



**“Parent’s alcohol consumption behaviors and
their children’s alcohol abuse:”**

**EVIDENCE FROM SECONDARY SCHOOL
STUDENTS IN NAIROBI**

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ABBREVIATIONS AND ACRONYMS

CBS Central Bureau of Statistics

HIV Human Immunodeficiency Virus

NACADA National Campaign Against Drug Abuse Authority

SPSS Statistical Package for Social Sciences

EXECUTIVE SUMMARY

Background: Parents are both role models and primary agents of socialization for their children hence their alcohol use patterns or behaviours are likely to have an impact on their children's alcohol abuse. The study seeks to document the prevalence of alcohol abuse among students in secondary schools in Nairobi as well as to establish the nature of association between parents' alcohol consumption and their children's alcohol abuse.

Data and methods: The main type of data was quantitative in nature hence a structured questionnaire was used. The study is based on a random sample of 1281 students distributed equally among forms 1-4 in every sampled school. Any school which opted out of the study was replaced with another school similar to it in terms of gender and location. Data was entered and analysed using SPSS computer programme and the main analytic method was logistic regression because the outcome variable (past use/lifetime use of alcohol) is dichotomous.

Findings: Close to half of all the sampled students have used (or experimented) with alcohol at least once in the past. Experimentation with alcohol is higher among boys compared with girls in the sample (56% and 35% respectively). Analyses further demonstrate a statistically significant positive association between fathers' alcohol consumption and their children's alcohol use. All factors considered, students whose fathers use alcohol are 2.7 times more likely to have consumed alcohol at least once in the past compared with students whose fathers do not use alcohol. Similarly, students whose mothers currently consume alcohol are 2.6 times more likely to have consumed alcohol compared with their counterparts whose mothers are non-drinkers.

Recommendations: Training of parents to appreciate their role in mitigating initiation of alcohol among their children as well as more research on the role of peers are recommended.

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CHAPTER 1: INTRODUCTION

1.1 Background

Parents are both role models and primary agents of socialization for their children hence their alcohol use patterns or behaviours are likely to have an impact on their children's alcohol abuse. Indeed, the evidence suggests that parenting behaviours in general and alcohol-specific practices in particular are associated with their children's alcohol use (Jackson *et al.*, 1999) to the extent that they act as models as well as agents of socialization.

Research has identified several mechanisms involved in transmitting the risk of problem drinking from parents to their offspring—genetics, physiological sensitivity to the effects of consumption, psychosocial factors such as modelling substance misuse by parents, family dysfunction, negative affect, anxiety sensitivity, availability of alcohol, and poor parental monitoring. An alternative explanation of problem drinking in adolescents, including the children of parents with alcohol problems, relates to psychological motivations to use alcohol and expectancies about its effects. Adolescents often engage in risk-taking behaviours and thus may be motivated to experience the physiological or psychological enhancement gained by using alcohol. However, other research indicates that some adolescents (particularly females) may consume alcohol to cope with negative feelings, while for others (particularly males) drinking is tied closely to social conformity motives (See Chalder *et al.*, 2006 for a detailed discussion).

The overriding concern of this study is to explore nature and strength of association between parental use of alcohol and alcohol-related behaviours among their children. Alcohol is the most commonly abused substance in Kenya and has been associated with numerous negative outcomes. Early initiation of alcohol consumption has negative health, psychological and economic implications both to the user, his/her family and the society at large. It is also worth noting that alcohol is an entry point for other drugs. One study in the US found that underage persons who reported binge drinking were 7 times more likely to

report using illicit drugs during the past month than underage persons who did not binge drink¹.

1.1.1 Status of alcohol abuse in Kenya

As noted earlier, alcohol is the most commonly abused mood altering substance in Kenya. According to a study by NACADA Authority, 14 percent of Kenyans aged between 15 and 64 currently use alcohol. The same study found that 8% of children aged 10 to 14 years have used alcohol at least once in the past (NACADA 2007).

Illicit brews seem popular among Kenyans: 2% of 10-14 year olds have tasted *chang'aa* at least once in the past, while 15% of 15 - 64 year olds have used *chang'aa* at least once. This scenario notwithstanding, licit bottled alcohol poses more harm due to the trust accorded to it by consumers hence the tendency to overindulge and this is made worse by aggressive marketing by the alcohol industry. Emergence of “third generation” alcohols has compounded the problem of alcohol abuse to the extent that they are licit yet highly potent and substandard.

