HIV/AIDS EDUCATION IN SECONDARY SCHOOLS:
An Analysis of the Knowledge, Attitudes and Practices of Teachers in Ruiru Division of Thika District- Kenya

By

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A Research Project submitted in Partial Fulfilment of the Requirements for the Degree of Master of Education in Educational Administration and Planning of the University of Nairobi
DECLARATION

This Research Project is my original work and has not been presented for examination in any other university.

Malusi Dickson Musyoka

3rd March, 2005

Date

This Research Project has been submitted for examination with my approval as University Supervisor.

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ACKNOWLEDGEMENTS

Several people have made possible the completion and success of this study through their co-operation, assistance, financial, moral and material support. I wish to acknowledge with deep appreciation the support and guidance my supervisor Dr. Nyagah has given me throughout the writing of this project.

I'm indebted to give my gratitude to my dear wife, Grace for her patience, support and sacrifice she has made to see me through this study. To our lovely son, Eric Musyoka for his patience during my absence at home for most of the time when they really needed me.

Special thanks go to Johnson Kitetu for his guidance and support during the writing of this project, and especially availing of his highly valuable textbooks and other research materials.

The information in this report is the sincere devotion of the teachers who filled the questionnaires I prepared. I wish to acknowledge their contribution with much appreciation.

Last but not least, I am sincerely grateful to my postgraduate colleagues at the University of Nairobi, Kikuyu campus.
DEDICATION

This research work is dedicated to my wife, Grace Mwikali and our son, Eric Musyoka.
ABSTRACT

This research work was aimed at finding out knowledge, attitude and skills of secondary school teachers in public schools in Ruiru Division of Thika District, who have an enormous task of implementing the HIV/AIDS curriculum. The study contradicted the government's claim that teachers have been trained on HIV/AIDS education, and that HIV/AIDS education is being taught in secondary schools.

The research work was guided by the following research questions:

1. Are teachers knowledgeable about the characteristics of the HIV/AIDS disease and its modes of transmission?
2. What practices and methods do teachers use in teaching HIV/AIDS education?
3. What is the attitude of the teachers towards HIV/AIDS education?
4. What are the sources of HIV/AIDS teaching and learning materials for teachers?
5. To what extent have the teachers received training on HIV/AIDS education?
6. What are the impediments facing teachers in teaching HIV/AIDS education in secondary schools?
7. What are the ways of improving the teaching of HIV/AIDS in secondary schools?
The target population comprised of 328 secondary teachers from whom a sample of 100 teachers was selected. The research instrument used for data collection was the questionnaire. The data collected was largely analyzed using descriptive statistics.

The research findings revealed that:

The teachers were generally knowledgeable on the subject matter, with many of the teachers aware of the highly held misconceptions and prejudices on HIV/AIDS. Generally HIV/AIDS education is not taught in most of the schools and some teachers are not aware that they are supposed to be teaching it. Majority of the teachers had not undergone any training on HIV/AIDS. On the other hand, it was realised that some few teachers had attended these seminars/workshops more than once, which may be construed to mean that there is biased appointment on who attends them.

There are a myriad of problems facing the effective teaching of HIV/AIDS education which included lack of clear instructions on the implementation of the HIV/AIDS curriculum. The teachers suggested that more teaching and learning materials are required. It was suggested that if the students see the infected people it leaves an indelible mark in their minds and hence very careful in whatever they engage in. The teachers also suggested that there should be trained teachers to teach HIV/AIDS education. This should be accompanied by clear instructions on
integration and infusion of the topics. This shows that teachers are willing to teach HIV/AIDS education and that the Teachers Service Commission (TSC) and the Ministry of Education should strive to provide teaching and learning materials to schools. Also of importance is the training of the teachers on the subject, as materials without training will achieve very little.
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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS - Acquired Immune Deficiency Syndrome
B.Ed - Bachelor of Education
EFA - Education For All
G.O.K - Government of Kenya
HIV - Human Immuno Deficiency Virus
IDG - International Development Goal
KIE - Kenya Institute of Education
MoEST - Ministry of Education, Science and Technology
NACC - National AIDS Control Council
NASCOP - National AIDS and Sexually Transmitted Disease Control Programme
PCA - Population Communication Africa
PGDE - Post Graduate Diploma in Education
R.O.K - Republic of Kenya
SADC - South Africa Development Community
STIDs - Sexually Transmitted Infections
STIs - Sexually Transmitted Infections
TSC - Teachers Service Commission
UNAIDS - United Nations joint commission on AIDS
UNICEF - United Nations Children’s Fund
CHAPTER ONE
INTRODUCTION

1.1 Background to the problem

The global extent of AIDS epidemic is dramatically higher than was predicted thirteen years ago, and the full impact of its consequences for all sectors of society, including the education sector, is only now starting to be fully recognized. National AIDS and STDs Control Programme (NASCOP, 2001) estimates that globally, the number of people living with Human Immuno Deficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) is 36.1 million and that 25.3 million or seventy per cent of these are in Sub-Saharan Africa. The largest number of deaths is occurring in young adults, the most productive sector of the population, which includes most young parents and teachers' (World Bank, 2002). UNAIDS (2002) estimates that 11.8 million people aged between 15 and 24 are living with HIV/AIDS.

Kiragu, (2001) sees the young people today as the “AIDS generation”. They have never known a world without HIV or AIDS. It was on 5th June 1981, that the United States Centre for Disease Control published a report about a disease that was hitting gay men. That report marked the formal beginning of the AIDS era (Kelly, 2002). It ushered in what we now know as the AIDS pandemic. During the twenty-three years that have passed since then, the disease has grown to
nightmarish proportions, with almost every passing year seeing a revision upwards of dire estimates and predictions.

In 1990, the World Conference on Education for All (EFA) held in Jomtien, Thailand, put forward a vision and commitment to meet the basic learning needs for all; to equip people with the knowledge, skills, values and attitudes they need to live in dignity, to continue learning, to improve their own lives and to contribute to the development of their communities. In 2000 the second Education for All Forum was held in Dakar, Senegal. In this forum, it was realised that the world was no closer to achieving the aims and accepted the challenge of achieving EFA by the year 2015 (UNESCO, 2000a). It is now clear that HIV/AIDS is a major obstacle to achieving the goal.

HIV/AIDS has become the world’s most devastating epidemic, particularly in developing countries, where many governments have declared it an emergency. The vast majority of young people remains uninformed about sex and sexually transmitted infections (STIs), including HIV/AIDS. Although a majority have heard of AIDS, many do not know how HIV is spread and do not believe they are at risk. Those who know something about HIV often do not protect themselves because they lack the skills, the support or the means to adopt safe behaviours (UNICEF, 2002). They think that you can judge by appearance whether or not a person is HIV infected.
It is unfortunately true that in many ways the world, countries and communities, have allowed themselves to get into the current HIV/AIDS. Notwithstanding the urgency with which the signs presented themselves, the world has stood by and watched a steady, and seemingly unstoppable, drift into crisis, disaster and catastrophic human tragedy.

The uncertainty up to fairly recently of the education sector’s response to the disease is brought out by the fact that, in early 1994, the International Institute for Educational Planning (IIEP) in Paris produced and disseminated a very comprehensive report on how HIV/AIDS was likely to impact the education sector, but almost six years passed before education ministries began to take on board the contents of that seminal work (Kelly, 2002). During these lost years, the AIDS situation in general and in the education system in particular, grew steadily worse. The tragedy of the past twenty years is that education sectors worldwide, but especially in the most severely affected countries, did not get moving early enough to respond to the demands of HIV/AIDS. According to Kelly (2001), when they did begin to take account of the epidemic, they adjusted themselves in an almost random way to its demands, cautiously, hesitantly, and timidly.

The increased HIV/AIDS pandemic has had devastating effects on the education sector in general, and the participation of children in particular. HIV/AIDS affects both the demand and supply of basic education. Available statistics for Kenya
indicate that more than 1.5 million people have died of HIV/AIDS, over 2 million are infected and about 45% of the infected cases are young people aged between 15 and 36 years (MoEST, 2001).

Governments in high prevalence countries have accepted responsibility for delivering mass prevention campaigns through learning institutions. One important change that has been placed on educational institutions in many countries has been the expectation that they introduce sex education in some form or other into the curriculum (World Bank, 2002). This is in recognition of the role that information can play in prevention of HIV transmission where it is assumed that schools can influence the sexual behaviour of young people. In Zambia, HIV prevalence among 15 to 19 year olds in Lusaka dropped from 23% in 1994 to 16% in 1998 and in Ndola from 21% to 15% in the same period. In Zimbabwe, a large population survey showed that those attending school had much lower prevalence rates than those who were not in school as highlighted by Kelly (2002).

According to UNICEF (2002), a basic education of good quality for all children, offering sound knowledge about sexuality and HIV is essential. Behaviour is not changed by knowledge alone, young people need skills to put what they learn into practice.
Life skills - in negotiation, conflict resolution, critical thinking, decision-making and communication - are vital for young people. These skills help young boys and girls learn to relate to one another as equals, work as groups, build self-esteem, resolve disagreements peacefully and resist both peer and adult pressure to take unnecessary risks. Coombe (2002) avers that the teaching response to HIV/AIDS (known as HIV/AIDS education, reproductive health and sex education, life skills or life orientation) is generally supposed to communicate relevant knowledge, engender appropriate values and attitudes, and built personal capacity among learners to maintain or adopt behaviour that will minimize or eliminate the risk of being infected by HIV.

To achieve this, the subject area must be properly professionalised, with the development of a corps of educators and teacher educators who are the specialised professionals in this field. (Kelly 2002) says that we must invest heavily in the multilevel preparation of educators for HIV/AIDS, sexual and reproductive health and life skills - subject areas that enhance the likelihood that children and young people will live. He adds that for too long we have toyed with this discipline and in doing so not only have we marginalized it but we have also failed to equip children and the young people who are at grave risk with knowledge, skills, attitudes and values that could mean the difference between life and death for large numbers of them.
HIV/AIDS, sexual and reproductive health and life skills education must be fully integrated across the curriculum and into the educational system. It is not an optional extra. It is not an add-on. It is not something that can be picked up in spare moments of a biology or social studies lesson. It is a crucial stand-alone area that necessitates separate timetabling, the support of appropriate materials, and the provision of all the backup guidance, training, teacher support structures, monitoring and evaluation that other subjects receive (Bennell, Hyde & Swainson, 2002).

The Government of Kenya (G.O.K) has been playing a lead role in mobilizing financial, human and technical resources to combat the epidemic. To meet the challenge of the HIV/AIDS epidemic, the Government of Kenya recognized the need to establish clear policy guidelines and effective organizational structures. The government issued the *Sessional Paper number 4 of 1997* as her response to the pandemic. On 25th November 1999, AIDS was declared a national disaster in Kenya.

In December 1999, the Ministry of Education came up with an elaborate HIV/AIDS curriculum for schools and colleges. The purpose of the secondary school AIDS syllabus is to equip the students with the necessary knowledge, skills, and attitudes that will enable them adopt behaviour that will help them prevent being infected with and spreading HIV/AIDS.
According to the Ministry of education, science and technology syllabus (1999), the main objectives are to strengthen and reinforce AIDS education awareness in schools by integrating and infusing HIV/AIDS in the existing school curriculum, and to enable the teachers acquire knowledge on the contents of AIDS curriculum for the levels they are preparing to teach.

