SEXUAL VIOLENCE AGAINST ADOLESCENT GIRLS IN MIXED-DAY SECONDARY SCHOOLS IN LIMURU SUB-COUNTY, KIAMBU COUNTY, KENYA.

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A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF DEGREE OF MASTER OF PUBLIC HEALTH IN THE SCHOOL OF PUBLIC HEALTH, KENYATTA UNIVERSITY.

JUNE 2015
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university or any other award.

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DEDICATION

To my dear parents for believing in me and supporting me all the way. I could not have made it without your support and prayers.

To my grandmother who has cheered me all the way even without full understanding of what a degree is.
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# TABLE OF CONTENTS

DECLARATION ................................................................................................................................. ii  
DEDICATION ................................................................................................................................ iii  
ACKNOWLEDGEMENTS ................................................................................................................. iv  
TABLE OF CONTENTS ......................................................................................................................... v  
LIST OF FIGURES .............................................................................................................................. viii  
LIST OF TABLES .............................................................................................................................. ix  
OPERATIONAL DEFINITIONS ........................................................................................................... x  
ABBREVIATIONS AND ACRONYMS .............................................................................................. xi  
ABSTRACT ......................................................................................................................................... xii  

## CHAPTER ONE: INTRODUCTION.......................................................................................... 1  
1.1 Background information ................................................................................................................. 1  
1.2 Problem Statement ............................................................................................................................. 2  
1.3 Justification of study .......................................................................................................................... 3  
1.4 Research Questions ......................................................................................................................... 5  
1.5 Research objectives ......................................................................................................................... 5  
1.5.1 Broad objective ............................................................................................................................... 5  
1.5.2 Specific Objectives ......................................................................................................................... 5  
1.6 Conceptual Framework .................................................................................................................... 6  

## CHAPTER TWO: LITERATURE REVIEW............................................................................. 8  
2.1 Proportion adolescent girls affected by sexual violence ................................................................. 8  
2.2 Perpetrators of sexual violence against adolescent girls ............................................................... 9  
2.3 Factors increasing vulnerability of adolescent girls to sexual violence ........................................... 10  
2.3.1 Alcohol use ................................................................................................................................. 11  
2.3.2 Sexual violence at debut .............................................................................................................. 11  
2.3.3 Socio-economic status of family ................................................................................................. 12  
2.3.4 Family connectedness ................................................................................................................... 13  
2.4 Factors affecting disclosure of sexual violence among adolescent girls ....................................... 13  

## CHAPTER THREE: RESEARCH METHODOLOGY ......................................................... 16  
3.1 Study area ....................................................................................................................................... 16  
3.2 Research design .............................................................................................................................. 16  
3.3 Measurement of variables .............................................................................................................. 16  
3.4 Study population ............................................................................................................................. 18  
3.5 Inclusion and exclusion Criteria ..................................................................................................... 18  
3.5.1 Inclusion Criteria ........................................................................................................................ 18  
3.5.2 Exclusion Criteria ........................................................................................................................ 18
3.6 Sample Size Calculation .............................................................................19
3.7 Sampling Techniques .................................................................................19
3.8 Research Instruments ..................................................................................20
  3.8.1 Self administered questionnaires ..........................................................20
  3.8.2 Focus group discussions (FGD) ..............................................................20
  3.8.3 Key informant interviews (KII) ..............................................................20
3.9 Pre-Testing Of Instruments ........................................................................20
3.10 Validity And Reliability ..............................................................................21
  3.10.1 Validity ..................................................................................................21
  3.10.2 Reliability .............................................................................................21
3.11 Data Collection Procedures ......................................................................22
3.12 Data analysis and presentation ..................................................................22
3.13 Ethical Consideration ..................................................................................23

CHAPTER FOUR: RESULTS AND DISCUSSION ........................................24

4.1 Introduction ..................................................................................................24
4.2 Socio-demographic characteristics ..............................................................24
4.3 Proportion of girls affected by sexual violence in Limuru Sub-county ....25
4.4 Perpetrators of Sexual Violence in Limuru Sub-county ............................28
  4.4.1 Gender of perpetrators ...........................................................................28
  4.4.2 Relationship with perpetrators of SVAG in Limuru Sub-county .......29
  4.4.3 Perpetrators, substance abuse and SVAG ............................................32
  4.4.4 Places where sexual violence occurs ....................................................33
4.5 Factors affecting vulnerability of adolescent girls to sexual violence ......33
  4.5.1 Adolescent girls, alcohol use and vulnerability to SVAG in Limuru Sub-county ...............................................................34
  4.5.2 Forced sex at debut .................................................................................35
  4.5.3 Family connectedness and its influence on SVAG in Limuru Sub-county ...............................................................36
4.6 Factors affecting disclosure levels in SVAG matters .................................36
  4.6.1 Level of knowledge on sexual violence and its association with disclosure of SVAG ...............................................................38
  4.6.2 Level of knowledge on service availability .............................................39
  4.6.3 Family connectedness and its influence on levels of disclosure .....40
4.7 DISCUSSION ...............................................................................................41
  4.7.1 Proportions of adolescent girls affected by sexual violence ..........41
  4.7.2 Perpetrators of sexual violence ..............................................................42
  4.7.3 Factors that increase vulnerability to sexual violence .........................43
  4.7.4 Factors that affect disclosure of SVAG .................................................46

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ........................................48

5.1 Introduction ..................................................................................................48
5.2 Summary .......................................................................................................................... 48
5.3 Conclusions ....................................................................................................................... 49
  5.3.1 Proportion of girls affected by SVAG in Limuru Sub-County .................. 49
  5.3.2 Perpetrators of SVAG in Limuru Sub-County ........................................... 49
  5.3.3 Factors associated with SVAG in Limuru Sub-County ......................... 49
  5.3.4 Factors associated with disclosure of SVAG in Limuru Sub-County .... 50

5.4 Recommendations ......................................................................................................... 50
  5.4.1 Recommendations from the study ......................................................... 50
  5.4.2 Recommendations for further research ................................................. 51

REFERENCES ....................................................................................................................... 52

APPENDICES ....................................................................................................................... 57
  Appendix 1: Informed Consent ....................................................................................... 57
  Appendix 2: Questionnaire for adolescent girls ...................................................... 60
  Appendix 3: Key informant interview schedule- Children’s Officer .................... 67
  Appendix 4: Key informant interview schedule- School heads .................................. 68
  Appendix 5: Key informant interview schedule- Police officers ............................... 69
  Appendix 6: Key informant interview schedule- Medical personnel ...................... 70
  Appendix 7: Focus group discussion guide with adolescent girls .......................... 71
  Appendix 8: Map of study area .................................................................................... 72
  Appendix 9: Graduate School Approval ...................................................................... 73
  Appendix 10: Ethical Approval by Kenyatta University Ethical Review Committee .................................................................................................................. 74
  Appendix 11: NACOSTI Permit .................................................................................... 75
  Appendix 12: Limuru DEO’s Authority to conduct study within schools ............. 76
LIST OF FIGURES

Figure 1.1: Conceptual framework .......................................................................................... 7

Figure 4.1: Overall proportion of adolescent girls affected by sexual violence in Limuru Sub-county, March 2014 ................................................................. 25

Figure 4.2: Number of times adolescent girls in mixed day secondary schools in Limuru Sub-county had faced various forms of SVAG, March, 2014 .................. 27

Figure 4.3: Gender of perpetrators of sexual violence among adolescent girls in mixed day secondary schools in Limuru Sub-county, March, 2014 ......................... 29

Figure 4.4: Relationship between the adolescent girls in mixed day secondary schools and perpetrators of sexual violence in Limuru Sub-county, March, 2014 .......... 30

Figure 4.5: Perpetrators of SVAG in mixed day secondary schools, who were under substances when carrying out the acts, March, 2014 ................................. 32

Figure 4.6: Place where SVAG in mixed day secondary schools in Limuru Sub-county occurred, March, 2014. ........................................................................ 33

Figure 4.7: Nature of sexual debut among adolescent girls in mixed day secondary schools in Limuru Sub-county, March 2014 ......................................................... 35

Figure 4.8: Levels of knowledge on sexual violence among adolescents in mixed day secondary schools in Limuru Sub-county, March 2014 ........................................ 39

Figure 4.9: Level of knowledge on service availability among adolescent girls in mixed day secondary schools in Limuru Sub-county .................................................. 40

Figure 6.1: Map of Limuru Sub-county .................................................................................. 72
LIST OF TABLES

Table 3.1: Calculation of socio-economic status (SES) among adolescent girls in Limuru Sub-county, March, 2014.................................................................17

Table 3.2: Sampling Frame..................................................................................................................19

Table 4.1: Socio-demographic characteristics of adolescent girls in mixed day secondary schools in Limuru Sub-county, March, 2014 ..................................................24

Table 4.2: Proportion of adolescent girls in mixed day secondary schools affected by sexual violence in Limuru Sub-county zones, March, 2014............................................26

Table 4.3: Frequency and multiplicity of SVAG among girls of various socio-demographic characteristics in Limuru Sub-County, March, 2014.............................28

Table 4.4: Various perpetrators involved in the three forms of SVAG in Limuru Sub-County, March, 2014 ..................................................................................31

Table 4.5: Perpetrators of SVAG under substances when carrying out the acts in Limuru Sub-county, March, 2014.................................................................32

Table 4.6: Factors associated with vulnerability to SVAG in Limuru Sub-county, March, 2014..............................................................................................................34

Table 4.7: Disclosure levels of different forms of SVAG in Limuru Sub-county, March, 2014 ..................................................................................................................37

Table 4.8: Factors associated with disclosure of SVAG in Limuru Sub-county, March, 2014.................................................................................................................38
OPERATIONAL DEFINITIONS

**Adolescent girl**- A girl aged 10-19 years and for purposes of this study a girl aged 15-19 years.

**Boy friend**- For this study, a boyfriend is a male with whom the adolescent girl has a mutual consent to be in a romantic or sexual relationship.

**Coerced sex**- Sexual activity resulting from intimidation, tricks, manipulation without physical force.

**Family connectedness**- In this study, family connectedness will be viewed through who the adolescent girl stays with presently. It is divided into three categories: biological parents, mixed parentage (where one parent is a step parent) and single parentage and/or another guardian. Those living with both biological parents are deemed to be most connected while those living with single parents and/or other guardians are deemed as least connected.

**Sexual debut**- First sexual intercourse

**Sexual violence**- For this study sexual violence entails acts of forced sexual intercourse, attempted sexual assault and forced touching of genitals and/or breasts.
ABBREVIATIONS AND ACRONYMS

CDC - Centres for Disease Control and Prevention

DEO - Sub-county Education Office

FGD - Focus Group Discussion

HIV - Human Immune-deficiency Virus

KDHS - Kenya Demographic Health Survey

KII - Key Informant Interview

KNBS - Kenya National Bureau of Statistics

SES - Social economic status

SGBV - Sexual and gender Based Violence

SRH - Sexual and Reproductive Health

SSA - Sub-Saharan Africa

STI - Sexually Transmitted Infections

SPSS - Statistical package for Social sciences

SV - Sexual Violence

SVAG - Sexual Violence against adolescent girls

UNFPA - United Nations Population Fund

UNICEF - United Nations International Children’s Fund

VAC - Violence Against Children.
ABSTRACT

Sexual violence against adolescent girls (SVAG) is a global concern due to its adverse effects on the overall health of these girls. In Kenya, cases of sexual violence in this age group are reported to be at 33%. The study explored sexual violence among adolescent girls (15-19 years) in the nine (9) mixed day secondary schools of Limuru Sub-county, Kiambu County, Kenya. The broad objective of the study was: to assess the status of SVAG in mixed day school in Limuru Sub-county, Kiambu County. The specific objectives were: To establish the proportion of adolescent girls in mixed day schools in Limuru Sub-county affected by SVAG, to determine the perpetrators of SVAG in mixed day schools in Limuru Sub-county, to determine the factors that increase vulnerability of adolescent girls in mixed day schools in Limuru Sub-county to sexual violence, and to determine the factors that affect disclosure levels on sexual violence matters among adolescent girls in mixed day schools in Limuru Sub-county. The study was cross sectional in nature and collected qualitative and quantitative data. The research instruments that were employed in gathering data included self-administered questionnaires with the 301 sampled girls. The number of girls sampled in every school was proportionate to the number of adolescent girls in that school. Systematic sampling was then used to select the individual girls to participate in every school. Girls who were aged 15-19 years, who were in any mixed day secondary school in Limuru Sub-county, those that had been in the school for three terms and those who consented to participate in the study were eligible. Those who were excluded were girls who failed to consent to participate in the study as well as those who were absent from school during sampling. Three Focus Group Discussions (FGDs) were conducted; one in each educational zone of the Sub-county to enrich the data collected using the questionnaires. Key informant interviews were conducted with two officials in the Children’s Sub-county office, two medical officers, as well as with two police officers stationed in Limuru Sub-county and two school heads selected at random. 32.6% of the respondents were affected by SVAG. Of these cases, 85% had experienced forced touching, 51% had experienced attempted sex and 15% had experienced forced sex. In all the three forms of SVAG, male perpetrators constituted more than 96%. Boyfriends (32%) were the commonest perpetrators of sexual violence. About 49% of the perpetrators were reported to have been under the influence of psychoactive substances when committing the sexual violence. Most of the SVAG (40%) was done in the perpetrator’s home. Factors that showed a significant association with vulnerability to SVAG were: alcohol use (OR=3.4 p=0.001), forced sex at debut (OR=62.4 p=0.000) and family connectedness (p=0.001 OR=10.6). Social economic status and age of adolescent girl did not show any significant association with vulnerability to SVAG. Disclosure levels were low: forced sex (7%), attempted sex (12%) and forced touch (15%). Factors that showed significant association with disclosure levels were: level of knowledge on sexual violence (OR=1.8 p=0.03), level of knowledge on service availability (OR=7.9 p=0.01) and family connectedness (OR=2.29 p=0.02). Age of the girl did not show any significant association with disclosure levels.
CHAPTER ONE: INTRODUCTION

1.1 Background information

Sexual violence is defined by Centres for Disease Control (CDC) as any sexual act that is perpetrated against someone’s will and encompasses four types of offences. The first is a completed sex act which is defined as contact between penis and the vulva involving penetration or penetration of genital opening by another person’s hand, finger or other object. The second is an attempted but not completed sexual act. The third type is an abusive sexual contact which is defined as intentional touching of genitalia, anus, groin, breast or buttocks of a person without his/her consent. The fourth type is non-contact sexual abuse which does not include physical contact of sexual nature between perpetrator and victim. It however includes acts such as intentional exposure to pornography, verbal or behavioural sexual harassment, threats of sexual violence, taking nude pictures of a person without his/her consent or of a person unable to consent or refuse (Basile K., et al, 2000). This study however examined the first three forms of sexual violence (forced sex, attempted sex and forced touching of breasts and genitals).

