PERCEPTION OF HIV/AIDS BY PRIMARY SCHOOL PUPILS IN THIKA MUNICIPALITY, THIKA DISTRICT, KENYA.

BY;

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REG. NO. 157/7182/2001

A THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF PUBLIC HEALTH AND EPIDEMIOLOGY IN THE SCHOOL OF PURE AND APPLIED SCIENCES OF KENYATTA UNIVERSITY.

MAY, 2005
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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ABSTRACT

The increase in incidence of the HIV/AIDS among men and women in their early and mid twenties calls for urgent but effective HIV/AIDS prevention programs targeted at the youth. More than 20 million people have lost their lives to the disease. In Kenya, the pandemic has been declared a national disaster, over 2.2 million Kenyans are already living with HIV and about 1.5 million Kenyans have died from HIV related diseases. This study was on perception of HIV/AIDS by primary school pupils in class 5-8. This descriptive cross-sectional study was carried out in Thika Municipality of Thika District, Kenya. The HIV/AIDS prevalence in the district stood at 34 percent in 2001, the highest in Central Province. A total of 465 pupils from 12 schools were interviewed. A stratified random sampling was done and data collected using self administered questionnaires. Data was processed using SPSS and Ms Excel Computer package. Chi-square test was done on the data to show the relationships between various variables. Variations and percentages were compared using t-test for proportions. HIV/AIDS was perceived as a reality by (96.6%) of the respondents. However, even with this, a majority (59.8%) still believed that the ongoing campaign was a plan to stop sexual intercourse enjoyment by young people. The study showed that females (43.5%) had better perception compared to males (38.1%). However, this was statistically non significant ($\chi^2=1.216$, df=1, $p>0.05$) showing perception does not depend on gender. Of all the mentioned sources of information, media gave most information on condoms use. There was a non-significant relationship between the perception of HIV/AIDS and the source of information ($\chi^2=10.11$, df=6, $p>0.05$). Age category 12-13 years had the highest percentage of those with good perception (46.3%), although poor perception was high (44.7%) at age category 18-19 years, ($\chi^2=6.09$, df=4, $p>0.05$). This was statistically non significant indicating there is no relationship between the age category and perception on HIV/AIDS. Public schools had a higher percentage of pupils with good perception, (42.1%) compared to (39%) from private schools. However chi-square test gave a non significant association ($\chi^2=0.313$, df=1, $p>0.05$). Distribution of the study subjects by gender was also not significant (t=0.608, df=463, $p>0.05$). However, the following were among aspects shown to be significant: age distribution ($\chi^2=356.98$, df=9, $p<0.001$), knowledge about existence of HIV/AIDS (t=21.5, df=463, p<0.001), source of information with media topping the list ($\chi^2=85.1$, df=4, $p<0.001$) and majority maintained that HIV/AIDS campaign is a scheme to stop the youth from enjoying themselves (t=4.35, df=463, p<0.001). From this study most of the respondents indicated having not had sexual intercourse (73.8%). This means that if the pupils can be helped to adopt abstinence or safer sexual practices in their lives they could be safe from the deadly scourge. The findings of this study provide crucial information on the perception of HIV/AIDS by the young people, which may significantly help in the planning of effective prevention and control programs against the pandemic.
# TABLE OF CONTENTS

Declaration ................................................................................. ii
Dedication ................................................................................ iii
Acknowledgement ..................................................................... iv
Abstract .................................................................................. v
Table of contents ...................................................................... vi
List of tables .......................................................................... xii
List of figures ........................................................................... xiv
Abbreviations .......................................................................... xvi

## CHAPTER ONE: INTRODUCTION 1

1.1 Background ......................................................................... 1
1.2 Problem Statement and Justification .................................. 2
  1.2.1 Problem Statement .................................................... 2
  1.2.2 Justification ............................................................... 2
1.3 Research Questions ............................................................. 2
1.4 Null Hypothesis ................................................................. 3
1.5 Study Objectives ................................................................. 3
  1.5.1 General Objective ...................................................... 3
  1.5.2 Specific Objectives ................................................... 3
1.6 Rationale of the Study ......................................................... 3
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER TWO: LITERATURE REVIEW</td>
<td>4</td>
</tr>
<tr>
<td>2.1 Global Situation of HIV/AIDS</td>
<td>4</td>
</tr>
<tr>
<td>2.2 Kenyan Situation of HIV/AIDS</td>
<td>4</td>
</tr>
<tr>
<td>2.3 Social Economic Effects of HIV/AIDS</td>
<td>5</td>
</tr>
<tr>
<td>2.4 HIV/AIDS infection</td>
<td>7</td>
</tr>
<tr>
<td>2.4.1 Symptoms of HIV infection</td>
<td>8</td>
</tr>
<tr>
<td>2.4.2 Signs and symptoms of AIDS</td>
<td>9</td>
</tr>
<tr>
<td>2.4.3 Major Signs and symptoms of HIV/AIDS</td>
<td>10</td>
</tr>
<tr>
<td>2.4.4 Major Signs and symptoms specific to children</td>
<td>10</td>
</tr>
<tr>
<td>2.4.5 Minor Signs and symptoms</td>
<td>10</td>
</tr>
<tr>
<td>2.4.6 Phases of HIV/AIDS</td>
<td>11</td>
</tr>
<tr>
<td>2.4.7 Diagnosis</td>
<td>12</td>
</tr>
<tr>
<td>2.4.8 Modes of Transmission</td>
<td>12</td>
</tr>
<tr>
<td>a) Transmission through sexual intercourse</td>
<td>12</td>
</tr>
<tr>
<td>b) Transmission through contaminated equipment</td>
<td>13</td>
</tr>
<tr>
<td>c) Transmission through blood and organs transplant</td>
<td>13</td>
</tr>
<tr>
<td>d) Transmission by mother to child</td>
<td>14</td>
</tr>
<tr>
<td>2.5 Control of HIV/AIDS</td>
<td>14</td>
</tr>
<tr>
<td>2.5.1 Prevention</td>
<td>14</td>
</tr>
<tr>
<td>a) Prevention of transmission through Sexual intercourse</td>
<td>14</td>
</tr>
<tr>
<td>b) Prevention of transmission through Contaminated Equipment</td>
<td>15</td>
</tr>
<tr>
<td>c) Prevention of transmission through Blood and Organs Transplant</td>
<td>15</td>
</tr>
<tr>
<td>d) Prevention of transmission of Mother to Child</td>
<td>15</td>
</tr>
</tbody>
</table>
2.5.2 The role of voluntary counselling and testing ........................................ 16
2.5.3 The role of religion and religious organisation ...................................... 16
2.5.4 Treatment ............................................................................................. 17

CHAPTER THREE: MATERIALS AND METHODS ........................................... 19
3.1 Study Area .................................................................................................. 19
3.2 Study population ........................................................................................ 19
3.2.1 Inclusion Criteria .................................................................................. 19
3.2.2 Exclusion Criteria .................................................................................. 19
3.2.3 Ethical Consideration ............................................................................ 20
3.3 Sampling Technique .................................................................................. 20
3.4 Sampling Size ............................................................................................ 20
3.5 Data Collection Method ............................................................................ 21
3.6 Data Management and Analysis ............................................................... 22

CHAPTER FOUR · RESULTS ............................................................................... 23
4.1 SOCIO- DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION ................................................................. 23
4.1.1 Age distribution .................................................................................... 23
4.1.2 Distribution of study subjects by sex .................................................... 24
4.1.3 Distribution by school category ............................................................. 24
4.1.4 Distribution by family type and the persons they stayed with ............... 25
4.1.5 Distribution by occupation of the persons they stayed with ................... 26
4.2 KNOWLEDGE, SOURCE AND TYPE OF INFORMATION RECEIVED BY THE RESPONDENTS ON HIV/AIDS .................................................. 27
4.2.1 Knowledge on the existence of HIV/AIDS ........................................ 27
4.2.2 Source of Information about HIV/AIDS issues ............................... 27
4.2.3 Type of HIV/AIDS information ................................................... 28
4.2.4 Belief in the information they had received on HIV/AIDS ............... 29
4.2.5 Contribution of each source on each information type .................... 29
4.2.6 Those who had seen someone suffering from HIV/AIDS .................. 30
4.2.7 Sexual intercourse involvement ................................................... 30
4.2.8 Age at start of sexual intercourse ............................................... 32

4.3. PREVALENT PERCEPTIONS ON HIV/AIDS BY THE RESPONDENTS .. 33
4.3.1 Perception about the reality of HIV/AIDS ................................... 33
4.3.2 View about HIV/AIDS campaign ................................................. 34
4.3.3 View about HIV/AIDS Campaign - by sex category ....................... 34
4.3.4 View about death resulting from HIV/AIDS ................................... 35
4.3.5 Belief that HIV/AIDS can be avoided ........................................... 35
4.3.6 Perception that HIV/AIDS is a curse from God ............................... 36
4.3.7 Knowledge about the difference/similarity between HIV and AIDS ....... 36
4.3.8 Perception that Only HIV positive can infect can infect another person .... 37
4.3.9 Knowledge on whether one cannot get HIV/AIDS on first sexual intercourse .. 37
4.3.10 Knowledge on whether young and healthy looking persons cannot infect others with HIV/AIDS .......................................................... 37
4.3.11 Knowledge on whether HIV/AIDS infects homosexuals .................. 38
4.3.12 Knowledge that sharing of injection equipment would cause infection with
HIV/AIDS ................................................................. 38
4.3.13 Knowledge that circumcision would cause infection with HIV/AIDS..... 39
4.3.14 Perception on whether blood transfusion would cause infection with HIV/AIDS ................................................. 40
4.3.15 Perception that ear piercing could cause HIV/AIDS infection ............... 40
4.3.16 Perception that condoms offer full protection against HIV/AIDS infection .42
4.3.17 Frequency of those who took precaution against HIV/AIDS ............... 42
4.3.18 Type of precaution taken by the respondent .................................. 43
4.4 MEASURE OF THE LEVEL OF AWARENESS ABOUT HIV/AIDS
............................................................................................ 44
4.4.1 Awareness about HIV/AIDS issues ................................................. 44
4.4.2 Awareness about HIV/AIDS issues by gender .................................... 44
4.5.1 The relationship between awareness level and gender ......................... 45
4.5.2 Perception measurement .................................................................... 46
4.5.3 Perception by sex ............................................................................... 46
4.5.4 Perception by family type .................................................................. 47
4.5.5 The relationship between the age category and perception of HIV/AIDS ........................................................................... 47
4.5.6 Testing relationship between perception and source of information ....... 48
4.5.7 Perception by school category ............................................................ 48
CHAPTER FIVE : DISCUSSION ......................................................... 49
5.1 DEMOGRAPHIC CHARACTERISTICS OF THE STUDY SUBJECTS .... 49
5.2 AWARENESS, KNOWLEDGE, SOURCE AND TYPE OF INFORMATION
LIST OF TABLES

Table 1. Age distribution ................................................................. 23
Table 2 Distribution by school category............................................. 24
Table 3 Occupation of the persons the respondents stayed with............. 26
Table 4. Source of Information about HIV/AIDS issues.......................... 28
Table 5 Type of HIV/AIDS information ............................................. 28
Table 6. Contribution of each source of information to information type...... 29
Table 7. Age at start of sex intercourse........................................... 32
Table 8. View about HIV/AIDS campaigns by gender............................ 34
Table 9. Perception that only those who are HIV positive, can infect others with HIV ................................................................. 37
Table 10. Knowledge on whether one cannot get HIV/AIDS on first sexual intercourse ................................................................. 37
Table 11. Knowledge that young and healthy looking persons can infect others with HIV/ AIDS...................................................... 38
Table 12. Knowledge that HIV/AIDS infects homosexuals........................ 38
Table 13. Awareness about HIV/AIDS issues........................................ 44
Table 14. Comparison of awareness level by gender............................... 45
Table 15. Test of relationship between awareness level and sex category...... 45
Table 16. Perception measurement about HIV/AIDS issues..................... 46
Table 17. Perception by sex ............................................................... 46
Table 18. Perception by Family type ................................................... 47
Table 19. Perception by age category.................................................. 47
Table 20. Testing relationship between perception and source of information....... 48

Table 21 Perception by school category.............................................................. 48
CHAPTER ONE: INTRODUCTION

1. Background

HIV/AIDS is among the top ten killer diseases in the world. Among the adolescents, personal perception of risk is usually low and misperceptions continue about the transmission modes and the efficiency of prevention measures. For some, the search for love may sometimes represent a far more immediate reward than the adoption of safe sex (Mann et al., 1992). The global impact of HIV/AIDS is becoming even more severe, first because it is spreading very fast and secondly, it may take many years to develop an effective vaccine and even longer to develop a cure. Several countries are already in the grip of serious HIV/AIDS epidemic. More than 20 million people have lost their lives to the disease (UNAIDS, 2002). In most parts of the world HIV/AIDS has become the single greatest threat to social, economic and human development.