In view of the importance of AIDS education in the school curriculum, the best strategy is to incorporate HIV/AIDS education contents into the existing subjects, instead of creating new ones or setting aside a lesson (Wango, 2001). According to him, the AIDS message will be strengthened and enriched in the existing curriculum by adopting an all round approach. AIDS is one of the diseases that infect people and can be taught together with related topics in science, health education and home science. By their own nature, subjects like science, Religious Education and social ethics render themselves more suitable to teaching about AIDS than others. The teacher is alert and uses any suitable opportunity that arises to pass HIV/AIDS related issues. AIDS education can be well incorporated in drama, debate, poems, painting and essay competitions.

For effective infusion and integration of AIDS education, good background knowledge on HIV/AIDS is vital. The basic knowledge enables the teacher to understand and comprehend the content, identify the particular topics and sub-topics, identify plug-in points and suit the message to particular class.
According to the National report on the development of education in Kenya (2001) curriculum materials in the form of books and training materials have been developed on HIV/AIDS and teachers in-serviced on how to infuse messages in the curriculum that can help prevent the spread of AIDS.

### 1.2 Statement of the Problem

Although almost everyone in Kenya has heard about HIV/AIDS and knows that HIV is transmitted primarily through sexual intercourse, cases of HIV/AIDS are still high (Nascop, 2001). Data from Multi Indicator Cluster Survey (2002-2003) indicate that HIV/AIDS prevalence in Kenya was 10.2% in 2002. It is imperative to use the education sector’s potential to slow down the rate of infections. Good quality sexual health and HIV/AIDS education is needed in order to equip the young people with the information that they rarely get from their parents or senior family members.

The evidence of HIV infection on young people is deeply worrying. Data suggests that about half of new HIV infections are in young people less than 25 years of age- precisely the age cohort that is the clientele of the educational system (Kelly, 2001). Since such a significant proportion of the relevant age group for reducing HIV transmission is engaged with the educational system, it follows that these institutions need to develop appropriate and effective ways to reach the young people. Coombe & Kelly (2002) say that the main constraints to education
sector’s response to HIV/AIDS is absence of strategic planning for the epidemic; considerable piloting, but with little coordination between interventions and few, if any, being brought to scale and lack of teacher capacity to deliver relevant HIV/AIDS education.

HIV/AIDS related programmes provide an opportunity to strengthen and accelerate existing health promotion campaigns in schools. Education to prevent HIV/AIDS has been integrated into the curriculum about reproductive health, life skills, and other important health issues. A study by Coombe (2002) concluded that there is ubiquitous evidence that less teaching and learning materials are getting into classrooms and that teachers have virtually no guidelines for coping with the pandemic.

This research aims at assessing the knowledge, attitudes and practices of the secondary school teachers in Ruiru division of Thika district, who have the big task of implementing the HIV/AIDS curriculum. This would form the basis of the preparation of teachers as capable disseminators of information on HIV/AIDS preventive measures to students, which is required to encourage and sustain responsible behaviour for HIV prevention.
1.3 The purpose of the study

This study sought to find out whether the secondary school teachers in Ruiru division of Thika District have the necessary knowledge, attitudes and skills required to teach HIV/AIDS education.

1.4 Objectives of the study

The following were the objectives of the study:

1. To assess the knowledge, practices and methods used by the teaching staff in implementing HIV/AIDS curriculum in secondary schools.

2. To determine the attitudes of the teachers towards AIDS education in secondary schools.

3. To identify the source of information on HIV/AIDS for the secondary school teachers.

4. To determine whether the teachers have undergone any training on HIV/AIDS education.

5. To establish the impediments facing teachers in teaching of HIV/AIDS education.
6. To obtain suggestions from the teachers on ways of improving the teaching of HIV/AIDS education.

1.5 Research questions

1. Are teachers knowledgeable about the characteristics of the HIV/AIDS disease and its modes of transmission?

2. What practices and methods do teachers use in teaching HIV/AIDS education?

3. What is the attitude of the teachers towards HIV/AIDS education?

4. What are the sources of HIV/AIDS teaching and learning materials for teachers?

5. To what extent have the teachers received training for HIV/AIDS education?

6. What are the impediments facing teachers in teaching HIV/AIDS education in secondary schools?
7. What are the ways of improving the teaching of HIV/AIDS in secondary schools?

1.6 Significance of the study

The study sought to establish the knowledge, skills and attitude teachers have on HIV/AIDS education. This would form the basis of the preparation of teachers as capable disseminators of information on HIV/AIDS to students. Previous studies have shown that having knowledge about HIV/AIDS is important to prevent HIV infection and to have appropriate attitude towards people with HIV especially among adolescents. Young people need skills to put what they learn into practice, which can well be imparted by trained and knowledgeable teachers.

1.7 Limitations of the study

The researcher was not able to control the attitudes of the respondents, which may affect the validity of their responses. This is because respondents might at times give socially acceptable answers in order to avoid offending the researcher (Mulusa, 1990). The size of the study area may decrease the generalizability of the study findings to all other areas in the country.
1.8 Delimitation of the study

The study confined itself to public secondary school teachers in Ruiru Division of Thika District, and a questionnaire was used as a tool for collecting data.

1.9 Assumptions of the study.

The basic assumption of this study was that HIV/AIDS education is taught in all secondary schools in Ruiru Division, Thika District. This is in accordance with the Ministry of Education, Science and Technology syllabus for secondary schools in Kenya. Also the respondents are expected to give honest answers and responses to the items in the study.

1.10 Definition of significant terms

AIDS: AIDS stands for acquired immune deficiency syndrome. It is acquired because it is not inherited—the virus that destroys the body's immune system is spread from one person to the other.

HIV: HIV stands for human immuno-deficiency virus. The virus destroys the human immune (defence) system, making the body vulnerable to other infections.
**HIV/AIDS education**: AIDS education consists of knowledge, skills, and attitudes meant to assist the learner to develop and adopt behaviour that will prevent them from being infected with HIV.

**Infusion**: Refers to the process of incorporating AIDS education content in existing subjects.

**Integration**: refers to the inclusion of AIDS messages in the curriculum, co-curriculum and any other activities, in and out of school.

**Professional Qualifications**: Refers to the level the teacher is placed in the promotional hierarchy within the scheme of service.

**Secondary School**: Refers to post-primary institutions where students receive regular instructions for four years from form one to four.

**Secondary School Teachers**: Refers to certified persons holding certificates and trained teachers employed by the Teachers Service Commission or Board of Governors or other authority to teach either science or art based subjects.

**Teachers’ Service Commission (TSC)**: Refers to a corporate body established through an Act of parliament whose major functions are registration of teachers,
regulation of teaching profession and cancellation of registration of teachers in cases of misconducts and remunerates teachers among other functions.

**Trained HIV/AIDS teachers**: Refers to teachers who have undergone training in HIV/AIDS education teaching.
CHAPTER TWO

REVIEW OF LITERATURE

2.0 Introduction

This section reviews literature on HIV/AIDS and education. The purpose of the study is to analyse the implementation of the AIDS curriculum in Ruiru Division of Thika District. The section is divided into five parts. Part one is a brief overview of HIV/AIDS among the youth. The second part discusses the impact of HIV/AIDS on demand and process of education. Part three looks at the concept of HIV/AIDS education, while the fourth part highlights the challenges facing the implementation of HIV/AIDS curriculum. The last part presents a summary of the section.

2.1 HIV/AIDS among the youth

Joint United Nations Programme on HIV/AIDS (UNAIDS, 2002) estimates that there are more than 11.8 million young people aged between 14 and 23 years living with HIV/AIDS all over the world. In sub Saharan Africa, 8.6 million young people are infected. UNICEF (2002) estimates that 61% of the Kenyan youth have at least one misconception about HIV/AIDS. These misconceptions
include: HIV can be transmitted through witchcraft; mosquito bites; and a healthy looking person cannot have the AIDS virus.

The first case of HIV infection in Kenya occurred in 1978 in communities living around the shores of the Lake Victoria. Six years later in 1984, the Ministry of Health in Kenya reported the first AIDS case Population Communication Africa (PCA, 1999). Johnson (1999), in a survey found out that 84% of Kenyan adolescent boys perceive themselves to be at no risk or small risk of getting AIDS. The case of the girls was a bit different, with 80% of them considering themselves to be at no risk or small risk of getting AIDS. This is a worrying trend considering that a third of Kenyan population falls under the teenage-adolescence category of between 13 and 19 years of age. In the same survey, Johnson found out that at age 16, a majority of adolescents are sexually active and that at one time or another 80% or more of those sexually active have engaged in intercourse that was not protected from STIs.

According to the Kenya Demographic and Health Survey (1998), both men and women in Kenya are less likely to be informed about HIV/AIDS if they lack formal education and especially if they are younger, that is, age between 15 and 19 years of age. The then minister in the Office of the President, Mr Masden Madoka, during a launch of a book titled ‘Nuru’, said that 20% of Kenyans aged 15 and 19 years were HIV positive (Rapuro, August, 2001). This is exactly the age bracket of the secondary school students in Kenya. The launch of the book, he
said, was yet another milestone in the fight against the HIV/AIDS scourge as it would be an effective tool since the youth can relate to the characters in the book. He said the government supports campaigns and programmes that exploit the talents of the youth in the fight against HIV/AIDS.

2.2 Impact of HIV/AIDS on demand and the process of education.

HIV/AIDS has a major impact on the demand for education. With HIV/AIDS, enrolment has gone down. Children from families inflicted with HIV/AIDS will suffer trauma through the experiences as they have to work to generate income for family support, or are needed to care either for the sick or for the young siblings. As a result of the illness and death of productive members of the family the loss of income due to expenditures on treatment, care and funeral costs, fewer children will be able to afford education.

HIV/AIDS leads to the expansion of extended families, with many children of school age in a family often led by less productive adults (Grand parents) or teenage children (Shaeffer, 1994). In such families there may not be enough money to cover fees and other schooling costs of all the children, and this may lead to fewer children being able to complete education. This may be also as a result of illness in school.
The social interactions and educational processes, which make it work, will inevitably be coloured in some way by the epidemic. Those in class who are infected or ill or even members of affected families – both teacher and pupils – may face discrimination, ostracism and isolation. The experience of trauma or discrimination may lead some young people to discontinue their education or be erratic in participation. Others may find that they are not able to learn as they ought. Educators and school heads may be at a loss as to how they should cope with the emotional, psychological and resulting behavioural problems that students may present.

Teachers may face suspension of social and health benefits and/ or dismissal from the system (Shaeffer, 1994). Pupils may face formal suspension by the system or be pressured to leave school ‘voluntarily’. The supposedly free and open nature of school and classroom relationships may end up being governed by suspicion and fear. This will affect the teaching – learning process, an impact exacerbated by the greater randomness of teaching and learning due to higher rates of absenteeism of both teachers and pupils.

A study in 2000 by John Hopkins University researchers working in Nairobi warns of an adolescent AIDS epidemic that is likely to afflict over 40% of teenagers aged 13 to 19 years in Kenya (Kigotho, January, 2001). This is mainly secondary school age group. According to Dr Tony Johnston, the team leader of
the study, at the highest risk are the schoolgirls who are sexually active and not exposed to sex education. The issue is that in Kenya, most teenagers engage in sexual activity at a younger age than elsewhere in sub-Saharan Africa, with over 90% of Kenyan teenagers being sexually active by the age of 18 years. The study also found out that twenty five per cent of boys aged 15 to 19 years have been found to have more than one sexual partner, especially among commercial sex workers. The boys said that they did not know that the commercial sex workers were at the greatest risk. In Kisumu, the researchers found that almost 30% of teenage girls are sexually active before the age of 15 years.