1.1.2 Parent alcohol use and children’s alcohol abuse: exploring the linkages

According to a study by Roosa and others (1988), children of problem-drinking parents were more at risk of depression, low self-esteem, and heavy drinking than their peers in the general high school population. Parenting practices, particularly support and control, have been linked to development of adolescent drinking, delinquency, and other problem behaviors. The study confirmed that parental support and monitoring are important predictors of adolescent outcomes even after taking into account critical demographic/family factors, including socioeconomic indicators, age, gender, and race of the adolescent, family structure, and family history of alcohol abuse. In addition, peer networks remain a significant predictor of drinking behavior and deviance and interact with aspects of parenting.

¹ <http://www.adolescent-substance-abuse.com/binge-drinking-underage.html>

Other studies while confirming this linkage have gone on to advocate for consideration of social class in predicting the likelihood of alcohol misuse among children. A study by Green and colleagues (1991) found that both social class and parental smoking behaviour were independently associated with young people's smoking, with young people from lower social class households or whose parents smoked being most likely to smoke. Social class and gender were independently associated with young people's drinking, with males and young people from non-manual households being most likely to drink. Parental drinking behavior was associated positively with young people's drinking. The study concluded that it is important to take social class and gender into account since it may influence whether or not there is an association between the behavior of young people and that of their parents, and it may also influence young people's behavior in addition to influences from parental behavior (Green *et al.*, 1991).

Another study (Wilks *et al.*, 1989) found that the strongest predictors of alcohol use for males were their perceptions of their father's and mother's drinking, and their father's actual drinking. Best friend's drinking was positively related to the adolescent males' perceptions of themselves as a drinker. The single predictor of their internalized norms was the perception adolescent males had of their friend's drinking. Significantly, the adolescent male's own norms predicted how much and what they drank. For adolescent females, how much they believed their best friend drank, and their friend's normative standards, were the strongest predictors of alcohol use. Father's drinking also influenced the drinking practices of daughters, but mothers had no impact on their daughters' alcohol use. In contrast to young males, females' personal preferences or liking of alcohol successfully predicted most of their drinking behavior.

1.3 The problem

Alcohol is the most commonly abused substance in Kenya. According to a study by the Kenya Medical Research Institute, 70% of Kenyan families abuse alcohol or are affected by alcohol abuse in one way or another. A study by the National Campaign Against Drug Abuse Authority in 2007 revealed that nationally, 8% of 10 to 14 year-olds have ever used alcohol

while about 40% of people aged 15 to 65 years have used one type of alcoholic beverage or another in the past. About 14% of Kenyans aged 15-65 years are current users of alcohol (NACADA 2007).

Anecdotal evidence suggests that there are profound changes in drinking patterns and contexts among the Nairobi city's residents. It is common for parents to consume alcohol in the presence of their children in popular hotels and bars during family outings but the impact of such contexts on children's alcohol use practices later in life has not been documented. In all likelihood, parents' use of alcohol has a direct and positive influence on their children's odds for alcohol use and abuse later in life. This was the key concern of the study.

1.4 Objectives

1.4.1 General objective

The general objective of the study is to understand the relationship between parents' use of alcohol behaviours and their children's alcohol use.

1.4.2 Specific objectives

1. To document the prevalence of alcohol abuse among students in secondary schools in Nairobi;
2. To establish the nature of association between parents' alcohol use behavior and their children's alcohol misuse.

1.5 Justification of the study

Early initiation of alcohol use is associated with alcohol abuse and attendant social and health problems. A study by Hawkins and others (1997) found that most measured risk factors for alcohol misuse were mediated through the age of alcohol initiation. Gender differences in alcohol misuse at age 17-18 was the only one not mediated by age of alcohol initiation. Variables associated with these differences require further study. The results of this study indicate the importance of prevention strategies to delay the age of initiation of alcohol use.

