UNDERSTANDING THE IMPACT OF HIV/AIDS ON EDUCATION IN SUB-SAHARAN AFRICA

KENYA

–

COUNTRY REPORT

April 2003

Institute of Education, University of London
And
Department for International Development

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ACU	AIDS Control Unit
CBS	Central Bureau of Statistics
CBO	Community Based Organization
CSW	Commercial Sex Workers
DASCO	District Aids Control Officer
DEB	District Education Board
DfID	Department for International Development
GoK	Government of Kenya
HIV	Human Immune Deficiency Virus
KANCO	Kenya AIDS NGO Consortium
KAP	Knowledge Attitude and Practices
KEMRI	Kenya Medical Research Institute
MoH	Ministry of Health
NACC	National AIDS Control Council
NASCOP	National AIDS and STI Control Programme
NGO	Non-governmental organization
Orphan	A child under age 18 years who has lost one or both of her/his parents
RoK	Republic of Kenya
PTA	Parents Teachers Association
STD	Sexually Transmitted Disease
VCT	Voluntary Counseling and Testing
UNAIDS	United Nations Joint Programme on HIV/AIDS

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EXECUTIVE SUMMARY

The study on understanding the impact of HIV/AIDS on education sector was commissioned by Department for International Development (DfID) and contracted to Institute of Education, University of London. The study covers four countries (Kenya, Uganda, Tanzania and Madagscar). The Institute subcontracted Fibec Limited for the Kenya study. The main focus of the study was on primary schooling.

The purpose of the study is to improve our understanding of the current impact of HIV/AIDS on primary education in four Eastern and Southern African countries. The study uses Kelly's (2000) framework, which identifies potential ways in which education systems are affected by HIV/AIDS. Using a selection of his categories the study is designed to assess the impact at both national and local levels through the collection of empirical data on the teaching force and the situation of orphans in each country. It also assesses the actual impact on students and schools in a small number of communities and additionally on the changes in community responses to HIV/AIDS.

The focus is not only on assessing the impact, but also to consider the existing potential for collecting reliable information routinely. In order to examine these empirical issues the research is limited to three specific aspects.

- The current and projected impact on the teaching force of death and sickness in different administrative areas of each country
- The nature and extent of orphan participation in primary schooling
- The data on attendance of teachers

We set out to assess the potential for collecting reliable information about teacher illness, attendance and productivity through examining personnel registers, which are an under-exploited resource. We also explored the possibility of collecting detailed information on orphans through exploiting existing orphan databases such as those constructed by governmental and non-governmental agencies and from school information.

In addition to the above aspects, which were contained in the original proposal, the joint national research teams at our first meeting decided to expand the proposed community studies to include modified knowledge attitudes and practices (KAP) studies with school pupils, teachers and community representatives. Initially we had planned to carry out local studies, limited to focus group discussions and qualitative interviews. The additions gave access to information on how the quality of education delivered and learning received has been affected by the pandemic through the collection of more than just basic data on attendance. It allowed us to include discussions with teachers, pupils, parents and community leaders. This was considered both timely and relevant in that detailed knowledge of the interactions and issues surrounding HIV/AIDS in schools might provide some insight into the so called "generation of hope" and highlight some of the factors that need to be considered in order to provide a meaningful educational experience for them.

Methodology

A combination of literature review, stakeholders' consultations, KAP surveys, collection of quantitative data using structured questionnaires and focus group discussions were used in the study. The consultants benefited from recent studies undertaken by Futures Group and UNICEF on HIV/AIDS and the education sector in Kenya. Other important sources of information were UNAIDS reports, World Bank reports, NASCOP reports and gray literature from NGOs.

Four districts were visited and interviews conducted in three schools in each district among teachers and pupils using both structured questionnaires and focus group discussions (FGD). The schools were selected in consultation with the District Education Office (DEO) to ensure a fair representation of the socio-economic strata in each district. Information from the communities was collected using FGD. Prior to the survey, the survey instruments were pre-tested in a school outside the four districts.

In each school the questionnaires were administered to twenty pupils (10 girls and 10 boys) and a maximum of 8 teachers depending on the number of teachers in the school. A mixture of age groups, sex and marital status was considered in selecting the teachers' sample to participate in the survey. The same group was also taken through a FGD. At the end of the day, the researchers held joint assembly with all teachers and pupils and demonstrated HIV virus transmission through drama. This forum was also used to gauge the level on knowledge of HIV/AIDS among all pupils.

In administering the structured questionnaires, the researchers made sure that the pupils were seated as far from each other as possible for confidentiality. The pupils were instructed on the purpose of the survey and the need to be as truthful as possible. They were assured that answers would not be attributed to any of them or their schools' as there was not space to write their names or the school's name. The questionnaires were structured in a similar manner to their normal class examination questions, complete with choices for each question (see appendix IV).

Two research assistants were involved in assisting the pupils to complete the questionnaires. The researchers would read out the questions and options and interpret them in Swahili and in some cases in local language. They would then give the pupils time to mark the correct choices before moving on to the next question. The community representatives were only taken through group discussion of various topics.

As with the pupils, the researchers read out the questions to the teachers and elaborated either in English or Kiswahili before the teachers would complete the questions. School head teachers completed a two page questionnaire with assistance from the lead national consultant. The information collected related to teachers' records (deaths, retirements, transfers, absenteeism etc.), information on cost of school financing, orphans in the school and general opinion on teachers and pupils in the school.

We showed HIV/AIDS and sexually transmitted diseases video tapes borrowed from UNICEF and Ministry of Education to pupils, teachers and the parents. General school assemblies were also held in each school in which general HIV/AIDS topics were discussed with the entire school.

The study covered four districts in Kenya, three of which have high HIV prevalence rates and one with low preference rates. In each district three schools were covered. They were selected to ensure representation of rural and urban, multi-ethnic, and multi-religious groups. In each school twenty pupils of class 4 – 8 were interviewed, up to 8 teachers were interviewed depending on number of teachers in the school and between 8 – 15 community representatives interviewed in each school.

Structured questionnaires and focus group discussions were the main study instruments used. In addition head teachers, district school administrators completed detailed questionnaires on teachers absenteeism and attrition within their schools and selected schools for district school administrators respectively.

Main Findings

The results show high levels of orphans in the schools, high levels of teachers deaths and retirements in the last seven years.

The level of knowledge of HIV/AIDS was high among pupils, teachers and the community. However, the quality of knowledge differed between regions, schools, pupils, teachers and the community members. In general the quality of knowledge would be classified as low. The level of stigma on HIV/AIDS is still high among pupils, teachers and communities as exemplified by their responses on how they would relate and/ or interact with those perceived to be HIV positive.

The use of condoms was not fully acceptable by communities, teachers or the pupils. However, a large number said they were not opposed to use of condoms. Some pupils reported having used condoms during sexual intercourse.

The cost of education was increasingly becoming unbearable to communities as a result of increased cases of AIDS deaths, which resulted in high numbers of orphans in schools. Increased costs to community were associated with; deaths of community members who were important contributors to school development, understaffing which forced communities to hire their own teachers, high levels of orphans in schools which translated to high demand on remaining school parents, increased expenses on medical and funerals on the community which diverted resources from school development and time wasted in attending funerals. There were very few structures to support orphans to ensure that they were able to continue with schooling.

The quality of data kept by school heads and district administrators on teachers attendance, information on orphans and their actual numbers, teachers attrition was lacking in a number of aspects and there is need to come up with formal data gathering and management on orphans in schools and their state/ participation in schooling, teachers attendance and attrition. This was due to the fact that schools and education administration offices lacked capacity to routinely keep detailed data on a number of the variables of interest to the study. Data on teachers deaths was available in many offices but was not detailed enough to make a good judgment as to probability of the deaths being AIDS related. Equally data on teachers' retirement was available but lacked some important details.

Data from head teachers' records on teachers' absenteeism was the most unreliable as it contradicted that collected from teachers in the same school using structured questionnaires. In most cases the teachers reported high rates of absenteeism than recorded in the head teachers' data form. Equally schools did not keep reliable data on orphans in their schools except in cases where NGOs and other organizations had in the past requested such data.

The level of sexuality among school pupils was very high as can be seen in the summary data below. Age at first sexual intercourse was also very low.

The Average Age at First Sexual Intercourse by Region and Sex

District	Boys	Girls
Kisumu	9.73	10.86
Nakuru	10.00	9.80
Makueni	8.60	9.00
Thika	13.67	12.14

Source: survey data

When the pupils were asked if they knew of close class friends who had already had sexual intercourse, 34.7% said they knew at least two. There were more boys than girls who knew at least two close friends who had had sexual intercourse. Girls were mainly lured into sex through peer pressure, enticement with gifts such as money, sweets, and buns. Majority of the pupils who reported to be sexually active were having sex with their age-mates. Most of the sex activities were consensual.

All schools were teaching HIV/AIDS topics although some said they were yet to receive teaching material. While teachers said they were comfortable teaching most of the HIV/AIDS topics, some said they were not. Teachers complained of lack of sufficient training on HIV/AIDS, which compromised their effectiveness in teaching the subject.

Majority of the pupils said they would prefer to ask re-productive health questions to their mothers in case of girls or fathers in case of boys. The pupils ranked their teachers third in terms of choice of people they would turn to if they had questions of sexual nature.

Views on teachers suspected to be HIV positive varied from one group of the community to the other. Overall school management was rated as the most accommodating to teachers suspected to be HIV positive, while local community ranked lowest. There was no significant difference between teachers and pupils' attitude towards teacher suspected to be HIV positive.

Majority of the teachers said that pupils whose parents had died of AIDS had more problems and usually dropped out of school. This finding is collaborated by our findings from interviews with orphans in various schools visited, where cases of orphan headed households, and of children who could not even access sufficient food, uniforms and books were found.

Schools kept no records of orphans unless such records had been requested by some development agency.

Recommendations

There is need to have a simple mechanism of tracking down school participation by all pupils. Such data should include enrolment in each class by age and sex, parental status (whether child has parents, single parent, single orphan or double orphan). In addition class absenteeism by pupils need to be closely monitored using the same parameters as outline above.

Dropout rates should also be captured and reasons for dropping out clearly indicated. Simple codes for reasons of dropping out could be developed and used in all schools. Such codes as; financial, pregnancy, orphaned, medical etc. could be used.

A simple method should also be developed between individual schools and the local communities to monitor lives of children who become orphaned when in school, including those who dropout of school due to orphanage. The information gathered should be geared towards not only finding ways of assisting orphaned children but also preventing further dropouts of orphaned children from schools.

Schools should also be encouraged to keep data on teachers participation in terms of absenteeism (with clear reasons given), turnover, attrition (including reasons). Although schools are already required to keep these records, their accuracy is highly questionable. The data should also include information on age, marital status and sex of the teachers.

It is recommended that the data be sent on a monthly basis to the District Educational Offices for analysis before being forwarded to the ministry headquarters.

Communities, schools and other development agencies such as NGOs need to work out modalities of supporting the ever increasing numbers of orphaned children. This will reduce the level of dropout rates as well as address social stress being faced by orphaned children. Each community should evolve its own model based on their culture and traditions so that it does not socially destabilize the child.

The government and other development agencies need to capture data on increased cost of schooling to communities brought about by HIV/AIDS impact and come up with modalities to cushion communities from these effects.

The high levels of stigma on HIV/AIDS among teachers, communities and pupils need to be addressed. For example teachers said that they did not feel free in discussing the HIV/AIDS because of the stigma associated with it. In schools were there were suspected cases, the stigma was even more evident. Teachers said that whenever a teacher who was suspected to be HIV positive walked into staff room there would be immediate silence, which made the suspect teacher feel isolated. Teachers also said that they felt embarrassed in handling some of the topics in the AIDS books, one topic that was mentioned was "myself" in the class 5 handbook.

High turnover of school management was said to be hurting schools in terms of performance, teachers and management relationships and community and school management relationships. The ministry should therefore ensure that head-teachers on posting stayed in schools long enough to create rapport and ensure stability in school management.

HIV/AIDS awareness needs to be beefed up in schools through increased teachers training and provision of training materials to schools. Joint activities between schools and communities should be developed to combat HIV/AIDS. This is based on the realization that the schools are part and parcel of the communities in which they are located and that targeting schools in isolation of the community will be futile.

Use of none classroom chalk and blackboard type of teaching may not bring out desired results in combating HIV/AIDS in schools and therefore there is need to come up with more participatory life skills teaching methods. Classroom lectures are more associated with passing exams rather than addressing issues of behavioral change. Furthermore since pupils were found to have their own perceptions of HIV/AIDS, how it is transmitted, how to combat it etc., there is need to built on these knowledge bases in developing teaching materials for the youth.

The early onset of sexual activities among the youth and especially girls poses a great danger as they are most vulnerable due to lack of knowledge of use of protective measures and their low bargaining power. Hence efforts should be made to ensure that the girl child is educated on the dangers of early sexuality. Conditions that make the girl child vulnerable to sexual abuse of early sexual activity should be addressed.

PART I

1 HIV/ AIDS IN KENYA

The first case of HIV AIDS in Kenya was diagnosed in 1984. Since then, both HIV infections and AIDS cases have grown exponentially. By 1998 it was estimated that 13.9 % of the population was HIV positive and that 106,621 children were HIV positive (NASCOP, 1999). The national AIDS/ STD Control Programme (NASCOP) acknowledges that only a fraction of AIDS cases are officially reported. Official statistics show that there were 1,944,623 HIV positive cases in Kenya in 1998 up from 513,941 reported in 1990, an increase of 378%). Previous reports had projected a total of 1.9 million HIV positive Kenyans by 2005, but this figure is already attained by 1998 (see table 1 below).

Table 1: National HIV Prevalence Trends (1990 - 1998)

Year	National HIV Pre.	No. Of Adult HIV+	Urban Adult HIV Prev	No. Of Urban Adult HIV+	Rural Adult HIV Prev.	No. of Rural Adult HIV+	HIV + Children	Total HIV + Populati on
1990	4.8%	485,762	8.8%	144,422	4.1%	341,340	28,179	513,941
1991	6.1%	636,625	10.5%	180,618	5.3%	456,006	36,930	673,555
1992	7.4%	798,119	12.0%	216,941	6.5%	581,178	46,298	844,417
1993	8.7%	965,910	13.4%	252,721	7.7%	713,190	56,032	1,021,942
1994	9.9%	1,136,066	14.5%	287,615	8.9%	848,451	65,902	1,201,968
1995	11.0%	1,305,056	15.5%	321,490	10.0%	983,566	75,705	1,380,761
1996	11.9%	1,469,832	16.3%	354,333	11.0%	1,115,500	85,264	1,555,096
1997	12.8%	1,627,975	16.9%	366,198	11.9%	1,241,777	94,438	1,722,412
1998	13.9%	1,838,002	18.1%	432,756	13.0%	1,405,246	106,621	1,944,623

Source: NASCOP 1999

Table 2 below illustrates the reported AIDS cases by province from 1994 – 2000. As it can be seen Nyanza and Eastern province are the leading provinces in AIDS cases in the country.

Table 2: Reported AIDS Cases by Province of Birth 1994 – 2000

Province	1994	1995	1996	1997	1998	1999	2000
Nairobi	2,933	443	396	224	247	129	14
Coast	6,077	310	283	241	162	253	44
Eastern	8,650	2,113	1,634	1,474	1,480	1,536	189
N. Eastern	195	53	24	22	46	49	0
Central	4,946	1,424	763	1,132	682	894	62
Nyanza	18,398	2,264	1,558	1,216	1,690	1,694	66
Rift Valley	4,612	1,391	1,276	1,156	886	714	51
Western	5,299	908	904	522	463	441	7

Source: NASCOP 1999

The Ministry of Health 2001 report (RoK, MoH, 2001) on HIV prevalence rates in Kenya gives the 10 leading districts and their prevalence rates as follows;

Kisumu	28%
Nyando	28%
Bondo	27%
Homa Bay	27%
Kuria	27%
Migori	27%
Rachuonyo	27%
Siaya	27%
Suba	27%

All the top 10 districts bordering Lake Victoria and are in Nyanza Province. Bondo, and Nyando districts were hived from Kisumu district in mid 1990s. Other leading districts in HIV prevalence are presented below and they are all in Eastern Province.

Embu	26%
Mbeere	26%
Meru Central	26%
Meru North	26%
Nithi	26%
Tharaka	26%

Nithi, Tharaka, Meru Central and Meru North were hived from the greater Meru district in mid 1990s. Embu and Mbeere border Meru to the South.

Prevalence rates for other districts other than Kisumu that were covered during the field survey are; Thika – 17%, Makueni – 12%, and Nakuru – 25%. Makueni therefore represented a district with low infection rates but on the threshold of joining the districts with high infection rates as it is traversed by the Nairobi –Mombasa highway and has numerous truck stops. Although Thika district does not show high infection rate compared to Kisumu and other highly infected districts, the municipality has an infection rate of 22.8% and borders some of the schools that were covered during the survey. The infection rates for Kisumu district by sex and age group are presented below

HIV Infection Rates in Kisumu District

Age Group	Sex	Rate
15 – 19	Girls	22%
	Boys	5%
20 – 24	Female	38%
	Male	12%
25 – 29	Female	37%
	Male	28%
30 – 39	Female	30%
	Male	33%
40 – 49	Female	17%
	Males	27%

Source: Kisumu district AIDS Coordinator

In Kisumu district among those who seek treatment for STDs over 40% are HIV positive, while among commercial sex worker (CSW) over 75% are HIV positive. Bed occupancy rate by HIV/AIDS patients in the district hospital is over 60%. In Kisumu district, the local education office estimates that primary school teachers are dying at the rate of 4 per week and that the rate of school enrollment in primary schools has been dropping since 1999 (Kisumu Education Office, November 2001).

1.1 Methods Used to Monitor HIV/AIDS Cases in Kenya

Kenya uses a sentinel surveillance system that provides the basis for estimating the extent and trends of HIV infections (MoH, 2001). The system operates in 12 urban and 8 peri-urban or rural sites around the country. The sites are antenatal clinics, where pregnant women go for care during pregnancy. Each year, women in each site are anonymously tested for HIV (MoH, 2001). The results are sent to NASCOP. The University of Nairobi and the Kenya Medical Research Institute (KEMRI) conduct additional testing. Random blood testing for those who seek treatment for sexually transmitted infections from selected sites is also carried out. Blood donations also form a small part of sources of information on status of HIV/AIDS in the country. The ministry of health has also established voluntary counseling and testing centers (VCTs) for those willing to undergo a voluntary test.

1.2 Impact of HIV/AIDS on the Kenyan Economy

The impact of HIV/AIDS on various sectors of Kenyan economy has been researched for quite sometime now. Two studies have been conducted on HIV and education sector, one looking at the impact of the pandemic on education (UNICEF) and another by Futures Group looking at the implication of HIV/AIDS on education planning (Goliber, 2000). The UNICEF study was largely qualitative and did not generate quantitative data on actual impact of the pandemic on orphaned children, teachers or the communities. The Futures Group study looked more at secondary information and provided projections on the expected numbers of AIDS/HIV cases and their implication to education planning. A study by FAO looking at the commercial agriculture sector (Rugalema et al), predicted the collapse of the commercial agriculture sector especially the sugar industry if no actions were taken to prevent the spread of the pandemic. The study was able to show erosion of company profits, caused by increased absenteeism, increased medical and funeral costs, decline in quality and quantity of cane production and loss of specialized manpower.

The most severely affected sectors of the Kenya's economy by HIV/AIDS are; Health, Education, Military, Transport and Agriculture (MoH, 2001). These sectors have been affected in various ways. The education sector has been affected through reduced demand for education as infected children do not live up to enrollment age, while he affected are forced to drop out of school to take care of sick parents or just as orphans when their parents die (MoH, 2001). Teachers' deaths or retirements related to AIDS have increased over the years.