2.3 The concept of HIV/AIDS education

There is no cure for HIV/AIDS, and many scientists believe that because of the nature of the virus there never will be a cure. The antiretroviral drugs suppress HIV activity and influence in the body for as long as they are being taken, but these drugs raise a host of problems relating to their cost, their continued effectiveness, the demands of administration and patient monitoring, dangers of resistance, and the creation of a false sense of optimism (NASCOP, May 2002).

Second, there is no vaccine. Work on vaccine development is proceeding in several locations, all of them with relatively small research facilities and funds and with none of the major pharmaceutical companies being involved. The latest
word from the International AIDS Vaccine Initiative (IAVI) is that we should no longer think of an AIDS vaccine just as possible but confidently say that it is probable (Berkley, 2002).

With no cure available, no vaccine in immediate sight, and no consensus on how to answer the many questions surrounding drug therapy, we must, make prevention the mainstay of our response. But there can be no prevention of HIV transmission without either the maintenance of behaviour that will protect oneself and others, or the change of existing behaviour so that it becomes protective of self and others. The only way of ensuring this is through education.

The first direct call to begin education about AIDS in early elementary school came from a leading public health figure, not an educator. U.S. surgeon-general, Dr Everett Koop, had realized back in 1987 what is today a common practice: schools are a priority setting for preventing HIV/AIDS and related discrimination (World Bank, 2002). He recognized five generations of school-based responses to HIV/AIDS in America.

The first generation of responses was in the mid 1980's, which was fear driven, non-organized, with strong local reactions, often in response to new media reporting. By this time information about HIV/AIDS was scanty and plagued with misconception as to who was at risk. Content was information based focusing on
new information about the virus, its transmission and general concepts of prevention.

The second responses (mid 1980's) were more organized, reflecting a growing recognition that young people need knowledge about HIV/AIDS to protect themselves. National guidelines, curricula and teachers' training were initiated to increase the spread of basic and accurate information about HIV/AIDS, but without pre assessment of needs.

In the third generation (early 1990's), teachers and health educators began to draw upon theory and experience in health education, sex education, drug and alcohol prevention, and reproductive health. Educators realized that "AIDS education" and "sex education" were not the same, and that the latter, because controversial, was often not ideal means of introducing HIV/AIDS prevention. Sex education was seen more as introducing the teenagers to family life at young age than teaching them to be responsible in their lives.

In the fourth generation (mid 1990's), education about HIV/AIDS was viewed as only one part of an effective school based intervention strategy. Increasingly, this focused on skills to prevent infection, and prevention of discrimination and stigma. The close association between AIDS and education and health education was established, connecting prevention of HIV transmission to primary
prevention of substance use, family life education, personal development and sex education.

In the fifth generation (2000’s), HIV/AIDS education is characterized by different inter related strategies aimed at reducing the impact of HIV/AIDS on the education system, decreasing vulnerability and reducing risk. This is the era in which most African countries, though mostly affected, started responding to the pandemic. A UN Inter Agency Working Group on HIV/AIDS in schools and education, has developed a strategic framework to facilitate development of country level strategic implementation plans for HIV/AIDS prevention and impact management in educational systems, as a part of the expanded global response to the epidemic (World bank, 2002).

According to UNESCO (2000b), in reaction to HIV/AIDS, the tendency of education ministries has been to focus almost all of their attention on the curriculum, and within this perspective to concentrate even more narrowly on the integration of HIV/AIDS education and related health issues. This is of supreme importance. With or without HIV/AIDS, all students need skills-based health education that will assist them to adopt and sustain a healthy lifestyle during schooling and for the rest of their lives.
Good quality sexual health and HIV/AIDS education is needed in order to equip young people with the information which they rarely get from their parents or senior family members, which they no longer get from traditional training such as was customarily provided at the time of initiation, which they frequently pick up haphazardly from peers and books and which they sometimes, augment by high risk experimentation (Kelly, 2000). This education should go beyond the biological facts to include many aspects of behaviour and ultimately of attitude and values.

In the context of HIV/AIDS, however, curriculum and pedagogic reform must extend further than the development of the knowledge and attitudes to values and life-skills needed for making and acting on the most appropriate and positive health-related decisions (Coombe & Kelly, 2002). The latter is critically important in equipping individuals for their personal combat against HIV/AIDS, and also in addressing other needs that arise in an AIDS-ravaged society, like the care of those infected with the virus.

Responding creatively and flexibly to HIV/AIDS also requires willingness to adjust educational delivery systems (UNESCO, 2000b). There are many dimensions to this. One is to establish broad principles for the timetable, daily schedules, and even the education and training calendar, while allowing schools to regulate these in ways that respond to locally experienced needs. The needs of
those of different ages, and the needs of boys and girls, may differ widely and require age or gender-differentiated responses. It is hard to see how a traditional education system, centred round a physical structure, conceived in a somewhat rigid hierarchical way, and using the technology of one teacher in charge of a class of forty or more students, could respond to these and similar perplexing needs. Something more is required. As currently conceived, curricula do not respond to the needs of learners affected by loss of members of their family (Coombe & Kelly, 2002).

Kelly (2000) sees education as playing a very crucial role in curbing HIV menace. While as yet there is no infection, it has the potential to:

- Provide information, knowledge, skills and attitude that will inform and lead to positive moral behaviour for self-protection.

- Enhance the capacity to help others to protect themselves against the risk of infection.

- Inculcate the youth life skills to cope with adolescence.

Hubbley (2000) says that in the long term, education has the potential to alleviate socio-economic problems such as poverty, ignorance, gender discrimination and other cultural practises that inhibit development. In particular, it will reduce the
vulnerability and the risk of infection through promiscuity, streetwise prostitution, and related social and cultural practices. It is hoped that the youth will use the knowledge acquired and the attitudes and skills developed to protect themselves from infection and also educate others. This will reduce and control the spread of HIV/AIDS among adolescents and young people.

Studies show that governments in high prevalence countries have accepted the responsibility for delivering mass prevention campaigns through learning institutions. While intended responses of such campaigns can be categorized, their actual achievements are poorly described in the literature and very rarely evaluated (Coombe, 2001a). This is in contrast to Gachuhi (2000), who says that data now available confirm that effective life skills programme promote abstinence and help children and adolescents to delay the initiation of sexual activity.

Kabaji (2001) says that as more than 95% of Kenyans know the facts about AIDS, a new focus should be on behaviour change, and that creative works would go a long way in leading people into self-examination, evaluation and reflection. Works of literature do not just present facts; they integrate the facts and open up new possibilities of thinking. This inevitably leads to an internal monologue that bears fruit of a rebirth within a reader. Unconsciously, one is led to choose the moral, pro-life path and at the same time sympathise with those infected.
Uganda has registered significant success in reducing HIV prevalence among young people, with at least some of the credit going to the education sector. Whereas there were signs of continued increase in prevalence among the least educated, a girl attending school was three times less likely to be HIV infected (Kaleeba, Kadowe, Kaliaki & Williams, 2000). Similarly, in Zimbabwe a large population survey showed that those children attending school had much lower prevalence rates than those who were not in school (Gregson, Waddell & Chadiwana, 2001; Fylkesnes & others, 2001).

Religious groups in Kenya have said that the place for the family life sex education is in the home and that the ideal teachers are the parents. But according to a survey by Population Communication Africa (PCA, 1999), less than 10% of Kenyan parents seek to educate their children in matters relating to sexuality or preventive reproduction. Of this 10%, the vast majority are mothers. In Kenya fathers play no significant role in the sexuality education of the young. Too many parents believe that threatening, warning, and preaching are effective means of communication, dialogue is rarely used. A recent survey indicated that over 50% of parents made no attempt to sexually educate their young, and moreover admitted to having had no intention of ever doing so (PCA, 1999).

The National Policy on HIV/AIDS Disaster Response over the medium term period (2000-2003) focuses on the following priorities in education to target and
rescue the youth in the age group 10-24 years that are at the greatest risk of contracting HIV/AIDS:

❖ Incorporation of HIV/AIDS prevention, control, care, support, management, and control into all programmes of education and training at all levels.
❖ Design, development, production, dissemination and implementation of multi-sectoral and multi-disciplinary education curriculum and culturally sensitive and scientific approach.
❖ Sensitisation and training of all teachers to implement the HIV/AIDS curriculum.

In January 2000, Kenyatta university started training programme on HIV/AIDS issues which ultimately prepare teachers to respond to HIV/AIDS curriculum demands in schools and colleges (Republic of Kenya, 2000). The university also introduced a 35-hour compulsory unit for all B.ed students on HIV. This was seen as a big step forward in the teaching of AIDS education.

2.4 The implementation of HIV/AIDS curriculum

The quality of education depends on the availability and adequate number of suitably qualified teachers. But with HIV/AIDS there seems to having a serious shortage of trained personnel. This was also put across by Coombe (2001a), who
observed that there is serious concern about the capacity or willingness of many teachers to engage in HIV/AIDS education, or to provide complimentary care and counselling support to affected learners or colleagues. Kamau (2000), in his study found out that there are no suitably qualified teachers to teach HIV/AIDS education at the secondary level in Kenya. The few who are there, are being taught through seminars organized by the Kenya Institute of Education (KIE). A study by Ndegwa, and others (2002) in Riruta location of Nairobi province (2002) indicated that although teachers are involved in teaching about HIV/AIDS, the frequency is very low, with only 12.9% doing it daily.

Kelly (2000) sees HIV/AIDS education as supposed to communicate relevant knowledge, engender appropriate values and attitudes, but he notes that in most cases teachers have no guidelines for coping with those infected and affected by HIV/AIDS. Delivery is almost exclusively in the hands of teachers although they are for the greatest part poorly prepared, and generally lack knowledge and understanding. They have no resource materials and have not been trained in the field of AIDS education. This problem has been compounded by the fact that prevention programmes are often under funded, with inadequate attention to training teachers, sensitising managers, providing supportive services, and linking programmes with other community services.
While presenting a paper during a southern African development community (SADC) meeting on HIV/AIDS and education Coombe (2001b), observed that ministries of education have channelled a lot of money and energy into helping government prevent the spread of AIDS by teaching life skills. Classroom materials have been developed, and in places teacher mentors and school heads have been trained and sensitised to support classroom teachers. She raised major concerns on the willingness and capability of teachers as disseminators of HIV education. She avers that as yet however, no one has comprehensively assessed life skills programmes with regard to materials content, implementation or outcomes.

Clearly this needs to be done as the government continues to pour more money and teacher energy into what might be a dead-end, or less-than-useful exercise as it is presently conceived. Perhaps the statistical evidence is the clearest indicator of success or failure of the curriculum interventions: HIV prevalence rates among young people of school age are high and apparently rising. There is clear evidence that teachers generally feel uncomfortable about teaching sexuality issues.

Coombe (2001b) raised the following questions:

- Why should we assume that teachers are knowledgeable about the characteristics of the disease and its transmission;
➢ That they are willing to talk about intimate matters with young people when everything in their own upbringing rebels against such intimacy;

➢ That every teacher will make an acceptable counsellor, mentor, guide and guard;

➢ That those male teachers who abuse students or harass female colleagues are willing to turn around and fight the disease?