Alcohol intoxication has been identified a risk factor for rapid HIV transmission since it affects judgment hence influencing risky decision-making and reducing inhibitions. The Kenya Demographic and Health Survey of 2003 shows that HIV prevalence among women who had ever consumed alcohol was 19%, compared to 9% among their never-drinking counterparts (CBS 2004). A study by Ayisi (2000) in Kisumu, the third largest city in Kenya, found that after controlling for confounding variables, women who drank alcohol were 60% more likely to be HIV-positive than women who did not drink.

In summary, there are glaring gaps in our knowledge about parent-child alcohol use linkages in the Kenyan context. Are parents unwittingly recruiting their children into alcohol abuse and probable alcohol dependence? Understanding the linkages between parent use of alcohol and their children's alcohol use is useful at both programme and policy levels. At programme level, the findings of the study are expected to refocus the campaign against alcohol abuse by redefining the role of parents in prevention of adolescent alcohol use/abuse. This assertion is based on the postulate that parents would consciously strive to keep their children away from alcohol and avoid glamorizing alcohol consumption if they understand that their usage patterns are a risk factor for their own children's alcohol abuse. At policy level, the findings will inform the debate on whether to legally prohibit access by children to places where alcohol is sold.

CHAPTER 2: MATERIALS AND METHODS

2.1 Study site

The study was conducted in selected secondary schools in Nairobi (Annex 1).

2.2 Study design

The study adopted a cross-sectional design where quantitative data was obtained

2.3 Sampling

The study randomly sampled 1281 students, and was distributed equally among forms 1-4 in every sampled school. A sampling frame of schools within Nairobi was obtained from the Ministry of Education. Stratification was done to categorize the schools into public and private schools. Stratification was also applied to categorize schools. Selection of the schools was based on the basis of gender (boys' only, girls' only and mixed); boarding status; and geographic location to factor in issues of socio-economic status albeit loosely.

Given that some vital information was lacking even from the Ministry of Education headquarters, ranking of the schools was done according to academic performance based on the researchers' own understanding of the schools and not strictly objective status as recorded by the Ministry of Education. However, there is no evidence that this approach biased the sample in any way. Any selected school which opted out of the study was replaced with another school similar to it in terms of gender and location. It may be noted here that this problem was more common among private schools compared with public ones. A complete list of schools which participated in the study is presented in Annex 1.

2.4 Study instruments

A structured self-administered questionnaire was used. However, for the sake of consistency in understanding and interpretation of the questions, research assistants read out the questions and explained to the respondents how to fill them.

2.5 Recruitment and training of research assistants and supervisors

Research assistants were trained in a one day seminar in NACADA Authority boardroom. Given the sensitive nature of the study, special care was taken in the recruitment of interviewers so as to minimize non-response brought about by discomfort of face-to-face interview. Young but experienced research assistants participated in the study.

2.5 Fieldwork

Data was collected in a three-day period. The research supervisor ensured quality by reviewing all questionnaires as soon as they were submitted to him/her.

2.6 Data entry, cleaning, and analysis

Data was keyed in and analysed using SPSS computer programme. The main analytic method was logistic regression because the outcome variable (ever use of alcohol) is dichotomous.

CHAPTER 3: FINDINGS

This chapter discusses the key findings of the study. Characteristics of survey respondents as well as the results of analysis of the variables of interest are presented.

3.1 Characteristics of survey respondents

Background information of all respondents was collected to enable categorization of students according to the various alcohol-related indicators of interest in this study. Table 3.1 shows is a percentage distribution of students who participated in the study according to type of school, religion, gender, age, class, and socio-economic status as reflected in ownership of durable goods namely a car and a computer.

Girls' only boarding schools accounted for 28 percent of the sample while boys only boarding schools accounted for 23 percent while girls only boarding and day schools accounted for the least proportion at 6 percent. The sample also had more males than females (68% and 32% respectively). The proportions of students across all the classes were almost equally distributed, although those in form four were slightly fewer (about 21%). Majority were Protestants (51%), followed by Catholics (28%), Muslims (10%) and finally Hindus (5%). About 56% of the students reported that their parents own a car and another 59% have a computer at home. The 16-17 age bracket was relatively overrepresented compared with younger and older age. (For the sake of meaningful interpretation of the findings, these age categories are used in all the analysis. As can be seen in Annex 2, some ages particularly the youngest and the oldest have very few cases hence they cannot be analysed and interpreted realistically if presented in single years).

