

**FACTORS INFLUENCING EFFECTIVE IMPLEMENTATION OF HIV/AIDS  
COMPONENT OF CURRICULUM IN PRIMARY SCHOOL IN NAIROBI  
PROVINCE**

**BY**

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## DECLARATION

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

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## **DEDICATION**

For their love and support I dedicate this work to my husband Isaac and my children Evelyn, Edwin and Maxwell.

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## **DEFINITION OF TERMS**

### **Affected**

Refers to a person experiencing the impact of HIV/AIDS through loss or sickness of family or colleague.

### **AIDS**

Acquired immune Deficiency syndrome is the final phase of HIV infection. It is a condition characterized by a combination of signs and symptoms caused by HIV which attacks and weakens body's immune system making the infected person susceptible to other life-threatening diseases.

### **HIV**

Short form for Human Immunodeficiency Virus - the virus that causes AIDS.

### **Infected**

Refers to a person living with the HIV virus that causes AIDS.

### **Learner**

It is a person receiving education and training from a learning institution or programme.

### **Teacher**

A person who is registered to teach under the terms of the Teachers Service Commission.

### **Curriculum**

Subjects included in a course of study or taught in a school or college.

### **Education**

A process of teaching or training and learning especially in schools to improve knowledge and develop skills.

### **Selective teaching.**

A process of teaching what a teachers wants to teach rather than what is laid down in the syllabus.

## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centre for Disease Control and Prevention
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
MOE	Ministry of Education
PE	Physical Education
PLWHA	People Living With HIV /AIDS
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Agency for International Development
UNGASS	United Nation's General Assembly Special Session
WHO	World Health Organization.
UNICEF	United Nations Children's Fund

### ABSTRACT

In Kenya HIV/AIDS remains a major challenge in all sectors including education. Failure to address the impact of HIV/AIDS would put the country at the risk of losing all gains it has made in education sector. Therefore, this study aimed to determine the status of HIV/AIDS education and factors influencing its effective implementation. The Kenya government through the MOE incorporated HIV/AIDS education in the school curriculum as a key means of prevention of HIV/AIDS in year 2003. Since then curriculum has gone largely unutilized and affected due to teachers in experience and discomfort in teaching the sensitive materials (UNESCO, 2006). However, the subject is not examinable hence becomes difficult to assess the level of knowledge acquired by learners. Effective implementation of this subject would probably equip these children with knowledge and skills to enable them to live positively and to prevent further, more children from becoming infected. By establishing how HIV/AIDS education curriculum is being implemented and factors influencing its implementation will help in identifying areas where the ministry of education and other stakeholders would enhance its effective implementation. This Cross sectional study was carried out in primary schools in Nairobi province. Random sampling procedure was used in selecting schools where data was to be collected. Data was collected using structured interview guides with open and closed type questions where a total of 303 primary school teachers teaching in Nairobi were interviewed. Focused group discussions for pupils and key informant interviews in the local communities were conducted. The data collected was analyzed using the SPSS version 12. Chi-square was computed to determine association between variables of interest. The study found that most respondents (54%) had high levels of education. Teachers with high level of training on HIV/AIDS were more likely to teach of HIV/AIDS ( $\chi^2 = 17.985$  df = 1 p=0.0001). The findings of the study indicated that few teachers (37.6%) had training on HIV/AIDS and had adequate knowledge in teaching HIV/AIDS. It was observed that teachers with training on HIV/AIDS were more likely to have knowledge adequacy in teaching HIV/AIDS ( $\chi^2=13.084$  df = 1 p = 0.0001). Teachers who got information through literature had adequate knowledge in teaching HIV/AIDS ( $\chi^2=60.716$  df=1 p=0.0001). Various methods were used in teaching HIV/AIDS. The most popular method of teaching was discussion method (60.7%), role play (17.8%), enquiry method (11.3%) and lecture method (10.2%). It was observed that teachers who used discussion method in teaching HIV/AIDS were more likely to encounter no problems in teaching HIV/AIDS education ( $\chi^2 = 40.333$  df = 1 p = 0.001). However, no method of teaching was adequate on its own. Time and resource materials allocated to teach HIV/AIDS were not adequate. Most teachers (75.2%) were comfortable teaching all topics on HIV and AIDS. Parents interviewed approved HIV/AIDS education in schools. However, some parents disclosed that they felt inadequate to discuss HIV/AIDS with their children. The church and school sponsors also supported HIV/AIDS education in schools. But the responsibility of teaching the subject was left entirely on the teachers. It was concluded that most respondents lacked requisite knowledge of HIV/AIDS and time and resource materials allocated for HIV/AIDS education are inadequate. Based on these findings to ensure effective implementation of HIV/AIDS component of curriculum in primary schools, the study recommends that KIE should prepare more resource materials and in-service training for teachers on HIV/AIDS education.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background Information

HIV/AIDS cases continue to increase in numbers and in reach, without any immediate medical solutions in view. As a consequence, the centrality of prevention and mitigation through education is being recognized in countries and among agencies. Educational interventions across a range of settings are envisaged to provide the knowledge and encourage the development of attitude and skills that can limit the spread and impact of the epidemic ( Bennel,P., 2001). With HIV/AIDS out of control education will be out of reach (UNAIDS, 2005).

Studies have shown that education has a key role to play both in prevention of HIV/AIDS and mitigating its effects on individuals, families, communities and society (Grunseit, 1997). Primary education in Kenya begins with first phase of formal education system. It starts at six years of age and runs for eight years. Thus most learners leave primary school by the age of 15 years of age. The main purpose of primary education is to prepare children to participate fully in social, political and economic well-being of the country (Kaiser, 2008).

HIV/AIDS is affecting all parts of the globe with devastating impact. Since the first case was reported in the United States in 1981, it has become a major worldwide epidemic. It is estimated that more than 25 million people have died of AIDS since 1981 globally. Global HIV/AIDS estimates by the end of 2007 were 33.2 million new infections of HIV in 2007 were 2.1 million. In Sub-Saharan Africa, about 22.5 million people were living with HIV/AIDS by the end of 2007 (UNAIDS/WHO, 2008). However, the new estimate of global HIV/AIDS prevalence is a reduction from the 2006 estimate of 39.5 million. The data reflects a positive impact of HIV/AIDS prevention programmes in a small number of countries (UNAIDS/WHO, 2008).

An estimate of 22.4 million adults and children were living with HIV/AIDS in sub-Saharan Africa by the end of 2008 (UNAIDS, 2009). It was noted that these children are highly affected by HIV/AIDS through the infection and /or death of their parents. In sub-Saharan Africa an estimate of 14.1million children lost one or both parents by the end of 2008. It is also estimated that by the end of 2007 approximately 180,000 children were living with HIV/AIDS (UNAIDS/WHO, 2008). So when this age group

enters into parenthood they are already infected by HIV/AIDS and likely to pass the virus on to their children. In Kenya about 1.1 million children below 15 years of age are living with HIV and AIDS. Nairobi province is rated second in HIV prevalence rate of 9.0% after Nyanza province (UNAIDS/WHO 2008)

The Millennium Summit in September 2000 reaffirmed international commitment to working towards a world in which sustaining development and eliminating poverty have the highest priority. The summit also identified a number of MDGs including goals of specific relevance to education, gender equality and HIV/AIDS. The attainment of these goals is dependent upon full participation of the education sector to counter HIV/AIDS and its impact (Boler, *et al.*, 2003). All these have led to development and implementation of HIV/AIDS education and programmes in Kenyan schools. Well implemented HIV/AIDS prevention programme can reduce the risk of HIV by delaying the age at first sex, increasing condom use, reducing the number of sexual partners, promoting early treatment of sexually transmitted infections (STIs), promoting access to voluntary and confidential counseling and testing (Grunset, 1997). A cross-country study on educational response by Boler and Jellema (2005), show that HIV prevalence of an area is likely to decrease as education increases. Primary educations therefore can half the risk of infection among young people (Boler and Jellema, 2005).

## **1.2 Statement of the Problem**

The study sort to find out factors influencing implementation of HIV/AIDS curriculum in primary schools. The Kenya government through the Ministry of Education incorporated HIV/AIDS education in the school curriculum in year 2003 as a key means of prevention of HIV/AIDS. The curriculum has gone largely unutilized and affected due to teachers in experience and discomfort in teaching the sensitive materials (UNESCO, 2006). However, the subject is not examinable hence becomes difficult to assess the level of knowledge acquired by learners (UNESCO, 2006). In Kenya about 1.1 million children below 15 years of age are living with HIV and AIDS. Nairobi province is rated second in HIV prevalence rate of 9.0% after Nyanza province (UNAIDS/WHO 2008). A study carried out in Korogocho slums on teenage pregnancy and unsafe abortion included respondents between ages 9 to 15 years. All respondents affirmed having engaged in sexual intercourse between ages 12 years to

14 years (KHRC and RHRI, 2010). Many of these children are found in primary schools. Effective implementation of this subject would probably equip these children with knowledge and skills to enable them to live positively and to prevent further, more children from becoming infected.

### **1.3 Justification of the Study**

The HIV/AIDS epidemic has been steadily spreading across the world for the past two decades. There is concentrated knowledge on how the virus is transmitted and about prevention. One of the key means of HIV prevention is education (UNESCO, 2006). Children and young people account for half of all new HIV infection worldwide and more than 6000 people become infected with HIV everyday (UNAIDS, 2004). More than a third of all people living with HIV/AIDS are under the age of 25 years.

By establishing how HIV/AIDS education curriculum is being implemented and factors influencing its implementation will help in identifying areas where the ministry of education and other stakeholders would enhance its effective implementation. Similarly, identifying factors influencing communication in HIV/AIDS education would enable effective intervention by the government to draw up programmes for teachers and other personnel for effective implementation.

### **1.4 Research Questions**

- a) What level of training on HIV/AIDS do teachers teaching primary schools have?
- b) What in-school and out of school factors influence effective implementation of HIV/AIDS education in primary schools?

### **1.5 Hypothesis**

Effective implementation of HIV/AIDS curriculum in schools is not affected by teachers training, time allocation, assessment of pupils, modes of teaching and other factors.

## **1.6 Objectives**

### **1.6.1 General Objective**

To investigate factors that influence effective implementation of HIV/AIDS education in primary schools in Nairobi.

### **1.6.2 Specific Objectives**

- a) To determine the level of training on HIV/AIDS among teachers teaching HIV/AIDS education. .
- b) To establish in-school and out of school factors influencing effective implementation of HIV/AIDS education in primary schools.

## **1.7 Limitations and Delimitations**

### **1.7.1 Limitations**

Due to time and financial constraints the study was based on schools in Nairobi province.

### **1.7.2 Delimitations**

The study is not concerned with teaching HIV/AIDS education, but with exploring factors that are influencing the teaching of HIV/AIDS education.

## **1.8 Assumption of the study**

The study assumes that most parents and other stakeholders are aware of the content of HIV/AIDS education content. The assumption could result the researcher misjudging the knowledge status on HIV/AIDS of parent respondents and the stakeholders. This could consequently hinder the necessary probing of these respondents to identify the out of school factors that hinder effective implementation of HIV/AIDS component of curriculum in schools. The study further assumed that all primary school as an education entry point provides HIV/AIDS education. Similarly all children between ages six to fourteen years are in primary schools.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Role of education in prevention and control of HIV/AIDS.

AIDS education for young people plays a vital role in global efforts to end the AIDS epidemic. Despite the fact that HIV transmission can be prevented each year millions of people become infected with the virus: there were 2.7 million new HIV infections. Almost half of these new infections were among people under 25 years old (UNAIDS/WHO 2008).

Providing young people with basic AIDS education enables them to protect themselves from becoming infected. Young people are particularly vulnerable to sexually transmitted HIV, and to HIV infection as a result of drug – use. Acquiring knowledge and skills encourages young people to avoid or reduce behaviours that carry a risk of HIV infection (Paul- Ebhohimhem, *et al.*, 2008). Even for young people who are not yet engaging in risky behaviours, AIDS education is important for ensuring that they are prepared for situations that would put them at risk as they grow older (UNESCO, 2008). AIDS education also helps to reduce stigma and discrimination by dispelling false information that lead to fear and blame. This is crucial for prevention, as stigma often makes people reluctant to be tested for HIV. People who are not aware of their HIV status are more likely to pass the virus on to others. AIDS education can help to prevent this, halting stigma and discrimination before they have an opportunity to grow (Bankole, *et al.*, 2007).

Educating young people about HIV and AIDS necessitates discussion about sensitive subjects such as sex and drugs use. Many people believe that it is inappropriate to talk to young people about these subjects and fear that by doing so will encourage young people to indulge in risky behaviours. Such attitudes are often based on moral or religious views rather than evidence and severely, limit AIDS education around the world. Substantial evidence shows that educating young people about safer sex and the importance of using condoms does not lead to increases in sexual activity (UNESCO, 2009).

The belief that young people should only be taught about sex and drugs in terms of them being ‘wrong’ also perpetuates stigmatization of people who are living with

HIV. By teaching young people that indulging in ‘immoral’ sex and drugs will lead to HIV infection, educators imply that anyone who has HIV is therefore involved in these ‘immoral’ activities (Paul- Ebhohimhem *et al.*, 2008).

In order to prevent young people from becoming infected with HIV, there is a need for comprehensive information about how HIV is transmitted and what they can do to stop themselves from becoming infected. This information should be delivered without moral judgment (Paul -Ebhohimhem. *et al.*, 2008). Schools play a pivotal role in providing AIDS education for young people. Not only do schools have the capacity to reach a large number of young people, but school students are particularly receptive to learning new information. Therefore schools are a well established point of contact through which young people can receive AIDS education. At the same time, in many countries HIV and AIDS is significant weakening the capacity of the education sector, and greater investment in education is vital for the provision of effective HIV prevention for young people (UNESCO, 2009).