Sexual violence against adolescents is a global concern with approximately 1 in 10 girls and 1 in 20 boys having experienced it (UNICEF, 2007). This scenario is also reflected in Sub-saharan Africa and also in Kenya (Kenya VAC, 2010). The reporting/disclosure levels of sexual violence against adolescents are poor and this hinders mitigation efforts as well as proper documentation on the exact proportion of the adolescents that is affected (Fisher, et al, 2000). Sexual violence in adolescence is associated with several risk and protective factors that increase or decrease the individual girls’ vulnerability to the vice. They range from individual, to relational and community factors (CDC, 2007).
Sexual violence in adolescence is mostly directed towards girls and can occur anywhere, in school and even in the community but the most common place being the home. It is a reflection of society-wide violence by males against females (UNICEF, 2004).

Sexual violence has a wide range of consequences on adolescent girls. Sexual violence leaves the victim little or no room to negotiate for safer sex especially condom use. This therefore means that victims of sexual violence are at a great risk of contracting STIs including HIV from unprotected sex (UNICEF, 2009). Unplanned pregnancies are common after sexual violence. This is mostly followed by unsafe abortions which are a leading cause of death and disability among adolescents aged 15-19years (UNFPA, 2010).

1.2 Problem Statement

Worldwide, many sexual encounters among girls are not voluntary. In Sub Saharan Africa (SSA), 1 in 4 girls aged 15-19years had her first sexual encounter as forced (WHO, 2002). In Kenya, prevalence of sexual violence against adolescent girls below the age 19 stands at 1 in every 10 as compared to their male counterparts whose prevalence stands at 1 in every 20 (Kenya VAC, 2010). Central province (where Limuru Sub-county falls) is among the top three provinces with highest number of girls (15-19years) having undergone sexual violence (KNBS and ICF Macro, 2010).

In Limuru Sub-county, about 20 cases of sexual violence among adolescent girls are reported monthly. This is the highest among all the Sub-counties of Kiambu County (Children’s Office, Kiambu). There is widespread underreporting of sexual violence with only 1 in 3 girls comfortable to discuss their ordeals. Although sexual violence is common among school going adolescent girls, neither the educational nor the legal
system effectively identifies or regulates it. The health care system does not adequately address the issue of adolescence sexual violence (Kenya VAC, 2010). Against this background there is need to determine the factors that increase girls’ vulnerability as well as the factors that affect disclosure of SVAG. Information on prevalence of the vice will also be crucial. This information will be required not just at national level but in every administrative level to make it possible to effectively implement mitigatory measures. However, many studies on sexual violence in Kenya among the adolescent girls have been done at national and provincial level. Sub-county-specific data on SVAG is generally lacking including in Limuru Sub-county.

1.3 Justification of study

Adolescent girls are more likely than adult women to experience sexual violence from people well known to them and to suffer adverse consequences as a result. In spite of the pervasiveness of sexual violence among school going adolescent girls little is known about the contexts in which it occurs, how adolescent girls interpret and define it, and its impact on their lives (American Association of University Women, 2003). SVAG has many negative health outcomes including HIV infection. Worldwide, 40% of new HIV infections occur among people aged 15-24 years. In Sub-saharan Africa (SSA), 59% of these new cases are girls indicating that girls are more vulnerable to risky sexual behaviours mainly due to acts of sexual abuse and coercion experienced due to their social, economic and gender inequalities compared to their male counterparts (UNICEF, 2005). In Kenya, 3 percent of women aged 15-19 are HIV infected, compared with less than one percent of men age 15-19 (KNBS and ICF Macro, 2010). This further portrays the vulnerability of the girls to HIV which is one of the consequences of experiencing sexual violence.
Disclosure rates among these girls were poor with only 1 in 3 girls feeling comfortable to share their experience. Among the girls, victims of sexual violence have little knowledge on where to seek care after the violence like HIV tests and other post rape services including counselling (Kenya VAC, 2010).

Not only are girls more likely than boys to face sexual violence but the effects are more on them. Thus, although both girls and boys can encounter sexual violence at school or elsewhere, it is still a highly gendered phenomenon that is directly and negatively associated with outcomes for girls (UN, 2006).

The risk of sexual violence among school going girls is greatly increased where the school environment is pre-dominated by males; including teachers and fellow students. This therefore implies that girls in mixed gender schools have a higher risk to sexual violence. The threat of sexual violence among the school going adolescent girls is not only limited to the school grounds: research has found that a girl’s risk of sexual violence increases in relation to the distance she must travel to go to school and back, sometimes along busy paths that are isolated and in the early morning hours or in the evening when its somewhat dark (UN Study on Violence Against Children, 2006). Therefore girls in day schools are at a higher risk than their counter parts in boarding schools.

Interventions to reduce or stop the sexual violence among adolescent girls have proved difficult. This is partly due to low disclosure levels and the stigma attached to sexual violence that hinders victims from seeking professional help. In other cases, the girls are sometimes not even aware that some of those actions amount to sexual violence and even when they do, they are unaware of where to seek help (UNICEF, 2009).
There is little information on the prevalence of sexual violence, the perpetrators of SVAG, the factors that increase girls’ vulnerability to the vice as well as factors that affect disclosure of SVAG in Limuru Sub-county. The findings of this study will address the information gap and contribute towards policy making in the health and education sectors, in Limuru Sub-county and at national level.

1.4 Research Questions

1. What is the proportion of adolescent girls in mixed day secondary schools in Limuru Sub-county affected by sexual violence?
2. Who are the perpetrators of sexual violence among adolescent girls in mixed day secondary schools in Limuru Sub-county?
3. What are the factors that increase vulnerability of adolescent girls in mixed day secondary schools in Limuru Sub-county to sexual violence?
4. What are the factors that affect levels of disclosure on sexual violence matters among adolescent girls in mixed day schools in Limuru Sub-county?

1.5 Research objectives

1.5.1 Broad objective

To assess the status of sexual violence among adolescent girls in mixed day schools in Limuru Sub-county, Kiambu County

1.5.2 Specific Objectives

1. To establish the proportion of adolescent girls in mixed day secondary schools in Limuru Sub-county affected by sexual violence.
2. To determine the perpetrators of sexual violence on adolescent girls in mixed day secondary schools in Limuru Sub-county.
3. To determine the factors that increase vulnerability to sexual violence among adolescent girls in mixed day secondary schools in Limuru Sub-county.
4. To establish the factors that affect levels of disclosure on sexual violence matters among adolescent girls in mixed day secondary schools in Limuru Sub-county

1.6 Conceptual Framework

The conceptual framework illustrates the various inter-relationships between variables. The dependent variable is sexual violence. The intermediary variables are vulnerability to sexual violence, exposure to perpetrators and levels of disclosure of sexual violence on sexual violence matters. Vulnerability to sexual violence is affected by adolescent girls’ alcohol use, family connectedness, socio-economic status and forced sex at debut. Levels of disclosure are affected by girl’s family connectedness, girl’s knowledge on service availability, girl’s age and girl’s knowledge on sexual violence. Exposure to perpetrators is affected by family connectedness, girl’s knowledge on sexual violence and girl’s social economic status.
SEXUAL VIOLENCE AGAINST ADOLESCENT GIRLS

Vulnerability to sexual violence

Exposure to perpetrators

Levels of disclosure of sexual violence

Independent Variables
- Alcohol use/non-use
- Forced sex at debut
- Family Connectedness
- Social economic status of girl’s family
- Girl’s knowledge on sexual violence
- Girl’s knowledge on service availability
- Girl’s age

Intermediary Variables

Source: Adapted and modified from UNFPA, 2005

Figure 1.1: Conceptual framework
CHAPTER TWO: LITERATURE REVIEW

This chapter examines relevant literature on SVAG globally, in Africa and within Kenya. It also aims at finding gaps in the studies already done in the areas of SVAG and indicates how this study intends to fill those gaps as well as add to the body of knowledge.

2.1 Proportion adolescent girls affected by sexual violence.

A study in the USA with 1086 school going adolescents of average age of 15 done to examine adolescent sexual assault victimisation within and outside school, showed that 51% of the girls had undergone sexual assault (Young, et al., 2009). Another study done by the governments of Swaziland and Tanzania, in partnership with the US Centres for Disease Control and Prevention (CDC) and UNICEF in the two countries among children, show high levels of violence against children, especially the girls.

About a third of girls in both Tanzania and Swaziland reported to have been sexually abused before they were 18 years (Amin, et al., 2011). Another country level study done by WHO in Swaziland, Tanzania, Zimbabwe and Kenya in 2009, also indicate that in the four countries, 1 in 3 girls compared to 1 in 5 boys suffer from sexual violence before they are 18 (Reza, et al., 2009). A comparative study funded by East & South Africa Regional office of UNICEF, between Kenya and Zambia, which sought to compare the effectiveness of one stop centres in addressing SGBV, also concurred with the other two studies showing that in both countries, 1 in 3 girls and 1 in 5 boys faced sexual violence before age 18 (Keesbury, et al, 2012).

According to Kenya Demographic Health Survey (KDHS), 2008/2009 in Kenya, one in five women (21 percent) in Kenya has experienced sexual violence and 11.3 percent of those aged 15-19 have experienced sexual violence. Central province,
where Limuru Sub-county falls came in third after Nyanza and Western provinces with 19.5% of women aged 15-49 having undergone sexual violence. All these studies show gender differentials in prevalence of sexual violence among girls compared with boys. The sexual violence among adolescent girls is high and hence a cause of alarm. This study will attempt to find if the proportions of girls affected by sexual violence concur with the proportions at the African and Kenyan level.

2.2 **Perpetrators of sexual violence against adolescent girls.**

WHO multi-country studies show that almost 50% of girls above age 15 who face sexual violence, the perpetrators are their intimate partners while only 12% of the girls report to have been sexual violated by strangers (Claudia, et al., 2010). A study of 1058 American adolescents, who perpetrate sexual violence, indicates that 9% of all adolescent boys have perpetrated sexual assault against adolescent girls. 25.1% of the adolescent boys have also perpetrated or attempted to perpetrate others acts that categorised as sexual violence against the adolescent girls. These acts included: coerced sex, forced touching of breasts/ genitals and forced kissing (Michele, 2013).

Findings from baseline studies carried out in three Districts in Kenya, Ghana and Mozambique show that the greatest number of perpetrators of sexual violence against adolescent girls within school settings is their peers who are boys. Teachers are also mentioned but form a small percent. In all the three countries forced and transactional sex with family members was mentioned by the adolescent girls (Jenny, et al., 2011).

A nationally representative sample of 1242 girls and women, aged 13–24 years in Swaziland showed that the vast majority of girls were sexually violated before age 18 and by men in their neighbourhoods especially their intimate partners (Reza, 2009). Another study done in Malawi among school going girls in 40 schools showed that teachers were key perpetrators of sexual violence. 32 out of the 40 participating
schools knew a male teacher who had suggested or coerced a female student to sex. 26 schools out of the 40, had reported a male teacher for impregnating a girl (Columbia, et al., 2007)

A study done in Swaziland and Tanzania among adolescent girls showed that perpetrators of sexual violence who were strangers accounted for only 15% leaving the bulk as people known to the girls mainly their intimate partners (Amin, et al., 2011). According to Violence against Children (VAC) survey carried out in 2010 by Government of Kenya in collaboration with other partners, most sexual violence against adolescent girls was committed by the boyfriend or romantic partners of the victims. In Kenya, the highest percent of the perpetrators (47.3%) of sexual violence among these girls aged 15-19 years are acquaintances (Kenya VAC, 2010). There are many and varied perpetrators of sexual violence among the adolescent girls, most of whom are the very people who are supposed to offer safety to the girls. In literature, varied perpetrators of sexual violence have been identified at regional and national levels. Studies at local level in Kenya are however generally lacking and the findings of this study will seek to find out who the perpetrators are in Limuru Sub-county.

2.3 Factors increasing vulnerability of adolescent girls to sexual violence

The risk factors for sexual violence can be individual (including: age of the girl, alcohol and drug abuse, violence in the family, etc). They can also be relationship factors such as emotional unsupportive family relations association with sexually aggressive peers, among others. The risk factors can also be at community level, for instance; lack of institutional support from police and the administrative system, tolerance of sexual violence within the community as well as weak community sanctions against sexual violence perpetrators. At the societal sphere, factors like poverty, gender inequalities and society norms that are lenient or secretive towards
sexual violence also propagate sexual violence (Acierno, et al., 2009). This study will examine five factors: Alcohol use, sexual violence at debut, socio-economic status of family, family connectedness and age of the adolescent girl.