➢ Why do we assume that we understand and can reflect in our materials the complex nature of adolescent sexuality; that the classroom is an effective space for grappling with rape, assault and the often non-negotiable sexual relationships between young men and women?

➢ Why do we think that teachers – who already struggle to deliver the core curriculum under the most difficult circumstances – can take on yet another set of responsibilities?

These concerns are a major bottleneck to the delivery of HIV/AIDS education. Unless and until teachers are trained to handle these problems, it may not be easy to achieve the expected outcomes.
There is fear that putting reproductive health and HIV/AIDS education into the school system will increase sexual activity among the youth. Although research has shown that it does not (Kelly, 2000), some religious organizations are against it. The director of Young Muslim Association (YMA) in Kenya, Mr Slatch, criticised the Ministry of Education for announcing the introduction of AIDS Education. He said, “Muslims totally disagree with the introduction of sex education in schools, and they will oppose it vehemently” (East African Standard, 7th July 2000, page 4). Also, the idea of condoms for the youth is a persistent cause of conflict between the Catholic Church, Muslims, parents and teachers, and between the teachers and the students (Coombe, 2000). There is no evidence that guidance on condom availability, accessibility, and use has been issued to teachers or school heads in any country. Resistance by church leaders, older teachers, and traditional leaders has created an aura of ambivalence.

Society creates an almost impossible task for the young people, expecting them to behave in a certain way but confronting them with social norms, expectations and role models that point in a very different direction (Kelly 2000). The young people are expected to protect themselves, but information about sex has to be acquired unsuccessfully and almost by osmosis, while sexual behaviour, is kept under wraps. At the same time society tends to associate masculinity with extensive sexual knowledge and practice, femininity with naivety and inexperience (Coombe, 2001c). This has been highly amplified by the media
where in the movies the main character engages in sexual escapades with many
different women. Adult conservatism, cultural taboos and the 'sensitivity' of the
content area create tension around implementing effective life skills programmes.
Teachers are embarrassed when teaching sexuality issues with the young and with
those of the opposite sex.

Despite generally high level of basic awareness of HIV/AIDS, millions of people
are still vulnerable because of fundamental gaps in the knowledge of the disease
and how to protect themselves. Sometimes this lack of knowledge can be
misleading and dangerous. A study of AIDS orphans in Kenya found that while
over 99% knew about AIDS, none of them believed that their own parents had
died of the disease. The most common response from these children was that their
parents had died from witchcraft or a curse (UNAIDS, 2000a).

Kelly (2001) in a survey of university students in Africa found that although basic
knowledge about HIV/AIDS and its transmission was generally good, there were
still some major shortcomings, such as the belief that oral contraceptives can
prevent HIV infection, and that the HIV virus can pass through an undamaged
condom. Only 45% of the students in the survey considered themselves to be at
risk of contracting HIV/AIDS, manifesting 'denial, fatalism and an air of
invulnerability'.
Providing information about issues such as sex, sexually transmitted infections, and HIV (transmission risk factors, how to avoid infection), is necessary, but not sufficient, to lead to healthy behavioural change (Hubley, 2000). Programmes that provide accurate information, to counteract the myths and misinformation that often surround HIV/AIDS, frequently report improvements in knowledge and attitudes, but this is poorly correlated with behaviour change related to risk taking and desirable behavioural outcomes (UNAIDS, 1997). A skills based approach to health education can be effective in the more difficult task of achieving and sustaining behaviour change.

The school should be a safe haven for children, with the teacher acting as a guardian of the welfare of the children on behalf of their parents. This is not always the case, and the school itself may serve as a focus for increased risk of HIV transmission, especially for girls (World Bank, 2002). Abuse and harassment of girls is reported from schools at all levels. In some societies, the frequency of sexual relations is high, voluntary or otherwise, among students and between teachers and students. This often leads to difficult relationships between the school and the community. Due to these constraints, there is ubiquitous evidence that few teaching and learning materials are getting into classrooms, and that teachers have virtually no guidelines for coping with the pandemic (Kelly, 2001).
2.5 Summary

This section has looked at the magnitude of the HIV/AIDS pandemic among the youth. Literature has shown that there is serious threat to the very existence of our adolescents, and that Sub Saharan Africa is greatest hit by the pandemic, with 8.6 million adolescents infected out of the 11.8 million infected worldwide. The review has also traced the development of AIDS education and shown that good quality sexual health and HIV/AIDS education are needed in order to equip the youth with the much needed information, which should translate to positive behaviour change and a healthy living.

At the same time, literature has shown that there are bottlenecks to the implementation of AIDS education in schools. The review has also highlighted some of the major constraints to the implementation of the AIDS curriculum. Some of these bottlenecks are school-based while others are societal.

2.6 CONCEPTUAL FRAMEWORK

Figure 1 gives a Conceptual Framework in which teaching and learning of HIV/AIDS can effectively occur.

From this diagram, it is observed that effective teaching and learning of HIV/AIDS must take into account the various supporting variables and the process variables. The input variables are all that comes into the system to fill the intended function.
Figure 1: Conceptual Framework
Factors contributing to effective teaching and learning process

**Supporting inputs**
- Effective support from the education system
- Adequate material support
- Adequate facilities
- Frequent/appropriate teacher development activities

**School climate**
- Positive teacher attitude
- Order and discipline
- Rewards and incentives
- Organized curriculum

**Enabling conditions**
- Effective administration
- Capable teaching force
- Flexibility and autonomy

**Effective teaching and learning**

**Student outcomes**
- HIV/AIDS information
- HIV protection
- Increased HIV/AIDS awareness
- Social skills to help others protect themselves
- Positive attitudes towards HIV/AIDS
- Life skills to cope with adolescence uncertainties
Adequate curriculum materials in form of books and training materials on HIV/AIDS should be developed and facilities provided that are needed for effective learning and teaching process. These should be augmented by frequent and appropriate teacher development activities, which include pre-service and in-service training, seminars and workshops. Doll (1992) says that the learner's curriculum improves largely in consonance with improvement in his or her teacher's insights, skills and attitudes, and that the emphasis needs to be placed on the growth of individual teachers. There should be procedures and structures set in place for capacity building for teachers and providing for personnel replacement and training.

The education system should provide an effective support to all those in the implementation of the HIV/AIDS curriculum. It should provide guidelines on how to go about the implementation to both the teachers and the administrators. For effective teaching and learning process, the educational system and school climate needs to be stable. Coombe & Kelly (2002) argue that stabilizing the system entails ensuring that even under attack by HIV/AIDS, the system works so that the teachers are teaching, children are enrolling and staying in school, older learners are learning, managers are managing and professional development systems are performing adequately.
The perception that employees have of the organizational environment, influences either directly or indirectly their attitudes and resulting behaviour towards management as well as their expectations from their job and their actual level of performance. Employee performance improves when his potential, ability, presence of conducive environment and inputs (skill and tools) are combined, but the absence of such variables in the organisation leads to deterioration of performance.

Learning and teaching process occurs in a socio-cultural context, and so it is important to integrate the concerns of the community lest teaching content and activities conflict with community, cultural or religious practices, norms and values.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Research methodology is divided into the following sub-sections; research design, target population, sample and sampling procedure, research instruments-its validity and reliability, data collection procedure and data analysis techniques.

3.1 Research design

This study followed a survey design. The purpose of survey design is to generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behaviour of the population (Babbie, 1990). A sample was chosen from the teachers in Ruiru Division. The results of the research investigation were then generalized to the whole division. The survey was cross-sectional design. Cross-sectional survey design involves the collection of data at one point in time from a random sample representing some given population at that time. Therefore data for this study was collected from the selected sample of secondary school HIV/AIDS teachers from Ruiru Division, using a questionnaire. A cross-sectional survey design cannot be used for measuring change of an individual, since an individual is measured only once (Wiersma, 1995; Leedy, 1997, & Creswell, 1994). For this study, a teacher’s questionnaire was issued to a selected sample to fill only once. According to Mugenda & Mugenda (1999), survey research is probably the best method.
available to social scientists and other educators who are interested in collecting original data for the purposes of describing a population that is too large to observe directly. In Ruiru Division there are 328 secondary schoolteachers and it was not possible observe all of them directly, so a sample was selected from the population.

Table 1. Secondary school teachers in Ruiru Division

<table>
<thead>
<tr>
<th>NAME OF SCHOOL</th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANIA BOYS</td>
<td>11</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>CHANIA GIRLS</td>
<td>7</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>KENYATTA SEC</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>NGOLIBA</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>ST PAUL GATUANYAGA</td>
<td>7</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>MUNYU MIXED</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>THIKA HIGH</td>
<td>14</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>SCHOOL FOR THE BLIND</td>
<td>11</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>BROADWAY</td>
<td>7</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>JOY TOWN</td>
<td>5</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>MUNYU GIRLS</td>
<td>9</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>MANGU HIGH</td>
<td>21</td>
<td>20</td>
<td>41</td>
</tr>
<tr>
<td>JUJA SEC</td>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>JUJA FARM</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>MURERA</td>
<td>4</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>KITAMAIYU</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>RUIRU SEC</td>
<td>5</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>RUIRU GIRLS</td>
<td>3</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>126</strong></td>
<td><strong>202</strong></td>
<td><strong>328</strong></td>
</tr>
</tbody>
</table>

Source: District Education office, Thika.
3.2 Target Population

The target population for this study were all the public secondary schoolteachers in Ruiru Division.

According to the data obtained from the District Education Office in Thika, there are 18 public secondary schools in Ruiru Division. Both male and female teachers were included for this study. According to the data obtained from the September 2003, based on the heads of institution returns, the division has a total of 328 teachers with 126 and 202 male and female teachers respectively. Therefore the target population was the 328 teachers, as illustrated in Table 1 above.

3.3 Sample and sampling techniques

According to Leedy, (1997), if the population size is around 500, 50% of the population should be sampled, but due to cost and time constraints, a sample of 100 teachers was selected. This is according to Wiersma (1985), who asserts that it should not be inferred that it is always desirable to increase the sample to its maximum, since this may be unduly costly and wasteful of effort and information.

Sampling was done using the stratified random sampling. In this method, the population is divided into homogenous groups with similar characteristics (Sekaran, 1992). One group consists of the carrier subjects, which include science subjects, Religious Education, home science and social ethics. The other group
proportionate stratified sampling was used, where the sampling fraction was the same for each stratum or group.

Based on the data from the District Education Office in Thika, there are 230 teachers who teach the carrier subjects. The rest teach non-carrier subjects. Twenty six per cent of teachers from each group formed the sample. This was followed by random selection of subjects from each group. This involved giving a number to each subject or member of the accessible population. The numbers were then placed in a container, and then picked randomly. The subjects corresponding to the numbers picked were included in the sample in the respective groups. The sample for the carrier subjects' group consisted of 60 teachers while for the non-carrier group consisted of 40 teachers.

3.4 Research instruments

Data in this study was collected using a questionnaire. The questionnaire consists of a series of open-ended, closed-ended and matrix questions. The closed ended questions are important because they are easier to administer because each item is followed by alternative answers. The open-ended questions permit greater length of response. The matrix questions give easy comparison of responses, as it is easy to detect a trend.
The questionnaire consists of three parts. In Part A, aspects of teacher input are measured from a background questionnaire. The inputs measured include the teacher’s age, educational level, gender, marital status and the teacher’s years of teaching experience. Part B measures the knowledge and the source of information of the teachers, while Part C measures the attitudes and the practices of the teachers towards the teaching of HIV/AIDS in secondary schools.