Schools provide one of the most cost-effective and efficient ways of reaching young people. However education sector have been seriously threatened by AIDS (UNAIDS, 2004). Generally a well-designed education programme is a valuable tool in the fight, to establish a conducive environment where PLWHA are well supported and new infections are prevented (Boler, *et al.*, 2003). Children and young people are more likely to be affected by HIV/AIDS than any other age group. They are also more likely to change behavior as a result of education. Studies have shown that HIV prevalence of an area is likely to decrease as education increases and that primary education can half the risk of infection among young people (Boler and Jellema, 2005). A study by Kelly (2000) on the encounter between HIV/AIDS and education reveals that reduced vulnerability to HIV is observed in people with secondary and higher education. Schooling increases learning power, self-confidence and social status allowing young people to take greater control over their sexual choices (Kelly, 2000).

Through HIV/AIDS education, schools can also help reduce stigma and discrimination (UNAIDS, 2004). HIV/AIDS education is likely to encourage a more respectful open-minded attitude towards other people (Kelly, 2000) hence reducing

discrimination. Similarly, the education is needed to improve quality of life for the HIV-infected people. An important and commonly neglected aspect of AIDS education with HIV infected people is enabling and empowering them to improve quality of life (Mellanby *et al.*, 1995). HIV /AIDS education gives pupil a greater understanding of the epidemic and help them realize that HIV can affect anyone. This education should go beyond the biological facts to include many aspects of behaviour attitudes and values (Grunseit, 1997).

Teachers expand their understanding on HIV/AIDS while researching for a lesson and can pass on this information on to adults and pupils. Children themselves once informed about HIV/AIDS can share with their parents and friends what they have learnt. HIV-infected children in the school are likely to learn more about HIV/AIDS through the schools effort to support those children (Boler and Jellema, 2005).

A study conducted by Action Aid investigated how schools in Tamil Nadu, India and Nyanza, Kenya, implemented their state-sponsored HIV/AIDS curriculum (Boler *et al.*, 2003). Researcher sought the attitudes of 3706 teachers, pupils, parents and other key stakeholders. The study found that teachers and schools play a key role in teaching young people about HIV/AIDS in both countries. Young people and their parents view the school as a trusted place to learn about HIV/AIDS. Majority of Indian teachers (87%) and Kenyan teachers (87%) felt that their profession has a responsibility to teach young people about HIV/AIDS. According to the study, the efforts of the teachers were hampered by perceived parental disapproval, religious barriers especially in Kenya, sexual relations and power inequalities leading to paradox of safer sex. Teachers efforts were also hampered by wider crisis in education including over-crowded classes, lack of training opportunities and learning materials and large numbers of out of school children who will not be reached by school-based HIV/AIDS education. The study concluded that the success of HIV/AIDS education is unlikely to improve without dramatic improvements to underlying education systems (Boler *et al.*, 2003)

There is no set age at which AIDS education should start, and different countries have different regulation and recommendations. Often young people are denied life – saving AIDS education because adults consider the information to be too ‘adult; for

young people. These attitudes hinder HIV prevention, as it is crucial that young people know about HIV and how it is transmitted before they are exposed to situations that carry a risk of HIV infection (UNESCO, 2009).

AIDS education should begin as early as possible. Information can be adapted so that awareness of AIDS can begin from an early age whilst still ensuring that topics are age appropriate. According to UNESCO (2009) guidelines advise that basic education on human reproduction should begin as early as age five. This information provides the foundation on which children can build AIDS specific knowledge and skills as they develop, education about condoms and how they can protect themselves from HIV infection can be introduced, from around age nine.

### **2.1.2 Content and coverage of HIV curriculum.**

In conjunction with UNICEF Kenya through ministry of education has adopted an AIDS education curriculum as well as training manuals handbooks. However this curriculum has gone largely unutilized due to teachers' inexperience and discomfort in teaching the sensitive material (Bankole, *et al.*, 2007).

A study by Action Aid in Kenya on silence in HIV Education found that there were a number of silences in communication around HIV/AIDS in schools. The study further noted that, frightened of parental disapproval, teachers often omitted HIV/AIDS lessons laid out in the curriculum or taught without any direct reference to sex or human relations (Boler, *et al.*, 2003)

Another study to examine the implementation of primary school HIV education initiative on knowledge, self efficacy and preventive measures in upper primary by Tyndale , *et al.*, (2007) was carried out. The study results supported the conclusion that the HIV education has its most beneficial effect of inexperienced youth and therefore should be implemented among the youngest age-groups. The study concluded that despite the fact that the ministry of education having HIV/AIDS education curriculum in place, no specific classroom time is set aside for it, hence leaving teachers to fit the subject at their own discretion (Tyndale, *et al.*, 2007).

A strong influence of the Roman Catholic Church and its position against condom use also played a key role in selective teaching. Teachers viewed responsibility for

teaching the young HIV/AIDS as being diffused throughout the whole community. The study suggested that collaboration and consistency must be fostered between school, religious leaders and communities to overcome contradictory message. The study found that HIV/AIDS education in Kenyan schools had failed the young people. Attempts to discuss the subject and sexual relations in classroom had been constrained by social and cultural taboos, leaving young people at risk (Boler, *et al.*, 2003).

In Kamukunji Division, Nairobi, a study was carried out to investigate the problems faced by primary school head teachers in implementing HIV/AIDS education programmes. The findings of the study found that head teachers faced problems with infected and affected pupils. This was due to absenteeism of these pupils and lack of proper nutrition due to prevailing poverty levels in the division which affected the pupils learning (Were G.W., 2010). According to the study, other challenges included physical and financial resources.

## **2.2 In – School factors Influencing Effective Teaching HIV/AIDS Education**

### **2.2.1 Teachers Training**

Teacher training is fundamental to the successful delivery of AIDS education in schools, and yet efforts to train teachers are often inadequate, if in place at all. For example, teachers in Malawi report not receiving any training on HIV and AIDS. In Kenya many teachers have opted not to teach about HIV and AIDS as a result of inadequate training (UNESCO, 2008). AIDS education requires detailed discussion of subjects such as sex, death, illness and drug use. Teachers are not likely to have experience dealing with these issues in class, and require specialized training so they are comfortable discussing them without letting personal values conflict with the health needs of the learners (UNESCO, 2009 May).

In India, where young people represent a large proportion of the country's population, an estimated 2.4 million people are infected with HIV (UNAID, 2008). In phase two of the country's National AIDS Control Programme, the Adolescent Education Programme (AEP) was launched. The programme aimed to train teachers and peer educators to educate the student community both in and out of school about life skills, HIV prevention related stigma and discrimination. Under the initiative 112,000 schools were covered and 2888,000 teachers were trained (National Aids Control

Organization, 2008). However, there is a discrepancy between the large amount of effort invested in HIV/AIDS curricula and training packages on a national level, and the lack of actual education being carried out in many schools. In the states of the country where there is a relatively low HIV prevalence, officials have been reluctant to encourage AIDS education, claiming that the problem is not significant enough in these areas to warrant a widespread educational response (Global Campaign for education, 2005). In reality, it is crucial that young people learn about AIDS in areas with a low prevalence so that prevalence stays low (UNESCO, 2009).

In 2007 it was reported that a number of states in India had decided not to implement the Adolescent Education Programme in its present form, rejecting the material that had been supplied. Many young people across India are still not receiving information about HIV/AIDS (National AIDS Control Organization, 2008). Although offering AIDS education at school is a principal method of reaching large numbers of young people, there are 75 million children around the world who are either unable to go to school or decide drop out of school (UNESCO, 2009). In order to ensure that all young people are reached with basic AIDS education, programmes that target young people outside of school are essential. Young people who are in school also benefit from receiving further information about HIV and AIDS from other sources, adding to and reinforcing what they learn in school (UNESCO, 2009).

AIDS education in Kenya still faces numerous problems. A recent survey carried out by KNUT showed that Kenyan teachers are not generally well prepared for HIV lessons and that many are not well informed about the subject (UNESCO, 2006). In India where AIDS education is carried out it is incorporated in science lessons with learners being taught purely biological aspects of the subject (Global campaign for education, 2005). This modality is more adaptable to teachers with no training on how to teach HIV education and also avoids cultural and religious barriers that prohibit the talking of sex in classroom (Boler and Jellema, 2005). An educational survey in Uganda on teachers training on HIV/AIDS showed that lack of knowledge among teachers is a major problem. According to the survey teachers training initiatives are not included in government strategy. Except in larger assemblies, teachers fear to talk about HIV/AIDS because pupils may ask difficult questions (Global campaign for education, 2005).

Good quality risk reduction education relies on trained and skilled human capacity, (UNAIDS, 2001). Teaching personnel need to be properly trained supervised and monitored in their work. In Kenya only 6,000 teachers are specially trained on HIV/AIDS education compared to an estimate of 250,000 national wide (UNESCO, 2009). This number is far below the required number; hence most teachers lack adequate knowledge to teach the subject more comprehensively (Global campaign of education, 2005).

Apart from the social and cultural constraints that exist in teaching HIV/AIDS, a number of obstacles faced by teachers are a symptomatic of a wider crisis in education. Efforts in the classroom are hampered by oversized classes dearth of training opportunities for teachers and limited learning materials (Boler *et al.*, 2003).

Boler *et al.* (2003) carried out a study on difficulties in communicating HIV/AIDS in schools in Kenya and India. Through qualitative and quantitative approaches, the study had 3,706 subjects that included teacher and other stakeholders in the educational community. The key findings of the study were that 45% of Kenyan teachers said they did not have adequate knowledge to teach HIV/AIDS in schools compared to 25% of Indian teachers. Majority of teachers in both countries reported never having been on training course on HIV/AIDS (70% in India and 64% in Kenya). Interviews and focus groups discussion in both countries suggest that cultural barriers included the paradox of safe sex and gender specific issues in which teachers felt uncomfortable teaching students of the opposite sex (Boler *et al.*, 2003). The study further recommended that government must put in place adequate monitoring systems for assessing the impact of HIV education. The study also recommends that high priority must be given to training teachers to teach HIV/AIDS. Both in-service and pre-service teacher training should include compulsory HIV/AIDS components that are examinable and certifiable.

Some teacher training institutions in Southern African Development Community (SADC) countries and universities have succeeded in developing institutional policy on HIV /AIDS. They have also integrated HIV and AIDS education in curricula and implementation of training, support and counselling services for learners and teacher

(UNESCO, 2006). However, many of teacher training institutes have weak structures and have limited collaboration with other stake-holders in the field of HIV prevention. There is also limited available information to date on HIV and AIDS pre-service teachers programme for teachers in Sub-Saharan Africa, and most of the information does not offer hard data on measuring effectiveness of such programmes (UNESCO, 2006).

A study carried out by Boler and Jellema (2005) on teacher training in Zambia concluded that poorly trained teachers are often too shy to teach sex education. The study further concluded that such teachers also lack commitment to teach the topics in an often over-crowded curriculum. Another study carried out in Mauritius Institute of Education on doorway innovative teaching and learning approaches by Bholah and Gungdeen (2007) stated that the government of Mauritius strongly supported all policies linked to HIV and AIDS. Hence the institute has integrated HIV and AIDS Education into various training programmes in both primary and secondary curricula.

Another study carried was out in Zambia on analysing the response of teacher training institutes to HIV and AIDS by Ramos (2007). The study sought to examine the extent to which teacher training institutes in Zambia were able to address the problem of HIV and AIDS, teaching programmes and barriers to effective teaching on HIV and AIDS and the overall response. The study concluded that while attempts were made to establish structures and integrate HIV and AIDS in teaching programmes, the response needs strengthening and improvement. Issues such as lack of teaching materials, selective teaching and discomfort in teaching HIV and AIDS education were identified as major barriers (Ramos, 2007).

### **2.2.2 Time Allocation**

Schools are the one institution that young people regularly attend. They are geared towards increasing students' knowledge and improving their skills. Kenya has witnessed a decline in HIV prevalence in recent years (UNAIDS 2006), partly helped by increased efforts to provide AIDS education in schools. A weekly HIV/AIDS lesson has been inserted into all primary and secondary state school curriculums (Global campaign of education, 2005). Similarly AIDS education has been integrated at the schools subjects. But in delivery of HIV/AIDS education, schools may not be

ideal, class time is limited, teachers are often not trained in handling sensitive subjects and considerable controversy surrounds the teaching of such subjects (Wellings *et al.*, 1995). Increase in knowledge about HIV/AIDS can not be accomplished in a few hours. But changing behaviour requires additional contact hours and teaching strategies (Dorman *et al.*, 1990).

Given the sensitivities that surround sex and HIV education, teachers find it difficult to discuss HIV/AIDS with their students. Research study by Boler *et al.* (2003) on difficulties in communicating on HIV/AIDS in India and Kenya schools suggested that selective teaching often takes place. Teachers appear to be selecting which messages to teach or else not to teach HIV education at all. The study findings revealed that incomprehensive HIV/AIDS teaching is taking place in both Kenya and India. In India 95% of teachers claimed that HIV component of Total Health programme was being taught compared to only 53% of students in Kenya. In both countries, selective teaching appears to be more common in rural than in urban areas (Boler *et al.*, 2003)

Kenya's Ministry of Education has HIV/AIDS prevention and sex education, but no specific classroom time is set-aside for it, which leaves the school and teachers to fit the subject in their discretion. A research study carried out by Boler and Jellema (2005) concluded that there is little evidence that HIV/AIDS education in schools has significant impact on sexual behaviour and that the programmes have failed to change behaviour in spite of high levels of knowledge of risks among learners both in primary and secondary schools. Lack of time, resources and training often mean that the curriculum is inadequate.