Table 3.1: Characteristics of survey respondents

Characteristics	Categories	Number (N=1281)	Percent
Type of school	Boys only boarding	295	23
	Girls only boarding	360	28.1
	Boys only day	199	15.5
	Girls only day	47	3.7
	Mixed day	129	10.1
	Mixed boarding	91	7.1
	Boys only boarding and day	88	6.9

Characteristics	Categories	Number (N=1281)	Percent
	Girls only boarding and day	72	5.6
Gender	Male	875	68.3
	Female	406	31.7
Age*	12-15	375	29.3
	16-17	572	44.7
	18+	320	25
	Missing	14	1.1
Class/form	One	324	25.3
	Two	340	26.5
	Three	352	27.5
	Four	263	20.5
	Missing	2	0.2
Religion	Catholic	353	27.6
	Protestant	652	50.9
	Muslim	130	10.1
	Hindu	69	5.4
	Others	73	5.7
	Missing	4	0.3
Ownership of durable	Car	711	55.5
	Computer	753	58.8
	Total		100

*See Annex 1 for distribution of age in single years

3.2 Alcohol abuse

In order to assess the prevalence of alcohol abuse, all respondents were asked if they had consumed an alcoholic drink in their lifetime. Past usage of alcohol is defined as usage at least once irrespective of whether the respondent got intoxicated or not. It, however, excludes inadvertent consumption of alcohol such as “spiking”.

Table 3.2 is a percent distribution of secondary school students in the sample who reported having ever consumed alcohol at least once in their lifetime according to different background characteristics. Close to half of all the sampled students have used or experimented with alcohol at least once in the past. Experimentation with alcohol is higher

among boys compared with girls in the sample (56% and 35% respectively). As expected, alcohol consumption increases consistently with age: while only 38 percent of students aged 12 to 15 years claimed to have consumed alcohol in their lifetime, the proportion increase to 51 percent among those aged between 16 and 17 years and reaches 59 percent among those aged 18 or more years. With respect to religious affiliation, Hindu and Muslims have the lowest rates of alcohol use (22% and 31% respectively) while Christians in general as well as those who profess other religions or have no religion have prevalence rates of slightly over 50 percent.

Lifetime use of alcohol also varies with type of school. It is highest among boys' only boarding and day schools (67%) and lowest among mixed day schools (35%). It can also be seen in Table 3.2 that those whose households own a car (an indirect measure of socio-economic status), those who think their friends take alcohol, and those who reside in Nairobi are proportionately more likely than their opposites to report lifetime alcohol consumption.

Finally, there appears to be a very close association between parents' alcohol use and the likelihood of their children's lifetime alcohol use. Sixty-six percent of students whose fathers take alcohol reported having ever consumed alcohol compared with 39 percent among those whose fathers do not consume alcohol and 42 percent among those who said they did not have a father. Perhaps the most spectacular finding here is that more than three-quarters of students whose mothers use alcohol have also used an alcoholic drink at least once in the past.

Table 3.2 Percent distribution of all students in forms 1-4 who have used alcohol at least once in their lifetime according to background characteristics

Characteristics	Categories	Number (N=1281)	Percentage who have ever taken an alcoholic drink
Gender	Male	875	55.6
	Female	406	35.3
Age	12-15	375	37.8
	16-17	572	51.1
	18+	320	58.8

Characteristics	Categories	Number (N=1281)	Percentage who have ever taken an alcoholic drink
Religion	Catholic	353	53.4
	Protestant	652	52.2
	Muslim	130	31.0
	Hindu	69	22.4
	Others	73	52.1
Type of school	Boys only boarding	295	54.6
	Girls only boarding	360	51.8
	Boys only day	199	39.6
	Girls only day	47	55.3
	Mixed day	129	34.9
	Mixed boarding	91	38.5
	Boys only boarding and day	88	67.0
	Girls only boarding and day	72	54.2
Car ownership	Owns car	711	55.4
	Does not own car	550	41.2
Father takes alcohol	Yes	399	66
	No	658	38.5
	No father	192	41.9
Mother takes alcohol	Yes	169	76.3
	No	998	45.3
	No mother	90	23.3
Thinks friends take alcohol	Yes	878	62.6
	No	381	17.9
Residence	Nairobi	1092	50.3
	Other town	125	44.8
	Rural	51	37.3
Total		1281	49.20