In Kenya the pandemic has been declared a national disaster. Over 2.2 million Kenyans are already living with HIV and about 1.5 million Kenyans have died from the HIV related diseases (UNAIDS, 2000a). Seven hundred Kenyans are dying daily (RoK, 2002e), yet the extent to which the populace actually perceive HIV/AIDS as a real threat remains unknown. There is therefore an urgent need to ascertain the perception of HIV/AIDS by Kenyans. Young people account for the majority of new HIV/AIDS infection in East and Southern Africa (Horizon, 2001). This study was on the perception of HIV/AIDS by primary school pupil. The study was carried out in Thika District where HIV/AIDS prevalence in the district stood at 34 percent in 2001 (RoK, 2002a), the highest in Central Province.
1.2 PROBLEM STATEMENT AND JUSTIFICATION

1.2.1 Problem statement

HIV/AIDS continues to claim millions of precious lives yet there is no cure or vaccine in use. The perception of the populace on HIV/AIDS particularly the adolescent has not been clearly understood despite the obvious benefits. Much of the accumulated knowledge about HIV/AIDS prevention has been gained from adult programs. Adolescents' health behaviour is different from that of adults owing to their different environmental, social and developmental diversity. Unless the perception on this disease by young people is clearly understood no meaningful prevention and control can be achieved.

1.2.2 Justification

Thika District has one of the highest HIV prevalence rates in the country, at 34%, with a prevalence rate of at 17% amongst primary school children and 22% among the secondary school students in 2001 (RoK, 2002a). Even though there has been a lot of information on the existence of HIV/AIDS the real nature and its life threatening consequences may still be distant to a majority of Kenyans, more so the youth. For HIV/AIDS prevention and control programs to succeed adequate cognisance of the perception of HIV/AIDS by the populace must be taken into account.

There is no better starting point than at the adolescence when they are no longer children and not yet adults (10 years to 19 years), when most of them are HIV free and have not started risky behaviour.

1.3 RESEARCH QUESTIONS

a) What is the relationship between the age of the adolescent, and the perception of HIV/AIDS?

b) What is the relationship between the family background and the perception of HIV/AIDS among the primary school pupils of class 5-8?

c) What is the relationship between the source of information and the perception of HIV/AIDS by adolescents in primary schools within Thika Municipality?

d) What is the relationship between gender and the perception of HIV/AIDS?
1.4 NULL HYPOTHESIS

a) There is no relationship between the age of the adolescent, and the perception of HIV/AIDS.

b) There is no relationship between the family background and the perception of HIV/AIDS, among the primary school pupils of class 5-8.

c) There is no relationship between the source of information and the perception of HIV/AIDS by adolescents in primary schools within Thika Municipality.

d) There is no relationship between the sex of the adolescent and the perception of HIV/AIDS.

1.5 STUDY OBJECTIVES

1.5.1. General objective

To identify the perceptions of HIV/AIDS, by primary school pupils in Thika Municipality.

1.5.2 Specific objectives

1) To identify the level of perception of HIV/AIDS by pupils of Primary school in the study area

2) To determine the level of knowledge on HIV/AIDS by the adolescents.

3) To determine the sources of information on HIV/AIDS by primary school pupils.

4) To determine the relationship between gender and perception of HIV/AIDS by primary School pupils in class 5-8.

5) To determine the relationship between family type and perception of HIV/AIDS by primary School pupils.

6) To determine the level of awareness on HIV/AIDS, by primary school pupils of class 5-8.

1.6 RATIONALE OF THE STUDY

Despite various campaigns on HIV/AIDS control in this country, the prevalence rate of HIV/AIDS is still unacceptably high. Over 2.2 million Kenyan’s are living with HIV (UNAIDS, 2000a). Over 1.5 million Kenyans had died from HIV related diseases by 2002 and about 700 persons die daily in Kenya due to HIV/AIDS (UNAIDS, 2002). Young people account for the majority of all new HIV infections there is therefore an urgent need to ascertain their perception of HIV/AIDS.
CHAPTER TWO: LITERATURE REVIEW

2.1 Global situation of HIV/AIDS

The global estimate at the end of 2002 for adults and children living with HIV/AIDS was 42 million, with 5 million people newly infected in 2002. Out of this, 800,000 were children under 15 years (UNAIDS, 2003). The pandemic is causing havoc in developing countries especially Africa and South Asia. There were 3.1 million deaths as a result of AIDS in 2002, 2.5 million were adults, out of which 1.2 million were women, and 610,000 were children under 15 years (UNAIDS, 2003).

Sub-Saharan Africa is hardest hit with 29,400,000 people living with the disease, and out of the 5 million new global infections in 2002, 3.5 million were from Sub Saharan Africa (UNAIDS, 2003). 11 million children were estimated to be orphaned by AIDS in this region by the end of 2001 (UNAIDS 2002).

Globally, 3.2 million young people under 15 years were living with the disease by the end of 2002 (UNAIDS, 2003). But despite the obvious benefits associated with reaching the young people, less is known about effective interventions for this age group than for adults, more so their perception on HIV/AIDS. Young people’s perception and health behaviour is different from that of adults owing to their different behavioural, social and developmental diversity. Today adolescence is characterised by earlier sexual activity and rapid physical growth, which often outstrips emotional maturity. Peer pressure may override their healthy behaviours. Today young men and women are questioning traditional norms and seeking to define their own mode of experience, often beyond the confines of their parent’s lives and experience (Beker et al., 1999)). With the grave reality encompassing us in relation to HIV/AIDS, prevention and control programs will only succeed if young people’s perceptions to this deadly disease are clearly understood.

2.2 Kenyan situation of HIV/AIDS

In Kenya the pandemic has been declared a national disaster by the government. HIV probably started to spread in Kenya in the late 1970s or early 1980s. Over 2.2 million Kenyans are already living with
HIV and about 1.5 million Kenyans have died from HIV related diseases (UNAIDS, 2000b). Hospital bed occupancy by AIDS patients rose from 15% in 1992 to 51% in 2000 (RoK, 2001a). HIV/AIDS prevalence is estimated to be about 18% in urban areas and 13-14% in rural areas (NASCOP, 2001). Life expectancy in Kenya has also declined from 65 years to 46 years because of HIV/AIDS (RoK, 2001a).

Thika District where this study was carried out has been badly hit. HIV prevalence was 34% in 2001 (RoK, 2002a). This is far above the national prevalence level of 13.5%. There has been a rise in street children and orphans; education has been badly affected, with HIV prevalence rate at 17% amongst primary school children and 22% amongst secondary school students (RoK, 2002a). Although HIV/AIDS control campaigns have been going on in this country with an awareness level of more than 95%, the extent to which the populace actually perceive that HIV/AIDS is a real threat remains unknown (RoK, 2002a).

Although 99% of Kenyan adults know that the AIDS virus is transmitted through sexual intercourse, over 50% of single and sexually active men and 14% women have more than one sexual partner (RoK, 2001a). The need to understand the perception on HIV/AIDS by our people is urgent. For us to succeed we must begin at adolescence, when they are no longer children, and not yet adults (10 – 19 years).

2.3 Social economic effects of HIV/AIDS

HIV/AIDS has affected all aspects of social and economic life. Education systems have been affected in many ways. Children infected by HIV during birth do not live to enrol in schools, many children have to drop out of school when they become orphans or have to stay at home to tend to sick family members. Teachers are also dying of HIV/AIDS.

In some African countries spending on school education fell by half, food consumption went down by 11% per capita, and health care expenditure more than quadrupled in households where a family member had AIDS (World Bank, 2003). School-based programs can help young people understand
how to avoid the risks of unsafe sex and this will be more effective when the perception of HIV/AIDS by young people is clearly understood.

The health sector has been badly affected by an increased burden of caring for those infected by HIV/AIDS, provide effective treatment of opportunistic infections, and implement prevention programs. HIV/AIDS prevalence has been particularly high among soldiers in many countries with the military service often placing young men in risky environments away from their families. Effective programs will be needed to address this situation.

Long distance truck drivers and other transport workers often spend many nights away from home, with commercial and casual sex available at truck stops, border closing points and major transportation stops. Truck drivers and other transport workers may acquire HIV infection through commercial or casual sex and spread it along their route and back to their partners and communities.

Employer’s medical costs and employee costs are on the rise; most of these resources could have been saved or invested in productive ventures. HIV/AIDS affect savings of both individuals and organisations, which cumulatively, reduces the general level of saving and investments in the country.

Eastern Africa is one of the lowest income regions in the world, with some of the world's poorest health indicators, an average per capita income of $162 and an average life expectancy of 50 years (Population And Human Resources, Report, 1996). With HIV/AIDS the situation is more serious.

Absenceism costs have increased as absent employees continue to be paid for the job they did not perform. Absenteeism also results into extra work for other healthy employees who have to stand-in for sick colleagues. Working longer hours produces stress among the employees and is responsible for a decline of both quantity and quality of work while illness compromises labour productivity because a sick person is unable to work. Even in circumstances where one can still work, performance is lowered by both physical and psychological factors. Before the onset of HIV/AIDS, the most important reasons for employees exit from employment then, were old age, retirement, resignation, termination, dismissal, illness and death in that order. Today, the order has changed as illness and
death has become the leading cause of exit from employment. A study in Zambia shows that two thirds urban households that lost their bread winner to AIDS experienced an 80% loss of income. The same study found out that 61% of the households had moved to cheaper housing, 39% lost piped water, and 21% of the girls and 17% of the boys dropped out of school (World Bank, 2003).

The HIV/AIDS pandemic is reversing most of the gains achieved both socially and economically.

2.4 HIV/AIDS Infection

An infection with HIV occurs when the virus gains access to an uninfected host following exposure to infectious material (Kurth, 1993). The virus is spread most commonly during sexual intercourse with an infected partner. During sex, the virus enters the body through the mucosal linings of the vagina, vulva, penis, or rectum after intercourse or, the mouth and the upper gastrointestinal tract after oral sex. The likelihood of transmission is increased by factors that may damage these linings, especially other sexually transmitted diseases that cause ulcers or inflammation (NIAID, 2001). The immune system cells of the dendritic type, which reside in the mucosa, begin the infectious process after sexual exposure by binding to and carrying the virus from the site of infection to the lymph nodes where other immune system cells become infected.