### **2.2.3. Teaching approaches of HIV/AIDS education**

Whether a particular education system is of high or low quality can be judged by input, output and process. Due to financial constraints, government of Ethiopia chose to improve quality of education through teaching and learning process which is assumed cost-effective. The study aimed at finding extent to which innovative approaches of teaching and learning are employed in primary school in Ethiopia. Descriptive survey research method used study found most teachers still use lecture method dominate most classes (Derebssa, 2005)

For education to play a positive role in learner development, Lockheed and Verspoor (1999), stated that it needs to meet minimum quality standard in terms of minimum inputs (facilities, materials, qualified teachers, parent and community support) process (effective leadership, Ministry of Education, accountability, community participating effective teaching and learning, a learner assessment) and output (high student learning, societal and individual returns).

Dakar Framework for Action (2007) that quality of education was recognized as a prime condition for achieving Education for All (EFA). Dakar Framework for Action affirms that quality is the heart of education and goals to commit nations to provide education of good quality. Goal six includes commitment to improving all aspects of a quality of Education and ensuring excellence for all so that recognized and measurable learning outcomes are achieved by all especially literacy, numeracy and life skills (UNESCO, 1990).

For scholars quality of education depends largely on teaching-learning process. It is therefore cognizant of this situation that employment of learners-centred pedagogy is essential (Cook and Cook, 1998). Learning by doing is a theme stressed by many educators since John Dewey's time where learners are engaged in an active quest for learning new ideas. (Dewey, 1966). Silcock and Brundert (2001) define learner - centred approaches as those where tutor guides facilities learners other than asserting control, towards targeted teaching goals. Active learning and teaching involves use of strategies which maximize opportunities for interaction. Some literatures make reference to interactive rather than active approaches.

AIDS education in Kenya is based around a "life skill" approach. This approach focuses on relationship issues, social side of HIV and scientific aspects about the infection. But since Kenyan teachers are more used to teaching subjects in factual, academic fashion many find it difficult to address the topic in a way that was relevant to the social realities of learners' lives (Boler and Jellema, 2005). School education is highly focused on examinations. Teachers therefore are used to inundating learners with facts and figures, whereas AIDS education require that teachers engage pupils in active learning sessions (Boler, *et al.*, 2003).

Effective AIDS education encourages young people to participate and engage with the information that is being presented to them by offering them the opportunity to apply it (UNESCO, 2009). Group work and role play are particularly important methods in which students might discover the practical aspects of the information they are given. These methods allow pupils an opportunity to practice and build skills – saying “No” to sex. Active learning approaches are widely considered to be most effective way for young people to learn health- related and social – skills (UNICEF, 2009). Further more active leaning offers an opportunity to make AIDS education lessons fun. AIDS education classes can be constructed to involve quizzes, games or drama, for example – and can still be very effective learning sessions.

A study carried out in India on educational responses to HIV/AIDS showed that HIV/AIDS education is included into science lessons hence taught purely on biological aspect of the subject (Global Campaign on Education, 2005). This approach has advantages in that it is more adaptable to teachers who have not received any training to teach HIV/AIDS. In US, AIDS education is carried out within the wider framework on sex education (Global Campaign on Education, 2005). Preparation and distribution of scientifically accurate, culturally appropriate, good quality teaching and learning materials on HIV/AIDS education would enhance effective implementation of HIV/AIDS education (Bennel, P., 2001). Teachers require on going support in introducing the inquiry based right-oriented type of education about HIV/AIDS. Many of these approaches encourage active participation and skill development (Boler,*et al.*, 2003).

Due to HIV/AIDS epidemic, the role of schools appears to be changing. Traditionally, there were expectations that schools would educate the whole child across the broad spectrum of the intellectual, social, moral, aesthetic, cultural, physical and spiritual domains. A critical problem passed by HIV/AIDS education regards educators most of them shy away from dealing with the basic issues of adolescent sexuality. When they approach the subject they present the content with an abstract presentation of themes and principles. In the process the educators are unaware of that there is a communication gap between them and young people (UNESCO, 2008). Families, friends, the wider community, mass media and popular culture all influence young

people, and it is important that they convey accurate educational information about HIV and AIDS (UNESCO, 2009).

Opinion is divided between education providers who take an abstinence only approach to sex education and those who advocate a more comprehensive approach. Which approach is favoured significantly affects how young people are educated about HIV and AIDS (UNESCO, 2009).

Sex education that focuses on abstinence is based on the belief that encouraging young people not to have sex until marriage is the best way to protect against HIV infection. This approach limits AIDS education by not providing information about how young people can protect themselves from HIV infections if and when they do chose to have sex. It is vital for HIV prevention that schools provide comprehensive sex education, which educates about the importance of condom use as well as promoting delayed initiation of sex (UNAIDS/WHO 2008).

#### **2.2.4 Source of Information on HIV/AIDS**

Using the media is a powerful way of reaching large numbers of young people with HIV and AIDS information and prevention messages. Many countries have tried some form of AIDS education advertisement, films, or announcements. Love life is a prominent campaign in South Africa, which uses a variety of media to educate young people about HIV and AIDS. The Love Life campaign has produced eye-catching posters and billboards. It has also educated through TV soaps that are popular with young people and used rap and kwaito music to get messages across (UNESCO, 2009)

However, it is difficult to measure the extent to which media-based AIDS education reaches young people, and the effect that it has. In 2005, the Global Fund withdrew its funding of Love Life on the basis that the campaign was not reaching the majority of young South Africans, and that its contribution to HIV and AIDS prevention was unclear (Pettifor *et al.*, 2007).

## **2.3. Out of school factors influencing effective teaching of HIV/AIDS education**

### **2.3.1 Parental attitudes and Cultural factors**

Parents and community share the task of promoting positive learning in young learners (World Bank, 2002). Parents were frequently assumed to object to teaching of HIV/AIDS or reproductive health. Some parents cited religious or cultural beliefs prohibit them from discussing sex with their children. Several parents mentioned teachable moments as they arose from TV programmes or adverts to discuss HIV/AIDS with their children. Opponents of HIV/AIDS Education in schools felt that they were not prepared to discuss HIV/AIDS at home or other reproductive health topics either due to embarrassment or lack of knowledge (Pettifor *et al.*, 2007). Education can contribute to female economic independence, delayed marriage and family planning. Several studies have demonstrated that education can protect girls and women from HIV/AIDS. A study in Zambia by Vandemooretele and Delamonica (2000) showed that young women with secondary education were less likely to be HIV positive than those with primary education or no education at all. Unfortunately gender inequalities thrive in schools and communities. Sexual abuse among girls also features in our schools. This may discourage them from attending schools. This will in turn damage their education and possibly prevent them from learning how to protect them against HIV infection (UNAIDS, 2006).

Another obstacle to effective AIDS education for young people in schools is adults who determine the curriculum. The adults – parents’ curriculum planners, teachers or legislators – often consider the subject to be too ‘adult’ for young people. There is also obstruction to adequate AIDS education from adults who are also concerned that teaching young people about sex, sexually transmitted infections, HIV and pregnancy, will somehow encourage them to begin having sex when they otherwise might not have done so. A cross-sectional study by Wellings *et al.* (1995) involved 311 English young people on provision of sex education and early sexual experience. A similar study carried out by Mellanby *et al.* (1995) on school sex education. The study used a quasi-experimental design to examine the impact of a single sex education Programme. Both studies suggest that education programmes did not hasten the onset of intercourse. The study by Mellanby *et al.* (1995) suggested that having the school as a primary source of sex education might have increased the use of condoms at first intercourse.

Despite common misconceptions about HIV/AIDS education, community resistance should not be assumed. Community members including parents and religious leaders are often keen to be better informed and involved (Grunseit, 1997). The AIDS education is an issue stemming from the fact that HIV is often sexually transmitted or via drug use.

### **2.3.2 Church and Religion on HIV/AIDS Education**

Christian believes that persons are inherently valuable, that life is sacred and that patience, forbearance and self control are fruit of the spirit. The church has a special obligation to honour the Ministry of Education. The role of religion in combating HIV/AIDS can be a controversial one. Orthodox thinkers in major faiths have, in the past denounced those who fall ill with the virus that causes AIDS. They have been suggesting that the fate of the infected is divine punishment for immoral behavior (Orthodox Research Institute, 2001). International conference on population and development in Cairo in 1994 was largely seen as a failure on question of HIV/AIDS because various religious delegates opposed measures like condom distributed to stop the spread of the disease.

Islam is a religion that is very close to human nature. It highly values human life. It appreciates the strong sexual desires human have. It also appreciates the fact that not all Muslims follow their religion fully. As a result Islamic religion has developed educational programmes for its communities. These programmes emphasize Islamic moral values and methods of protection from this life threatening illness (Orthodox Research institute, 2001). Religious groups have commented AIDS education on very much. In the US those with religious agenda are increasingly supporting sex education. This education is increasingly focusing more on morality. The Vatican states that this education is abused when children are taught all the intimate details of genital relationships (Tooley, 2003).

However, with government's implementation of the structural adjustments policy package from the World Bank and IMF (GOK 1996) there has been a shift in financing education, up to date public schools have since 2003 received instructional

material from GOK. KIE has been charged with responsibility of developing these materials, including HIV/AIDS instructional materials.

Religion Anthropologists such as Rapport (1999) consider religion as a primary regulation of human behaviour. In Sub-Saharan Africa, Christianity is a dominant force controlling individual gain in the interest of collective good thus setting the context of pivotal decision and daily living of many people. (Central Intelligence Agency, 2007). Most African religious institutions focus on the multitude of human problems. Of particular interest has been the significant response to the HIV and AIDS pandemic (Central Intelligence Agency, 2007).

Some religious organizations in Africa in their HIV/AIDS intervention efforts supplement treatment of the diseases with prayers and religious exercises in pragmatic outreach programs (Adogame, 2007). Intervention mechanisms employed include education, spiritual counselling, sermons, publications and drama (Adogame, 2007).

A study by Toole (2007) found that strategies to prevent the spread of HIV/AIDS among young people could be more effective if they are trapped into the power of religious beliefs and practice. Scholars of African Culture and Religion like Prof. Mazrui have argued that an African is a child of triple heritage. That Christianity, Islam and the Traditional African Religion have all impeded on spiritual psyche of the African personality. This argument proved true in the area of HIV/AIDS (UNESCO, 2002).

Churches in Africa have for long argued that HIV/AIDS is an affliction of the sinners. Churches in Africa particularly in Kenya continue to condemn preventive measures such as use of condoms (UNESCO, 2002). In contrast, in Uganda according to the Minister of Finance, the church agreed that it would not discredit the prevention measures advocated by the government and other stakeholders so as to reduce the spread of HIV/AIDS (UNESCO, 2002)

### **2.3.3 School Sponsorship**

GOK is the main sponsor of public/state primary schools. Recent studies including cost and financing of education in Kenya project (1995) strengthening primary

education and education sector analysis (MOE, 1996) revealed a direct bearing on access to, quality of and efficiency of education in Kenya. According to the study, Kenyans can no longer have access to education because of poverty. Households face very difficult choices on short-term survival goals such as food security (MOE, 1996).

Gender disparity also manifests itself in declining girls/women participation in education (MOE, 1996). This has a direct bearing on HIV/AIDS education. Kenya education system is suffering from years of under-funding. Thus GOK has introduced a “sector-wide approach to education in Kenya its aim is to implement the government pledge to give all Kenyan citizens a good quality education. GOK introduced free primary education in January 2003 as a step to achieve universal primary education one of the eight MDGs. Since then over one million children in school going age were enrolled mostly in Arid and semi-arid areas, in urban slums and those affected by HIV/AIDS and working children (UNESCO, 2006).

In recent year’s provision of infrastructure and learning materials have improved. All 18000 state primary schools have some textbooks. The UK government is giving Kenya 7 billion to help support free primary education (UNESCO, 2006). The badly hit schools are community schools. Most of the well-equipped and successful schools are private schools in big cities. Provision of instructional materials is good hence making learning easier. Existing literature indicate that communities and parents in Kenya have met a high percentage of costs of education (Heynemans 1980, Sifuna 1997). Before independence primary education was almost exclusively the responsibility of communities and local church groups.

After independence GOK assumed a higher share of financing primary education. Thus had a positive impact on education because primary schools increased and a high number of children were enrolled.

However, with government’s implementation of the structural adjustments policy package from the World Bank and IMF (GOK 1996) there has been a shift in financing education, up to date public schools have since 2003 received instructional material from GOK. KIE has been charged with responsibility of developing these materials, including HIV/AIDS instructional materials.

## **CHAPTER THREE: MATERIALS AND METHODS**

### **3.1 Study Area**

This study was carried out in Nairobi Province, Kenya. The province is divided into seven divisions namely Kasarani, Dagorreti, Langata, Kamukunji, Starehe, Makadara and Westland Divisions. The Province has about 200 primary schools. However, four divisions were randomly sampled; these were Westlands, Embakasi, Kamukunji and Daggorreti (appendix 6.7). A total of 32 schools were sampled in all the four division In Kenya about 1.1 million children below 15years of age are living with HIV and AIDS. Nairobi province is rated second in HIV prevalence rate of 9.0% after Nyanza province (UNAIDS/WHO 2008).Most of these children are found in primary schools. Effective implementation of this subject would probably equip these children with knowledge and skills to enable them to live positively and further prevent more children from becoming infected.

### **3.2 Study Design**

A cross – sectional descriptive study design was carried out to determine how HIV/AIDS education curriculum was being implemented in primary school in Nairobi Province.

### **3.3 Study variables**

#### **3.3.1 Independent variables**

The independent variables included teacher training on HIV/AIDS, time and resource materials allocated for teaching HIV/AIDS and sources of information of HIV/AIDS by teachers, method of teaching and attitude of parents towards HIV/AIDS education in schools.