2.3.1 Alcohol use

A web based survey in the Midwest, USA whose purpose was to study prevalence and characteristics of alcohol related sexual violence among middle and high school girls, showed that 20% of female victims had consumed alcohol prior to the violence. The figures of those females who were sexually violated under the influence of alcohol were particularly high (29%), for those violated in social parties and in friends’ houses. Those under alcohol influence and violated in their homes stood at 6% (Amy, et al., 2009). Findings of a 12-year longitudinal study of 237 females in junior and senior school from rural USA, showed that 73% of the girls who reported sexual violence during that period also indicated being under the influence of alcohol (Janine, et al, 2002). A survey in the USA of adolescent victims of sexual violence indicated that alcohol consumption and sexual violence co-occur. However in other cases sexual violence lead to the victims to consume alcohol (Abbey, et al., 2002)

Adolescents worldwide report lower rates of alcohol consumption compared with older age groups and yet they report the highest rates of sexual violence (Rennison, 2002). This therefore questions the relationship between alcohol consumption and incidence of sexual violence. Studies on this relationship in Sub-Saharan Africa are generally lacking. This study will seek to establish if there is a relationship between the two variables.

2.3.2 Sexual violence at debut

Findings of a WHO multi-country study done among adolescent girls in various countries to establish link between forced sexual debut and subsequent sexual
violence showed that in Thailand, 60% of adolescent girls who had their sexual debut as forced subsequently experienced sexual violence compared to 22% who had their sexual debut as voluntary (Im-em, et al, 2003). The same study showed that in Uganda, sexual violence at debut increased an adolescent girl’s vulnerability to sexual violence in subsequent relationships (Koenig, 2003). A study done among 1395 adolescent girls in South Africa on sexual victimisation showed that forced first sexual intercourse in associated with increased sexual violence in subsequent relationships (Kristin, et al, 2004). In literature, it is well documented that many girls have their sexual debut through sexual violence, what is missing out is whether sexual violence at debut has a relationship with subsequent sexual violence. This study will attempt to examine the existence of such a relationship.

2.3.3 Socio-economic status of family

The perpetrators of sexual violence among girls especially during adolescence usually target those that lack power in the society especially those living in poverty. This is because in many contexts, poverty silences and discredits victims of sexual violence when they report it. It is even worse when they are in their adolescence and female (Donna, et al, 2007). An overview of sexual violence among adolescent girls worldwide shows that adolescent girls from poor homes depend on others even for their basic needs and this makes them vulnerable to sexual violence in exchange for goods. Such girls are unable to recognise sexual victimisation when it happens or fail to report it for fear of losing their livelihoods since their perpetrators could be the ones providing their basic needs (CDC, 2007). A study carried out among rescued rape victims in Pennsylvania, USA, found out that 90% of the victims of rape were those unable to meet their basic needs. They had depended on the perpetrators of the sexual violence for their basic needs prior to being rescued (Donna, et al, 2007)
The relationships between sexual violence among adolescent girls and socio-economic status are complex and further research is needed to understand how they interact.

### 2.3.4 Family connectedness

A study in Swaziland using a nationally representative sample of adolescent girls, using cluster survey design, showed that those with unstable, uncaring and un-nurturing family relationships and environments are more vulnerable to sexual violence. Not living with both biological parents and living with step fathers was found to increase the risk for sexual violence (Matthews, et al, 2011). Another study conducted in South Africa on risk factors for sexual violence among school going girls under 16 years, found that failure to live with biological mothers increased vulnerability of the girls to sexual violence (Madu, 2003). Yet another study on sexual violence among school going adolescent girls in Nigeria, found that those girls not living with either of the biological parents had high vulnerability to sexual violence (Ajuwon, et al, 2006). There are therefore discrepancies in findings of various studies on what the ideal family is in terms of protecting adolescent girls from sexual violence. There is insufficient knowledge about the factors that increase adolescent girls’ vulnerability to sexual violence in the family setting. This study will shed some light on some of these factors.

### 2.4 Factors affecting disclosure of sexual violence among adolescent girls

A study carried out in seven Sub-counties of Terai, Nepal among 2000 adolescent girls showed that 65.8% of the victims of sexual violence reported it mainly to relatives (mostly mothers) and friends. Out of those who reported only 0.9% reported to the police or any legal office. Reasons cited by those who failed to report included fear of being exposed and subsequent victimisation as well as fear of stigma attached
to victims of sexual violence (Himalayan Human Rights Monitors, 2013). In a study carried in Zambian schools on sexual violence against adolescent girls, only 3 out of 105 victims of sexual violence had reported to any authority (teachers, principals, and police). The reasons cited for under-reporting included: unawareness of the procedures for reporting sexual violence, not perceiving some acts as sexual violence as well as fear of stigma and perpetrator retaliation (Avon Global Centre for Women and Justice, 2012). According to a study on sexual victimisation among young women in the USA, many adolescent girls fail to report sexual violence due to acceptance of traditional gender stereotypes, especially those that place women and girls in low positions within society and they are and disposal of men including for sexual purposes (Fisher, et al, 2000)

There is high underreporting of sexual violence among girls who experience sexual violence prior to age 19 in Kenya. This underreporting also means there is low service seeking in cases of SVAG. Among the girls aged 15-19 years who faced sexual violence, only 3.4% received professional help, 6.8% tried to seek professional help while only 24.7% of the sexual violence victims knew a place they could seek professional help after the acts of violence (Kenya VAC, 2010).

Disclosure of sexual violence should ideally lead to provision of services to cope with the ordeal. However, disclosure does not necessarily result in service (medical, legal and social support) seeking. In other cases even when sexual violence is reported, no service may be sought or made available (Khan, et al, 2001). The WHO guidelines for care of victims of sexual violence outlines the recommended services to be given to sexual violence victims. They encompass medical, legal and socio-support services (WHO, 2003). However, the levels of seeking all the three categories of services among adolescent girls are still very poor since they do not disclose the sexual
violence in the first place. This could be due to a myriad of reasons. A study done in Tanzania, showed that the services for tackling sexual violence were inaccessible and even where they were accessible, the girls knowledge on availability of such services was poor (Mbeba, et al, 2012).

A multi-country study by the UN found out that many adolescent girls victims of sexual violence have no knowledge on how to access health services. Concerns about confidentiality prevent adolescent girls from using services, which may require the consent of their parents/ guardians and yet the adolescent may not be willing to disclose the issue even to the parents (UN, 2009). In some contexts the services for the victims of sexual violence are unavailable. Even where they are available, the adolescent girls do not use them optimally possibly because they are unaware of their existence (Amin, et al, 2009).

It is evident that most of the cases of sexual violence against adolescent girls in Kenya (also applies to Limuru) go un-reported. The reasons for this are many and differ among girls in different contexts. There is little information on exactly what causes this underreporting/non-disclosure. More information is needed to ensure the majority if not all of the SVAG cases are reported for appropriate actions to be taken.

Little is known about the factors that promote or hinder victims to disclose sexual violence in Limuru Sub-county and this study aims to find out those factors.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Study area

The research was carried out in Limuru Sub-county, Kiambu County, Kenya. Its geographical coordinates are 1° 6’ 0” South, 36° 39’0” East. It has 5 administrative divisions. In educational terms, the Sub-county is divided in three educational zones: Limuru zone, Tigoni zone and Ndeiya Zone. Limuru zone has three mixed day secondary schools, Ndeiya zone has four while Tigoni zone has two.

3.2 Research design

The study used a cross-sectional descriptive design because the research employed a single point of data collection on the dependent variable (in this case sexual violence) within the population. This design was useful in establishing associations between the dependent and independent variables at a snapshot setting. The dependent variable was expected to remain static through this period of interest. Inferences about sexual violence among the study population were made at point in time (Lix, 2006)

3.3 Measurement of variables

The dependent variable for this study was SVAG while the independent variables were: alcohol use, family connectedness, social economic status, forced sex at debut, girl’s age, girl’s level of knowledge on service availability and girls’ level of knowledge on sexual violence.

Social economic status of the respondents was measured using the International wealth Indicator formula. It employed the household asset ownership method. This method calculated the social economic status (S.E.S) on a scale of 0-18. This was established by the kind of assets owned in the respondent’s household. The assets were divided into three categories: consumer durables (television, refrigerator, phone, car and bicycle/motorbike), access to public services (electricity, source of water) and housing characteristics (number of sleeping rooms, type of toilet facility & type of
Scores were assigned to each asset ownership category (Table 3.1). The highest score was 18, indicating the highest possible level of S.E.S. A score of 0-6 indicated low social economic status; 7-12 score indicated average social economic status while a score of 13-18 showed high social economic status.

**Table 3.1: Calculation of socio-economic status (SES) among adolescent girls in Limuru Sub-county, March, 2014.**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Asset ownership category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Fridge</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Phones by all adults in family</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Car</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Bicycle/ motorbike</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Home connected to electricity</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Type of floor at home</td>
<td>High quality (tiled)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Medium quality (cemented)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low quality (earth, dung)</td>
<td>1</td>
</tr>
<tr>
<td>Type of toilet facility</td>
<td>High quality (flush toilet within home)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Medium quality (pit latrine within home)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low quality (pit latrine shared or no toilet)</td>
<td>1</td>
</tr>
<tr>
<td>Number of sleeping rooms</td>
<td>Three or more</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Zero or one</td>
<td>1</td>
</tr>
<tr>
<td>Water source</td>
<td>High quality-piped/ rain harvested in home</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Medium quality-Public tap/ vendors</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low quality open sources: rivers, wells, etc</td>
<td>1</td>
</tr>
</tbody>
</table>

Adopted and modified from KDHS 2008/2009 (KNBS and ICF Macro, 2010)

Respondents’ knowledge on sexual violence was rated on a scale of 0-10 points adopted from UNICEF, 2010. The points were derived from five (5) questions about knowledge on sexual violence (Appendix 2). A correct response in each question scored 2 while a wrong response scored 0. The highest possible score was 10 points representing the highest level of knowledge on sexual violence. A score of 0-6 was
categorised as a low level of knowledge on sexual violence while a score of 7-10 was
categorised as a high level of knowledge on sexual violence.

Respondents’ knowledge on service availability was rated on a scale of 0-14 points.
The points were derived from seven (7) questions about respondents’ knowledge on
service availability (Appendix 2). A correct response in each question scored 2 while
a wrong response scored 0. The highest possible score was 14 points representing the
highest level of knowledge on service availability. A score of 0-10 was categorised as
a low level of knowledge on service availability while a score of 11-14 was
categorised as a high level of knowledge on service availability.

3.4 Study population

The study was carried out among adolescent girls (ages 15-19) in mixed day
secondary schools within Limuru Sub-county, Kiambu County. The total number of
girls in these schools who were aged 15-19 was 1524 pupils (DEO, Limuru Sub-
county)

3.5 Inclusion and exclusion Criteria

3.5.1 Inclusion Criteria

For one to be a study participant, they were to possess the following characteristics:
be an adolescent girl aged 15-19 years who is in any mixed day school within Limuru
Sub-county, they must have been in the school for at least 3 terms and be willing to
consent to participate in the study.

3.5.2 Exclusion Criteria

Those who were excluded from the study were those who met the inclusion criteria
but were unwilling to consent to the study or were absent from school during
sampling.
3.6 Sample Size Calculation

The sample size was calculated using the Fisher, et al, 1998 method \( (n = (Z^2pq)/d^2) \) and corrected for a population of less than 10,000. The study was done at a 95% level of confidence using the sexual violence prevalence rate of adolescent girls aged 15-19 which stands at 32% (Kenya VAC, 2010). The calculated sample size was 334 girls. To adjust for a population of less than 10000, the correctional formula \( \{nf = n/(1+n/N)\} \) was applied to get a sample size of 274. Verification of sample size calculation utilised the sample size calculator (Naing L. et al, 2006). The sample size as confirmed by the calculator was 274 adolescent girls. To take care of attrition, 10% was added (27 girls). A total of 301 girls were picked as a sample.

3.7 Sampling Techniques

There are nine (9) mixed day secondary schools within the Limuru Sub-county. All the schools participated in the study. The allocation of participating girls in each school was proportionate to the population of adolescent girls aged 15-19 in that school (proportionate sampling), as shown in Table 3.2. In each school, forms 2, 3 and 4 will form the stratum. Simple random sampling was then utilised to pick the individual girls from each stratum (form).