HIV is also transmitted through transfusion with contaminated blood or through contact with infected blood, through the sharing of needles or syringes contaminated with blood containing the virus. Children may acquire the virus from their mothers before or during birth. The virus also may be transmitted from an HIV-infected mother to her infant through breastfeeding (NIAID, 2001).

In the early stages of HIV infection the victim looks and feels healthy, but there is a steady and inexorable loss of immune functions. In the middle stage of infection, non-specific signs and symptoms may develop. As immune dysfunction becomes more severe, those infected become susceptible to unusual opportunistic pathogens and cancers.

AIDS results from inability or impaired ability of the immune system to do its job of protecting its victim from various diseases. The immune system becomes deficient hence the name "immune
Immune deficiency does not kill the victims directly but leaves them “naked” to be attacked by all kinds of infectious agents (Duh, 1991). Usually a person is born with a functioning immune system but with HIV/AIDS he or she “acquires” something that destroys the immune system hence the name acquired. Thus other ailments that could have been trivial could now even cause death. The immune system is destroyed by the virus rendering the victim helpless to the disease process (Duh, 1991).

HIV attacks a group of white blood cells, the CD4+ T cells also referred to as T4 helper cells. The progressive destruction of the CD4+ T cells by HIV leads to immune system deficiency. AIDS develop as a result of several illnesses and infections that take hold as a result of the weakened immune system.

CD4+ T cells have also been referred to as the commanders of the immune system. They recognise invading pathogens and signal other white blood cells called B cells to produce antibodies that bind with pathogens to inactivate them and mark them for destruction. AIDS is a fatal condition in which the immune system is so weakened that it falls prey to several opportunistic diseases.

2.4.1 Symptoms of HIV infection.

Many people do not have any symptoms when they first become infected with HIV. Some people, however, have a flu-like illness within a month or two after exposure to the virus. This illness may include fever, headache, tiredness and enlarged lymph nodes (with glands of the immune system easily felt in the neck and groin). These symptoms usually disappear within a week to a month and are often mistaken for those of another viral infection. During this period, people are very infectious, and HIV is present in large quantities in genital fluids.

During the asymptomatic period, the virus is actively multiplying, infecting, and killing cells of the immune system. The most obvious effect of HIV infection is a decline in the number of CD4+ T cells (also called T4 cells). At the beginning of its life in the human body, the virus disables or destroys these cells without causing symptoms (NIAID, 2002).

As the immune system worsens, a variety of complications start to take over. For many people, the
first signs of infection are large lymph nodes or "swollen glands" that may be enlarged for more than three months. Other symptoms often experienced months to years before the onset of AIDS include lack of energy, weight loss, frequent fevers and sweats, persistent or frequent yeast infections (oral or vaginal), persistent skin rashes or flaky skin, pelvic inflammatory disease in women that does not respond to treatment, and short-term memory loss. Some people develop frequent and severe herpes infections that cause mouth, genital, or anal sores, or a painful nerve disease called shingles. Children may grow slowly or be sick a lot (NIAID, 2002).

2.4.2 Signs and symptoms of AIDS

This is the last phase of HIV infection and includes all HIV-infected people who have fewer than 200 CD4+ T cells per cubic millimeter of blood (Healthy adults usually have CD4 + T-cell counts of 800-1200.). In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease. Most of these conditions are opportunistic infections that generally do not affect healthy people.

Symptoms of opportunistic infections common in people with AIDS include, coughing and shortness of breath, seizures and lack of coordination, difficult or painful swallowing, mental symptoms such as confusion and forgetfulness, severe and persistent diarrhea, fever, vision loss, nausea, abdominal cramps, and vomiting, weight loss and extreme fatigue, severe headaches and coma. Children with AIDS may get the same opportunistic infections as do adults with the disease. In addition, they also have severe forms of the bacterial infections, such as conjunctivitis, ear infections, and tonsillitis.

People with AIDS are particularly prone to developing various cancers, especially those caused by viruses such as Kaposi’s sarcoma and cervical cancer, or cancers of the immune system known as lymphomas. These cancers are usually more aggressive and difficult to treat in people with AIDS.

Signs of Kaposi’s sarcoma in light-skinned people are round brown, reddish, or purple spots that develop in the skin or in the mouth. In dark-skinned people, the spots are more pigmented (NIAID, 2002).
During the course of HIV infection, most people experience a gradual decline in the number of CD4 positive T cells. Many people are so debilitated by the symptoms of AIDS that they cannot hold steady employment or do household chores. Other people with AIDS may experience phases of intense life-threatening illness followed by phases in which they function normally.

The World Health Organization, in a workshop at Bangui (Central African Republic), defined diagnostic criteria for Africa. These criteria are called the Bangui criteria. They grouped the signs and symptoms of AIDS into 2 categories, major or minor signs and symptoms, depending on their frequency and seriousness. According to the Bangui criteria, AIDS in an adult can be defined by the presence of at least 2 major signs associated with at least 1 minor sign. In children, AIDS can be defined by the presence of at least 2 major signs and 2 minor signs.

2.4.3 Major signs and symptoms of HIV/AIDS

The three major signs and symptoms of AIDS in adults are; rapid loss of more than 10% of the body weight without any apparent reason, chronic diarrhoea for more than one month that does not respond to treatment and prolonged fever for more than a month that does not respond to treatment. The presence of generalized Kaposi's sarcoma (a cancer of the skin) or cryptococcal meningitis (an inflammation of the covering of the brain) are by themselves sufficient for the diagnosis of AIDS.

2.4.4 Major Signs and Symptoms Specific to Children

Weight loss, abnormally slow growth, chronic diarrhoea of more than one month and prolonged fever of more than one month.

2.4.5 Minor Signs and Symptoms

These include; persistent dry cough for more than one month, generalised itchy skin, recurrent multiple painful blisters (herpes zoster), chronic white coating of the mouth, tongue and throat (thrush), generalized swollen lymph glands in children and confirmed maternal HIV infection (RoK, 2002d).
2.4.6 Phases of HIV/AIDS.

There are 3 major phases in the progression of HIV infection in the human body. Each phase is divided into 2 major stages.

Phase 1

During this phase the HIV is present in the blood but most laboratory tests in use (ELISA) cannot detect it and lasts up to 6 months. This phase is divided into 2 parts:

i) Entry stage – this is the time when the virus enters the body. ii) Window period stage – during this time the HIV is multiplying in the body but cannot usually be detected by laboratory tests.

Phase 2

During this phase the HIV is in the blood and laboratory tests can detect its presence. It has no signs or symptoms for 2 months to several years. The time varies from person to person. This is the HIV – positive (HIV+) stage. This phase includes; the sero conversion stage, which means that the virus is present in large quantities to produce an immune reaction that laboratory tests can detect in the blood, the asymptomatic seropositive stage, which means that the virus is in the body in large quantities but the person infected shows no signs and is not aware of the infection unless tested. The person can be in good health but at times they may have persistently enlarged lymph nodes.

Phase 3

During this phase the HIV virus is in the blood, laboratory tests can detect the virus and the person shows signs and symptoms of AIDS. This is the AIDS stage. This phase includes; the AIDS related illness stage, during which infected persons show signs and symptoms such as diarrhoea, weight loss, weakness and fatigue, loss of appetite, fever, night sweats etc, but are still capable of taking care of themselves. This is the full-brown AIDS stage, where the persons show more pronounced and more frequent signs and symptoms of AIDS and often become too weak to take care of themselves. This is the advanced stage of AIDS (RoK, 2002d).
2.4.7 Diagnosis

Because early HIV infection often causes no symptoms, a doctor or other health care provider usually can diagnose it by testing a person's blood for the presence of antibodies (disease-fighting proteins) to HIV. HIV antibodies generally do not reach detectable levels in the blood for one to three months following infection. It may take the antibodies as long as six months to be produced in quantities large enough to show up in standard blood tests.

People exposed to the virus should get an HIV test as soon as they are likely to develop antibodies to the virus - within 6 weeks to 12 months after possible exposure to the virus. By getting tested early, people with HIV infection can discuss with a health care provider when they should start ARV treatment to help their immune systems combat HIV and help prevent the emergence of certain opportunistic infections. Early testing also alerts HIV-infected people to avoid high-risk behaviors that could spread the virus to others.

A number of health facilities can do HIV testing and also offer counseling to the patients.

Health care providers diagnose HIV infection by using two different types of antibody tests, ELISA and Western Blot. If a person is highly likely to be infected with HIV and yet both tests are negative, the health care provider may request additional tests. The person also may be told to repeat antibody testing at a later date, when antibodies to HIV are more likely to have developed.

Babies born to mothers infected with HIV may or may not be infected with the virus, but all carry their mothers' antibodies to HIV for several months. If these babies lack symptoms, a doctor cannot make a definitive diagnosis of HIV infection using standard antibody tests until after 15 months of age. By then, babies are unlikely to still carry their mothers' antibodies and will have produced their own, if they are infected (NIAID, 2001).

2.4.8 Modes of transmission

a) Transmission through sexual intercourse

Sexual intercourse remains the greatest avenue for the HIV transmission. This means the majority of
people with HIV/AIDS today acquired their infection sexually. Only an effective sexual transmission intervention can have significant impact on the spread of HIV/AIDS (Neu et al., 1993). Many love at first sight, they are driven by emotions, their feelings betray them, their hearts and thoughts deceive them, and get caught up in the web. Even some of the wisest have fallen into the same trap, not even the loudest call of caution reaches their ear (Mosedame, 2000). Among the adolescents, personal perception of risk for HIV/AIDS is low and misperceptions continue about transmission modes and the efficiency of prevention measurers. For some, the search for love may sometimes represent a far more immediate reward than the adoption of safe sex (Mann et al., 1992). Among the adolescents and young adults those who have adopted monogamy reveal a pattern of serial monogamy relationships lasting from only a few weeks to several years, but often marry many years later. This leads to a higher number of sexual partners and greater risk of HIV/AIDS with young girls and women being increasingly under pressure from older men seeking sexual partners (Mann et al., 1992).

It is in the face of this enormous and formidable reality that more effort should be put to ensure that our young people are HIV free and do not acquire the virus through risky sexual intercourse. This will only be possible after a clear understanding of their perception of HIV/AIDS. In the absence of an HIV/AIDS cure or vaccine the adolescent is central in efforts to halt the pandemic (Amref, 2001).

b) Transmission through contaminated equipment

HIV transmission through contaminated equipment is well illustrated by the serious HIV/AIDS epidemic among the illegal IVDU’s (intravenous drug users) worldwide. HIV/AIDS transmission by this method is determined by the sharing of contaminated injection equipment; risk increases with frequency of drug use and injections (Desjairus and Friedman, 1987).

Unsterile equipment by traditional medical practitioners used for scarification, circumcision and injections also poses danger of transmitting this deadly disease (Berkley, 1992).

c) Transmission through blood and organs transplant

Transmission through blood, its products and organ transplants is the most efficient method of
transmitting HIV/AIDS; nearly all recipients of blood transfusion from HIV seropositive blood get
infected (Colebunders et al., 1991). Today both transmission routes are rare due to the universal blood
screening and better transfusion practices.

d) Transmission of HIV from mother to child

Transmission of HIV/AIDS from an infected mother to her child occurs in 12-40% of the cases (Neu
el al., 1993). Advanced immuno-suppression seems to be a major risk factor; women with advanced
immuno-suppression have a higher incidence of still births and premature births (Ryder and
Temmerman, 1991). Preventing women from becoming infected before and during pregnancy is
undoubtedly the best approach to preventing mother to child transmission. The risk of transmission
through breast feeding milk can be prevented by avoiding breast-feeding by HIV positive mothers and
screening of breast milk donors for HIV antibody.