#### **3.3.2 Dependent variable**

The dependent variable is effective implementation of HIV/AIDS component of curriculum in primary schools. Indicators of effective implementation were teachers' knowledge adequacy on HIV/AIDS, Confidence in teaching HIV/AIDS to learners of opposite sex, attention given to teaching of HIV/AIDS.

### **3.4 Population**

#### **3.4.1 Target Population**

The target population was all teachers in primary school and primary school pupils.

#### **3.4.2. Study Population**

Study population was teachers in primary schools in Nairobi. Standard 6, 7 and 8 pupils, parents, local community leaders and religious leaders. Parents were interviewed to establish attitudes towards the subject and their opinion on relevance of the subject. Church leaders and community leaders were interviewed to establish how they support the curriculum. Sponsors were also interviewed to determine if they support the implementation of the subject.

### **3.5. Inclusion Criteria**

Teachers teaching primary schools in Nairobi at least for one year at the time of study were randomly sampled. Standard 6, 7 and 8 pupils were randomly sampled for FGD. Parents who consented to the study were sampled. Community leaders, sponsors and church leaders who were willing to participate were also included in the study.

### **3.6. Exclusion Criteria**

Teachers, parents, church leaders and community leaders who did not consent to the study were excluded.

### **3.7 Ethical Considerations**

Permission to carry out research was sought from Board of Postgraduate Studies of Kenyatta University, Ethical Committee Ministry of Education and from head teachers of sampled schools. Informed consent was sought from the study population and the results obtained from the study were to be treated with confidentiality and will only be used for the purpose of study only. Informed consent for pupils who participated in FGD was sought from the teachers.

### 3.8 Sampling Procedure and Sample Size Determination

#### 3.8.1 Sampling Procedure

Four divisions from Nairobi province were randomly sampled. Stratified sampling was used to select schools where the study was to be carried out. This enabled the researcher to categorize schools into two strata, City Council Schools (Public) and private schools. Schools from each stratum were selected using simple random sampling technique. This enhanced homogeneity. Random stratified sampling was used to group teachers into two strata upper and lower primary teachers. The teachers from each stratum were selected using simple random sampling. Numbers were written and the teachers who picked even number were included in the study. Stakeholders were purposively sampled. This included parents, religious leaders, church leaders and sponsors.

#### 3.8.2 Sample Size Determination

The sample size was determined by a standard formula as used by Fisher *et al* (1998).

$$n = \frac{Z^2 pqL}{d^2}$$

Where: n = Sample size.

Z = Standard normal deviation (1.96) which corresponds to the 95% confidence level.

P = Proportion of target population estimated to be benefiting from effective implementation of HIV/AIDS component of curriculum in primary schools.

q = 1 – p.

d = degree of accuracy set at 0.05

D = design effect (1)

$$\begin{aligned} \text{Therefore } n &= \frac{Z^2 pqL}{d^2} = \frac{1.96^2 \times 0.5 \times 1}{0.05^2} \\ &= 384 \end{aligned}$$

The target population of teachers in Nairobi Province is 1500 as at January 2006.

Therefore the Final sample size will be: -

$$N = n_1$$

$$n_1 = \frac{n}{\left[1 + \left(\frac{n}{N}\right)\right]}$$

Where:  $n_1$  = the desired sample size (when population is less than 10,000)  
 $n$  = desired sample size (when the population is more than 10,000)  
 $N$  = the estimate of the population

Then

$$\begin{aligned} n_1 &= \frac{384}{1 + \frac{384}{1500}} \\ &= \frac{384}{1.256} \\ &= 305 \end{aligned}$$

### 3.9 Data Collection Methods and Instruments

Data was collected by administering questionnaires (appendix 6.4) to 303 teachers teaching HIV/AIDS education in primary schools. Structured interview schedules (appendix 6.5) were administered to 100 parents and 20 church leaders (appendix 6.6) to establish their attitudes towards HIV/AIDS education. This was purposefully and conveniently done since they were key informants. Focus group discussion (appendix 6.7) was held for STD 6,7 and 8 pupils to evaluate levels of knowledge and attitudes acquired through HIV and AIDS education.

### 3.10 Data quality control

The questionnaires and interview schedules were pretested before actual data collection in a district that was not randomly sampled. Research assistants were trained to ensure good quality data collection.

### 3.11 Data Analysis

Data was collected, cleaned, coded and analyzed using Statistical Package for Social Sciences (SPSS). Quantitative data was analyzed using both descriptive and inferential statistics. Descriptive statistics included frequency distribution means and

modes. Chi-square test was used to determine the association between levels of training, time allocation, sources of information methods of teaching and teaching of HIV/AIDS education. Data was presented using frequency distribution tables' percentages, pie charts and graphs.

## CHAPTER FOUR: RESULTS AND DISCUSSION

### 4.1: Demographic Data of respondents

This section deals with characteristics of respondents regarding gender, age, marital status, and religion and academic levels.

#### 4.1.1 Gender Categories of the respondents

The studies revealed that overwhelming majority of 224 (73.9%) teachers were females while only 79 (26.1%) were males (Table 4.1). Since the sample was randomly selected, this reflects a female domination in teaching career in the study area.

**Table 4.1: Distribution of teachers by gender**

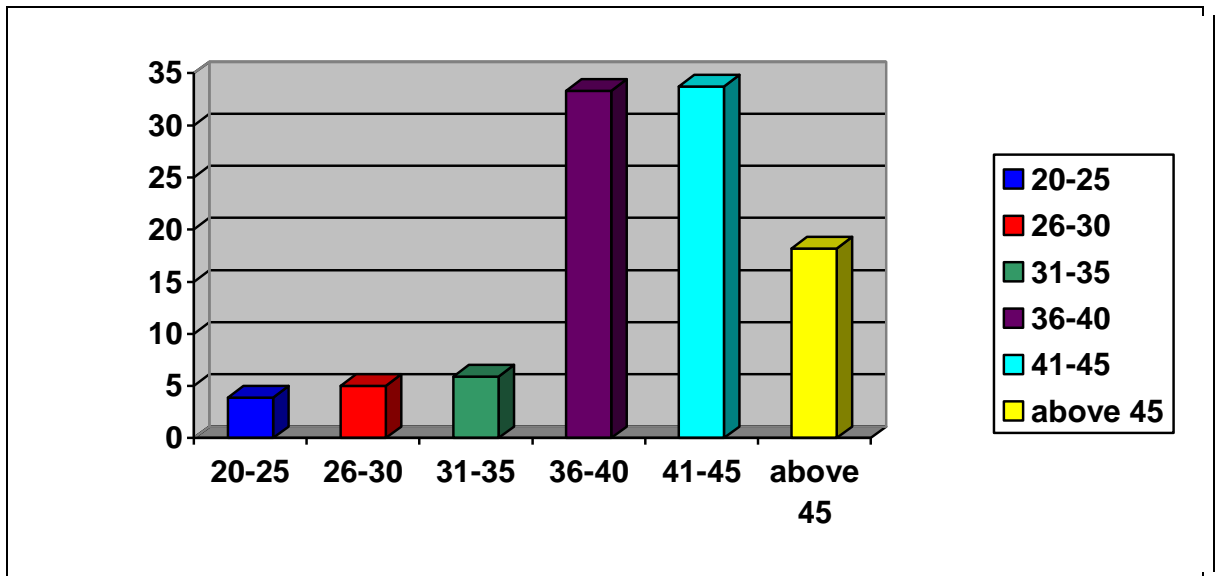
Gender	Frequency	Percent
Male	79	26.1
Female	224	73.9
Total	303	100

The study revealed that a majority of 7 (70%) of school sponsors were women while 3 (30%) of them were men.

Majority of church leaders interviewed were women 15(75%) with only 5(25%) respondents being men.

#### 4.1.2 Age category of teachers

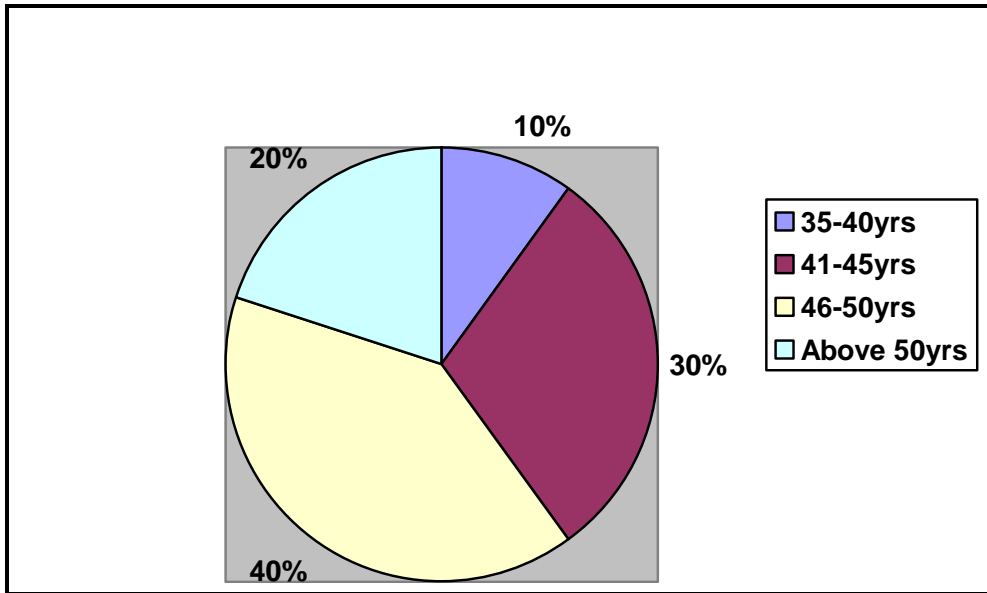
The findings revealed that only 12(3.9 %) teacher respondents were aged between 20 and 25 years. It was also evident that 15(5 %) teachers were aged between 26 and 30 years. Only 18(5.9 %) teacher respondents were in the age category 31 – 35 years while 101(33.3%) respondents were aged between 36 and 40 years. Study results indicated that 102(33.7%) teacher respondents were aged between 41 and 45 years while 55(18.2 %) respondents were aged above 45 years. Hence majority (67%) of teachers were aged between 36 and 45 years (Figure 4.1).



**Figure 4.1: Distribution of teacher respondents by age**

Majority of parents who were interviewed were between the ages of 35 years to fifty years with 36 respondents (36%) between 25 – 35 years, 48 (48%) parent respondents aged between 36 – 40 years while 15 (15%) parent respondents were aged between 41 – 45 years. Only one parent was above 45 years of age.

All church leaders interviewed were aged between 35-56 years of age whereby 2 (10%) were aged between 35 -40 years of age, 6(30%) were aged between 41-45 years while 8 (40%) were aged between 46-50 years of age. Only 4 (20%) church leaders were aged above 50 years.



**Figure 4.2: Distribution of church leader respondents by age**

The age category of school sponsors ranged between 45 – 60 years with 4 (40%) respondents aged between 45 – 50 years 5 (50) respondents aged between 50 – 55 years while only 1 (10%) was aged between 56 – 60 years.

#### 4.1.3 Marital status of respondents

The findings revealed that majority of 262 (86.5%) teachers involved in the study were married, 21 (6.9 %) single while 20 (6.6%) were widowed. (Table 4.2) This was expected given the age distribution observed in figure 4.1 where the majority of the respondents were between the ages of 41-45.

**Table 4.2 Distribution of teachers by marital status**

Age category	Frequency	Percent
Married	262	86.5%
Single	21	6.9%
Widowed	20	6.6%
Total	303	100%

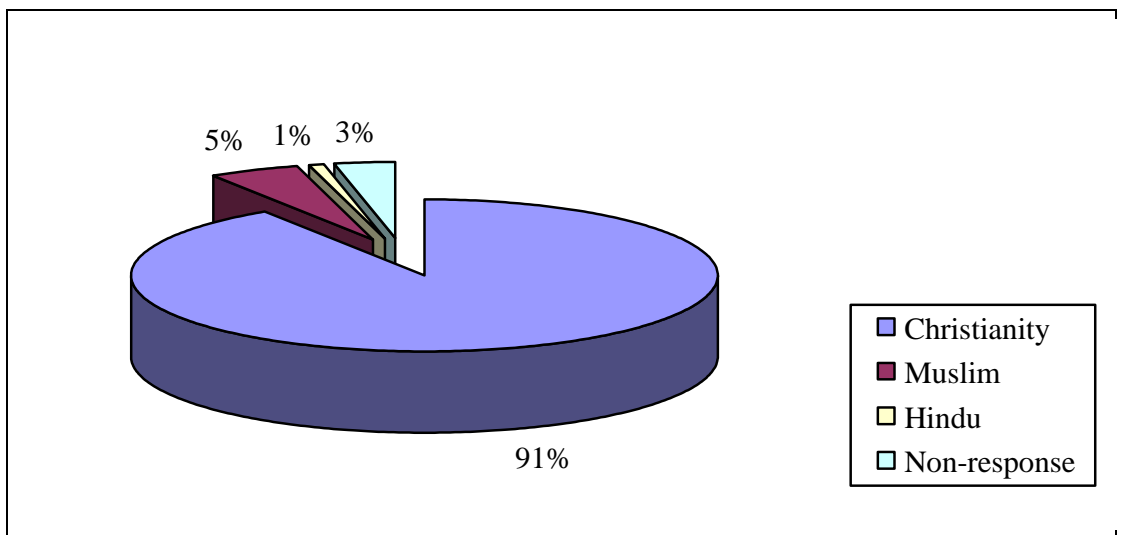
Majority of parents (84 %) were married while 14 (14%) respondents were widowed but two were single parents. Majority of the church leaders were married 16 (80%)

while 3 (15%) were widowed and 1 (5%) single parent. The findings of the study also indicated that 7 (70%) of school sponsors were married while 1 (10%) was widowed and 2 (20%) were not married.