3.3 Where do children consume their first alcoholic drink?

The study further sought to find out where the sampled students first consumed an alcoholic drink by posing the question “Where did you take alcohol the first time?” Table 3.3 presents results of analyses of the context of first use of an alcoholic drink among the sub-sample of 620 students who reported use of alcohol at least once in the past. Evidently, home is the main place for initiation of alcohol consumption (mentioned by 39%) followed by legal alcohol selling outlets (24%). Friends’ home is also a significant place in terms of initiation of alcohol use as it was mentioned by 23% of the respondents. Results further suggest that friends play a critical role in initiation of alcohol use: over one half of all students who reported that they had used an alcoholic drink at least once in the past said that they were with their friends the first time they drank. About 20 percent mentioned other relatives while 12 percent mentioned brother or sister. It is, however, not possible to investigate further the ages of these companions at the context of first incidence of alcohol consumption because they were not captured in the questionnaire.

Table 3.3 Proportion of students who have ever used alcohol at least once in their lifetime according to place of first use and other people present at first use of alcohol

Place	Number	Percent
Home	240	38.9
Bar/club/pub	148	24.0
Friend's home	144	23.3
In school	29	4.7
Kiosk/shop	5	0.8
Supermarket	14	2.3
Other places	22	6.0
Other people present the first day respondent consumed alcohol		
Brother/sister	72	11.9
Friends	325	53.7
Other relatives	120	19.8
Parents	50	8.3
Others	12	2.0

3.4 Age at first use of alcohol

Previous studies have demonstrated that the younger the age at first use of alcohol, the higher the likelihood of habituation and alcoholism as well as use of other drugs including illicit drugs. In the Kenyan context, studies demonstrate that young people begin their drug abuse careers with licit drugs such as alcohol and cigarettes before graduating to illicit ones such as bhang and heroin.

Table 3.4 shows the distribution of students who have ever used alcohol by age at first use. One quarter of these students said they took their first drink before their 12th birthday. However, most of the students tasted their first drink between the age of 12 and 15 years, which coincides with entry into secondary school as well as onset of puberty to most adolescents.

Table 3.4: Percent distribution of secondary school students by age at which they took their first alcoholic drink

Age when first took an alcoholic drink	Number	Percent
Below 12 years	155	25.0
12-15 years	307	49.5
16-17 years	100	16.1
18+ years	10	1.6
Age at first use not stated	48	7.7
Total	620	100

3.4 Drinking patterns: got intoxicated in the last one year

About one quarter (24%) of all the students in the sample have got intoxicated at least once (not shown). Further analyses based on the sub-sample of students at risk for intoxication (that is, those who have taken an alcoholic drink at least once) suggest that there is high prevalence of intoxication among secondary school students in Nairobi province.

Table 3.5: Proportion of students in forms 1-4 who have ever drunk until they got intoxicated in the last one year (based on sub-sample of those used alcohol at least once)

Characteristics	Categories	Number (N=620)	Percentage got intoxicated in the last one year
Gender	Male	479	47.0
	Female	141	27.3
Age categories	12-15	137	25.8
	16-17	290	40.1
	18+	187	57.7
Form	One	118	22.6
	Two	161	33.3
	Three	196	53.1
	Four	145	54.3
Religion	Catholic	187	35.3
	Protestant	338	43.5
	Muslim	40	58.3
	Hindu	13	33.3
	Others	38	52.6
Type of school	Boys only	297	46.7
	Girls only	243	38.0
	Mixed	80	40.5
Car ownership	Yes	386	45.2
	No	224	35.6
Father takes alcohol	Yes	258	44.6
	No	249	40.2
	No father	96	42.7
Mother takes alcohol	Yes	128	49.2
	No	433	42.0
	No mother	42	26.2
Total			42.5

As shown in Table 3.5, 43 percent of all students who have ever drunk alcohol also drank until they were intoxicated in the year preceding the survey. Male students and older

students in general have higher likelihood of intoxication compared with their female counterparts. The same pattern is evident among those whose parents consume alcohol.