According to a World Bank strategy report of 1996[4], a Kenya company spent about US$45 per employee per year for HIV/AIDS related costs or 3% of company profits. The report further noted that in 1992, an average company in Kenya incurred mean annual costs associated with AIDS of

[4] World Development Sources

approximately US$140,000. In a study by the Futures Group in Kenya on Implications of HIV/AIDS on education planning in Kenya, it is shown that the number of teachers dying per year increased from 450 in 1995 1400 in 1999.

Overall, studies have shown that in 1991, the total cost of AIDS to the country ranged between 2 and 4 percent of GDP, but this was estimated to increase to 15 percent in year 2000 (MoH, 2001).

In 1992, the Ministry of Health estimated that, people suffering from AIDS related illnesses occupied 15 percent of hospital beds in the country. In some districts such as Kisumu, AIDS cases are estimated to occupy up to 70 percent of the hospital beds (MoH, 2001).

1.3 Education System in Kenya

The Kenya formal education is structured in a four tier system; Pre-Primary school, Primary school, Secondary School and Tertiary. There were an estimated 25,429 Pre-primary institutions in the country in 1999. The pre-Primary education is for a period of 2 years and entry age is between 3 – 6 years.

There were an estimated 17,623 Primary schools in the country in 1999. Primary school enrollment is legally for those aged 6 years and above. The age limit is observed in mainly public schools and in some religious run schools. In private schools the limit is not enforced. Primary school education lasts for a period of 8 years. Enrollment in primary schools has increased from 5,031,340 to 5,867,800 between 1987 and 1999. The age bracket for primary school enrollments in the country is between 6 years and 18 years. Between 1998 and 1999, there was an estimated decline of primary school enrollment of 0.8 percent. The decline is attributed to cost sharing in education, perceptions of declining returns to education as an investment and declining fertility rates as a result of increased family planning awareness (CBS, 2000). Although the increased number of orphaned children who are dropping out of school is not mentioned as a cause of decline, it is expected that it has played a major role in the decline in enrollment (MoH, 2001).

There were an estimated 3,197 secondary schools in the country in 1999. Enrollment in secondary schools was estimated at 638,509 in 1999 of which 337,360 were boys and 301,149 were girls. This is compared to a 1998 enrollment of 700,538 representing a decline of 8.8 percent. The government attributes the decline to increased cost of education (CBS, 2000).

There are both mixed as well as single sex secondary schools in the country, in addition there are boarding, day and boarding and purely day secondary schools in the country. In the area of tertiary education we have diploma colleges, technical colleges that offer certificates in various trades, teachers training colleges offering either certificates or diplomas. In addition we have universities, both public and private which offer degrees from undergraduate level up to PhD level.

1.4 Efforts to Combat HIV/AIDS in Education System

The Ministry of Education, Science and Technology (MoES&T) and the National AIDS and STDs Control Programme (NASCOP) are dedicated to using the education sector to combat HIV/AIDS in Kenya. The ministry launched a UNICEF-supported AIDS Education Project in 1992. The objectives of this project were to (1) strengthen the capabilities of the ministry to implement HIV/AIDS programs; (2) sensitize and train education sector personnel to organize and implement HIV/AIDS activities at provincial, district and school levels; (3) design and develop educational materials to assist teachers to carry out AIDS education and activities; and (4) institutionalize collaboration between the Ministry of Education, Science and Technology and other public and private sector organizations.

As was typical of early efforts, these were largely pilot programs. Under the current version of the AIDS Education Project, efforts are being made to expand the earlier programs to encompass all of Kenya. Both MoES&T and NASCOP staff believe that the education sector is making rapid strides in scaling up programs to national level, particularly in the areas of materials development and distribution and teacher training. They believe that the major challenge now is to expand and strengthen these programs to maximize the impact the education sector can have on changing the course of the HIV/AIDS epidemic in Kenya.

Kenya's policy response to HIV AIDS has gone through a number of phases since the first case was diagnosed in 1984. During the first period 1984 – 1987, there was a period of denial and general sense that the disease was a Western problem especially among the gay community. Such risk groups did not exist in Kenya. In 1985 a National Aids Council was created, but it was without resources and for the next two years it never met. In 1987 the National AIDS/ STD Control Programme was created under the Ministry of Health. Limited HIV/AIDS awareness campaigns were started with support from Kenya Red Cross and Red Crescent (AIDSCAP/FHI).

In 1997 the government formulated a comprehensive policy on the disease (Sessional Paper No. 4 of 1997 on HIV/AIDS in Kenya). This policy document called for formation of a National AIDS Control Council (NACC) among other recommendations. It recommended a multi-sectoral and participatory approach in tackling the spread of HIV/AIDS in the country. Thus all sectors of the society were invited to join the effort against AIDS. Social-cultural issues were also to be addressed in order to tackle those cultural issues, values and beliefs that may hamper the fight against the spread of the pandemic.

The NACC was established as a body corporate under the State Corporations Act by presidential order in Legal Notice No. 170 of 26 November 1999. The Council is expected to provide strong leadership and to coordinate the multi-sectoral response. A National HIV/ AIDS Strategic Plan has been developed for 2000 – 2005 period to provide sound policy and institutional framework and to ensure the HIV/AIDS Strategic Plan and policies are integrated into the agenda and the core process of entire government of Kenya.

The Strategic Plan has three key specific targets;

- to reduce HIV prevalence by 20 to 30 percent by the year 2005
- to increase access to care and support for the people infected and affected by HIV/AIDS
- to strengthen institutional capacity and coordination at all levels.

Within the government structure, each Ministry has formed an AIDS control unit (ACU), which is supposed to coordinate the implementation of the strategic plan. The ACUs provide proactive leadership and advocate NACC policies to ensure that priorities on HIV/AIDS prevention and control become integrated into the mainstream of ministry functions (MoH, 2001).

Other players include over one thousand NGOs and community based groups all over the country formed to fight the spread of the pandemic. The NGOs started addressing HIV/AIDS when the government was still either in denial stage or undecided on what to do and when. Majority of these NGOs operate in areas that are considered to have high prevalence rates of HIV infections. These areas include, Nyanza and Western province, Nairobi, and some parts of Eastern and Rift Valley provinces. There are also quite a number of child support NGOs, and children homes that have mushroomed all over the country in response to increasing number of AIDS orphans, now estimated at between 850,000 and 1,000,000. Only a few of these homes have well equipped and manned facilities.

1.5 Interventions for Prevention of Spread of HIV

There are about seven key strategies adopted in Kenya for prevention of transmission of HIV virus.

Heterosexual Transmission	Abstinence and faithfulness Reduction in number of sexual partners Delay in onset of sexual activity Use of condoms STD control
Voluntary Counseling and Testing	Provision of accurate whole blood tests from a finger prick in 10 – 15 minutes Counseling services to those HIV positive
Use and Availability of condoms	Promotion through media Increase the availability of condoms through public distribution, social marketing programmes and programmes in workplace. Special initiatives to promote condom use among high risk groups.
STD Control	Deliberate campaign to control the spread of STDs through early detection and treatment
Infection Among Young People	Equip adolescents with knowledge, skills and attitudes that would keep them safe from infection before they become sexually active
Mother to Child Transmission	Prevent infection of mothers Safe and appropriate feeding strategies for babies whose mothers are HIV positive
Safe Blood supply	Screen potential donors Screen donated blood through laboratory tests to detect infected blood

PART II

2 DESIGN OF FIELD WORK

2.1 Cooperation with Ministry

The research team received maximum support from the Ministry Of Education right from the headquarters to the district and divisional level.

The Ministry seconded the Deputy Head of the AIDS Control Unit was to work with the research team from the preparation stage and throughout the survey period. At the district level the team was joined by the officer in-charge of HIV/AIDS or school inspectorate at the district level for the survey period. These officers participated in the research work and were responsible for organizing the research work at the community level. Selection of the districts were also done with assistance of the ministry of education and on the basis of set criteria established by the consultants and the client.

The fieldwork was preceded by discussions and preparations with Ministry of Education officers. Stakeholders in Nairobi were also consulted in order to establish what had already been done on the subject, what activities were ongoing and future plans of the main stakeholders. We also used this opportunity to gather all research information (gray literature etc.) available in the country.

Planning missions were undertaken in all the four districts by the national consultant and a ministry of education senior official. The missions purpose was to meet the DEOs, the district AIDS coordinators and all other relevant stakeholders at the district level, select the schools with assistance of DEO and his officers, have the DEO write to the schools and inform them of the study dates and agenda.

2.2 Specific Choice of Communities

The selection of communities was based on the following criteria; HIV/AIDS prevalence and historical experience in Kenya, areas that have historically had high HIV preference (Kisumu), areas that have recently been taunted as having high infection rates (Nakuru and Thika), and an area with low infection rate (Makueni). The research team also ensured that there were both urban and rural based communities in the sampled communities. Within each district rural and urban communities/schools were selected. Where possible multi-religious consideration was used in selecting schools. In some areas we were able to get both Christian and muslim communities (Tangu, Kisayani). Cultural diversity (a number of cultural factors such as wife inheritance, widows cleansing, circumcision etc.) was also considered in selection of communities. To capture this phenomena we ensured that we had communities that practiced and those who did not practice any of the above rites (Luo Vs Kamba, Kikuyu, Kalenjini).

2.3 Choice of Research Assistants

Two main criteria were applied in selecting research assistants. One, familiarity with HIV/AIDS matters. This was considered important as the research assistants were expected to conduct focus group discussions on a wide range of issues including HIV/AIDS. It was expected that many questions will be asked by teachers, pupils and the communities on HIV/AIDS and it was important to ensure that the RAs could give competent answers. The second criteria was familiarity with participatory research methodologies. This was important to ensure that as much information was gathered during the group discussions. Gender balance and maturity of the researchers was also considered.

As part of capacity building for the ministry and especially at the district level, we also considered the use of the district AIDS coordinators/ counseling officers as research assistants. They were also familiar with local conditions and hence did not need a lot of induction. The use of the local education officers also made it easy for the research team to access schools and get most of the information they required. In some areas we were able to enlist local personnel that had worked with youth of matters of sexuality through counseling services.

2.4 Piloting

A pilot survey was undertaken in a non-survey focus district but which fitted the criteria on which various research sites were selected. The pilot was undertaken at Mutituni Primary school in Machakos district. The school is located some 12 kilometers from Machakos municipality and it is multiethnic. It lies along the Machakos – Kangundo road and borders Mutituni shopping center. It represents a rural/urban setting and a truck stop.

Machakos lies some 82 kilometers South – East of Nairobi. The area in which the pilot survey was conducted is agricultural in which coffee, horticulture are the main sources of income. Land parcels are very small due to population pressure and majority of the residents do not have adequate land to grow surplus crops for cash. This has resulted in high poverty levels in the area. During the pilot survey, teachers, pupils and community representatives were interviewed. The pilot survey helped in refining the questionnaires and also planning the rest of the survey in terms of time coverage and areas of emphasis.

2.5 Proposed samples of parents, teachers and students

Based on the pilot survey experience, it was decided that for the pupils only those of class five and above be interviewed. This was because the questions were found to be complex for lower classes. The lower classes also constituted pupils of below age 10 and it was thought that majority had not yet reached the stage of understanding re-productive health. In order to have efficiency in managing the structured survey, and accuracy of information recorded by pupils, only twenty pupils per school were interviewed. They were a mix of 10 boys and 10 girls. Majority were from class eight and the rest were selected in a reducing order up to class five. In some schools we were unable to interview class eight pupils as they were sitting for exams. In such cases pupils were selected from class five to seven. In other cases limited numbers of class four were included in the sample.

In each school we had set out to interview eight teachers (four males and four ladies) of the following characteristics, married, widowed, separated, young and old, and of different ethnic groups. We were not always lucky to get such a mix, because some schools were under staffed, while others had a skewed gender mix. In those circumstances we were forced to either reduce the number of respondents or have an unbalanced gender mix depending on the situation. The same group of teachers completed structured questionnaires, and then was taken through a two hour group discussion on various topics.

The community was in most cases represented by between 8 to 15 members selected from parents of the school, school committee members, local leaders, education officials and religious leaders. These groups were organized by the head teachers prior to arrival of the research team to the school.

PART III

3 STUDY FINDINGS

Four districts were visited and interviews conducted in three schools in each district among teachers and pupils using both structured questionnaires and focus group discussions (FGD). The schools were selected in consultation with the District Education Office to ensure a fair representation of the socio-economic strata in each district. Information from the communities was collected using FGD. Prior to the survey, the survey instruments were pre-tested in a school outside the four districts. Additional information was collected from the local district medical officer's of health on reported district HIV/AIDS prevalence rates.

3.1 Description of Communities

Most of the communities in the areas in which the survey was conducted were largely rural and dependent on agriculture as their source of livelihood. The agro-ecological zone in which the survey was conducted largely determined the type of agriculture.

In Thika district two of the communities were found in the coffee growing zone, one of which was plantation and the other small scale. The community that lived in the coffee plantation was largely made of farm labourers and dependent on wages from the coffee plantations for their livelihood. This community was largely composed of single parents. The small-scale coffee growing area had dairy activities as part of their livelihood. Due to falling prices of coffee in the world market and near collapse of the industry in the country, the communities were facing economic difficulties. The third school in Thika district was located in an area that relied on small-scale agriculture of mainly traditional foodstuffs (maize and beans), labour wages from a nearby pineapple plantation and quarrying. All the schools in the district had some influence of migrant labour due to agriculture enterprises and other institutions that employed both local as well as migrant labour.

The communities covered in Makueni, Nakuru and Kisumu districts were largely small-scale farmers. In some areas there were peri-urban communities for those schools neighbouring urban centers. In such cases the communities dependent on income from the urban centers as workers or traders. The influence of urban setup meant the people were more exposed to information and also high levels of HIV prevalence. The Africa social structure was also more fluid in such cases, as the community would be composed of people of different ethnicity backgrounds and religion.

3.2 Brief Description of Schools in the Study

Gatuanyaga Primary School is located along Thika - Garissa highway next to Delmont pineapple plantation. It is about 20 kilometers from Thika town. Majority of the local community are peasants growing mainly subsistence crops and also depending on the pineapple farm where they provide labour services. There is also quarrying in the area. Poverty levels are high in the area and the school has over 20 orphaned children. It has 736 pupils and 21 teachers. Plan International supports 10 orphaned children in the school. It is one of the best performing schools in Thika district.

Alcoholism and sexual immorality including rape is a big problem in the community. This year a standard eight girl dropped out of the school due to pregnancy.

Ngethu Primary School was established in 1940s. It is located in the interior of Thika district some 45 kilometers from Thika town. It is close to Ngethu Water Works, a facility that was constructed to tap water for the city of Nairobi. The area is therefore cosmopolitan due to presence of Nairobi City Council workers of multi-ethnic composition who manage the water dam.

The school has 548 pupils and 16 teachers and has over 20 orphans. Its performance is poor by standards of Thika district. The school has had many management problems and at one time parents threatened to pull out their children from the school. The turnover of school heads has been nvery high. Since 1995 the school has had five head teachers, and in one of the transfers, one head teacher only stayed in the school for only two days. Funding of development projects has therefore been poor or non-existent. This has affected teachers' morale. Teachers claimed at times they have been forced to purchase chalk using their own money.

Thamuru Primary School is set up in a coffee plantation, some 15 kilometers from Thika town. Majority of the parents are either workers or squatters living on the farm. It was claimed that due to down-turn of the economy and the problems facing the coffee industry, workers on the farm have gone for over eight months without pay.

Majority of the parents are single mothers working on the farm or nearby farms. They have multiple partners and live in single rooms even those with older children. They bring their partners for overnight stay and therefore there is hardly any privacy in their sexual contacts. This has contributed to high sexuality among the youth in the area. Poverty, which is exacerbated by delayed payments of monthly wages have driven a number of the people to brewing of illegal brews. The brews are sold to the young and the old. Some school age-going children are also involved in the sale of illicit brew. The brew has contributed to high immorality in the area.

The head teacher said circumcision of girls in the estate especially among some migrant communities is very high. Recently a girl complained that her classmate girls were denying her sharing a desk because they claimed she was stinking (this girl was actually not circumcised and was being told she is not like the others). The school is poorly funded. Its performance is also among the lowest in the district.

Kisayani Primary School is situated in Kibwezi division of Makueni district, about 15 kilometers from Mombasa - Nairobi highway and some 260 kilometers South East of Nairobi. It is 12 kilometers from Kibwezi township. It is 11 kilometers from Dwa Sisal Estate and 7 kilometers from University of Nairobi Dryland Research Station. Due to its proximity to river Athi and Kibwezi the area is rich in horticultural produce. The local market in which the school is located is a horticultural produce collection center for export. This means the area is highly exposed to outside influence and highly vulnerable. Over 95% of the sisal plantation workers are migrants. The University farm also has a lot of migrant workers. Kibwezi Township has multicultural and multi-religious population. The school has both Christian and Muslim student population.

Kisayani Primary school is one of the best performers in the district. It has 586 pupils and 15 government employed teachers. The parents have employed three more teachers from the local community. The school has 100 orphans (both single and double). ActionAid-Kenya has offered to sponsor some of the needy orphans in the school.

Enzai Primary School is located about 10 kilometers from Salama Township, Makueni district. Salama is located on the Nairobi – Mombasa highway and it is a major truck stop. The school is one of the best performers in the district and teachers and parents are satisfied with the performance. Relationship between teachers, parents and pupils is cordial.

The school financing is reasonable except for widowed parents and those who for one reason or the other are very poor. There are very few orphaned children in the school. The school is able to waive all levies for orphaned children. The teachers' morale was said to be high and teachers are generally hard working.

Tangu Primary School is located along Nairobi – Mombasa highway at Salama market. This township is a major truck stop for Trans-Eastern and Central Africa trucks. It is also multicultural and multi-religious. The school has both Christian as well as Muslim students. The relationship between students, teachers and parents is very cordial according to the headmaster and the school community.

Majority of the teachers are from outside the region. There are also migrant parents in the school. The head teacher has been in the school since 1984. The school is sponsored by the African Inland Church. The church has given partial sponsorship to 5 orphans in the school. The support covers school levies while immediate family members meet other needs. The orphans are selected on the basis of need and have to be 12 years old or younger.

Pele Primary School is located at the junction of Kericho road and the Nakuru – Eldoret highway, in Nakuru district. It is a very popular truck stop with a high population of commercial sex workers. Hawking of vegetables (carrots, green peas, onions, and roasted maize) is a very popular trade among young boys of age 10 – 18 years. We were informed that majority had dropped out of school before completing class eight for various reasons, but the most important reason was due to orphanage. Girls' pregnancy in the school was said to be a serious problem.

Njoro DEB Primary School is located in Njoro Township near Egerton Unveristy in Nakuru district. It has 1000 pupils and 31 teachers. It has 29 double orphans and the number is increasing. The number of single orphans is almost half the school enrolment. It is the only school where the administration and the other teachers revealed one of the teachers is ailing from AIDS related illness. The teacher had been absent in the last 2 terms. She is however, still in the payroll. The school is located near a big slum with large migrant population. The slum is characterized by commercial sex, brewing and consumption of illicit brews and drug abuse.

Egerton University which is a few kilometers from the school was mentioned as one of the reasons for high HIV/AIDS prevalence rates in the area. There is also an industrial center at Njoro Township which attracts large migrant labour in the area.

Due to increased number of parents deaths the school started by asking each child to contribute Kshs 1/= per every parent who died in the last 3 years. This was to assist in funeral expenses and also welfare of the orphaned children. However, this was later dropped after the rate of deaths increased to a minimum of one per week. They replaced it with an orphan levy of Kshs 40 per term per parent. This is now formalized and the fund is used in covering levies for orphaned children who are extremely needy although previously it covered all orphans.