3.4.1 Validity of the instrument

To enhance the validity of the instrument, a pilot study was conducted to test the instrument. The aim of pilot study was to assess the clarity of the instrument items so that those items found to be inadequate for measuring the variables were either discarded or modified to improve the quality of the research instrument thus increasing its validity.

Mulusa (1988) recommends the use of ten (10) cases that represent the target population in all major aspects to be tested in the pilot study. For this study, 15 questionnaires were administered. Ten were administered to teachers who teach the carrier subjects while five were administered to the non-carrier subjects’ teachers. The pilot study was undertaken in two schools, one boys’ and the other girls’.
3.4.2 Reliability of the instrument

To determine the reliability of the instruments Split-half technique was also used. Mugenda & Mugenda (1999) says the main advantage of the technique is the elimination of chance error, which is due to differing test conditions. The technique involves splitting the instrument into two halves, scoring them separately, and determining the correlation coefficient (r) between the two sets of scores, (Leedy, 1997).

The approach taken was the odd-even approach, where the odd-numbered items constitute the first half while the even-numbered items will be treated as the alternate half. The correlation coefficient (r) was calculated from the formula:

\[
r = \frac{\sum XY - (\sum X \cdot \sum Y)}{\sqrt{\left(\frac{\sum X^2 - (\sum X)^2}{N}\right) \cdot \left(\frac{\sum Y^2 - (\sum Y)^2}{N}\right)}}
\]

Where: 
- \(x\) = Represents odd – numbered scores
- \(Y\) = Represents even – numbered scores
- \(\sum x\) = The sum of the odd – numbered scores
- \(\sum y\) = The sum of the even – numbered scores
- \(\sum x^2\) = The sum the square of odd – numbered scores
- \(\sum y^2\) = The sum the square of even – numbered scores
- \(\sum xy\) = The sum of cross – products X and Y
- \(N\) = Total number of respondents

44
The Spearman - Brown prophecy formula was then used to compensate for the reduction of the instrument to one - half of its final length. The reliability coefficient (re) for the full test is given by formula:

\[ re = \frac{2r}{1 + r} \]

Where: re = Reliability coefficient between the two halves.

The reliability coefficient was found to be 0.97. It can be deduced that the reliability measure is significant for the target population.

### 3.5 Data collection procedures

A research permit to conduct the study was sought from the Ministry of Education headquarters Nairobi. Thereafter, the office of the District Education Officer’s (DEO), Thika District was contacted before the commencement of the main study. The head teachers of the schools participating in the main study were contacted to inform them of the study. The data for this research was gathered through a questionnaire. The questionnaire was administered to the selected teachers in Ruiru Division. The teachers were given a week to fill the questionnaire, after which the filled questionnaires were collected for analysis of the data.
3.6 Data analysis.

Data was edited first to inspect the data pieces and identify those items wrongly responded to, spelling mistakes in the responses and any blank spaces left unfilled by the respondents. It was then classified according to age, professional qualification, gender, marital status, teaching experiences and training in AIDS education to ease its analysis. The responses were coded, tabulated and processed by computer through use of Statistical Programme for Social Sciences (SPSS). Descriptive statistics such as frequency distribution and percentages were used to analyse demographic data.

The research questions were also analysed using descriptive statistics. Tables were constructed that indicate responses that were made for each item used in scoring. The number of persons among the total group selecting each response was converted to a percentage value, and this value was numerically compared with the responses of the other respondents in general. Graphs were then constructed to show which of them received the greatest number of reactions and which had the least number of reactions (Leedy, 1997).
CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION

4.0. Introduction

This chapter presents the findings of the study as per data collected from the respondents. The chapter begins with information on return rate of the questionnaire followed by general and demographic information of teachers who participated in the study. Issues to do with age, marital status of the teachers, their teaching experience, professional qualification, and subjects the teachers teach have been looked at.

Further, the chapter embarks on issues addressing the research questions that guided the research tasks.

4.1 Questionnaire Return Rate

As per sample design a total of 100 respondents were targeted, however, the actual responses were 80 teachers, Comprising 80 percent. The response rate achieved of 80 percent was considered adequate in providing a relatively valid and reliable representation of the target population.
4.2 General and Demographic Information of the Teachers

This section attempts to highlight major characteristics of the target population of this study. To analyze data on demographic factors of the teachers, descriptive statistics was used.

4.2.1 Gender of the teachers

In Ruiru Division it was found out that majority of the teachers 60.0% were female while 40.0% were male, as in Table 2 below. This may be attributed to the fact that this is an urban and Peri-urban area and female teachers may be posted closer to their spouses rather than hardship areas.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>48</td>
<td>60.0</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>40.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.2.2 Teachers’ age category

Table 3 shows the teachers’ age category. When data was analysed to determine teacher's age category, 26 teachers, (32.8%) were aged between 36-40 years, followed by 23 teachers (28.8%) aged 31-35 years, 20.0% aged between 41-45 years and 14.8% aged 30 years and below. From this data it can be concluded that majority of the teachers (49) are between 31-35 years of age. The low percentage of teachers below the age of thirty years may be due to freeze on teacher recruitment since 1998.

Table 3: Teachers’ age category

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-below</td>
<td>11</td>
<td>14.8</td>
</tr>
<tr>
<td>31-35</td>
<td>23</td>
<td>28.8</td>
</tr>
<tr>
<td>36-40</td>
<td>26</td>
<td>32.8</td>
</tr>
<tr>
<td>41-45</td>
<td>16</td>
<td>20.0</td>
</tr>
<tr>
<td>&gt;46</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.2.3 Teachers' Marital Status

Data concerning the teachers' marital status indicated that, majority, 65 cases comprising 81.3% of total respondents were married and only 10 (12.5%) were single, while 4 (5.0%) were widowed (Table 4 below). Married teachers are deemed to be more responsive to the needs of children and hence better placed to teach HIV/AIDS. This is because they may be taken more seriously by the students than those who are single on matters of sexuality.

Table 4: Teachers' marital status

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>65</td>
<td>81.3</td>
</tr>
<tr>
<td>Single</td>
<td>10</td>
<td>12.5</td>
</tr>
<tr>
<td>Separated</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.4 Subject Category Taught

Teachers were asked to indicate their teaching subjects in terms of major and minor subjects taught (See Table 5). When data was computed and analysed, the research findings showed that there was moderate balance in major teaching
subjects in humanities, science, technical and language subjects. However, in terms of minor subjects taught, sciences led with 37.5 percent and least was technical with only 8 teachers, 10.0%. The science subjects are importance as the HIV/AIDS education is easily infused in most of them.

Table 5: Subject category for teachers

<table>
<thead>
<tr>
<th>Major subject</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Minor subject</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>30</td>
<td>37.5</td>
<td>Sciences</td>
<td>30</td>
<td>37.5</td>
</tr>
<tr>
<td>Humanities</td>
<td>17</td>
<td>21.3</td>
<td>Humanities</td>
<td>28</td>
<td>35.0</td>
</tr>
<tr>
<td>Languages</td>
<td>26</td>
<td>32.5</td>
<td>Languages</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>Technical</td>
<td>7</td>
<td>8.8</td>
<td>Technical</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.5 Teaching Experience

To determine the teaching experience of the teaching force the different ages were categorized and grouped at a class interval of 5 (as indicated in Table 6 below). From the table it can be seen that, greatest percentage of (33.8%) teachers have teaching experience of between 6-10 years, 32.5% between 11-15 years, 15.0% 16-20 and 13.8% 1-5 and 3.8 per cent with teaching experience 26 years and above. Such information on teaching experience may imply that majority of them
have proportionally good professional experience and are satisfied with teaching as a profession or have stuck to the profession because they have no alternative.

Table 6: Teaching experience

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>11</td>
<td>13.8</td>
</tr>
<tr>
<td>6-10 years</td>
<td>27</td>
<td>33.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>26</td>
<td>32.5</td>
</tr>
<tr>
<td>16-20 years</td>
<td>12</td>
<td>15.0</td>
</tr>
<tr>
<td>21-25 years</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>&gt;26 years</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2.6 School category

From the research findings, it can be observed that the majority of the schools are Boys boarding followed by girls' day schools. Others are mixed boarding (16.3%), girls' boarding (15.0%), mixed day (10.0%) and boys' day (3.8%) respectively. This shows that boys' and mixed schools are more than the purely girls schools. This, with the fact that there are almost thrice the number of
female teachers in the division, shows that more female teachers are in boys’
schools than male teachers, as in Table 7 below.

<table>
<thead>
<tr>
<th>School category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys' boarding</td>
<td>26</td>
<td>32.5</td>
</tr>
<tr>
<td>Boys' day</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Mixed day</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>Mixed boarding</td>
<td>13</td>
<td>16.3</td>
</tr>
<tr>
<td>Girls' boarding</td>
<td>12</td>
<td>15.0</td>
</tr>
<tr>
<td>Girls' day</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**4.2.7 Teachers’ professional qualifications**

The research findings revealed that majority of the teachers were graduates in
possession of a degree either in B.Ed, B.A & B.Sc., and those who were not
initially trained in education had to take up a post-graduate diploma in education
(6.3%). Only 28.8% of the teachers had diploma. As reflected in Table 8, 71.3%
of the teaching force in the division are graduates and have acquired proportionally good formal training majority 61.3% qualifying as graduate teachers with B.Ed and only 2.5% with B.A/B.Sc qualification.
The professional qualification attained by the teachers probably affirms government commitment to provide quality education to the implementers of educational programs. The quality of education in any country is the manifestation of the quality of those who prepare and provide it. It is indeed their product, hence an important indicator of what they are, (Republic of Kenya, 1995).

Table 8: Teachers' professional qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.A/M.Sc</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>B.Ed</td>
<td>49</td>
<td>61.3</td>
</tr>
<tr>
<td>B.A/B.Sc</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>PGDE</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Diploma</td>
<td>23</td>
<td>28.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.8 Teachers' training in HIV/AIDS

The quality of education depends on the availability and adequate number of suitably qualified teachers. The research established 50.0% of the teachers have never attended any training on HIV/AIDS, 41.3% attended workshops/seminars, and 6.3% had attained a certificate while only 2.5% had a post-graduate diploma.
in HIV/AIDS. These findings concurs with Kamau (2000) who observed that there are no suitably qualified teachers to teach HIV/AIDS in secondary level in Kenya, and that the few who have been trained are being taught through seminars organized by K.I.E. (41.3% in this research). See Table 9 below.

Table 9: Teachers' HIV/AIDS training

<table>
<thead>
<tr>
<th>HIV/AIDS training</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGD (HIV/AIDS)</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Certificate</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Workshops/ seminars</td>
<td>33</td>
<td>41.3</td>
</tr>
<tr>
<td>None</td>
<td>40</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.9 Workshops attended by teachers

Those who had attended the workshops/seminars were asked the number of times they attended (Table10). About forty percent (38.8%) said they attended once, 32.5% had attended twice while 15.0% and 12.1% had attended thrice and four times or more respectively.

This shows that there is a bias in selecting who to train as it is not fair to continue sending the same teachers for seminar while others have never attended any. This
may cause dissatisfaction among teachers, hence negative attitude towards HIV/AIDS education

Table 10: Workshops attended by teachers

<table>
<thead>
<tr>
<th>Number of Workshops attended</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once</td>
<td>13</td>
<td>39.4</td>
</tr>
<tr>
<td>Twice</td>
<td>11</td>
<td>33.3</td>
</tr>
<tr>
<td>Thrice</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>Four or more times</td>
<td>4</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.10 Teachers’ workload

The teachers’ workload depends on the number of classes to be taken care of and the number of subjects to be taught. In Kenyan secondary schools, workload depends on the curriculum being offered or followed at the school but each teacher is expected to teach 25 periods per week.