3.5 Results of multivariate analysis of lifetime use of alcohol

It may be recalled that the overriding concern of this study was to understand the nature and strength of association between parents' alcohol use on the one hand and their children's alcohol abuse on the other. In the previous sections an attempt was made to explore some of the characteristics of students who ever used an alcoholic drink and one of the key findings was that parents' alcohol use is positively correlated with their children's experimentation with alcohol. However, without statistical controls, it is not possible to firmly confirm that indeed there exists close association between parents' alcohol consumption and their children's alcohol abuse without taking care of confounding factors. For this reason, multivariate logistics regression analysis was used to confirm these associations while controlling for confounding factors.

This section presents results of multivariate logistic regressions analyses of the likelihood that children of parents who use alcohol are more likely than children whose parents do not use alcohol to have consumed an alcoholic drink at least once in the past, that is, to have initiated alcohol use. Control variables for the final model were selected for inclusion into final models based on their strength of association with the dependent variables (ever used alcohol) as captured through univariate logistic regression analysis. Five control variables included in the model are: positive views about friends' alcohol use; household ownership of a car; usual place of residence; gender; and age of respondent.

Table 3.6 presents odds ratios from logistic regression of the likelihood for lifetime use of alcohol among students in Nairobi's secondary school. Our two variables of interest – father's and mothers use of alcohol – were put in the model together with other variables known to influence adolescent alcohol use as captured in previous studies. Age rather than grade/form was used in the model because it was found to have stronger association with alcohol use.

As hypothesized, parents' alcohol use is closely associated with alcohol experimentation among their children. It is evident from Table 3.6 that there is a statistically significant positive association between fathers' alcohol and their children's alcohol use. All factors considered, students whose fathers use alcohol are 2.7 times more likely to have consumed alcohol at least once in the past compared with students whose fathers do not use alcohol. Similarly, students whose mothers currently consume alcohol are 2.6 times more likely to have consumed alcohol compared with their counterparts whose mothers are non-drinkers².

Although these findings support the hypothesized link between parents and their children's alcohol, it is also evident that peers play a significant role in initiation of alcohol use. Students who thought their friends consume alcohol are almost seven times more likely to have used alcohol compared with those who thought their friends do not drink. Other variables that are significantly associated with alcohol experimentation are economic status as reflected by household ownership of a car, gender and age.

² Granted, it would have been quite insightful to assess alcohol use status among the nine categories of students with respect to orphan hood and alcohol use among parents [neither parent drinks; only father drink; fatherless children with a mother who does not drinks; only mother drinks; both parents drink; fatherless children with a mother who drinks; motherless children with a father who does not drink; motherless children with a father who drink; and children with no parents]. However, such an analysis is not tenable due to the fact that most of these categories had very low number of cases. Distribution of students according to these categories is presented in Annex 3.

Table 3.6: Odds ratios from logistic regression of the likelihood for having ever used alcohol among student in Nairobi, by selected characteristics

	Beta Coefficients	Standard errors	Significance	Odds ratios
A. Parental alcohol use				
(Father does not take alcohol)*			0.00	
Father takes alcohol	0.99	0.16	0.00	2.69
No father	0.03	0.45	0.95	1.03
(Mother does not take alcohol)			0.00	
Mother takes alcohol	0.97	0.25	0.00	2.63
No mother	-0.75	0.49	0.12	0.47
B. Role of peers				
(Thinks friends do not take alcohol)				
Thinks friends take alcohol	1.87	0.18	0.00	6.50
C. Social and economic indicators				
(Household does not own a car)				
Household owns a car	0.34	0.16	0.03	1.41
(Lives in rural area)			0.18	
Lives in Nairobi	0.55	0.37	0.14	1.73
Lives in other town	0.25	0.43	0.57	1.28
D. Individual characteristics				
(Female)				
Male	0.85	0.17	0.00	2.34
(12-15 years)			0.01	
16-17 years	0.38	0.18	0.03	1.47
18 or more years	0.63	0.21	0.00	1.87
Constant	-3.50	0.44	0.00	0.03
*Note: Reference categories are in parentheses				

3.6 Discussion

The overriding concerns of the study were two-pronged: to understand the magnitude of alcohol abuse among students in Nairobi's secondary schools and to assess the direction and strength of association between parental alcohol use and reported abuse among students. Data was collected from a sample of 1281 students in the city of Nairobi's public

and private secondary schools. The sampled students responded to questions on their own alcohol use, as well as that of their parents.