The dropout rate is not very high in the school, but there are isolated cases. Reasons for dropouts are, fear of being asked to repeat a class especially among mature girls and boys who are not good performers and pregnancy (one class seven girl dropped out of school this year due to pregnancy).

The parents, teachers and the administration agreed HIV/AIDS was a big problem in the school. They said funerals in the area are held every week. They could remember the first case in the area was in 1992. By 1997/99, deaths became so frequent that sometimes they could bury up to 5 victims a week. Majority of the victims are men aged 20 – 40 years old, many of who are married.

The parents mentioned that they knew of two teachers in the school who have died in the last five years. They said they were aware of two at the moment who are just about to die (one their school and another in a neighbouring school).

Rabour Primary School is located along the Kisumu – Nairobi highway some 20 kilometers east of Kisumu town, Kisumu district. It has a population of 630 (290 girls and 340 boys) pupils. There are 194 orphans in the school. The school is sponsored by African Inland Church (AIC). It is one of the best performing in the district having been number 5 in the last KCPE examination. The Compassion Ministries are sponsoring four orphans in the school. There were cases of orphans in the school who were heading households.

Other sponsors of orphans are relatives, well-wishers, the teachers and pupils themselves. Teachers and pupils however, only help in raising money when there is a bereavement of a parent of a child in the school. Teachers have a contributory lunch scheme and usually share with some of the orphans.

Maseno DEB Primary School is located in Kisumu district next to Maseno University. It is along the Kisumu – Busia road. The area is peri-urban and has influence from immigrants such as lectures and other support staff at the university and of-course the university student community. The school administration expressed concern over low morality among the university students, which has led to negative impact on the older school pupils especially girls.

Diemo Primary School is located in a remote rural area of Kisumu district close to the border with Bondo district. The area is rated as one of the poorest regions in the district. The school enjoys support from Plan International, which has orphan child support project in the area. It has benefited from construction of classes, water tanks, and supply of desks and school feeding program. Families hosting beneficiary children have also been given support in terms of construction of houses and food supply.

3.3 Composition of the Sampled Students, Teachers and Community Groups

The study team got the desired samples of 20 pupils per school during the survey, but the class mix differed from school to school as we found some schools in the mid of their class eight mock exams, and therefore this class could not participate in the interviews. In such cases we either allowed more pupils from the other classes (class 5 – 7), or allowed a small number of class four pupils with the difference being made up by taking more pupils in class 5 – 7.

For the teachers, the team faced two main problems in achieving the desired samples; one – in some schools there were too few teachers and therefore we could not manage the desired sample of eight teachers. The desired gender and marital status mix was constrained by imbalance of male/female teachers population in some schools. The desirable sample was a mix of four male and four females for each school with additional conditions of ensuring, representation of marital status and different age groups. We found out however, in some schools the ratio of male to female teachers was about 1:10, in such cases we would take all the under represented sex and the rest from the over-represented sex. In one school we only found they had a total staff of six including the head teacher who was not even present. Of those present was the deputy (male), and the rest were all females. For this school only females were interviewed using the structured questionnaire and group discussions, as the deputy was being interviewed on other matters related to teachers' absenteeism, deaths, number of orphans etc.

Table 3: Achieved Sample Size of Pupils

District	**School**	Number of respondents	Classes Represented
Thika	Gatuanyaga	26	Std 5-8
	Ngethu	20	Std 6-8
	Thamuru	20	Std 5-8
Makueni	Kisayani	20	Std 5-8
	Enzai	20	Std 5-8
	Tangu	20	Std 6-8
Nakuru	Pele	20	Std 5-8
	Njoro	20	Std 5-8
	Ngeya	20	Std 4-7
Kisumu	Rabour	20	Std 5-8
	Maseno	20	Std 4-7
	Diemo	20	Std 4-7
Total		246	

Source: Survey Results

Table 4: Achieved Sample Size for Teachers

District	Male	Female	Total
Thika	5	13	18
Makueni	11	15	26
Nakuru	7	17	24
Kisumu	9	13	22
Total	**32**	**58**	**91**

**Note one teacher did not indicate his/her sex.*

3.4 Obstacles Encountered Carrying Out Fieldwork

In general the survey went on very well without undue obstacles. This was largely a result of careful planning involving the Ministry of Education at all levels. The participating schools and communities considered themselves privileged to have been selected among many to participate in this study. They reciprocated by giving full support to the research team. The local education officials had made excellent prior arrangements with all the selected schools, the head teachers of the schools had in turn made adequate arrangements with pupils, teachers, school committee and the local community to participate in the exercise. The local provincial administration gave full support to the research team and indicated their interest in findings of the study.

The only obstacle, which in our view was minor, was lack of participation of class eight pupils in some schools due to ongoing mock examinations at the time. In some schools depending on the sampled pupils, the exercise took much longer to accomplish as the researchers had to repeat the questions several times and also ensure each pupil understood the questions well before completing the question.

3.5 Brief Summary of Interviews with District Officials

In all the districts where the survey was conducted, local education officials were concerned about the escalating deaths of teachers most of which they said were AIDS related. The officials were also getting overwhelmed by increasing number of orphans in schools. In one district, a children's officer stormed the deputy DEO's office demanding to know why a particular head teacher had send a secondary school child away from school for levies when he knew very well the child was an orphan. The officer was accompanied by the child. We were informed that these were regular scenes.

District Education Officers were trying their best to ensure HIV/AIDS awareness in all schools and communities so as to curb the spread of the pandemic. Their efforts were however hampered by lack of resources (trained personnel, finances, audio visuals aids and other equipment).

The officials gave examples of teachers who have not been able to teach for whole term, while others were on and off as they struggled with the disease. The increase in orphans was manifested by increasing number of requests for bursary support of children who were not able to pay school levies as their parents had either died or were in their last days of death. The high levels of poverty among local communities aggravated the impact of the HIV/AIDS on community and orphans participation in schooling.

The main information gathered from local education officials included, reported teachers deaths in the last ten years where possible, reported teachers retirements where possible and level of teachers absenteeism for at least thirty schools in each district. Since the officials did not keep analysed information, we had to leave data forms with them for a period of two weeks to compile the data. As it turned out, the data on teachers' absenteeism was most unreliable except for Nakuru district in which a comprehensive list was given. However, this was only for 15 teachers. The data was so detailed that

one could almost certainly pick out HIV related absenteeism in the schools selected. This was in cases where prolonged and frequent absences were reported for an individual teacher[5].

Potential monitoring at the district level of impact of HIV/AIDS on education was hampered by lack of resources to gather, store and use data for decision making. Although DEOs kept data on teachers' absenteeism in local schools, most of the information reflected under reporting as found out with actual interviews with teachers and school heads. There was no data on number of orphans in schools at the district level.

3.6 HIV/ AIDS Prevalence Rates in Study Surveyed Districts

Table 5: HIV Prevalence Rates In The Four Survey Districts Compared to National Rates

YEAR		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Kisumu		19.2	20.0	20.2	19.6	30.4	25.2	27.4	33.4	29.4	29.2	33.0
Nakuru		10	13	13	22.5	25.9	27.2	25	27.2	27.5	24.9	18
Thika		3	10	3	28	40	**	13	23	34	33	21
Makueni		1	5	2	8	20	4	4	6	10	9	14
National		4.8	6.8	7.4	8.7	9.9	11.0	11.9	12.8	13.9	14.1	14

Source: DASCO

NB: Thika and Makueni data has been computed from Sentinel Survey of MOH

3.7 Effect of HIV/AIDS on Communities' Ability to Finance Education

The impact of HIV/AIDS on education sector in all the areas visited was beyond the researchers' expectations. It manifested itself in high numbers of orphans in all schools, high death rates of parents and teachers, high teachers' absenteeism, pupils absenteeism, financial burdens on teachers, pupils, parents and the community, high cases of rape etc.

Increasing numbers of orphans in schools overwhelmed communities and this had overstretched their ability to finance school development. In some schools, parents and local leaders talked of wealthy members of the community who had contributed immensely to school development, but later succumbed to the disease leading to decline in school development activities.

In all areas visited, the serious teachers shortages partially caused by the government stoppage of automatic employment of teachers qualifying from teachers training colleges and deaths from AIDS and other diseases, and retirements had forced parents to employ their own teachers affecting the resources available for school development.

HIV/AIDS had also led to diversion of resources from school development to finance hospital bills, and funerals. This had also affected the communities' ability to undertake economic activities to raise money for school development. Sickness was also said to have negatively affected ability of parents to

[5] The list contained individual personnel numbers of the affected teachers.

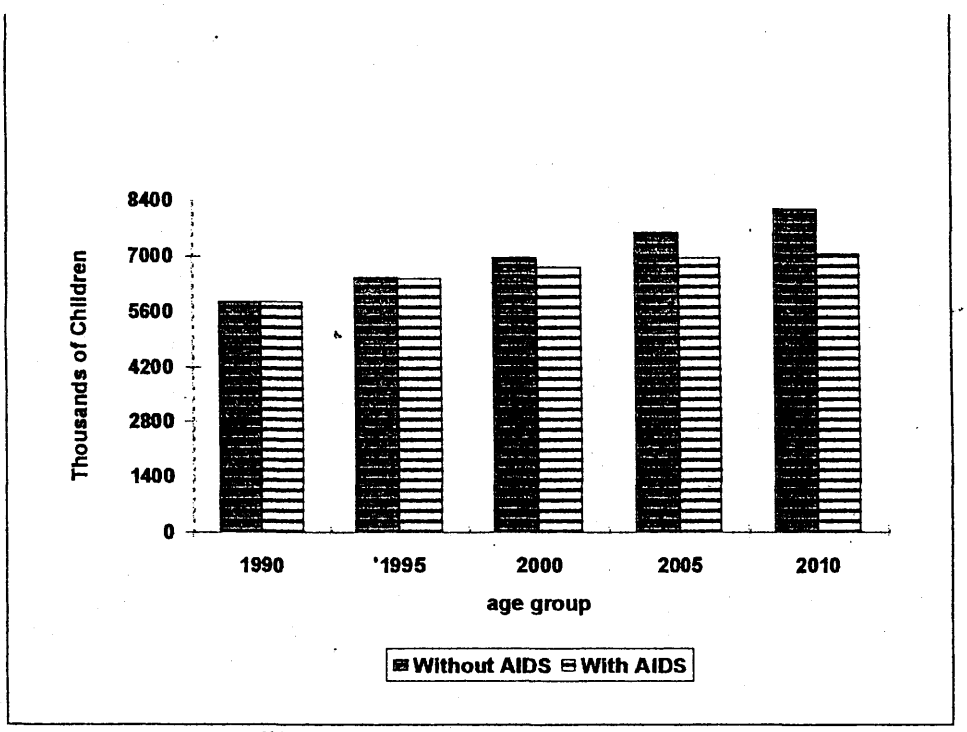
contribute labour for school development activities. Deaths of parents also meant that there were fewer people available to finance or contribute labour for school development activities[6].

3.8 Impact of HIV/AIDS on Demand for Education

Kenya's goal for universal education is being affected by HIV/AIDS. The epidemic is affecting the demand for education through, deaths of potential clientele, dropouts occasioned by increased number of orphans, reduced fertility as many women die before they reach maximum bearing age. This coupled with natural decline of fertility rates associated with increasing use of family planning methods will see a drastic decline in the size of population of school going age.

A study by Goliber (1999) projected that demand for primary education in a Kenya without AIDS, the primary school age population (age 6 to 13) rises to 8.2 million by the year 2010. In Kenya with AIDS, the number is projected to increase to 7.1 million children, a difference of 16% (see figure 1 below).

Figure 1: Kenya Primary School Age Children 1990-2010



Source: Goliber, 1999

Projections on the number of maternal and double orphans as a result of AIDS show an increase from 43,000 in 1990 to 966,000 in 2000 and 2.2 million in 2010. This would equal 17 percent of all children under the age of 15 (Goliber, 1999).

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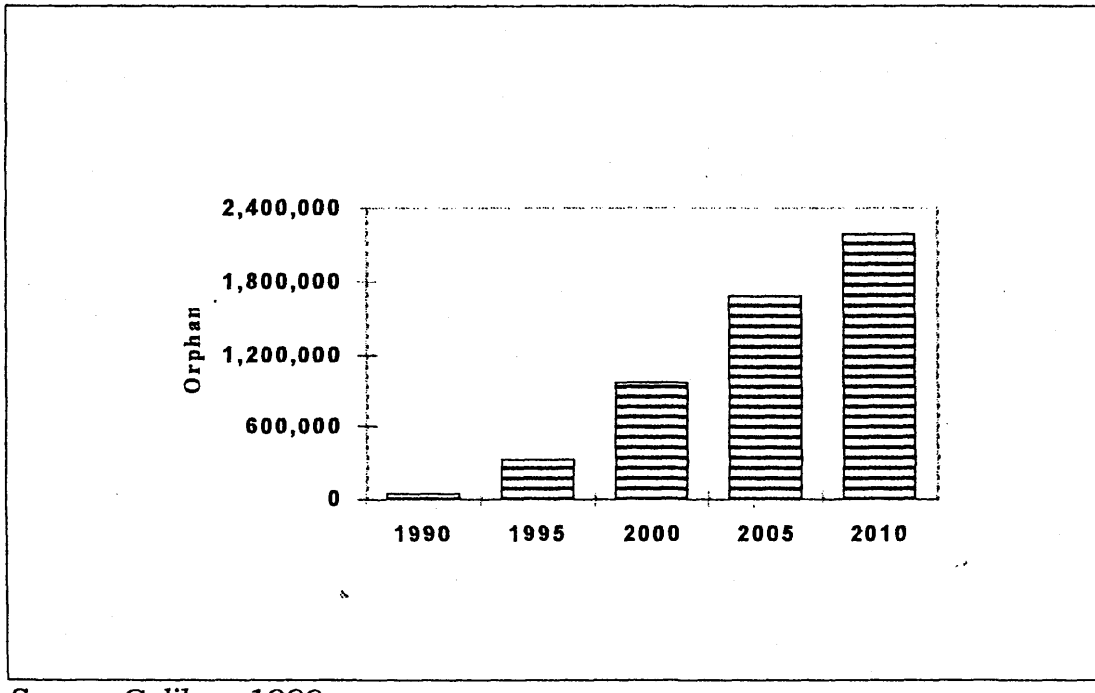
[6] Construction of Kenyan rural primary schools is the responsibility of the local community and in particular the parents of the school. Financing can be in form of cash, labour or fundraising (locally referred as harambee).

NASCOP defines AIDS orphans as a child under the age of 15 years who has lost the mother to AIDS. Based on this definition, the number of AIDS orphans is estimated at 900,000 and is expected to increase to 1.5 million by 2005 (GoK-MoH, 2001).

In figure 2 below projections of both maternal and double orphans based on a study conducted recently in Kenya are presented (Goliber, 1999). The projections show that the number of orphans as a result of AIDS is expected to exceed 2 million by the year 2010. This is about a third of the current primary school enrollment in the country.

Figure 2: Kenya: Maternal and Double Orphans as a Result of AIDS, 1990-2010



Source: Goliber, 1999

The reality is that the actual number of orphaned children whether by AIDS or otherwise is not known. Even at local level (school), actual numbers of orphans are not known as school administration do not keep such records. In the schools that we visited some head teachers took quite sometime and at times had to consult class teachers, parents and pupils to arrive at the actual number of orphans that were currently attending school. This means the records even at the micro level are not a formality. The schools did not keep records of orphans who had dropped out of school either, this coupled with lack of data on actual numbers of orphans in the school made it difficult for routine monitoring of orphan participation in schooling.

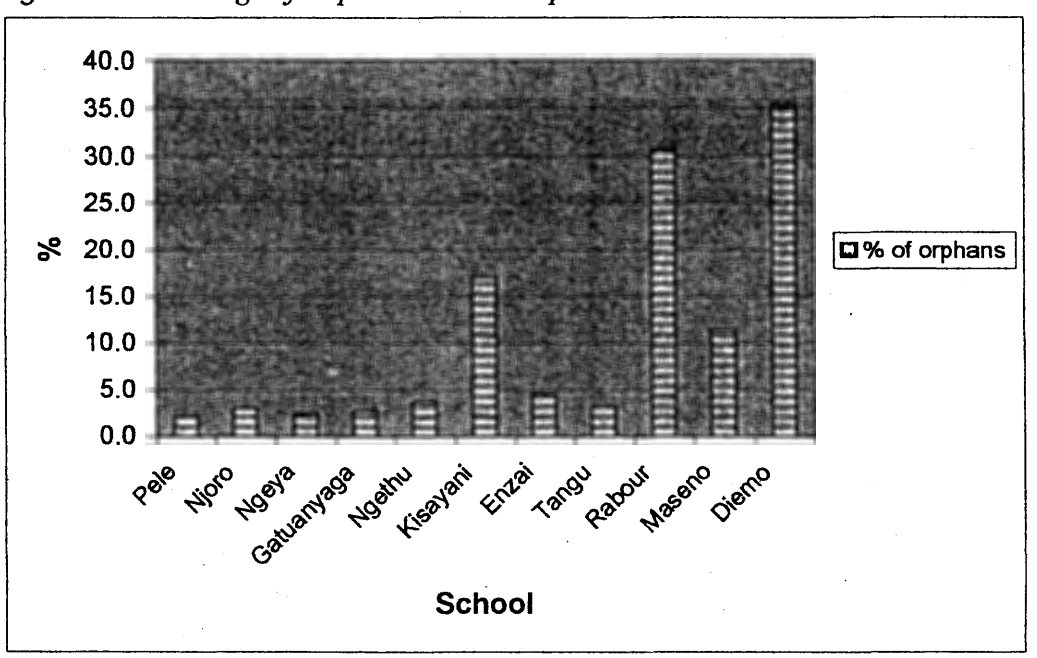
However, schools that had been approached by NGOs for support of orphans had comprehensive report of the number and status of all the orphans in the school. They did not have formal definition of orphans, but would use definitions required by sponsoring NGOs.

For the purpose of this study we define orphans as a child below 18 years of age who has lost one or both parents. It was not possible within this study to separate AIDS orphans from the general orphans as no deaths are legally recorded in Kenya as caused by AIDS. However, based on group discussions with orphans it was possible to ascertain some as real AIDS orphans.

The number of orphaned children in the schools ranged between 2.14 and 35.31%. Most of the orphaned children were found in Kisumu district followed by Kisayani primary school in Makueni district. Kisumu district has so far been the hardest hit by HIV/AIDS in Kenya. It is also the district where most of the HIV/AIDS interventions either by NGOs or the government have been concentrated. The district is also the most studied of all the districts in the country on matters of HIV/AIDS. There is more information on HIV/AIDS in the district compared to other parts of the country.

Makueni has the lowest infection rate of HIV of the four districts surveyed. Information on HIV /AIDS is also scarce in the district safe for a few studies that have been conducted on commercial sex workers and truck drivers by AMREF along the Nairobi-Mombasa highway truck stops.

Figure 3: Percentage of Orphans in the Sample Schools



Source: Survey results.

3.8.1 Living Conditions of the Orphaned Children

Orphans were facing a number of problems; absenteeism, lack of books and school uniform, and social stress as some were also heading their households[7], lack of finance for schools levies[8], examination registration fees. Single orphans had also to look after sick parents or other relatives and this contributed to absenteeism.

Some orphans had also been mistreated by their guardians and it appeared some of them had in fact been sexually molested. In a study by Saoke and Mutemi (UNICEF, Undated) it was found that double orphans in Kisumu, Busia and Mombasa often preferred to stay in their households due to mistreatment by their extended families. In this case the oldest child assumes the headship of the household. Our study found out that older children would be forced to drop out of school in order to fend for the young ones.