From Table 11 below, research findings reveal that, majority of teachers 56.3% teach between 16-20 lessons per week, which is below the recommended teaching workload, while 25.0% corresponds with the recommended teaching workload for secondary school teachers. Fourteen percent (13.8%) of teachers have between 11-15 lessons per week, an indication of being under utilised if these teachers are not holding administrative posts, where deputy head teacher is recommended to
teach 14 lessons and Head of department 16 lessons according to ministry of education or because they may be teaching unpopular subjects. Almost four percent (3.8%) had over 26 lessons per week, a sign of overworking.

Teachers time availability is affected by the number of pupils in the class (teacher-pupils ratio) number of teaching periods and their demand on his/her time for lesson preparation and evaluation, amount of time allocated for the subject on the timetable, and finally, the teachers involvement in other non-school and personal activities. (Ngau, 1991).

Table 11: Teachers’ workload (Lessons per week)

<table>
<thead>
<tr>
<th>Workload (Lessons)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 and below</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>11-15</td>
<td>11</td>
<td>13.8</td>
</tr>
<tr>
<td>16-20</td>
<td>45</td>
<td>56.3</td>
</tr>
<tr>
<td>21-25</td>
<td>20</td>
<td>25.0</td>
</tr>
<tr>
<td>&gt;26</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.3 HIV/AIDS information
As noted earlier in chapter two facts about HIV/AIDS are fairly known in Kenya. This research established that majority of the respondents disagreed with the statement that one can tell an HIV-positive person by just looking at him/her
(48% disagree and 43% strongly disagree). On spread of HIV by mosquitoes, 67% said it could not while 28% said it could be spread. The last 6% were undecided. Eighty nine per cent (89%) disagreed that HIV can be spread through witchcraft while only 11% agreed.

Table 12: Teachers’ HIV/AIDS information

<table>
<thead>
<tr>
<th>Statement on HIV/AIDS</th>
<th>SA</th>
<th>A</th>
<th>UN</th>
<th>D</th>
<th>SD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can tell HIV-positive person by looking</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>HIV is not spread by mosquito bites</td>
<td>30</td>
<td>38</td>
<td>23</td>
<td>29</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>HIV is spread through witchcraft</td>
<td>9</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>HIV can be avoided by type of fish</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Having sex with a virgin can cure AIDS</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Teaching HIV/AIDS increases sexuality</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>HIV/AIDS education delays sex</td>
<td>9</td>
<td>11</td>
<td>44</td>
<td>55</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Students should not be taught condom</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>16</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Spiritual intervention cures AIDS</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>16</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Handshakes can not spread HIV/AIDS</td>
<td>38</td>
<td>48</td>
<td>21</td>
<td>26</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**KEY**
SA= Strongly agree, A= Agree, UN= Undecided, D= Disagree, SD= Strongly disagree.
It was clear to almost all (96%) that having sex with a virgin cannot cure AIDS. Only 4% agreed that it could. Seventy nine per cent disagreed that teaching HIV/AIDS increases sexual activity while only 13% agreed and the other 9% were undecided. Sixty six per cent agreed that teaching HIV/AIDS delays sexual activity, 23% disagreed while 11% were undecided. On teaching condom use to students, 64% said they should be taught, 27% said they should not be taught while 9% were undecided. Fifty per cent (50%) disagreed that spiritual intervention cures AIDS, 25% agreed while 15% were undecided. Seventy four per cent (74%) agreed that handshakes cannot spread HIV/AIDS, 21% disagreed while only 5% were undecided (Table 12 above).

This section established that generally the HIV/AIDS information is well understood by many of the teachers. This collaborates with earlier researches which found out high percentages on the knowledge of HIV/AIDS (Kabaji, 2001).

4.4 Practices and work environment of HIV/AIDS teachers

The working environment of any employee significantly influences performance. Working environments that are conducive lead to high job performance. This study established that 50% of the teachers have never used any HIV/AIDS teaching aids, 24% use them rarely and only 9% uses them always. The teachers always teach other subjects instead of HIV/AIDS (35%) while 42% often teach other subjects. Thirty six percent (36%) of the respondents said that they often find teaching HIV/AIDS interesting, 38% said they rarely or never find teaching it
interesting and only 16% find it always interesting. This is in contrast to the finding that 63% who said that they never take teaching HIV/AIDS as unimportant and 16% who rarely find it unimportant. Only 3% finds teaching of HIV/AIDS unimportant.

Table 13: Practices and work environment

<table>
<thead>
<tr>
<th>Statement on practices</th>
<th>AL F</th>
<th>VO F</th>
<th>OF F</th>
<th>RA F</th>
<th>NE F</th>
<th>Total F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses HIV/AIDS teaching aids</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>4</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>24</td>
<td>40</td>
<td>50</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Teaches other subjects</td>
<td>28</td>
<td>35</td>
<td>18</td>
<td>23</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>13</td>
<td>9</td>
<td>11</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Finds teaching HIV/AIDS interesting</td>
<td>13</td>
<td>16</td>
<td>8</td>
<td>10</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>19</td>
<td>15</td>
<td>19</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Teaching HIV/AIDS is unimportant</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>16</td>
<td>50</td>
<td>63</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Recognition for accomplishment</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>34</td>
<td>33</td>
<td>41</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Conducive working environment</td>
<td>14</td>
<td>18</td>
<td>8</td>
<td>10</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>15</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Gives my best in teaching</td>
<td>19</td>
<td>24</td>
<td>7</td>
<td>9</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>18</td>
<td>17</td>
<td>21</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Informal discussions with students</td>
<td>12</td>
<td>15</td>
<td>19</td>
<td>24</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>18</td>
<td>8</td>
<td>10</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

KEY: AL= Always, VO= Very Often, OF= Often, RA= Rarely, NE= Never

The research also found out that teachers were never recognized for accomplishment (41%), 34% rarely recognized and only 6% felt they were always recognized. Majority of the teachers said that there often was conducive working environment, 24% thought that there was rarely conducive working environment...
while 18% said the working environment was always conducive. Most of the teachers give their best in teaching HIV/AIDS (24%-always, 9% very often and 29% often). Research findings indicate that teachers have informal discussions on HIV/AIDS with the students outside class time with 34% often, 24% very often and 15% very often. 18% said they rarely have informal discussions while 10% have never had these discussions with students. The above shows that there is no conducive work environment for the HIV/AIDS teachers in most schools.

4.5 Teachers' attitudes towards HIV/AIDS education

The respondents were asked to show their level of agreement with some factors that affect teaching and learning if HIV/AIDS. Ninety four percent (94%) said they wanted to feel their skills are put to use. This shows that the teachers are responsible and take training seriously. From the literature review it was evident that there were no clear instructions on the teaching of HIV/AIDS education. This research established that 97% of the teachers want the government to come up with clear instructions on HIV/AIDS education. The research established that the working environment of the teachers was very important (88%). Only 5% said it was not important.

The research also noted that individual recognition was very important to the respondents with 72% saying it means much to them. This was also strengthened by effect of indifference supervision, where 59% of the respondents agreed that it affects their feeling (24% strongly agree, 35% agree). Form the research findings
it was evident that teachers of HIV/AIDS education need more incentives (71%),
while only 8% said they do not need more incentives with 10% undecided.

<table>
<thead>
<tr>
<th>Statement on attitudes</th>
<th>SA</th>
<th>A</th>
<th>UN</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Want to feel their skills are put to use</td>
<td>40</td>
<td>50</td>
<td>35</td>
<td>44</td>
<td>3</td>
<td>80</td>
</tr>
<tr>
<td>Should have clear instruction</td>
<td>49</td>
<td>61</td>
<td>29</td>
<td>36</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>Should not be reminded of importance</td>
<td>17</td>
<td>21</td>
<td>16</td>
<td>20</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>Working environment is important</td>
<td>39</td>
<td>49</td>
<td>31</td>
<td>39</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>Individual recognition means less</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>No need friendly working atmosphere</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>Indifferent supervision affects feelings</td>
<td>19</td>
<td>24</td>
<td>28</td>
<td>35</td>
<td>12</td>
<td>80</td>
</tr>
<tr>
<td>More incentives are not needed</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>Teachers think of themselves as best</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Informal discussions be encouraged</td>
<td>46</td>
<td>58</td>
<td>28</td>
<td>35</td>
<td>3</td>
<td>80</td>
</tr>
<tr>
<td>Learning materials important</td>
<td>51</td>
<td>64</td>
<td>23</td>
<td>29</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Do not like teaching HIV/AIDS</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>11</td>
<td>80</td>
</tr>
<tr>
<td>Feels you have done your best</td>
<td>4</td>
<td>5</td>
<td>15</td>
<td>19</td>
<td>27</td>
<td>80</td>
</tr>
<tr>
<td>No fairness on attending short courses</td>
<td>32</td>
<td>40</td>
<td>17</td>
<td>21</td>
<td>8</td>
<td>80</td>
</tr>
</tbody>
</table>

**KEY**
SA= Strongly agree, A= Agree, UN= Undecided, D= Disagree, SD= Strongly disagree
There was general agreement on the need to have informal discussions with students on HIV/AIDS, with 58% strongly agreeing and 35% agreeing. Only 2% disagreed. Leaning materials were rated as very important (93%) and only 3% saying they were not important. Sixty percent (60%) of the respondents said they like teaching HIV/AIDS, 21% said they did not like teaching HIV/AIDS while 14% were undecided. The teachers were asked to show the level of agreement with the fairness of selection of who to go for short courses/seminars. The research established that the selection was unfair (61%) and fair (29%) with 10% undecided. (See Table 14).

4.6.0 Teaching methods, approaches and frequency of teaching

4.6.1 Teaching methods and approaches

The teachers were asked their opinion no whether they would like HIV/AIDS education to be taught as a subject or to be integrated in other subjects. Figure 2 below revealed that 90.0% wanted it as a subject while 10.0% want it integrated. Those for an independent subject argued that HIV/AIDS is a national disaster and hence to give it the seriousness it deserves be taught as independent. They also said that if it is integrated, teachers tend to ignore it to concentrate on their subjects that are examinable. If it is allocated time on the timetable, that time will be used exclusively for it. Those for integration argue that it is more effective if
all teachers were involved for the students to see the seriousness rather than just another subject added on their timetable.

**Figure 2: preferred teaching method**

![Bar chart showing preferred teaching method.]

### 4.6.2 Frequency of teaching HIV/AIDS

Figure 3 above revealed that 41.3% of the respondents have never taught HIV/AIDS, as 30.0% teach weekly, 21.3% teach once in a month while 5.0% rarely teach and only 2.8% teach daily. This is an indication that the overall teaching of HIV/AIDS is poor and needs improvement.

When asked if they prepare schemes of work, 98.7% did not while only 1 teacher (1.3%) prepared schemes of work for HIV/AIDS. This shows that HIV/AIDS education is not given the seriousness it deserves.
Figure 3 below show the teaching frequency of the HIV/AIDS teachers per week.

**Figure 3: Frequency of teaching HIV/AIDS education**

![Bar chart showing teaching frequency]

Figure 4 below shows the sources of information for the HIV/AIDS teachers.