2.5 Control of HIV/AIDS

2.5.1 Prevention

Since there is no vaccine or cure for HIV/AIDS, the only way to prevent and control infection is by
avoiding practices that puts a person at risk of infection.

a) Prevention of transmission through sexual intercourse route

Prevention through this route can be achieved through :-:

i) Abstinence: this is abstaining from sexual intercourse until marriage. Many people infected with HIV
have no symptoms. This means that there is no way of knowing with certainty whether a sexual
partner is infected unless he or she has repeatedly tested negative for the virus and has not engaged in
any risky behaviour.

ii) Being faithful to one’s marriage partner: The marriage partners must be both faithful to each other.

iii) Proper use of condoms: Use of male latex condoms or female polyurethane condoms, may offer
partial protection, during sexual intercourse. The condoms must be properly used (a new condom for
each act, and the condom must be used even during fore play). Only water-based lubricants should be
used with male latex condoms.

iv) Early and effective treatment of STDs.

v) Avoiding cultural practices that increase the risk of transmission such as sex as a rite of passage and wife inheritance.

vi) Empowering the young people with the appropriate, accurate and age relevant knowledge on how to prevent themselves from getting infected, including the advantages of delaying the onset of sexual intercourse activities which is only possible after clearly understanding their perception of the disease.

b) Prevention of transmission through contaminated equipment.

Unsterile and contaminated equipment by traditional medical practitioners used for scarification, circumcision and injections poses the danger of transmitting HIV/AIDS (Berkley, 1992). These equipment must be sterilised and if not, must be avoided.

Proper decontamination and sterilisation of reusable equipment whether by the conventional medical practitioners or the traditional ones must be effected. Proper disposal of contaminated equipment, e.g. needles, syringes should be done. Sharing of syringes, needles and other skin, and ear-piercing instruments should be avoided.

c) Prevention of transmission through blood and organs transplant

Although now rare due to the universal blood and organ donor screening, transmission through blood, its products and organ transplants is the most efficient method of transmitting HIV/AIDS. Nearly all recipients of blood transfusion from HIV seropositive blood/organ get infected (Colebunders et al., 1991). All blood and organ transplant donors should be screened. Blood transfusion should be discouraged and only done when it is absolutely necessary.

Direct contact with blood, all body fluids and body wastes should be avoided, gloves should be worn.

d) Prevention of transmission by mother to child.

In Kenya an estimated 50,000-60,000 infants are infected with HIV/AIDS, due to mother to child infection annually. This can occur in uterus, during labour and delivery or through breastfeeding
(RoK, 2002e), and therefore deliveries should be handled by experienced and qualified personnel, birth canal washes where early membranes ruptures occurs. Pooling or sharing of breast milk should be avoided.

The risk of HIV transmission from a pregnant woman to her baby is significantly reduced if she takes AZT during pregnancy, labour, and delivery, and if the baby is given the drug for first six weeks of life. Nevirapine is currently the best available option for resource constrained nations like Kenya (RoK, 2002e). When administered correctly to non breastfeeding mothers, the risk of HIV/AIDS infection is reduced by 50% (RoK, 2002e).

2.5.2 The role of voluntary counselling and testing

Voluntary Counseling and Testing is a critical part of prevention and treatment, people are more likely to engage in prevention if they know their HIV status and will also seek anti-retroviral drugs if they realize that they are already infected with HIV/AIDS.

Voluntary counselling and testing is not only an effective prevention mechanism, it is also often the entry point to care and support of those infected with HIV/AIDS (RoK, 2002c). This is because people are worried about their sero-status but when they find that they are negative they can readily take steps to stay away from infection. Those who are positive can take steps to live positively and seek medical care early, and be in a position of taking anti-retroviral drugs in time and so prolong their lives.

2.5.3 The role of religion and religious organisations

Churches and religious organisations provide a great amount of care for those living with or affected with HIV/AIDS (RoK, 2004). The teachings and preaching in churches and religious organisations have always emphasised on abstinence to the unmarried and faithfulness for the married to one's marriage partner. The Churches and religious organisations have also sponsored hospitals and health facilities where VCT centres have been put up to supplement governments resources in the fight against HIV/AIDS. Apart from the needed spiritual care, they play a paramount role in
advocating for positive behaviour change and a reduction in stigmatization and discrimination against people living with HIV/AIDS (RoK, 2004).

2.5.4 Treatment

HIV/AIDS has no cure and currently there is no known vaccine. However, there are drugs now which may slow the spread of HIV in the body and delay the start of opportunistic infections. The decision to start therapy should be made after considering the patients acceptance or readiness and the probability of adherence (RoK. 2002f), this is determined by the clinical state, CD4 cell count and viral burden.

The time to initiate therapy to asymptomatic patients is not known; one should weigh the risks and benefits of delayed and early therapy and discuss them fully with the patient before initiating therapy.

Benefits of early therapy are:— i) Control of viral replication easier ii) Delayed immune system compromise iii) Decreased risk of HIV transmission.

Risks of early therapy are:— i) Greater cumulative drug related adverse effects ii) Earlier drug resistance iii) limitation of future anti retroviral treatment options.

Benefits of delayed therapy:— i) No inconveniences of taking drugs ii) No drug related side effects, iii) No early development of drug resistance iv) Has a maximum number of available drugs options when HIV disease risk is highest.

Risks of delayed therapy:— i) Risk of irreversible immune system depression, ii) Possible greater difficulty in suppressing viral replication, iii) Increased risk of HIV transmission (RoK. 2002f)

The first group of drugs used to treat HIV infection, are called nucleoside reverse transcriptase (RT) inhibitors. These interrupt an early stage of the virus making copies of itself. Included in this class of drugs (called nucleoside analogs) are AZT, ddC (zalcitabine), ddi (dideoxyinosine), d4T ( stavudine), 3TC (lamivudine), abacavir (ziagen), and tenofovir (vied) (NIAID. 2002). Health care providers can also prescribe non-nucleoside reverse transcriptase inhibitors (NNRTIs), such as delvaridine (Rescriptor), nevirapine (Viramune), and efavirenz (Sustiva), in combination with other antiretroviral drugs. (NIAID. 2002).
The second class of drugs for treating HIV infection are drugs, called protease inhibitors, which interrupt virus replication at a later step in its life cycle. They include Ritonavir (Norvir), Saquinivir (Invirase), Indinavir (Crixivan), Amprenivir (Agenerase), Nelfinavir (Viracept), and Lopinavir (Kaletra). Because HIV can become resistant to any of these drugs, health care providers must use a combination treatment to effectively suppress the virus. When RT inhibitors and protease inhibitors are used in combination, it is referred to as highly active antiretroviral therapy, or HAART, and can be used by people who are newly infected with HIV as well as people with AIDS.

Despite the beneficial effects of HAART, there are side effects associated with the use of antiviral drugs that can be severe. Some of the nucleoside RT inhibitors may cause a decrease of red or white blood cells, especially when taken in the later stages of the disease (NIAID, 2002). Some may also cause inflammation of the pancreas and painful nerve damage. There have been reports of complications and other severe reactions, including death, to some of the antiretroviral nucleoside analogs when used alone or in combination. Therefore, health care experts recommend that people on antiretroviral therapy be routinely seen and followed by their health care providers. The most common side effects associated with protease inhibitors include nausea, diarrhea, and other gastrointestinal symptoms. In addition, protease inhibitors can interact with other drugs resulting in serious side effects.
CHAPTER THREE: MATERIALS AND METHODS

3.1 Study Area

This study was conducted in Thika municipality of Thika District, Central Province (Appendix 1). Thika district is one of the seven districts that form central province. It was carved out of the larger Kiambu and Muranga Districts in 1995. It borders Nairobi city to the south, Kiambu district to the west, Maragwa District to the north and Machakos District to the east. The district has a diverse topography ranging from 1060 to 1350 meters above sea level. Thika Municipality lies at 13 degrees South and 37.5 degrees East. Thika town was settled around 1910, gazetted as a town in 1924 and elevated to municipal status in 1963 (RoK, 2000a). It is the district headquarter for Thika District. The main economic activities are farming (coffee, fruits, and flowers), tanneries, textile knitwear, and food processing. Thika has over 100 small and 26 major factories (RoK, 2000a). The large number of factories in the town has resulted in an influx of population in the town by people coming to seek for employment. Most of the workers in the town are employed as casual workers in the factories. There were 38 primary schools in Thika Municipality, 24 public and 14 private schools out of these 36 are day and 2 boarding (RoK, 2002b).

3.2 Study Population

Thika municipality had a projected population of 116461 in the year 2002 (RoK, 2002a). According to Thika Municipal Education Department Report (2002) there were 7321 pupils in classes 5-8 within the Municipality, 3445 boys and 3876 girls (RoK, 2002b).

3.2.1 Inclusion Criteria

a) Pupils in classes 5 to 8 within Thika Municipality.

b) Age bracket of 10 to 19 years.

c) Have lived in Thika for at least six months.

3.2.2 Exclusion Criteria

a) Pupils in classes 5-8 but not in the age bracket of 10 - 19 years.
b) Pupils in classes 5-8 but had not lived within Thika Municipality for at least six months.

3.2.3 Ethical Consideration

Permission for the research was obtained from the Ministry of Education Science and Technology, Thika Municipal Council Education Department and from the head teachers of the selected primary schools. Confidentiality was maintained at all levels of the research by ensuring that the pupils did not write their names on the questionnaires and there was no access of the information received to unauthorized persons.

Those who wished to pull out of the study were allowed to do so freely, without intimidation and this did not result in any loss of benefit, for instance access to the information on HIV/AIDS prevention and control offered to other pupils in the study.

3.3 Sampling Technique

Data was collected in 12 primary schools, 7 Public and 5 private schools. The schools were selected through purposive sampling as some head teachers did want their pupils to be asked questions on HIV/IDS. Some refused the interviews even after consenting saying questions on sexual practices may entice their pupils to do sexual intercourse experimentation. Random numbers were used to pick pupils per class (class 5-8). English language, which is the official language of communication for these classes, was used. The pupils were asked not to write their names on the questionnaire to maintain confidentiality.

3.4 Sampling Size.

The sample size was determined using the formula used by Fisher et al. (1998):

\[ n = \frac{Z^2pqD}{d^2} \]

\[ Z = \text{Standard normal deviate (1.96) which corresponds to 95\% confidence interval} \]
\[ P = \text{proportion of the target population estimated to have particular characteristics} \]
\[ q = 1 - p. \]
\[ d = \text{Degree of accuracy} = 0.05 \]
\[ D = \text{design effect} = 1 \]
\[
\begin{align*}
= 1.96^2 \times 0.5 \times 0.5 \\
= 0.05 \\
= 384 \\
\approx 400
\end{align*}
\]

Since the study population is 7321 pupils (3445 Boys and 3876 Girls) which is <10000, the formula below was used to determine \( n \)

\[
n_f = \frac{n}{1 + (n/N)}
\]

\( n_f \) = the desired sample size, when \( N < 10000 \), \( n \) = the desired sample size, \( N \) = the number of pupils.

\[
= \frac{400}{1 + 400/7321}
\]

\[
= \frac{400}{1 + 0.054763}
\]

\[
= \frac{400}{1.05476} = 379.2
\]

\( \approx 400 \) pupils.