There is currently no study or database on the number orphan headed households in the country. However, from this study we were able to establish orphans within the surveyed schools who were heading households. In most cases these orphans were living under extremely difficult conditions.

There were reported cases of rape targeted at schoolgirls, in some cases by confirmed HIV/AIDS sufferers. Orphaned girls were particularly in more danger as they lived under difficult conditions. Rape among schoolgirls by those perceiving them to be safe from HIV was also reported in some cases in Thika and Nakuru districts. Some of the culprits had actually been reported and apprehended by the provincial administration.

Most orphans were said to drop out of school because of lack of food, clothing or books, even when the levies were waived. In schools in which World Food Programme (WFP), had school feeding programme, enrolment rates were high and dropout rates low.

It was only in very rare occasions when we encountered orphans who were living in relatively secure environments. In the majority of cases, the orphans were living in very difficult circumstances. This seems to be compounded by progressive breakdown in the social cohesion especially among low-income communities in urban areas and rural areas environments with a high incidence of material poverty. Cases of orphaned child headed households were reported to be common in all the study areas. Uncertainty in access to basic needs especially food and clothing among the orphans was their biggest concern. In districts where there were school feeding programs - the situation of the orphans was greatly ameliorated but in the districts that were not covered by such programs, many of the orphaned boys were reported to be resorting to petty trade and theft while girls got married or resorted to commercial sex.

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[7] In one school in Kibwezi division Makueni district a standard eight boy was actually the household.

[8] Even though some schools had waived all the levies for orphans, pupils in some districts were still required to pay the District Education Board (DEB) levy, which is levied at the district level and based on level of enrolment in a school. Failure to keep records of orphans in schools is one of the reasons the Education Boards have been unable to extend waivers to the orphaned children.

3.8.2 Structures to Support Orphaned Children

We encountered four types of orphaned child support in the schools that we visited; those started by the school itself, those initiated by the community, support by NGOs and a mix of pupils and teachers support structures.

In some schools and communities there were structures to support orphaned children, while in others there were none. In Kibwezi (Makueni district) for example most of the orphans we talked to had been absorbed by their immediate relatives and were being taken care of just like their own children. Urban based orphans faced more problems than the rural based orphans due to lack of the extended family structure in urban centers. Female orphans were also prone to sexual abuse as they were left living in single rooms for which rent had to be paid. In such cases some would simply drop out of school and become sex workers. In Nakuru district, Njoro DEB primary school initiated a formal fund to support orphaned children in the school who do not have any other support.

Some church organizations and NGOs such as Plan-International, ActionAid and Care-International had orphan child sponsorship programmes in their programme regions. Plan International uses a holistic approach in supporting the children, which includes addressing the child's personal needs at school and at home. We found in Diemo Primary School in Kisumu, Plan International had constructed a water tank for school, provided food, desks and other facilities, constructed a class room and also houses for some of the households supporting the orphans.

There are a number of children homes catering for neglected children that have come up in response to increased number of orphans especially in the urban centers. Most of the centers are operated by people with little experience and/or resources to take care of the children. Majority would setup some makeshift homes and then go to the media to seek support for the centers from the public and donors. In some districts we found the provincial administration had been forced to form committees to monitor the activities of the mushrooming homes.

Some of the homes however, provide adequate support including laboratory and medical services to the children orphaned and suffering from AIDS as we found out at Nyumbani Centre in Nairobi. The center also provides education, including registering older children to regular primary and secondary schools.

Figure 4: Number of Orphans in the Surveyed Schools

	Mean Score 2000	No. of Teachers	Number of Pupils	Number of orphans
Nakuru District				
Pele Primary	395.06	17	653	14+
Njoro DEB Primary	397.96	31	1000	30 (double only)
Ngeya Primary	386.17	18	657	16
Thika District				
Gatuanyaga Pr.	290	21	736	20+
Ngethu Pr.	–	16	548	20
Thamuru Pr.	–	–	–	–

Makueni District				
Kisayani Pr.	411.65	15	586	100
Enzai Pr.	–	11	310	14+ (double only)
Tangu Pr.	444.88	12	310	10+
Kisumu District				
Rabour Pr.	414.53	23	630	194
Maseno Mixed	337	24	872	100+
Diemo Pr.	374.20	11	354	125

Source: School records

3.8.3 Children's Views on Sexual Harassment and Security of Schools

Although most students reported that they felt their schools were secure and that love relationships either between teachers and students or among students were not common, there were isolated cases in which some students felt students harassment by teachers was high or sexual harassment among students had gotten worse (table 7 – 10). The same schools also reported high levels of student pregnancy. This was collaborated by information gathered through interviews with head teachers. One of the reasons attributed to high levels of pregnancy among girls was forced class repetitions of mature girls.

Majority of the students interviewed were of the view that students were able to discuss their problems with teachers. However, when asked if they had a sexual problem whom they would most likely talk to majority said their mothers.

Table 6: Students are able to discuss their problems with teachers

District	School	Agree	Disagree
Thika	Gatuanyaga	65.4%	34.6%
	Ngethu	90%	10%
	Thamuru	60%	35%
Makueni	Kisayani	85%	10%
	Enzai	95%	5%
	Tangu	85%	15%
Nakuru	Pele	75%	20%
	Njoro	69.6%	30.4%
	Ngeya	76.2%	23.8%
Kisumu	Rabour	85%	15%
	Maseno	70%	30%
	Diemo	70%	30%
Mean		77.2%	21.6%

Source: Survey results

Table 7: Student pregnancy is a big problem in this school

District	School	Agree	Disagree
Thika	Gatuanyaga	53.8%	46.2%
	Ngethu	25%	75%
	Thamuru	40%	60%
Makueni	Kisayani	35%	65%
	Enzai	20%	80%
	Tangu	20%	80%
Nakuru	Pele	80%	20%
	Njoro	30.4%	69.6%
	Ngeya	47.6%	52.4%
Kisumu	Rabour	30%	70%
	Maseno	20%	80%
	Diemo	30%	70%
Mean		36.0%	64.0%

Source: Survey results

Table 8: Sexual harassment of students by teachers is a serious problem in this school

District	School	Agree	Disagree
Thika	Gatuanyaga	15.4%	84.6%
	Ngethu	5%	95%
	Thamuru	5%	95%
Makueni	Kisayani	20%	80%
	Enzai	-	100%
	Tangu	-	100%
Nakuru	Pele	50%	50%
	Njoro	8.7%	91.3%
	Ngeya	23.8%	76.2%
Kisumu	Rabour	-	100%
	Maseno	20%	80%
	Diemo	5%	95%
Mean		17.0%	87.3%

Source: Survey results

Table 9: Sexual harassment among students has got worse in recent years

District	School	Agree	Disagree
Thika	Gatuanyaga	69.2%	30.8%
	Ngethu	35%	65%
	Thamuru	35%	65%
Makueni	Kisayani	30%	70%
	Enzai	15%	85%
	Tangu	45%	55%
Nakuru	Pele	60%	35%
	Njoro	39.1%	56.5%
	Ngeya	47.6%	47.6%
Kisumu	Rabour	20%	80%
	Maseno	30%	70%
	Diemo	40%	60%
Mean		38.8%	60.0%

Source: Survey results

When asked whether school management dealt firmly with sexual harassment by teachers only Pele, Gatuanyaga, and Njoro pupils were in agreement. Majority in the other schools did not think the management was firm enough.

Table 10: School management deals effectively with sexual harassment by teachers

District	School	Agree	Disagree
Thika	Gatuanyaga	52.8%	46.2%
	Ngethu	35%	65%
	Thamuru	30%	70%
Makueni	Kisayani	30%	70%
	Enzai	50%	50%
	Tangu	30%	70%
Nakuru	Pele	70%	30%
	Njoro	52.2%	47.8%
	Ngeya	28.6%	71.4%
Kisumu	Rabour	30%	70%
	Maseno	50%	50%
	Diemo	20%	80%
Mean		39.9%	60.0%

Source: Survey results

3.8.4 Pupil's Views on HIV/AIDS in Their Schools and Community

Majority of the pupils did not think HIV/AIDS was a big problem in their schools. However, in two schools in Thika a large number of pupils felt HIV/AIDS was a problem in their schools. On the contrary when the same question was asked to teachers majority of those who felt HIV/AIDS was a big problem to their schools were from Kisumu and Nakuru.

Table 11:Pupils: HIV/AIDS is a big problem in this school

District	**School**	Agree	Disagree
Thika	Gatuanyaga	46.2%	53.8%
	Ngethu	45%	55%
	Thamuru	10%	90%
Makueni	Kisayani	15%	85%
	Enzai	15%	85%
	Tangu	-	100%
Nakuru	Pele	50%	40%
	Njoro	26.1%	69.6%
	Ngeya	23.8%	76.2%
Kisumu	Rabour	15%	85%
	Maseno	35%	65%
	Diemo	-	100%
Mean		28.1%	75.4%

Source: Survey results

Table 12: ***Teachers: HIV/AIDS is a big problem in this school***

District	Agree	Not sure	Disagree
Kisumu	54.5%	27.3%	18.2%
Nakuru	50.0%	12.5%	37.5%
Makueni	7.4%	55.6%	37.0%
Thika	22.2%	55.6%	22.2%
Mean	33.5%	37.8%	28.7%

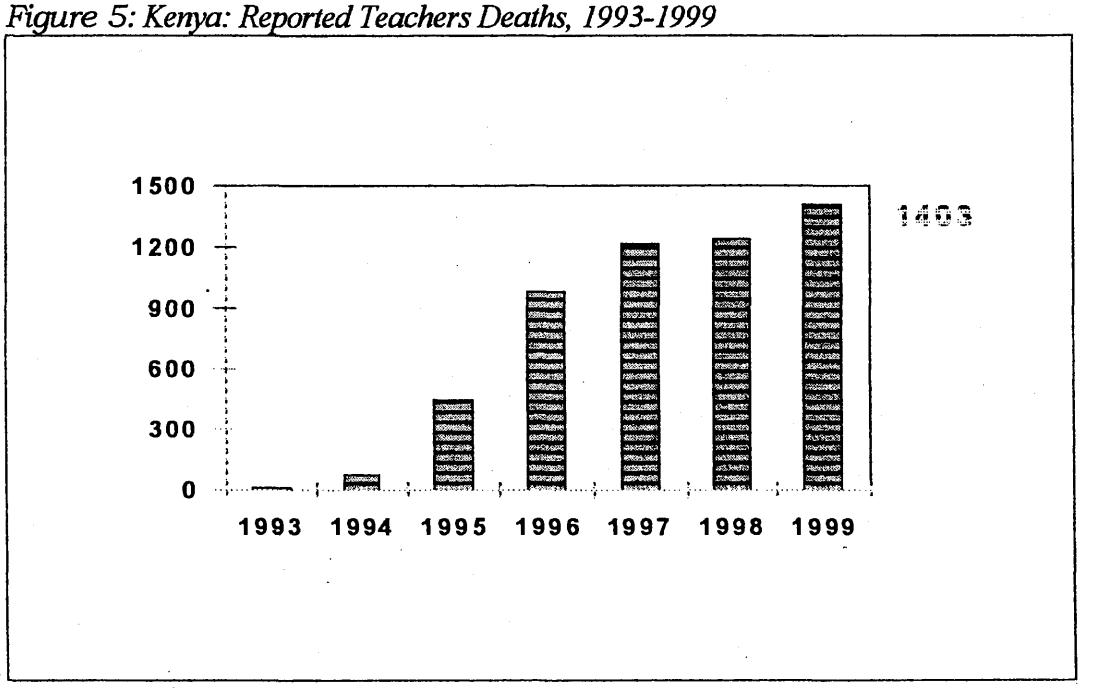
Source: Survey results

3.9 Impact of HIV/AIDS on Supply of Education

3.9.1 Teachers Deaths

According to Ministry of Health, education sector is one of the hardest hit by the AIDS scourge in the country. Teachers' deaths and absenteeism have increased exponentially in the last decade. According to the Teachers Service Commission (TSC), reported annual teachers deaths rose from 450 teachers in 1995 to 1,400 in 1999[9]. As can be seen in figure 4 below, the deaths shot rapidly between 1994 and 1997 before easing off. Although data on actual numbers of teachers dying of HIV/AIDS complications does not exist, it is probable that the high increase in number of annual deaths of teachers is probably as a result of HIV/AIDS.

Figure 5: Kenya: Reported Teachers Deaths, 1993-1999



Source: Goliber, 1999

Teachers' deaths in the surveyed districts were quite high as can be seen in the figures 5 (a & b) and 6 below. As can be seen Kisumu district, which has the highest HIV prevalence rate in the country, also has the highest annual reported teachers' deaths among the four districts. It is followed by Makueni, which according to NACC reports has one of the lowest HIV prevalence rates in the country!. The number of deaths for year 2001 is expected to be much higher for all the districts as the available figures were up to July 2001. Nakuru has had one of rapidly rising teachers retirement rates compared to other three districts. Some of the retirements could be on medical grounds.

While we cannot say for certain how many of these deaths are AIDS related, the fact that most of them are occurring in districts with high HIV prevalence rates gives credence to the fact that most of the deaths could be AIDS related.

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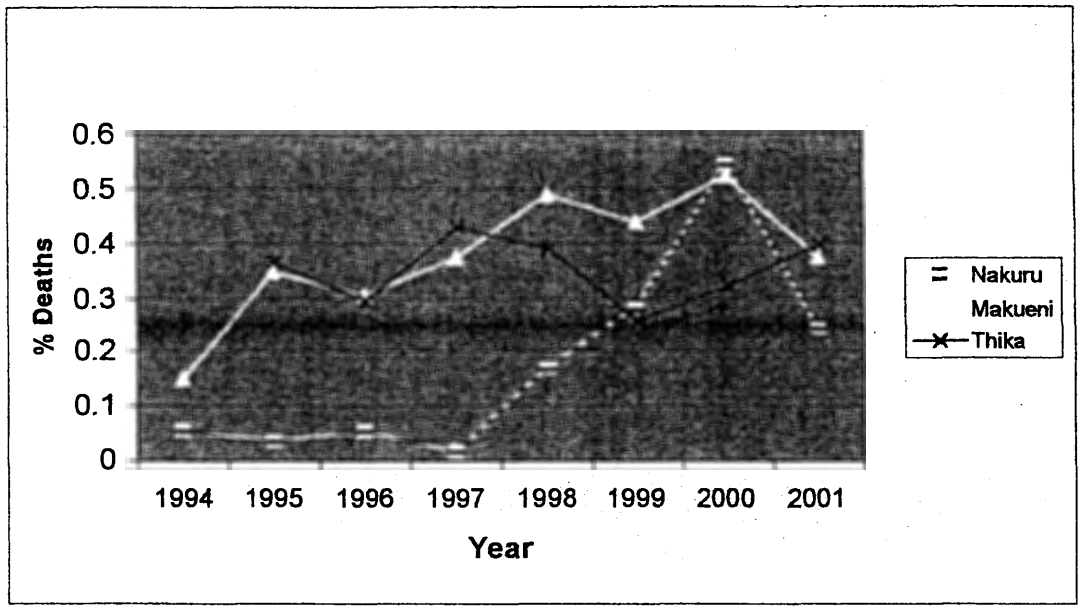
[9] These are absolute deaths and not necessarily caused by AIDS.

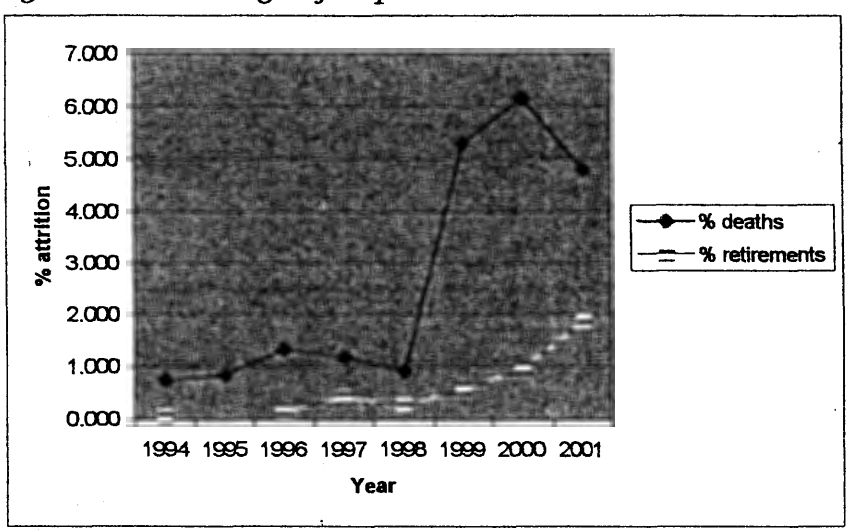
Most the records did not show the age at which the teachers died or the cause of death[10].

Figure 6: Percentage of Reported Teachers Deaths in Three Districts



Source: District Education Office Records

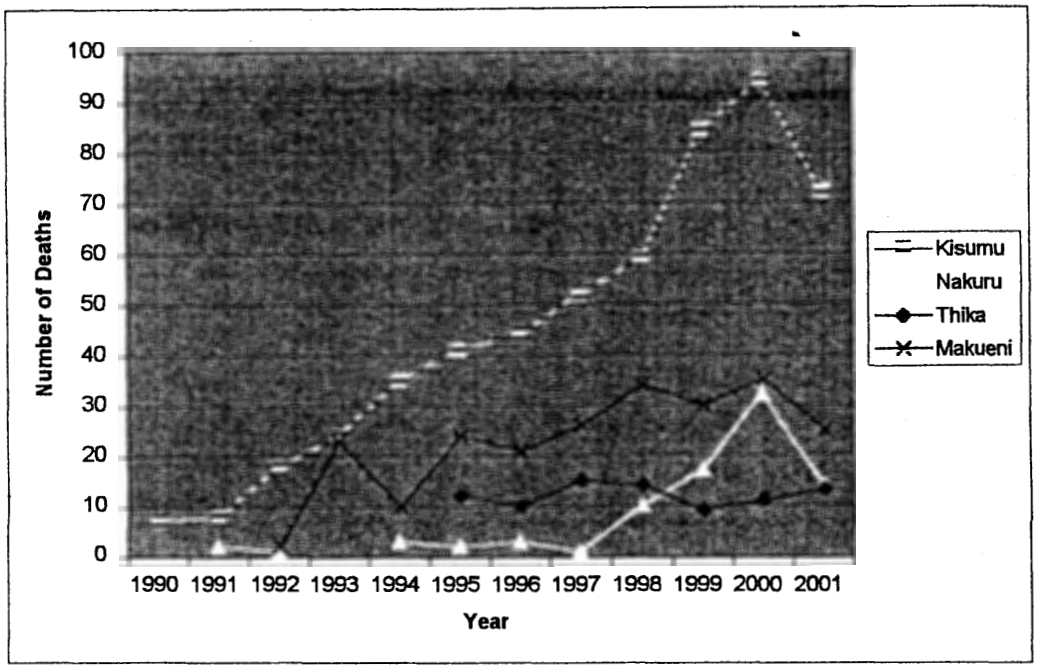
Figure 7: Percentage of Reported Teachers Deaths Attrition in Kisumu District



Source: District Education Office Records

[10] At the moment Kenyan law does not allow reporting deaths as being caused by AIDS. They would be reported as TB, pneumonia, etc.

Figure 8: Number of Reported Primary School Teacher Deaths in the Four Districts



Source: District Education Office Records

At the local (school) level, the researchers were able to get data from head teachers records that showed unusually high levels of teachers deaths in some schools in the last seven years (table 14). One particular school had lost five teachers in a span of seven years including one teacher in year 2001. The school also reported two teachers who had left due to chronic illness.