Table 3.2: Sampling Frame

<table>
<thead>
<tr>
<th>Name of school</th>
<th>Zone</th>
<th>Number of adolescent girls aged 15-19 years</th>
<th>Sample selected</th>
<th>No. of girls per zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatura Sec</td>
<td>Ndeiya</td>
<td>53</td>
<td>10</td>
<td>95</td>
</tr>
<tr>
<td>Mukoma Sec</td>
<td></td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nguirubi Sec</td>
<td></td>
<td>235</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Makutano Sec</td>
<td></td>
<td>163</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Manguo Sec</td>
<td>Limuru</td>
<td>208</td>
<td>42</td>
<td>131</td>
</tr>
<tr>
<td>Rironi Sec</td>
<td></td>
<td>178</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Kinyogori Sec</td>
<td></td>
<td>276</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Tigon Sec</td>
<td></td>
<td>189</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Gicheru Sec</td>
<td>Tigoni</td>
<td>185</td>
<td>37</td>
<td>75</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1524</td>
<td>301</td>
<td></td>
</tr>
</tbody>
</table>


3.8 Research Instruments

3.8.1 Self administered questionnaires

The self administered questionnaires were filled by the sampled adolescent girls. This was done to ensure utmost confidentiality since the disclosure levels among the girls aged 15-19 years were very low and the great proportion do not disclose the ordeal so it may be impossible to derive accurate information from researcher administered questionnaires; Kilpatrick, et al, 2000 and Sheehan, et al, 2007

3.8.2 Focus group discussions (FGD)

Three FGDs were conducted to enrich the information generated. These were conducted with school going girls aged 15-19. One FGD per educational zone was conducted with 6-8 participants who were picked using simple random sampling method. The researcher was the moderator and a research assistant was the note taker. The consent to record responses was sought from the adolescent girls. (Holly, et al, 2011; Young, et al, 2009)

3.8.3 Key informant interviews (KII)

KIIs were conducted with two Sub-county children officials, two school heads, two medical officers and two police officers to supplement the information derived from the questionnaires and the FGDs. These officers are the ones who mainly receive the complaints of cases of SVAG. The instrument has also been used in other studies on adolescent sexual violence: (Breiding, et al, 2011; Ajuwon, et al, 2006)

3.9 Pre-Testing Of Instruments

The self administered questionnaire and the FGD guide were pretested with adolescent girls in Broadways secondary school in Thika Sub-county (30 girls for the questionnaire and 8 girls for the FGD). It was a mixed day secondary school and in
also in Kiambu County. The KII schedules were also pre-tested in Thika Sub-county with one police officer, one school head, one medical officer and one children’s officer.

3.10 Validity And Reliability

3.10.1 Validity

Validity refers to how well a test measures what it is purported to measure. In this study validity was ensured in a number of ways. Expert review of the three instruments (questionnaires, KII schedules, FGD guides) was conducted before commencement of the study to ensure content validity. The researcher ensured that all the questions in the instruments were clear, properly grouped as per subject and also that instructions were easy to follow. The research assistants were trained using standardised material to ensure they understood the operational definitions of the study and that they asked the questions in a manner to allow uniformity in their questioning skills.

3.10.2 Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results. In this study, reliability was ensured in several ways. The research instruments were pre-tested prior to the actual data collection in Broadways secondary school in Thika Sub-county. This helped find out if sufficient response categories were available, whether the participants were able to understand the questions and instructions and whether the meanings of the questions would be the same for all respondents. Necessary adjustments were then made. For reliability analysis Cronbach’s alpha was calculated by application of SPSS. All the alpha coefficients were greater than 0.7, therefore a conclusion was drawn that the instrument had an acceptable reliability coefficient and was appropriate for the study.
3.11 Data Collection Procedures

The researcher contacted the adolescent girls during school hours especially over breaks. Screening questions were asked to verify that the girls fit in the inclusion criteria. After acquiring signed informed consent and assent forms, the researcher distributed self-administered questionnaires to the adolescent girls. The questionnaires were retrieved immediately after they are filled. The researcher got an FGD group from each zone in a school that was randomly selected with 6-8 participants who were also randomly selected. Key Informant interview schedules were administered by the researcher and in case the informant needed more time to refer to his/her records, a return visit was arranged as agreed to ensure accuracy of information and avoid recall bias. These procedures have been applied in various other studies on adolescent sexual violence (Ybarra, et al, 2013; Columbia, et al, 2007)

3.12 Data analysis and presentation

Qualitative and quantitative data was generated. Qualitative data from the research was coded appropriately and then categorized as per emerging themes. The quantitative data was then entered into SPSS version 17.0 programme for data management after being cleaned and coded. Frequencies and percentages were used to describe quantitative data. Chi-square was used to test for the associations between the dependent and independent variables.

Inferential statistics used logistic regression. The variables that were statistically significant using chi square were subjected to logistic regression to check the magnitude with which the independent variables influenced the dependent variable i.e the degree of association between them. Results were presented in pie charts, bar charts, tables and narrations.
3.13 Ethical Consideration

Ethical clearance was sought from Kenyatta University Ethical Review Committee and the permit to carry out the study sought from the National Council for Science, Technology and Innovation. Permission to carry out the research in schools was sought from school principals as well as from the Limuru Sub-county Education office. Confidentiality and anonymity was maintained throughout the research. Data was disaggregated in a way that could not identify individuals. Informed consent was sought from parents/guardians on behalf of participants. The participants were also asked for their assent. They were given clear information about the study, to be able to choose to or not to participate. Participants were made aware that they could withdraw at any time from the study.
CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and findings obtained from field responses and data, broken into two parts. The first section deals with the background information, while the other section presents findings of the analysis, based on the objectives of the study as derived from the 300 out of 301 completed questionnaires, KIIs and FGDs. Both descriptive and inferential statistics have been employed.

4.2 Socio-demographic characteristics

The socio-demographic characteristics of the respondents are presented in Table 4.1.

It is observed that the majority were 17 years accounting for 38% of the total. The respondents who were aged 19 years were the least at 9%. From the study findings a higher proportion (42%) of the respondents indicated that they were in Form Two, 30% were in Form Three and 28% indicating that they were in Form Four (Table 4.1).

Table 4.1: Socio-demographic characteristics of adolescent girls in mixed day secondary schools in Limuru Sub-county, March, 2014

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sub-category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>15 years</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>16 years</td>
<td>81</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>17 years</td>
<td>114</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>18 years</td>
<td>54</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>19 years</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Current form of study</td>
<td>Form 2</td>
<td>126</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Form 3</td>
<td>90</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Form 4</td>
<td>84</td>
<td>28</td>
</tr>
<tr>
<td>Parent hood</td>
<td>Biological parents</td>
<td>162</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Mixed parentage</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Single parentage/ other guardian</td>
<td>63</td>
<td>21</td>
</tr>
<tr>
<td>Socio-economic status</td>
<td>Low</td>
<td>123</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>114</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>63</td>
<td>21</td>
</tr>
</tbody>
</table>

The study further established the type of parentage among the respondents. The study findings revealed that 54% of the respondents stay with both biological parents, 25%
had mixed parentage while 21% had single parentage and/or other guardian(s) (Table 4.1). Social economic status (SES) was calculated using the International Wealth Index formula which takes into account ownership of 10 assets to determine the SES. Asset ownership was either dichotomous or categorical in nature. Numerical values were assigned to various sub-categories of asset ownership to get a highest possible score of 18. A score of 0-6 was low SES; 7-12 was average SES while 13-18 was high SES (Section 3.3). Most of the respondents (41%) were of low SES (Table 4.1). This therefore implies that those of low SES were the majority in every zone.

4.3 Proportion of girls affected by sexual violence in Limuru Sub-county

The proportion of reported sexual violence against adolescent girls (SVAG) in mixed day secondary schools in Limuru Sub-county was about 33%. This therefore implies that for every 10 girls, about three have undergone one or more forms of SVAG. However, among those who had reported SVAG, forced touching was the most prevalent form at 85% (84 out of 99 girls) followed by attempted sex at 51% (50 out of 99 girls) and then forced sex at 15% (Figure 4.1). Although the proportion of girls affected by SVAG is lower compared to the proportion of girls not affected, the proportions are still high enough to warrant worry.

![Figure 4.1: Overall proportion of adolescent girls affected by sexual violence in Limuru Sub-county, March 2014.](image-url)
The most affected zone was Tigoni with 50 out of 75 (66.7%) of the sampled girls having faced SVAG. Tigoni was followed by Ndeiya at 22.1% and then Limuru at 21.5%. Tigoni zone showed significantly higher proportions of SVAG compared to the other two zones ($\chi^2 = 16.74, df = 2; p = 0.007$) (Table 4.2).

**Table 4.2: Proportion of adolescent girls in mixed day secondary schools affected by sexual violence in Limuru Sub-county zones, March, 2014.**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Overall sexual violence</th>
<th>Significant test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes Frequency (%)</td>
<td>No Frequency (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ndeiya (N=95)</td>
<td>21(22.1)</td>
<td>74(77.9)</td>
</tr>
<tr>
<td>Tigoni (N=75)</td>
<td>50(66.7)</td>
<td>25(33.3)</td>
</tr>
<tr>
<td>Limuru (N=130)</td>
<td>28(21.5)</td>
<td>102(78.5)</td>
</tr>
</tbody>
</table>

Forced touching $^a$

<table>
<thead>
<tr>
<th>Zone</th>
<th>Yes Frequency (%)</th>
<th>No Frequency (%)</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndeiya</td>
<td>17 (17.9)</td>
<td>78 (82.1)</td>
<td>= 8.381</td>
<td>2</td>
<td>0.02</td>
</tr>
<tr>
<td>Tigoni</td>
<td>45 (60)</td>
<td>30 (40)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limuru</td>
<td>22 (17)</td>
<td>108 (83)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attempted sex $^b$

<table>
<thead>
<tr>
<th>Zone</th>
<th>Yes Frequency (%)</th>
<th>No Frequency (%)</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndeiya</td>
<td>10 (10.5)</td>
<td>85 (89.5)</td>
<td>= 7.134</td>
<td>2</td>
<td>0.03</td>
</tr>
<tr>
<td>Tigoni</td>
<td>23 (30.7)</td>
<td>52 (69.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limuru</td>
<td>17 (13.1)</td>
<td>113 (86.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Forced sex $^c$

<table>
<thead>
<tr>
<th>Zone</th>
<th>Yes Frequency (%)</th>
<th>No Frequency (%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndeiya</td>
<td>3 (3)</td>
<td>92 (97)</td>
<td>&lt;0.001 (Fischer’s exact test)</td>
</tr>
<tr>
<td>Tigoni</td>
<td>6 (8)</td>
<td>69 (92)</td>
<td></td>
</tr>
<tr>
<td>Limuru</td>
<td>6 (4.7)</td>
<td>124 (95.3)</td>
<td></td>
</tr>
</tbody>
</table>

$^a$ n=84; $^b$ n=50; $^c$ n=15

Analysing the data by zone and form of SVAG, the results indicate that Tigoni zone consistently showed significantly higher levels of SVAG irrespective of the form ($\chi^2 = 8.381, df = 2; p = 0.02$: $\chi^2 = 7.134, df = 2; p = 0.03$: $p < 0.001$ FET) for forced touching, attempted sex and forced sex respectively (Table 4.2). It is therefore evident that adolescent girls in mixed day secondary schools from Tigoni zone suffer the blunt of all the three forms of SVAG indicating a problem in this zone.

In this study, it was important to measure the frequency with which SVAG occurred as well as the multiplicity of forms of SVAG faced by the girls. The results indicate
that 94 out of 99 adolescent girls (95%) in Limuru Sub-County, who had experienced SVAG, had faced it more than once. Negligible percentages had experienced SVAG once (Table 4.3). Among the respondents who had reported forced sex, 87% had faced it more than once while 13% had faced it once (Figure 4.2). Among respondents who had faced attempted sex, 95% had faced it more than once while only 5% had faced it once. Among those who reported having faced forced touching, all (100%) had faced it more than once (Figure 4.2)

![Figure 4.2: Number of times adolescent girls in mixed day secondary schools in Limuru Sub-county had faced various forms of SVAG, March, 2014](image)

The study found that among the respondents who reported to have faced SVAG, 35 out of 99 (35%) had faced multiple forms while 64 girls (65%) were victims of one form of SVAG (Table 4.3). Of the 35 girls who reported multiple forms, 15 had faced all the three forms of SVAG while 20 reported forced touching combined with attempted sex. Of great concern is that all the 15 girls who reported forced sex also reported facing the other two forms of SVAG implying some form of progression in acts of SVAG. Among the 64 girls who had faced one form of SVAG, 49 had faced forced touching only while 15 had faced attempted sex as the only form of SVAG.
Table 4.3: Frequency and multiplicity of SVAG among girls of various socio-demographic characteristics in Limuru Sub-County, March, 2014

<table>
<thead>
<tr>
<th>Socio-economic status</th>
<th>Family connectedness</th>
<th>Age of the girl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Average</td>
<td>High</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Frequency of SVAG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>once</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;once</td>
<td>47(50)</td>
<td>33(35)</td>
</tr>
</tbody>
</table>

Multiplicity of types of SVAG

<table>
<thead>
<tr>
<th></th>
<th>Any 1type</th>
<th>Any two</th>
<th>All three</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30(47)</td>
<td>10(50)</td>
<td>8(53)</td>
</tr>
<tr>
<td></td>
<td>20(31)</td>
<td>9(45)</td>
<td>6(40)</td>
</tr>
<tr>
<td></td>
<td>14(22)</td>
<td>1(5)</td>
<td>1(7)</td>
</tr>
<tr>
<td></td>
<td>10(16)</td>
<td>3(15)</td>
<td>2(13)</td>
</tr>
<tr>
<td></td>
<td>25(39)</td>
<td>10(50)</td>
<td>4(27)</td>
</tr>
<tr>
<td></td>
<td>29(45)</td>
<td>7(35)</td>
<td>9(60)</td>
</tr>
<tr>
<td></td>
<td>51(80)</td>
<td>16(80)</td>
<td>12(80)</td>
</tr>
<tr>
<td></td>
<td>13(20)</td>
<td>4(20)</td>
<td>3(20)</td>
</tr>
</tbody>
</table>

Data is presented as n (X %) unless indicated. A-Biological parents B-Mixed parentage C-Single parentage and/or other guardian.

Girls of low SES, those of single parentage and those below 18 years formed the greatest proportions of those facing SVAG more than once as well as those facing all the three forms of SVAG (Table 4.3). This therefore implies that girls falling under these three sub-categories are more prone to be sexually violated with greater frequency as well as more prone to multiple forms of SVAG.