The findings of the study also indicated that 7 (70%) of school sponsors were married but 1 (10%) respondent was widowed while 2 (20%) were not married.

#### 4.1.4 Religion of respondents

The findings in Figure 4.3 shows that an overwhelming majority of 275 (90.8 %) of teacher respondents were Christians, 15 (5%) were Muslims; while 3 (0.9 %) teacher respondents indicated that they were Hindus (Figure 4.2). Only 10 (3.3 %) of the respondents indicated no religion. The findings implied that majority of the teacher respondents interviewed were of the Christian faith.



**Figure 4.3 Distribution of teachers by religion**

Most parent respondents 96 (96%) were Christians, 3 (3%) were Muslims while 1 (1%) was a Hindu (table 4.4)

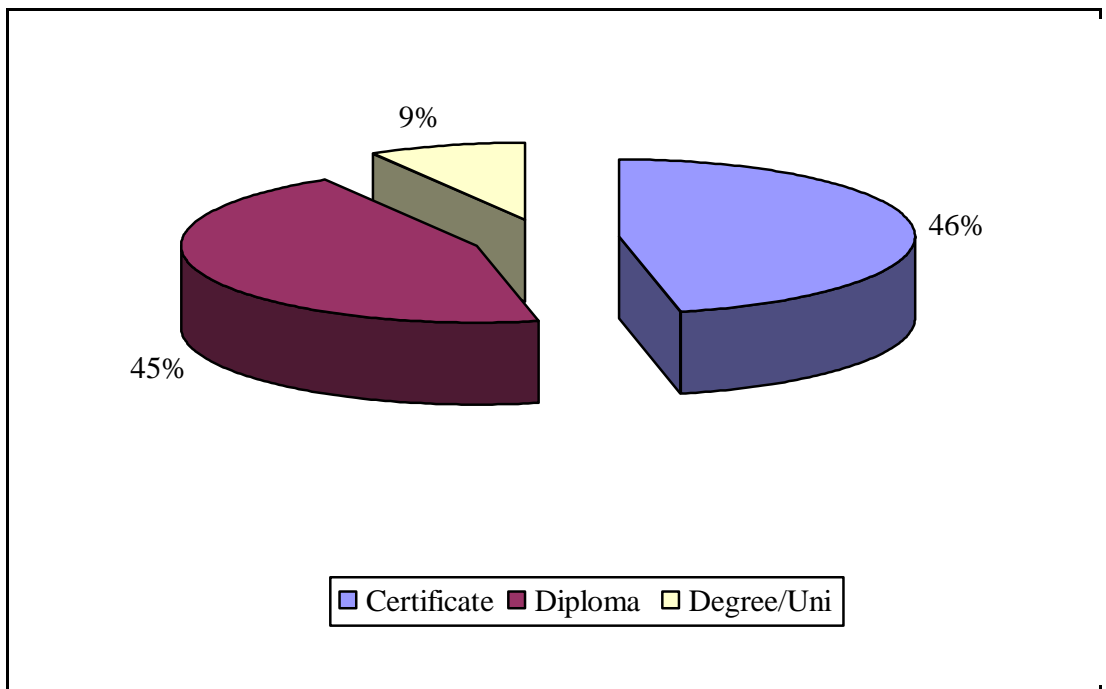
**Table: 4.3 Distribution of parents by religion**

Religion	Frequency	Percent
Christian	96	96%
Muslim	3	3%
Hindu	1	1%
<b>Total</b>	<b>100</b>	<b>100%</b>

Most of religious leaders 17 (85%) were Christians while 3 (15%) were Muslims. Majority of 8 (80%) sponsors were Christian while 2 (20%) respondents were Muslim.

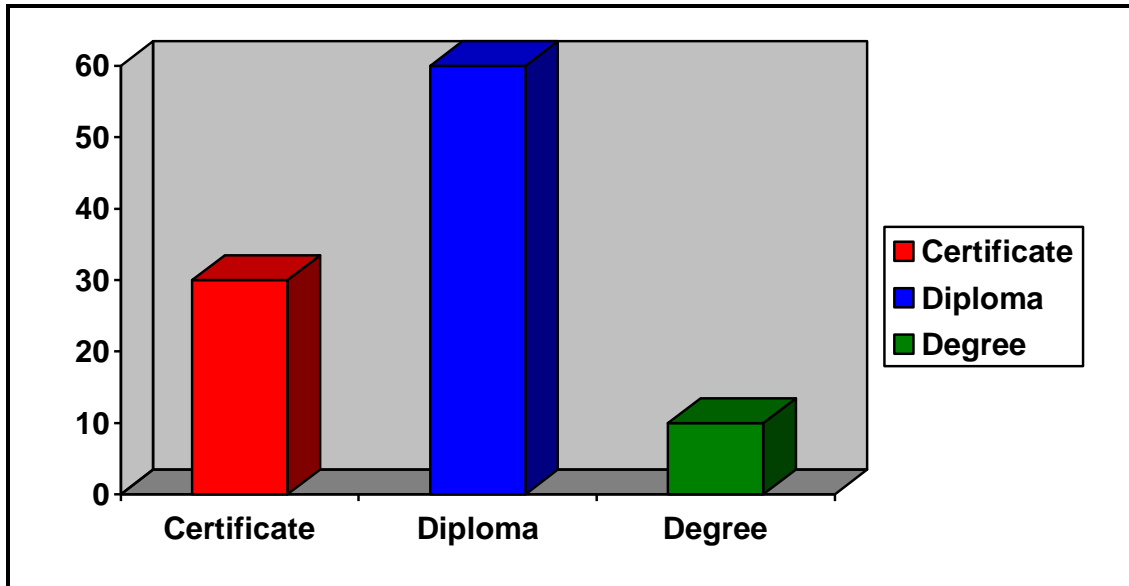
#### 4.1.5 Education levels of the respondents

The results showed that 142 (46%) teacher respondents had attended college up to certificate levels, 135 (45%) diploma level, while 26 (9%) were university graduates (Figure 4.4). Hence majority had attained a higher level of education.



**Figure: 4.4 Distribution of teachers by education level**

On education level, 56 parent respondents had reached form four, 38 o had diploma while 6 respondents were university graduates. Majority 17 (85%) of church leaders had reached form four, 2 (10%) form six and 1 (5%) graduate. It was observed that 3 (30%) school sponsors had attained a certificate in teaching while 6 (60%) had a diploma and 1 (10%) was a university graduate.



**Figure: 4.5 Distribution of sponsors by education level**

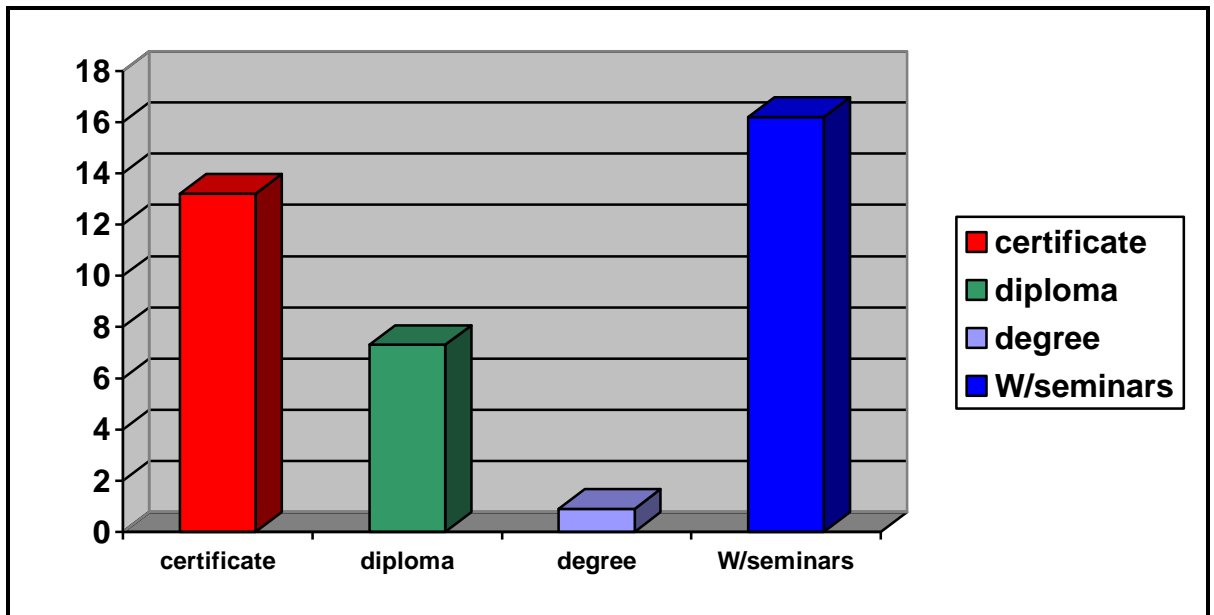
#### **4.2. Teacher training with other selected indicators**

The results showed that 142 (46%) teacher respondents had attained certificate levels, where 37 (12.2%) taught the subject while 105 (34.7%) indicated that they did not teach the subject. one hundred and five (44.6%) teacher respondents had trained at diploma level, 130 (42.9%) stated that they teach HIV while 26 (8.5%) were university graduates and all of them taught the subject (Figure 4.4). Hence majority had attained a higher level of education. High educated a teachers were more likely to teach HIV education ( $\chi^2 = 17.985$  df = 2 p = 0.0001)

##### **4.2.1 Teachers' Special training on HIV/AIDS and knowledge adequacy**

The research revealed that only 114 (37.6%) respondents had specialized training on HIV/AIDS while 189 (62.4%) respondents were not specially trained. The study further revealed that the respondents who had trained on HIV/AIDS (37.6%) had trained in the following levels. According to the study, 40 (13.2%) of respondents had trained at certificate level, 22 (7.3%) respondents had trained at diploma level while 3 (0.9%) respondents had trained at degree level. Forty nine (16.2%) respondents had attended workshops and seminars on HIV/AIDS. Of the 114 respondents who had trained on HIV, 83 (72.8%) of them had adequate knowledge on the subject. Only 31 (27.2%) had inadequate knowledge.

Chi- test results found an association between levels training on HIV/AIDS and of adequate HIV/AIDS knowledge ( $\chi^2 = 13.084$  df = 4 p = 0.0001). Those who were not specially trained in HIV/AIDS felt that they did not have adequate knowledge.



**Figure 4.6 Distribution of teacher respondents by specific level of training on HIV/AIDS**

It was apparent that knowledge of the teachers on HIV/ AIDS influenced the implementation of HIV/ AIDS curriculum in primary schools, as emotionally put by one of the teacher:

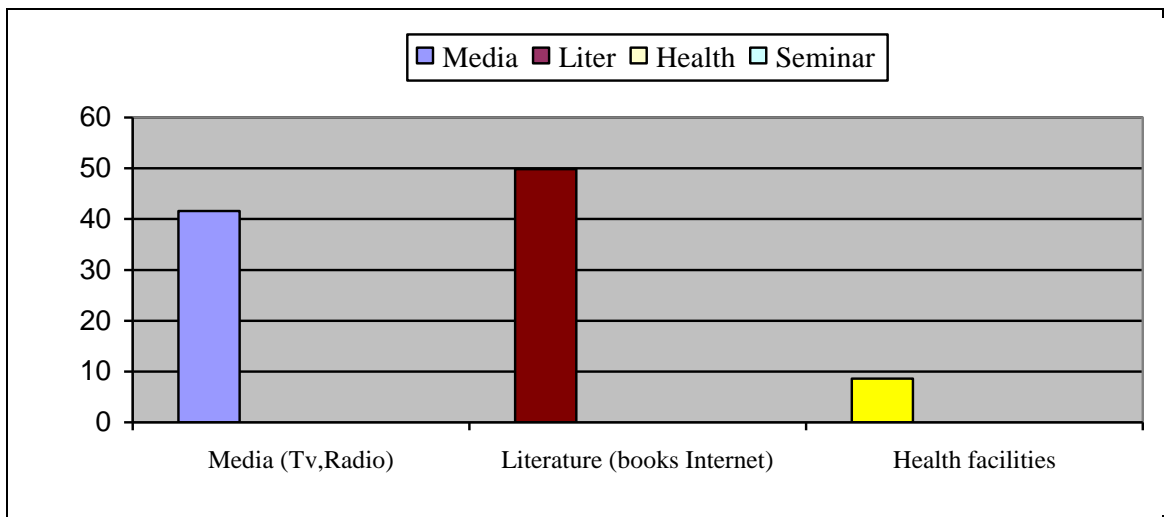
*“I feel powerless, helpless and perhaps sad, because I am not equipped to deal with the situation if a learner confides in me about his or her problems concerning HIV. This disease is affecting all of us. We are all grieving and we do not know how to deal with all this sorrow. Our learners are suffering we are suffering. We need to learn to teach in a world that is so full of pain”*

It was apparent that majority of respondents who had special training on HIV/AIDS encountered no problems compared to their counterparts

### 4.3 Sources of information on HIV/AIDS

Respondents who got information through literature were 151 (49.8%) while 140 (46.2%) of them felt that they had adequate knowledge on HIV/AIDS. The literature materials included textbooks, pamphlets and journals. One hundred and twenty six (41.6%) respondents got information through media with 45 (14.9%) felt they had adequate knowledge. Only 26 (8.6%) respondents got information through health facilities none had adequate knowledge on HIV/AIDS (Fig.4.5). There was a significant association between responders who got HIV/AIDS information through literature and feeling of adequate knowledge.