Table 13: Number of teachers who have died or left due to illness in last seven years (1995 – 2001) in the surveyed schools

District	School	Attrition due to death	Attrition due to illness	Medical retirement
Machakos (Pilot)	A	5	2	0
Thika	A	0	0	0
	B	0	0	0
	C	0	0	0
Makueni	A	0	1	0
	B	0	0	0
	C	0	0	0
Nakuru	A	0	3	0
	B	2	1	1
	C	0	0	0
Kisumu	A	0	0	0
	B	1	0	1
	C	3	0	0
Total		11	7	2

Source: School records

Teachers were also asked to state if they knew any people in the local community who had died of AIDS related complications in the last five years and how many of them were in teaching profession. In Kisumu all the interviewed teachers knew someone who had died of AIDS, while 95.8%, 94.4% and 88.9% of the teachers interviewed in Nakuru, Thika and Makueni respectively said they knew someone who had died of AIDS in the local community.

At least 50 percent of the teachers in each district said that of the people who had died of AIDS related diseases in the local community some were in the teaching profession. In Makueni for example 74.1 percent of the interviewed teachers knew more than five teachers who had died of AIDS in the local community, this was followed by Kisumu at 45.5 percent.

Table 14: ***Teachers Who Knew of Local People Who Had Died of AIDS Related Illness in the Last 5 Years***

District	Yes	No	N
Kisumu	100.0%	0.0%	22
Nakuru	95.8%	4.2%	24
Makueni	88.9%	11.1%	27
Thika	94.4%	5.6%	18
Mean	94.8%	5.2%	

Source: Survey results

Table 15: ***How Many of These Were in Teaching Profession?***

District	1-2	3-5	More than 5	None	N
Kisumu	22.7%	27.3%	45.5%	4.5%	22
Nakuru	25.0%	12.5%	12.5%	50.0%	24
Makueni	4.8%	3.7%	74.1%	7.4%	27
Thika	11.1%	5.6%	11.1%	50.0%	18
Mean	15.9%	12.3%	35.8%	28.0%	

Source: Survey results

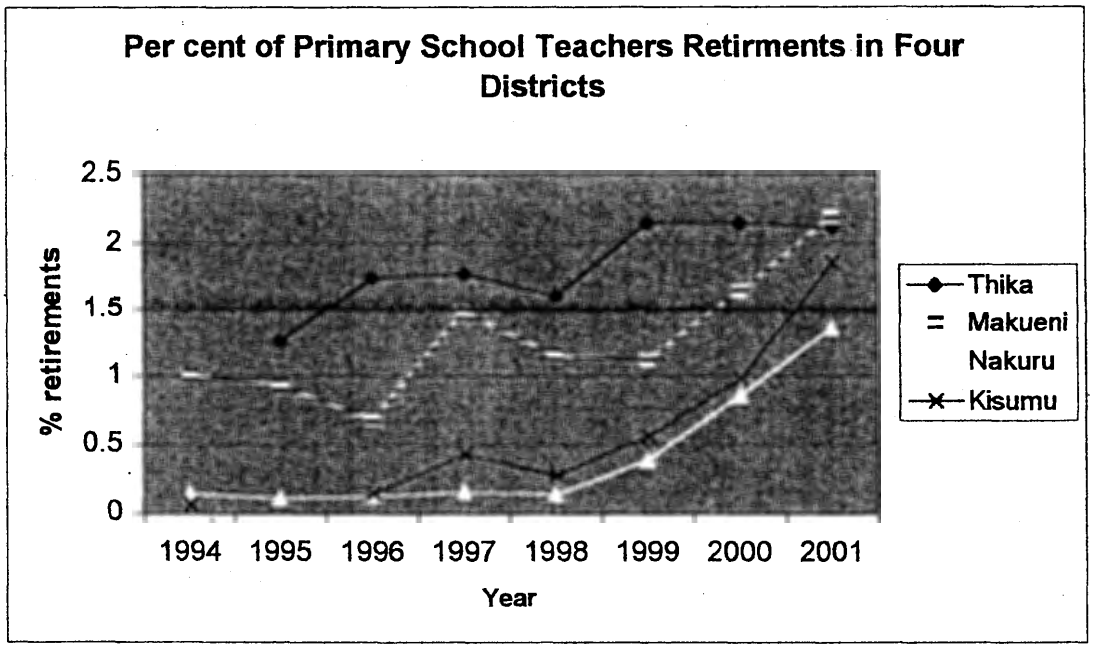
When asked if HIV/AIDS was a big problem in their school, 54.4% and 50% of teachers in Kisumu and Nakuru respectively replied in the affirmative.

3.9.2 Teachers Retirements

The level of teachers retirements (early, mandatory and retirements on medical grounds) had increased exponentially in all the districts surveyed as can be seen in figure 7 below. Although we were not able to get disaggregated data on reasons of retirement or age at retirement, the rate at which these retirements have increased in the last five years gives an indication of potential AIDS factor. When considered together with reported teachers deaths in figure above the credence to this conclusion is even more.

Education officials indicated that some teachers opted to retire when they got sickly to extend of being unable to discharge their duties. Also according to TSC regulations absenteeism on medical grounds is only allowed for the first six months after which salary is terminated. As it can be seen in figure 7 below, the level of retirements is quite high especially in Thika and Makueni districts.

Figure 9: Percentage of Primary School Teachers Retirements in Four Districts



Source: District Education Office Records

3.9.3 Teachers Absenteeism

Records on teachers' absenteeism although required to be routinely kept in schools and at the local education administration centers were not readily available in all the study sites. Even within the schools, the data on teachers absenteeism as provided for by the head teachers contrasted significantly with data collected using structured questionnaires administered on selected number of teachers. This could point to lack of records at the school level on teachers' absenteeism or fear by the head teachers to reveal incompetence by showing high levels of absenteeism within their schools.

In some schools, the head teachers reported low absenteeism than reported by the teachers who completed structured questionnaires. For example in one school the head teacher reported only two days of absenteeism by a male and a female teacher, while among the seven teachers who completed the questionnaires five of them had been absent for a period ranging between one to five days.

Teachers' absenteeism data at the district level could therefore be highly misleading. Data on teachers' absenteeism using questionnaires administered with confidentiality among individual teachers would be more reliable.

In each school the sampled teachers were asked to give a range of the number of days they had been absent from school during the school term in which the interview was conducted. The ranges were between one and five days, 6 and 10 days, 11 and 15 days and over fifteen days.

In the analysis below within each district we had a minimum of 30 percent absenteeism of teachers. In Thika district, for all the teachers interviewed in the three schools, each of them had been absent for a minimum period of between one and five days. The low rate of absenteeism in Nakuru district and Kisumu is because the interviews were conducted in the second and third week after the schools opened for the third term respectively. In Makueni where the interviews were conducted during the last week of the school term only 22.2% of the interviewed teachers had not been absent that term.

Table 16: How many days have you been absent from school this term?

District	None	1-5 days	6-10 days	11-15 days	> 15 days	N
Kisumu	50%	50%	-	-		22
Nakuru	70.8%	29.2%	-	-		24
Makueni	22.2%	70.4%	7.4%	-		27
Thika	-	83.3%	11.1%		5.6%	18

Source: Survey results

Although we did not ask teachers the reasons for absenteeism, the head teachers questionnaire reveal that most of the reported absenteeism was because of school related activities, sickness, attending funerals, and attending to other sick people.

3.9.4 Teachers Views about Their School

The level of teachers moral was considered high by most of the teachers, although there were some especially in Kisumu and Thika district who did not consider teachers' morale in their schools to be high. The teachers however, considered themselves to be hard working.

In one of the schools in Thika, the management was going through a crisis and we were told that the administration and the entire management committee were not in talking terms with parents. The parents had even threatened to withdraw their children from the school. Financing of school activities and facilities had stalled. Teachers in the school were even buying their own chalk and in some cases textbooks.

Table 17: ***Teachers' morale in this school is high***

District	Agree	Not sure	Disagree
Kisumu	72.7%	4.5%	22.7%
Nakuru	83.3%	4.2%	12.5%
Makueni	85.2%	3.7%	11.1%
Thika	72.2%	5.6%	22.2%
Mean	78.4%	4.5%	17.1%

Source: survey results

Table 18: ***Teachers in this school are hard working***

District	Agree	Not sure	Disagree
Kisumu	90.9%	9.1%	0.0%
Nakuru	100.0%	0.0%	0.0%
Makueni	96.3%	3.1%	0.0%
Thika	94.4%	5.6%	0.0%
Mean	95.4%	4.5%	0.0%

Source: Survey results

3.9.5 Discrimination of Teachers Perceived to Be HIV Positive

When asked about treatment of teachers suspected to be HIV positive by the; school management, other teachers, pupils and the community. The teachers' responses in all the districts showed that the school management were the most tolerant, while the communities were the most intolerant to HIV positive teachers. For example in Makueni where only 7.4 percent of the teachers believed that school management discriminated against HIV positive teachers, 51.9 percent of the respondents felt the community discriminated against teachers perceived to be HIV positive and 29.6 percent of them felt students discriminated against HIV positive teachers. There were a significant number of teachers who felt that HIV positive teachers were discriminated against by fellow teachers especially in Nakuru and Kisumu. Incidentally these happen to be the districts with high infection rates in the country.

In Nakuru where actual cases of HIV positive teachers were reported in two schools, 37.5 percent of teachers felt HIV positive teachers were discriminated against by their fellow teachers, and 41.7 percent felt such teachers were discriminated against by the community.

Table 19: ***Teachers who are HIV positive are discriminated against by the School Management***

District	Agree	Not sure	Disagree
Kisumu	18.2%	31.8%	50.0%
Nakuru	20.8%	29.2%	50.0%
Makueni	7.4%	40.7%	51.9%
Thika	11.1%	33.3%	55.6%
Mean	14.4%	33.8%	51.9%

Source: survey results

Table 20 ***Teachers who are HIV positive are discriminated against by other teachers***

District	Agree	Not sure	Disagree
Kisumu	31.8%	22.7%	45.5%
Nakuru	37.5%	16.7%	45.8%
Makueni	14.8%	33.3%	51.9%
Thika	16.7%	16.7%	66.7%
Mean	25.2%	22.4%	52.5%

Source: survey results

Table 21: *Teachers who are HIV positive are discriminated against by community*

District	Agree	Not sure	Disagree
Kisumu	45.5%	18.2%	36.4%
Nakuru	41.7%	29.2%	29.2%
Makueni	51.9%	29.6%	18.5%
Thika	38.9%	44.4%	16.7%
Mean	44.5%	30.4%	25.2%

Source: survey results

Table 22: *Teachers who are HIV positive are discriminated against by students*

District	Agree	Not sure	Disagree
Kisumu	27.3%	31.8%	40.9%
Nakuru	33.3%	41.7%	25.0%
Makueni	29.6%	40.7%	29.6%
Thika	44.4%	44.4%	11.1%
Mean	33.7%	39.7%	26.7%

Source: survey results

The level of intolerance of suspected HIV positive teachers in Kisumu is surprising because this is a district that has benefited from a lot NGOs' interventions in HIV/AIDS education and public awareness. This shows that even though level of awareness may have been created, its effectiveness remains low.

3.10 Impact of HIV/AIDS on Teaching Force

HIV/AIDS in the surveyed districts has impacted on teachers in a number of ways. In some schools, due to increased deaths from AIDS related complications coupled with increased poverty levels, financing of school activities and other requirements have been severely affected. Teachers have been forced to use their own money to buy chalk, textbooks etc. They are also contributing large sums of money to help in financing; funerals for parents, fellow teachers and their kin, levies for orphans, uniforms for orphaned children and other needs including food, and medical bills for fellow teachers and their kin. In one school, where teachers contribute money to cook joint lunch meals, they have been forced to include some orphans in the project after they realized that the pupils were about to drop out of school for lack of meals.

Teachers have been forced to take up the burden of caring for the desperate cases in their schools. For instance, in one school a child who was getting support (clothing, food, textbooks etc.) from one of the teachers in her school became quite apprehensive after learning that the teacher was being transferred to another school. To her, the teacher was her only hope.

In all the schools visited we found teachers had formed local welfare associations to assist each other on emergencies. Most of the expenditures went to cover medical bills for members and their immediate families. The second most important expenditure item was for funeral expenses, for

members and immediate families. Contributions for assisting funeral expenses of children who lost their parents were done outside the welfare kitty.

Teachers were also overburdened when their own succumbed to the pandemic, as they had to shoulder extra workload. Stress among teachers as they watched one of their own succumb and then die was also demoralizing. In one school we were told of a teacher who was on verge of death and she had not reported to school in the last two school terms. The teachers were looking quite apprehensive.

Deaths among pupils were minimal except a few cases reported in Kisumu, but deaths among the parents were quite alarming. This is the reason for high numbers of orphans.

3.11 Impact of HIV/ AIDS on Communities

The levels of deaths among community members in some of the districts surveyed were very high. Community members and teachers reported having to attend funerals on a weekly basis. Each death of a school parent presented a financial as well as a social burden to the remaining members of the community. The death meant a shortfall in financial support to the school as each parent was responsible for paying certain levies to the school as well as contributing labour.

The remaining parents are forced either to dig deeper into their pockets to provide for the financial shortfall, or have to do with a poorly financed school. In addition, they are forced to finance other requirements of the orphaned children. Some community members talked of having been forced to cut down on school expenditure for their own children in order to accommodate the financial burden of the orphaned children. In another school, the community talked of a prominent Kenyan from the local area who had spearheaded a number of development activities for the school and the community, but died of AIDS four years ago. Since then all the development activities for the school have stalled.

The financial burden of financing funerals of dying relatives and neighbours is contributing to increased poverty among the rural communities. The communities talked of time spend in preparation of funerals, which meant less time was spent on productive work.

In one of the surveyed districts funeral festivities can last up to two weeks and this means no productive work for the mourners. With an average of 3 funerals per week in some communities, it means very little work is being done.

3.12 Impact of HIV/AIDS on Cost of Education

The HIV/AIDS impact on the cost of education has not been documented in Kenya. However, the pandemic affects cost of education in a number of ways;

- Payment of teachers' salaries who are not teaching because of ill-health
- Cost incurred in training of teachers who die before rendering full service of their teaching carrier
- Retraining of teachers due to changes in teaching process to reflect new demands imposed by the HIV pandemic
- Increased financial burden on community members due to increased number of orphans in schools

One of the objectives of this study was to try to document the number of teachers that are currently being paid but not actually teaching due to ill health. Although in some schools we were able to get some data on teachers who were actually on extended sick leave or attending classes intermittently due to ill health, other schools were not as open. Information on teachers who had died or retired due to ill-health was also sought and given in some schools but not in others.

At the district level, only Nakuru had comprehensive information on teachers' absenteeism and early retirements of teachers.

According to TSC rules a teacher is allowed 3 months of medical leave in which full salary is paid, he/she is then entitled to another three months of medical leave but at half the salary. After this period the salary is supposed to be stopped. Majority of the primary school teachers are in job group P1 followed by P2 and S1/Diploma in that order. In 1999 there were an estimated 125,490 P1 teachers, 27,673 P2 teachers and 18,942 S1/diploma teachers in primary schools. Other categories included, 5,301 P3 teachers, 2,594 approved teachers, 164 graduate teachers and 6,448 untrained teachers. In total there were 186,612 teachers.

From the above statistics the ratio of teachers by grades are:

P1	0.67
P2	0.15
P3	0.03
S1	0.10
Approved	0.01
Graduate	0.00
Untrained	0.03

There were 94, 32 and 11 teachers who died in year 2000 in Kisumu, Nakuru and Thika respectively. If we apply the above ratios, we can assume that 63 P1 teachers died in Kisumu, 21 P1 in Nakuru and 7 P1 in Thika. Due to none disclosure of actual deaths caused by AIDS in Kenya's national statistics, it was not possible to compute the percentages of the teacher deaths that could be attributed to HIV/AIDS. This would have made it possible to compute an estimate of costs of retaining HIV/AIDS infected teachers in schools. The Ministry of Education for example pays a full salary for teachers on

medical leave for first three months, and then half pay for the next three months, after which salaries are supposed to be stopped. Using this basic information one can easily compute the possible expenses for AIDS related absenteeism.

3.13 Levels of Knowledge and Attitudes among Parents, Students and Teachers

The level of knowledge of HIV/AIDS among students, teachers and parents was high. At least over 97% had heard about HIV/AIDS. It is the quality of the knowledge that was at variance and in some cases misleading. Most did not know the difference between HIV and AIDS.

Despite the level of knowledge, attitude change had not occurred. This was as a result of a combination of factors such as; cultural beliefs, poverty, peer pressure, drug abuse, alcohol abuse, misinformation, etc.

When teachers, pupils and the community representatives were asked how HIV/AIDS affects education, there were varied opinions. Teachers talked of heavy workload, social stress as they saw their own succumb to the disease, general stress and fear among the pupils, and financial burden (teachers, pupils and parents contributed money to assist in funeral arrangements for parents or teachers who have died). To pupils, when their teachers fell sick, there was a risk of not covering the syllabus.

Teachers, parents and pupils were aware of how HIV/AIDS is transmitted, although misconception on methods of spreading the disease also existed. They were also aware of the general symptoms of AIDS.

All the schools were implementing HIV/AIDS curriculum. Pupils, parents and the teachers supported HIV/AIDS education. Some teachers were however, uncomfortable in handling the subject for a number of reasons. Some did not feel competent to handle the subject as they had not been trained while others felt shy. This was collaborated by the pupils during focus groups discussions.

Teachers expressed desire for in-service training in order to improve on the delivery of the subject.

Most parents, especially women discussed HIV/AIDS with their children. The level of discussion was however shallow, in most cases confined to threats like if you don't watch out you will get AIDS and die.

3.14 Level of Knowledge, Attitude and Practice among Pupils

The average age of the pupils in the schools surveyed by sex was; Thika district girls-13.48, boys-13.41, Makueni district girls-14.03, boys-13.97, Nakuru district girls-13.46, boys-13.8, Kisumu district girls-13.17 and boys 13.1.

The level of awareness among the pupils was very high. The main sources of information on sexuality and HIV were parents (especially mothers), radio, friends, teachers and newspapers. When asked whom they would most likely talk to if they had a personal concern about sex, majority said they would talk to their mother. Fathers and teachers came second and third in that order.

When asked at what age girls or boys should start having sexual intercourse majority of the pupils said that it depends on when one marries. A few however mentioned between ages less that 10 years and 14 years. This applied to both boys and girls. Majority of those who advocated early onset of sexuality were from Nakuru and Kisumu districts.

Table 23: ***At What Age Should A Girl Start To Have Sexual Intercourse?***

District	Sex	< 10 yrs	10-14 yrs	15-20 yrs	>20yrs	Depends on when she gets married	Don't know
Thika	Boys	0	0	3	4	51.7%	24.1%
	Girls	0	1	4	5	64.9%	8.1%
Makueni	Boys	0	0	2	0	82.8%	10.3%
	Girls	0	0	0	0	87.1%	12.9%
Nakuru	Boys	0	3	4	1	61.8%	14.7%
	Girls	0	0	0	2	60%	33.3%
Kisumu	Boys	1	1	1	0	71%	19.4%
	Girls	0	3	2	2	62.1%	13.8%
Total		1	8	16	14	68%	17%

Source: Survey results

Table 24: ***At What Age Should a Boy Start to have Sexual Intercourse?***

District	Sex	< 10 yrs	10-14 yrs	15-20 yrs	>20yrs	Depends on when she gets married	Don't know
Thika	Boys	0	0	3	3	62.1%	17.2%
	Girls	0	0	4	2	59.5%	24.3%
Makueni	Boys	0	0	1	0	75.9%	13.8%
	Girls	0	0	0	2	77.4%	22.6%
Nakuru	Boys	0	2	2	2	64.7%	17.6%
	Girls	0	1	0	2	56.7%	33.3%
Kisumu	Boys	1	1	0	2	67.7%	19.4%
	Girls	0	3	1	2	55.2%	24.1%
Total		1	7	11	15	64.9%	21.5%

Source: survey results

Majority of the pupils said the had already heard about HIV/AIDS. Over 50% said using condoms can prevent one from getting HIV, while 34.5% said condoms can not protect one from contracting HIV virus and 16.8% did not know if condoms can protect one from contracting HIV virus.