**Figure 4: Sources of HIV/AIDS information**

![Bar chart showing sources of information]
4.7 Teachers’ sources of HIV/AIDS information

From Figure 4 above it can be seem that majority of the teachers get HIV/AIDS information from mixed sources (51.3%), mass media (33.8%), friends (11.3%) and Textbooks (3.8%). This shows that schools have not been provided with textbooks and that the teachers rely on their own initiative to get the materials

4.8 Impediments to teaching HIV/AIDS education

The research established that teachers were facing several impediments in teaching HIV/AIDS. These impediments were ranked as follows: Forty one percent (41.3%) cited lack of clear instructions, twenty six percent (26.3%) cited a lot of work in school twenty percent (20.0%) cited lack of support from administration thirteen percent (12.5%) cited shortage of teaching and learning materials

However, those who cited a lot of work in school seemed not sincere because data on workload revealed that 70.0% of the respondents had twenty (20) lessons or less, which is below what is recommended by the Ministry of Education. Hence this factor was not as serious as the teachers portrayed it.

The HIV/AIDS syllabus was released to schools for the teachers to implement, but the problem is that they were not given clear instructions on how to go about it. It is supposed to be integrated in the other subjects, but the main problem is
that the teachers do not have instructions on which subject teachers are supposed to teach specific HIV/AIDS education topics (Figure 5).

**Figure 5: Impediments to effective teaching of HIV/AIDS education**

![Bar chart showing percentages of impediments to effective teaching of HIV/AIDS education]

4.9 Teacher's risk to HIV infection

From Figure 6 below it was shown that 31.3% of the respondents do not know their chances of infection with HIV, 22.3% had moderate chances, and 19% had great chances of infection and 16.3% had small chances. Only 11.3% had no chances of infection. Those who said they have great chances of infection attributed this to multiple relationships, not sure of the faithfulness of the spouse and accidents leading to blood transfusion or during birth. Those who felt they
have no chances of infection with HIV said they were faithful to spouses and that they trusted them.

Figure 6: Chances for HIV infection

These findings show that although the teachers are expected to teach the students on ways to protect themselves, they themselves were at a greater risk and that many of them do not know their chances of infection. This means that the teachers will not be confident while teaching the topics that deal with the ways of infections and the chances of infection, because they are not sure of their risk of infection.
The respondents were asked whether they have ever been tested for HIV/AIDS. According to Figure 7, Sixty nine percent (68.8%) said they have never been tested while only 31.3% have ever been tested.

**Figure 7: Tested for HIV**

**Figure 8: Willingness to go for testing**

Figure 8 shows the willingness to go for a HIV test. Fifty nine percent (58.8%) said they could not go for testing willingly, 23.8% said they were not sure while only 17.5% were willing to go for a HIV test. This can be construed to mean that as much as the teachers were willing to teach HIV/AIDS they were impeded by their own HIV status.

**4.10 Suggestions from teachers on improving teaching of HIV/AIDS education**

The teachers indicated that that like teaching HIV/AIDS to young boys or girls of the opposite sex. They said that the sex of the student does not matter when they
are in the class. Forty percent (40.0%) of the teachers suggested that to improve teaching that there should be trained teachers to teach HIV/AIDS education. This should be accompanied by clear instructions on integration and infusion of the topics (30.0%). This is to eliminate the confusion on which topic should go to which subject. Twenty one percent (21.3%) said that more teaching and learning materials are required, including audio-visual gadgets like videos, movies and programmes from the electronic media. It was suggested that if the students see the infected people it leaves an indelible mark in their minds and hence very careful in whatever they engage in. other teachers (8.8%) were of the opinion that professional from the medical sector should be used as resource persons for the students to get the information from different quarters.

Table 15: Suggestions from teachers on improving of HIV/AIDS education

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of teaching and learning materials</td>
<td>17</td>
<td>21.3</td>
</tr>
<tr>
<td>Training of teachers</td>
<td>32</td>
<td>40.0</td>
</tr>
<tr>
<td>Provide clear instructions</td>
<td>24</td>
<td>30.0</td>
</tr>
<tr>
<td>Use resource persons</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.11 Summary

This chapter dealt with data presentation and analysis. From the data it is evident that the teachers are knowledgeable on the HIV/AIDS and that they are aware of
the widely held misconceptions on the disease. Data also revealed that HIV/AIDS education is rarely taught in schools as the teachers are busy teaching their official subjects or they have no guidelines on how to go about it. Most of the teachers preferred it to be taught as a subject on its own.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0. Introduction
This chapter highlights major findings obtained through the analysis made on all the data collected. From the findings relevant conclusions are drawn and appropriate recommendations made.

5.1. Summary of the Findings
This study touched on the teaching of HIV/AIDS in secondary schools in Ruiru Division of Thika District. The study looked at the knowledge, attitudes and practices of the HIV/AIDS education teachers, in an issue that has brought very divergent and often conflicting views on its teaching. On the basis of the research questions raised earlier in this study, the following results were obtained.

In terms of knowledge, it was established that the teachers were generally knowledgeable on the subject matter, with many of the teachers aware of the highly held misconceptions and prejudices on HIV/AIDS. The issues that elicited different opinions were the cure of AIDS through spiritual intervention and teaching of condom use to the students. Fifty percent (50.0%) disagreed while 35.0% agreed that AIDS could be cured through spiritual intervention. On
teaching of condom use, 64.3% said it should not while 27.4% said it should. This is a case of the differences in the religious beliefs of a diverse group.

The teachers had a positive attitude towards the teaching of HIV/AIDS. Sixty percent (60.0%) said that they liked teaching HIV/AIDS and 26.2% did not like teaching it. Those who did not like teaching it attributed that to lack of clear instructions and lack of training. The teachers encouraged informal discussions with their students (93.1%). The teachers highlighted the importance of a friendly working environment for the success of HIV/AIDS education (88.4%). HIV/AIDS was seen as an extra work for the teachers and so they felt that more incentives were needed to boost the morale of the teachers (71.2%), and only 21% felt there was no need for more incentives. They also felt that indifferent supervision affected the feelings and hence working of the teachers (59.4%). Twenty seven percent (27.1%) were not affected by indifferent supervision, while 15.3% were undecided.

Although all the teachers should teach to all classes HIV/AIDS education, the study established that 41% of the teachers have never taught it and 5.0% rarely teach it. Only 2.5% of the teachers teach it daily. Preparation of schemes of work by teachers is a must but only one teacher (1.3%) prepare a scheme of work for HIV/AIDS, but does not allocate any time period for it. Seventy four (74.1%) have never or rarely use teaching aids respectively. Fifty eight percent (58.2%) of
the teachers teach other subjects instead of HIV/AIDS. Only 15.0% of the teachers always hold informal discussions with students. Ninety percent (90.0%) of the teachers prefer HIV/AIDS taught as a separate subject instead of being integrated into other subjects, and only 10.0% preferred it to be integrated.

These findings imply that the teachers do not take HIV/AIDS education seriously and that they view it as an extra burden to their already overloaded curriculum.

The study established that:
Fifty one percent (51.3%) of the teachers get their HIV/AIDS information from mixed sources, while 33.8% get it through mass media and 9% get it from friends. Only 2.5% get it from textbooks.

The research findings suggest that the teachers use their own efforts to get the learning and teaching materials, as it is evident from the results that they are not supplied with textbooks.

The study found out that majority of the teachers had not undergone any training on HIV/AIDS. The following are the statistics from the research findings:
Fifty percent (50.0%) have never undergone any training on HIV/AIDS; Forty one percent (41.3%) attended workshops/seminars while Six percent had attained certificate level. Only 2.5% had a postgraduate diploma in HIV/AIDS.
These findings show that the teachers are not trained on teaching HIV/AIDS, a situation that impact negatively on reduction HIV/AIDS scourge.

Those who had attended workshops/seminars showed that some had attended many times. Thirty nine percent (38.8%) had attended once, 32.5% had attended twice, and 15.0% had attended thrice while 12% had attended four or more times. This clearly shows a bias appointment of who to attend for these courses. This is because 50.0% of the teachers had not attended any while others attended more than four times.

The teachers were asked to rate themselves of their risk of HIV infection. Thirty one percent (31.3%) said they do not know, Twenty three percent (22.5%) said it was medium and Sixteen percent (16.3%) had small risk of infection. Only 11.3% felt they were at no risk of infection. These results show that teachers are at a very high risk of HIV infection.

The teachers were further asked whether they have ever been tested for HIV. Sixty nine percent (69.4%) had never been tested and only 31.3% had been tested. On willingness to go for a test, 59.4% said they cannot, 23.8% were not sure and only 17.5% were willing to go for a test.

These findings have it that although the teachers are at risk of HIV infection, they are not willing to go for testing.
There are a myriad of problems facing the effective teaching of HIV/AIDS education as the results show. The highest rated problem was lack of clear instructions on the implementation of the HIV/AIDS curriculum (41.3%), a lot of work in school (26.3%), lack of support from the school administration (20.0%) and shortage of teaching and learning materials (12.5%). This shows that HIV/AIDS education teachers work under very difficult conditions, which bears negatively on the teaching.

When the teachers were asked to suggest remedial measures on the problem facing the teaching of HIV/AIDS education, they suggested the following:

There should be a lesson set aside for HIV/AIDS education and that the subject should be examinable (90.0%). This is to enable the subject to be given the seriousness it deserves. All the teachers should be trained (40.0%) or train specific teachers who should be allocated HIV/AIDS education as a subject.

The government should provide learning and teaching material in line with the seriousness of the epidemic. Nine percent (8.8%) of the teachers proposed that there should be use of resource persons from the Ministry of health and other sectors to give talks to the students in conjunction with the infected people.

There should be a school radio programme teaching on HIV/AIDS to help schools without qualified HIV/AIDS teachers. Teachers who finance themselves to
undertake training in HIV/AIDS should be reimbursed their funds. The schools should organize films on the pandemic. The students should also be organized to visit sick HIV/AIDS victims in hospitals.

The above suggestions show the teachers are willing to teach HIV/AIDS education if these bottlenecks are taken care of. Without impediments, teaching of HIV/AIDS will be accepted as a responsibility for all the teachers.

5.2 Conclusions

After studying the knowledge, attitudes and practices of the HIV/AIDS education teachers it has been noted that they are knowledgeable on the subject matter. What is lacking most are clear instructions on how the teachers are supposed to go about implementing the syllabus.

The teachers had a positive attitude on the teaching of HIV/AIDS but they needed conducive teaching atmosphere to go about it. There seems to be a major friction between the teachers and the schools' administration on the implementation of HIV/AIDS syllabus. While the administration tells the teachers to implement it, the teachers complain that there are no guidelines and hence difficult to implement. Other teachers who are willing to teach HIV/AIDS are pressured to finish the syllabus of their respective subjects and leave HIV/AIDS, as it is not examinable.
This shows clearly that teachers are willing to take the responsibility of teaching HIV/AIDS if there are clear instructions and conducive environment.

The study also established that there was a shortage of trained HIV/AIDS education teachers. This was attributed to the unwillingness of the teachers' employer, Teachers' Service Commission (TSC) to grant study leave with pay to teachers willing to pursue HIV/AIDS education. The Ministry of Education and the Teachers Service Commission (T.S.C) should consider training teachers or grant study leave with pay for teachers pursuing studies on HIV/AIDS education.