4.4 Perpetrators of Sexual Violence in Limuru Sub-county

4.4.1 Gender of perpetrators

The adolescent girls in mixed day secondary schools in Limuru Sub-county who had faced any of the three forms of sexual violence were asked to indicate the perpetrators. The findings indicate that the perpetrators of all forms of SVAG are largely male (96%, 98% and 93% for forced sex, attempted sex and forced touching respectively) (Figure 4.3). Although males were the majority perpetrators, the results
herein imply that females also do sexually violate adolescent girls in Limuru Sub-county. The female perpetrators included aunties, cousins, house girls, among others.

![Figure 4.3: Gender of perpetrators of sexual violence among adolescent girls in mixed day secondary schools in Limuru Sub-county, March, 2014.](image)

### 4.4.2 Relationship with perpetrators of SVAG in Limuru Sub-county

From the study findings, it is revealed that the highest percentage (32%) of SVAG was perpetrated by boyfriends of the adolescent girls, the other perpetrators were: schoolmates (20%), relatives (16%), friends/ acquaintances (10%), strangers (5%), teachers (4%) and other perpetrators (4%). (Figure 4.4) Relatives who were reported as perpetrators of SVAG in Limuru Sub-County included: uncles, grandfathers and cousins.

None of the respondents reported having being sexually violated by a sibling or a biological parent whereas 3% of the sexual violence was done by a step-parent (Figure 4.4). Results from FGDs indicated that other perpetrators included shopkeepers, domestic workers, neighbours, motorbike riders, touts, among others.

An FGD participant from Ndeiya zone said:

“The 'boda boda’ driver used to give me a free ride to school most of the mornings. I was happy because it saved me from the long walk to school. After about two months,
he started saying that he liked me very much. One day, he stopped his motorbike in the middle of a bushy area and tried to force me into sex”.

Another FGD participant from Tigoni zone said:

“The shopkeeper in the nearby shop used to invite me to get into the shop instead of buying over the counter whenever I went to buy something. He would touch my breasts and suggest sex. He would then give me something like a soda and ask me to think about his request”

---

**Figure 4.4: Relationship between the adolescent girls in mixed day secondary schools and perpetrators of sexual violence in Limuru Sub-county, March, 2014.**

In this study, it was important to establish which perpetrators were involved in each form of SVAG. Boyfriends were the most common perpetrators in forced touching at 39% as well as in forced sex at 34%. Attempted sex was mainly perpetrated by school mates at 28% (Table 4.4). Boyfriends, school mates, relatives and
friends/acquaintances were the four major perpetrators of all the three forms of SVAG (Table 4.4). This therefore implies that the greatest proportion of SVAG in Limuru Sub-county is perpetrated by people well known to the girls and at face value may not pose a risk to these girls.

Table 4.4: Various perpetrators involved in the three forms of SVAG in Limuru Sub-County, March, 2014

<table>
<thead>
<tr>
<th>Perpetrator category</th>
<th>Form of SVAG</th>
<th>Significant test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Forced touching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boyfriends</td>
<td>33(39)</td>
<td>51(61)</td>
</tr>
<tr>
<td>School mates</td>
<td>18(22)</td>
<td>66(78)</td>
</tr>
<tr>
<td>Relatives</td>
<td>10(12)</td>
<td>74(88)</td>
</tr>
<tr>
<td></td>
<td>8(10)</td>
<td>76(90)</td>
</tr>
<tr>
<td>Friends</td>
<td>15(17)</td>
<td>69(83)</td>
</tr>
<tr>
<td>All others</td>
<td>15(17)</td>
<td>69(83)</td>
</tr>
<tr>
<td>Attempted sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boyfriends</td>
<td>10(20)</td>
<td>40(80)</td>
</tr>
<tr>
<td>School mates</td>
<td>14(28)</td>
<td>36(72)</td>
</tr>
<tr>
<td>Relatives</td>
<td>12(24)</td>
<td>38(76)</td>
</tr>
<tr>
<td></td>
<td>9(18)</td>
<td>41(82)</td>
</tr>
<tr>
<td>Friends</td>
<td>5(10)</td>
<td>45(90)</td>
</tr>
<tr>
<td>All others</td>
<td>5(10)</td>
<td>45(90)</td>
</tr>
<tr>
<td>Forced sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boyfriends</td>
<td>5(34)</td>
<td>10(66)</td>
</tr>
<tr>
<td>School mates</td>
<td>3(20)</td>
<td>12(80)</td>
</tr>
<tr>
<td>Relatives</td>
<td>3(20)</td>
<td>12(80)</td>
</tr>
<tr>
<td></td>
<td>2(13)</td>
<td>13(87)</td>
</tr>
<tr>
<td>Friends</td>
<td>2(13)</td>
<td>13(87)</td>
</tr>
<tr>
<td>All others</td>
<td>2(13)</td>
<td>13(87)</td>
</tr>
</tbody>
</table>

Data is presented as n (X %) unless indicated.

The results showed that the perpetrators of forced touch differed significantly (p=0.0432). There was no statistical difference between the perpetrators of forced sex (p=0.342) as well as those of attempted sex (p=0.464) (Table 4.4).
4.4.3 Perpetrators, substance abuse and SVAG

The respondents were asked to indicate whether the perpetrators were under the influence of any substance at the time of the sexual violence incident. The results in Figure 4.5 indicate that the majority (49%) were reported to have been under the influence of some substances during the incident while 36% of the perpetrators were sober. However, 15% of the respondents could not tell whether the perpetrators were under the influence of any substances or not when they carried out the sexual violence. Among the perpetrators under the influence of substances, 76% were reportedly drunk while 24% were under the influence of miraa (khat), bhang and other intravenous psychoactive substances.

![Pie chart showing the percentage of perpetrators under substances and those who were not.]

**Figure 4.5: Perpetrators of SVAG in mixed day secondary schools, who were under substances when carrying out the acts, March, 2014.**

The results however indicated that there was no statistical difference in the proportions of perpetrators under substances and those that were not while perpetrating the various forms of SVAG (Table 4.5).

**Table 4.5: Perpetrators of SVAG under substances when carrying out the acts in Limuru Sub-county, March, 2014**

<table>
<thead>
<tr>
<th>Form of SVAG</th>
<th>Perpetrators under substance</th>
<th>Significant test results</th>
<th>test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Forced touch</td>
<td>32(39)</td>
<td>52(61)</td>
<td>$\chi^2 = 3.89$</td>
</tr>
<tr>
<td>Attempted sex</td>
<td>31(62)</td>
<td>19(38)</td>
<td>df=2</td>
</tr>
<tr>
<td>Forced sex</td>
<td>10(66)</td>
<td>5(34)</td>
<td>p=0.085</td>
</tr>
</tbody>
</table>

Data is presented as n (X %) unless indicated.
**4.4.4 Places where sexual violence occurs**

Results of this study indicate that the majority (40%) of sexual violence incidences took place in perpetrators’ homes. Other places where sexual violence took place included parties (30%), respondents’ homes (20%), schools (7%) and 3% of the sexual violence took place elsewhere (Figure 4.6). FGDs revealed that other places where SVAG occurred included bushes especially during early morning or late evenings. Abandoned structures and toilets were also mentioned.

![Figure 4.6: Place where SVAG in mixed day secondary schools in Limuru Sub-county occurred, March, 2014.](image)

**4.5 Factors affecting vulnerability of adolescent girls to sexual violence**

In this study, there were five factors affecting girls’ vulnerability to Sexual Violence against adolescent girls (SVAG). These were: Social economic status (SES), alcohol use among the adolescent girls, forced sex at debut, family connectedness and age of the adolescent. Pearson’s Chi-square was used to determine the significance of association between these variables and SVAG. All the variables except SES and age of the adolescent girl showed significant association with SVAG. Later, binary logistic regression analysis was carried out and the relationships between the associated study variables were established (Table 4.6).
Table 4.6: Factors associated with vulnerability to SVAG in Limuru Sub-county, March, 2014.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Variable Category</th>
<th>SVAG</th>
<th></th>
<th></th>
<th>Odds Ratio</th>
<th>95% Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes (%)</td>
<td>No (%)</td>
<td>p value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>Low</td>
<td>48(39.0)</td>
<td>75(61.0)</td>
<td>0.456</td>
<td>0.91</td>
<td>0.65-2.76</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>35(30.7)</td>
<td>79(69.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>16(25.4)</td>
<td>47(74.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol use</td>
<td>Yes *</td>
<td>63(48)</td>
<td>68(52)</td>
<td>0.001 *</td>
<td>3.4</td>
<td>2.07-5.66</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>36(21.3)</td>
<td>133(88.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced sexual debut</td>
<td>Yes *</td>
<td>63(90)</td>
<td>7(10)</td>
<td>0.000 *</td>
<td>62.4</td>
<td>26.17-149.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>29(12.6)</td>
<td>201(87.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family connectedness</td>
<td>Biological parents'</td>
<td>15(9.3)</td>
<td>147(90.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed parentage</td>
<td>39(52)</td>
<td>36(48)</td>
<td>0.001 *</td>
<td>10.6</td>
<td>8.06-12.38</td>
</tr>
<tr>
<td></td>
<td>Single parentage</td>
<td>45(71.4)</td>
<td>18(28.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>&lt;18 yrs</td>
<td>79(36.1)</td>
<td>140(63.9)</td>
<td>0.644</td>
<td>1.72</td>
<td>0.968-3.06</td>
</tr>
<tr>
<td></td>
<td>18 &amp; above*</td>
<td>20(24.7)</td>
<td>61(75.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Method=Likelihood ratio
* Reference category
* Significant (p<0.05)

4.5.1 Adolescent girls, alcohol use and vulnerability to SVAG in Limuru Sub-county

Among the respondents, 43% had used alcohol at least once in their lifetime. It was reported that 48% of those who had ever used alcohol, were sexual violated compared with 21.3% that were sexually violated despite the fact that they had never used alcohol (Table 4.6). Use of alcohol by the respondents was observed to be significantly associated with SVAG (p=0.001; OR=3.4; 95% CI: 2.15-4.13) (Table 4.6). Alcohol use by the adolescent girls increased the odds of being sexually violated by 3.4 times. The results were collaborated by FGDs which indicated that alcohol use by the adolescent girls contributed to vulnerability to SVAG. Many of the respondents who had consumed alcohol had done so in boyfriends’ or acquaintances’/friends’ houses. In such houses, the owners who were mostly male then turned out to be
perpetrators of SVAG. Since the drunk adolescent girls had less ability to resist sexual violence, they ended up becoming victims. When alcohol was consumed in public places, it posed even a greater risk since there are multiple perpetrators who prey on the drunken adolescent girls. For instance, a 16 year old FGD participant from Tigoni zone said she had gotten drunk in a pub where she had gone with several male friends. The male friends turned out to be perpetrators and forcefully touched her breasts. She decided to leave and on her way out, other drunk men forcefully touched her, one particular man followed her outside and attempted to force her into sex. Alcohol use seemed to be a precursor for sexual violence.

4.5.2 Forced sex at debut

Among respondents who had already had sex, 71%, reported that the first time they had sex, it was forced. Only 29% had “consented” to the sexual act during debut (Figure 4.7). FGDs revealed that not all of the 71% had actually been forced to have sexual intercourse during debut. Some had actually consented but being aware of societal expectations to abstain, they were ashamed to say they had sex willingly. A 17 year old FGD participant from Limuru zone said:

“Even if I agreed to sleep with a boy or a man, I cannot admit to anyone that I was willing, I will just say he forced me. Otherwise people will think am bad and have no morals”

![Figure 4.7: Nature of sexual debut among adolescent girls in mixed day secondary schools in Limuru Sub-county, March 2014.](image-url)
It was reported that 90% of those who had forced sex at debut faced subsequent sexual violence compared to those whose sexual debut was consented/willing (12.6%) (Table 4.6). Being sexually violated at debut was seen to be significantly associated with subsequent SVAG (p=0.000; OR=62.4; CI=56.17-68.99) (Table 4.6). The odds of being sexually violated of a girl who had a forced debut were 62.4 times the odds of those girls who did not have a forced sexual debut.

4.5.3 Family connectedness and its influence on SVAG in Limuru Sub-county

The level of family connectedness was measured given the person(s) living with the adolescent. Those living with both biological parents were deemed most connected while those of single parentage and/or other guardians were deemed least connected. Among those who lived with both biological parents, 9.3% had faced sexual violence. A worrying 52% of those who had mixed parentage faced sexual violence while 71.4% of those who had single parentage and/or other guardian(s) had faced SVAG (Table 4.6).

A significant association was observed between family connectedness and sexual violence (Table 4.6). Those who were of single parentage and/or other guardian (p=0.007; OR=24.5; 95% CI: 20.16-26.44) and those who were of mixed parentage (p=0.013 (OR=10.6; 95% CI: 8.06-12.38), (Table 4.6) were more likely to experience sexual violence compared to those who lived with both biological parents. This therefore implies that living with both parents seems to be a protective factor against SVAG while those of single parentage or living with other guardian(s) were more vulnerable to SVAG.

4.6 Factors affecting disclosure levels in SVAG matters

Disclosure in this study is seen as a respondent letting another person know about the sexual violence (SV). Disclosure levels were low; only 20 out of 99 respondents
(20%) disclosed their SV incidence. This therefore means that for every 5 adolescent girls who had faced sexual violence, only one disclosed the matter.