Table 25: *Have You Heard Of HIV/AIDS?*

District	School	Yes	No	N
	Gatuanyaga	96.2%	3.8%	26
	Ngethu	100%	-	20
Thika	Thamuru	100%	-	20
	Kisayani	90%	5%	20
	Enzai	100%	-	20
Makueni	Tangu	100%	-	20
	Pele	90%	10%	20
	Njoro	100%	-	20
Nakuru	Ngeya	100%	-	20
	Rabour	100%	-	20
	Maseno	95%	5%	20
Kisumu	Diemo	95%	5%	20
Total				246
Mean		97.2%	5.8%	

Source: survey results

Table 26: *Using Condoms Helps To Prevent AIDS*

District	School	Yes	No	Don't know	N
Thika	Gatuanyaga	30.8%	61.5%	7.7%	26
	Ngethu	15%	70%	15%	20
	Thamuru	55%	20%	25%	20
Makueni	Kisayani	65%	10%	25%	20
	Enzai	55%	40%	5%	20
	Tangu	65%	25%	10%	20
Nakuru	Pele	60%	20%	20%	20
	Njoro	39.1%	34.8%	21.7%	20
	Ngeya	42.9%	38.1%	19.0%	20
Kisumu	Rabour	50%	50%	-	20
	Maseno	50%	30%	20%	20
	Diemo	85%	15%	-	20
Mean		51.07%	34.53%	7.13%	

Source: survey results

Over 80% of the pupils interviewed said that there was no cure for AIDS while 12.1% said there was cure for AIDS and 6.2% did not know.

Table 27: *There Is No Cure For AIDS*

District	School	Yes	No	Don't know
Thika	Gatuanyaga	88.5%	3.8%	7.7%
	Ngethu	60%	35%	5%
	Thamuru	90%	5%	5%
Makueni	Kisayani	80%	15%	5%
	Enzai	85%	5%	10%
	Tangu	95%	-	5%
Nakuru	Pele	90%	-	10%
	Njoro	78.3%	17.4%	4.3%
	Ngeya	85.7%	4.8%	4.8%
Kisumu	Rabour	95%	5%	-
	Maseno	80%	15%	-
	Diemo	80%	15%	5%
Mean		84.0%	12.1%	6.2%

Source: survey results

Over 50% of the pupils said you could not tell if one had HIV virus just looking at him or her, while 31.9% said one could tell just by looking. Fourteen and half of the pupils said they were not sure if one can tell an HIV infected person just by looking.

Table 28: *You Can Simply Tell By Looking That Someone Is HIV Positive*

District	School	Yes	No	Don't know
Thika	Gatuanyaga	38.5%	50.0%	11.5%
	Ngethu	25%	60%	10%
	Thamuru	20%	80%	-
Makueni	Kisayani	30%	45%	25%
	Enzai	40%	55%	5%
	Tangu	10%	70%	20%
Nakuru	Pele	45%	40%	15%
	Njoro	21.7%	47.8%	8.7%
	Ngeya	38.1%	47.6%	9.5%
Kisumu	Rabour	60%	40%	-
	Maseno	30%	45%	20%
	Diemo	25%	55%	20%
Mean		31.9%	53.0%	14.5%

Source: survey results

3.15 Sexuality among The Pupils

Sexuality among the pupils was very high in some schools as can be seen in the analysis below. This is worrying as majority said they did not use any form of protection during the sexual intercourse. Of the four districts surveyed Makueni reported the lowest number of respondents who had already had sexual intercourse. The other districts averaged about 30% of those who had already had sexual intercourse.

Table 29: Number Pupils Who Already Had Sexual Intercourse (N)

Thika District	No. Who had Sex	No. interviewed	Classes Interviewed
School			
A	12	26	5 - 8
B	3	20	6 - 8
C	6	20	5 - 8
Makueni District			
School			
A	4	20	5 - 8
B	3	20	5 - 8
C	3	20	6 - 8
Nakuru District			
A	13	20	5 - 8
B	6	20	5 - 8
C	3	20	4 -7
Kisumu District			
A	9	20	5 - 8
B	5	20	4 - 7
C	7	20	4 – 7

Source: Survey results

In some schools, we found class 8 having their mock examination[11] and therefore they could not participate in the survey.

The early on-set of sexuality among pupils is also worrying as at this tender age, they do not have reproductive information to prevent themselves from infections. The girls attributed sexual activity among themselves and older men to small gifts. The average age at first sexual intercourse for the pupils interviewed is given below.

Table 30: The Average Age At First Sexual Intercourse By Region And Sex

District	**Boys**	**Girls**
Kisumu	9.73	10.86
Nakuru	10.00	9.80
Makueni	8.60	9.00
Thika	13.67	12.14

Source: Survey results

[11] The exams are taken as part of preparation for the end of primary school examinations.

When asked whether they knew of close class friends who had already had sexual intercourse, 34.7% said they knew at least two. There were more boys than girls who knew at least two close friends who had had sexual intercourse.

Table 31: ***Thinking Of Your Closest Friends In Your Class At School, How Many Of Them Do You Think Have Had Sexual Intercourse?***

District	Sex	None of them	One of them	Two of them	More than two	Not sure
Thika	Boys	6.9%	3.4%	10.3%	27.6%	51.7%
	Girls	18.9%	13.5%	10.8%	18.9%	37.8%
Makueni	Boys	24.1%	3.4%	24.1%	--	48.3%
	Girls	22.6%	-	3.2%	19.4%	51.6%
Nakuru	Boys	2.9%	14.7%	5.9%	38.2%	32.4%
	Girls	16.7%	16.7%	--%	40%	26.6%
Kisumu	Boys	12.9%	12.9%	3.2%	38.7%	32.3%
	Girls	17.2%	10.3%	6.9%	31%	34.5%
Mean		%	%	%	%	%

Source: Survey Results

When asked if faced with a situation in which they could play sex, how likely they were to say no, majority (58.5%) said they would say no. However, some said they were not sure whether they would resist. In terms of gender more girls than boys said they were likely to say no. More boys than girls said they were unlikely to say no if faced with a situation in which they could play sex.

Table 32: ***If You Were Faced With A Situation Where You Could Play Sex, How Likely Or Unlikely Do You Think You Would Be Able To Say No?***

District	Sex	Very likely	Fairly likely	Very unlikely	Fairly unlikely	Not sure
Thika	Boys	34.5%	17.2%	13.4%	21.6%	17.2%
	Girls	54.1%	13.5%	5.4%	10.8%	16.2%
Makueni	Boys	75.9%	3.4%	6.9%	10.3%	3.4%
	Girls	77.4%	-	9.7%	3.2%	6.5%
Nakuru	Boys	41.2%	8.8%	17.6%	--	20.6%
	Girls	73.3%	--	3.3%	3.3%	20%
Kisumu	Boys	51.6%	12.9%	9.7%	6.5%	19.4%
	Girls	62.1%	3.4%	6.9%	-	27.5%
Mean		58.5%	9.5%	12.3%	13.1%	15.9%

Source: Survey results

The fact that there were a large number of pupils reporting sexual activity is worrying even with high knowledge of HIV/AIDS. Although some said they had used protection during sexual intercourse, some of the protective methods were crude and could even pose more danger to the pupils. In a group discussion session in one school we were told of how some pupils improvised using polythene papers

as condoms. Some girls who had sex with older men claimed that their partners used condoms and therefore did not feel at risk.

The onset of first sexual intercourse among the pupils was very early and at such age, the penis for the boys may not be big enough to fit the adult condoms available in the market. Condoms may therefore not be a solution at such tender age. However, for girls who were having mature sexual partners, encouraging them to insist on use of condoms may help tame the spread of the disease. However, the bargaining power of such girls is limited because first they are dealing with much older men who perceive them to be safe from HIV and therefore would like to have unprotected sex with the girls. Secondly we were told that the girls are usually enticed with gifts of snacks, sweets and money and this could still compromise their bargaining power.

The orphaned girl child is even in a more precarious position as some live with cruel relatives, while others are forced to sell sex for survival.

If faced with a personal concern about sex, most pupils said they would prefer to talk to their mothers about such concerns. However, as expected more girls than boys said they would prefer to talk to their mothers. More boys than girls also said they would prefer to talk to their fathers if faced with a sexual concern. Incidentally grandparents did not fair well as people the pupils would talk to if faced with a concern about sex. This is worrying as most AIDS orphans are left under the care of the grandparents.

Older brothers and sisters and teachers were also mentioned as potential people pupils would go to if faced with problems of sexual nature.

Table 33: ***If you had a personal concern about sex, who would you most likely talk to?***

District	School	Mother	Father	Older Sister	Older Brother	Aunt	Uncle	Grandmother	Grandfather	Friends	Sch. mates	Teacher	Pastor	Local Healer
Thika	Gatuanyaga	57.7%	3.8%	3.8%	3.8%	3.8%	7.7%	3.8%	0	3.8%	0	3.8%	3.8%	7.7%
	Ngethu	45.0%	10%	20%	20%	10%	10%	0	5.0%	5.0%	15%	0	0	0
	Thamuru	0	25%	15%	5.0%	15%	5.0%	5.0%	0	5.0%	0	25%	0	0
Makueni	Kisayani	30%	0	0	25%	5.0%	0	5.0%	10%	5.0%	5.0%	5.0%	10.0%	0%
	Enzai	45%	25%	5.0%	0	5%	5%	5%	0	0	5%	25%	5%	5%
	Tangu	75%	5%	0	0	0	0	0	5%	5%	0	0	10%	0
Nakuru	Pele	25%	15%	30%	5%	0	10%	10%	10%	15%	10%	15%	0	0
	Njoro	34.7%	8.7%	13%	8.7%	4.3%	0	4.3%	8.7%	8.7%	4.3%	4.3%	0	0
	Ngeya	38.1%	33.4%	4.8%	14.4%	0	9.6%	0	0	4.8%	9.6%	23.8%	0	0
Kisumu	Rabour	45%	0	10%	15%	5%	0	5%	0	0	10%	5%	5%	5%
	Maseno	40%	20%	10%	5.0%	5%	0	5%	0	0	0	15%	0	0
	Diemo	30%	15%	10%	15%	5%	0	25%	5%	10%	20%	25%	0	0
Mean		38.8%	13.4%	10.1%	9.7%	4.84%	3.94%	5.7%	3.6%	5.2%%	6.6%	12.2%	2.8%	1.5%

Source: Survey results

Table 34: *If you had a personal concern about sex, who would you most likely talk to?*

District	Sex	Mother	Father	Older Sister	Older Brother	Aunt	Uncle	Grandmother	Grandfather	Friends at home	Schoolmates	Teacher	Pastor	Local Healer
Thika	Boys	17.2%	24.1	3.4	17.2	3.4	13.7%	3.4	-	-	-	3.4%	6.9	6.9
	Girls	51.4%	2.7	16.2%	2.7	13.5	2.7	2.7	-	-	-	13.5	-	-
Makueni	Boys	24.1%	20.6	-	17.2%	-	3.4	-	10.3%	6.9	3.4	10.3	10.3	-
	Girls	74.2%	-	3.2	-	6.4	-	3.4	-	-	3.2	9.7%	6.5	-
Nakuru	Boys	11.8%	26.5	5.9%	5.9	-	-	2.9	8.8	5.9%	5.9	8.8%	-	-
	Girls	56.6%	-	23.3%	-	3.3	-	6.6	-	13.3	3.3	6.6%	3.3	-
Kisumu	Boys	9.7%	22.6%	6.5	19.4%	3.2	-	19.4	12.9	3.2	19.4	19.4%	3.2	-
	Girls	65.5%	-	10.3	3.4	3.4	-	-	-	3.4	-	10.3%	-	-
Mean		42.3%	23.7%	19.5%	20.0%	15.0%	7.7%	0.0%	10.0%	15.0%	20.0%	15.8%	0.0%	5.0%

Source: Survey results

3.16 Knowledge, Attitude and Practice among Teachers

Over 90 percent of the interviewed teachers believed that a person can transmit the HIV virus while appearing healthy. But a small number of female teachers believed that this was not possible.

More females than men said they would not embrace anybody if they suspected he/she had the virus that causes AIDS. However, the females were more tolerant than men in working with people they suspect to have the HIV virus.

Table 35: ***A person Can Transmit the AIDS Virus Whilst Appearing Healthy***

Gender	Yes certainly	More or less	Certainly not
Female	92.3%	1.9%	5.8%
Male	96.9%	0.0%	0.0%
Mean	94.6%	1.0%	2.9%

Source: survey results

Table 36: ***I Can Embrace a Person Even if I Suspect He/She Has The AIDS Virus***

Gender	Yes certainly	More or less	Certainly not
Female	50.0%	17.3%	30.8%
Male	46.9%	28.1%	21.9%
Mean	48.5%	22.7%	26.4%

Source: survey results

Table 37: ***I can work with anyone even if I know that he/she has the AIDS virus***

Gender	Yes certainly	More or less	Certainly not
Female	82.7%	7.7%	7.7%
Male	78.1%	6.3%	12.5%
Mean	80.4%	7.0%	10.1%

Source: survey results

Based on the information in the tables below, even though the level of knowledge of HIV/AIDS and how it is transmitted appeared to be high among teachers and even pupils, the quality of that information was rather low. Some of the limited areas of knowledge among the teachers were; if a blood test can sometimes give false results, and attitudes such ability to work with or embrace someone suspected to be HIV positive.

Table 38: *A Person Can Transmit the AIDS Virus Whilst Appearing Healthy*

District	Yes certainly	More or less	Certainly not
Kisumu	95.5%	4.5%	0.0%
Nakuru	100.0%	0.0%	0.0%
Makueni	100.0%	0.0%	0.0%
Thika	94.4%	5.6%	0.0%
Mean	97.5%	2.5%	0.0%

Source: survey results

Table 39: *Can someone have the HIV virus without showing any symptoms of being ill?*

District	Yes	No	Don't know
Kisumu	86.4%	13.6%	0.0%
Nakuru	91.7%	8.3%	0.0%
Makueni	88.9%	7.4%	3.7%
Thika	100.0%	0.0%	0.0%
Mean	91.8%	7.3%	0.9%

Source: Survey results

Table 40: *Does a blood test for HIV virus sometimes give you false information?*

District	Yes	No	Don't know
Kisumu	27.3%	4.5%	68.2%
Nakuru	25.0%	4.2%	66.7%
Makueni	51.9%	18.5%	29.6%
Thika	88.9%	11.1%	0.0%
Mean	48.3%	9.6%	41.1%

Source: Survey results

Majority of the teachers displayed negative attitude towards the use of condoms. They believed that women who carried condoms in their handbag appeared to be available to everyone. In terms of gender the negative attitude was stronger among female teachers.

Table 41: *A Woman Who Carried Condoms in her Handbag Appears to be Available to Anyone.*

District	Strongly Agree	More or less agree	Disagree
Kisumu	63.6%	13.6%	22.7%
Nakuru	45.8%	25.0%	29.2%
Makueni	51.9%	11.1%	37.0%
Thika	61.1%	33.3%	5.6%
Mean	55.6%	20.8%	23.6%

Source: Survey results

Table 42: *A Woman who Carried Condoms in her Handbag Appears to be Available to Anyone*

Gender	Strongly Agree	More or less agree	Disagree
Female	63.5%	9.6%	26.9%
Male	40.6%	34.4%	21.9%
Mean	52.1%	22.0%	24.4%

Source: Survey results

Majority of the female teachers were opposed to use of condoms. They said they would feel embarrassed to ask for condoms. Over 30 percent felt that condoms were for immoral people. A large number of female teachers than male also said they would never use a condom with anyone during sexual intercourse. A large number of females than men also believed that one cannot have sexual pleasure using a condom.

Table 43: *A condom is Ok to Buy*

Gender	Strongly Agree	Agree a little	Disagree
Female	34.6%	21.2%	42.3%
Male	62.5%	9.4%	2.5%
Mean	48.6%	15.3%	22.4%

Source: Survey results

Table 44: *Condom is for Immoral People*

Gender	Strongly Agree	Agree a little	Disagree
Female	26.9%	13.5%	59.6%
Male	12.5%	6.3%	78.1%
Mean	19.7%	9.9%	68.9%

Source: Survey results

Table 45: *It is Easy to Put on a Condom*

Gender	Strongly Agree	Agree a little	Disagree
Female	40.4%	34.6%	23.1%
Male	53.1%	31.3%	12.5%
Mean	46.8%	33.0%	17.8%

Source: survey results

Table 46: *One Can Have Pleasure With a Condom*

Gender	Strongly Agree	Agree a little	Disagree
Female	17.3%	36.5%	46.2%
Male	40.6%	21.9%	31.3%
Mean	29.0%	29.2%	38.8%

Source: survey results

Table 47: *A condom is difficult to buy because I am embarrassed to ask for it*

Gender	Strongly Agree	Agree a little	Disagree
Female	44.2%	25.0%	30.8%
Male	31.3%	34.4%	31.3%
Mean	37.8%	29.7%	31.1%

Table 48: *A condom does not need to be used with a person that I love*

Gender	Strongly Agree	Agree a little	Disagree
Female	30.8%	9.6%	59.6%
Male	25.0%	0.0%	71.9%
Mean	27.9%	4.8%	65.8%

Source: survey results

Table 49: *A condom can be used to avoid having children*

Gender	Strongly Agree	Agree a little	Disagree
Female	53.8%	26.9%	19.2%
Male	71.9%	12.5%	12.5%
Mean	62.9%	19.7%	15.9%

Source: survey results

Table 50: *When I shall have sex in future, I shall use a condom*

Gender	Only with a partner I don't know	Always with all my partners	Never with anyone
Female	13.5%	26.9%	44.2%
Male	25.0%	25.0%	21.9%
Mean	19.3%	26.0%	33.1%

Source: survey results

When asked at what age a girl should start having sexual intercourse majority of the teachers said it depends on when she marries. However, there were some who believed girls should start sexual intercourse at 12 years.

Table 51: *At What Age Should a Girl Start To Have Sexual Intercourse?*

District	10-15 yrs	15-20 yrs	>20yrs	Depends on when she gets married	Don't know
Kisumu	9.1%	9.1%	4.5%	72.7%	4.5%
Nakuru	0.0%	0.0%	16.7%	79.2%	4.2%
Makueni	0.0%	0.0%	3.7%	81.5%	14.8%
Thika	0.0%	11.1%	22.2%	61.1%	5.6%
Mean	2.3%	5.1%	11.8%	73.6%	7.3%

Source: survey results

In terms of the rights of the youth to use of health services to avoid getting pregnant majority of the female teachers interviewed were opposed, while the male teachers felt the youth had a right to the services. In terms of regional distribution, Thika had the highest cases against youth having access to health services. This is not surprising as majority of those interviewed in the district were female teachers.

It may be useful to investigate why the female teachers were opposed to such services given that majority of those responsible for counseling and teaching of HIV/AIDS in the schools visited were women.

