



NATIONAL AUTHORITY FOR THE CAMPAIGN AGAINST ALCOHOL AND DRUG ABUSE

**“NATIONAL SURVEY ON ALCOHOL AND
DRUG ABUSE AMONG SECONDARY SCHOOL
STUDENTS IN KENYA”**

SURVEY REPORT

OCTOBER, 2016

ACKNOWLEDGEMENT

This report would not have come this far without the support of several individuals. First, we would like to thank the Chief Executive Officer NACADA, Dr. William N. Okedi, for his keen interest on this topic and comments throughout the development phase, fieldwork and report writing. Prof. Isaac Nyamongo, the lead consultant in the assignment was instrumental in guiding the survey process and production of the final report. Prof. John K. Muteti and John Muturi were similarly instrumental and supportive through the preparation, field work and the finalization of this report. In particular, we would like to thank Prof. Muteti together with the technical advisory team for making field visits during the data collection phase; to Morris Kamenderi for his comments and logistical support throughout the process of tool development, field work and report writing. The support of Noberts Basweti Ombati is greatly acknowledged as well as that of the Technical Advisory Teams. The members of this team and the organizations they represent were: Reverend Dr. Wilfred Kogo, Director, NACADA Board; Felistas Kanana, NACADA; Margaret Maina, KEMI; Stephen Kimotho, KUPPET; Joel Otini, Ministry of Education Science and Technology (MoEST); Grace Rasugu, KICD; and Evelyn Waweru, Kenyatta University. Finally, we acknowledge the following for their support in data collection: Fernandos Kredgie Ongolly, Ruth Mwikali Jonathan, Daniel Omari Onderi, Rayyan Abdulswabour Juma, Raymond Chai Jefwa, Shedrack Nthenge, Christine Wangechi Kahiga, Trevas Nyambura Matathia, Robert Ayusa Nyabuti, Morris Musyoka, Maoline A. Waga, Irene Adhiambo Adewa and Jimmy Mwangi Maina.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
LIST OF TABLES	iv
LIST OF FIGURES	iv
ABBREVIATIONS AND ACRONYMS	v
DEFINITION OF TERMS	vi
EXECUTIVE SUMMARY	viii
BACKGROUND	1
1.1. Introduction.....	1
1.2. Study Objectives	2
1.3. Literature Review.....	2
1.4. Conceptual Framework.....	4
METHODOLOGY	6
2.1. Study Coverage.....	6
2.2. Study Design and Population.....	6
3.3 Sample Size and Sampling.....	7
2.4. Data Collection Instruments.....	7
FINDINGS	9
3.1 Introduction.....	9
3.2 Characteristics of respondents	9
3.3 Knowledge, Attitudes and Perceptions about Alcohol & Drugs use	12
3.4 Students' Alcohol and Drugs use.....	20
3.5 Risk Factors for Alcohol and Drugs Use	24
3.6 Protective Factors Against Alcohol and Drugs Use.....	32
3.7 Current Strategies to Address Alcohol and Drugs Use in Schools	34
3.8 Guidance and Counseling Teachers: Roles, Gaps & Opportunities.....	37
3.9 Strategies to Prevent, Control and Manage Alcohol and Drugs Use in Schools	39
SUMMARY OF FINDINGS AND RECOMMENDATIONS	42
4.1 Summary of findings.....	42
4.2 Recommendations.....	44
REFERENCES	46
Sample distribution	48

LIST OF TABLES

<i>Table 1: Lifetime use/ ever use of drugs by secondary school students</i>	X
<i>Table 2: Use of drugs in the last six (6) months by secondary school students</i>	X
<i>Table 3: Use of drugs in the last 30 days by secondary school students</i>	XI
<i>Table 2.1: Sampling different categories</i>	6
<i>Table 2.2: Study objectives and data collection methods</i>	8
<i>Table 3.1: Characteristics of respondents</i>	10
<i>Table 3.2: Person with whom the student stays with</i>	11
<i>Table 3.3: Educational level of parents/guardians</i>	12
<i>Table 3.4: Do you consider the following as drugs?</i>	14
<i>Table 3.5: Drugs affect academic performance</i>	14
<i>Table 3.6: Students can take drugs without teachers knowing</i>	17
<i>Table 3.7: Drugs that are available and taken by students</i>	18
<i>Table 3.8a: Substance ever use</i>	20
<i>Table 3.8b: Substance use in the last 6 months</i>	21
<i>Table 3.8c: Substance use in the last 30 days</i>	21
<i>Table 3.9: Place where alcohol/substance was used the last time</i>	23
<i>Table 3.10: Sources of alcohol/substances used by students (multiple responses)</i>	26
<i>Table 3.11: Access to alcohol/substances within school and school neighbourhood</i>	28
<i>Table 3.12: Alcohol use in the last 6 months by socio-demographic characteristics</i>	29
<i>Table 3.13: Relationship between alcohol use in the last six months and selected variables</i>	31
<i>Table 3.14: Inspection of alcohol and drugs in schools</i>	33
<i>Table 3.15: Number of rehabilitation centres mentioned by region</i>	34
<i>Table 3.16: Other methods of intervention</i>	36
<i>Table 3.17: Other effects associated with use of ADA (multiple responses)</i>	37

LIST OF FIGURES

<i>Figure 1.1: Modified social stress model</i>	4
<i>Figure 3.1: Occupation of parents/guardians</i>	12
<i>Figure 3.2: Knowledge of alcohol and substance use by schoolmates in school</i>	13
<i>Figure 3.3: Harmful substances</i>	15
<i>Figure 3.4: Students attitudes towards alcohol and drugs use</i>	16
<i>Figure 3.5: Drugs/substances that are legal (i.e. accessed without restriction by law)</i>	19
<i>Figure 3.6: Age of onset to different substances of abuse</i>	22
<i>Figure 3.7: Alcohol/substance use by schoolmates and close friends</i>	25
<i>Figure 3.8: When students are likely to use alcohol and drugs</i>	26
<i>Figure 3.9: Presence and adequacy of supervision provided in school</i>	32
<i>Figure 3.10: Discussions with friends on social media regarding alcohol and drugs</i>	33
<i>Figure 3.11: Punishment given to students found in possession of drugs/alcohol</i>	34
<i>Figure 3.12: Additional structures to support students against alcohol and drugs abuse</i>	35
<i>Figure 3.13: Support provided by the school to students with alcohol/ drug problems</i>	35
<i>Figure 3.14: Perceived link between alcohol & drug use and behavior/academic outcomes</i>	36

ABBREVIATIONS AND ACRONYMS

ADA	Alcohol and Drugs Abuse
KEMI	Kenya Education Management Institute
KICD	Kenya Institute of Curriculum Development
KMTC	Kenya Medical Training Center
KUPPET	Kenya Union of Post Primary Education Teachers
MoEST	Ministry of Education, Science and Technology
MSSM	Modified Social Stress Model
NACADA	National Authority for the Campaign Alcohol and Drug Abuse
SES	Socio-Economic Status
TSC	Teachers Service Commission
WHO	World Health Organization
WHO/PSA	WHO's Programme on Substance Abuse

DEFINITION OF TERMS

<i>Bhang</i>	a mild preparation from young leaves and stems of the Indian hemp plant, <i>Cannabis sativa</i> , which, when used, produces hallucinogenic effects. It is often drunk with milk or water as a fermented brew or smoked.
<i>Chavis</i>	snuff tobacco adulterated by various substances which make it more potent.
<i>Drug use</i>	a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others.
<i>Drug misuse</i>	a term used commonly to refer to improper use of prescription medication. The prescribed drug may be used for mood alteration or intoxication without regard to the serious negative side effects a person is exposing themselves to.
<i>Inhalants</i>	these are substances that vaporize at room temperature. The vapours produced as a result can be inhaled to induce a mind-altering effect in an individual. The commonly used inhalants in Kenya include shoe maker's glue, petrol, paint thinners and nail polish removers. Often because of the short-term nature of the effect produced by inhalants which lasts only a couple of minutes, users frequently seek to prolong their altered feeling by continuing to inhale repeatedly over the course of several hours.
<i>Khat (also Miraa)</i>	is a stimulant drug derived from a shrub (<i>Catha edulis</i>) that is native to East Africa and parts of Yemen. Khat contains a mind-altering chemical known as cathinone. The leaves of this shrub are chewed and held in the cheek to allow for the slow release their stimulant chemicals.
<i>Kuber</i>	a highly addictive and intoxicating substance assumed to have libido-enhancing properties. It is often disguised as a mouth freshener and packed in sachets similar to tea leaves pouches. Originally from India, in Kenya the street name for kuber is <i>Ndovu</i> or <i>Skari</i> .
<i>Mandrax</i>	a synthetic drug sold in form of tablets and whose active ingredient is Methaqualone. Some of the side effects of mandrax include emotional disturbances, depression, weight loss, headaches, insomnia, epileptic like seizures, aggression and stomach cramps among others.

- Prescription drugs*** pharmaceutical products that require a qualified and approved health care provider to prescribe their use. Although these products have beneficial health care outcomes for the patient, when they are not used according to prescription they lead to potential negative health consequences. Consequences include dependence and addiction. Abuse of such drugs may include taking another person's prescription to get high, to treat pain, or because you think it will help get a desired effect.
- Rohypnol*** a brand name for a sedative called Flunitrazepam. It is a tasteless and odourless drug that easily dissolves in carbonated drinks. Its common street names among others include: date rape drug, the forget pill, forget me drug and lunch money drug.
- Shisha*** the use of a stemmed instrument for vaporizing and smoking tobacco that has been flavoured. The vapour or smoke is passed through water before it is inhaled.
- Substance abuse*** see *Drug abuse*.

EXECUTIVE SUMMARY

Introduction: The Government of Kenya lays significant focus on the control of substances of abuse in the various sectors. This survey on alcohol and drug misuse in Kenyan secondary schools contributes to the growing body of knowledge on the impact of alcohol and drug abuse in the country as a whole and the education sector in particular. The school environment is a critical point of interaction between the students and the larger society as a whole.

Methodology: A sample of students was drawn from 10 stratified regions across the country, broadly divided into Nairobi, Central, Lower Eastern, Upper Eastern, North Eastern, Coast, Upper Rift, Lower Rift, Nyanza and Western. Using a sampling frame of schools registered with the Ministry of Education, Science and Technology, the schools were categorized into National, County and sub-County schools as well as into boys, girls, mixed boarding and mixed day schools. A questionnaire was used to capture information directly linked to the study objectives. In addition, in-depth interviews were conducted with either the principals/deputy principals or guidance and counselling teachers of selected schools.

Findings: A total of 3,908 students (60% male and 40% female) from 77 randomly sampled schools were interviewed. Overall, the survey shows that students are fairly knowledgeable on the different drugs and substances of abuse. Bhang, alcohol, cigarettes, cocaine, heroin, inhalants, mandrax and *khat* are all fairly well known with at least 80% of the students identifying them as drugs. The three top drugs and substances of abuse reported as most readily available to students in schools are cigarettes, alcohol and *khat*.

Students reported that they can use alcohol and drugs discretely, a notion that could contribute to students carrying substances of abuse to school. A majority of students (72.8%) thought that it was possible for a student to use drugs without their teachers' knowledge. Consequently, the majority of students agree that the school environment could provide opportunities for students to initiate use of alcohol and other substances of abuse. More than seven in ten (71.3%) of the students agreed that students are likely to initiate alcohol and drug of abuse in schools.

Key Findings at a Glance

- *Secondary schools in Kenya are not drug free environments*
- *The age of onset to alcohol and drug abuse marks the period of transition from primary to secondary school(13 -15 years)*
- *Supervision and inspection of students for drugs in schools is not strict enough to discourage drug and substance abuse*
- *A curriculum on alcohol and drug abuse is timely because there is evidence that students are initiating the use of drugs at very young ages*
- *Environments around schools are a common source for drugs being used in schools*
- *The home environment is a major risk for initiation of drugs by students*
- *The guidance and counselling teachers are not equipped to deal with alcohol and drug abuse issues in their training*
- *There is need for student friendly counselling, treatment and rehabilitation services.*

An almost similar number (69.1%) thought that students have a role to play in the supply of alcohol and drugs of abuse in schools.

The survey showed that the home environment was an important risk factor for initiation of alcohol and drugs among the students. The highest proportion of students reported the home environment as the place where a drug or substance of abuse was used during the last time. In the case of alcohol, the home environment was reported by 14.5% of the students. It was followed by other occasions such as weddings or parties (7.9%) and pubs (4.1%). Noteworthy is the high proportion of students who reported accessing prescription drugs within the school.

Not surprising, use of alcohol and other drugs of abuse by schoolmates closely mirrors use of those substances by close friends. The students were asked if they were aware that their school mates and friends were abusing alcohol or drugs. Among the top four reported substances that schoolmates and friends are using include alcohol (41.4%; 40.1%), *khat* (34.1%; 32.6%), cigarettes (31%; 27.5%) and prescription drugs (30%; 27.6%) respectively. These are followed by chewed tobacco, *shisha*, *kuber* and sniffed tobacco. The least mentioned drugs and substances of abuse are rohypnol, heroin, mandrax, cocaine and inhalants.

The students were also asked to mention the period when alcohol and drugs are most likely to be used in schools. Data shows that alcohol and drugs are more likely to be used during school holidays (48.5%) and on their way home (35.1%). Within the school environment, students are more likely to use drugs during weekends (30.4%). Other times mentioned include during inter-school meetings (27.8%), during school outings (27.3%), during entertainment in school (24.4%), during games (23.7%) and during school trips (21.8%).

The students were also asked to mention the possible sources of alcohol and drugs. The most commonly mentioned source of these substances of abuse is from friends (32.2%). The drugs and substances of abuse are also carried from home (29.3%), bought from other students (25.7%), bought from a bar near school (22%) or from a local brew den (19.1%). Other sources are kiosks or shops near school (16.9%), relatives (16.7%), supermarkets (11.3%), non-teaching school workers (7.4%), parents (5.3%), teachers (4.8%) and school canteen (3.9%).

The survey shows that the age of onset to alcohol and drug use marks the period of transition from primary school to secondary schools. The age between 13 to 15 years presents the most critical period for the students in secondary schools to initiate alcohol and drug use. The students are likely to initiate prescription drugs and inhalants at the age of 13 years. The students are likely to initiate alcohol, *khat/ miraa*, tobacco and heroin at the age of 14 years. For cocaine, the age of onset is 14.5 years while bhang is 15 years.

The students were asked to mention the drugs and other substances of abuse that they have ever used in their lifetime (ever use). Data shows that alcohol (23.4%) is the most commonly ever used substance of abuse by students followed by ever use of *khat/ miraa* (17.0%), prescription drugs (16.1%), tobacco (14.5%), bhang (7.5%), inhalants (2.3%), heroin 1.2% and cocaine (1.1%). Table 1 shows the prevalence of lifetime use/ever use of drugs by students in secondary schools.

Table 1: Lifetime Use/ Ever use of Drugs by Secondary School Students

<i>Type of Drug</i>	<i>Prevalence (%)</i>	<i>No. of Students</i>
Alcohol	23.4	508,132
<i>Khat/ miraa</i>	17.0	369,155
Prescription drugs	16.1	349,613
Tobacco	14.5	314,869
Bhang	7.5	162,863
Inhalants	2.3	49,945
Heroin	1.2	26,058
Cocaine	1.1	23,887

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly ever used tobacco products in a student's lifetime include cigarettes 9.2% (199,778 students), *shisha* 6.2% (134,633 students), chewed tobacco 3.9% (84,689 students), *kuber* 3.9% (84,689 students) and sniffed tobacco 3.0% (65,145 students). The most commonly ever used prescription drugs in a student's lifetime include sleeping pills 15.5% (336,583 students), mandrax 1.0% (21,715 students) and rohypnol 0.6% (13,029 students).

The students were then asked to mention the drugs and other substances of abuse that they have used in the last six (6) months. Findings show that alcohol (9.3%) is the most commonly used substance of abuse by students in the last six (6) months followed by use of prescription drugs (6.8%), *khat/ miraa* (5.9%), bhang (3.7%), inhalants (0.8%), heroin 0.4%, and cocaine 0.4%. Table 2 shows the prevalence of drug use in the last six (6) months by students in secondary schools.

Table 2: Use of Drugs in the Last Six (6) Months by Secondary School Students

<i>Type of Drug</i>	<i>Prevalence (%)</i>	<i>No. of Students</i>
Alcohol	9.3	201,950
Prescription drugs	6.8	147,663
<i>Khat/ miraa</i>	5.9	128,118
Tobacco	5.2	112,919
Bhang	3.7	80,346
Inhalants	0.8	17,372
Heroin	0.4	8,686
Cocaine	0.4	8,686

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly used tobacco products in the last six (6) months include cigarettes 3.1% (67,317 students), *shisha* 2.9% (62,974 students), *kuber* 1.7% (36,916 students), chewed tobacco 1.5% (32,573 students) and sniffed tobacco 1.3% (28,230 students). The most commonly used prescription drugs in the last six (6) months include sleeping pills 6.4% (138,976 students), mandrax 0.4% (8,686 students) and rohypnol 0.3% (6,515 students).

The students were also asked to mention the drugs and other substances of abuse that they have used in the last 30 days. Findings show that alcohol (3.8%) is the most commonly used substance of abuse by students in the last 30 days (current use) followed by use of prescription drugs (3.6%), *khat/ miraa* (2.6%), bhang (1.8%), inhalants (0.6%), heroin (0.2%) and cocaine (0.2%). Table 3 shows the prevalence of drug use in the last 30 days (current use) by students in secondary schools.