The study also established that HIV/AIDS education is normally not taught in schools. There are very few teachers who teach, with the majority having never taught it. It was also realised that there are no teaching and leaning materials in schools and that the teachers have to strain to get the materials using their own resources.

Kenya Institute of Education (KIE) should produce guidelines to other publishers for them to publish books on HIV/AIDS, if they do not have the capacity to do so. Also the distribution of the books should be enhanced for schools to get them. Clear guidelines should be given to teachers in order for them to know which topics should be integrated into which subjects.
5.3 Recommendations

After analysis of the study, the following recommendations have been found vital for improved teaching and learning of HIV/AIDS education. Teachers should be trained on the implementation of HIV/AIDS education and the Kenya Institute of Education (KIE) to give clear instructions on its implementation and a lesson should be set aside for HIV/AIDS education, it should be timetabled and the subject made examinable in order to be seriously taught.

The TSC should grant study leave with pay for teachers willing to pursue courses on HIV/AIDS. This is to give teachers time to pursue the courses with ease, and realize that the government is serious on the issue of HIV/AIDS education. Mobile cinemas on HIV/AIDS should be taken to schools. This will provide the students a chance to see the sick people, and this will make them think of the disease seriously rather than being told that of the infection verbally.

5.4. Suggestions for Further Research

Further research could be replicated in a larger population using same instruments. This is because the area under study was a division which may limit the generalizability of the results. A larger area would provide a sizeable population that can lead to a comfortable generalization.
The area under study is mostly peri-urban. A comparative study could be carried out between an urban and rural setting. This is because there may be factors that may inhibit the teaching of HIV/AIDS education that may not be common to these areas.
BIBLIOGRAPHY


APPENDIX 1
LETTER OF INTRODUCTION

Malusi D Musyoka,
University of Nairobi
C/o Department of Administration and Planning
P.O box 30197,
Nairobi.

Dear Respondent,

RE: A QUESTIONNAIRE ON KNOWLEDGE, ATTITUDES AND PRACTICES OF HIV/AIDS EDUCATION TEACHERS.
I am a postgraduate student in the University of Nairobi, undergoing a Master of Education degree course. Currently I am carrying out a research on the above named topic. You are kindly requested to respond honestly and objectively to all the items in the questionnaire. The information is merely for research purposes only.

Your responses will be treated as confidential. Therefore DO NOT write your name on the questionnaire.

Thank you for your cooperation.

Yours sincerely,

Malusi Musyoka.
APPENDIX 2
TEACHERS’ QUESTIONNAIRE

Instructions
Please answer the following items. Kindly answer the questions as honestly and objectively as possible. Confidentiality about the information you give will highly be maintained.

SECTION A: BACKGROUND INFORMATION

Please use a tick (✓) to indicate the following:

1. Your gender.
   (a) Male........[ ]
   (b) Female......[ ]

2. Age category in years that applies to you.
   (a) 30 or below......[ ]
   (b) 31-35..........[ ]
   (c) 36-40 ..........[ ]
   (d) 41-45..........[ ]
   (e) 46 and above......[ ]

3. What is your marital status?
   (a) Married......... [ ]
   (b) Single.......... [ ]
   (c) Separated....... [ ]
   (d) Divorced........[ ]
   (e) Widowed...... [ ]
4. Indicate the subjects you currently teach.
   (a) Major subject. ..............................................................
   (b) Minor subject ............................................................
   (c) Others (specify) .........................................................

5. Please indicate the number of years you have taught as a teacher.
   (a) 1-5............ [ ]
   (b) 6-10..........[ ]
   (c) 11-15.........[ ]
   (d) 16-20...........[ ]
   (e) 21-25...........[ ]
   (f) 26 and above. [ ]

6. Indicate the category of school in which you are teaching
   (a) Boys' boarding secondary school........ [ ]
   (b) Boys' day secondary school............. [ ]
   (c) Mixed day secondary school..........[ ]
   (d) Mixed boarding school.............[ ]
   (e) Girls' boarding secondary school........[ ]
   (f) Girls' day secondary school........[ ]

7. Please indicate your highest professional qualifications.
   (a) M.Ed.................. [ ]
   (b) M.A/ M.Sc....[ ]
   (c) B. Ed.................. [ ]
   (d) B.A/ B.Sc...........[ ]
   (e) PGDE.................[ ]
   (f) Diploma...............[ ]
8. Course(s) on HIV/AIDS you have undertaken
   (a) Post Graduate Diploma (HIV/AIDS) ...[ ]
   (b) Diploma.....................................................[ ]
   (c) Certificate..................................................[ ]
   (d) Workshops/Seminars..............................[ ]
   (e) None.........................................................[ ]

9. If you have attended HIV/AIDS training workshops indicate how many times.
   (a) Once..............................................[ ]
   (b) Twice............................................[ ]
   (c) Thrice.............................................[ ]
   (d) Any other (specify).................................................................

10. Have you undergone any training on HIV/AIDS education in the last one year?
    (a) Yes.......[ ]
    (b) No.......[ ]

11. Indicate the number of years you have taught HIV/AIDS education ......

12. Indicate the number of lessons you teach all your subjects per week ......
SECTION B: INFORMATION ON HIV/AIDS AND THE SOURCES FOR HIV/AIDS EDUCATION TEACHERS

For the following section, you are kindly requested to show the level of agreement in each sub-item by ticking (√) the appropriate number in the columns on the right hand side.

**KEY:**
SA= Strongly agree, A= Agree, UN= Undecided, D= Disagree, SD= Strongly disagree

<table>
<thead>
<tr>
<th>HIV/AIDS information</th>
<th>SA</th>
<th>A</th>
<th>UN</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You can tell an HIV-positive person by looking at him</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. HIV is not spread by mosquito bites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. HIV is spread through witchcraft</td>
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<tr>
<td>4. HIV infection can be avoided by eating a certain type of fish</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Having sex with a virgin can cure AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teaching of HIV/AIDS in schools increases sexual activity among the students</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7. HIV/AIDS education is likely to delay sexual activity among students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Students should not be taught condom use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. AIDS can be cured through spiritual intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. HIV/AIDS cannot be spread by handshakes</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
SECTION C: ATTITUDES AND PRACTICES OF HIV/AIDS EDUCATION TEACHERS.

For the following section, you are kindly requested to indicate your HIV/AIDS education practice frequency in each sub-item by ticking (✓) in the appropriate columns on the right hand side using the key provided.

KEY:
AL= Always, VO= Very often, OF= Often, RA= Rarely, NE= Never

<table>
<thead>
<tr>
<th></th>
<th>AL</th>
<th>VO</th>
<th>OF</th>
<th>RA</th>
<th>NE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use teaching aids during HIV/AIDS lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Teaches other subjects instead of HIV/AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Finds teaching HIV/AIDS interesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Finds teaching HIV/AIDS unimportant or unnecessary</td>
<td></td>
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<td>5. Receives recognition for accomplishment</td>
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<td>6. Principal provides a conducive working environment</td>
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<td>7. Give my best in teaching HIV/AIDS education</td>
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<td>8. Has informal discussions on HIV/AIDS with students</td>
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</table>
For the following section, you are kindly requested to indicate your level of agreement in each sub-item by ticking (✓) in the appropriate columns on the right hand side using the key provided.

**KEY:**
SA= Strongly agree, A= Agree, UD= Undecided, D= Disagree, SD= Strongly disagree

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<th></th>
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<th>SA</th>
<th>A</th>
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<tbody>
<tr>
<td>1. Teachers want to feel their skills are put to use</td>
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<td>2. Should have clear instruction on HIV/AIDS education</td>
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<td>3. Teachers should not always be reminded of the importance of the HIV/AIDS education</td>
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<td>4. Head teacher should give a great deal of attention to physical working environment of HIV/AIDS teachers</td>
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<td>5. Individual recognition means less to HIV/AIDS teachers</td>
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<td>6. Supervisors need not develop friendly working atmosphere</td>
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<td>7. Indifferent supervision affects feelings of teachers</td>
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<td>8. More incentives are not needed for HIV/AIDS teachers</td>
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<td>9. Teachers want to think of themselves as the best in teaching HIV/AIDS education</td>
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<td>10. Informal discussions on HIV/AIDS should be encouraged among teachers</td>
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<td>11. Having relevant books and other teaching facilities is important in teaching HIV/AIDS</td>
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<td>12. Teachers do not like teaching HIV/AIDS</td>
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<td>13. Feels you have done your best in teaching HIV/AIDS</td>
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<td>14. No fairness on selecting who should attend short courses on HIV/AIDS</td>
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93
1. a) Indicate the impediment(s) to the teaching of HIV/AIDS.
   i. Lack of access to information materials.......[ ]
   ii. A lot of work in school for the teacher.......[ ]
   iii. Lack of support from administration...........[ ]
   iv. Any other, specify.............................................

   b) Indicate the methods of overcoming the impediment(s) in question (a) above.
   ..............................................................................
   ..............................................................................
   ..............................................................................
   ..............................................................................
   ........

2. Choose your main source of HIV/AIDS information
   (a) Mass media....................[ ]
   (b) Text books.....................[ ]
   (c) Friends.........................[ ]
   (d) Mixed sources.................[ ]
   (e) Any other source
     (specify)...............................................................

3. How often do you teach about HIV/AIDS in class?
   (a) Daily....................[ ]
   (b) Weekly.................[ ]
   (c) Monthly.............[ ]
   (d) Never.............[ ]

4. a) Do you prepare schemes of work for HIV/AIDS education?
    Yes............[ ]
    No.............[ ]
b) If yes, does the scheme of work prepared indicate time allocated for each topic?

Yes........[..] No........[..] N/A........[..]

5. a) What are your chances of getting the HIV/AIDS virus?

(a) Great........[..]
(b) Moderate.......[..]
(c) Small..........[..]
(d) Do not know....[..]
(e) Nil.............[..]

b) Give reasons for your answer.

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6. Have you ever been tested for HIV?

Yes....[..] No.....[..]

7. Would you willingly go for a test?

Yes.......[..] No.......[..] Not sure..[..]
8. (a) In your own opinion, do you think it is better to have AIDS education integrated in other subjects, or it is better to be taught as a subject on its own?

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(b) Give reasons for your answer in (a) above.

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9. a) Please indicate whether you teach HIV/AIDS willingly.

Yes...........[ ]

No...........[ ]

b) Please explain

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

10. Do you feel comfortable teaching HIV/AIDS to young boys/ girls?

(a) Yes...........[ ]

(b) No...........[ ]

Please explain.

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11. Please suggest ways or strategies that could be adopted to improve teaching of HIV/AIDS education in secondary schools.

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12. Suggest ways of making AIDS education more interesting.

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Thank you for your cooperation.
Dickson Malusi Musyoka  
University of Nairobi  
P.O. Box 30197  
NAIROBI

Dear Sir

RE: RESEARCH AUTHORISATION

Please refer to your application for authority to conduct research on 'HIV/AIDS Education in Secondary Schools' An analysis of the knowledge, Attitude and Practice of Teachers in Ruiru Division, Thika District,' I am pleased to inform you that you have been authorised to conduct research in Thika District for a period ending 31st December, 2004.

You are advised to report to the District Commissioner and the District Education Officer, Thika District before commencing your research project.

Upon completion of your research project, you are expected to submit two copies of your research findings to this Office.

Yours faithfully

B. O. ADEWA
FOR: PERMANENT SECRETARY

CC
The District Commissioner  
Thika District
The District Education Officer  
Thika District
The District Medical Officer of Health  
Thika District