Table 52: ***Youth have the right to use the health services in order to prevent pregnancy and or STDs.***

District	Strongly Agree	More or less agree	Disagree
Kisumu	68.2%	9.1%	22.7%
Nakuru	45.8%	25.0%	29.2%
Makueni	63.0%	7.4%	29.6%
Thika	22.2%	5.6%	72.2%
Mean	49.8%	11.8%	38.4%

Source: survey results

Table 53: ***Youth have a right to use the health services in order to prevent pregnancy and /or STDs***

Gender	Strongly Agree	More or less agree	Disagree
Female	38.5%	9.6%	51.9%
Male	71.9%	6.3%	18.8%
Mean	55.2%	8.0%	35.4%

Source: survey results

3.17 Factors that increase the Vulnerable of Schools and Communities to HIV/AIDS

There were quite a number of factors that teachers, pupils and communities mentioned as being responsible for the vulnerability of schools and community to HIV/AIDS. The main ones are as listed below.

- ✓ High levels of poverty
- ✓ Closeness to highways and urban centers
- ✓ High levels of migrant population
- ✓ Misconceptions
- ✓ Break down of cultural norms
- ✓ Spouse separation
- ✓ Lack of parental guidance
- ✓ Low rate of behaviour change
- ✓ Retrogressive cultural practices
- ✓ Drug and alcohol abuse

3.18 Community Response to the Threat of HIV/AIDS in the Community and the Schools

Kisumu and some parts of Makueni represented areas with high concentration of NGOs and community based organizations dealing with HIV/AIDS awareness creation. Overall Kisumu had the highest concentration of such NGOs. In parts of Makueni, Thika and Nakuru very little interventions had been initiated. These areas lacked either community based organizations or NGOs dealing with HIV/AIDS maters.

In Kibwezi area of Makueni, ActionAid- Kenya, AMREF, Care-International and a host of CBOs were conducting HIV/ AIDS awareness campaigns using posters, video shows, public meetings and seminars. In the upper part of Makueni, the people relied on radio, print media and local hospitals and dispensaries for information. Local churches were also said to be sources of information on AIDS. In Kilome area near Salama market which is a truck stop, the local teachers have formed an AIDS awareness group which targets schools, local markets and the community. They are however, handicapped by lack of resources. They require audio visual equipment, a generator and video tapes on AIDS for the campaign work. They would also like to get some youth trained in HIV/AIDS to help in the public awareness work.

In Kisumu, Plan- International, ActioAid Kenya, Care-International and a host of CBOs and donor funded projects were involved in creating awareness through print media, video shows, seminars, poverty reduction projects etc.

In Nakuru, coverage of international NGOs was limited but there were a few areas where CBOs had been formed to create HIV/AIDS awareness. The church was also said to be spearheading HIV/AIDS campaigns in the area. In one area in the district a local group of young people has started a video show programme on HIV/AIDS awareness with help from Baraka Colloge. They have been provided with a television set, a video player and a mobile generator. They visit schools and market places to show the videos. The American Peace Corps in conjunction with AIC church were also involved in HIV/AIDS awareness creation in Nakuru district especially around Mai Mahiu.

In Thika, Plan – International and AMREF had just started activities on HIV/AIDS awareness. Plan was however concentrating in only one area of the areas we visited. In this area it had started AIDS awareness campaigns as well as support for orphaned children. It was working through school clubs and peer educators. AMREF concentration was health and water and sanitation and therefore did not have direct HIV/AIDS awareness creation in schools.

Even though there are a number of efforts at the community level on HIV/AIDS awareness the quality of information is generally low and this could explain the slow pace in behaviour change. The methods used and the people used in raising the public awareness are sometimes also questionable and not acceptable to the community of age/ sex group.

In one area in Makueni district where some NGOs are undertaking public awareness campaign, the community leaders questioned the moral of some of the people involved in the campaign saying that they did exactly what they preached against and there added to sceptism about HIV/AIDS existence among the local people. They also complained that most them were too young and the older generation tended to keep away.

In another area in Thika district, the use of provincial administration in creating public awareness was also questioned with some people saying that some local chiefs cannot talk about sexual morality in public as they were known culprits. This study suggests that the choice of the method and the resources persons is an important factor in creating public awareness on HIV/AIDS.

3.19 Teaching of HIV /AIDS in Schools

Since the introduction of HIV/AIDS curriculum majority of the schools in the country have started teaching HIV/AIDS. In all the schools we visited HIV/AIDS had been integrated into other subjects and special classes had been set aside for HIV/AIDS subject. The teachers were however, ill equipped to handle the subject. They expressed desire for in-service training in order to equip them with skills to handle this delicate subject.

One of the challenges of teaching HIV/AIDS is that there are so many sources of information that each day a teacher will be confronted with all manner of questions by pupils resulting from information picked from either of the following sources; radio, print media, friends, church, NGOs, posters, or some village gossip. During this survey the most recurring question from pupils, teachers and communities was whether mosquitoes can transmit the HIV virus. Incidentally this topic is handled in the facilitators' handbook for HIV/AIDS but they seem not to be convinced partially because the book does not give details as to why mosquitoes cannot transmit the HIV virus.

When asked about in-service training on HIV, majority of the teachers said it was not adequate. In most schools only one teacher had attended such training, usually a seminar. Majority of those who have attended HIV/AIDS seminars were from Kisumu district where incidentally HIV/AIDS interventions started early.

The biggest challenges schools are facing at the moment is demand for counseling services especially among mature girls and orphaned children. It is a pity that most schools are ill equipped to handle such cases. Many schools have selected older female teachers with strong religious background as the counseling providers. It is important to note that while these teachers may do their best, they will do better is they acquired professional skills. The teachers responsible for counseling services explained to the research team that lack of counseling services was responsible for increased dropout rates among pupils.

Table 54: ***In-service training on HIV/AIDS has been adequate***

District	Agree	Not sure	Disagree
Kisumu	31.8%	9.1%	59.1%
Nakuru	20.8%	8.3%	70.8%
Makueni	25.9%	3.7%	70.4%
Thika	22.2%	5.6%	72.2%
Mean	25.2%	6.7%	68.1%

Source: survey results

Table 55: *Teachers in this school enjoy teaching HIV/AIDS related topics*

District	Agree	Not sure	Disagree
Kisumu	31.8%	40.9%	27.3%
Nakuru	25.0%	33.3%	41.7%
Makueni	37.0%	29.6%	33.3%
Thika	55.6%	33.3%	11.1%
Mean	37.4%	34.3%	28.4%

Source: survey results

The pupils and teachers felt that topics on HIV/AIDS taught in the schools were not adequate. For example 48% of the teachers interviewed felt that topics taught in primary schools were not adequate, while 29.8% felt the topics were adequate. In Nakuru, where Centre for British Studies has a project on school management and primary health care, most teachers (50%) felt topics taught were adequate.

Table 56: *HIV/AIDS related topics taught in the primary school level are adequate*

District	Agree	Not sure	Disagree
Kisumu	22.7%	22.7%	54.5%
Nakuru	50.0%	8.3%	41.7%
Makueni	18.5%	22.2%	59.3%
Thika	27.8%	33.3%	38.9%
Mean	29.8%	21.6%	48.6%

Source: survey results

When asked whether they were comfortable teaching HIV/AIDS related topics, only a large proportion of teachers in Thika district said they were comfortable. In the group discussions, teachers said they had not been trained in handling the AIDS subject and felt ill-prepared to teach the subject. They argued that their main source of information was electronic media, print media and occasional seminars and workshops for a few. These sources were also available to pupils, but pupils demanded clarification on issues that were not clear. In most cases teachers did not have convincing answers.

Some teachers said they felt shy discussing sex matters with children and therefore were not comfortable with HIV/AIDS subjects.

Although the ministry has printed HIV/AIDS textbooks and guidelines, these were not available to most of the schools at the time of the survey. In the group discussions some teachers said that even though they had seen the facilitators hand books they had not used it in planning their lessons. They were also concerned about mixed reactions on sex education from Ministry of Education. In some schools the materials for teaching the subject were either lacking or inadequate. Even in schools where the books were available it was clear from discussions with teachers that the topics were not well understood12.

[12] In one school, the topic mosquitoes transmit HIV virus in the teachers guidelines which was supposed to be for discussion, some teachers had taken it as true. We pointed out that in the subsequent pages in the same text book it had been explained mosquitoes do not transmit the virus.

Table 57: ***I am comfortable with teaching some of the HIV/AIDS related topics***

District	Agree	Not sure	Disagree
Kisumu	36.4%	9.1%	54.5%
Nakuru	29.2%	0.0%	70.8%
Makueni	22.2%	0.0%	77.8%
Thika	50.0%	5.6%	44.4%
Mean	34.5%	3.7%	61.9%

Source: survey results

4 SUMMARY AND RECOMMENDATIONS

4.1 Summary

The study has shown that the impact of HIV/AIDS on the education sector is much worse than officially acknowledged. Teachers are dying in alarming numbers across the districts surveyed, even in districts considered as low HIV/AIDS prevalence areas. The number of orphans in schools is also increasing at very high rates with some schools reporting as high as 35% of orphans of the total pupils' population. The communities' resources were also overstretched by the demand for medical and funeral services resulting from increased number of AIDS cases in their communities. This has affected the communities' ability to finance education and also support the increasing number of orphans in and out of school. Perhaps the increased deaths of teachers coupled with government's suspension of automatic employment of teachers completing colleges in exemplified by the increasing number of Parents Teachers Association (PTA) employed teachers in most of the schools visited.

The level of knowledge and practices among the teachers, pupils and communities varied from district to district, but overall communities, pupils and teachers had reasonable knowledge of how HIV virus is transmitted. Despite this level of knowledge, stigma was reported to be high, with those suspected to be HIV positive being shunned by their fellow teachers, communities and even pupils.

Teachers lacked knowledge of how to handle the HIV/AIDS subject largely because majority had not attended any induction courses and their knowledge was based on what they get from the media. Many argued that they were unable to answer pertinent questions regarding HIV/AIDS which pupils pose to them during HIV/AIDS lessons. Teachers were also shy to handle the subject. Some felt reluctant to discuss sexual matters with young pupils. Those handling the subject indicated that in some occasions pupils giggled or looked amused with certain sexuality topics. Teachers expressed desire to have induction courses on HIV/AIDS and particularly counseling skills, pointing out that the demand for counseling services was increasing with increase in the number of AIDS orphaned children in schools.

There is lack of formal data collection, collating, analysis and dissemination on number of educators dying, level of orphaned children in schools and the general trend of impact of HIV/AIDS on education sector. This makes it difficult for the ministry and communities in general including development partners to formulate and implement effective measures to counter the spread and impact of HIV/AIDS on the sector.

There was general lack of support mechanisms for HIV/AIDS orphaned children across the districts except in some areas where schools and communities had improvised their own mechanisms of supporting orphaned children. In one school teachers were taking care of some of the orphaned children with their own resources in terms of clothing, text and exercise books, waiver of school levies and also provision of lunch. In one school, the school committee had set up an orphaned children fund to which parents, teachers and pupils contributed on school terms basis. This fund has been outstretched by the needs and they have had to come up with more stringent criteria of identifying beneficiaries. Only those orphans without relatives who can give support now benefit from the fund.

In some schools there was total lack of support for orphaned children, with some showing signs of being physically assaulted and psychologically distressed. Some were heading households with siblings as young as two years old when they were barely twelve years old. Cases of rape of orphaned girls were also reported as they had nobody to take care of them.

Sources of information on HIV/AIDS were largely media (audio and print), billboards, posters and in rare occasions seminars and public rallies. This information was however said to be inadequate especially by teachers who needed more and higher quality information in order to teach with confidence.

Sexuality among pupils was very high in schools visited and cases of pupils who started having sexual intercourse from as early as 8 years old. It is important to note that even though majority of these sexual adventures were with age mates, some girls were having sex with much older men and therefore exposing themselves to HIV infections. Although some pupils claimed to have used protective contraceptives majority did not use any form of contraceptives.

4.2 Recommendations

The following section summarizes the major recommendations that emerged from this study for consideration at various levels in the education system.

The Ministry of Education should setup a system for collecting data on the impact of HIV/AIDS at the school level. This could be incorporated as part of monthly reporting by school administration. For instance, school registers could be re-organised to capture the status of enrolled children to capture those who are orphaned or become orphaned in school. The Ministry of Education should provide support to schools in proportion to the orphaned student population. However, the Ministry should also set up a mechanism to ensure that head teachers don't exaggerate the orphan population.

The head teachers should also monitor the performance and attendance of the orphaned children regularly. Poor performance and irregular school attendance of orphans is a good indicator of high stress levels and therefore could be used to prioritize timely support to individual orphans.

The Ministry of Education should encourage school administrators to maintain detailed register of teachers' absenteeism especially those seeking sick offs. Currently, teachers' absenteeism records are used by the Ministry for "disciplinary" purposes and therefore head teachers have no incentive to keep accurate records as it also reflects poorly on their own performance. By separating records as a tool for disciplinary action from its utility as a monitoring tool on the impact of HIV/AIDS and other health related stresses, the records can provide the ministry with an early warning system for more focused interventions on the teaching workforce.

Many children orphaned by AIDS have dropped out of school and are a threat to the stability of the communities in which they live as well as continued schooling of the other pupils remaining in school through bad influence. The government, communities and development organizations should devise ways of keeping these pupils in school. The waiver of all school levies for orphaned children, some form of school feeding program would help keep the pupils in school. This support should be

supplemented with other inputs including clothing, books, mentoring, and guidance and counseling services.

Financing of education in the face of HIV/AIDS is becoming a big burden to communities and there is danger of declining levels of education. The government should come up with a school financing scheme that takes into consideration HIV/AIDS pandemic levels among other factors. This is to ensure that communities that are highly affected do not suffer inferior education as a result of school financing.

The Ministry of Education should train teachers and equip them with skills to handle HIV/AIDS lessons, and counseling should be done as matter of priority. Supplying schools with books without inducting the teachers is not enough. The methods of teaching HIV/AIDS also need to be modified from classroom based approach towards creating a more participatory learning environment in which drama, music, poetry etc are used as vehicles for learning. The subject of HIV/AIDS should not be handled as any other examinable subject in which, pupils learn for purposes of passing examinations. Pupils and teachers need life skills and not knowledge for the sake of it. Teachers should be encouraged and supported to be innovative in presenting the subject but more important is to cultivate among teachers the right attitudes, values and convictions to support efforts to reduce the impact of HIV/AIDS in their communities.

Schools should recognize communities as part of the school system and therefore cannot be divorced from HIV/AIDS interventions in schools. It was pointed out that most of the teachers or pupils contracting HIV/AIDS in schools pick it from the community in which the schools are located and therefore any interventions within the school must also involve the community (the school is not an island). For example the sexually active girls were said to have boyfriends or sugar daddies within the community who were not part of the school system. The Ministry of Education should therefore support school heads to identify community resource people that can support the efforts of the school community to learn to respond to the needs of those affected by HIV/AIDS in their community.

The Ministry of Education should work closely with the all HIV/AIDS prevention and control interventions in different communities so as to create community awareness to address the communities' negative attitude towards teachers perceived to be HIV positive. Joint activities on HIV/AIDS that includes the schools and the community should be encouraged. These activities should have positive themes on HIV/AIDS care and support.

District Education Officers should develop tools to monitor teachers' deaths and school attendance, in order to detect potential cases of HIV infections among the teaching force early enough. To effect such a change, the Ministry should train DEOs together with head teachers on the essential information that they should provide and the way it must be organized to support decision making on staffing. The DEOs may need further training to acquire analytical capacities to generate meaningful information out of the data gathered. Teachers who are frequently absent on medical grounds could be showing early symptoms of HIV. In such cases the DEOs should make arrangements to have such teachers transferred to areas where they can get adequate medical care and also close to their relatives. At advanced levels of HIV infection teachers should be encouraged to retire on medical grounds in order to avoid inconveniencing other staff and pupils through extra workload and incomplete syllabus.

Records on teachers should be disaggregated by age, sex, marital status and if possible any other experience that teachers may have acquired in working with communities on HIV/AIDS interventions. In this way, the Ministry would have a better understanding of the available capacity of the teaching work force to handle the HIV/AIDS subject in every district. This is particularly important when allocating scarce resources to support the training. This study found that some of the districts were found to be lacking detailed information on the teachers.

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6 APPENDIX I: SUPPLY OF EDUCATION

Table A- 1: Reported Primary School Teacher Deaths In Nakuru District 1991 – 2001

Year	Male	Female	Total
1991	2	-	2
1992	1	-	1
1993	-	-	-
1994	2	1	3
1995	1	1	2
1996	1	2	3
1997	1	-	1
1998	7	3	10
1999	11	6	17
2000	17	15	32
2001*	7	7	14

**Up to July 2001*

Source: District Education Office, Nakuru.

Table A- 2: Reported Primary School Teachers' Deaths In Kisumu District 1990 – 2001

Year	Male	Female	Total
1990	6	1	7
1991	6	2	8
1992	17	1	18
1993	18	6	24
1994	22	13	35
1995	28	13	41
1996	35	9	44
1997	41	11	52
1998	48	11	59
1999	53	31	84
2000	63	31	94
2001*	46	26	72

Note: The number of deaths reported above are not necessarily from HIV/AIDS.

*Up to July 2001.

Source: District Education Office, Kisumu.

Table A- 3: ***Primary School Teachers' Deaths In Thika District***

1995 – 2001

Year	Male	Female	Total
1995	6	6	12
1996	4	6	10
1997	10	5	15
1998	8	6	14
1999	4	5	9
2000	7	4	11
2001*	5	8	13

*Up to end of July 2001.

Source: District Education Office, Thika.

Table A- 4: Reported Primary School Teachers' Deaths In Makueni District 1995 – 2001

Year	Male	Female	Total
1992	1	1	2
1993	14	9	23
1994	7	3	10
1995	19	5	24
1996	12	9	21
1997	16	10	26
1998	22	12	34
1999	22	8	30
2000	28	7	35
2001*	12	13	25

*Up to end of July 2001.

Source: District Education Office, Makueni.

Table A- 5: Primary School Teachers Retirements in Kisumu District 1994 – 2001

Year	Male	Female	Total
1994	6	2	8
1995	4	2	6
1996	4	3	7
1997	6	3	9
1998	6	2	8
1999	14	9	23
2000	34	16	50
2001*	55	23	78

Note: The retirements reported are general and not necessarily due to illness related to HIV/AIDS

*Up to July 2001.

Source: District Education Office, Kisumu.

Table A- 6: Primary School Teachers Retirements in Nakuru District

1994 – 2001

Year	Male	Female	Total
1994	6	2	8
1995	4	2	6
1996	4	3	7
1997	6	3	9
1998	6	2	8
1999	14	9	23
2000	34	16	50
2001	55	23	78

Table A - 1: Primary School Teachers Retirements in Thika District

1994 – 2001

Year	Male	Female	Total
1995	26	15	41
1996	45	14	59
1997	39	29	62
1998	30	28	58
1999	38	37	75
2000	44	29	73
2001*	39	30	69

Note: The retirements reported are general and not necessarily due to illness related to HIV/AIDS
*Up to July 2001.
Source: District Education Office, Thika.

Table A- 8: Primary School Teachers Retirements in Makueni District

1994 – 2001

Year	Male	Female	Total
1992	2	-	2
1993	12	2	14
1994	53	15	68
1995	53	11	64
1996	42	5	47
1997	91	12	103
1998	61	19	80
1999	60	16	76
2000	95	15	110
2001*	99	47	146

Note: The retirements reported are general and not necessarily due to illness related to HIV/AIDS
*Up to July 2001.
Source: District Education Office, Makueni.