Respondents who got HIV and AIDS information through literature material felt that they had adequate knowledge in HIV and AIDS ( $\chi^2=60.716$  df =2 p=0.0001) Respondents who got information on HIV/AIDS through media only 9 (2.99%) felt they had adequate knowledge to teach HIV/AIDS education.



**Figure 4.7 Distribution of respondents by source of information on HIV/ AIDS**

From focused group discussions it was observed that majority 28 (58%) of pupils had wide knowledge on causes of HIV/AIDS, having acquired this knowledge from school, peers, and media and from pamphlets. Very few pupils indicated that they had acquired knowledge from parents or their siblings.

#### 4.4. Time Allocation

The teachers were asked to state the number of lessons in a week allocated to HIV/ AIDS education 218 (71.9%) indicated that HIV/ AIDS education was integrated in other subjects while 80 (26.4%) taught it during PE lessons and 5 (1.7%) were ambivalent about the number of lessons in a week allocated to HIV/ AIDS education.

Additionally, the teachers were to indicate how long each HIV/ AIDS education lesson lasted. While some stated that it depended on the level of education, with the duration ranging from 30 minutes in lower primary to 35 minutes per lesson in upper primary.

The teachers were, in addition, asked to state if they teach all the lessons on HIV and AIDS as intended, 252 (83.2 %) respondents stated that they teach all lessons as intended while 51 (16.8 %) respondents disagreed. Some teachers 51 (16.8%) stated that they do not teach all lessons as intended. The reasons they gave included that the subject was not examinable and integrated in other subjects hence difficult to test it. Respondents were asked to state if time allocated for teaching HIV/AIDS was adequate. An overwhelming 230 (75.9%) respondents indicated that time allocated was not adequate. Only 73 (24.1%) respondents felt that time allocated was adequate for teaching HIV/AIDS. They quoted that HIV/AIDS education was an important to fight the HIV pandemic. More time needed to be allocated for behaviour change, attitude change and more emphasis of the subjects. At the same time, 236 (77.9 %) of the teachers stated that they teach all the topics in the syllabus while 67 (22.1 %) respondents did not teach all the topics in the syllabus.

**Table 4.4 Distribution of respondents by perception on adequacy of time allocated for teaching HIV/AIDS**

<b>Time Adequacy</b>	<b>Frequency</b>	<b>Percentages</b>
No	230	75.9%
Yes	73	24.1%
Total	303	100%

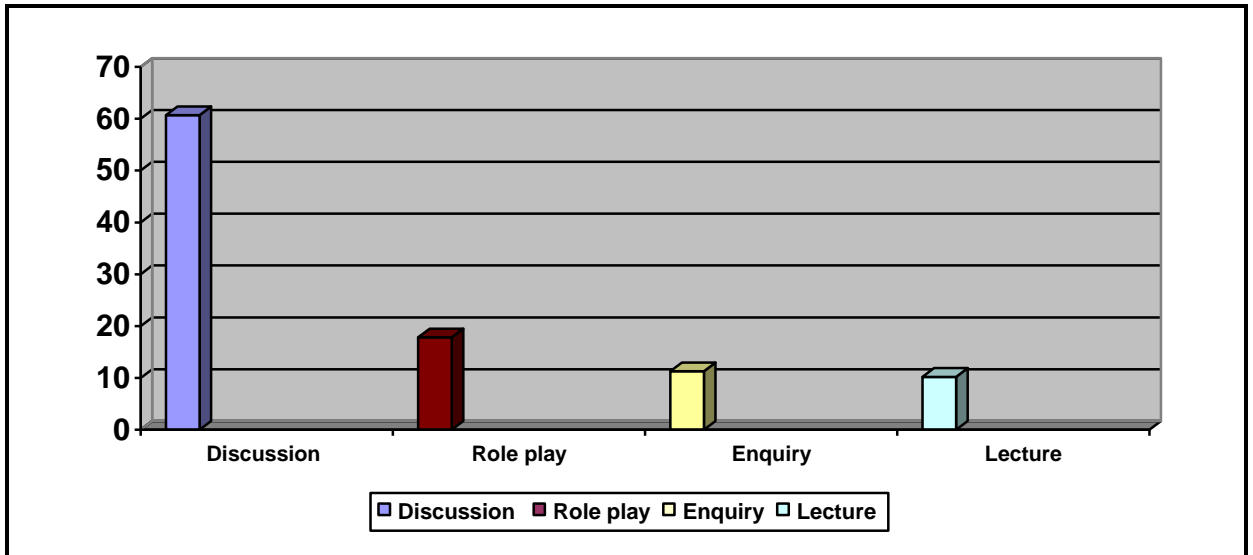
The respondents were to state whether they assess learners to evaluate if they acquired the necessary knowledge on the subject. The responses point to the fact that majority of respondents 227 (74.9%) assess the learners but 76 (25.1%) do not assess the pupils knowledge on HIV/AIDS.

#### **4.5. Teaching approaches and encounter problems teaching HIV and AIDS**

The most popular method of teaching HIV/AIDS was discussion method. A high number of 184 (60.7%) respondents used discussion method in teaching HIV/AIDS. The study results revealed that teachers who used discussion method of teaching did not have problems in teaching HIV and AIDS. The likely reason was that this method encouraged active learning through participation and skill development Teachers were encouraged because students would ask questions among themselves then consult the teacher and therefore get the concept adequately (Figure 4.8). There was a significant association between discussion method and not encountering problem in teaching HIV and AIDS education ( $\chi^2 = 40.337$  df = 3 p = 0.0001).

Only 54 (17.8%) respondents used role-play method of teaching. It was observed that, 36 (11.9%) teachers who used role-play method of teaching had problems in teaching HIV/AIDS education The likely reason could be as the pupils and the teacher assumed some role-play during HIV/AIDS lesson the pupils who were affected and/or infected became emotional and refused to participate in the lesson.

Only 34 (11.3%) respondents used enquiry method. It was observed that 21 (6.9%) teachers who used enquiry method of teaching also had problems in teaching HIV/AIDS education. The likely reason could be that this method where the teacher teaches by asking or finding out what the learner know about the topic discourages full participation of the learner. Very few teachers 31 (10.2%) used lecture method in teaching HIV/AIDS and none had problems in teaching HIV/AIDS. The findings of the study showed that teachers who used lecture method did not encounter problems teaching HIV and AIDS. The likely reason could be those teachers who used this method, were not specially trained in HIV and AIDS and just taught the subject from a factual and theoretical perspective.



**Figure 4.8 Distribution of respondents by preferred mode of teaching HIV and AIDS**

From focused group discussions pupils stated the topics taught in schools, which included; what is HIV/AIDS, causes of HIV/AIDS, its mode of transmission and the preventive measures among others. The main preventive measures the pupils highlighted included use of condoms and abstinence, which they termed as ‘chilling.’ Most learners stated that they were shy while discussing this topic even with their teachers. Most learners 25 (52%) had no problem in any topic. However 23 learners stated that they joined the “chill” club or peer educator club in their schools.

#### **4.6 Problems encountered by selected indicators for effective teaching of HIV/AIDS**

##### **4.6.1 Problems encountered in teaching HIV/AIDS education**

The respondents were asked to state if they encounter problems while teaching HIV and AIDS education. Two hundred and fifteen (71 %) respondents did not encounter problems in teaching HIV/AIDS, while 123 (40.6%) encountered problems. Hence majority did not encounter problems in teaching HIV and AIDS (Table 4.5). Respondents who felt that they had inadequate HIV and AIDS knowledge encountered problems teaching HIV and AIDS. There was a positive association between HIV and AIDS knowledge adequacy and problem encounter in teaching

HIV/AIDS education ( $\chi^2 = 15.025$  df = 1 p = 0.0001). The more the teachers felt having adequate knowledge the fewer the problems they encountered.

Emerging issues from the interview with parents on factors that may influence children to engage in risky behaviour include poverty, media, and personal greed for fashionable clothes, parental neglect and lack of attention which pushes children to seek sexual attention. Parents recognized their role responsibility in raising children. Other issues included, parents were unanimous in their support for school based HIV/AIDS education, a position that should be conveyed to teachers training on HIV/AIDS and condom distribution should be included in comprehensive developmentally appropriate HIV/AIDS programme.

When asked to state if, in their opinion, teaching of HIV/AIDS was effective in their schools, only 6 (60%) sponsor respondents agreed that the teaching of HIV/AIDS was effective in their schools, 4 (40%) stated the teaching of HIV/AIDS education was not effective in that most of the teachers in their respective schools were not trained in HIV/AIDS education. Most sponsors (60%) stated that it was difficult to know how effective the teaching of HIV/AIDS education was since there was no examination to assess performance levels on knowledge acquired by learners in HIV/AIDS education.

Most sponsors, 7 (70%) felt that there were some obstacles that hindered the implementation of HIV/AIDS education. The obstacles that they cited included most teachers were not trained in HIV/AIDS. Similarly there were very few learning resources from KIE.

When asked to state how they felt the government should do to support the teaching of HIV/AIDS majority pointed out that the MOE should train more teachers and other stakeholders in education. Similarly the MOE through KIE should provide learning resources to school. A syllabus on HIV/AIDS should be in place.

**Table 4.5 Distribution of respondents by problems encounter in teaching HIV and AIDS**

Encounter problems in teaching HIV and AIDS	Frequency	Percent
Yes	180	59.4%
No	123	40.6%
Total	303	100%

However results from the interview indicated that a few parents 32 (32%) do not discuss the subject with their children. They felt that they were not prepared to discuss the subject with their children or due to lack of knowledge. A few parents cited religion and cultural beliefs prohibit them from discussing issues relating to sex with their children. Majority of parents discuss about causes HIV/AIDS and lack of cure but they avoid topics such as condom use and abstinence. Similarly only 30 parents (30%) felt that their children should not be taught the subject. This was because they were infected by HIV/AIDS and would not like their children to know.

#### **4.6.2 Adequacy of Resource material and teaching HIV/AIDS**

Respondents were asked to state if there were adequate resource materials in their respective schools. Few 48 (15.8%) respondents indicated that they had adequate resource materials while none had a problem teaching the subject. Majority of respondents 255 (84.2%) had no adequate resource materials in their schools. As a result, 180 (59.6%) respondents encountered problems in teaching HIV and AIDS ( $\chi^2 = 16.135$  df = 1 p = 0.0001).

This was because without resource materials it was difficult for the teachers to educate learners effectively on HIV and AIDS. The other reason was that despite having resource materials teachers without special training in HIV/AIDS found it difficult to teach. Therefore for effective teaching of HIV and AIDS education, teachers need to undergo special training on HIV/AIDS and resource materials should also be provided.

When further asked to state if the resource materials available were age-appropriate, out of the 48 (15.2%) who had adequate resource materials, only 12 (25%) respondents stated that indeed the resource materials were age-appropriate while 36 (75%) of respondents stated that the materials were not age appropriate. The respondents were asked to state how often the test learners knowledge on HIV/AIDS. Majority of respondents 210 (69.6%) assess learners knowledge on HIV/AIDS while 93 (30.4%) respondents do not assess learners on the subject. The respondents were asked to indicate what in their opinion; the MOE should do to enhance teaching of HIV/AIDS. The responses included build capacity of teachers through seminars and workshops and provision of relevant teaching and learning resource materials like books, videos and films. The parents were asked to state how they support the learning of HIV/AIDS education of their children. The parents were so clear that they provide learning materials such as textbooks and further they discuss the subject with their children.

The sponsor respondents were interviewed to state what they felt the government should do for effective implementation of the subject. Majority 9 (90%) of respondents agreed that the government should train teachers in HIV/AIDS education, prepare and disseminate more learning resource materials into the market and that HIV/AIDS education should be examinable at different levels of learning. Ten (10%) of the respondents felt the government has done quite a lot in teaching of HIV/AIDS education. This was through the preparation and provision of HIV/AIDS education teaching materials by KIE to schools.

#### **4.6.3 Respondents confidence in teaching HIV/AIDS topics**

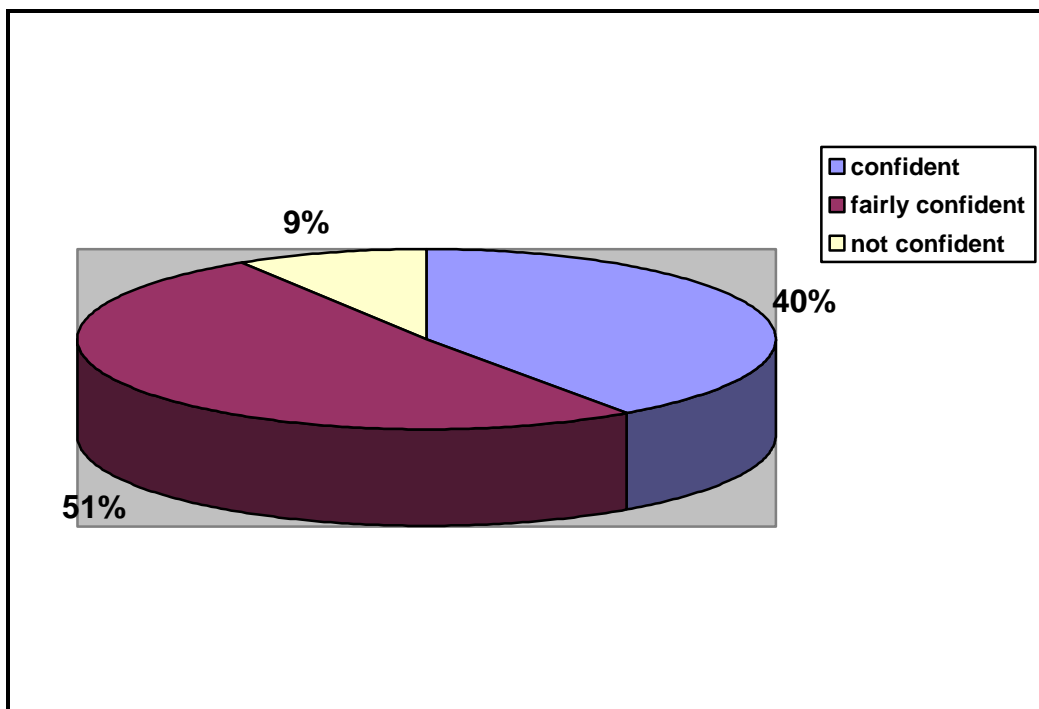
On the topics that they feel uncomfortable, teaching, 75 (24.8%) respondents felt that some topics made them feel uncomfortable while teaching while 228 (75.2%) did not feel uncomfortable teaching the topics. The topics there made most respondents uncomfortable while teaching included modes of transmission of HIV/AIDS and methods of prevention, which included condom use and abstinence. Most teachers stated clearly that it was not easy to talk about sex and condom use openly. It was even more difficult to demonstrate the transmission, preventive aspect of condoms.