Table 3: Use of Drugs in the Last 30 Days by Secondary School Students

<i>Type of Drug</i>	<i>Prevalence (%)</i>	<i>No. of Students</i>
Alcohol	3.8	82,517
Prescription drugs	3.6	78,175
<i>Khat/ miraa</i>	2.6	56,459
Tobacco	2.5	54,288
Bhang	1.8	39,087
Inhalants	0.6	13,029
Heroin	0.2	4,343
Cocaine	0.2	4,343

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly used tobacco products in the last 30 days (current use) include cigarettes 1.6% (34,744 students), *shisha* 1.1% (23,887 students), *kuber* 1.0% (21,715 students), chewed tobacco 0.8% (17,372 students) and sniffed tobacco 0.7% (15,201 students). The most commonly used prescription drugs in the last 30 days (current use) include sleeping pills 3.4% (73,831 students), mandrax 0.3% (6,515 students) and rohypnol 0.1% (2,172 students).

Ease of access was determined by asking students how easy it was for them to access the various drugs and substances of abuse. Accordingly, prescription drugs (36.8%), alcohol (32.4%), cigarettes (32.2%), *khat* (29.6%) and bhang (22.8%) are the top five easily accessed substances. On the other end, rohypnol (5.8%), mandrax (6.5%), cocaine (6.9%), and heroin (7.5%) are less likely to be accessed while at school.

In order to have an insight into the risk factors associated with alcohol and drug abuse among secondary school students, the survey analysed data on alcohol consumption by students in the last six months. According to the findings, the risk factors associated with alcohol and drug abuse among secondary school students are being male, being in a school with male students (e.g. boys boarding or boys day); being in Form 3 or Form 4 (the risk increased with increase in number of years in the school); having fewer frequency of inspection; schooling in Lower Eastern, Central or Upper Eastern; living with a single parent who is a father; not being an active member of a religious group or club; having a high amount of pocket money;

having a family member or friend using alcohol or other drugs; knowledge of a schoolmate using alcohol or other drugs; and lack of awareness that alcohol and drugs are detrimental to academic performance.

The survey also shows that schools have several strategies of dealing with students who are found with drugs and other substances of abuse in schools. These strategies include: guidance and counselling; suspension or expulsion from school; and summoning of parents to school. Less frequently mentioned was the use of police, punishment without suspension and referral for treatment or rehabilitation. However, there is lack of a pro-active strategy to deal with alcohol and drugs in schools. Indeed, the guidance and counselling teachers only get involved when cases of drugs and substance abuse were reported.

Recommendations: Based on the survey findings, the following recommendations are made:

- ☛ The school-home continuum presents an axis along which adolescents transit into adulthood in society. Nine in ten of the students are in secondary school during their teenage years. Creating a multi-pronged approach to tackling alcohol and drug abuse in the school environment will maximize effective use of resources. Therefore, NACADA should continue to strengthen its coordinating role of supporting the youth in schools through innovative and evidence based preventive approaches.
- ☛ Most of the students pointed to the need for information on effects of drugs and other substances of abuse. Having curriculum in place would be critical to facilitate the equipping of students with the relevant knowledge on drugs and other substances of abuse. NACADA should therefore work with relevant stakeholders to put up a curriculum that also encompasses the other aspects of life skills training.
- ☛ The guidance and counselling teachers reported training needs on issues of alcohol and other drugs of abuse. They reported that they are not well equipped to handle the cases of alcohol and drug abuse and therefore they are ill prepared to guide and counsel students. NACADA in collaboration with the Ministry of Education, Science and Technology should support in the provision of the relevant training to guidance and counselling teachers to empower them to deal with the emerging challenges of alcohol and drug abuse.
- ☛ The survey also established that the guidance and counselling teachers work within a time-constrained environment due to other competing demands and responsibilities such as covering the prescribed syllabus of other subjects that they teach. The Ministry of Education, Science and Technology, Teachers Services Commission (TSC) and KICD should address the issue of overloading guidance and counselling teachers in order to improve the quality of the services that they provide.

- The preference of abusing prescription drugs as an emerging “high” of choice among students in secondary schools is without a doubt unusual and disturbing. Thus, the teachers and parents should be extra cautious with the students because they may be abusing these drugs without their knowledge. Further, strict controls and enforcement of legislations on access to prescription drugs by the Pharmacy and Poisons Board should be enhanced.
- Lastly, NACADA should support secondary schools to come up with school-based alcohol and drug abuse policies that holistically address the aspects of promoting free drug environments within the school; early identification of students with drugs and substances of abuse problems; focus on extra-curricular activities; and evidence based preventive strategies of dealing with cases of drugs and substance abuse in schools.

BACKGROUND

1.1. Introduction

The Government of Kenya recognizes the threat of alcohol and drug abuse to all sectors of the economy. The types of drugs available in the market have increased overtime while channels of communication and distribution have expanded giving drug merchants an ever increased access to a wider market. In response, it has enacted a legal and institutional framework within which the problem of alcohol dependency and drugs abuse can be addressed. The National Campaign Against Drug Abuse Authority (NACADA Authority) is mandated to undertake quality research on alcohol and drugs use so as to guide policy and programming in the country.

The destructive outcome of abuse of alcohol and other intoxicating substances is clearly demonstrated in various researches (Miller *et al.*, 2007; Odenwalda *et al.*, 2010). The negative impact of alcohol and substance abuse is reflected in the immediate and long-term effects that individuals, families, and society suffer. These effects include death, as has been documented by the Kenyan media, and psychological instability. Alcohol and drugs use also leads to poor academic outcomes on the part of students (Balsa, Giuliano and French, 2011; El Ansari, Stock and Mills 2013). This national survey on Alcohol and Drug use among students in secondary schools brings out the current trends of alcohol and drug abuse among students in secondary schools. The findings will support the Authority to design effective evidence-based strategies to reach out to this key target group.

A 2012 national survey showed a decline in the proportion of the general population who reported ever use of alcohol and drugs in the country (NACADA 2012). However, the survey did not document alcohol and drug use among secondary school students. A comparative study of urban and rural secondary school students by Kuria (1996) revealed that male students used drugs more often compared to female students. More specifically, alcohol was the more likely to be used (15% - urban schools compared to 14% - rural schools) followed by tobacco, cannabis and inhalants (Kuria 1996).

A recent study in Nairobi has documented the role the school environment plays in the use of alcohol and drugs among secondary school students (NACADA, 2010). In terms of supply, the country has witnessed an increase in the number of drugs seized and alcohol-related deaths. An increase in the drug supply may be an indicator of many things including unmet need in the control of alcohol and drugs abuse. Thus this increase may be regarded as a proxy indicator of increase in demand in the general population including schools. In 2014, in a high profile act, the President and NACADA supervised the destruction in the high seas off the Kenya Coast drugs (heroin) with an estimated street value of one billion shillings (Daily Nation 29th August 2014).

The survey on alcohol and drugs abuse in secondary schools contributes to the on-going debate regarding student perceptions, attitudes, prevalence and risk factors in relation to use alcohol and other substances. It also presents information on the school environment in which alcohol and drugs use behaviours occur.

1.2. Study Objectives

The *overall objective* is to conduct a national survey on alcohol and drugs abuse among students in secondary schools in Kenya.

There are seven *specific Objectives* for this survey, namely:

- (i) To determine the perceptions of students on alcohol and drug abuse
- (ii) To determine the prevalence of alcohol and drug abuse among secondary school students in Kenya
- (iii) To document the risk factors associated with initiation and continuation of ADA among students in secondary schools
- (iv) To document the protective factors for ADA among students in secondary schools
- (v) To document the current strategies put in place to address ADA in secondary schools
- (vi) To determine the role, gaps and opportunities for using guidance and counselling teachers in ADA prevention, control and management
- (vii) To recommend effective strategies of ADA prevention, control and management in secondary schools

1.3. Literature Review

Students spend the major part of their life in school and often during their formative years. In secondary schools, this time coincides with adolescence, a period of self-discovery and major psychological transformation. It has been reported elsewhere that levels of substance use among adolescents increases through the adolescence period (Johnstone *et al.*, 2006) and that by the time the adolescents are at age 18 years, up to about a fifth of adolescents meet the criteria of substance use disorder (e.g. Young *et al.*, 2002). Substance use among adolescents is also linked to other complications such as depression. Community studies have, for example, recorded that substance use by adolescents increases their risk of entering a depressive episode by over three times (Armstrong and Costello 2002).

Most of these behaviours are modelled by the environments to which the adolescents are exposed. In this case, the school environment provides standards within which young people test behaviour. School personnel often play a very influential role as models by which pre-adolescents and adolescents gauge themselves. Those adolescents who perceive that their teachers care about them are less likely to initiate drugs and substances of abuse (such as marijuana, cigarettes and alcohol). In a recent study, Perra *et al.* (2012) have shown the influence of student-teacher relations on smoking, drinking and drug use. In this study involving 2968 Belfast youth, the researchers documented factors which were linked to substance use. Key among these was the finding that positive teacher-student relationships reduced the risk of daily use of cigarettes by 48%, weekly use of alcohol by 25% and weekly use of cannabis by 52%.

Thus, relationships with teachers and counsellors are important and formative for many students. Students who are poorly bonded to school are also less likely to recognize that substance use may reduce the likelihood of them achieving their future goals (American Academy of Paediatrics, 2007). Therefore, programmes addressing substance use should focus in a special way to the school environment within which the students operate.

Given the role schools play in shaping lives of young people, they can positively influence students by providing appropriate knowledge and skills for the students to make the right choices. Improving student knowledge and imparting them with appropriate skills enables students to make informed choices when they are faced with decisions to make. Thus schools could act as powerful behaviour modifiers.

Schools may adopt a variety of alternatives to address the issue of substance abuse, including offering after-school programs, incorporating life-skills training into drug education curricula, helping parents become better informed, providing counseling, identifying problem behaviors for early intervention, and promptly referring students to health care professionals for assessment and intervention. For schools with health centers, those centers should have the capacity to counsel students who are in need of support and rehabilitation and connect students to available community support resources. Schools provide a conducive atmosphere for drug prevention programs for three reasons. First, prevention must focus on children before their beliefs and expectations about substance abuse are established. Second, schools offer the most systematic way of reaching young people. And, finally, schools can promote a broad spectrum of drug-related educational policies.

At the community level, communities can offer clear and consistent messages by developing and implementing a broad, comprehensive approach to dealing with substance abuse. Drugs cartels and peddlers often set shops near schools where they can easily reach their clientele. Using community-based approaches, one could achieve population-level reductions in alcohol consumption in adolescents. Community level coalitions could be brought into and used to implement drug abuse prevention programmes that reduce the risk of drug use by adolescents. By partnering with schools through, for example use of school-based drug prevention curriculum, community level agencies can work together to monitor illicit drug use patterns in the local region and to direct specific educational and preventive programs leading to overall reduction in substance use (Fagan, Hawkins and Catalano 2011).

Several studies have identified one psychological factor that is consistently related to an increased risk of ADA problems in both adolescents and adults—a personality pattern of high novelty seeking, low harm avoidance, and high reward dependence. For example, it has been indicated that individuals low in novelty seeking tend to prefer alcohol and marijuana while those who are high in novelty seeking tend to prefer a wide range of substances mainly stimulants and motivations related to achieving positive rewards (Adams *et al.*, 2003). Academic pressure can produce levels of stress for certain students that can have negative effects on their mental health. The school is also a primary cultural milieu for students which can influence drug, alcohol, and cigarette use among students, and risky sexual activities.

Stressful or traumatic life events also increase adolescents' risk of developing substance use problems. For example, Kilpatrick, Acierno and Saunders (2000) found that adolescents who witnessed or experienced physical and/or sexual assault were at greater risk of developing drug-related disorders than were adolescents without such experiences. Similarly, in an analysis of factors related to initiation and increase of ADA, Wills, Sandy and Yaeger (2001) showed that the number of stressful life events experienced by adolescents was related to both the initiation and continuation of ADA. Abuse of drugs becomes a mechanism through which individuals overcome the challenges they are facing or dealing with, perceived or real.

Poor parenting is linked to alcohol abuse as well as abuse of other substances. In a study of 542 middle school students from the Birmingham Youth Violence Study in Alabama, USA, poor parenting practices (e.g. less nurturance and harsh and inconsistent discipline) was found to be strongly related to school-level alcohol and cigarette use (Mrug *et al.*, 2010). They concluded in line with earlier studies that poor parenting could increase susceptibility to school-level substance use through greater deviant peer affiliations or impaired ability withstand negative peer influence (Mrug and Windle 2009 and Simons-Morton 2002).

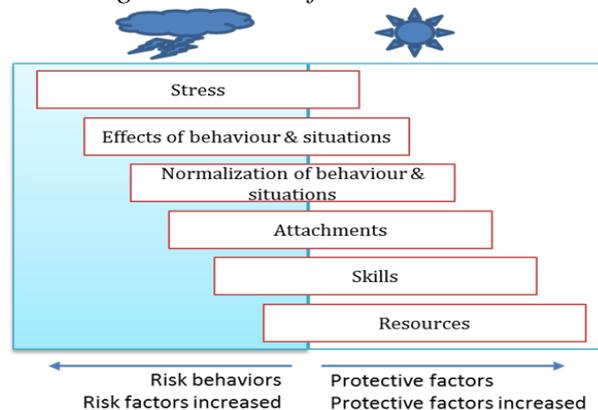
Although parental guidance and approval remain important influences on adolescent behaviour, in situations where poor parenting is the norm, peer guidance and approval become increasingly powerful and valued during the period of adolescence. Rather than seeking parental guidance, they often seek role models outside the family who may be characters or personalities. Nonetheless, these shifts in influences shape numerous aspects of adolescent behaviour, including ADA (Wills, Sandy and Yaeger 2001). Family variables still continue to exert a strong influence not only because most adolescents continue to value their family members as models of behaviour, but also because these factors encompass such a wide range of influences.

1.4. Conceptual Framework

The primary assumption in this study is that behaviour is learned from those we directly or indirectly interact with. Thus, in schools it is expected that students will learn/use alcohol and other drugs either from observing what parents do at home or through influence from friends (fellow students). Also influence can come from social and mass media.

In order to understand the risk and protective factors in behaviour modelling, the study is grounded upon the modified social stress model (MSSM – see Figure 1.1). MSSM was developed by Rhodes and Jason (1988) and later modified by WHO's Programme on Substance Abuse (WHO/PSA) so as to include effects of drugs/substances of abuse, the personal response of individuals to drugs and additional environmental, social and cultural variables.

Figure 0.1: Modified social stress model



Accordingly, it is argued in this model that there are factors (referred to as risk factors) that encourage use of alcohol and drugs as well as factors that make people less likely (referred to as protective factors) to use alcohol and drugs. Thus, as Rhodes and Jason (1988) argue, easy availability of tobacco products to youngsters contributes to high rates of tobacco use. By varying the protective factors so as to tilt the scale against risk factors, alcohol and drug use is reduced.

The Modified Social Stress Model highlights the risk factors and protective factors which influence decisions regarding risky behaviours i.e. alcohol use or other substance abuse. There are six components to the model: stress, normalization of behaviour and situations, effect of behaviour and situations, attachments, skills, resources, which influence the probability of indulging in risk behaviours. To intervene in any of the six areas could help the student to lead an alcohol and drug free life. Intervening in more than one area increases the chances of benefit. Successful interventions are often aimed at various components of the model and arranged according to the level of intervention. This analytical framework will guide the study.

The MSSM contributes to the attainment of the following survey objectives:

- (i) To document the risk factors associated with initiation and continuation of alcohol and drugs use among students in secondary schools;
- (ii) To document the protective factors for alcohol and drugs use among students in secondary schools;
- (iii) To document the current strategies put in place to address alcohol and drugs use in secondary schools;
- (iv) To determine the role, gaps and opportunities for using guidance and counselling teachers in alcohol and drugs use prevention, control and management in schools;
- (v) To recommend effective strategies of ADA prevention, control and management in secondary schools.

METHODOLOGY

The national survey of alcohol and drug abuse among secondary school students in Kenya used a cross-sectional design. In order to generate data to address the objectives set out, the study employed a mixed methods approach combining qualitative and quantitative techniques. The qualitative techniques have provided data in relation to what, why and how questions while quantitative techniques have allowed for the estimation of current levels of alcohol and drugs abuse in secondary schools. Qualitative techniques involved use of in-depth interviews which targeted head teachers, discipline masters and other teachers in schools. The quantitative techniques on the other hand relied on a survey questionnaire targeting students in schools.

2.1. Study Coverage

The study covered secondary schools from across 10 stratified regions to represent the whole country. The schools were also stratified in terms of urban and rural areas so as to ensure that students within different environments are captured as well as information on the types of alcohol and drugs that they have access to across different regions are obtained. A national sample of schools was selected, as a representative sample of public and private, day and boarding schools as well as boys only, girls only and mixed schools. In addition, schools were also sampled on the basis of their classification i.e. into National, County, Sub-County and Private schools to ensure maximum variation and representation. A list of these schools for each County was obtained from the Ministry of Education, Science and Technology (MoEST).