This study established that alcohol abuse among secondary school students is high: close to half of these students have used an alcoholic drink at least once in the past, a finding that is consistent with those from other studies in Kenya with respect to alcohol use among young people in Kenya. For instance, according to a rapid situation assessment on alcohol and drug abuse in Kenya by NACADA Authority (2007), 8 percent of children aged 10-14 have experimented with alcohol at least once in the past. The proportion increases to 19 percent among those aged 15-17 years and to 35 percent among young adults aged between 18 and 24 years.

Parents not only offer models for acceptable behavior but also present the adolescent with a value system on which critical life decisions are based. Their behaviours as well as norms and values convey standards of conduct, which shape adolescents' perceptions of the cost of their activities in general hence, influence their behavior (Bandura, 1992). According to a study by Wilks and colleagues (1989) in the US, the strongest predictors of alcohol use for males were their perceptions of their father's and mother's drinking, and their father's actual drinking. Best friend's drinking was positively related to the adolescent males' perceptions of themselves as a drinker.

Consistent with the hypothesis that parents' alcohol use shapes the likelihood for their children's alcohol abuse, this study found that parents' alcohol use has a role to play, at least in initiation of alcohol abuse among their children. Mothers and fathers seem to play an equal role. All factors considered students whose fathers use alcohol are 2.7 times more likely to have consumed alcohol at least once in the past compared with students whose fathers do not use alcohol. Similarly, students whose mothers currently consume alcohol are 2.6 times more likely to have consumed alcohol compared with their counterparts whose mothers are non-drinkers. These findings are explicable in terms of poor role modeling, inadequacies in parenting, and availability of alcohol in the house.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The prevalence of alcohol abuse among secondary school students in Nairobi is high. Close to half of all students and as many as 67 percent of those in boys only day and boarding school have used alcohol at least once in the past. This assertion is further supported by the fact that 47 percent of males who have ever used an alcoholic drink have drunk until they were intoxicated. This problem is concentrated more among students who are aged over 18 years.

Parental alcohol use is a significant risk factor for experimentation with alcohol among their children. The study has demonstrated that fathers and mothers, who drink, may be recruiting their children into alcohol consumption and probable habituation. Children of alcohol users are almost 3 times more likely to have experimented with alcohol compared with those whose parents do not use alcohol.

4.2 Recommendations

4.2.1 Programmatic

There is a serious need to create awareness among parents with the aim of increasing their appreciation of their unique role in curbing alcohol abuse among their children. Such training should focus on role modeling as well as issues of access to alcohol among children. Parents who take alcohol, for instance, ought to understand that their alcohol is a predisposing factor for alcohol abuse among their children hence they need to specially guide their children with respect to views, attitudes and behaviours pertaining to alcohol in order to ensure that their children do not initiate alcohol consumed before reaching the legal age for alcohol consumption and that when they reach that age, they do not fall into the trap of alcohol abuse and alcoholism.

The study also found that perception of peers' (captured here as "friends") alcohol use are closely associated with actual experimentation with alcohol. In this regard, it is recommended that efforts to curb alcohol abuse among the youth should also focus on peer

networks and use them as channels for dissemination of accurate information about alcohol and other drugs. It should be noted that parents have a role to play to the extent that they can influence their children's selection of peer group members.

Finally, all young people require more information about the dangers of alcohol abuse simply because the rate of alcohol abuse as documented in this study is high. The fact that 43 percent of all students who have ever consumed alcohol have also drunk until they were intoxicated in the last one year implies that a huge proportion of the students is at risk for experiencing the many negative consequences of alcohol abuse.

4.2.2 Research

There is need for more studies on the role of peers in initiation of alcohol abuse among students given the close association between positive perceptions on alcohol use among friends and one's alcohol abuse. These perceptions seem to be the most important predictor of alcohol abuse among students who participated in the study.