But a sample of 465 was taken to take care of those who would drop out or not complete the questionnaires.

**3.5 Data Collection Method.**

Data were collected by use of structured questionnaires. The schools were selected through purposive sampling. 5 private schools and 7 public schools, the pupils were selected through random sampling. 40 pupils were randomly selected per school. In each class 10 pupils were selected using random sampling in classes 5-8. An equal number of boys and girls were picked per class. The pupils were asked to answer the questions in the questionnaire without consulting one another; clarifications were made where need arose.
3.6 Data Management and Analysis

Data was processed using SPSS and Ms Excel Computer package. Chi – square tests were done on the data to show the relationships between various variables. Variations and percentages were compared using t-test for proportions.

Measures of central tendencies like the mode and standard deviation have also been calculated where necessary and cross tabulations done.
CHAPTER FOUR: RESULTS

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION.

The study covered 12 primary schools in Thika Municipality and a total of 465 pupils were included in the study. The pupils were of class 5 – 8. Class five had 117, (25.2%), class six had 109, (23.4%) class seven had 118, (25.4) and class eight had 121(26%) pupils. Their ages ranged between 10 to 19 years, with a mean of 12.6 years and a standard deviation of 1.615 years; the mode was 13 years).

4.1.1 Age distribution.

The majority of the pupils were within the age group 12-13 years ($\chi^2 = 356.96, p<0.001, df=9$)

Table 1 Percentage distribution of pupils by age category

<table>
<thead>
<tr>
<th>Categories (years)</th>
<th>Number of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 11</td>
<td>126</td>
<td>27.1</td>
</tr>
<tr>
<td>12 – 13</td>
<td>211</td>
<td>45.4</td>
</tr>
<tr>
<td>14 – 15</td>
<td>109</td>
<td>23.4</td>
</tr>
<tr>
<td>16 – 17</td>
<td>16</td>
<td>3.4</td>
</tr>
<tr>
<td>18 – 19</td>
<td>3</td>
<td>0.6</td>
</tr>
</tbody>
</table>
4.1.2 Distribution of study subjects by sex.

There were 226 (48.6%) males and 239 (51.4%) females (figure 1). When these were subjected to t-test for proportions there was no statistical difference ($t=0.608, df=463, p>0.05$).

![Figure 1: Distribution of study subjects by sex](image)

4.1.3 Distribution by school category.

There were 278 (59.8%) pupils from public school and 187 (40.2%) were from private schools, (table 2)

<table>
<thead>
<tr>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private schools</td>
<td>187</td>
</tr>
<tr>
<td>Public schools</td>
<td>278</td>
</tr>
</tbody>
</table>

When this two proportions were compared using t-test for proportions, public schools were found to have significantly higher number of pupils than the private schools ($t=4.485, df=463, p<0.001$).
4.1.4 Distribution by family type and persons they stay with.

Most of the pupils came from families with both parents, (77.4%) followed by those from single mothers (10.8%) as shown in (Figure 2a). The majority of the pupils stayed with both parents (73%), followed by those who stayed with their mothers only 17% (Figure 2b).
The main occupation of the parents or guardians the pupils were staying with was employment (37.8%), followed by business (29.9%). Minor jobs like hawking 28.6%, occasional casual work 1.1%, whereas 2.6% did not indicate (table 3).

Table 3, Occupation of the persons the respondents stayed with (n=465).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>37.8</td>
</tr>
<tr>
<td>Business</td>
<td>29.9</td>
</tr>
<tr>
<td>Minor jobs, Hawking, peasant farming</td>
<td>28.6</td>
</tr>
<tr>
<td>Occasional casual work</td>
<td>1.1</td>
</tr>
<tr>
<td>Did not indicate</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
4.2. KNOWLEDGE, SOURCE AND TYPE OF INFORMATION, RECEIVED BY THE RESPONDENTS ON HIV/AIDS

4.2.1. Knowledge on the existence of HIV/AIDS

Most of the respondents had heard about the existence of HIV/AIDS, 99.4% (Figure 3) (t=21.5, df=463, p<0.001).

![Pie chart showing the percentage of respondents who have heard or have never heard about HIV/AIDS](image)

Figure 3. Knowledge on the existence of HIV/AIDS

4.2.2 Source of Information about HIV/AIDS issues

The respondents indicated that the media (radio, T.V, Newspapers) was their predominant source of information on HIV/AIDS issues 32.9%, home provided information to 18.1%, and only 6.7% had indicated Hospitals and health facilities as their source of information (table 4).
Table 4. Source of Information about HIV/AIDS issues

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Number of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home (parents/family)</td>
<td>84</td>
<td>18.1</td>
</tr>
<tr>
<td>School (teachers/classmates)</td>
<td>83</td>
<td>17.8</td>
</tr>
<tr>
<td>Media (Radio/TV/Newspapers)</td>
<td>153</td>
<td>32.9</td>
</tr>
<tr>
<td>Health workers (Health facilities)</td>
<td>31</td>
<td>6.7</td>
</tr>
<tr>
<td>All the sources above</td>
<td>91</td>
<td>19.8</td>
</tr>
</tbody>
</table>

The greatest source of information was media (32.9%), while the lowest was health workers (6.7%), (Chi-square=85.1, df=4, p<0.001).

4.2.3 Type of HIV/AIDS information

General health information on HIV/AIDS issues topped the list as the predominant type of information received with 38.5% followed by abstinence with 22.3% and condom use 22.1%, in that order (Table 5). This was highly significant (Chi-square=55.58, df=3, p<0.001).

Table 5: Type of information received on HIV/AIDS, n=462

<table>
<thead>
<tr>
<th>Type of information</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>38.5</td>
</tr>
<tr>
<td>Abstinence</td>
<td>22.3</td>
</tr>
<tr>
<td>Faithfulness</td>
<td>15.2</td>
</tr>
<tr>
<td>Use of condoms</td>
<td>22.1</td>
</tr>
<tr>
<td>Other</td>
<td>0.9</td>
</tr>
<tr>
<td>Type of information not indicated</td>
<td>1.1</td>
</tr>
</tbody>
</table>

|                      | 100  |
4.2.4 Belief in the information received on HIV/AIDS.

Most of the respondents believed the information they had received on HIV/AIDS 97% (Figure 4) \((t=116.05, df=460, p<0.001)\).

![Figure 4, Believing information received on HIV/AIDS](image)

4.2.5 Contribution of each source on each information type.

Health information was highest (38.5%) while media was the dominant source (Table 6).

Table 6, Contribution of each source of information to information type

<table>
<thead>
<tr>
<th>Source Information Type of information</th>
<th>Home</th>
<th>School</th>
<th>Media</th>
<th>Home/Sch/ Media</th>
<th>Hospital</th>
<th>All sources</th>
<th>Non response</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>35</td>
<td>30</td>
<td>60</td>
<td>10</td>
<td>13</td>
<td>30</td>
<td>-</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>19.7%</td>
<td>16.9%</td>
<td>33.7%</td>
<td>5.6%</td>
<td>7.3%</td>
<td>16.9%</td>
<td>-</td>
<td>38.5%</td>
</tr>
<tr>
<td>Abstinence</td>
<td>21</td>
<td>14</td>
<td>29</td>
<td>2</td>
<td>6</td>
<td>31</td>
<td>-</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>20.4%</td>
<td>13.6%</td>
<td>28.2%</td>
<td>1.9%</td>
<td>5.8%</td>
<td>30.1%</td>
<td>-</td>
<td>22.3%</td>
</tr>
<tr>
<td>Faithfulness</td>
<td>13</td>
<td>16</td>
<td>23</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>1</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>18.6%</td>
<td>22.9%</td>
<td>32.9%</td>
<td>2.9%</td>
<td>5.7%</td>
<td>15.7%</td>
<td>1.4%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Condoms</td>
<td>13</td>
<td>22</td>
<td>37</td>
<td>5</td>
<td>6</td>
<td>18</td>
<td>1</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>12.7%</td>
<td>21.6%</td>
<td>36.3%</td>
<td>4.9%</td>
<td>5.9%</td>
<td>17.6%</td>
<td>1%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>50%</td>
<td></td>
<td>25%</td>
<td>25%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.9%</td>
</tr>
<tr>
<td>Non response</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
<td>20%</td>
<td>-</td>
<td>-</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Media which was the dominant source of information delivered messages predominant about condom use, home which followed gave abstinence as its predominant type of information.
4.2.6 Those who had seen someone suffering from HIV/AIDS.

The majority of the respondents indicated that they had seen an HIV/AIDS patient, (74.2%) (Figure 5). Only 25.8% had not seen a HIV/AIDS patient ($t=10.53, df=463, p<0.001$)

![Figure 5: Those who had seen an HIV/AIDS patient.](image)

4.2.7 Sexual intercourse involvement

Majority, 73.8% of the pupils indicated that they had not had sexual intercourse. The pupils who indicated that they had already had sexual intercourse were 23.2% while 3% did not respond, (figure 6).

![Figure 6: Sexual intercourse involvement.](image)
When sexual intercourse involvement was categorized per sex, males indicated a higher level of sexual intercourse involvement 27.9% (Figure 7) than females (18.8%) (Figure 8).

Figure 7, Males sexual intercourse involvement

Figure 8, Female sexual intercourse involvement
4.2.8 Age at start of sexual intercourse

Among those who had had sexual intercourse and had indicated age at which they had started, majority started at the age of 10 years (Table 7) and this was highly significant (Chi-square=38.22, df=7, p<0.001). 61.1% though having indicated involvement in sexual intercourse, did not indicate age at which they had started sexual intercourse.

Table 7: Age at start of sex intercourse((n=108))

<table>
<thead>
<tr>
<th>Age at start of sexual intercourse (years)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>9</td>
<td>5.6</td>
</tr>
<tr>
<td>10</td>
<td>9.3</td>
</tr>
<tr>
<td>11</td>
<td>6.5</td>
</tr>
<tr>
<td>12</td>
<td>2.8</td>
</tr>
<tr>
<td>13</td>
<td>5.6</td>
</tr>
<tr>
<td>14</td>
<td>2.8</td>
</tr>
<tr>
<td>Age not indicated</td>
<td>61.1</td>
</tr>
</tbody>
</table>

Chi-square = 38.22, df=7, p<0.001
4.3. PREVALENCE OF PERCEPTIONS ON HIV/AIDS BY THE RESPONDENTS

4.3.1 Perception about the reality of HIV/AIDS

Majority (96.6%) had indicated that they believed that HIV/AIDS was a reality while only 3.4% (16) indicated that they did not believe on the reality of the disease (figure 9) \( (t=20.26, df=463, p<0.001) \).

![Belief on the reality of HIV/AIDS](image)

Figure 9. Belief on whether HIV/AIDS really exists
4.3.2 View about HIV/AIDS campaign

Majority (59.8%) believed that the HIV/AIDS campaign was a plan to stop young people from enjoying sexual intercourse while, (40.2%) indicated otherwise. (Figure 10). Comparison of the two percentages gave a statistically significant result (t=4.35, df=463, p<0.001).