2.2. Study Design and Population

The quantitative survey applied a cross-sectional approach using individual respondents as units of analysis because the study is focused on individual rather than group behaviours. A multi-stage sampling approach was used to identify the schools from which data was gathered. A mix of students from all levels (Forms 1 to 4) as well as from public and private schools was sampled. In addition to this criterion, single sex schools (i.e. boys only and girls only and mixed schools) were

sampled as were National, County, and Sub-County. Finally, consideration was made to include day as well as boarding schools. This stratification was critical to capturing all the possible categories of secondary schools

Table 0.1: Sampling different categories

	Boys' schools	Girls' schools	Mixed schools
Public – Day	√	√	√
Public – Boarding	√	√	√
Private – Day	√	√	√
Private – Boarding	√	√	√

(see Table 2.1). A *survey questionnaire* was administered to eligible individuals. Qualitative data was derived using *in-depth interviews*. This elicited rich qualitative information, which has aided a deeper understanding of the trends in substance use. *In-depth interviews* targeted those in schools who deal with discipline among students so as to capture their perspectives regarding alcohol and drug use in secondary schools.

3.3 Sample Size and Sampling

Sample size: The survey targeted a sample of 4000 (i.e. 400 respondents from each of the sampling areas¹), which gives a 4% allowance for non-responses. The sample size was derived based on the sample size determination formula given below.

$$n = \frac{z^2 \cdot p \cdot q \cdot N}{C^2(N - 1) + z^2 \cdot p \cdot q}$$

Where:

- z = Z value (which is 1.96 for 95% confidence level)
- p = sample proportion of the population with the desired characteristics
- q = 1-p
- C = confidence interval (precision)
- n = sample population
- N = sampling frame

Accordingly, z is set at 1.96 (for a 95% confidence level); p is set at 0.54 (which is the proportion of boys in secondary schools); q is set at 0.46 (the proportion of girls in secondary schools); C is 0.05; and N is approximated at 2,171,504 based on latest data from MoEST. The sample of 3,850 (which is rounded off to 4,000 factoring a non-response rate of 4%) respondents nationally is considered statistically appropriate. The study will also rely on additional data from IDIs.

Sampling strategy: Stratification of schools was done as previously described. Using the list of schools from MoEST as a guide, the number of students identified from each region is presented in Appendix 1. The sample size was proportionate to the student population in that County. Selected schools which opted out of the study were to be replaced with another school similar to it in terms of gender representation and location. Once the various categories of schools were identified, a simple random sampling method was used to identify the schools. In each of the selected schools, students were sampled using systematic random sampling technique. Using a school's register as the sampling frame, every n^{th} student at each level was selected for the interview.

2.4. Data Collection Instruments

The data collection instruments sought to gather information on various aspects including but not limited to the current trends in alcohol and drug use among secondary school students in Kenya. Literature review was carried throughout before, during and after data collection and into analysis and report writing. The findings from the literature review are being used to put the survey results into perspective. This review also helped in identifying potential interventions likely to enhance elimination of substance use among students.

Table 2.2 outlines the research questions and methods used to investigate each of the study questions.

¹ For the purpose of this survey, the Country has been divided into 10 regions with the Rift Valley region being divided into North Rift and South Rift while Eastern is divided into Lower Eastern to cover Machakos, Mwingi and Makueni while Upper Eastern covers Meru, Embu, Marsabit and Isiolo.

Table 0.2: Study objectives and data collection methods

<i>Research Objective</i>	<i>Research Methods</i>
To determine the perceptions of students on alcohol and drug use	Survey questionnaire
To determine the prevalence of alcohol and drug use among secondary school students in Kenya	Survey questionnaire
To document the risk factors associated with initiation and continuation of alcohol and drugs use among students in secondary schools	Survey questionnaire In-depth Interviews
To document the protective factors for alcohol and drug use among students in secondary schools	Survey questionnaire
To document the current strategies put in place to address alcohol and drug use in secondary schools	Survey questionnaire In-depth Interviews
To determine the role, gaps and opportunities for using guidance and counselling teachers in alcohol and drugs use prevention, control and management	In-depth Interviews

Two data collection instruments—survey questionnaire and in-depth interviews—were used to capture this information.

2.4.1. Survey questionnaire

A survey questionnaire captured basic demographic information on respondents and various issues relating to perceptions, attitudes and behaviour related to drug use, availability and use of different drugs, risk and protective factors and strategies being used to tackle the problem of alcohol and drug abuse in secondary schools. As well the questionnaire was used to generate information on opportunities for intervention. A total of 3,908 respondents were eventually interviewed proportionately distributed across the country following the sampling criteria described above. Bernard (2006) discusses sample sizes in great detail. The sample per region was determined on the principle of proportionate sampling to size.

2.4.2. In-depth Interviews

In-depth interviews were conducted with teachers responsible for ensuring discipline is maintained in schools. As well, in schools where there were counsellors, they were also interviewed. The interviews focused on strategies used to deal with alcohol and drug abuse in schools, risk and preventive factors and emerging challenges in the prevention, control and management of alcohol and drug abuse in schools.

FINDINGS

3.1 Introduction

This section presents the key findings of the survey on alcohol and drug use among secondary school students in Kenya. It is divided into five sections that follow the survey objectives. The first part summarizes the key characteristics of the study population. The next section provides information on student knowledge, attitudes and perceptions regarding alcohol and drug use while the section after that focuses on the prevalence of alcohol and drug use in secondary schools. The risk and protective factors are discussed in section four while the current strategies including use of guidance and counselling teachers to address alcohol and drug use are discussed in section five.

3.2 Characteristics of respondents

A total of 3,908 students from 77 schools representing 10 regional blocks, namely Nairobi, Central, North Rift, South Rift, Western, Nyanza, Upper Eastern, Lower Eastern, Coast and North Eastern were interviewed. Out of these about 60% were male while the remaining 40.0% were female students. Most of the students were from boys boarding schools (about 33% of them), girls boarding (18.7%) and mixed day schools (16.1%). The other notable categories were boys' day schools and girls boarding and day schools. The characteristics of students sampled for the survey are summarized in Table 3.1.

Age: The average age of the respondents was 16.6 years (std. deviation = 1.64 years), with a median of 16 years. The male students were slightly older compared to the female students. Their average age was 16.82 years (std. deviation = 1.70 years) and a median of 17 years. The average age of female students was 16.28 years (std. deviation = 1.49 years and median = 16 years).

Religion: Those interviewed were predominantly Christian which accounted for 83.8% while Muslim students accounted for 16.1% of those interviewed. Hindu/Buddhist represented a minority (0.1%) of those responding. None of the respondents reported belonging to any other religion.

Type of school: Students were sampled from different schools based on whether they were single sex schools and whether they were either boarding, day schools or both day and boarding schools. A majority of the students (74.5%) came from single sex schools, while 25.5% were from mixed schools. Furthermore, about half (i.e. 51.7%) of the students were pure boarding students while the rest were either day scholars or were composed of a mixture of day scholars and boarding students.

School category: The survey sampled students from the national, county and sub-county schools. Out of the total sample of 3,908 students, 9.4% of the students were from schools classified as national schools, 44.4% were from county schools and the remaining 46.2% of the students were from the sub-county schools.

Table 0.1: Characteristics of respondents

<i>Characteristic</i>		<i>Region</i>										<i>Total</i>
		<i>Central</i>	<i>Coast</i>	<i>Lower Eastern</i>	<i>Nairobi</i>	<i>North Eastern</i>	<i>North Rift</i>	<i>Nyanza</i>	<i>South Rift</i>	<i>Upper Eastern</i>	<i>Western</i>	
<i>Gender</i>	<i>Male</i>	65.7	65.7	61.9	59.7	55.8	50.6	48.3	69.1	68.8	59.8	60.0
	<i>Female</i>	34.3	34.3	38.1	40.3	44.2	49.4	51.7	30.9	31.2	40.2	40.0
<i>Religion</i>	<i>Christian</i>	99.7	72.8	97.5	88.7	0.3	99.0	98.8	100.0	79.5	98.5	83.8
	<i>Muslim</i>	0.3	26.9	2.3	11.1	99.5	1.0	1.2	0.0	20.5	1.5	16.1
	<i>Hindu/Buddhist</i>	0	0	0.3	0.3	0.3	0	0	0	0	0	0.1
<i>Type of School</i>	<i>Boys Boarding</i>	48.9	29.8	45.7	27.6	0	38.5	6.0	39.5	64.0	28.8	33.0
	<i>Boys Day</i>	0	17.4	0	13.9	55.8	0	0	0	0	0	8.5
	<i>Boys Day& Boarding</i>	9.8	5.8	0.5	0	0	0	21.4	0	0	12.0	5.0
	<i>Girls Boarding</i>	27.0	12.4	0	10.5	0	39.5	31.3	12.0	29.0	23.5	18.7
	<i>Girls Day</i>	0	4.2	0	7.9	0	0	0	0	0	0	1.2
	<i>Girls Day& Boarding</i>	0	7.7	22.7	2.9	44.2	0	0	0	0	5.0	8.1
	<i>Mixed Boarding</i>	0	0	0	0	0	0	0	16.5	0	0	1.6
	<i>Mixed Day</i>	14.4	17.9	11.1	17.9	0	12.8	19.9	31.9	7.0	27.8	16.1
	<i>Mixed Day& Boarding</i>	0	4.7	19.9	19.2	0	9.1	21.4	0	0	3.0	7.8
<i>School category</i>	<i>National</i>	24.4	0.3	0	0	44.2	25.7	0	0	0	0	9.4
	<i>County</i>	40.1	46.4	45.7	52.1	0	31.7	61.2	56.0	78.0	31.8	44.4
	<i>Sub-county</i>	35.5	53.3	54.3	47.9	55.8	42.6	38.8	44.0	22.0	68.2	46.2
<i>Class</i>	<i>Form 1</i>	23.9	22.7	23.5	26.3	30.1	24.7	24.1	21.5	26.8	23.5	24.7
	<i>Form 2</i>	21.4	25.1	22.7	27.6	23.2	28.7	26.4	26.9	25.5	28.0	25.6
	<i>Form 3</i>	28.0	23.5	26.5	22.4	20.6	23.7	24.9	28.5	27.5	29.0	25.5
	<i>Form 4</i>	26.7	28.8	27.3	23.7	26.1	22.9	24.6	23.1	20.2	19.5	24.3
<i>Socio-Economic Status</i>	<i>Low SES</i>	19.4	44.1	28.8	21.1	36.1	39.6	40.8	46.0	29.2	39.0	34.4
	<i>Medium SES</i>	45.8	40.6	43.7	50.5	53.0	35.6	44.5	37.8	53.0	47.0	45.2
	<i>High SES</i>	34.8	15.3	27.5	28.4	10.8	24.7	14.7	16.2	17.8	14.0	20.5
Total N (%)		397 (10.2)	379 (9.7)	396 (10.1)	380 (9.7)	380 (9.7)	397 (10.2)	402 (10.3)	377 (9.6)	400 (10.2)	400 (10.2)	3908 (100)

Class currently attending: A majority of the students entered their current school in Form one. From those surveyed, 90.3% reported that they entered the school in Form One, 6.1% entered in Form Two, 2.8% entered in Form Three while only a small proportion (0.7%) reported that they entered their current school in Form Four. In terms of current class attendance, the number of students sampled from each class was about 25% of the total sample (Table 3.1). Thus, the students were evenly distributed throughout the four levels, i.e. Form One, Form Two, Form Three and Form Four.

Socio-economic status: A seven-point Guttman scale was used to group students into three socio-economic status (SES) levels namely, high socio-economic status, middle socio-economic status and low socio-economic status. Based on this scale, one in five students (20.5%) are classified as coming from a high socio-economic status background (Table 3.1). Those classified as coming from a middle socio-economic status background account for 45.2% while about 34% were classified as coming from a low socio-economic background status (Table 3.1). Central region has the highest proportion of students classified as coming from a high socio-economic status followed by Nairobi, Lower Eastern and North Rift. On the other hand, South Rift, Coast and Nyanza had the three highest proportion of students classified as being of low socio-economic status.

Living arrangements: A majority of the students (68.4%) reported that they live with both their parents, while 17.8% indicated that they lived with their mother. A smaller proportion lived with their father (3%), grandparents (3.3%) or guardians (6.8%). Furthermore, these living arrangements reveal similar patterns when the data is split into male and female student respondents. This is shown in Table 3.2. Those who reported that they lived with some other person identified that person as a brother, sister, aunt or an uncle.

Table 0.2: Person with whom the student stays with (n=3902)

Person staying with	Male		Female		Combined	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Mother & Father	1640	69.6	1028	66.5	2668	68.4
Mother only	400	17.0	295	19.1	695	17.8
Father only	71	3.0	47	3.0	118	3.0
Grandparents	68	2.9	61	3.9	129	3.3
Guardians	164	7.0	103	6.7	267	6.8
Other	14	0.6	11	0.7	25	0.6

Educational Status and occupation of parents/guardians: Data on educational status and occupation of parents/guardians shows that men were more likely to have a higher educational status and to be in formal employment compared to women. At least 40% of the men had college level of education and above compared to about 33% of the women (Table 3.3). Furthermore, 40% of the men reported that they were either in employment (34.3%, compared to women – 24.8%) or retired (6.4%, compared to women – 2%). These differences are captured in Figure 3.1. Indeed, the students reported most of the women to be either self-employed (37.9%) or not employed (20.6%).

Table 0.3: Educational level of parents/guardians (n=3,908)

	<i>Father/male guardian</i>		<i>Mother/female guardian</i>	
	<i>Freq</i>	<i>Percent</i>	<i>Freq</i>	<i>Percent</i>
Never attended school	361	9.2	428	11.0
Primary	441	11.3	634	16.2
Secondary	967	24.7	1159	29.6
College (e.g. KMTC)	742	19.0	754	19.3
University	883	22.6	563	14.4
Don't know	507	13.0	365	9.3
No response	7	0.2	5	0.2

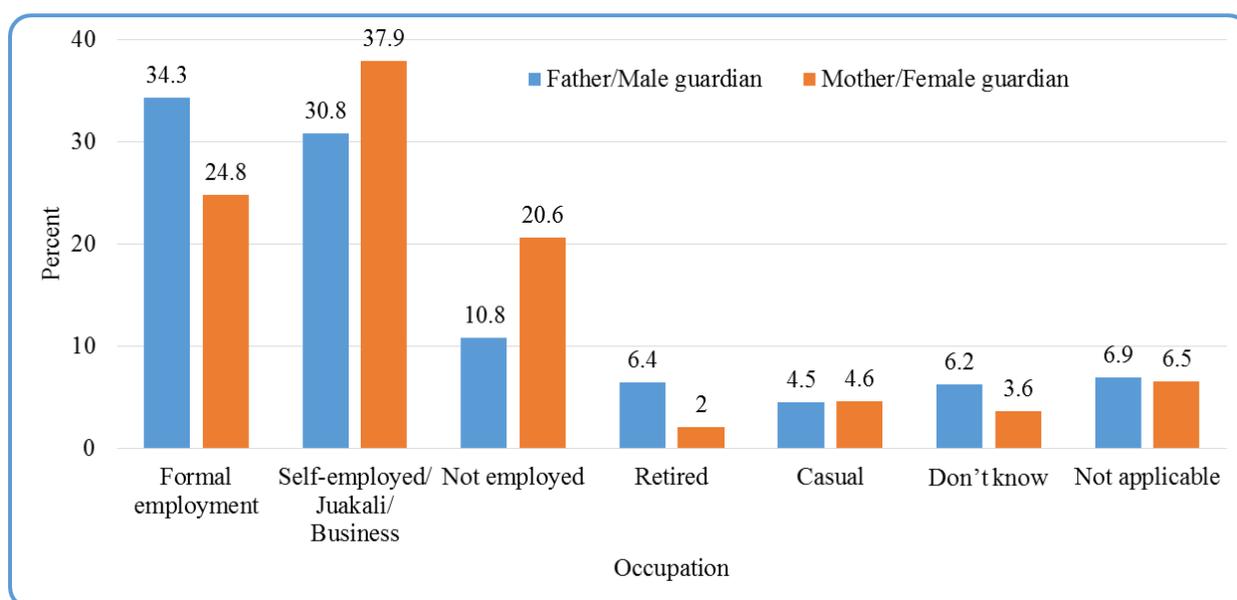


Figure 0.1: Occupation of parents/guardians

Student pocket money: It is difficult to determine how much money students received from either their parents or guardians as this amount was determined from the cumulative figure from the previous term's money the students received. The exception was for those in Form one for whom the question sought to establish how much money they were given as pocket money in the current term. This question was answered by 94.2% of the 3,908 students surveyed. On average students received KSh. 1,246.00. The median amount of pocket money given is KSh. 700.00 while the highest proportion of students were given KSh. 500.00 as pocket money.

3.3 Knowledge, Attitudes and Perceptions about Alcohol & Drugs use

Knowledge about alcohol and drugs abuse

The questions on knowledge, attitudes and perceptions focused on use of alcohol and other substances. About half (47.6%) of the students agreed that there are schoolmates who used either alcohol or other substances. Twenty-three percent (23.0%) were categorical that they don't agree that there are students in schools who use alcohol or other substances while another 29.2% reported that they couldn't tell i.e. they didn't know (Figure 3.2).

