effects experienced by the respondents due to taking sachet alcohol included hangover, sexual temptations, sickness and doing something regrettable. The regretted actions were however not explored. These findings were consistent with the GSHS report which revealed that 21.0% of students ever had a hang-over, felt sick, got into trouble, missed school, or got into fights one or more times as a result of drinking alcohol during their life (GSHS 2003). Also, a third of the respondents who took sachet alcohol indicated to have experienced sickness. The sickness indicated could be as a result of binge
drinking since sachet alcohol is easily accessible but also it could be due to the high content of alcohol in the sachets which is usually between 37% to 43% (Kifuko et al 2014).

Poor school performance was supported by habits experienced by the respondents after taking sachet alcohol like absenteeism from school, skipping of lessons and expulsion from school which can be mediating factors towards poor school performance. The results of a study done by El Ansari et al (2013) indicated an inverse relationship between alcohol use and academic performance.

Sexual activity among the respondents was quite high with 31.4% reporting having ever had sex. 28.1% of the respondents who had had sex had taken alcohol before sexual intercourse and almost a half of them had taken alcohol in sachets. Several studies including a study conducted among university students in Uganda found a significant association between alcohol use in relation to sexual activity (Choundhry et al 2014, Oye-Adeniran et al 2014). Social spaces where alcohol use takes place, such as bars and clubs are the same settings where sexual relationships are initiated (Osaki et al 2018). In such spaces, alcohol is used as a means to facilitate interaction and create an informal mood. Alcohol packed in sachets was mostly taken probably because of its easy availability and accessibility.

Therefore, these findings show that although adolescents continue to use sachet alcohol they have experienced some of the serious consequences of alcohol abuse. Though more than half (56.6%) of those who had drank sachet alcohol in the 12 months had tried to stop drinking, only 36.1% had sought help about their drinking problem. Many young people either by ignorance or omission never seek help for alcohol related problems for fear of stigmatization, feelings of guilt and living
in denial which has further exacerbated the problem of alcohol abuse among young people (Emyedu et al 2017). With a high number of students trying to stop taking sachet alcohol, teachers need to play an active role in guidance and counselling of students abusing alcohol.

7.4 Study limitations

- This study used self-reporting methods. Self-reporting is prone to recall bias since respondents were required to remember events that had occurred many years ago. This was addressed in part by limiting the recall period to one year and 30 days.

- Self-reporting is also prone to under reporting due to social desirability bias. As a result, the reported data are most likely an underestimation of true levels of drinking. Attempts were however made to explain to respondents that information obtained from them would be used for academic purposes and where possible to improve service provision and that data would be presented in a confidential manner in order to increase their trust.

- The study is based on data from students in three government schools in Kampala. Therefore, the findings cannot be generalized to youths who are not attending school, youths attending private schools or other populations in the country.

- The data in this study was collected before the ban on sachet alcohol. The prevalence of sachet alcohol use could have changed since then.

- The survey was cross-sectional, so causation cannot be determined.

- This study used convenience sampling approach to identify the students to participate in the study because it was difficult to get access to the students’ lists and schools were giving little time to collect data. This may affect generalization of the findings to the student population in this sample due to the possibility of selection bias.
7.5 Conclusion

The findings from this study indicate that there is a high prevalence of sachet alcohol drinking among the sampled high school students. The students drink alcohol in sachets because it is readily available and affordable around their school and home environments. Male students were more likely to consume sachet alcohol compared to the female students. Regardless of age, class, person staying with student and type of school, students from all the schools sampled engage in sachet alcohol drinking. Other factors highlighted such as family, parental and peer influence can be facilitating factors for sachet alcohol use by secondary school students.

Although some students use sachet alcohol, a number of them experience associated negative effects like sickness, poor performance in school, absenteeism from school, skipping of lessons, expulsion from school, hangover, sexual temptation, doing something regrettable, getting hurt, damage of property and getting into a fight after drinking alcohol.

Therefore, sachet alcohol use is a big challenge to secondary students in Kampala and Uganda. These findings support the ban of sachet alcohol by the Ugandan government. There is need for the various stakeholders to support the implementation of this ban on sachet alcohol.

7.6 Recommendations

There is need for deliberate attempts by key stakeholders such as Ministry of Health, Ministry of Education, and Ministry of trade with the objective of preventing and reducing use of alcohol among secondary school adolescents in Kampala while managing the related problems. The following recommendations are made to the various stakeholders:
• Ministry of Health should design sensitization programs that target students, teachers, parents and the entire community.

• Enforce and strengthen restrictions on alcohol availability and accessibility to young people in schools by:
  • Implementing the regulation on age limit for alcohol purchase and consumption.
  • Shops around schools should not sell alcohol.
  • Support and implement the ban on the sale of sachet alcohol.

• Schools should train peer educators and other student leaders to serve as role models for other students. Students should also be encouraged to report to the school administration fellow students who abuse alcohol.

• Pupils who are found abusing alcohol should be counseled or referred for rehabilitation. Expulsions do not fully solve the problem as they just transfer problems to other schools as shown in the survey results that some of those who drink alcohol were expelled from other schools.

• Parents should not provide alcohol to their children and should avoid keeping alcohol in the homes.
REFERENCES


Good morning /Good Afternoon Sir /Madam.

Thank for accepting to participate in this study. My name is Hope Mavis Masika. I am a graduate student from Makerere University School of Public Health. I am talking to people about alcohol abuse. The information you tell me will be used to write a report to plan alcohol abuse prevention strategies in the future.

I will ask you a number of questions about alcohol abuse and related issues. Some of the questions will be about personal behaviors such as alcohol taking. I am interested in your experiences and opinions. There is no right or wrong answers. You are free to refuse to answer any questions. You have been selected to participate because you are a member of this school and you may have an idea of what goes on in this school concerning pupil behavior related to alcohol abuse. Your participation is anonymous and identifying information will not be recorded or reported in any way. Things that you will say may be reported as anonymous quotations.