![Figure 10, View about the HIV/AIDS Campaigns]

4.3.3 View about HIV/AIDS Campaign - by sex category

A higher percentage of boys than girls believed that the HIV/AIDS campaign is a campaign to stop sex among young people (Table 8) and this was shown to be statistically significant (Chi –square=6.416, df=1, p<0.02)

Table 8, View about HIV/AIDS campaigns by sex category

<table>
<thead>
<tr>
<th>View</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents</td>
<td>%</td>
<td>Respondents</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Yes, it is a campaign to stop sexual enjoyment by young people.</td>
<td>149</td>
<td>65.9%</td>
<td>129</td>
<td>54%</td>
<td>278</td>
</tr>
<tr>
<td>No, it is not a campaign to stop Stop sexual enjoyment by young people.</td>
<td>77</td>
<td>34.1%</td>
<td>110</td>
<td>46%</td>
<td>187</td>
</tr>
<tr>
<td>226</td>
<td>100</td>
<td>239</td>
<td>100</td>
<td>465</td>
<td></td>
</tr>
</tbody>
</table>
4.3.4 View about death resulting from HIV/AIDS

Most of the respondents (73.5%) indicated that death resulting from HIV/AIDS was not natural while 26.5% (Figure 11), indicated that death from HIV/AIDS was natural just like any other (t=10.22, df=463, p<0.001).

![Figure 11. View about death resulting from HIV/AIDS](image)

4.3.5 Belief that HIV/AIDS can be avoided.

Majority (89.2%) of the respondents believed that HIV/AIDS can be avoided while 10.8% (50) believed that HIV/AIDS cannot be avoided. (Figure 12).

![Figure 12. Belief that HIV/AIDS can /cannot be avoided.](image)
4.3.6 Perception that HIV/AIDS is a curse from God.

Majority (57.6%) did not perceive HIV/AIDS as a curse as a curse from God only 42.4% of the respondents perceived otherwise (Figure 13), and this was statistically significant (t=3.3, df=463, p<0.001)

![Figure 13. Perception on whether HIV/AIDS is a curse from God](image)

4.3.7 Knowledge about the difference between HIV and AIDS

Majority (64.1%) perceived HIV and AIDS as the same thing, 35% (163) perceived the two to be different while (0.9%) did not respond (Figure 14).

![Figure 14. Perception about the difference between HIV and AIDS](image)
4.3.8 Perception that Only HIV positive person can infect another person

A significant majority (62.4%) (table 9), stated that only those who are HIV positive, can infect others, 37.6% (175) perceived otherwise, Chi-square =28.44, df = 1, p<0.001).

Table 9, Perception that only those who are HIV positive can infect others with HIV.

<table>
<thead>
<tr>
<th>View</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>290</td>
<td>62.4</td>
</tr>
<tr>
<td>False</td>
<td>175</td>
<td>37.6</td>
</tr>
<tr>
<td></td>
<td>465</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.9 Knowledge on whether one can get HIV/AIDS on first sexual intercourse

Majority of the respondents (71.4%) stated that one can be infected with HIV/AIDS even on the first sexual intercourse (Chi-square =86.02, df = 1, p<0.001) (table 10), 28.4% indicated that one cannot get infection on first sexual intercourse. 0.2% did not respond to the question.

Table 10. Knowledge on whether one can get HIV/AIDS on first sexual intercourse

<table>
<thead>
<tr>
<th>View</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>332</td>
<td>71.4</td>
</tr>
<tr>
<td>False</td>
<td>132</td>
<td>28.4</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>465</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.10 Knowledge on whether young and healthy looking persons can infect others with HIV/AIDS.

The majority (84.3%) agreed that it was true that young and healthy looking persons can infect others with HIV/AIDS while 15.7% felt that young and healthy looking persons cannot infect others with HIV/AIDS (Table11). These were shown to be significant statistically when the proportions were compared using t-test (t=14.91, df=463, p<0.001)
Table 11. Knowledge that young and healthy looking persons can infect others with HIV/ AIDS.

<table>
<thead>
<tr>
<th>Response</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>392</td>
<td>84.3</td>
</tr>
<tr>
<td>False</td>
<td>73</td>
<td>15.7</td>
</tr>
<tr>
<td></td>
<td>465</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.11 Knowledge on whether HIV/AIDS infects homosexuals

Majority (68 %) indicated that it was true that HIV/AIDS does infect homosexuals, while 31.4% thought otherwise, (Table 12). When compared using t-test for proportions it was shown that significantly a higher number of pupils indicated that HIV/AIDS infects homosexuals (t=7.96, df=460, p<0.001).

Table 12. Knowledge that HIV/AIDS infects homosexuals

<table>
<thead>
<tr>
<th>Response</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>316</td>
<td>68</td>
</tr>
<tr>
<td>False</td>
<td>146</td>
<td>31.4</td>
</tr>
<tr>
<td>Did not respond</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>465</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.12 Knowledge that sharing of injection equipment would cause infection with HIV/AIDS.

Majority of the respondents (81.3 %) indicated that sharing of injection equipment would cause infection with HIV/ AIDS (figure 15), while 18.5 % indicated that sharing injection equipment would not cause infection, 0.2 % did not respond.
4.3.13. Knowledge that circumcision would cause infection with HIV/AIDS.

Majority of the respondents (58.9%) indicated that circumcision would cause HIV/AIDS infection, (Figure 16), 40.0 % (186) indicated circumcision cannot cause HIV/AID infection, while 1.1 % did not respond. When proportions of those who knew and those who did not were compared a significant difference was shown (t=4.35,df=458,p<0.001)
4.3.14. Perception on whether blood transfusion would cause infection with HIV/AIDS

Majority of the respondents (76.3 %) indicated that blood transfusion would cause HIV/AIDS infection, \( t=11.72, df=457, P<0.001 \) (Figure 17), 22.4 % (104) perceived that blood transfusion cannot cause HIV/AIDS infection, 1.3%(6) did not respond.

![Figure 17, Perception that blood transfusion would cause infection with HIV/AIDS](image)

4.3.15 Perception that ear piercing could cause HIV/AIDS infection.

Majority 56.8 % (264), \( t=3.28, df=456, p<0.01 \) indicated that ear piercing would cause HIV/AIDS infection while 41.7 % (194) indicated that it cannot. (Figure 18).
Figure 18. Perception that ear piercing would cause HIV/AIDS infection

No. of respondents

<table>
<thead>
<tr>
<th>TRUE</th>
<th>FALSE</th>
<th>Did not indicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.8%</td>
<td>41.7%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Response

t=3.28, df=456, p<0.001
4.3.16 Perception that condoms offer full protection against HIV/AIDS infection.

Almost an equal percentage were split about safety of the condom and 48.4% (225) perceived it offered full protection while 50.1% (233) perceived that it did not, (Figure 19); only 1.5% (7) did not respond.

![Figure 19: Knowledge that condoms offer full protection against HIV/AIDS infection](image)

4.3.17 Frequency of those who took precaution against HIV/AIDS.

Majority of the respondents 93.3% (434) took precaution (Figure 20). Only 6.7% (31) indicated that they did not take any precaution. \( t=18.82, \ df=463, \ p<0.001 \).

![Figure 20: Frequency of those who take precaution against HIV/AIDS](image)
4.3.18 Type of precaution taken by the respondent

Most respondents 54.2%(252) indicated they abstain, 12.3%(57) indicated that they have one sexual partner (Figure 21), whereas 9.2%(43) indicated they used condoms. Some respondents (17.4%) did not indicate the type of precaution.

![Pie chart showing types of precautions](image)

Figure 21, Type of precaution taken by the respondent against HIV/AIDS
4.4 MEASURE OF THE LEVEL OF AWARENESS ABOUT HIV/AIDS

4.4.1 Awareness about HIV/AIDS issues.

Awareness was divided into three categories, based on questions answered correctly from eleven (11) awareness questions (Q40a - Q62), which were weighted, as follows:

- High level of awareness: 8 and above/11
- Reasonable enough: 5-7/11
- Low level of awareness: 1-4/11
- No awareness: 0/11

Most respondents (59.0%) had a high level of awareness about HIV/AIDS issues, 40.4% (188) had a reasonable level of awareness, and only 0.6% (3) had a low level of awareness (Table 13).

This difference was statistically significant (Chi-square = 242.5, df=3, p<0.001)

Table 13: Awareness about HIV/AIDS issues

<table>
<thead>
<tr>
<th>Level of awareness/scores</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>274</td>
<td>59.0</td>
</tr>
<tr>
<td>Reasonable</td>
<td>188</td>
<td>40.4</td>
</tr>
<tr>
<td>Low</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>465</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square = 242.5, df=3, p<0.001

4.4.2 Awareness about HIV/AIDS issues by gender.

Comparatively, girls had a higher level of awareness 62.8%(150) compared to boys 54.9%(124) (Table 14).
Table 14: Comparison of awareness level by gender.

<table>
<thead>
<tr>
<th>Awareness score</th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>124</td>
<td>54.9</td>
<td>150</td>
<td>62.8</td>
<td></td>
</tr>
<tr>
<td>Reasonable</td>
<td>100</td>
<td>44.2</td>
<td>88</td>
<td>36.8</td>
<td></td>
</tr>
<tr>
<td>enough</td>
<td>2</td>
<td>0.9</td>
<td>1</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>226</td>
<td></td>
<td>239</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5.1 The relationship between level of awareness and gender.

A significant test was done using Chi-square in a large table technique at \( p < 0.05 \). (Table 15) showed that there is no relationship between gender and awareness, with those very aware being more in both females and males \( (\chi^2 = 0.02, p > 0.05) \).

A further comparison of percentages of awareness for girls revealed the same trend \( (t = 1.71, df = 272, p < 0.05) \).

Table 15: Test of relationship between awareness level and sex category

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>45.3%</td>
<td>54.7%</td>
<td>58.9%</td>
</tr>
<tr>
<td></td>
<td>124</td>
<td>150</td>
<td>274</td>
</tr>
<tr>
<td>Reasonable</td>
<td>53.2%</td>
<td>46.8%</td>
<td>40.4%</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>88</td>
<td>188</td>
</tr>
<tr>
<td>Low</td>
<td>66.6%</td>
<td>33.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>226</td>
<td>239</td>
<td>465</td>
</tr>
</tbody>
</table>
4.5.2 Perception measurement.

Perception was divided into two categories, based on 7 questions in the questionnaire (13,15,16,21,23,24,25), weighted the same? These were divided into two categories (good perception or poor perception). Perception, unlike awareness, controls the attitude and practice of the individual. This means being able to stay free from HIV/AIDS, or one acquiring the disease and becoming a victim of HIV/AIDS. The 2 categories, depended on the number of questions answered correctly.

- Good perception - 4 and above out of 7,
- Poor perception - 3 and below out of 7.

Most respondents, (59.1%) had poor perception about the HIV/AIDS issues. Those with good perception were only 40.9% (Table 16). When these proportions were tested for significance using t-test for proportions it was statistically significant. ($t_{463}=4.23$, $p<0.001$).

Table 16, Perception measurement about HIV/AIDS issues

<table>
<thead>
<tr>
<th>Perception measure</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Perception</td>
<td>190</td>
<td>40.9</td>
</tr>
<tr>
<td>Poor Perception</td>
<td>275</td>
<td>59.1</td>
</tr>
</tbody>
</table>

$t_{463}=4.23$, $p<0.001$

4.5.3 Perception by sex.

Females (43.5%) had a higher percentage of those good perception compared to males (38.1%) (Table 17).

Table 17: Perception by sex.