The highest proportion of students who agreed with the statement that there are schoolmates who used either alcohol or other substances was for the Nairobi region (66.5%), followed by Lower Eastern (60.7%), South Rift (56.5%), Central (53.4%) and Upper Eastern (51.9%) all of which had a score of more than 50%. About two-thirds of the students in North Eastern reported that students in schools do not use alcohol and other substances of abuse. On the whole, about 30% of the students didn't know the answer to the question of whether some of their schoolmates used either alcohol or some other substance of abuse.

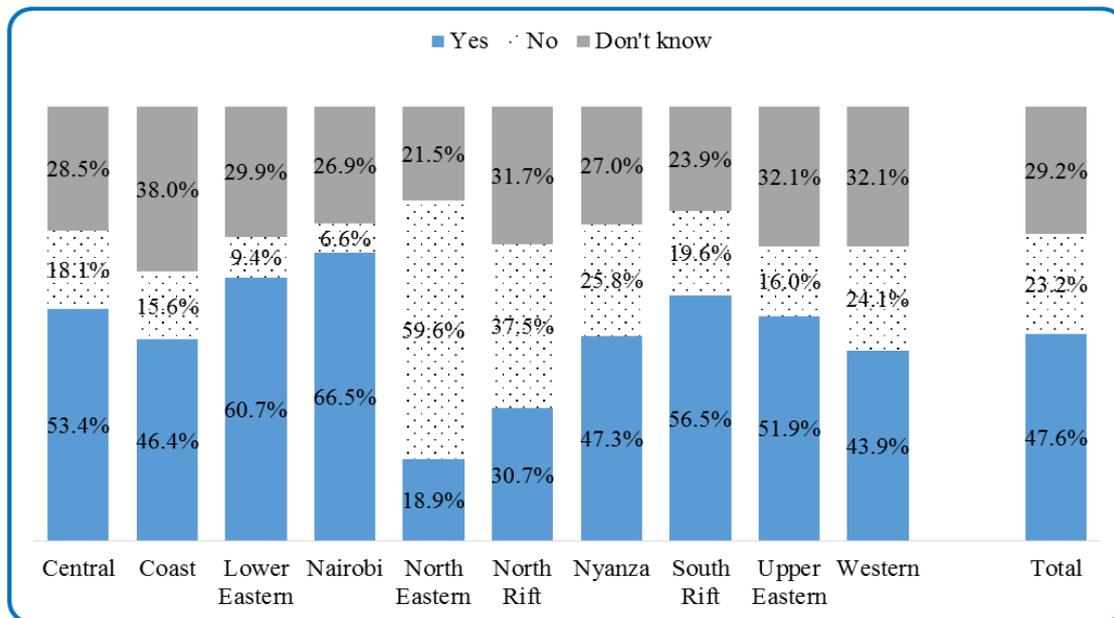


Figure 0.2: Knowledge of alcohol and substance use by schoolmates in school

Students were presented with a list of fourteen substances of abuse and asked whether they considered them as drugs or not. Their responses are presented in Table 3.4. All the substances were identified by more than 50% of the students as drugs (except for rohypnol that was identified as a drug by 49.7% of the students). Bhang, alcohol, cigarettes, cocaine, heroin, inhalants, mandrax and *khat/ miraa* were all identified by at least 80% of the students as drugs. Other drugs were identified in the following order: chewed/ raw tobacco (79.1%), *kuber* (65.8%), *shisha* (62.7%), prescription drugs (60.4%) and *chavis/ sniffed tobacco* (59.4%). In the case of rohypnol, 35% of the students did not know whether it was a drug or not. In the case of tobacco products in general, 89% of the students consider them drugs while for prescription drugs 79.3% of the students considered them drugs.

Overall, students are fairly knowledgeable of the different substances of abuse. In deed more than 50% reported that these substances are harmful (Figure 3.3). Overall, 92.1% of the students considered tobacco products as harmful while 85.6% considered prescription drugs to be harmful. A majority of the students identified bhang as harmful (92.3%) followed by cocaine (92.2%), cigarettes (91.9%), heroin (91.5%), inhalants (88.9%), alcohol (88.5%) and mandrax (87.8%) to complete the top eight drugs/substances of abuse (Figure 3.3).

Close to nine in ten students (92.5%) were in agreement that use of drugs/substances of abuse could have a negative effect on academic performance (see Table 3.5).

Table 0.4: Do you consider the following as drugs?

<i>Substance</i>	<i>Yes</i>		<i>No</i>		<i>Don't know</i>	
	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>
Bhang	3480	89.1	345	8.8	80	2.0
Alcohol	3465	88.7	370	9.5	70	1.8
Cigarettes	3444	88.2	375	9.6	86	2.2
Cocaine	3354	85.9	420	10.8	131	3.4
Heroin	3350	85.8	432	11.1	123	3.1
Inhalants	3290	84.3	449	11.5	166	4.3
Mandrax	3227	82.6	444	11.4	234	6.0
<i>Khat/ miraa</i>	3203	81.9	544	13.9	158	4.0
Raw/ chewed tobacco	3089	79.1	517	13.2	299	7.7
<i>Kuber</i>	2568	65.8	521	13.3	816	20.9
<i>Shisha</i>	2448	62.7	591	15.1	866	22.2
Prescription drugs	2357	60.4	1079	27.6	469	12.0
<i>Chavis/ sniffed tobacco</i>	2318	59.4	521	13.3	1066	27.3
Rohypnol	1941	49.7	600	15.4	1364	34.9

Table 0.5: Drugs affect academic performance

	<i>Males</i>		<i>Females</i>		<i>Total (n=3881)</i>	
	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>
Yes	2131	91.0	1458	94.7	3589	92.5
No	210	9.0	82	5.3	292	7.5
Total	2341	100	1540	100	3881	100

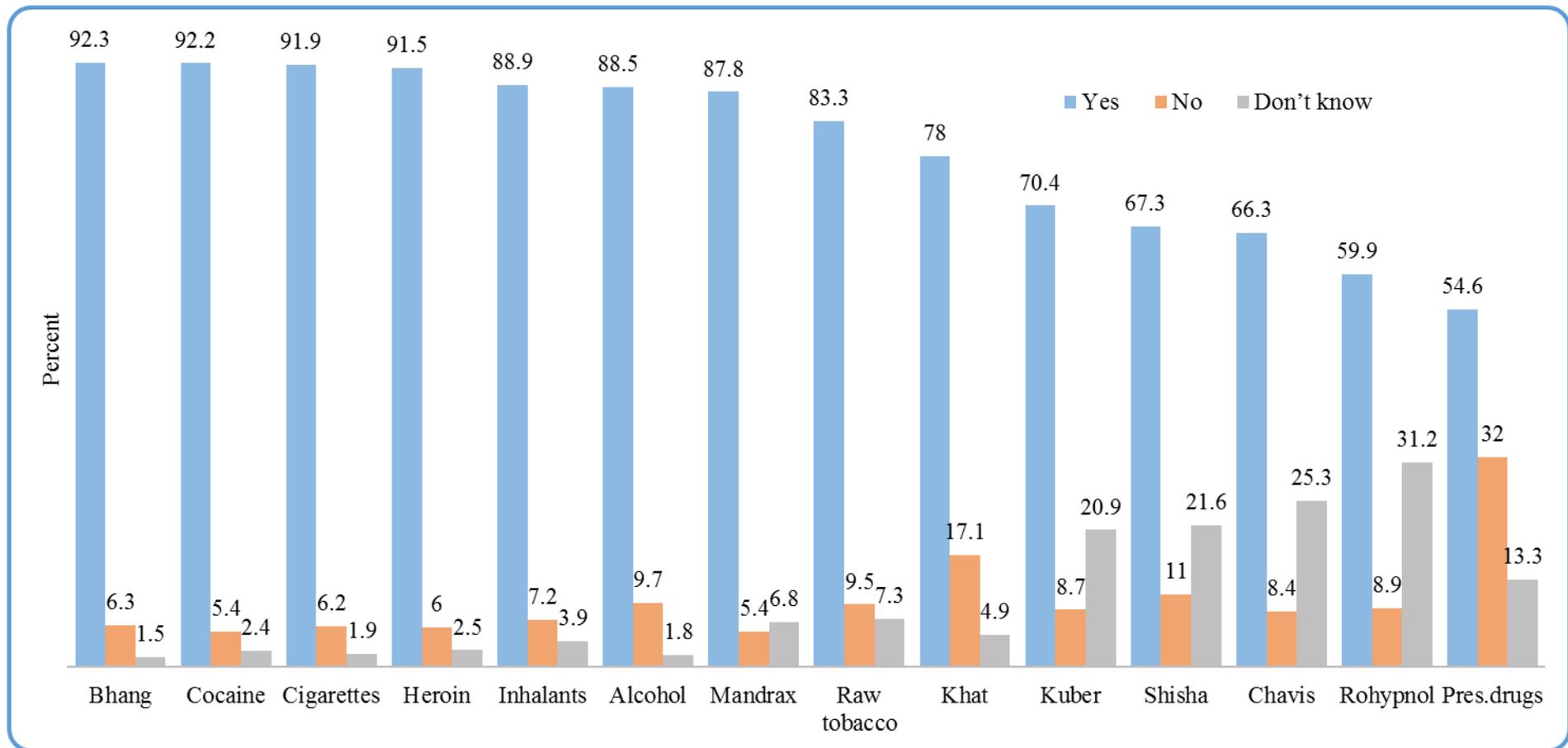


Figure 0.3: Harmful substances (n=3,904)

Attitudes towards alcohol and drug use

A set of five questions were asked to assess the student's views regarding initiation of alcohol and drug abuse within schools, their role in the control of alcohol and drug abuse, pocket money they received from parents or guardians and initiation of use of substances of abuse. They were also asked whether in their view there existed good communication channels between them and the school administration as well as whether those over 18 years should be allowed to use alcohol and other substances of abuse as long as those substances are legal. Their responses to these questions as shown in Figure 3.4.

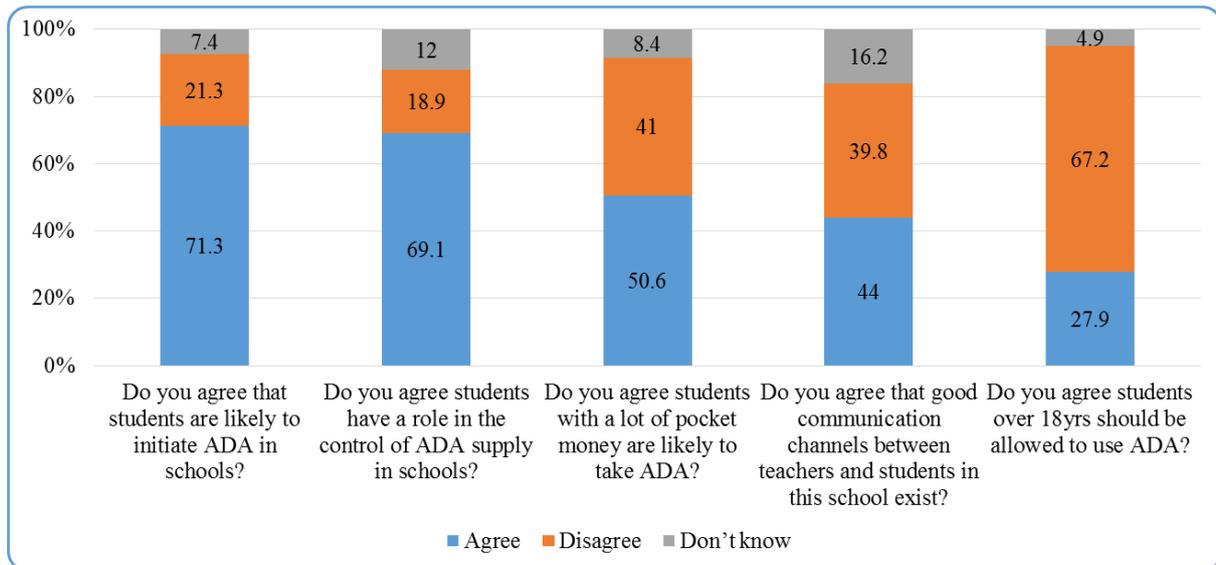


Figure 0.4: Students attitudes towards alcohol and drugs use

Clearly, a majority of the students agree that the school environment could provide opportunities for students to initiate use of alcohol and other substances. More than seven in ten (71.3%) of the students agreed that students are likely to start alcohol and substances of abuse in schools. An almost similar number (69.1%) thought that students have a role to play in the supply of alcohol and drug abuse in schools.

However, the students were divided on whether pocket money is a risk factor. Slightly more than half (50.6%) agreed that a lot of pocket money could drive students towards use of alcohol and drugs. The remaining either didn't agree with this statement (41%) or didn't have an answer to the question (8.4%).

In terms of communication between teachers and students, only 44% of the students thought that good communication channels existed between teachers/school administration and the students, 39.8% disagreed with the statement while 16.2% didn't know whether there were adequate channels of communication. This is an area in which the school administration may need to work on. While legal provisions allow those over the age of 18 years to use alcohol and other legal substances (under caution), 67.2% of the students didn't think students should be allowed to use these substances even if they are over the age of 18 years.

Substance availability and use in the school neighbourhood

One of the key areas of concern for school administrators is student access to alcohol and drugs without their knowledge. The students (72.8%) reported that they can consume alcohol and drugs in school without the knowledge of teachers (Table 3.6). More male students (78%) than female students (64.9%) reported that it is possible to consume alcohol and drugs without the knowledge of the teachers.

Table 0.6: Students can take drugs without teachers knowing (n=3,867)

	<i>Males</i>		<i>Females</i>		<i>Total</i>	
	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>	<i>Freq.</i>	<i>Percent</i>
Yes	1819	78.0	997	64.9	2816	72.8
No	512	22.0	539	35.1	1051	27.2
Total	2331	100	1536	100	3867	100

Cigarettes, alcohol and *khat/ miraa* were the three top substances identified as available to students in schools (Table 3.7). Just over 60% of the students reported that cigarettes were easily available followed by alcohol (56.3%) and *khat/ miraa* (49.8%). Also in this category of easily available drugs were prescription drugs (43.0%). These same substances were the ones most likely to be taken by students (Figure 3.6). Alcohol was reported as most likely to be taken by 48.3% of the students, followed by *khat/ miraa* (38.6%), bhang (37.3%), cigarettes (37.2%) and prescription drugs (32.2%). These findings are summarized in Table 3.7.

More than 50% of the students reported that cigarettes, alcohol, *khat/ miraa*, prescription drugs and raw/ chewed tobacco are legal (Figure 3.5). 77.6% of the students reported that cigarettes are freely available without any restriction in law as long as one is of legal age. Similarly, *khat/ miraa* (73.9%), alcohol (70.8%) and prescription drugs (55%) and raw/ chewed tobacco (50.5%) can be accessed lawfully if one is of legal age. On the other end of the scale, i.e. substances that one cannot get lawfully even if they are over 18 years are bhang (83.5%), cocaine (83.2%), heroin (81.9%), mandrax (74.9%) and rohypnol (51.1%). Lying in the middle are substances such as inhalants, *shisha*, *kuber* and chavis/ sniffed tobacco.