**Table 4.7: Disclosure levels of different forms of SVAG in Limuru Sub-county, March, 2014**

<table>
<thead>
<tr>
<th>Form/ type of SVAG</th>
<th>Forced touching n (%)</th>
<th>Attempted sex n (%)</th>
<th>Forced sex n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed</td>
<td>13 (15)</td>
<td>6 (12)</td>
<td>1 (7)</td>
</tr>
<tr>
<td>Did not disclose</td>
<td>71 (85)</td>
<td>44 (88)</td>
<td>14 (93)</td>
</tr>
<tr>
<td>Totals</td>
<td>84 (100)</td>
<td>50 (100)</td>
<td>15 (100)</td>
</tr>
</tbody>
</table>

The study revealed that 7% of those who faced forced sex disclosed it to anyone, attempted sex (12%) and forced touching of genitals and/or breasts (15%) (Table 4.7). Majority of the respondents who faced SVAG, reported it to their friends while a negligible percent (>1%), reported it to any relevant authorities. Results from FGDs and KII indicate a few reasons why disclosure was so low. Many adolescent girls associated SV with shame and hence opted to be silent. Others said they did not know of any effective platforms where they could report and gain help. Fear of threats given by the perpetrators also contributed to non-disclosure of SVAG.

In this study, there were four factors affecting disclosure of SVAG. These were: level of knowledge on sexual violence, level of knowledge on service availability, family connectedness and age of the adolescent. Pearson’s Chi-square was used to determine the significance of association between these variables and disclosure of SVAG. All the variables except age of adolescent girl showed significant association with disclosure of SVAG. Later, binary logistic regression analysis was carried out and the relationships between disclosure of SVAG and the variables were established (Table 4.8).
Table 4.8: Factors associated with disclosure of SVAG in Limuru Sub-county, March, 2014.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Variable Category</th>
<th>DISCLOSURE</th>
<th>p-value</th>
<th>Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes (%)</td>
<td>No (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LKSV</td>
<td>High *</td>
<td>11(25.6)</td>
<td>32(74.4)</td>
<td>0.03 *</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>9(16.1)</td>
<td>47(83.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LKSA</td>
<td>High *</td>
<td>13(46.4)</td>
<td>15(53.6)</td>
<td>0.01 *</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>7(9.9)</td>
<td>32(80.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family connectedness</td>
<td>Biological parents'</td>
<td>5(33.3)</td>
<td>10(66.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed parentage</td>
<td>7(17.9)</td>
<td>32(82.1)</td>
<td>0.02 *</td>
<td>2.29</td>
</tr>
<tr>
<td></td>
<td>Single parentage</td>
<td>8(17.7)</td>
<td>37(82.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>&lt;18 yrs</td>
<td>15(19)</td>
<td>64(81)</td>
<td>0.563</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>18 &amp; above</td>
<td>5(25)</td>
<td>15(75)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LKSV-Level of knowledge on sexual violence
LKSA-Level of knowledge on service availability
Method=Likelihood ratio
* Reference category
* Significant (p<0.05)

4.6.1 Level of knowledge on sexual violence and its association with disclosure of SVAG

Respondents’ knowledge on sexual violence was measured on a scale of 0-10 points derived from five (5) knowledge questions adopted (and modified) from UNICEF, 2010. A score of 0-6 was categorised as a low level of knowledge on sexual violence while a score of 7-10 was categorised as a high level of knowledge on sexual violence (Section 3.3). The levels of knowledge on sexual violence were generally high in all the three zones. Overall in the Sub-county, respondents with high knowledge were 67% while those with low knowledge were 33%. In Limuru zone, respondents with high knowledge were 74%. In Tigoni zone, those with high knowledge were 61% while in Ndeiya zone those with high knowledge on sexual violence were 66% (Figure 4.8).
A higher percentage (56.8%) of those with high knowledge on sexual violence disclosed the incidences compared to 43.2% of respondents with low knowledge (Table 4.8). The study revealed that high level of knowledge on sexual violence increased the odds of disclosure of SVAG by 1.8 times (OR=1.8; 95% CI, 1.18-5.15, p=0.03) (Table 4.8).

### 4.6.2 Level of knowledge on service availability

Respondents’ knowledge on service availability was rated on a scale of 0-14 points. The points were derived from seven (7) questions about respondents’ knowledge on service availability adopted (and modified) from UNICEF, 2010. A score of 0-10 was categorised as a low level of knowledge on service availability while a score of 11-14 was categorised as a high level of knowledge on service availability (Section 3.3). The levels of knowledge on service availability among the respondents were generally low. Those with high knowledge on service availability accounted for 34% while those of low knowledge accounted for 66% in Limuru sub-county (Figure 4.9).
Those with high knowledge on service availability who failed to disclose were a lesser percent (53.6%) compared to 80.1% of respondents with low knowledge on service availability who failed to disclose (Table 4.8). High level of knowledge on service availability increased the odds that SVAG would be disclosed by 7.9 times (OR=7.9; 95% CI, 3.19-9.61, p=0.01) (Table 4.8).

**4.6.3 Family connectedness and its influence on levels of disclosure**

The findings of this study revealed that 33.3% of the adolescent girls who faced sexual violence and lived with both biological parents disclosed it. This was the highest disclosure level among the three groups of family connectedness. Among those of single parentage and/or other guardians who faced sexual violence, 17.7% disclosed the ordeal. There was observed a significant association between family connectedness and levels of disclosure (p=0.02) (Table 4.8). The adolescents living with both parents were 2.31 times more likely to disclose sexual violence compared with those of single parentage and/or other guardian (OR=2.31; 95% CI, 1.30-3.64, p=0.020). Similarly those living with both parents were 2.29 times more likely to
disclose the ordeal compared to those of mixed parentage (OR=2.29; 95% CI, 1.78-3.93, p=0.014) (Table 4.8). This therefore implies that living with both parents encourages adolescent girls to disclose SV when it happens in comparison to those living with others forms of parentage.

4.7 DISCUSSION

4.7.1 Proportions of adolescent girls affected by sexual violence

This study aimed at finding the proportion of adolescent girls in mixed day secondary schools in Limuru Sub-County that were affected by SVAG. The study findings indicate that 33% of these girls are affected. This proves the fact that girls in Limuru like their counter parts world over face SVAG. The proportions observed in this study were much higher compared to proportions reported in other studies (Sochting, et al, 2004: Young, et al., 2009) but lower compared to those in other studies (Black, et al, 2011). It is evident however that girls are victims of SVAG globally. Studies focussing on out of school adolescent girls showed consistently higher proportions of SVAG compared those done at school level (Johnson, et al, 2010: Keesbury, et al, 2012: Kenya VAC, 2010:). Schools are controlled environments and will most of the time offer some protection from SVAG compared to the community setting (Amin, et al., 2011). All these findings reinforce the fact that adolescent girls globally suffer from SVAG both in developing and developed countries almost with similar proportions across the nations. Studies from developed countries however show greater proportions of SVAG compared to similar studies in developing countries (Madu, 2003: Ajuwon, et al, 2006: Johnson, et al, 2010). This could be attributed to the fact that in developed countries more girls are likely to disclose SVAG since it is treated will less stigma contrary to the situation in developing nations (Keesbury, et al, 2012). What is not very clear is what parameters are used to measure SVAG in the
different nations, since the definition is wide and that may explain the varying proportions in the different studies.

The findings of this study found that SVAG often occurred more than once. Multiple forms of SVAG also occurred among the respondents. This was consistent with findings from USA (Young, et al., 2009), Malawi (Columbia, et al., 2007), Swaziland (Amin, et al., 2011), Tanzania (Tanzania VAC, 2010) and Kenya (Kenya VAC, 2010). The circumstances around re-victimisation of victims of SVAG are still unclear.

4.7.2 Perpetrators of sexual violence

This study found that over 93% of perpetrators of SVAG were male. This concurs with other studies world over that perpetrators are almost always male (Claudia, et al., 2010: Dube, et al., 2005: Sedgwick, 2006: Michele, 2013). The circumstances around female perpetration and the actual female perpetrators are still poorly understood.

This study found out that the bulk of SVAG was carried out by people known to the girls especially their boyfriends/intimate partners (32%), school mates (20%) and relatives (16). Only 5% of SVAG was perpetrated by strangers. These findings concur with other findings (Kenya VAC Survey 2010: Zinzow and Thompson, 2011). It however differs with other studies that found that SVAG was perpetrated by strangers (Amin, et al., 2011: Tanzania VAC, 2010: Al-Joharah and Raheel, 2009). However, most of the studies on perpetration of SVAG indicate that the greatest threat of SVAG is people well known to the girls and they do not naturally view as perpetrators and hence less likely to act with caution when around them. Studies conducted where male-female interactions were limited by factors such as religion reported that most of the perpetrators were strangers since the girls were somehow shielded from interactions with people they know and could have perpetrated SVAG against them.
Therefore acts of SVAG were done by strangers who would dare cross the “male-female interaction boundaries’ and still not be found out or recognised. It is notable that there is a wide range of perpetrators who put the adolescent girls at risk of SVAG, most of them being people well known to them. These people are in close proximity with the girls (homes, schools, parties) and hence they easily perpetrate SV and do it over and over again and this can also explain the fact that in this study SVAG never occurred once.

4.7.3 Factors that increase vulnerability to sexual violence

4.7.3.1 Social economic status

In this study, SES was expected to be a factor increasing vulnerability of girls to SVAG as seen in many other study findings (Donna, et al, 2007: Keesbury, et al, 2012: CDC 2007). Contrary to expectations, this study did not find any significance between SES and SVAG. This was an unanticipated result but could be explained the fact that most respondents in Limuru Sub-county fall in average or high SES. This is supported by the findings of KDHS 2008/2009 which found that most of the respondents of Central province (where Limuru falls) in the upper wealth index quintiles and hence able to meet their basic needs. Even the majority of those classified in the category of low SES in Limuru sub-county are still able to meet the basic needs though they may not own the assets used in this study to calculate SES. Black, et al, 2011, reports that low SES becomes a vulnerability factor for SVAG when the girls are unable to meet their basic needs. These girls are therefore involved in transactional sexual relations with the people who help them meet those basic needs and in return demand sexual favours. How poverty affects the vulnerability to SVAG not very clear among adolescents and this is a potential area for further research.
4.7.3.2 Alcohol use by the adolescent girls

This study revealed that 43% of respondents who had used alcohol at any point in their lifetime. This rate is alarmingly high and warrants worry. In this study, alcohol use by the adolescent girls was significantly associated with SVAG. These study findings concurred with other findings from various parts of the world (Young, et al, 2008; Amy, et al., 2009; Brecklin and Ullman, 2002). These studies reported that alcohol use reduced adolescent girls’ ability to resist sexual violence. Other studies (Abbey, et al., 2002; Kilpatrick, et al, 2007) report that alcohol use and SVAG co-occur. Some girls are prone to sexual violence because they drank alcohol while some drank to overcome the grief of sexual violence. However, this study did not examine the co-occurrence of alcohol use and SVAG but influence of alcohol use on SVAG and this is a twist that can form another area of study. In conclusion, several studies (Janine, et al, 2002; Mohler-Kuo, et al, 2004) have reported that adolescent girls under alcohol are more vulnerable to SVAG irrespective of where they have consumed the alcohol. Therefore it is implied that alcohol use by the adolescent girls increases their vulnerability to SVAG and this study suggests that adolescent girls should remain sober to get a higher chance of avoiding SVAG.

4.7.3.3 Family connectedness

The findings of this study indicated that 54% of the respondents lived with both biological parents while 46% lived with other forms of parentage. The study findings also indicated that not living with the both biological parents increased the girls’ vulnerability to SVAG. This concurred with other studies in different countries: Nigeria (Ajuwon, et al, 2006), USA (Matthews, et al, 2011) and South Africa (Madu, 2003). These studies reported that not living with both biological parents increased a girl’s risk to being sexually violated. They also reported that presence of both
biological parents provided available confidants that can be reported to in case of SVAG. This can be further explained by the fact that living with any other person other than the biological parents serves to increase the number of perpetrators around the adolescent girls, relatives and step parents included. Living with both parents is implied to be a protective factor against SVAG as well as increases disclosure of such acts when they occur hence this study suggests that as far as possible adolescent girls should live with both biological parents.

4.7.3.4 Forced sex at debut

In this study, 71% of the respondents who had already had sex said their sexual debut was forced. This percent is alarmingly high compared to findings of several other studies in different countries: Philippines-27% (Natividad and Marquez, 2004), India-15% (IIPS and PC, 2010), Uganda-23%, Malawi-38%, Burkina Faso-15% and Ghana-30% (Moore, et al, 2007). The findings of this study show that some adolescent girls had ‘faked’ that their sexual debut was forced due to shame and unacceptable societal norms associated with early sexual activities. This explains the high rate of girls who reported that sexual debut was forced.

This study showed a significant association between forced sexual debut and sexual violence. Around 90% of girls who had a forced sexual debut experienced subsequent sexual violence. This concurred with other studies (Moore, et al, 2007: Natividad and Marquez, 2004: Kristin, et al, 2004). Sexual violence at debut increased an adolescent girl’s vulnerability to subsequent sexual violence in a complex of ways. One of the most understood ways is that the adolescent girl who has her sexual debut as forced is likely to be affected psychologically and hence more likely to get into relationships where SV is common (Koenig, 2003: Keesbury, et al, 2012). The other way is that the perpetrator who carried out the forced sex at debut is likely to keep forcing the girl
into sex or other forms of SV (Im-em, et al, 2003). However, this relationship between forced sexual debut and SVAG is still poorly understood and further research in this area is required.

4.7.4 Factors that affect disclosure of SVAG

In this study disclosure levels were very low. Only 7% of forced sex cases were reported, while only 12% and 15% of attempted sex and forced touch were reported respectively. Around 1 in every 5 girls who experienced sexual violence disclosed it to anyone. This collaborated with other findings that showed disclosure levels on SVAG were poor (Kilpatrick, et al., 2007: Avon Global Centre for Women and Justice, 2012). Forced sex which is the most severe form of SVAG had the lowest disclosure level in this study and concurs with findings of Rand, 2009. This can be explained by the fact that forced sex and SV in general is associated with shame and the victims fear disclosing it as they may face stigma. Ahrens, et al, 2007 reported that threats from the perpetrators may hinder disclosure of SVAG. In this study, the few victims who disclosed their ordeals did so, to their friends as opposed to any persons in authority. This collaborated with findings of other studies in USA (Ahrens, et al., 2007) and Nepal (Human Rights Monitors, 2013). From the findings of this study, friends mostly offered some sort of counselling as the single type of help to victims of SVAG and it is not sufficient to help victims cope neither is it adequate to stop future acts of sexual violence against the same adolescent girls and hence this study suggests that efforts be made to encourage girls to disclose SVAG to other people not just friends (IIPS and PC, 2010).