You may withdraw your participation in the project at any time without consequences.

The interview will last about 30 minutes. Please do not hesitate to ask if you have any questions concerning this matter.

All information given will be confidential.

Have understood? Yes No
Do you agree to participate? Yes No

Signature of respondent that verbal assent / consent was obtained

.............................................................

Date............................................
APPENDIX II: RESPONDENT QUESTIONNAIRE

This survey is about alcohol use and abuse. It has been designed for you so that you can tell us what you know about alcohol abuse among pupils. The information you give will be used to develop better prevention and intervention initiatives for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really see, hear or do.

Completing the survey is voluntary. Whether or not you answer the questions will have no effect on your life in this school if you are not comfortable answering a question, just leave it blank. We however request you to give correct information to the questions that follow.

Thank you.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Age in years ............................

2. What is your Sex?
   a) Male
   b) Female

3. What class are you?
a) Senior one
b) Senior two
c) Senior three
d) Senior four
e) Senior five
d) Senior six

4. Whom do you stay with at home?
   a) Both parents
   b) Single Mother
   c) Single father
d) Relatives
e) Others, specify---------------------

SECTION B: PERSONAL ALCOHOL USE

The following questions ask about how much you drink. A drink means any of the following:

➢ A bottle of beer
➢ A glass of wine
➢ A sachet of alcohol
➢ A glass of Local brew

5. Have you ever drank alcohol?
a) Yes

b) No

6. How old were you when you had your first drink of alcohol?..........................

7. What kind of drink did you take the first time you drank alcohol?

   a) alcohol in sachets
   b) beer in bottle
   c) local brew
   d) wine
   e) Others (specify).............................................

8. How would you describe yourself in terms of your current use of alcohol?

   a) abstainer
   b) abstainer – former problem drinker in recovery
   c) occasional drinker
   d) moderate drinker
   e) heavy drinker

9. When did you last have a drink of sachet alcohol (that is more than just a few sips)?

   a) I have never drank sachet alcohol
   b) Not in the past one year
   c) More than 30 days ago, but in the past year
   d) More than a week ago but in the past 30 days
   e) Within the last week
Where do you often get sachet alcohol from?

a) Home/ parents/ relatives
b) Fellow students at school
c) Teachers at school
d) Shop
e) Bar
f) Others (specify)………………………………..

10. How easy or difficult is it for you to obtain the following kinds of alcohol at school?

<table>
<thead>
<tr>
<th></th>
<th>Very easy</th>
<th>Easy</th>
<th>Difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Waragi or other alcohol in sachets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Waragi in bottle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Beer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Wine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Local brew</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
11. How much do you always pay for a sachet of alcohol? ..............................................

12. During the past 12 months did you try to stop taking sachet alcohol?

   a) I did not take sachet alcohol

   b) Yes

   c) No

13. Have you gone to anyone to get help about a problem with sachet alcohol?

   a) Yes

   b) No

SECTION C: EFFECTS OF ALCOHOL ABUSE

The following questions are about sexual behaviour

14. Have you ever had sexual intercourse?

   a) Yes

   b) No

15. How old were you when you had sex for the first time?.................................

16. Did you take alcohol before you had sexual intercourse the last time you had sex?

   a) Yes

   b) No
17. If yes, what kind of alcohol did you drink?

   a) Waragi or other alcohol in sachets
   b) Waragi in bottle
   c) Beer
   d) Wine
   e) Local brew
   f) Others (specify) ………………………

18. Please tick YES or NO on the following statements to indicate if you have experienced the following due to your drinking of sachet alcohol:

<table>
<thead>
<tr>
<th>Statement</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspension from school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expulsion from another school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of bad language or engaging in a bad argument</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual temptations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor school performance</td>
<td></td>
<td></td>
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<tr>
<td>Sickness</td>
<td></td>
<td></td>
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<tr>
<td>Absenteeism from school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skipping lessons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Come to class after several drinks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Got in trouble with school administration after drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punishment</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Have a hangover</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Do something I later regretted</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Damage property</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Engage in unplanned sexual activity</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Get hurt or injured</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Require medical treatment for an alcohol overdose</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Got into a fight after drinking</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
APPENDIX III: FOCUS GROUP DISCUSSION GUIDE

I am student from Makerere University School of Public Health. I am conducting study on the use of alcohol in sachets among secondary schools in Kampala capital city authority. I will moderate the discussion and my colleague will take notes. The information obtained in this study will recommend appropriate interventions for controlling abuse of alcohol among secondary school pupils. The questions will be in this order though not to be followed strictly.

1. What is alcohol use and abuse?

2. Which type of alcoholic drink is commonly used by pupils in this school?

3. How many of you have at one time tasted alcohol and what was the first experience like?

4. Why do you think pupils start using alcohol? How do they usually start?

5. What are the main reasons for pupils to abuse alcohol?

6. How do the pupils always get the alcohol into the school?

7. How easy or difficult is it for pupils to have alcohol in this school? Please give reasons for your answer.

8. How often do you think pupils use alcohol in this school?

9. When do pupils like abusing alcohol in this school?

10. Which places do you think youths consume their alcohol from?

11. How do you find out whom among the pupils abuses alcohol?
12. With whom do pupils take their alcohol?

13. What are the observed effects of alcohol abuse?

14. Are there any benefits for using alcohol?

15. What common problems do pupils who abuse alcohol usually face?

16. For those who drink how is their performance in class?

17. Do you have any questions?

Thank you!

Other questions will rise from certain pertinent contributions from the group.