Table 0.7: Drugs that are available and taken by students

<i>Substance</i>	<i>Available in school neighbourhood (n=3907)</i>						<i>Taken in school (n=3907)</i>					
	<i>Yes</i>		<i>No</i>		<i>Don't know</i>		<i>Yes</i>		<i>No</i>		<i>Don't know</i>	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
Cigarettes	2376	60.8	992	25.4	539	13.8	1452	37.2	1465	37.5	990	25.3
Alcohol	2201	56.3	1148	29.4	558	14.3	1888	48.3	1175	30.1	844	21.6
<i>Khat</i>	1947	49.8	1248	31.9	712	18.2	1510	38.6	1391	35.6	1006	25.7
Prescription drugs	1679	43.0	1310	33.5	918	23.5	1260	32.2	1484	38.0	1163	29.8
Bhang	1507	38.6	1591	40.7	809	20.7	1457	37.3	1465	37.5	985	25.2
Raw/ chewed tobacco	1352	34.6	1606	41.1	949	24.3	775	19.8	1905	48.8	1227	31.4
Inhalants	1222	31.3	1783	45.6	901	23.1	369	9.4	2226	57.0	1312	33.6
<i>Kuber</i>	808	20.7	1774	45.4	1325	33.9	622	15.9	1820	46.6	1465	37.5
Chavis/ sniffed tobacco	593	15.2	1812	46.4	1502	38.4	473	12.1	1903	48.7	1531	39.2
<i>Shisha</i>	584	14.9	1921	49.2	1402	35.9	599	15.3	1853	47.4	1455	37.2
Cocaine	521	13.3	2291	58.6	1095	28.0	268	6.9	2279	58.3	1359	34.8
Heroin	498	12.8	2323	59.5	1084	27.8	244	6.2	2286	58.5	1377	35.2
Mandrax	440	11.3	2183	55.9	1284	32.9	253	6.5	2194	56.2	1459	37.4
Rohypnol	305	7.8	1932	49.4	1670	42.7	170	4.4	2041	56.6	1696	43.4

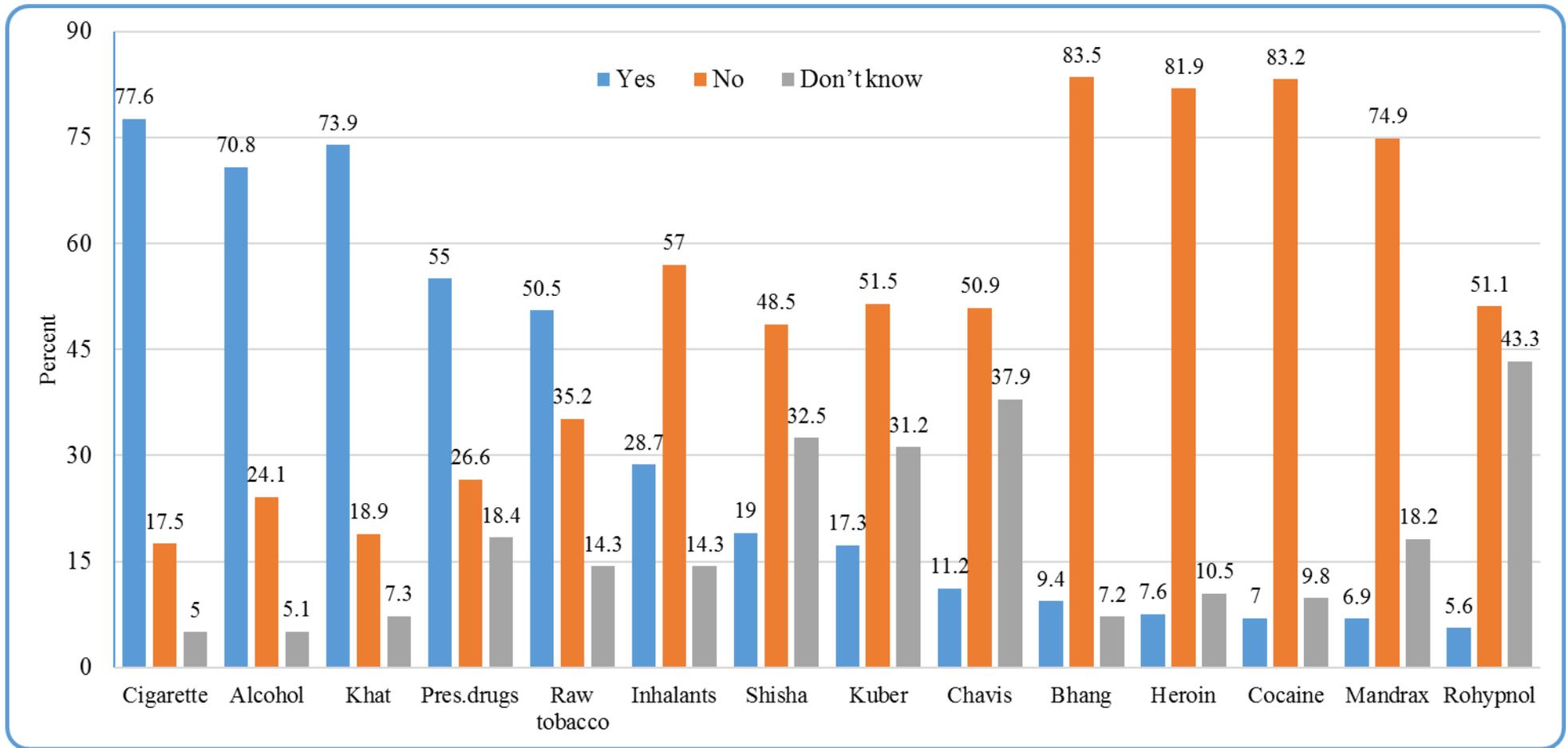


Figure 0.5: Drugs/substances that are legal (i.e. accessed without restriction by law) (n=3900)

3.4 Students' Alcohol and Drugs use

Students were asked to state whether they have ever used a drug or substance of abuse in their lifetime (lifetime/ ever use), the last 6 months and within the last 30 days (current use). Their responses are summarized in Tables 3.8a to 3.8c.

Ever use

The students were asked to mention the drugs and substances of abuse that they have ever used in their lifetime (ever use). Data shows that alcohol (23.4%) is the most commonly ever used substance by students followed by ever use of *khat/ miraa* (17%), prescription drugs (16.1%), tobacco (14.5%), bhang (7.5%), inhalants (2.3%), heroin 1.2% and cocaine (1.1%). Table 3.8a shows the prevalence of lifetime use/ever use of drugs by students in secondary schools.

Table 0.8a: Substance ever use (n=3902)

Type of Drug	Prevalence (%)	No. of Students
Alcohol	23.4	508,132
<i>Khat/ miraa</i>	17.0	369,155
Prescription drugs	16.1	349,613
Tobacco	14.5	314,869
Bhang	7.5	162,863
Inhalants	2.3	49,945
Heroin	1.2	26,058
Cocaine	1.1	23,887

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly ever used tobacco products in a student's lifetime include cigarettes 9.2% (199,778 students), *shisha* 6.2% (134,633 students), chewed tobacco 3.9% (84,689 students), *kuber* 3.9% (84,689 students) and sniffed tobacco 3.0% (65,145 students). The most commonly ever used prescription drugs in a student's lifetime include sleeping pills 15.5% (336,583 students), mandrax 1.0% (21,715 students) and rohypnol 0.6% (13,029 students).

Use in the last 6 months

The students were then asked to mention the substances of abuse that they have used in the last six (6) months. Findings show that alcohol (9.3%) is the most commonly used substance of abuse by students in the last six (6) months followed by use of prescription drugs (6.8%), *khat/ miraa* (5.9%), bhang (3.7%), inhalants (0.8%), heroin 0.4%, and cocaine 0.4%. The results of substance use in the last six months are presented in Table 3.8b.

Table 0.9b: Substance use in the last 6 months (n=3902)

Type of Drug	Prevalence (%)	No. of Students
Alcohol	9.3	201,950
Prescription drugs	6.8	147,663
<i>Khat/ miraa</i>	5.9	128,118
Tobacco	5.2	112,919
Bhang	3.7	80,346
Inhalants	0.8	17,372
Heroin	0.4	8,686
Cocaine	0.4	8,686

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly used tobacco products in the last six (6) months include cigarettes 3.1% (67,317 students), *shisha* 2.9% (62,974 students), *kuber* 1.7% (36,916 students), chewed tobacco 1.5% (32,573 students) and sniffed tobacco 1.3% (28,230 students). The most commonly used prescription drugs in the last six (6) months include sleeping pills 6.4% (138,976 students), mandrax 0.4% (8,686 students) and rohypnol 0.3% (6,515 students).

Current use (use within 30 days)

The students were also asked to mention the substances of abuse that they have used in the last 30 days. Findings show that alcohol (3.8%) is the most commonly used substance of abuse by students in the last 30 days (current use) followed by use of prescription drugs (3.6%), *khat/ miraa* (2.6%), bhang (1.8%), inhalants (0.6%), heroin (0.2%) and cocaine (0.2%). Table 3.8c shows the prevalence of drug use in the last 30 days (current use) by students in secondary schools.

Table 0.10c: Substance use in the last 30 days (n=3902)

Type of Drug	Prevalence (%)	No. of Students
Alcohol	3.8	82,517
Prescription drugs	3.6	78,175
<i>Khat/ miraa</i>	2.6	56,459
Tobacco	2.5	54,288
Bhang	1.8	39,087
Inhalants	0.6	13,029
Heroin	0.2	4,343
Cocaine	0.2	4,343

NB: Total enrolment of students was 2,171,504 (MoEST, 2014)

The commonly used tobacco products in the last 30 days (current use) include cigarettes 1.6% (34,744 students), *shisha* 1.1% (23,887 students), *kuber* 1.0% (21,715 students), chewed tobacco 0.8% (17,372 students) and sniffed tobacco 0.7% (15,201 students). The most commonly used prescription drugs in the last 30 days (current use) include sleeping pills 3.4% (73,831 students), mandrax 0.3% (6,515 students) and rohypnol 0.1% (2,172 students).

Figure 3.6 shows the average age when students first used a substance of abuse (age of onset). From the data presented, we can infer that the age between 13 and 15 years present the most critical period for the students in secondary schools. The students are likely to initiate prescription drugs and inhalants at the age of 13 years. The students are likely to initiate alcohol, *khat/ miraa*, tobacco and heroin at the age of 14 years. For cocaine, the age of onset is 14.5 years while bhang is 15 years.

Overall, there are two lessons that we draw from Figure 3.6; *first*, the age of onset to substances of abuse marks the period of transition from primary school to secondary schools. Therefore, if no interventions are put in place when students report to Form 1, this behaviour is likely to thrive into active substance use. Finally, the ease with which students access these substances of abuse decreases as one moves from substances with less statutory control to those with greater control and penalties, especially the narcotic drugs.

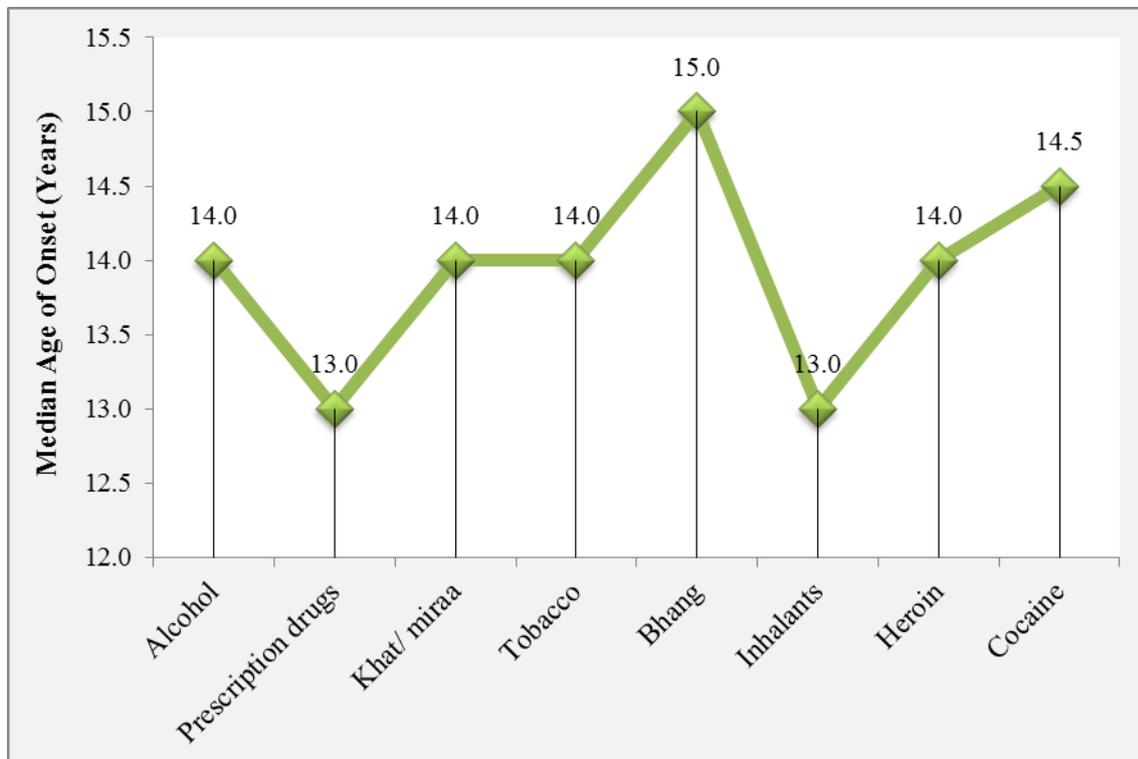


Figure 0.6: Age of onset to different substances of abuse

Use within the last 30 days: For those who reported use of a drug or substance of abuse within the last 30 days, they were asked to state whether it was taken within the school, school neighbourhood, at home, at a pub or some other occasion such as a wedding or party. Their responses are presented in Table 3.9. Invariably, the home environment presents the highest and critical risk of initiating drugs for the students. In all the cases, the highest proportion of students reported the home as the place where the drug or substance of abuse was taken. In the case of alcohol, the home environment was reported by 14.5% of the students. The home environment was followed by other occasions such as a weddings or parties (7.9%) and at a pub (4.1%).

Occasions such as weddings or parties presented the next most likely places where a drug or substance of abuse is taken. Noteworthy is the high proportion of students who reported accessing prescription drugs within the school. Among all the drugs substances of abuse mentioned, prescription drugs were reported by the highest number of students (5.1%) followed by bhang (2.3%), alcohol (2.0%), raw/ chewed tobacco (1.7%), *khat/ miraa* (1.6%) and *kuber* (1.3%).

Table 0.9: Place where alcohol/substance was used the last time (n=899)

Place where substance was used the last time		Freq.	Percent
Alcohol	Within the school	18	2.0
	School neighbourhood	12	1.3
	At home	130	14.5
	Pub	37	4.1
	Other occasion e.g. wedding/party	71	7.9
	Not applicable	631	70.2
Bhang	Within the school	21	2.3
	School neighbourhood	6	0.7
	At home	48	5.3
	Pub	4	0.4
	Other occasion e.g. wedding/party	16	1.8
	Not applicable	804	89.4
Cigarettes	Within the school	7	0.8
	School neighbourhood	7	0.8
	At home	58	6.5
	Pub	8	0.9
	Other occasion e.g. wedding/party	9	1.0
	Not applicable	810	90.1
Raw/ chewed tobacco	Within the school	15	1.7
	School neighbourhood	2	0.2
	At home	24	2.7
	Pub	5	0.6
	Other occasion e.g. wedding/party	1	0.1
	Not applicable	852	94.8
Cocaine	Within the school	2	0.2
	School neighbourhood	2	0.2
	At home	8	0.9
	Other occasion e.g. wedding/party	1	0.1
	Not applicable	886	98.6
Inhalants	Within the school	6	0.7
	School neighbourhood	1	0.1
	At home	15	1.7
	Pub	1	0.1
	Other occasion e.g. wedding/party	1	0.1
	Not applicable	875	97.3
Heroin	Within the school	4	0.4
	School neighbourhood	1	0.1
	At home	6	0.7
	Other occasion e.g. wedding/party	2	0.2
	Not applicable	886	98.6
<i>Khat/ miraa</i>	Within the school	14	1.6

<i>Place where substance was used the last time</i>		<i>Freq.</i>	<i>Percent</i>
	School neighbourhood	12	1.3
	At home	118	13.1
	Pub	11	1.2
	Other occasion e.g. wedding/party	22	2.4
	Not applicable	722	80.3
<i>Kuber</i>	Within the school	12	1.3
	School neighbourhood	5	0.6
	At home	21	2.3
	Pub	4	0.4
	Other occasion e.g. wedding/party	5	0.6
	Not applicable	852	94.8
<i>Shisha</i>	Within the school	5	0.6
	School neighbourhood	6	0.7
	At home	29	3.2
	Pub	5	0.6
	Other occasion e.g. wedding/party	21	2.3
	Not applicable	833	92.7
<i>Chavis/ sniffed tobacco</i>	Within the school	8	0.9
	School neighbourhood	6	0.7
	At home	17	1.9
	Pub	1	0.1
	Other occasion e.g. wedding/party	5	0.6
	Not applicable	862	95.9
Mandrax	Within the school	3	0.3
	School neighbourhood	1	0.1
	At home	5	0.6
	Pub	1	0.1
	Other occasion e.g. wedding/party	2	0.2
	Not applicable	887	98.7
Rohypnol	Within the school	3	0.3
	School neighbourhood	1	0.1
	At home	3	0.3
	Not applicable	892	99.2
Prescription drugs/ sleeping pills	Within the school	46	5.1
	School neighbourhood	6	0.7
	At home	118	13.1
	Pub	1	0.1
	Other occasion e.g. wedding/party	8	0.9
	Not applicable	720	80.1

3.5 Risk Factors for Alcohol and Drugs Use

Risk to initiation of alcohol and drug use has been determined through several questions focusing on among others the home environment and the school environment. Questions about the home environment focused on issues such as ‘whether already a family member uses a drug or substance of abuse’, ‘whether the student has a close friend(s) who uses alcohol or other drugs’ and ‘the ease with which students can access these substances’.

Use of drugs and substances of abuse by family and friends

The survey sought information on alcohol use among family members and friends. Overall, 43% of the students reported that they have a family member who uses a drug or substance of abuse. A similar proportion of students reported that they had a friend other than a family member who uses a drug or substance of abuse. In seven of the eight regions, more than 40% of the students reported that they had a family member who uses alcohol.

According to student responses, use of drugs and other substances of abuse by schoolmates closely mirror use of those substances by close friends. The top four substances that schoolmates and friends use are alcohol (41.4%; 40.1%), *khat* (34.1%; 32.6%), cigarettes (31%; 27.5%) and prescription drugs (30%; 27.6%). These are followed by raw/ chewed tobacco use, *shisha*, *kuber* and sniffed tobacco/ *chavis*. The least mentioned substances are rohypnol, heroin, mandrax, cocaine and inhalants (Figure 3.7). Cumulatively, 99.5% of the students said schoolmates use tobacco products while a smaller proportion (29.4%) reported that close friends use tobacco products. On the other hand, 31.7% reported that schoolmates use prescription drugs while a smaller proportion (29.4%) reported that close friends use prescription drugs.