There is need to study students' experiences with alcohol abuse using qualitative approaches. An analysis of personal as well as friends' experiences with alcohol – both positive and negative – can help intervention programmes focus their messages. Such studies should also focus on students who have never used an alcohol drink, which can unearth the nature of protective factors that cannot be teased out from quantitative information.

5.0 REFERENCES

Ayisi J. G. 2000. "Risk Factors for HIV infection among symptomatic Pregnant women attending an antenatal clinic in Western Kenya" *International Journal of STDs & AIDS*, 11: 789 – 797.

CBS (Central Bureau of Statistics) 2003. Kenya Demographic and Health Survey. CBS, ORC Marco

Chalder Melanie, Frank J. Elgar¹ And Paul Bennett. 2006. "Drinking and motivations to drink among adolescent children of parents with alcohol problems". *Alcohol and Alcoholism*. 41(1):107-113

Green, Gill, Sally Macintyre, Patrick West, Russell Ecob. 1991. "Like parent like child? Associations between drinking and smoking behaviour of parents and their children". *British Journal of Addiction*. [86 \(6\)](#) 745–758

Hawkins J. David, John W. Graham, Eugene Maguin, Robert Abbott, Karl G. Hill, and Richard F. Catalano. 1997. "Exploring the Effects of Age of Alcohol Use Initiation and Psychosocial Risk Factors on Subsequent Alcohol Misuse. *Journal of Studies in Alcohol*. 58(3): 280–290.

Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64-105. doi: 10.1037/0033-2909.112.1.64

Jackson, Christine, Lisa Henriksen, Denise Dickinson. 1999. *Journal of Studies on Alcohol*. 60 (3). (<http://www.jsad.com/jsad/articles/60/3/65.html>)

Roosa, Mark W., Irwin N. Sandler, Janette Beals, and Jerome L. Short. 1988. *American Journal of Community Psychology*, Vol. 16, No. 2,

NACADA Authority. Rapid situation assessment of alcohol and drug abuse in Kenya – 2007. NACADA Authority, Nairobi.

Wilks, J., Callan, V. J. And Austin, D. A. (1989), Parent, Peer and Personal Determinants of Adolescent Drinking. *British Journal of Addiction*, 84: 619–630. doi: 10.1111/j.1360-0443.1989.tb03477.x

6.0 ANNEXES

6.1 Annex 1 School which participated in the study

1. Aquinas High School
2. Arya Boys Secondary School
3. C.G.H.U Girls Secondary
4. Dagoretti Mixed Sec School
5. Eastleigh Secondary School
6. High Way Secondary School
7. Huruma Girls High School
8. Jamhuri Secondary School
9. Karura SDA Secondary School
10. Karura Secondary
11. Langata Secondary School
12. Le Pic Senior School
13. Light Academy
14. Moi Forces Academy
15. Nairobi School
16. Nembu Girls
17. Ofafa Jericho Secondary School
18. Parklands Boys Secondary School
19. Precious Blood Riruta
20. Shauri Moyo Muslim
21. Shree Cutchi
22. St Austin Secondary School
23. St Dominic Savios
24. St Teresa Boys
25. Starehe Boys
26. State House Girls
27. Strathmore
28. Temple Road Secondary School

6.2 Annex 2 Distribution of respondents' age in single years

Years	Frequency	Percent
12	7	0.5
13	20	1.6
14	115	9
15	233	18.2
16	294	23
17	278	21.7
18	207	16.2
19	77	6
20	22	1.7
21	10	0.8
22	2	0.2
25	1	0.1
26	1	0.1
Not stated	14	1.1
Total	1281	100

6.3 Annex 3 Distribution of respondents by parents' alcohol use orphanhood

Categories	Frequency	Percent
None of the parents uses alcohol	570	44.5
Only father uses	286	22.3
Father not alive and mother does not use	126	9.8
Only mother uses	42	3.3
Both use	95	7.4
Father not alive and mother uses	30	2.3
Mother not alive and father uses	31	2.4
Mother not alive and father drinks	15	1.2
No mother and no father alive	36	2.8
Total	1231	96.1
Missing	50	3.9
Total	1281	100