<table>
<thead>
<tr>
<th></th>
<th>Good perception</th>
<th>Poor perception</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>38.1% a</td>
<td>61.9% b</td>
<td>48.6%</td>
</tr>
<tr>
<td>86</td>
<td></td>
<td>140</td>
<td>226</td>
</tr>
<tr>
<td>Females</td>
<td>43.5% c</td>
<td>56.5% d</td>
<td>51.4%</td>
</tr>
<tr>
<td>104</td>
<td></td>
<td>135</td>
<td>239</td>
</tr>
<tr>
<td>190</td>
<td></td>
<td>275</td>
<td>465</td>
</tr>
</tbody>
</table>
However chi-square test of significance showed that perception did not change with sex category.

\[ \chi^2 = 1.216, \text{df} = 1, \ p > 0.05. \]

### 4.5.4 Perception by Family type.

Perception by family type was as shown in table 18. These data were then analysed using Chi-Square in large table technique and it was shown that there was no statistically significant association between family type and perception (Chi-square = 5.6, df = 4, p > 0.05).

**Table 18: Perception by Family type.**

<table>
<thead>
<tr>
<th>Both parents</th>
<th>Single (mother)</th>
<th>Single (father)</th>
<th>Orphan (both parents)</th>
<th>Single orphan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good perception</strong></td>
<td>72.6%</td>
<td>12.1%</td>
<td>3.2%</td>
<td>6.3%</td>
<td>4.7%</td>
</tr>
<tr>
<td><strong>Poor perception</strong></td>
<td>80.7%</td>
<td>9.8%</td>
<td>1.5%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

### 4.5.5 The relationship between the age category and perception of HIV/AIDS

Age category 12-13 years had the highest percentage of those with good perception (46.3 %) (Table 19). Those with poor perception were 44.7 %. Age category 18-19 years had the lowest percentage of for those who had good perception (1.1%) and those with poor perception 0.4%. This was statistically not significant (Chi-square = 6.09, df=4, p>0.05) indicating that there is no association between age category and perception of HIV/AIDS.

**Table 19, Perception by age category**

<table>
<thead>
<tr>
<th></th>
<th>10-11yrs</th>
<th>12-13yrs</th>
<th>14-15yrs</th>
<th>16-17yrs</th>
<th>18-19yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good perception</strong></td>
<td>22.6%</td>
<td>46.3%</td>
<td>24.7%</td>
<td>5.3%</td>
<td>1.1%</td>
<td>40.9%</td>
</tr>
<tr>
<td><strong>Poor perception</strong></td>
<td>30.2%</td>
<td>44.7%</td>
<td>22.5%</td>
<td>2.2%</td>
<td>0.4%</td>
<td>59.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>126</td>
<td>211</td>
<td>109</td>
<td>16</td>
<td>3</td>
<td>465</td>
</tr>
</tbody>
</table>
4.5.6 The relationship between perception and Source of information.

Of all the mentioned dependable sources of information the respondents mentioned. (Table 20) about HIV/AIDS, media (Radio, TV, and Newspaper) was the major source mentioned. However, overall there was no statistically significant association between perception and source of information (Chi-square = 10.11, df=6, p>0.05).

Table 20: Testing relationship between perception and source of information

<table>
<thead>
<tr>
<th>Perception level</th>
<th>Home (parents)</th>
<th>School</th>
<th>Media</th>
<th>Home/school/ media</th>
<th>Hospital</th>
<th>All sources indicated</th>
<th>Did not indicate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good perception</td>
<td>15.8% 30</td>
<td>14.2% 27</td>
<td>35.3% 67</td>
<td>5.3% 10</td>
<td>8.9% 17</td>
<td>20% 38</td>
<td>0.5% 1</td>
<td>40.9% 190</td>
</tr>
<tr>
<td>Poor Perception</td>
<td>19.6% 54</td>
<td>20.4% 56</td>
<td>31.3% 86</td>
<td>3.6% 10</td>
<td>5.1% 14</td>
<td>19.6% 54</td>
<td>0.4% 1</td>
<td>59.1% 275</td>
</tr>
<tr>
<td></td>
<td>84 83</td>
<td>153</td>
<td>20</td>
<td>31</td>
<td>92 2</td>
<td>465</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.5.7 Perception by school category.

Those from public schools had a higher percentage of pupils with good perception, 42.1 % compared to 38.9. %, from private schools , (table 21). Public schools had 57.9% of pupils with poor perception while private schools had 61.1%. When these data were subjected to Chi-square test of association there was no statistical significance (Chi-square = 0.313, df = 1, p>0.05).

Table 21, Perception by school category

<table>
<thead>
<tr>
<th>School category</th>
<th>Good perception</th>
<th>Poor Perception</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>42.1% 117</td>
<td>57.9% 161</td>
<td>59.8% 278</td>
</tr>
<tr>
<td>Private</td>
<td>39% 73</td>
<td>61.1% 114</td>
<td>40.2% 187</td>
</tr>
<tr>
<td>Total</td>
<td>190</td>
<td>275</td>
<td>465</td>
</tr>
</tbody>
</table>
CHAPTER FIVE: DISCUSSION

5.1 DEMOGRAPHIC CHARACTERISTICS OF THE STUDY SUBJECTS

The ages of the respondents in this study ranged from 10-19 years. This is period when they are faced with pressure from many sides; parental and sometimes religious pressure to abstain, and on the other side peer pressure to experiment. Adolescents face the challenges of the second decade of their lives, no longer children, and not yet adults (10 – 19 years) and are at a stage of rapid development when they acquire new capacities and are also faced with numerous new situations. Young people live in a paradoxical situation of prohibition and silence on matters of sexuality (Becker et al., 1999). The mean age of the respondents was 12.6 years, with the mode age of 13 years and a standard deviation of 1.65 years ($\chi^2 = 365.96, \text{df}=9, p<0.001$). At this age they have very few sources of information about sexuality and HIV/AIDS.

The percentages of males and females in the study populations were almost the same, 48.6% males and 51.4% females. The slight difference was as a result of those who did not respond or never completed the questionnaires. Those from public schools were 59.8% and from private schools were 40.2%, the difference being as a result of the fact that more pupils were from public schools compared to private schools. From the study it was observed that most pupils came from families with both parents (77.4%). This compared well with a study, done in Kenya in Bondo (Okweso, 2002), where 74.1% of pupils came from families with both parents. This was followed by those from single mothers (10.8%). The society is experiencing a high number of single mothers, as a result of changing of family values and lifestyles. Orphaned children totalled 9.7% some of them having been orphaned by HIV/AIDS.

The majority were staying with both parents, (72.9%) and this means, that if both parents teamed together to teach their children on HIV/AIDS and sexuality we would save many of these children from the scourge. Unfortunately this does not always translate into both parents being available to the children. Often children though staying with both parents spend time at home with one or at
times it is only the house help who is available to answer their questions. Even though coming from families of both parents more pupils were staying with mother (17%) compared to those who were staying with their fathers (4%). This means that more men are away from homes because of work or some other reason or some may have deserted their families and left the children under the care of their mothers. Most of the respondents were staying with persons that were already in formal employment, (37.8%) followed by business (29.9%). This could be explained by the fact that this study was carried out in town set up.

5.2 AWARENESS, KNOWLEDGE, SOURCE AND TYPE OF INFORMATION ON HIV/AIDS AMONG THE RESPONDENTS

Young people’s vulnerability to HIV infection is compounded by their scant knowledge of how HIV is spread and how infection can be avoided. This study revealed that most of the pupils, 99.4%, had heard about the existence of HIV/AIDS and only 0.6% (3) indicated that they had not heard of HIV/AIDS. \( t=21.5, df=463, p<0.001 \). Therefore this is a good indication in the fight against HIV/AIDS as it means that the awareness campaigns going on have borne fruit. The findings concurred with those of Kinyua (2001) who observed that 100% of his respondents in a related study had heard of the existence HIV/AIDS, also that of Mwangi (2000) who observed that 99% of the respondents had heard of the existence HIV/AIDS and also that of Okweso (2002), who indicated that 83.3% of the respondents on a related study had heard of the existence HIV/AIDS.

Society depends on media for news, education and entertainment, the media affects the quality of life for better, for worse, (Breikon, 1997). In this study media proved to be the major source of information (Chi-square = 85.1, df= 4, p<0.001) on HIV/AIDS (32.9%), for the respondents with home (parents and other members of the family) contributing 18.1%, and hospitals and health facilities workers contributing only 6.7%. This means that the health workers are not giving enough information to the pupils in schools on HIV/AIDS prevention and control. It also means
the pupils do not go to the health workers to get information on HIV/AIDS.

Schools’ (teachers/classmates/schoolmates) contribution to the information that the respondents had received on HIV/AIDS was only 17.8%. This means that though the schools are the main source of information outside the home environment, the pupils were not getting enough information on HIV/AIDS issues in the schools.

General information on HIV/AIDS issues topped the list on the type of information received by the respondents (38.5%). This was followed by abstinence (22.3%). Use of condoms was the third most important information (22.1%) received by the respondents. It is important to note that most of the respondents had indeed believed the information they had received on HIV/AIDS (97%). Only (3%) failed to believe the information they had heard on HIV/AIDS (t=116.05, df=460, p<0.001).

On contribution of information on HIV/AIDS, media that was indicated to have given most information to the respondents gave most of its information on condom use (36.6%). This unfortunately could lead to earlier onset of sexual intercourse activity and experimentation. This is supported by a related study on knowledge and attitude of adolescents towards pre-marital sex and HIV/AIDS in selected schools in Kenya (Kinyua, 2001), which blamed the media of encouraging pre-marital sex. Similarly a study on the attitude of adolescents towards pre-marital sex in relation to HIV/AIDS infection in Kenya, reported that 32% of the respondents indicated that mass media influenced their behaviour (Wanjiru, 2000). It is also supported by another study on the factors leading to the increase in pre-marital sex among the adolescents in secondary schools where 31.1% of respondents indicated that they were influenced by the mass media (Wanjiku, 2001). One of the most important commitments a country can make for its future economic, political progress and social stability is to address the health and development needs of adolescents (WHO, 2001). All the stakeholders must put more effort in giving young people the right type of information on HIV/AIDS in schools and out of school for them to be free from this scourge.
5.3 SEXUAL INTERCOURSE PRACTICE AMONG THE RESPONDENTS.

Unprotected sexual intercourse accounts for most of HIV infection (Rathus and Boughn, 1993). Young people are often confused and bogged with mixed messages on sexuality, peer pressure to experiment, with penalties exacted by school authorities and family members should experimentation result in pregnancy, and even ill health with early death should it result in HIV infection.

Most of the respondents in the study indicated having not had sexual intercourse (73.8%). This means that if the pupils can be helped to adopt abstinence or safer sexual practices in their lives they could be safe from the deadly scourge of HIV/AIDS. Nearly 75% of young Kenyans become sexually active before 20 years of age (Mugambi, 2001; R o K, 2000 b). While it is difficult for many adults to admit it, large numbers of young people begin sexual activity at a relatively early age. They become sexually active before marriage, are not monogamous, and do not use condoms regularly enough to ensure protection. In many countries, a significant proportion of young people start sexual activity before the age of 15 (UNAIDS, 2002). Unfortunately, as observed in this study and also supported by another study (Mwangi, 2001) most parents hardly shared information on HIV/AIDS with their children.