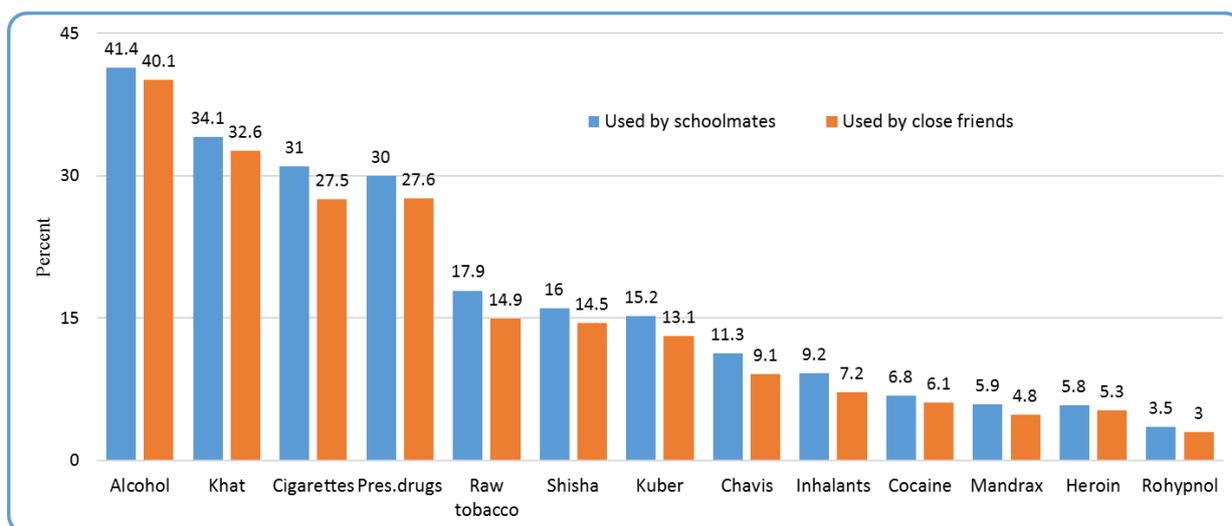


Figure 0.7: Alcohol/substance use by schoolmates and close friends

Source of drugs and substances of abuse: These substances are obtained from various sources mostly from friends (32.2%). A summary of sources of drugs and substances of abuse is shown in Table 3.10. The substances are also carried by students from home (29.3%), bought from other students (25.7%), bought from a bar near school (22%) or from a local brew den (19.1%). Other sources are kiosks or shops near school (16.9%), relatives (16.7%), supermarkets (11.3%), non-teaching school workers (7.4%), using the stock parents bring home (5.3%), teachers (4.8%) and school canteen (3.9%).

Therefore, one can conclude that those who work in the school compound (non-teaching and teaching) are less likely to be a source of substance abuse for the student.

Table 0.10: Sources of drugs and substances of abuse used by students (multiple responses)

Source of substance of abuse	Freq. (n=3,893)	Percent
Friends	1253	32.2
Carried from home	1141	29.3
Bought from other students	1000	25.7
Bar near school	856	22.0
Bought from brew dens	745	19.1
Kiosk or shop near school	659	16.9
Relatives	652	16.7
Super market	440	11.3
School workers (non-teaching)	289	7.4
Parents (i.e. stock bought for parent's consumption)	208	5.3
Teachers	187	4.8
School canteen	150	3.9

Time/ period students use drugs and substances of abuse: The students identified times/periods when they are most likely to use substances of abuse (Figure 3.9). Opportunities for alcohol/drug use easily fall into two categories, i.e. in school and away from school (Figure 3.9). The time/period identified when most of the students are likely to use drugs was during school holidays (48.5%) and/or their way home (35.1%). Within the school or during school trips were also identified as times/periods when students were likely to use alcohol and drugs (31.4%). Other times in order of decreasing mention are: during weekends (30.4%), inter-school meetings (27.8%), during entertainment in school (24.4%), and during games (23.7%). Other times are during prep time, school visits and class breaks (Figure 3.8).

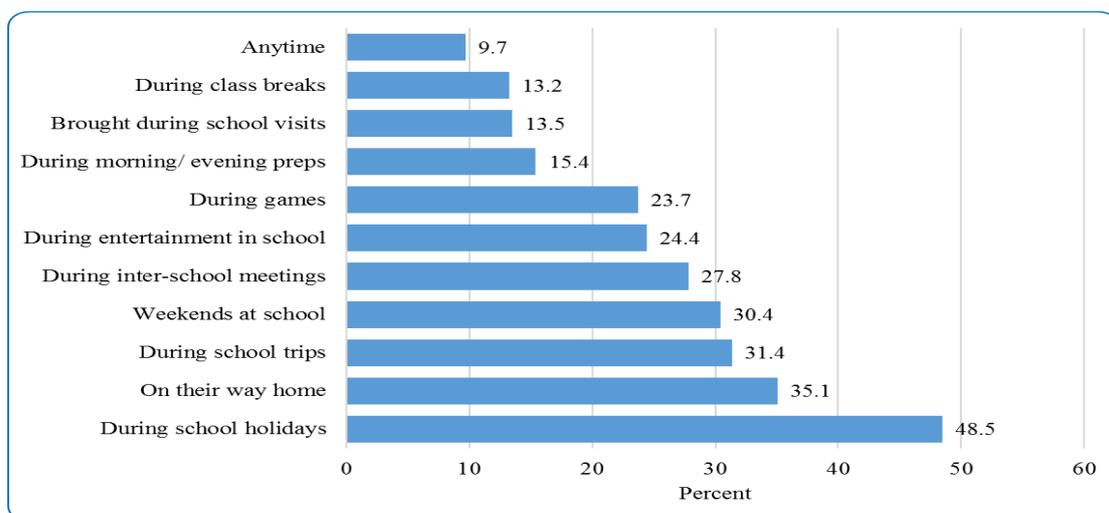


Figure 0.8: When students are likely to use alcohol and drugs

Access to drugs and substances of abuse in school or school neighbourhood:

Table 3.11 summarizes data on access to drugs and substances of abuse in schools. Accordingly, prescription drugs (36.8%), alcohol (32.4%), cigarettes (32.2%), *khat* (29.6%) and bhang (22.8%) are the top five easily accessed substances. On the other end, rohypnol (5.8%), mandrax (6.5%), cocaine (6.9%) and heroin (7.5%) are less likely to be accessed while at school.

This situation is also reflected with regard to access to substances of abuse in the school neighbourhood (Table 3.12). Like access to substances of abuse within school, the top five drugs and substances of abuse reported are cigarettes, alcohol, *khat*, prescription drugs and bhang. It worth noting that those drugs and substances of abuse reported as difficult to access while at school are equally difficult to access even outside school.

Table 0.11: Access to alcohol/substances within school and school neighbourhood

Substance	Easiness with which one can get ADA within school								Easiness with which one can get ADA in school neighbourhood							
	Easy		Difficult		Impossible		No response		Easy		Difficult		Impossible		No response	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Alcohol	1250	31.9	1122	28.7	1488	38.0	53	1.4	1661	42.4	995	25.4	1200	30.7	57	1.5
Bhang	880	22.5	1218	31.1	1760	45.0	55	1.4	1091	27.9	1268	32.4	1496	38.2	58	1.5
Cigarettes	1241	31.7	1051	26.9	1568	40.1	53	1.4	1680	42.9	918	23.5	1256	32.1	59	1.5
Raw/ chewed tobacco	763	19.5	1213	31.0	1880	48.0	57	1.5	940	24.0	1290	33.0	1609	41.1	74	1.9
Cocaine	266	6.8	1268	32.4	2320	59.3	59	1.5	277	7.1	1476	37.7	2100	53.7	60	1.5
Inhalants	497	12.7	1240	31.7	2118	54.1	58	1.5	620	15.8	1381	35.3	1849	47.3	63	1.6
Heroin	288	7.4	1185	30.3	2377	60.7	63	1.6	298	7.6	1402	35.8	2149	54.9	64	1.6
Khat	1140	29.1	1025	26.2	1688	43.1	60	1.5	1393	35.6	1011	25.8	1450	37.1	59	1.5
Kuber	535	13.7	1128	28.8	2193	56.0	57	1.5	600	15.3	1268	32.4	1980	50.6	65	1.7
Shisha	423	10.8	1130	28.9	2300	58.8	60	1.5	438	11.2	1319	33.7	2093	53.5	63	1.6
Chavis/ sniffed tobacco	432	11.0	1099	28.1	2322	59.3	60	1.5	431	11.0	1265	32.3	2152	55.0	65	1.7
Mandrax	244	6.2	1143	29.2	2467	63.0	59	1.5	226	5.8	1344	34.3	2280	58.3	63	1.6
Rohypnol	222	5.7	1122	28.7	2509	64.1	60	1.5	184	4.7	1308	33.4	2355	60.2	66	1.7
Pres. Drugs/ sleeping pills	1415	36.2	882	22.5	1550	39.6	66	1.7	1357	34.7	977	25.0	1501	38.4	78	2.0

Alcohol is the most widely reported substance of abuse. The study assessed whether there was any link between use of alcohol and various socio-demographic characteristics including gender, type of school the respondents are currently attending, their religion, the region in which the school is located, the class they are currently attending and the person they reported they are staying with². The cross-tabulation results are shown in Table 3.12.

Table 0.12: Alcohol use in the last 6 months by socio-demographic characteristics

<i>Socio-demographic characteristics</i>	<i>Freq.</i>	<i>Percent</i>	χ^2 (<i>p-value</i>)	
<i>Gender (n=3902)</i>	Male	277	11.7	.0001
	Female	84	5.4	
<i>Type of school (n=3902)</i>	Boys boarding	199	15.4	.0001
	Boys day & boarding	26	13.2	
	Mixed day & boarding	28	9.2	
	Girls boarding	46	6.3	
	Mixed day	39	6.2	
	Girls day	2	4.3	
	Girls day & boarding	12	3.8	
	Mixed boarding	2	3.2	
	Boys day	7	2.1	
<i>Religion (n=3897)</i>	Christian	348	10.6	.0001
	Muslim	12	1.9	
	Hindu/Buddhist	1	33.3	
<i>Region (n=3902)</i>	Lower Eastern	82	20.7	.0001
	Central	69	17.4	
	Upper Eastern	50	12.6	
	Nyanza	39	9.7	
	Nairobi	29	7.6	
	North Rift	27	6.8	
	Coast	24	6.3	
	Western	24	6.0	
	South Rift	16	4.2	
	North Eastern	1	0.3	
<i>Class (n=3895)</i>	Form one	22	2.3	.0001
	Form two	81	8.1	
	Form three	138	13.9	
	Form four	120	12.7	
<i>Type of person one lives with (n=3892)</i>	Mother & Father	259	9.7	.005
	Mother only	59	8.5	
	Father only	19	16.1	
	Grandparent(s)	10	7.9	
	Guardian(s)	11	4.1	
	Other (specify)	3	12.0	

² Current use is determined by substance use within the last 30 days, given in Table 3.9c. However, in calculating the statistics for Table 3.15, data has relied on use in the last 6 months. The survey was done during the school term when many students were in a restrictive school environment. A 6-month cutoff would capture substance use during school holidays when access is less restricted.

There a number of general conclusions that one can draw from Table 3.13 in relation to alcohol use in the last six months prior to the study:

- Male students have a higher likelihood of alcohol consumption in the last six months compared to female students (11.7% vs. 5.4%)
- Schools with male students have a likelihood of alcohol consumption in the last six months compared to those schools that are female only schools. For example, in boys' boarding schools and boys' day and boarding, 15.4% and 13.2% respectively reported higher likelihood of alcohol consumption in the last six months.
- Students who identified themselves as being Christian have a higher likelihood of alcohol consumption in the last six months (10.6%) compared to those who identified themselves as Muslim (1.9%).
- Lower Eastern (20.7%), Central (17.4%) and Upper Eastern (12.6%) are the three top regions which have a higher likelihood of alcohol consumption among students in the last six months while North Eastern (0.3%) has the lowest likelihood of alcohol consumption among students in the last six months.
- Students in higher classes (Form 3 – 13.9% and Form 4 – 12.7%) have a higher likelihood of alcohol consumption in the last six months compared to those in the lower classes (Form 1 – 2.3% and Form 2 – 8.1%). In fact, by the time a student moves from Form 1 to Form 2, there is an almost four-fold increase in the proportion of students reporting alcohol consumption.
- Students who reported living with only their fathers have a higher likelihood of alcohol consumption in the last six months (16.1%) compared those in which a mother was present.

Further cross-tabulation of alcohol use in the last six month and other respondent characteristics are summarized in Table 3.14. The findings reveal that students from high and middle level income families have a higher likelihood of alcohol in the last 6 months. These are families that could afford to own items such as a computer, TV, radio and satellite dish.

In addition, students who reported that they have a family member or a close friend who uses alcohol have equally a higher likelihood of alcohol in the last six months. Similarly, students who knew of a schoolmate who takes alcohol have equally a higher likelihood of alcohol consumption in the last six months. Students who are not aware that alcohol and drugs are detrimental to their academic performance have a higher likelihood of alcohol use in the last six months.

In terms of pocket money, students with higher levels of pocket money have a higher likelihood of alcohol use in the last six months. In terms of inspection, students from schools with fewer frequency of inspection have a higher likelihood of alcohol consumption in the last six months. In terms of regions, students from Lower Eastern, Central and Upper Eastern have a higher likelihood of alcohol consumption in the last six months.

Finally, students who are not an active member of a religious group or club have a higher likelihood of alcohol consumption in the last six months (Table 3.13).

Table 0.13: Relationship between alcohol use in the last six months and selected variables

<i>Variable</i>	<i>Taken alcohol in the last 6 months</i>		
	<i>Category</i>	<i>Percent</i>	χ^2 (<i>p-value</i>)
<i>Have computer (n=3894)</i>	Yes	14.8	.0001
	No	6.7	
<i>Have TV (n=3894)</i>	Yes	10.7	.0001
	No	3.7	
<i>Have radio (n=3894)</i>	Yes	10.0	.0001
	No	3.0	
<i>Have satellite dish (n=3894)</i>	Yes	14.3	.0001
	No	7.0	
<i>Family members uses alcohol/drugs (n=3895)</i>	Yes	15.4	.0001
	No	4.6	
<i>Close friend uses alcohol/drugs (n=3893)</i>	Yes	17.2	.0001
	No	3.3	
<i>Some students use alcohol/drugs in school (n=3887)</i>	Yes	14.7	.0001
	No	2.9	
	Don't know	5.6	
<i>Substances are detrimental to academic performance (n=3876)</i>	Yes	8.1	.0001
	No	23.9	
<i>Students with a lot of pocket money are more likely to take alcohol/drugs (n=3,889)</i>	Agree	9.1	.022
	Disagree	10.3	
	Don't know	5.5	
<i>Adequate supervision in school (n=3850)</i>	Yes	8.8	.105*
	No	10.5	
<i>Frequency of discussion on alcohol/drugs with friends in social media (n=3842)</i>	Very often (always)	5.1	.001
	Often	8.0	
	Sometimes	9.1	
	Rarely	10.9	
	Never	11.4	
<i>Knows of schoolmate who uses alcohol/drugs (n=3848)</i>	Yes	15.8	.0001
	No	5.7	
<i>Attended awareness talk on dangers of alcohol/drugs (n=3838)</i>	Yes	9.1	.533*
	No	9.7	
<i>Active member of a religious group (n=3833)</i>	Yes	8.3	.0001
	No	14.5	
<i>Active member of a sport (n=3831)</i>	Yes	9.3	.848*
	No	9.0	
<i>How often are students inspected for alcohol/drugs (n=3781)</i>	Weekly	6.8	.001
	Monthly	7.7	
	Once per term	6.8	
	Randomly	13.0	
	Rarely	10.4	
	Never	8.4	

3.6 Protective Factors Against Alcohol and Drugs Use

The protective factors assessed include among others the role of parents or guardians, alcohol and drugs inspections carried out in schools, guidance and counselling services, peer counselling and use of rehabilitation centres or recovered addicts as examples of effect of substances of abuse.

Student supervision in schools: To reduce the likelihood of alcohol and drugs abuse in schools, there is need for adequate supervision³ so that administrators can minimize the risk of student exposure to these substances. The students were asked whether in their view there is supervision in school to control access and use of drugs by students. Close to three-quarters (72.4%) of the students felt that there is supervision with more than half (52.9%) of these reporting that that supervision was very adequate. About four in ten students (38.4%) reported that the supervision was adequate while 8.7% were of the view that this supervision is not adequate (Figure 3.9).

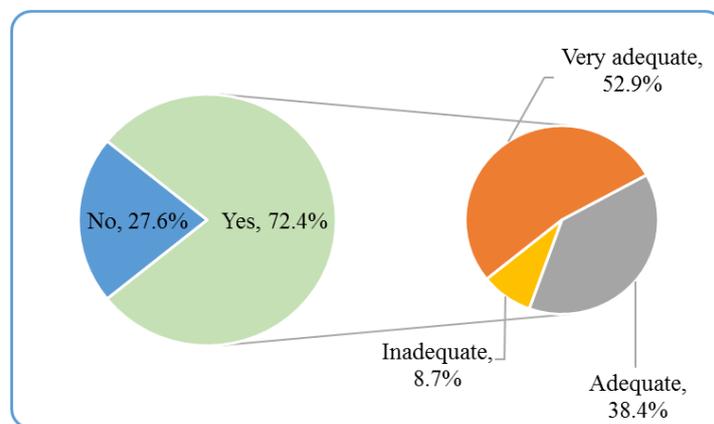


Figure 0.9: Presence and adequacy of supervision provided in school

Discussions with friends on social media: Students were asked to state how often they discussed with friends through social media the effect of alcohol and drugs use. While a majority of young people use social media (WhatsApp, Tweeter, and Facebook among others) to discuss many topical issues of social interest, it seems from the survey results that alcohol and substance use matters are not the key issues discussed on social media (Figure 3.10). Only about a quarter of the students (26.1%) reported regular discussions on social media about use of alcohol and other substances. 44.9% reported that they rarely (21.5%) or never (23.4%) discuss these issues in social media.