In this study, disclosure levels were significantly associated with levels of knowledge on sexual violence. The levels of knowledge on sexual violence were generally high within Limuru Sub-county. According to a study on sexual victimisation among
adolescent in the USA, many of the adolescent girls fail to report sexual violence due to little knowledge on SV and acceptance of traditional gender stereotypes that place girls/ women at a lower position where they are accustomed to SV by the male and hence over time some acts of SV are termed as the norm hence the need to report them is not there (Fisher, et al, 2000)

In this study, knowledge on service availability was associated with levels of disclosure of SVAG. These findings also concur with other studies that found out that many adolescent girls who are victims of sexual violence have little or no knowledge on how to access health services (UN, 2009: Kenya VAC, 2010: Mbeba, et al, 2012). Amin, et al, 2011, in their study findings on the addressing SV against adolescent girls reported that even where the services they are available, the adolescent girls do not use them optimally possibly because they are unaware of their existence. This study proposes improving every girl’s knowledge on service availability so that in case they face SVAG then they know where they can report it and get the necessary help.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Introduction

This chapter presents the summary of major findings, conclusions and recommendations arranged as per the study objectives. It also shows areas for further research which were identified from the gaps this study was not able to fill.

5.2 Summary

The study findings indicated that about 33% of girls in mixed day secondary schools in Limuru Sub-county had faced SVAG. Forced touch was the most prevalent form of SVAG at 50%, attempted sex (35%) and forced sex (15%). Adolescent girls under the age of 18 were more affected by SVAG compared to their counterparts aged above 18 years. Tigoni zone was the most affected by all forms of SVAG.

Boyfriends of the adolescent girls were the most common perpetrators of SVAG at 32%. Relatives formed 16% while friends/acquaintances accounted for 10% of the perpetrators. Strangers perpetrated 5% of the SVAG. Most perpetrators (49%) were under the influence of some substance when perpetrating SVAG, while 36% were sober. The respondents could however not tell if the remaining 15% of the perpetrators were under the influence of any substance or not. Most SVAG (40%) took place in perpetrators’ homes, 30% happened in parties, 20% in respondents’ homes, 7% in schools and the remaining 3% took place in other places.

This study found three independent variables to be associated with vulnerability to SVAG. These were: alcohol use by the girls, forced sexual debut, family connectedness. SES and age of the adolescent girl were not associated with vulnerability to SVAG. The study found that 43% of adolescent girls had already
consumed alcohol at least once in their lifetime. Forced sexual debut stood at 71% of the respondents who had already had sex.

Disclosure levels of SVAG were generally low at 7%, 12% and 15% for forced sex, attempted sex and forced touching respectively. There were three factors that were associated with disclosure of SVAG. These were: level of knowledge on sexual violence, level of knowledge on service availability and family connectedness.

5.3 Conclusions

5.3.1 Proportion of girls affected by SVAG in Limuru Sub-County
Sexual violence against adolescent girls (SVAG) is prevalent in Limuru sub-county irrespective of the form. It occurs to adolescents across ages, zones, SES, type of parentage and other variables albeit at differing degrees. Hence no adolescent girl is absolutely safe and measures need to continuously be put in place to mitigate it.

5.3.2 Perpetrators of SVAG in Limuru Sub-County
There is a wide range of perpetrators in Limuru Sub-county perpetrated acts of SVAG. The majority of these are people well known to the girls and they may actually feel safe around them giving the perpetrators a leeway to carry out the SV even at the comfort of their homes where the girls have willingly gone without prior knowledge of what awaits them. Some of these perpetrators are within the homes of the adolescent girls making it hard to be safe anywhere or around anyone.

5.3.3 Factors associated with SVAG in Limuru Sub-County
Use of alcohol by the adolescent girls, forced sexual debut and failure to live with both parents pose the risk of increasing girls’ vulnerability to SVAG. However it does not mean that a girl who has never used alcohol, one who has never had sex or one who lives with both parents is totally safe from SVAG. It reduces the likelihood and it’s therefore a worthy effort to try and reduce if not stop the vice.
5.3.4 Factors associated with disclosure of SVAG in Limuru Sub-County

It is unfortunate that very small proportions of SVAG are actually disclosed to anyone. Many adolescent girls suffer in silence and this should warrant great concern. Adolescent girls need to be made aware that services for coping with SVAG are actually available and hence help can be found. Increasing the knowledge on sexual violence in every girl will serve to ensure that they are able to recognise acts of SV and therefore be able to disclose. The role of both parents in creating a platform for disclosure is invaluable. If parents are available and approachable, possibly more cases of SVAG will be disclosed.

5.4 Recommendations

5.4.1 Recommendations from the study

- The study recommends that the Ministry of Education (Limuru Sub-county office) come up with strategies to increase the knowledge of adolescent girls on the various aspects of SVAG in order to reduce its prevalence in the sub-county.

- Parents should advise against and where possible prohibit adolescent girls’ visits to the homes of boys/ men since most of the SVAG occurs in perpetrators’ homes, majority of whom are males well known to the girls.

- The ministry of education in collaboration with school heads should come up with ways to help adolescent girls be able to delay sexual debut as well as resist forced/ coerced sexual debut.

- Schools in collaboration with other bodies working among adolescent girls should sensitise them on the need to stop alcohol consumption and hence reduce their vulnerability to SVAG.
Ministries of education and health should sensitise the adolescent girls on the importance of disclosure of SVAG and the places they can seek help in case of SVAG so as to increase levels of disclosure.

5.4.2 Recommendations for further research

- Further research on the female perpetrators of sexual violence: who are the major female perpetrators, where do they mainly perpetrate the SVAG and other dynamics around female perpetration of SVAG.
- The differentiation between circumstantial and pre-meditated/planned SVAG.
- Replication of similar studies in other types of schooling such as girls only and boarding schools to ease generalisation of findings.
REFERENCES


Amy Young, Melissa Grey Antonia abbey, Carol J. Boyd and Sean Esteban McCabe. Alcohol-Related Sexual Assault Victimization Among Adolescents: Prevalence, Characteristics, and Correlates. *Journal of studies of Alcohol & psychoactive substances* 2009; 69(1) 39-48


Jill Keesbury, W. Onyango-Ouma, Chi-Chi Undie, Catherine Maternowska, Frederick Mugisha, Emmy Kageha, Ian Askew. 2012. A Review and Evaluation of


Koenig, L. 2003. Sexual coercion among women in Uganda: Results from the WHO multi-country study on women is health and life experiences, New Delhi meeting.


APPENDICES

Appendix 1: Informed Consent

PART I: Information Sheet

Introduction

My name is Eunice W. Kimani. I am a student doing a Master of Public Health (Reproductive Health option), Kenyatta University. As a requirement by the university, for the completion and award of my degree, I am conducting a study titled: Sexual Violence among adolescent girls in mixed day Secondary Schools in Limuru Sub-county

Procedures to be followed

I am going to explain about this research and invite you to voluntarily participate in this research. A questionnaire will be filled only once. You are free to consult before making any decision. You are free to ask any question or clarification about the research during or after data collection using the contact address provided at the end of this document.

Benefits

There are no direct benefits for you as an individual, monetary or otherwise, but your involvement will help in finding the extent of sexual violence in Limuru Sub-county. This information will be key in developing future programmes and policies to reduce the cases of sexual violence.

Risks

The only risk involved in taking part in this research is that the questions asked may be touching on your private life and some of these issues may arouse negative emotions.

Voluntary Participation

Your involvement in this research is completely voluntary. It is your choice whether to participate or not. Whether you choose to take part or not will not affect you in any way. You may discontinue taking part in this study at any point.


**Duration**

The data collection will only take period of 30 minutes. During this time, you will only be expected to fill the provided questionnaire.

**Confidentiality**

The identity of those taking part in the research will not be disclosed or shared with anyone. To ensure confidentiality the data collection forms will not bear your name or other details that can identify you. All the data and the information obtained during the study will be used for the sole purpose of meeting the objectives of the study.

**Contact Information**

If you have any questions, you may contact Dr. Justus Osero-0724869330 or Dr. Daniel Akunga-0722552157 or the Kenyatta University Ethical Review Committee Secretariat on kuerc.secretary@ku.ac.ke/ 020-8710901

**Consent Giver statement**

The above information regarding my child’s participation in the study is clear to me. The participation will be voluntary and the child can withdraw from the study at any time. I have clearly understood the risks and benefits involved in the study.

Name of Consent giver______________________________________

Signature_________________ Date________________________
PART 2: Assent Form for Adolescent Girls

My name is Eunice W. Kimani, a masters Student in Kenyatta University and am conducting a research study. The study is titled: Sexual Violence among adolescent girls in mixed day Secondary Schools in Limuru Sub-county. You are asked to volunteer to participate in the above titled study. Your parent/guardian has given his/her consent for you to participate in this study.

As a volunteer adolescent girl, this study requires you to honestly fill in a questionnaire only once. This will take 30 minutes of your time. The questions asked may be touching on your private life and issues that may arouse negative emotions. The research findings will be important in improving the Sexual and Reproductive Health of adolescent girls. There will be no monetary remuneration. You may end your participation at any time you choose. The information you give will be used only for this research and with full guarantee of confidentiality. Having being satisfactorily informed about the study, you will give your assent to participate in this study.

AGREEMENT TO BE IN THE STUDY

Your signature below means that you have read the above information about the study and have had a chance to ask questions to help you understand what you will do in this study. Your signature also means that you have been told that you can change your mind later if you want to. You will be given a copy of this assent form.

____________________  __________________  ________
Adolescent’s name      signature of the adolescent      Date

____________________  __________________  ________
Person obtaining Assent  signature          Date
Appendix 2: Questionnaire for adolescent girls.

My name is Eunice Kimani from Kenyatta University, pursuing a Masters Degree and I am conducting research on sexual violence among adolescent girls in mixed day secondary schools in Limuru Sub-county, Kiambu County, Kenya. I kindly request for a few minutes of your time to ask you some few questions in relation to the study. The information you provide us will be kept strictly anonymous and confidential and will be used solely for the academic purposes. You are at liberty to skip any question(s) or withdraw from the survey at any time without any type of penalty. I however assure you that your opinion is very important to this study and therefore utmost confidentiality pertaining to any information that you may provide in this survey will be observed.

Mark your responses with a (√)

Section A: Social-demographic information.

1. Age
   - 15 years [ ]1
   - 16 years [ ]2
   - 17 years [ ]3
   - 18 years [ ]4
   - 19 years [ ]5

2. Current Form of study
   - Form two [ ]1
   - Form three [ ]2
   - Form four [ ]3

3. For how long have you been a student in this school?
   ________________________________ Terms

4. Who do you stay with?
   - Both father & mother _______ 1
   - Stepfather & mother _______ 2
   - Father & stepmother _______ 3
   - Father only _______ 4
   - Mother only _______ 4
   - Another guardian ______ Specify _______ 6

PART 2: Socio-economic status

5. Does your family own the following items?
   i. Television Yes [ ]1 No [ ]2
   ii. Refrigerator Yes [ ]1 No [ ]2
   iii. Car Yes [ ]1 No [ ]2
iv. Bicycle/motorbike  Yes [ ] 1  No [ ] 2
v. Do all adult members of your family own a mobile phone?
   Yes [ ] 1  No [ ] 2

6. Is your home connected to electricity?
   Yes [ ] 1  No [ ] 2

7. How many bedrooms does your house have?
   Zero or one_________1
   Two______________2
   Three or more_________3

8. When at home, where do you get your water from?
   Piped water within the homestead___________1
   Buy from water vendors/sellers___________2
   Wells, river, borehole or spring_____________3
   Any other__________________ Specify_____________4

9. What kind of toilet do you have at home?
   Flush toilet within the home_________1
   Pit latrine for the family only_________2
   Pit latrine shared with other people_________3

10. What kind of floor does your house have?
    Tiled_________1
    Cemented_________2
    Earthen ______________3

PART 2a: KNOWLEDGE ON SEXUAL VIOLENCE

11. I can be sexually violated by people I know well including family members
    True [ ] 1  False [ ] 2

12. If I am sexually violated it is my fault and therefore I should not tell anyone about it
    True [ ] 1  False [ ] 2

13. Sexual violence includes other acts not just rape
    True [ ] 1  False [ ] 2
11. The people who carry out sexual violence against adolescent girls can be both males and/or females
   True [ ]1 False [ ]2

12. Sexual violence has negative effects on the health of adolescent girls
   True [ ]1 False [ ]2

PART 2b: KNOWLEDGE ON SERVICE AVAILABILITY

13. There is no place in Limuru Sub-county where a girl can report sexual violence if it happens to her
   True [ ]1 False [ ]2

14. There is nothing that can be done by a doctor/nurse to prevent a girl from contracting HIV or STIs after she is raped
   True [ ]1 False [ ]2

11. There is nothing that can be done by a doctor/nurse to prevent a girl from becoming pregnant after she is raped
   True [ ]1 False [ ]2

12. The police/Chief can offer help in case of sexual violence, so any such case should be reported to them
   True [ ]1 False [ ]2