Moreover, 267 (88.1%) respondents stated they would not opt to teach another examinable subject during HIV/AIDS lessons. Only 36 (11.9%) respondents stated that they would opt to teach another examinable subject during HIV/AIDS lesson. The reasons they gave were that HIV/AIDS education was not examinable.

Therefore it was better to teach an examinable subject like maths rather than HIV/AIDS. Other respondents stated that HIV/AIDS was integrated and taught in other subjects. Thus there was no need to teach its lessons.

#### 4.6.4 Respondents confidence in teaching HIV/AIDS to learners of opposite sex

On respondents confidence in teaching HIV and AIDS, 154 (50.8%) said that they felt fairly confident while 134 (44.2%) taught HIV and AIDS, 122 (40.3%) felt confident with 120 (39.6%) teaching the subject and 27 (8.9%) felt not confident. Only 8 (2.6%) of them taught HIV confidently. Hence majority felt comfortable teaching HIV and AIDS (Table 4.7). The respondents who were not confident stated that some demonstration were obscene and vulgar especially while teaching learner of the opposite sex. The main demonstration that was cited as obscene was on condom use. The more confident a teacher felt, the more likely a teacher taught ( $\chi^2 = 36.396$  df = 2 p = 0.0001).



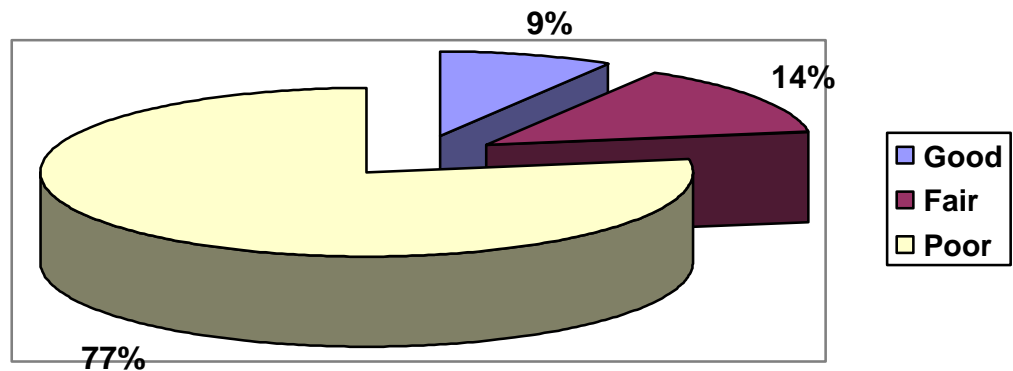
**Figure 4.9 Distribution of respondents by confidence while teaching learners of opposite sex**

Teachers were asked to give their opinion on what should be done to enable them teach better regarding the subject. The responses included; Building the capacity for teachers through seminars and workshops preparation of HIV syllabus. Most respondents indicated that provision of relevant teaching and learning resource materials such as videos and films was necessary. Other respondents felt that engaging resource persons who are HIV/AIDS positive was important and that timetabling of HIV/AIDS education should be considered.

In conclusion, the respondents were in their opinion, were to comment on HIV/AIDS in their respective schools. The results indicated clearly that the subject was being taught in their schools and that it was helpful in behaviour change especially to learners before they are mature and / or infected.

**4.6.5 Rating of the teaching of HIV/AIDS Education**

Teachers and pupils were to rate teaching of HIV/AIDS in their respective schools. The results indicated that 235 (77.6%) rated the teaching of the subject as poor while 42 (13.9%) rated the teaching as fair while 26 (8.5%) rated teaching of HIV/AIDS education as good.



**Figure 4.10 Rating of the teaching of HIV/AIDS Education**

From focused group discussion, pupils rated teaching of HIV/AIDS as fair citing it as a very important subject in their lives. Most pupils termed the subject as very interesting and important in their lives since it enabled them to ‘chill.’ But some pupils expressed discomfort in discussing the subject especially with the teachers as well as their parents. But majority of 20 learners agreed that they share HIV/AIDS messages with their peers. Some learners were quick to state that they have “Chill club” in their schools, which enable them to discuss the subject even further after school.

The results of the interview schedule indicated that majority 86 (86%) of parents were aware of HIV/AIDS education while only 14 (14%) were not aware of the subject. Most respondents also explain what they know about the subjects. They knew that it was a very helpful subject, which would equip their children with knowledge on prevention of HIV/AIDS. Majority of respondent 90 (90%) were in agreement that HIV/AIDS education has even reached to other community members who were not in school. They also agreed that the local community was supporting the school in HIV/AIDS education although more need to be done. Parents felt that the local community should be good role- models to be emulated by their children. They should avoid taking alcohol and other related issues that could lead to HIV/AIDS.

Only 40 (40%) respondents agreed that there were youth programmes in the communities that enabled the youth to learn more on HIV/AIDS. Some of these

programmes organized music plays and concerts that they take to schools to educate the pupils on HIV/AIDS, its causes and prevention. Others have films that they show in schools while other youth programmes have cleaning and sporting activities.

Parents were aware of non-governmental organization and civil society organizations visit school and conduct education programmes on HIV/AIDS. Most parents (95) indicate that they had participated in seminar and workshops organised by the community. Majority of parents 70 (70%) strongly agreed that HIV/AIDS education should be taught in primary schools

However some parent expressed their sentiments that they feared the HIV/AIDS education would address the sex issue with obscene language.

Majority of (95%) church leaders agreed that they were aware of HIV/AIDS education. They also appreciated its role of equipping learners with knowledge and skills to enable keep their bodies and minds holy hence preventing the spread of HIV/AIDS. Nineteen (95%) of church leaders agreed that the church was taking an active role in supporting HIV/AIDS education. Most churches went round in schools educating the learners on cause of HIV/AIDS and the problems of HIV/AIDS. However, 18 respondents rated the role of the church as average in supporting HIV/AIDS education. Similarly majority of church leaders 18 (90%) felt that MOE needed to do a lot to support HIV/AIDS education in schools. They had an opinion that MOE should train more teachers and community leaders on HIV/AIDS. Similarly more media programmes such as school broadcast programmes should be availed on HIV education.

**Table 4.6 Summary of cross tabulation of significant variables.**

<b>Independent variables</b>	<b>Category</b>	<b>Teaching</b>	<b>No teaching</b>	$\chi^2$
Level of training	Certificate 142 (46.9%)	37 (12.2%)	105 (34.7%)	$\chi^2$ 17.985 df =2 P= 0.0001
	Diploma 135 (44.6%)	130 (42.9%)	5 (1.7%)	
	Degree 26 (8.5%)	26 (8.5%)	0 (0%)	
Adequacy of resource material	Adequate 48 (15.8%)	48 (15.8%)	0 (0%)	$\chi^2$ =16.135 df= 1 p= 0.0001
	Inadequate 225 (84.2%)	45 (14.9%)	180 (59.4%)	
Confidence in teaching learners of opposite sex	Confident 122 (40.3%)	120 (39.6%)	2 (0.7%)	$\chi^2$ = 36.396 df = 2 p = 0.0001
	Fairly confident 154 (50.8%)	134 (44.2%)	20 (6.6%)	
	Not confident 27 (8.9%)	8 (2.6%)	19 (6.27%)	
Teaching methods	Discussion 184 (60.7%)	184 (60.7%)	0 (%)	$\chi^2$ =40.337 df = 3 p = 0.0001
	Role play 54 (17.8%)	18 (5.9%)	36 (11.9%)	
	Enquiry 34 (11.3%)	13 (4.2%)	21 (6.9%)	
	Lecture 31 (10.2%)	28 (9.2%)	3 (1%)	

Independent variables	Category	Knowledge adequacy	Knowledge inadequacy	$\chi^2$
Specialized training on HIV education	No training 189 (62.4%)	50 (16.5%)	139 (45.9%)	$\chi^2 = 13.084$ df = 4 p = 0.000
	Certificate 40 (13.2%)	26 (8.6%)	14 (4.6%)	
	Diploma 22 (7.3%)	21 (6.9%)	1 (0.3%)	
	Degree 3 (0.9%)	3 (1%)	0 (0%)	
	Seminar/workshop 49 (16.2%)	13 (4.3%)	36 (11.9%)	
Source of HIV information	Literature 151 (49.8%)	140 (46.2%)	11 (3.6%)	$\chi^2 = 60.716$ df = 2 p = 0.0001
	Media 126 (41.6%)	45 (14.9%)	81 (26.7%)	
	Health facilities 26 (8.6%)	7 (2.3%)	19 (6.3%)	

## 4.7 Discussion

### 4.7.1 Teachers' Special training on HIV/AIDS and knowledge adequacy

The findings that teachers who were specially trained on HIV and AIDS had adequate knowledge on HIV/AIDS education compared well with findings of a study carried out in India on sounds of silence in teaching HIV/AIDS by Boler and Carrol (2004) that 54% of teachers interviewed who reported having adequate knowledge on HIV/AIDS had attended a training course on HIV/AIDS.

The findings that teachers without any training on HIV/AIDS felt inadequate agrees with findings of a study carried out in Kenya and India on obstacles on teaching HIV/AIDS (Boler, 2003). The study showed that 45% of Kenyan teachers did not have adequate knowledge to teach HIV/AIDS compared to 20% of Indian teachers. Majority of teachers in both countries reported never having been on a training course on HIV/AIDS, 70% in India and 54% in Kenya (Boler, 2003). Another study conducted by UNESCO, (2008) on teachers training on HIV/AIDS in Eastern and Western African countries showed that little or no time or resources are being devoted to HIV/AIDS education in pre service or in-service training of teachers.

#### **4.7.2 Sources of information and knowledge adequacy**

The finding that teachers who accessed information on HIV/AIDS from literature had adequate knowledge agrees with findings of a study carried out in Uganda that lack of HIV/AIDS knowledge among teachers was due to limited sources such as literature (Educational International, 2006). However, there is no single source of information, which is adequate on its own. Another study in China by Hsia *et al.* (2008) also found that there is no one source of HIV/AIDS information that was adequate in itself. The more sources of information such as through media, seminars, workshops, health institutions etc a teacher accessed the more adequate a teacher was likely to feel on HIV/AIDS information

#### **4.7.3 Time allocation by given indicators for effective teaching of HIV/AIDS**

From the study findings time allocation seemed to influence teaching of HIV AIDS education where majority of 230 (75.9%) respondents felt time was not adequate. The results of the study agreed with a study carried out by Boler and Carroll (2004) on sounds of silence that teachers do not have enough time to teach about HIV/AIDS.

#### **4.7.4 Teaching approaches and problems encountered in teaching HIV/AIDS**

The most popular method of teaching HIV/AIDS was discussion method. A high number 184 (60.7%) of respondents used discussion method in teaching HIV/AIDS. However, the study by Derebssa (2005) on innovative approaches of teaching and learning employed in primary school in Ethiopia found that most (88%) teachers still use lecture method in most classes. On the other hand 63% of teachers felt that interactive learning approach should be employed in teaching HIV/AIDS to ensure learners connect HIV issues with real life (Derebssa, 2005)

#### **4.7.5 Respondents confidence in teaching HIV/AIDS to learners of opposite sex**

The results that teaching topics such as modes of transmission of HIV/AIDS and methods of prevention such as condom use and abstinence are uncomfortable compared well with the findings of a study by Peltzer and Promtussananon (2008) that most teachers, who were knowledgeable about HIV/AIDS, were moderately comfortable teaching learners on AIDS-related topics. A study by Ahmed *et al.*

(2009) in South Africa and Tanzania found that confidence in teaching HIV/AIDS was associated with teaching experience and sexuality.

#### **4.7.6 Parental attitude and cultural barriers towards HIV/AIDS education.**

Majority of 70 (70 %) respondents had positive attitude and in support of HIV/AIDS education. Only 30 parents (30%) felt that their children should not be taught the subject. This was in agreement with the findings of a study conducted by Sawyer *et al.* (2008) in Palm Beach country schools, Florida that there was a substantial concern among parents regarding the current and future activities of their children and a high level of support for inclusion of specific sexuality and HIV/AIDS topics in the school program. The study also indicated that the parents had a strong belief in the importance of providing skill instructions to avoid pregnancy, HIV and other STDs.

Parents were asked to state how they support the learning of HIV/AIDS education for their children. In addition to providing learning resources such as textbooks to the children; majority (68%) of parents said that they discuss the subject with their children though they avoid some topics on preventive measures such as condom use and abstinence. This finding was supported by the findings of a study by Turnbull *et al.* (2006) that even though parents want to talk to their children about topics related to sexual behaviours, they feel embarrassed, uncomfortable and have neither the skills nor the knowledge to do so. Another study was carried out by Adamshak (2005) to determine parents view on HIV and AIDS and problems facing young people at school showed that parents feel that teachers are more knowledgeable than parents, have specific training and read more, thus can do good job than parents.