³ Supervision is a continuous process put in place to minimize the entry of substances of abuse into schools while inspection is an exercise carried out at a specific point in time to check for substances of abuse. Consequently, inspection is just one aspect of supervision.

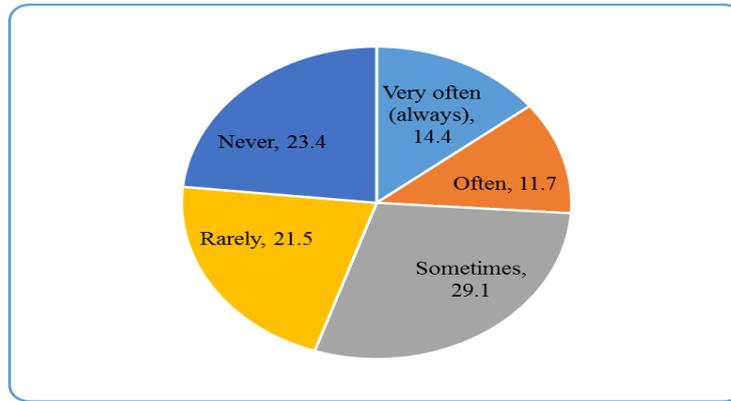


Figure 0.10: Discussions with friends on social media regarding alcohol and drugs

Inspection in schools: The role of inspection in reducing access to alcohol and drugs cannot be overlooked. Inspections help to deter students from bringing drugs and substances of abuse for fear to being caught and disciplined for possession. In spite of the role this plays, students are rarely inspected in schools (Table 3.14). Half of the students (50.7%) reported either they are never inspected (29.6%) or rarely inspected (21.1%). The person carrying out the inspection was likely to be the school principal, deputy principal or teachers who together constitute 57.8% of persons identified by the students.

On the other hand, persons linked to the school such as prefects, matrons, security employed by the school account for 14.2% of those identified as responsible persons for inspection. About a third of the students (35.4%) reported that they know of a schoolmate who has been caught with a substance of abuse.

Table 0.14: Inspection of alcohol and drugs in schools (n=3,908)

		Freq.	%
How often are students inspected?	Weekly	385	9.9
	Monthly	208	5.3
	Once per term	498	12.7
	Randomly	709	18.1
	Rarely	826	21.1
	Never	1155	29.6
Who usually inspects?	Principal	363	9.3
	Deputy principal	740	18.9
	Teachers	1155	29.6
	Prefects	248	6.3
	Security staff (e.g. watchman)	139	3.6
	Other (matron, nurse)	168	4.3
	Law enforcement agents (e.g. police)	27	.7
	None	1006	25.7
Know a schoolmate found with ADA?	Yes	1385	35.4
	No	2463	63.0

3.7 Current Strategies to Address Alcohol and Drugs Use in Schools

Those who have been found to be in possession of drugs and substances of abuse are punished in different ways (Figure 3.11). Most of the students are either referred to guidance and counselling (50%), suspended (49.1%), or expelled (47.8%). Other forms of punishment include summoning parents/guardians to school (39.4%), referring them to peer counselling (31.2%) or for rehabilitation (21.7%), taken to the police (16.1%) or punished without suspension (14.8%).

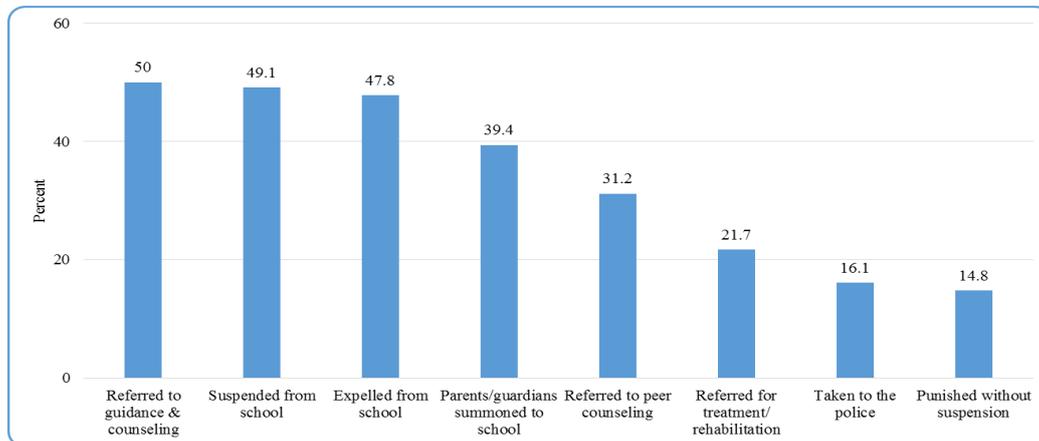


Figure 0.11: Punishment given to students found in possession of drugs/alcohol

Knowledge of a treatment and rehabilitation centres: The students were asked whether they know of a treatment and rehabilitation centre for those in need of these services. Just one in five students (23.1%) reported that they knew of a facility where students could be treated and rehabilitated while the remaining 76.9% did not know of such a facility. Furthermore, of the 900 students who reported knowledge of such a facility, only 47.9% could correctly mention a treatment and rehabilitation centre. A summary of the number of centres by region that were named is shown in Table 3.15.

Table 0.15: Number of rehabilitation centres mentioned by region (n=900)

Region	Number who know a rehab (a)	% of those who know a rehab (b)	Number who couldn't name rehab (c)	Number who named a rehab (d=a-c)	% of those who named a rehab (e)
Central	103	11.4	30	73	16.9
Nairobi	96	10.7	25	71	16.5
South Rift	90	10.0	27	63	14.6
Western	85	9.4	28	57	13.2
Nyanza	134	14.9	80	54	12.5
North Eastern	57	6.3	18	39	9.1
Lower Eastern	79	8.8	49	30	7.0
Upper Eastern	91	10.1	66	25	5.8
North Rift	67	7.4	48	19	4.4
Coast	98	10.9	98	0	0
TOTAL	900	100%	469	431	100%

Other support structures in place: There are additional support structures that were identified by students (Figure 3.12). About four in ten (43.9%) of the students reported that students have organized discussion forums on alcohol and drugs abuse. In deed a majority of the students have attended awareness talks in school (69.2%), or were active members of a religious group (83.9%), or a member of a sports, club or study group (90.1%). In addition, they reported that teachers were concerned about alcohol and drugs abuse in schools (71.5%).

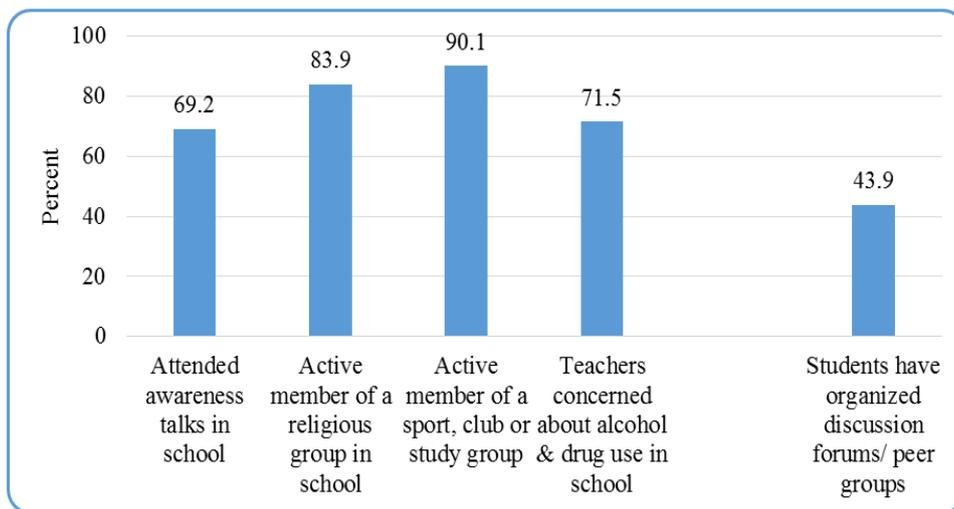


Figure 0.12: Additional structures to support students against alcohol and drugs abuse

Support to students with substance abuse problems: The students reported that schools were more active in providing guidance and counselling to students with drugs and alcohol abuse problems (74.6%), or in facilitating awareness talks on drugs and substance abuse (54.5%). On the part of students, peer counselling groups/clubs were in place (46.6%), as well as prayer groups (38.7%). These findings are summarized in Figure 3.13.

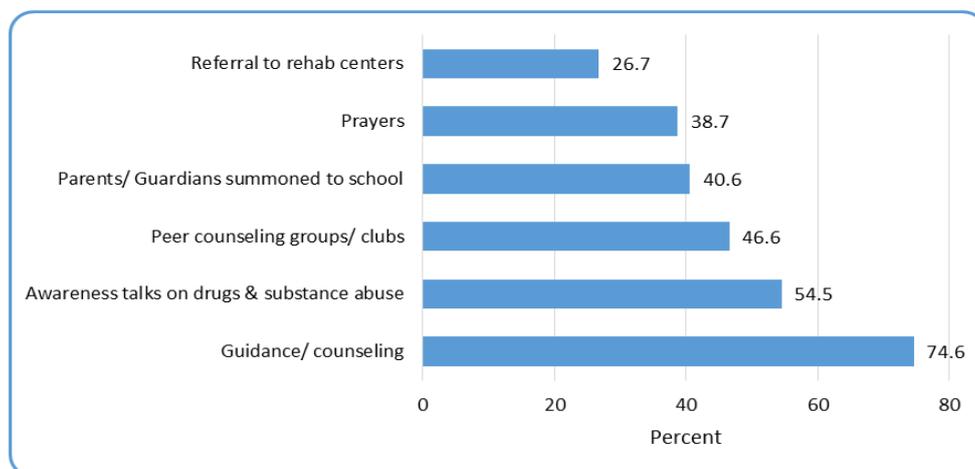


Figure 0.13: Support provided by the school to students with alcohol/ drug problems

Other methods of intervention identified by students are shown in Table 3.16. They include group discussions, open forums to discuss matters related to alcohol and drugs abuse, various meetings (e.g. religious, anti-drugs, and class), motivational talks given by invited speakers, teacher student sessions, use of promotional materials and suggestions boxes.

Table 0.16: Other methods of intervention

<i>Method of intervention</i>	<i>Totals (absolute numbers)</i>
Guidance & Counselling	272
Peer counselling	109
Clubs and Societies	97
Group discussions	94
Open forums	86
Religious meetings	40
Anti-drugs meetings	46
Motivational talks	35
Debating clubs	33
Awareness talks	22
Class meetings	22
Teacher student sessions	14
Promotional materials (e.g. brochures, posters)	7
Suggestion boxes	4
Left to families	6
Other (e.g. punishment, interviews)	11

Perceived links between alcohol and drugs abuse and other outcomes: The results of this question are shown in Figure 3.14. While students reported a clear link between alcohol and drugs abuse on one hand and discipline and academic performance on the other (66% and 64% respectively), however, many didn't see a link between alcohol and drugs abuse and homosexuality (39.2%) and lesbianism (35.9%).

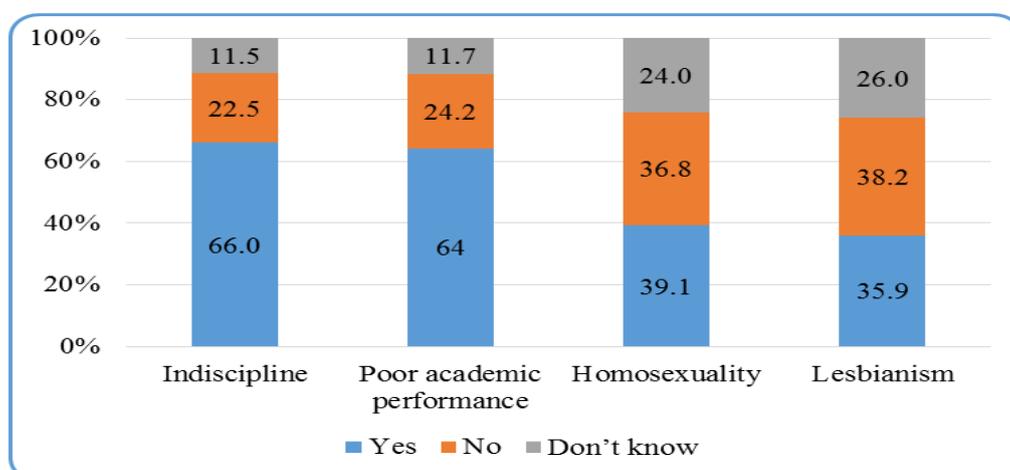


Figure 0.14: Perceived link between alcohol & drug use and behavior/academic outcomes

In addition to the perceived links between alcohol and drugs use and indiscipline, poor academic performance, homosexuality and lesbianism, students also identified other potential outcomes as a result of alcohol and drugs use. These outcomes are shown below in Table 3.17.

Table 0.17: Other effects associated with use of ADA (multiple responses)

	Freq.	% (n = 79)
School dropout	24	30.4
Rape	15	19.0
Violence-e.g. bullying, robbery, murder, kidnapping	13	16.5
Deviancy in school (noise making, sneaking from school, disregard of school rules)	12	15.2
Theft	10	12.7
Pregnancy	8	10.1
Health complications (e.g. diseases, death)	7	8.9
Sexual deviancy -Musturbation, incest, bestiality	7	8.9
Hallucinations	5	6.3
Addiction	4	5.1
Promiscuity - adultery, prostitution/Multiple partners	4	5.1
Peer pressure	3	3.8
Eating a lot	2	2.5
Laziness	2	2.5
Not going church/ illuminati	2	2.5
Divorce	1	1.3

3.8 Guidance and Counseling Teachers: Roles, Gaps & Opportunities

Close to three-quarters (74.6%) of the students identified guidance and counselling as one of the support systems put in place to address alcohol and drugs use in schools. Similarly, awareness talks on drugs and substances of abuse were also identified by most students (54.5%) as support provided by the school to students (Figure 3.14). The survey sought to establish the role of principals and/or guidance and counselling teachers in the prevention of alcohol and drugs abuse in schools. In addition, they were asked to identify gaps and any opportunities in addressing use of alcohol and drugs in schools.

According to school administrators from the various schools, they have put in place guidance and counselling teachers and have regular talks that focus on alcohol and drugs abuse. According to the teachers, the “*Government has disappointment since they don’t offer rigorous programmes, no trainings, and no free workshops to help eradicate drug abuse*” (IDI, Girls’ School, Western).

A key constraint is the manner in which the curriculum in schools is designed. One of the IDI informants from a boys school in Western Kenya noted that *“the school curriculum is not helping teachers as it leaves them with no ample time to teach broadly or counsel students on alcohol and drugs abuse”* (IDI, Boys’ School, Western). Thus, with a crowded school curriculum, the teachers are hard pressed to complete the syllabus and prepare the students for examinations.

Knowledge of the guidelines regarding alcohol and drugs abuse is one important step in addressing the problem of drugs and substance abuse in schools. In spite of the many efforts put in place by the Government, *“teachers are not much aware of the guidelines...what they are aware of is that the Government prohibits expulsion in schools...”* (IDI, Girls’ School, South Rift). This lack of awareness regarding guidelines on alcohol and drugs was repeated in several schools where In-Depth Interviews were conducted. In times when the guidance and counselling teachers want to be involved, *“the students themselves do not open up because they regard guidance and counselling teachers as any of the other teacher”*. This lack of trust puts a barrier in free communication and in bringing out the issues that should be handled by the guidance and counselling teachers.

A challenge identified is lack of a pro-active strategy to deal with alcohol and drugs in schools. For example, in some schools, the guidance and counselling teachers only get involved when cases of alcohol and drugs use have been noted, when students have been caught with either alcohol or drugs. In South Rift, one informant noted that *“her work ... begins when they have identified a problem with the student(s)”* (IDI, Girls’ School, South Rift).

Challenges faced by the guidance and counselling teachers include the following:

- Lack of privacy – the offices used by the guidance and counselling teachers are not conducive to sharing sensitive information, which hinders the students from fully disclosing the problems they are facing. In the end, support is limited or inadequate due to lack of full disclosure from the students.
- Lack of training on alcohol and drugs abuse– some guidance and counselling teachers reported that they do not have the proper training on management of alcohol and drugs use. As such they are limited in terms of what support they can provide to students who come to them for support.
- Time constraints – guidance and counselling sessions are time consuming. However, due to other competing demands, such as the rush to complete the syllabus, the teachers do not adequate time for dealing with student problems on alcohol and drugs abuse.

3.9 Strategies to Prevent, Control and Manage Alcohol and Drugs Use in Schools

The question addressed here was, what are the effective ways for alcohol and drugs abuse prevention, control and management in secondary schools? The students were asked to make suggestions as to what should be done by the community, the students as well as by the parents. Below is a summary of the responses obtained from the students. These responses are combined with those from in-depth interviews with the principals, deputy principals and/or guidance and counselling teachers.