In this study, 23.2% of the pupils indicated that they had already had sexual intercourse, with age 10 years being the modal age of sexual intercourse onset (Chi-square = 38.22, df=7, p<0.001). Males indicated a higher level of sexual intercourse involvement (27.9%) than the females (18.8%). This compared well with another study carried on young men and women of ages 15-19 yrs who had sexual intercourse before their 15th birthday (UNICEF, 1997-2001). Those who had had sexual intercourse were: - Malawi – 27% boys, 18% girls, Kenya – 32% boys and 15.5% girls, United Republic of Tanzania, 24% boys and 14.5% girls. In this study 4.4% of the males did not indicate their sexual intercourse involvement compared to 1.7% of the females. Thus every effort should be put in place to help these pupils to either abstain or adopt safer sexual practices.
On the issue of taking precaution against HIV/AIDS, majority (93.3%) indicated that they took some kind of precaution while 6.7% did not. Most of the respondents (54.2%), indicated they abstain, 12.3% indicated that they have one sexual partner, 9.2% indicated they used condoms whereas 17.4% did not indicate the type of precaution taken. This compared well with a study by Okweso (2002) in Nyanza, Kenya, where 57.2% of the respondents used abstinence and 13.1% used faithfulness to one sexual partner and 20.9% of them used condoms as a precaution against HIV/AIDS. In another study among adolescents at Kakuma refugee camp in Northern Kenya, 27% of the adolescents used condoms as a preventive precaution (Nkam, 2001).

As has been found out in this research large numbers of young people are beginning sexual activity at a relatively early age. This underscores the importance of implementing prevention activities long before sexual intercourse. Action on prevention must be done at this early age if we are to control this disease.

5.4 PERCEPTIONS ON HIV/AIDS BY THE RESPONDENTS

Young people are particularly vulnerable to HIV infection, because of their poor perception on HIV/AIDS issues. Personal perception of risk is usually low amongst many youth and there are misperceptions about transmission modes and the efficiency of prevention measures. This makes them vulnerable to HIV/AIDS through risky sexual behaviors or and substance abuse.

The majority, (96.6%) of the respondents indicated that they perceived HIV/AIDS as a reality (t=20.26, df=463, p<0.001). This is positive in the fight against the scourge, as only when one perceives a disease to be a reality can one be ready to take the appropriate measures to stop its spread. On the ongoing HIV/AIDS campaigns in the country, the majority 59.8% perceived that these HIV/AIDS campaign were a plan to deny young people sexual intercourse enjoyment (t=4.35, df=463, p<0.001). This unfortunately could lead to the young people not taking the HIV/AIDS campaigns seriously. Interestingly more boys (65.9%) than girls (54%) had this perception and might mean that the boys would persuade the young girls into sexual intercourse
more easily than the girls would to the boys.

Death from HIV/AIDS was viewed not to be natural by 73.5% (t=10.22, df=462, p<0.001) of the respondents with this view by a majority of the respondents this can help in the fight against the pandemic as only a few people would desire to die a death that is not natural. Only 26.5% viewed it as a natural death. HIV/AIDS is a disease whose main route of infection is through sexual intercourse, and largely associated with those who are immoral and in rare cases the innocent ones whose spouses are unfaithful. Though this view could be of help to the young people in avoiding the risky behaviours, it could also lead to stigmatisation of the HIV/AIDS victims. The majority of the respondents indicated that they had seen an HIV/AIDS patient (74.2%), and only 25.8% had not seen one (t=10.52, df=463, p<0.001). This in itself can help in our fight against the disease as it could reinforce the reality of the disease to a majority of the population and it means a good number may also take precautions not to get the disease. Majority (89.2%) perceived that HIV/AIDS could be avoided. This again shows that our young people should now be equipped with information on how to avoid contracting the disease since a majority are aware that it can be avoided. The pupils were almost divided on whether the HIV/AIDS scourge is a curse or not, as 42.45% of the respondents perceived that HIV/AIDS was a curse from God, whereas 57.6% believed that it was not.

Most of the respondents (64.1%) did not differentiate between HIV and AIDS. This again means more needs to be done to educate the respondents on the difference between being HIV +ve and having the AIDS which is the last stage of the disease. Majority (64.4%) perceived that only those who are HIV positive can infect others. Transmission of HIV/AIDS from one person to another is mainly through sexual intercourse accounting for 98% of all transmission cases (RoK, 2002c). On infection on first intercourse, 28.4% perceived that one cannot get infection on first sexual intercourse, 71.4% perceived the fact that it is possible to get infected on first sexual intercourse and only 15.7% perceived that young and healthy persons cannot infect others with HIV/AIDS.
Majority of the pupils (84.3%), perceived that young and healthy persons could still infect others with HIV/AIDS ($t=14.91, df=463, p<0.001$), and this means that even at their age a majority are aware, that they can get infected with the disease even from people who look healthy. This is positive and can help in the fight against the scourge. The first ever reported cases of AIDS were all from males who were homosexuals (Duh, 1991). 31.4% were not aware that homosexuality could expose them to HIV/AIDS infection, this is important and it means that our young people should be given the knowledge that not only is HIV/AIDS transmitted through heterosexual intercourse but can be transmitted through homosexual activities also. 68% were aware that homosexuality could lead to HIV/AIDS infection ($t=7.96, df=460, p<0.001$).

Circumcision has been implicated as a risk factor in the transmission of HIV/AIDS. Sexual intercourse may at times cause lacerations and bleeding in women who have undergone clitoridectomy and infiltrations, thus increasing their risk of infection (Ahberg, 1997). In both female and male circumcision use of instruments during the operation without proper sterilization has been implicated as a possible transmission route. In this study, 58.2% of the respondents perceived accurately that circumcision could be a possible route in the spread of HIV/AIDS ($t=4.25, df=458, p<0.001$). 40% did not perceive this as a possible route of transmission, while 1.1% did not respond. Majority (76.3%) perceived that blood transfusion from an infected person could spread HIV/AIDS, while only 24.4% perceived otherwise, and 1.3% did not respond ($t=11.72, df=457, p<0.001$).

Condom is one of the methods which is used as protection against the spread of HIV/AIDS. It is not 100% effective, but when properly used it can offer some protection. For individuals whose sexual activities expose them to high risk of HIV infection, consistent and proper use of good quality condoms offers them the safest option (RoK, 2001b). Almost an equal percentage were split about the safety of condoms as a means of protection, with 48.4% responding that it offers full protection while 50.1% felt that it does not. This is an indication that the information the
young people have been receiving in regards to protection against HIV/AIDS infection has not been clear particularly the one on condoms use as means of protection. Combined awareness assessment questions showed that 58.9% of the respondents had high awareness level on HIV/AIDS issues, 40.4% had reasonable awareness on HIV/AIDS and 0.6% had low awareness. Girls had comparatively a higher level of awareness (62.8%) compared to boys (54.9%). This suggests that most for any equal sample of girls and boys it is highly likely that majority of those with high level of awareness about HIV/AIDS issues will be girls. The fact that girls appear more vulnerable to HIV/AIDS infection may have driven the girls into acquiring more information on HIV/AIDS than the boys, leading to higher awareness levels. However t test for proportions gave a non significant result (t=1.71,df=272,p>0.05). Perception by sex indicated that females had better perception (43.5 %,) compared to males (38.1 %). However Chi-square test was non significant, showing that there is no association between perception and sex category, i.e. perception does not depend on sex category. There was a non significant relationship between the type of family of the respondents and the perception of HIV/AIDS (Chi-square=5.6,df=4,p>0.05). Age category 12-13 years had the highest percentage of those with good perception (46.3 %), while age category 18-19 years had the highest percentage of those with poor perception (44.7 %). Chi square gave a non significant result (Chi-square=6.09,df=4,p>0.05).

Of all the mentioned dependable sources of information the respondents had mentioned, media (Radio, TV, and Newspaper) was the most commonly mentioned by those with both good and poor perception. Chi-square significance test (at alpha level of 0.05) showed that there was a non significant relationship between the perception of the surveyed group and the source of information (Chi-square=10.11, df=6, p>0.05).

Media, which was the dominant source of information on HIV/AIDS, gave most of its information on condom use, which have negative impact on the young people and could easily lead to earlier onset of sexual intercourse due to constant reminder to use condoms, this was supported by related
study where 32% of respondents indicated negative behaviour change due to media (Wanjiru, 2000). The other factor could be the regular sponsorship of condom use, through media adverts by various competing manufacturers. This could easily affect the perception of young people more so when those, depicted as using them are young people like them.

Those from public schools had higher percentage of pupils with good perception, (42.1%) compared to 39 %, from private schools. Private schools are known to put a lot of effort to ensure the pupils pass the national examinations, with little effort to issues that are not examined. This may have had a bearing on the poor perception on HIV/AIDS issues compared to pupils from public schools. Private schools may need to put more effort in educating their pupils on HIV/AIDS issues just as much as they do to make them pass the examinations. However a closer examination of table 21 indicates that both categories of schools have higher number of pupils with poor perception (Chi-square=0.313, df=1, p>0.05).

5.5 CONCLUSIONS

Whereas a majority of the pupils had a high level of awareness on HIV/AIDS issues, their perception on HIV/AIDS issues was generally poor for most of the respondents.

Majority of the youths, believe that the ongoing HIV/AIDS campaigns, is a plan to deny young people enjoyment of sexual intercourse. This unfortunately may lead to the young people not taking the HIV/AIDS campaigns seriously; more boys than girls had this belief.

Media proved to be the major source of information on HIV/AIDS for the respondents followed by schools, home, hospitals and health facilities workers in that order. Health workers should do more to educate the members of the public and more so the youth in our schools on HIV/AIDS issues.

The respondents believed almost all the information received on HIV/AIDS from whatever source. Media that had given most information to the respondents, gave most of its information on condom
use. This unfortunately could lead to an earlier onset of sexual intercourse activity and experimentation by the pupils. There was however a non significant relationship between the perception of the surveyed group and their source of information (Chi-square=10.11, df=6, p>0.05). This means all available avenues should be utilized in educating our young people on HIV/AIDS, as the pupils are ready to receive information from any available source.

Most of the respondents indicated having not had sexual intercourse; this means that if the pupils can be helped to adopt abstinence or safer sexual practices in their lives they may be safe from the deadly scourge of HIV/AIDS. Males indicated a higher level of sexual intercourse involvement than the females. This underscores the importance of implementing prevention activities before this onset of sexual intercourse. More efforts needs to be put to make the young boys understand the dangers of risky sexual behavior just as the society has put a lot of effort in protecting the girl child.

On precautions being taken by the respondents most indicated that they abstain, followed by those using condoms, then those with one sexual partner.

Comparatively girls had a higher level of awareness than boys. The fact that girls appear more vulnerable to HIV/AIDS infection may have driven the girls into acquiring more information on HIV/AIDS than the boys. Females again appeared to have better perception compared to males though there was no significant relationship between perception and gender. This means that efforts should be put to reach both girls and boys with the right information without discrimination.

Those from public schools had a higher percentage of pupils with good perception, compared to those from private schools. The majority of the respondents perceived that HIV/AIDS can be avoided. Young people offer the greatest hope for changing the course of the HIV/AIDS epidemic, if they are given the tools and support to do so. This means that the young people should be equipped with the relevant and accurate information on how they can avoid being infected with the
disease. This should be done without delay and parents should play an active role in educating the young people without leaving and not to leave this responsibility to the media as revealed in this work. Health workers should also do more in educating the pupils on HIV/AIDS issues by visiting the schools for Health education.

Many young people do not perceive themselves to be at risk. Effort should be put in place to help the young people to perceive clearly the dangers of risky sexual behaviors and how to adopt and practice appropriate safe behavior.

Health Education on HIV/AIDS should start and be sustained; this should start before puberty and continue throughout a young person’s school years, before they become sexually active. This should be comprehensive, age-appropriate, taking into consideration their perceptions, attitudes and values. The more information provided the better.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCH WORK

Research should be carried out on

1. Ways of combating sexual exploitation of young people.
2. The role of gender in the HIV/AIDS epidemic.
3. How religion would contribute in the fight against HIV/AIDS.
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