Opponents of HIV/AIDS Education in schools felt that they were not prepared to discuss HIV/AIDS at home or other reproductive health topics either due to embarrassment or lack of knowledge. Some parents cited religious or cultural beliefs that prohibit sharing of knowledge on HIV/AIDS with their children. No parent felt the topics of HIV/AIDS were too sensitive to discuss with their children (Adamshak, 2005). Another study carried by Karki (2004) on HIV/AIDS education in schools in Nepal found that parents lacked knowledge and skills to share with their children.

#### **4.7.7 Religion and the Church on HIV/AIDS Education**

The finding that the church performed averagely in supporting the HIV/AIDS education agrees with the findings of a study in Nigeria by Mac Conkey *et al.* (2007) that the church in Africa has lagged in its role of making accessible HIV/AIDS information to members and the society at large. The study also indicated that ministers sited the most important issue in HIV/AIDS in the church is sex education.

#### **4.7.8 Learners Knowledge on HIV/AIDS Education**

On knowledge and attitude towards HIV/AIDS education the results of the FGD indicated that the learners cited the subject as very important in their lives since it equipped them with skills such as ‘chilling’ in prevention of spread of HIV/AIDS.

The results that pupils had joined chill club or peer educator club in their schools, agrees with the findings of a study in Tanzania by Temu *et al.* (2005) that peer education on HIV/AIDS improves pupils knowledge, facilitates discussion of sensitive issues give pupils life skills and contributes to preparing the way for healthy behavior in later life

Another study on HIV education in Tanzania by Cyprian *et al.* (2009) showed that all children in-school and out-of-school demonstrated low levels of HIV knowledge, low experience with condom use and low intentions to use condom. The children exhibited moderate perceived behavior control in condom use and value of sexual abstinence. Contrary to expectation, there were no significant difference between those children in school and those out of school with regard to HIV knowledge, condom use and abstinence

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Overview**

This research study sought to establish the factors that influence implementation of HIV/ AIDS education component of curriculum in primary schools. The study was carried out in public primary schools within Nairobi Province. Presented in this section are the summary, conclusions and recommendations of the study. The section ends with suggestions for further research.

### **5.2 Summary of the Research Findings**

The study analyzed four issues, namely; the extent to which level of knowledge, how time allocated to teach HIV/ AIDS affects its implementation; the extent to which methods of teaching influenced effective implementation of HIV/ AIDS component in the curriculum. Therefore the objective of the study was met

The findings of the study indicated that the implementation of HIV/AIDS component of the curriculum is not effective. Most of the teachers were cognisant of the fact that HIV/ AIDS lessons have been integrated into the curriculum. Teachers in different schools under study implemented the policy to integrate HIV/ AIDS into the primary school curriculum differently. Whilst some opt at HIV/ AIDS education is integrated in other subjects, others taught it during PE lessons, others set aside one lesson to specifically teach the subject while at the same time also infusing it in other subjects and others were unsure about the number of lessons in a week allocated to HIV/ AIDS education. Additionally, some of the respondents stated that the duration of HIV/ AIDS lessons depends on the level of education and others stated that no time is allocated as they are infused within the lesson with the duration ranging from 30 minutes to 40 minutes per lesson.

The fact that HIV/AIDS education is not examinable seemed to have a bad influence on the weight the teachers gave the subject some opting to teach other subjects instead. Some of the hindrances to effective implementation of the HIV/AIDS component of the curriculum were, majority of teachers lacked adequate knowledge on HIV/AIDS, lack of adequate resources and minimal time allocated to teaching of HIV/AIDS education. Different methods of teaching such lecture, discussion, role

play should be employed in teaching HIV/AIDS because the strength of one method will compensate the weaknesses of the other.

### **5.3 Conclusion**

- i. Implementation of HIV/AIDS component of curriculum in primary schools is not effective.
- ii. The implementation of the HIV/ AIDS curriculum in primary schools is not in harmony making the right judgment of the implementation status difficult.
- iii. Lack of adequate knowledge on HIV/ AIDS among teachers, limited resources and minimal time allocated for teaching HIV/AIDS negatively influenced the implementation of HIV/ AIDS curriculum in primary schools.
- iv. Although discussion method was the most preferred method of teaching HIV/AIDS other methods such as role-play, enquiry method and lecture method are important.

### **5.4 Recommendations**

To reduce the spread of HIV among pupils in primary schools in age group 5-15 years, this study recommends the following to the Ministry of Education and other stakeholders.

- i. The government should make sure the implementation of HIV/AIDS component of curriculum in primary schools is harmonized to make assessment easy.
- ii. An in-service course for teachers on HIV/AIDS should be introduced at the teacher training colleges, with a view of: breaking the silence that perpetuates the AIDS pandemic, teaching future teachers to respond to the AIDS pandemic with care, compassion and confidence, empowering and equipping teachers not only to deal with the 'infected' learners, but also the 'affected' ones, strengthening leadership capacity in teacher education institutions, schools and communities to address HIV and train-the-trainer: They will be able to build training networks by transferring their skills to other educators. Methodology to be adopted should include; blended learning approach and interactive learning.

- iii. The government through the ministry of education and KIE to provide resource materials such as text books at every level of learning in schools so as to provide quality education.

### **5.5 Suggestions for Further Research**

- i. The study covered only one Province. There is need to extend the study to other provinces in the country. This will help find the relationship or difference in factors affecting performance in different regions.
- ii. The research may be replicated in the secondary school section.

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## 6.0 APPENDICES

### 6.1 CONSENT

#### **FACTORS INFLUENCING HIV/AIDS EDUCATION CURRICULUM IMPLEMENTATION IN PRIMARY SCHOOLS. A CASE STUDY OF NAIROBI PROVINCE.**

##### **Introduction.**

I am Jane Kingori, a student at Kenyatta University pursuing a Masters programme in Public Health. The purpose of the study is to find out how HIV/AIDS education is being implemented in schools. The information will be used for the purpose of the study only and will be treated with confidentiality. You are therefore requested to consent by signing.

Sign \_\_\_\_\_

## 6.2 QUESTIONNAIRES

### FACTORS INFLUENCING HIV/AIDS EDUCATION CURRICULUM IMPLEMENTATION IN PRIMARY SCHOOLS. A CASE STUDY OF NAIROBI PROVINCE

**Instructions:** Tick the correct answer, be brief and truthful.

#### Details of Respondents

1. Gender. \_\_\_\_\_
2. How old are you? \_\_\_\_\_
3. Marital status . \_\_\_\_\_
4. Which religion do you belong to? \_\_\_\_\_
5. What is your highest level of academic achievement? \_\_\_\_\_

#### Knowledge on HIV/AIDS

6. Do you teach HIV/AIDS lessons in the school?
7. Why? \_\_\_\_\_
8. Are you specifically trained in HIV/AIDS education?
  - a) Yes            b) No.
9. If No, how did you get information on HIV/AIDS?
  - a) Literature (books, newspaper, pamphlets)
  - b) Media (Radio, TV)
  - c) Health facility.
10. If (7) is (Yes) to which level are you trained?
  - a) Certificate   b) Diploma   c) Degree   d) Workshops/Seminars
11. Do you feel you have adequate knowledge to teach HIV/AIDS education?
  - a) Yes            b) No
12. Do you encounter some problems in teaching HIV/AIDS education?
  - a) Yes            b) No

If yes state them \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Time Allocation**

13. a) About how many lessons in a week is HIV/AIDS education allocated?  
\_\_\_\_\_
- b) How long is a lesson? \_\_\_\_\_
14. Do you teach all the lessons on HIV/AIDS as intended?  
a) Yes      b) No
15. Why? \_\_\_\_\_
16. In your own opinion do you feel this time is adequate?  
a) Yes      b) No
17. If No explain \_\_\_\_\_
18. Do you teach all the topics in the syllabus?  
A) Yes      b) No
19. Are there some topics that you feel uncomfortable when teaching?  
a) Yes      b) No
20. If Yes, explain \_\_\_\_\_
21. a) Would you opt to teach another examinable subject during HIV/AIDS lessons?  
a) Yes      b) No
- b) If yes, why? \_\_\_\_\_
22. Now that HIV/AIDS education is not examinable do you assess if learners acquire necessary knowledge on the subject?  
a) Yes      b) No
23. If No, Why? \_\_\_\_\_

**Cultural Factors**

24. During your teaching in this school has there ever been a situation where a parent(s) feels their children should not be taught HIV/AIDS education?  
a) Yes      b) No
25. If yes what reasons did the parents cite? \_\_\_\_\_
- 
26. How would you rate teaching of HIV/AIDS education in this school?  
a) Poor      b) Fair      c) Good
27. How confident/comfortable are you when teaching the subject to students of opposite sex?

- a) Uncomfortable    b) Comfortable    c) Fairly comfortable

28. Explain \_\_\_\_\_

29. What do you think can be done to enable you to teach better regarding this subject?

\_\_\_\_\_

30. Generally, what is your opinion on HIV/AIDS education in school

\_\_\_\_\_  
\_\_\_\_\_

**Mode of teaching**

31. Do you have adequate resource material in teaching HIV/AIDS?

- a) Yes            b) No

32. If yes are they age- appropriate?

- a) Yes            b) No

33. What teaching approaches do you employ in teaching HIV/AIDS?

- a) Role-play
- b) Discussion
- c) Enquiry method
- d) Lecture method
- e) Any other \_\_\_\_\_

34. How often do you test learners on the subject? \_\_\_\_\_

Specify \_\_\_\_\_

35. Is there anything that you feel the Ministry of Education needs to do to enhance learning of HIV/AIDS?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### 6.3 INTERVIEW SCHEDULE FOR PARENTS

#### Details of Respondent

1. Indicate gender of the respondent. \_\_\_\_\_
2. How old are you? - \_\_\_\_\_ -
3. Marital Status. \_\_\_\_\_ -
4. Which religion do you belong to? \_\_\_\_\_
5. What is your highest level of academic achievement? \_\_\_\_\_
6. Have you heard about HIV/AIDS education? a) yes b)No
7. If yes what do you know about the subject?  
\_\_\_\_\_  
\_\_\_\_\_
8. In your opinion, do you think that this subject is important to children?  
(a). Yes (b). No
9. If yes, why? \_\_\_\_\_
10. Do your children discuss this subject with you after school?  
(a). Yes (b). No
11. If yes, in what areas? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
12. What do you as a parent do to support your child in learning of HIV/AIDS education?  
\_\_\_\_\_  
\_\_\_\_\_
13. What is your feeling on teaching of topics touching on preventive measures of HIV  
such as condom use?  
\_\_\_\_\_  
\_\_\_\_\_
14. In your opinion is this education reaching other community members who are not in  
school?  
a) Yes b) No
15. Does the local community support the school in the reaching the subject?  
a) Yes b) No
16. How? \_\_\_\_\_  
\_\_\_\_\_



### 6.4 church leaders interview schedule.

#### a. Details of Respondent

1. Indicate gender of the respondent. \_\_\_\_\_
2. How old are you? \_\_\_\_\_
3. Marital Status. \_\_\_\_\_
4. Which religion do you belong to. \_\_\_\_\_
5. What is your highest level of academic achievement?
6. Have you heard of HIV/AIDS education in schools?
  - (a). Yes
  - (b). No
7. What do you know about the subject? \_\_\_\_\_
  8. Is the Church taking any active role in supporting of HIV/AIDS education in schools?
    - (a). Yes
    - (b). No
9. If yes which role is it taking? \_\_\_\_\_ -
10. How would you rate the role the church is taking in support of HIV/AIDS education?
  - (a). Low.
  - (b). Average.
  - (c). High.
11. In your opinion is there anything you feel the MOE needs to do to support the education sector in preventive education on HIV/AIDS?
  - (a). Yes
  - (b) No
12. If yes what? \_\_\_\_\_

## 6.5 Sponsors' interview schedule

### Details of Respondents

1. Indicate gender of respondent. \_\_\_\_\_
2. How old are you? \_\_\_\_\_.
3. Marital status. \_\_\_\_\_
4. What religion do you belong to? \_\_\_\_\_
5. What is your highest level of academic achievement? \_\_\_\_\_
6. Have you heard of HIV/AIDS education? \_\_\_\_\_
7. As a sponsor how do you support the teaching of HIV/AIDS education \_\_\_\_\_
8. Are there obstacles that you feel, in your opinion influences the implementation of this education? \_\_\_\_\_
9. In your opinion is teaching of AIDS education effective in your school? \_\_\_\_\_
10. Is there anything that you feel the government should do for effective implementation of the subject?
  - a) Yes
  - b) No
11. If yes what is it?

## 6.6 FOCUS GROUP DISCUSSION FOR PUPILS

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1. Generally what is HIV/AIDS?
2. What causes HIV/AIDS?
3. Is there a cure for HIV/AIDS? Probe  
Do ARV drugs cure HIV/AIDS?
4. In your own view what can one do to prevent him from contracting HIV/AIDS?  
Probe  
Use of condoms and abstinence.
5. How did you acquire this knowledge on HIV/AIDS? Probe  
In Church  
In School
6. In the school we learn many subjects. How do you rate HIV/AIDS education as a subject? Probe  
Is it boring?  
Is it useful to you?
7. Do you share HIV/AIDS messages that you learn in school with your peers?  
Probe  
What kind of messages?  
How the messages help you?
8. Which topics do you learn in HIV/AIDS lesson?
9. How do you fill about topics on preventive measures of HIV/AIDS such as condom use and abstinence

6.7 AREA OF STUDY