At the *community* level, the students had the following to say:

- The students felt that at the community level, they should prevent individuals from selling drugs in and around schools. This could be achieved through closing of all premises near schools that sell alcohol as well as by helping in the arrest of individuals who sell alcohol and other substances of abuse in the school neighbourhoods.
- Community members should act as role models to students so that they can inculcate in them good behaviours and encourage them to protect themselves against alcohol and drug abuse.
- Organizing awareness talks and campaigns where issues about alcohol and other substances of abuse can be discussed was also identified by the students as something that the communities around schools could organize.
- Enforcement of existing laws is another area the students felt that the community could help in dealing with as a way of reducing alcohol and substances of abuse in schools.

Teachers were seen as generally being part of the community. The roles identified for the community were also mentioned in relation to teachers. However, in addition the students felt that teachers could also:

- Support in the inspection of students while in school to ensure that no alcohol or drugs find their way into school. This aspect was particularly pointed out by many students who use among other expressions the following: “*check students when they come to school*”; “*check randomly for any illegal items*”; and “*conduct weekly checks*.”
- Establishing a good rapport between the teachers and students could help reduce the distance that often one finds between teachers and students. This would help the students in opening up regarding the various challenges that they are facing as youth including use of alcohol and drugs.

- Guidance and counselling was identified by a majority of the students as one area in which teachers could also play a role in addressing the alcohol and drugs problem in schools.

On the part of the *parents*, the students identified the following as some of the areas they could be engaged in:

- Accompanying their children to school when the schools open for a new term.
- Having open discussions with their children on issues focusing on alcohol and drugs use.
- Avoid giving their children too much pocket money and exposing them into behaviours that could lead to drugs and substance abuse. This exposure includes taking alcohol at home where their children could easily access or role modelling the behaviour of parents.
- Like teachers in schools, the parents should also inspect their children while they are at home in order to ensure that they do not use alcohol and drugs while at home.

The *students* identified the following as some of the things they could do to reduce the dangers of alcohol and drugs in schools:

- Give peer support to one another to avoid use of alcohol and drugs. This could be done through for example, “*advising each other against using drugs.*”
- Students can also shield themselves against alcohol and drugs use through avoiding “*bad company*” i.e. those already engaged in alcohol and drug abuse related behaviours.
- Joining support groups such as prayer groups or being active in sports or peer counselling clubs would provide students with support systems that enable them to cope with alcohol and drug related challenges in school.

The general areas of support that were identified by students were also a focus in the discussions with principals/ deputy principals and guidance and counselling teachers. These school officers were of the opinion that support could also come from organizations engaged in the fight against alcohol and drug abuse in the country. “*Organizations in charge of fighting the problem of alcohol and drugs in the country such as NACADA should organize seminars on awareness of substances of abuse and have students, parents and teachers as a part of those meetings*” (IDI, Girls’ School, South Rift). Furthermore, respondents were of the view that the Government should make topics on alcohol and drugs abuse as part of the curriculum for students.

The use of school prefects (representatives of the student councils) is one of the many strategies that the school administrators use in checking alcohol and drugs use in schools. *“The representatives of the students’ body for example take charge of the peer counselling groups when the teachers are not available to support the students”* (IDI, Boys School, Coast).

Recognition of positive role models by schools is also used as a way to reward those students who have kept discipline at the end of every term. *“This practice has encouraged the students to maintain discipline and has helped to control the many cases of alcohol and drugs abuse in the school”* (IDI, Girls’ School, South Rift).

The interviews with school principals, deputy principals and guidance and counselling teachers suggested the following recommendations:

- ☛ The government should employ fully qualified counsellors to support any students who may need help and support in dealing with alcohol and drugs abuse.
- ☛ NACADA should intensify their visits to schools to speak to students on the dangers of alcohol and drugs use.
- ☛ The department of guidance and counselling should be given special focus in terms of reduced teaching workload, favourable counselling environment and allocation of adequate and private office space.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

In this Chapter, a summary of the key findings and recommendations are provided. The summary is presented as per the key objectives of the study.

4.1 Summary of findings

The data presented from this national survey has revealed a number of issues which are summarized below:

- Overall, the survey shows that students are fairly knowledgeable on the different drugs and substances of abuse. Bhang, alcohol, cigarettes, cocaine, heroin, inhalants, mandrax and khat are all fairly well known with at least 80% of the students identifying them as drugs. The three top drugs and substances of abuse reported as most readily available to students in schools are cigarettes, alcohol and *khat*.
- A majority of students (72.8%) thought that it was possible for a student to use drugs without their teachers' knowledge. Consequently, a majority of the students agree that the school environment could provide opportunities for students to initiate use of alcohol and other substances of abuse. More than seven in ten (71.3%) of the students agreed that students are likely to initiate alcohol and drug of abuse in schools. An almost similar number (69.1%) thought that students have a role to play in the supply of alcohol and drugs of abuse in schools.
- The home environment was an important risk factor for initiation of alcohol and drugs among the students. The highest proportion of students reported the home environment as the place where a substance of abuse was used the last time. In the case of alcohol, the home environment was reported by 14.5% of the students. It was followed by other occasions such as weddings or parties (7.9%) and pubs (4.1%). Noteworthy is the high proportion of students who reported accessing prescription drugs within the school.
- The use of alcohol and other drugs of abuse by schoolmates closely mirrors use of those substances by close friends. The students were asked if they were aware that their school mates and friends were abusing alcohol or drugs. Among the top four reported substances that schoolmates and friends are using include alcohol (41.4%; 40.1%), khat (34.1%; 32.6%), cigarettes (31%; 27.5%) and prescription drugs (30%; 27.6%) respectively. These are followed by chewed tobacco, shisha, kuber and sniffed tobacco. The least mentioned drugs and substances of abuse are rohypnol, heroin, mandrax, cocaine and inhalants.

- ☛ Data shows that alcohol and drugs are more likely to be used during school holidays (48.5%) and on their way home (35.1%). Within the school environment, students are more likely to use drugs during weekends (30.4%). Other times mentioned include during inter-school meetings (27.8%), during school outings (27.3%), during entertainment in school (24.4%), during games (23.7%) and during school trips (21.8%).
- ☛ The most commonly mentioned source of these substances of abuse is from friends (32.2%). The drugs and substances of abuse are also carried from home (29.3%), bought from other students (25.7%), bought from a bar near school (22%) or from a local brew den (19.1%). Other sources are kiosks or shops near school (16.9%), relatives (16.7%), supermarkets (11.3%), non-teaching school workers (7.4%), parents (5.3%), teachers (4.8%) and school canteen (3.9%).
- ☛ The age of onset to alcohol and drug use marks the period of transition from primary school to secondary schools. The age between 13 to 15 years presents the most critical period for the students in secondary schools to initiate alcohol and drug use. The students are likely to initiate prescription drugs and inhalants at the age of 13 years. The students are likely to initiate alcohol, *khat/ miraa*, tobacco and heroin at the age of 14 years. For cocaine, the age of onset is 14.5 years while bhang is 15 years.
- ☛ Data shows that alcohol (23.4%) is the most commonly ever used substance of abuse by students followed by ever use of *khat/ miraa* (17.0%), prescription drugs (16.1%), tobacco (14.5%), bhang (7.5%), inhalants (2.3%), heroin 1.2% and cocaine (1.1%). The commonly ever used tobacco products in a student's lifetime include cigarettes 9.2%, *shisha* 6.2%, chewed tobacco 3.9%, *kuber* 3.9% and sniffed tobacco 3.0%. The most commonly ever used prescription drugs in a student's lifetime include sleeping pills, mandrax 1.0% and rohypnol 0.6%.
- ☛ Findings show that alcohol (9.3%) is the most commonly used substance of abuse by students in the last six (6) months followed by use of prescription drugs (6.8%), *khat/ miraa* (5.9%), bhang (3.7%), inhalants (0.8%), heroin 0.4%, and cocaine 0.4%. The commonly used tobacco products in the last six (6) months include cigarettes 3.1%, *shisha* 2.9%, *kuber* 1.7%, chewed tobacco 1.5% and sniffed tobacco 1.3%. The most commonly used prescription drugs in the last six (6) months include sleeping pills 6.4%, mandrax 0.4% and rohypnol 0.3%.
- ☛ Findings also show that alcohol (3.8%) is the most commonly used substance of abuse by students in the last 30 days (current use) followed by use of prescription drugs (3.6%), *khat/ miraa* (2.6%), bhang (1.8%), inhalants (0.6%), heroin (0.2%) and cocaine (0.2%). The commonly used tobacco products in the last 30 days (current use) include cigarettes 1.6%, *shisha* 1.1%, *kuber* 1.0%, chewed tobacco 0.8% and sniffed tobacco 0.7%. The most commonly used prescription drugs in the last 30 days (current use) include sleeping pills 3.4%, mandrax 0.3% and rohypnol 0.1%.

- ☛ Prescription drugs (36.8%), alcohol (32.4%), cigarettes (32.2%), khat (29.6%) and bhang (22.8%) are the top five easily accessed substances. On the other end, rohypnol (5.8%), mandrax (6.5%), cocaine (6.9%), and heroin (7.5%) are less likely to be accessed while at school.
- ☛ According to the findings, the risk factors associated with alcohol and drug abuse among secondary school students are being male, being in a school with male students (e.g. boys boarding or boys day); being in Form 3 or Form 4 (the risk increased with increase in number of years in the school); having fewer frequency of inspection; schooling in Lower Eastern, Central or Upper Eastern; living with a single parent who is a father; not being an active member of a religious group or club; having a high amount of pocket money; having a family member or friend using alcohol or other drugs; knowledge of a schoolmate using alcohol or other drugs; and lack of awareness that alcohol and drugs are detrimental to academic performance.
- ☛ Schools have several strategies of dealing with students who are found with drugs and other substances of abuse in schools. These strategies include: guidance and counselling; suspension or expulsion from school; and summoning of parents to school. Less frequently mentioned was the use of police, punishment without suspension and referral for treatment or rehabilitation.
- ☛ However, there is lack of a pro-active strategy to deal with alcohol and drugs in schools. Indeed, the guidance and counselling teachers only get involved when cases of drugs and substance abuse were reported.

4.2 Recommendations

Based on the survey findings, the following recommendations are being made;

- ☛ The school-home continuum presents an axis along which adolescents transit into adulthood in society. Nine in ten of the students are in secondary school during their teenage years. Creating a multi-pronged approach to tackling alcohol and drug abuse in the school environment will maximize effective use of resources. Therefore, NACADA should continue to strengthen its coordinating role of supporting the youth in schools through innovative and evidence based preventive approaches.
- ☛ Most of the students pointed to the need for information on effects of drugs and other substances of abuse. Having curriculum in place would be critical to facilitate the equipping of students with the relevant knowledge on drugs and other substances of abuse. NACADA should therefore work with relevant stakeholders to put up a curriculum that also encompasses the other aspects of life skills training.
- ☛ The guidance and counselling teachers reported training needs on issues of alcohol and other drugs of abuse. They reported that they are not well equipped to handle the cases of alcohol and drug abuse and therefore they are ill prepared to guide and counsel students.

NACADA in collaboration with the Ministry of Education, Science and Technology should support in the provision of the relevant training to guidance and counselling teachers to empower them to deal with the emerging challenges of alcohol and drug abuse.

- ☛ The survey also established that the guidance and counselling teachers work within a time-constrained environment due to other competing demands and responsibilities such as covering the prescribed syllabus of other subjects that they teach. The Ministry of Education, Science and Technology, Teachers Services Commission (TSC) and KICD should address the issue of overloading guidance and counselling teachers in order to improve the quality of the services that they provide.
- ☛ The preference of abusing prescription drugs as an emerging “high” of choice among students in secondary schools is without a doubt unusual and disturbing. Thus, the teachers and parents should be extra cautious with the students because they may be abusing these drugs without their knowledge. Further, strict controls and enforcement of legislations on access to prescription drugs by the Pharmacy and Poisons Board should be enhanced.
- ☛ Lastly, NACADA should support secondary schools to come up with school-based alcohol and drug abuse policies that holistically address the aspects of promoting free drug environments within the school; early identification of students with drugs and substances of abuse problems; focus on extra-curricular activities; and evidence based preventive strategies of dealing with cases of drugs and substance abuse in schools.

REFERENCES

- Adams JB, Heath AJ, Young SE, Hewitt JK, Corley RP and Stallings MC (2003). Relationships between personality and preferred substance and motivations for use among adolescent substance abusers. *The American Journal of Drug and Alcohol Abuse*, Vol. 29(3):691-712.
- American Academy of Pediatrics (2007). The role of schools in combating illicit substance abuse. *Pediatrics*, 120:6
- Armstrong TD & Costello EJ (2002). Community studies on adolescent substance use, abuse, or dependence and psychiatric comorbidity. *Journal of Consulting and Clinical Psychology*, 70, 1224–1239.
- Balsa AI, Giuliano LM and French MT (2011) The effects of alcohol use on academic achievement in high school. *Economics of Education Review*, Vol. 30(1): 1–15.
- Bernard HR (2006). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Altamira Press.
- El Ansari W, Stock C and Mills C (2013) Is Alcohol Consumption Associated with Poor Academic Achievement in University Students? *International Journal of Preventive Medicine*, Vol. 4(10): 1175–1188.
- Fagan AA, Hawkins JD and Catalano RF (2011) Engaging communities to prevent underage drinking. *Alcohol Research and Health*, Vol. 34(2):167-174.
- Johnston LD, O'Malley PM, Bachman JG & Schulenberg JE (2006). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2005*. Bethesda, MD: National Institute on Drug Abuse.
- Kilpatrick DG, Acierno R and Saunders B (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology* 68:19–30.
- Krejcie RV and Morgan DW (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, Vol. 30: 607 – 610.
- Kuria MW (1996) Drug abuse among urban as compared to rural secondary schools students in Kenya: a short communication. *East African Medical Journal*, Vol. 73(5):339.
- Miller JW, Naimi TS, Brewer RD, Jones SE (2007) Binge Drinking and Associated Health Risk Behaviors Among High School Students. *Pediatrics* Vol. 119(1): 76 -85.
- Mrug S, Gaines J, Su W and Windle M (2010) School-Level Substance Use: Effects on Early Adolescents' Alcohol, Tobacco, and Marijuana Use. *Journal of Studies on Alcohol and Drugs*, Vol. 71(4): 488-495.
- Mrug S and Windle M (2009) Moderators of negative peer influence on early adolescent externalizing behaviours: The roles of individual behaviour, parenting, and school connectedness. *Journal of Early Adolescence*, Vol. 29:518–540.
- NACADA (2012). 2012 Report: Rapid situation assessment of the status of drug and substance abuse in Kenya. NACADA, Nairobi.
- NACADA (n.d) The role of school environment in alcohol and drug abuse among students – evidence from public secondary school students in Nairobi. NACADA, Nairobi.
- Nyamongo IK (2012). Rapid situation assessment of the status of drug and substance abuse in Kenya. Report submitted to NACADA.
- Odenwalda M, Warfa N, Bhui K, and Elberta T (2010) The stimulant khat—Another door in the wall? A call for overcoming the barriers. *Journal of Ethnopharmacology*, Vol. 132(3): 615–619.

- Perra O, Fletcher A, Bonell C, Higgins K and McCrystal P. (2012) School-related predictors of smoking, drinking and drug use: evidence from the Belfast Youth Development Study. *Journal of Adolescence*, Vol. 35(2):315-24. doi: 10.1016/j.adolescence.2011.08.009. Epub 2011 Sep 9.
- Rhodes J and Jason L (1988). *Preventing substance abuse among children and adolescents*. New York: Pergamon Press.
- Simons-Morton BG (2002) Prospective analysis of peer and parent influences on smoking initiation among early adolescents. *Prevention Science*, Vol. 3:275–283.
- Wills TA, Sandy JM and Yaeger AM (2001), Coping dimensions, life stress, and adolescent substance use: A latent growth analysis, *Journal of Abnormal Psychology* 110:309–23
- Young SE, Corley RP, Stallings MC, Rhee SH, Crowley TJ & Hewitt JK (2002). Substance use, abuse and dependence in adolescence: Prevalence, symptom profiles and correlates. *Drug and Alcohol Dependence*, 68, 309–322.

APPENDICES

Sample distribution

Sample distribution by region

SN	REGION	COUNTY/SUB-COUNTY	SAMPLE SIZE	TOTAL
1	COAST	Mombasa	200	400
		Kilifi	200	
2	NYANZA	Kisii/Nyamira	200	400
		Kisumu	200	
3	WESTERN	Bungoma	200	400
		Kakamega	200	
4	RIFT VALLEY (NORTH)	Uasin Gishu	200	400
		Keiyo Marakwet	100	
		Baringo	100	
5	RIFT VALLEY (SOUTH)	Bomet	150	400
		Nakuru	150	
		Narok	100	
6	CENTRAL	Murang'a	100	400
		Kiambu	100	
		Nyeri	100	
		Kirinyaga	100	
7	EASTERN (UPPER)	Meru	200	400
		Isiolo	200	
8	EASTERN (LOWER)	Machakos	200	400
		Makueni	200	
9	NORTH EASTERN	Garissa	400	400
10	NAIROBI	Dagoretti	80	400
		Embakasi	80	
		Kasarani	80	
		Kamukunji	80	
		Mathare	80	
TOTAL				4000