13. There are laws in Kenya to protect adolescent girls from sexual violence and punish those who carry out such acts
   True [ ]1 False [ ]2

14. At the police station, there is a specific desk where girls can report cases of sexual violence
   True [ ]1 False [ ]2

15. Counselling is available for those girls who have faced sexual violence at the Children’s Office in Limuru
   True [ ]1 False [ ]2

PART 3: SEXUAL EXPERIENCES

16. Have you ever had sex? (If no skip to Question 22)
   Yes [ ]1 No [ ]2

17. How old were you when you first had sex?
   Age in years________________
18. The first time you had sex would you say it was because you were willing or you were forced to?
Willing__________ 1
Forced to__________ 2

19. At any time in your life, have you ever been forced to have sexual intercourse?
Yes [  ] 1 No [  ] 2

20. How old were you the first time you were forced to have sexual intercourse?
Age in years_________________

21. How many times have you been forced to have sexual intercourse?
_________________________Times (please write the exact number)

22. At any time in your life, has anyone ever ATTEMPTED to force you to have sexual intercourse? (If no, please skip to Question 25)
Yes [  ] 1 No [  ] 2

23. How old were you the first time someone ATTEMPTED to force you to have sexual intercourse?
Age in years_________________

24. How many times has someone ATTEMPTED to force you to have sexual intercourse?
_________________________Times (please write the exact number)

25. At any time in your life, has anyone ever forcefully touched your genitals or breasts? (If no skip to Question 28)
Yes [  ] 1 No [  ] 2

26. How old were you the first time someone forcefully touched your genitals or breasts?
Age in years_________________

27. How many times has someone forcefully touched your genitals or breasts?
_________________________Times (please write the exact number)
PART 4: PERPETRATORS OF SEXUAL VIOLENCE (Please skip this Part 4 if all your three (3) answers to questions 19, 22 and 25 are “NO”)

28. What was the gender of the person who forced you to have sexual intercourse?
   Male_______ 1 Female_________ 2

29. What was the gender of the person who ATTEMPTED to force you to have sexual intercourse?
   Male_______ 1 Female_________ 2

30. What was the gender of the person who forcefully touched your breasts or genitals?
   Male_______ 1 Female_________ 2

31. Who was the person who forced you to have sexual intercourse, ATTEMPTED to force you to have sexual intercourse or forcefully touched your genitals or breasts? (you can tick more than one)
   Boyfriend_______1
   Parent_____________________2
   Step-parent________________3
   Other relative____________ Specify____________4
   A friend____________________5
   A school mate_____________6
   Teacher____________________7
   Police_______________________8
   A religious leader__________9
   Stranger____________________10
   Other person________________ Specify____________11

32. Was the person who forced you to have sexual intercourse, attempted to force you to have sexual intercourse or forcefully touched your genitals or breasts under the influence of alcohol or any other drug?
   Yes [   ] 1    No [   ] 2    Don’t know [   ] 98
33. Where were you when you were forced to have sexual intercourse, almost forced to have sexual intercourse or forcefully touched on your genitals or breasts? (You can tick more than one)
- Home____________________ 1
- School____________________ 2
- Way to/from school__________ 3
- Boyfriend/friend’s house_____ 4
- At a party____________________ 5
- Another place________________ Specify________________ 6

PART 5: Alcohol use

34. Have you ever used alcohol in your life? (If No skip to Question 37)
- Yes      [   ] 1
- No   [    ] 2

35. Where were you when you first used alcohol?
- Home___________1
- School________ 2
- Friend’s house______3
- At a party__________4
- Another place __________Specify_________5

36. How many times have you used alcohol in your life?
- _______________Times (please indicate the exact number of times)

PART 6: DISCLOSURE LEVELS (Please skip this Part 6 if all your three (3) answers to questions 19, 22 and 25 are “NO”)

37. Did you tell anyone when you were forced to have sexual intercourse?
- Yes      [   ] 1
- No   [    ] 2

38. Did you tell anyone when someone ATTEMPTED to force you to have sexual intercourse?
- Yes      [   ] 1
- No   [    ] 2

39. Did you tell anyone when someone forcefully touched your breasts or genitals?
- Yes      [   ] 1
- No   [    ] 2

40. If yes, who did you tell?
- Mother_______________________1
- Father________________________ 2
Another family member __________ Specify __________ 3
A friend/boyfriend __________ 4
Another person __________ Specify __________ 5

41. If you did not tell anyone why was that the case?
   Was afraid __________ 1
   Was ashamed __________ 2
   Didn’t know who to tell __________ 3
   Didn’t see the need to tell anyone _____ 4
   Another reason __________ Specify __________ 5

42. Did you get any help from the person(s) you told? (If no skip to Question 44)
   Yes   [   ] 1  No   [   ] 2

43. What kind of help did you get?
   Took the person who forced the acts to the police/chief______ 1
   Given some kind of medical treatment __________ 2
   Given some counselling __________ 3
   Given spiritual help (e.g prayers) __________ 4
   Other kind of help __________ Specify __________ 5

44. Did you seek help from any of the following? (You can tick more than one).
   Religious leader ________ 1
   Doctor/nurse ________ 2
   Police/chief ________ 3
   Children office ________ 4
   None of the above ________ 5

45. If not, why did you not seek help from the above people?
   Didn’t know where to get them __________ 1
   Didn’t think they would help in any way __________ 2
   Didn’t have money needed for that service __________ 3
   Was afraid of what response they would give __________ 4
   Any other reason __________ Specify __________ 5

Thank you very much for your responses!!
Appendix 3: Key informant interview schedule- Children’s Officer

Gender
Male [ ] Female [ ]

1. How many cases of sexual violence have been reported in your office of girls aged 15-19 years in the past year? ___________

2. In the cases reported who are the major perpetrators?

________________________
________________________
________________________
________________________

3. Where did the reported cases of sexual violence occur?

________________________
________________________
________________________

4. In your own view, what proportion of sexual violence cases are reported to the children’s office or any other help centre?

________________________

5. What actions do you take once an act of violence has been reported?

________________________
________________________
________________________

6. Which other places can sexual violence be reported and assistance sought by the adolescent girls within Limuru Sub-county?

________________________
Appendix 4: Key informant interview schedule- School heads

Gender

Male [ ] Female [ ]

1. How many cases of sexual violence have been reported in your office of girls aged 15-19 years in the past year?___________

2. In the cases reported who are the major perpetrators?

________________________
________________________
________________________
________________________

3. Where did the reported cases of sexual violence occur?

________________
________________
________________

4. In your own view, what proportion of sexual violence against the girls is reported to the school’s office?

________________________

5. What actions do you take once an act of violence has been reported?

________________
________________
________________

6. Do you have any kind of support system for girls who are victims of sexual violence in your school?

________________________
________________________
Appendix 5: Key informant interview schedule- Police officers

Gender

Male [ ]    Female [ ]

1. How many cases of sexual violence have been reported in your station of girls aged 15-19 years in the past year?___________

2. Do you have a gender desk where cases of sexual violence are reported?___________

3. In the cases reported who are the major perpetrators?
   ____________________________
   ____________________________
   ____________________________

4. Where did the reported cases of sexual violence occur?
   ____________________________
   ____________________________
   ____________________________

5. In your own view, what proportion of sexual violence against the girls is reported to the police in Limuru Sub-county?
   ____________________________

6. What actions do you take once an act of violence has been reported to your office?
   ____________________________
   ____________________________
   ____________________________
Appendix 6: Key informant interview schedule- Medical personnel

Gender

Male [ ] Female [ ]

1. How many cases of sexual violence have been reported in your station of girls aged 15-19 years in the past year?___________

2. In the cases reported who are the major perpetrators?

________________________
________________________
________________________
________________________

3. Where did the reported cases of sexual violence occur?

_______________
_______________

4. What health outcomes have been found among the adolescent girls who are victims of sexual violence?

________________________

5. As the adolescent girls seek medical help after the violence, do they come alone or accompanied? _________

If accompanied by whom? _______________

6. Most cases are reported after how much time has elapsed since the occurrence of the ordeal? _______________

7. What actions do you take once an act of violence has been reported to your facility?

________________________
________________________
Appendix 7: Focus group discussion guide with adolescent girls

1. What do you understand by the term sexual violence?

2. Within your school, have you heard of any girl who has been sexually violated?

3. What puts girls aged 15-19 years at risk of being sexually violated?

4. Who are the common perpetrators of sexual violence against these girls?

5. Which places put girls at risk of being sexually violated?

6. Which places within your locality can these girls seek help if sexually violated?
Appendix 8: Map of study area

Figure 6.1: Map of Limuru Sub-county

(Source: Google maps)
Appendix 9: Graduate School Approval

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School

TO: Ms. Eunice W. Kimani
C/o Environmental Health Dept.
Kenyatta University

DATE: 19th January, 2014

REF: Q139/21159/12

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

This is to inform you that Graduate School Board at its meeting of 15th January, 2014 approved your Research Proposal for the M. Env. Health Degree, entitled “Sexual Violence among Adolescent Girls in Mixed-Day Secondary Schools in Limuru District, Kiambu County, Kenya”.

You may now proceed with your Data collection.

Thank you.

REUBEN W. KURIKI
FOR DEAN, GRADUATE SCHOOL

C.C. Chairman, Environmental Health Dept.

Supervisors:

1. Dr. Justus Omero
C/o Community Health Dept.
KENYATTA UNIVERSITY

2. Dr. Dariel Akunga
C/o Environmental Health Dept.
KENYATTA UNIVERSITY

RB/cao

Committed to Creativity, Excellence & Self-Reliance
Appendix 10: Ethical Approval by Kenyatta University Ethical Review Committee

KENYATTA UNIVERSITY
ETHICS REVIEW COMMITTEE

Email: kuerc.chairman@ku.ac.ke
kuerc.secretary@ku.ac.ke
Website: www.ku.ac.ke

Our Ref: KU/R/COMM/51/305

Date: 21st March, 2014

Eunice Wambui Kimani,
Department of Community Health,
P.O. Box 45844 – 00100
Nairobi.

APPLICATION NUMBER PKU/182/1 159 – “SEXUAL VIOLENCE AMONG ADOLESCENT GIRLS IN MIXED – DAY SECONDARY SCHOOLS IN LIMURU DISTRICT, KIAMBU COUNTY, KENYA” – VERSION 2

1. IDENTIFICATION OF PROTOCOL
The application before the committee is with a research topic “Sexual violence among adolescent girls in mixed – day secondary schools in Limuru district, Kiambu County, Kenya”. Version 2 dated 11th March, 2014.

2. APPLICANT
Eunice Wambui Kimani, Department of Community Health,

3. STUDY SITE
Limuru district, Kiambu County, Kenya

4. DECISION
The committee has considered the research protocol in accordance with the Kenyatta University Research Policy (section 7.2.1.39) and the Kenyatta University Ethics Review Committee Guidelines AND APPROVED that the research may proceed for a period of ONE year from 21st March, 2014.

5. ADVICE/CONDITIONS
i. Progress reports are submitted to the KU-ERC every six months and a full report is submitted at the end of the study.
ii. Serious and unexpected adverse events related to the conduct of the study are reported to this board immediately they occur.
iii. Notify the Kenyatta University Ethics Committee of any amendments to the protocol.
iv. Submit an electronic copy of the protocol to KUERC.

When replying, kindly quote the application number above.
If you accept the decision reached and advice given, please sign in the space provided below and return to KU-ERC a copy of the letter.

PROF. NICHOLAS K. GIKONYO
CHAIRMAN ETHICS REVIEW COMMITTEE

Eunice Wambui Kimani...accept the advice given and will fulfill the conditions therein.

21 MAR 2014

Signature: ___________________________ Dated this day of ___________ 21st March, 2014.

Vice-Chancellor
Director; Institute for Research Science and Technology

P.O. Box 43844 – 00100 Nairobi.
Appendix 11: NACOSTI Permit

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,310571,2219420
Fax: +254-20-318245,318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

Ref: No.

Date:
27\textsuperscript{th} February, 2014

NACOSTI/P/14/5433/799

Eunice Wambui Kimani
Kenyatta University
P.O.Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Sexual violence among adolescent girls in mixed day secondary schools in Limuru District, Kiambu County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Kiambu County for a period ending 31\textsuperscript{st} December, 2014.

You are advised to report to the County Commissioner and the County Director of Education, Kiambu County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

\textit{[Signature]}

DR. M. K. RUGUT, PhD, HSC.
FOR: SECRETARY/CEO

Copy to:
The County Commissioner
The County Director of Education
Kiambu County.
Appendix 12: Limuru DEO’s Authority to conduct study within schools

REPUBLIC OF KENYA

MINISTRY OF EDUCATION SCIENCE & TECHNOLOGY
State Department of Education

When replying please quote
Ref. No: REF: LMR/MOE/MISC GEN/20/118

TO PRINCIPALS
MIXED DAY SECONDARY SCHOOLS
LIMURU SUB-COUNTY

SUB-COUNTY DIRECTOR OF EDUCATION
LIMURU SUB-COUNTY
P. O. Box 970, LIMURU

Date: 11th February 2014

RE: AUTHORITY TO CONDUCT A RESEARCH ON SEXUAL VIOLENCE AMONG ADOLESCENT GIRLS IN MIXED DAY SECONDARY SCHOOLS IN LIMURU SUB-COUNTY

The bearer of this letter, Eunice W. Kimani Reg. No Q139/21159/12, is a Postgraduate student of Kenyatta University, Department of Environmental Health in the school of Public Health. She intends to conduct the above research in our Mixed-Day secondary schools. She is therefore permitted to do so and any assistance accorded to her will be highly appreciated. Thank you.

Clarice Mwitwa
Sub-County Director of Education
Limuru Sub-County