7 APPENDIX II: STUDENTS PERCEPTIONS ON GENDER AND SEXUALITY

Table B- 1: The Man Should Know More About Sex Than The Woman

District	School	Agree	Disagree	Boys		Girls	
Thika	Gatuanyaga	46.2%	53.8%	Thika District			
	Ngethu	40%	60%	Agree	Disagree	Agree	Disagree
	Thamuru	60%	40%	51.7	48.3	45.9	54.1
Makueni	Kisayani	35%	65%	Makueni District			
	Enzai	15%	85%	Agree	Disagree	Agree	Disagree
	Tangu	25%	75%	20.7	79.3	29	71
Nakuru	Pele	8.7%	91%	Nakuru District			
	Njoro	8.7%	91.3%	Agree	Disagree	Agree	Disagree
	Ngeya	29%	71.4%	44.1	52.9	26.7	73.3
Kisumu	Rabour	10%	90%	Kisumu District			
	Maseno	25%	65%	Agree	Disagree	Agree	Disagree
	Diemo	10%	90%	16.1	83.9	13.8	79.3
Mean		27.5%	71.6%				

Table B- 2: *A Woman Who Carried Condoms In Her Handbag Appears To Be Available To Anyone*

District	School	Agree	Disagree	Boys		Girls	
Thika	Gatuanyaga	61.5%	38.5%	Thika District			
	Ngethu	40%	60%	Agree	Disagree	Agree	Disagree
	Thamuru	60%	35%	69	31	43.2	54.1
Makueni	Kisayani	55%	45%	Makueni			
	Enzai	40%	55%	Agree	Disagree	Agree	Disagree
	Tangu	55%	54%	51.7	48.3	48.4	48.4
Nakuru	Pele	60%	40%	Nakuru			
	Njoro	47.8%	52.2%	Agree	Disagree	Agree	Disagree
	Ngeya	52.4%	47.6%	52.9	47.1	53.3	46.7
Kisumu	Rabour	50%	50%	Kisumu			
	Maseno	35%	60%	Agree	Disagree	Agree	Disagree
	Diemo	45%	55%	38.7	61.3	48.3	48.3
Mean		50.1%	49.4%				

Table B- 3: *Women Should Think More About The Consequences Of Sex Than Men*

District	School	Agree	Disagree	Boys		Girls	
Thika	Gatuanyaga	38.5%	61.5%	Thika			
	Ngethu	25%	75%	Agree	Disagree	Agree	Disagree
	Thamuru	30%	70%	34.5	65.5	29.7	70.3
Makueni	Kisayani	15%	85%	Makueni			
	Enzai	45%	55%	Agree	Disagree	Agree	Disagree
	Tangu	45%	55%	48.3	51.7	22.6	77.4
Nakuru	Pele	70%	30%	Nakuru			
	Njoro	30.4%	69.6%	Agree	Disagree	Agree	Disagree
	Ngeya	23.8%	76.2%	41.2	58.8	40	60
Kisumu	Rabour	10%	90%	Kisumu			
	Maseno	40%	55%	Agree	Disagree	Agree	Disagree
	Diemo	35%	65%	32.2	67.7	24.1	72.1
Mean		34.0%	65.6%				

Table B- 4: *I Think That A Girl Can Refuse To Have Sexual Relations Whenever She Doesn't Want To*

District	School	Agree	Disagree	Boys		Girls	
Thika	Gatuanyaga	80.8%	19.2%	Thika District			
	Ngethu	85%	15%	Agree	Disagree	Agree	Disagree
	Thamuru	90%	10%	89.7	10.3	81.1	18.9
Makueni	Kisayani	80%	15%	Makueni District			
	Enzai	95%	5%	Agree	Disagree	Agree	Disagree
	Tangu	90%	10%	89.7	10.3	87.1	9.7
Nakuru	Pele	75%	20%	Nakuru District			
	Njoro	87%	13%	Agree	Disagree	Agree	Disagree
	Ngeya	90.5%	9.5%	79.4	17.6	90	10
Kisumu	Rabour	95%	5%	Kisumu District			
	Maseno	90%	5%	Agree	Disagree	Agree	Disagree
	Diemo	70%	30%	80.6	19.4	89.7	6.9
Mean		85.7%	13.1%				

Table B- 5: *Youth Have The Right To Use Health Services In Order To Prevent Sexually Transmitted Infections*

District	School	Agree	Disagree	Boys		Girls	
Thika	Gatuanyaga	84.6%	15.4%	Thika District			
	Ngethu	50%	50%	Agree	Disagree	Agree	Disagree
	Thamuru	85%	15%	86.2	13.8	64.9	35.1
Makueni	Kisayani	65%	35%	Makueni District			
	Enzai	90%	10%	Agree	Disagree	Agree	Disagree
	Tangu	95%	5%	86.2	13.8	80.6	19.4
Nakuru	Pele	85%	15%	Nakuru District			
	Njoro	78%	22%	Agree	Disagree	Agree	Disagree
	Ngeya	90.5%	9.5%	79.4	20.6	90	10
Kisumu	Rabour	90%	10%	Kisumu District			
	Maseno	90%	5%	Agree	Disagree	Agree	Disagree
	Diemo	55%	45%	87.1	12.9	69	27.6
Mean		79.9%	19.7%				

Table B- 6: I Do What My Parents/Guardians Tell Me

District	School	Never	Sometimes	Always	Boys			Girls		
Thika	Gatuanyaga	-	11.5%	88.5%	Thika District					
	Ngethu	-	10%	90%	Never	Sometimes	Always	Never	Sometimes	Always
	Thamuru	-	10%	90%	0	10.3	89.7	0	10.8	89.2
Makueni	Kisayani	-	5%	95%	Makueni District					
	Enzai	-	15%	85%	Never	Sometimes	Always	Never	Sometimes	Always
	Tangu	-	-	100%	0	10.3	89.7	0	3.2	96.8
Nakuru	Pele	5%	15%	80%	Nakuru District					
	Njoro	-	13%	87%	Never	Sometimes	Always	Never	Sometimes	Always
	Ngeya	-	9.5%	90.5%	2.9	11.8	85.3	0	13.3	86.7
Kisumu	Rabour	-	15%	85%	Kisumu District					
	Maseno	5%	15%	80%	Never	Sometimes	Always	Never	Sometimes	Always
	Diemo	10%	-	90%	3.2	6.5	90.3	6.9	13.8	79.3
Mean		6.7%	11.9%	88.4%						

Table B- 7: I Talk About Sex Issues With My Father And / Or Male Guardian

District	School	Never	Sometimes	Always	Boys			Girls		
Thika	Gatuanyaga	88.5%	11.5%	0%	Thika District					
	Ngethu	90%	10%	0%	Never	Sometimes	Always	Never	Sometimes	Always
	Thamuru	95%	5%	0%	86.2	13.8	0	94.6	5.4	0
Makueni	Kisayani	85%	10%	5%	Makueni District					
	Enzai	65%	25%	5%	Never	Sometimes	Always	Never	Sometimes	Always
	Tangu	95%	5%	0%	72.4	20.7	6.9	90.3	6.5	0
Nakuru	Pele	85%	10%	5%	Nakuru District					
	Njoro	82.6%	17.4%	0%	Never	Sometimes	Always	Never	Sometimes	Always
	Ngeya	76.2%	19%	0%	67.6	23.5	2.9	96.7	3.3	0
Kisumu	Rabour	100%	0%	0%	Kisumu District					
	Maseno	80%	5%	0%	Never	Sometimes	Always	Never	Sometimes	Always
	Diemo	70%	30%	10%	77.4	12.9	6.5	89.7	10.3	–
Mean		84.4%	12.3%	2.1%						

Table B- 8: I Talk About Sex Issues With My Mother And / Or Female Guardian

District	School	Never	Sometimes	Always	Boys			Girls		
Thika	Gatuanyaga	53.8%	30.8%	15.4%	Thika District					
	Ngethu	55%	35%	10%	Never	Sometimes	Always	Never	Sometimes	Always
	Thamuru	100%	-	-	96.6	3.4	0	45.9	37.8	16.2
Makueni	Kisayani	70%	25%	5%	Makueni District					
	Enzai	40%	30%	25%	Never	Sometimes	Always	Never	Sometimes	Always
	Tangu	45%	45%	10%	75.9	17.2	6.9	29	48.4	19.4

Nakuru	Pele	55%	25%	15%	Nakuru District					
	Njoro	69.6%	30.4%	-	Never	Sometimes	Always	Never	Sometimes	Always
	Ngeya	85.7%	9.5%	4.80%	85.3	8.8	2.9	53.3	36.7	10
Kisumu	Rabour	85%	10%	-	Kisumu District					
	Maseno	80%	10%	10%	Never	Sometimes	Always	Never	Sometimes	Always
	Diemo	65%	25%	10%	83.9	6.5	6.5	69	24.1	6.9
Mean		67.0%	25.1%	11.7%						

Table B- 9: *I Talk About Sexuality With My Brothers And / Or Sisters*

District	School	Never	Sometimes	Always	Boys			Girls		
Thika	Gatuanyaga	50.0%	30.8%	19.2%	Thika District					
	Ngethu	55%	45%	-	Never	Sometimes	Always	Never	Sometimes	Always
	Thamuru	90%	2%	-	75.9	20.7	3.4	54.1	35.1	10.8
Makueni	Kisayani	95%	5%	-	Makueni District					
	Enzai	60%	40%	-	Never	Sometimes	Always	Never	Sometimes	Always
	Tangu	75%	10%	10%	75.9	13.8	6.9	77.4	22.6	0
Nakuru	Pele	55%	35%	5%	Nakuru District					
	Njoro	82.6%	17.4%	-	Never	Sometimes	Always	Never	Sometimes	Never
	Ngeya	85.7%	14.3%	-	76.5	17.6	2.9	73.3	26.7	0
Kisumu	Rabour	85%	15%	-	Kisumu District					
	Maseno	50%	35%	15%	Never	Sometimes	Always	Never	Sometimes	Never
	Diemo	50%	40%	10%	58.1	35.5	6.5	65.5	24.1	10.3
Mean		69.4%	24.1%	11.8%						

Table B- 10: ***At What Age Should A Girl Start To Have Sexual Intercourse?***

District	School	< 10 yrs	10-14 yrs	15-20 yrs	>20yrs	Depends on when she gets married	Don't know
Thika	Gatuanyaga	0	1	2	4	38.5%	23.1%
	Ngethu	0	0	0	2	80%	10%
	Thamuru	0	0	5	0	65%	10%
Makueni	Kisayani	0	0	1	0	90%	5%
	Enzai	0	0	1	0	80%	15%
	Tangu	0	0	0	0	85%	15%
Nakuru	Pele	0	3	1	2	50%	20%
	Njoro	0	0	1	1	65.2%	21.7%
	Ngeya	0	0	1	0	66.7%	28.6%
Kisumu	Rabour	1	0	0	0	75%	20%
	Maseno	0	1	1	1	70%	15%
	Diemo	1	2	0	2	55%	15%
Mean						68.4%	16.5%

Table B- 11: ***At What Age Should A Boy Start To Have Sexual Intercourse?***

District	School	< 10 yrs	10-14 yrs	15-20 yrs	>20yrs	Depends on when she gets married	Don't know
Thika	Gatuanyaga	0	0	1	3	42.3%	7.7%
	Ngethu	0	0	0	1	80%	20%
	Thamuru	0	2	2	0	65%	15%
Makueni	Kisayani	0	0	0	0	90%	10%
	Enzai	0	0	1	0	80%	15%
	Tangu	0	0	0	1	75%	15%
Nakuru	Pele	0	2	0	2	50%	30%
	Njoro	0	1	1	1	60.9%	17.4%
	Ngeya	0	0	0	0	71.4%	28.6%
Kisumu	Rabour	0	1	0	2	75%	20%
	Maseno	1	0	0	2	55%	30%
	Diemo	1	1	0	3	55%	15%
Mean						66.6%	18.6%

Table B- 12: *If Your Were Faced With A Situation Where You Could Play Sex, How Likely Or Unlikely Do You Think You Would Be Able To Say No?*

District	School	Very likely	Fairly likely	Very unlikely	Fairly unlikely	Not sure
Thika	Gatuanyaga	46.2%	11.5%	11.5%	3.8%	26.9%
	Ngethu	20%	15%	10%	40%	10%
	Thamuru	70%	15%	5%	-	5%
Makueni	Kisayani	65%	-	10%	15%	5%
	Enzai	70%	5%	10%	5%	10%
	Tangu	95%	-	5%	-	-
Nakuru	Pele	40%	10%	15%	-	15%
	Njoro	78.3%	4.3%	-	-	13%
	Ngeya	47.6%	-	19.0%	4.8%	28.6%
Kisumu	Rabour	85%	5%	10%	-	-
	Maseno	50%	10%	15%	-	25%
	Diemo	35%	10%	25%	10%	20%
Mean		58.5%	9.5%	12.3%	13.1%	15.9%

Table B- 13: *Thinking Of Your Closest Friends In Your Class At School, How Many Of Them Do You Think Have Had Sexual Intercourse?*

District	School	None of them	One of them	Two of them	More than two	Not sure
Thika	Gatuanyaga	15.4%	15.4%	11.5%	15.4%	42.3%
	Ngethu	10%	5%	10%	20%	50%
	Thamuru	10%	5%	10%	35%	40%
Makueni	Kisayani	15%	-	10%	25%	50%
	Enzai	30%	-	-	35%	30%
	Tangu	25%	-	-	5%	70%
Nakuru	Pele	-	10%	-	60%	20%
	Njoro	17.4%	8.7%	-	21.7%	47.8%
	Ngeya	9.5%	28.6	9.5%	38.1%	14.3%
Kisumu	Rabour	15%	10%	5%	50%	20%
	Maseno	20%	5%	15%	55%	75%
	Diemo	25%	5%	5%	40%	25%
Mean		17.5%	324.9%	9.5%	33.4%	40.4%

8 APPENDIX III: TEACHERS PERCEPTIONS ON GENDER AND SEXUALITY

Table C- 1: ***Women Should Think More About The Consequences Of Sex Than Men***

Gender	Strongly Agree	More or less agree	Disagree
Female	15.4%	13.5%	71.2%
Male	25.0%	12.5%	59.4%
Mean	20.2%	13.0%	65.3%

Table C- 2: At What Age Should A Girl Start To Have Sexual Intercourse?

Gender	12-25 yrs	18-25 yrs	Depends on when she gets married	Don't know
Female		X	71.2%	7.7%
Male	X		65.6%	6.3%
Mean			68.4%	7.0%

Table C- 3: ***At What Age Should A Boy Start To Have Sexual Intercourse?***

Gender	12-27 yrs	18-30 yrs	Depends on when she gets married	Don't know
Female		X	75.0%	4.7%
Male	X		62.5%	12.5%
Mean			68.8%	8.6%

Table C- 4: ***The AIDS Virus Can Be Transmitted By Any Type Of Sexual Relations Without A Condom***

Gender	Yes certainly	More or less	Certainly not
Female	76.9%	21.2%	1.9%
Male	*84.4%*	*3.1%*	*9.4%*
Mean	80.7%	12.2%	5.7%

Table C- 5: ***AIDS Is In The Condom***

Gender	Yes certainly	More or less	Certainly not
Female	1.9%	5.8%	90.4%
Male	9.4%	9.4%	78.1%
Mean	5.7%	7.6%	84.3%

Table C- 6: ***Youth Have The Right To Use The Health Services In Order To Prevent Pregnancy And Or STDs.***

District	Strongly Agree	More or less agree	Disagree
Kisumu	68.2%	9.1%	22.7%
Nakuru	45.8%	25.0%	29.2%
Makueni	63.0%	7.4%	29.6%
Thika	22.2%	5.6%	72.2%
Mean	49.8%	11.8%	38.4%

Table C- 7: A Woman Who Carried Condoms In Her Handbag Appears To Be Available To Anyone.

District	Strongly Agree	More or less agree	Disagree
Kisumu	63.6%	13.6%	22.7%
Nakuru	45.8%	25.0%	29.2%
Makueni	51.9%	11.1%	37.0%
Thika	61.1%	33.3%	5.6%
Mean	55.6%	20.8%	23.6%

Table C- 8: ***When I Shall Have Sex In Future, I Shall Use A Condom***

District	Only with a partner I don't know	Always with all my partners	Never with anyone
Kisumu	13.6%	0.0%	18.2%
Nakuru	25.0%	29.2%	45.8%
Makueni	18.5%	44.4%	33.3%
Thika	11.1%	27.8%	61.1%
Mean	17.1%	25.4%	39.6%

Table C- 9: ***One Can Have Pleasure With A Condom***

District	Strongly Agree	Agree a little	Disagree
Kisumu	40.9%	31.8%	22.7%
Nakuru	29.2%	29.2%	37.5%
Makueni	29.6%	33.3%	37.0%
Thika	16.7%	22.1%	61.1%
Mean	29.1%	29.1%	39.6%

Table C- 10: ***It Is Easy To Put On A Condom***

District	Strongly Agree	Agree a little	Disagree	N
Kisumu	40.9%	45.5%	13.6%	22
Nakuru	54.2%	16.7%	25.0%	24
Makueni	51.9%	29.6%	14.8%	27
Thika	44.4%	33.3%	22.2%	18
Mean	47.9%	31.3%	18.9%	

Table C- 11: ***Condom Is For Immoral People***

District	Strongly Agree	Agree a little	Disagree	N
Kisumu	13.6%	13.6%	72.7%	22
Nakuru	25.0%	12.5%	62.5%	24
Makueni	14.8%	7.4%	77.8%	27
Thika	33.3%	11.1%	55.6%	18
Mean	21.7%	11.2%		

9 APPENDIX IV: STUDENTS STRUCTURED QUESTIONNAIRE

STUDENT QUESTIONNAIRES

District .....
Division .....
Location .....
Class .....

1. Sex Male [M] Female [F]

2. How old are you? _____AGE_____ yrs

3. Who do you live with:

(Put a tick in the space provided against all adult persons you live with.)

My father and mother [a]

My mother [b]

My father [c]

Grandfather [d]

Grandmother [e]

Uncle (mother side) [f]

Uncle (fathers side) [g]

Aunt (mother side) [h]

Aunt (fathers side) [i]

Stepmother [j]

Brother [k]

Sister [l]

Cousin [m]

Siblings (brothers and sisters) [n]

Orphanage centre [o]

Other (specify) [p]

4. State the person (by relationship) who pays for the cost of your school requirements

(here we record relationship using codes in question 3 above, .e.g. c for father)

(1) School Fees ....., ..., ...
(2) School uniforms ....., ..., ...
(3) Books, Pens/pencils ....., ..., ...
(4) Activity fees ....., ..., ...
(5) Development Fees ....., ..., ...

5. How many days have you been absent from school this term?

[1]	1 – 5 days	[a]
[2]	6 – 10 days	[b]]
[3]	11 – 15 days	[c]
[4]	More than 15 days	[d]
[5]	Not at all	[e] if 5 please go to number 7

6. If you have been absent from school this term, what was the reason? (can tick more than one)

[1]	I was sick	[a]
[2}	I had not paid school fees	[b]
[3)	My mother or father was sick	[c]
[4]	I was doing some work at home	[d]
[5]	Other ..... (specify)	[e]

7. Below is a list of activities someone your age might do outside school. How often do you do each of these activities? (**Please tick one box only on each line**)

		1 Never	2 Occasionally	3 Very Often
A	Clean the house	[ ]	[ ]	[ ]
B	Cook food	[ ]	[ ]	[ ]
C	Fetch Water	[ ]	[ ]	[ ]
D	Collect Firewood	[ ]	[ ]	[ ]
E	Wash Clothes	[ ]	[ ]	[ ]
F	Take care of young children	[ ]	[ ]	[ ]
G	Take care of sick relative	[ ]	[ ]	[ ]
H	Listen to radio	[ ]	[ ]	[ ]
I	Study at home	[ ]	[ ]	[ ]
J	Look after cattle, goats, sheep	[ ]	[ ]	[ ]
K	Fish	[ ]	[ ]	[ ]

L	Attend a social club	[ ]	[ ]	[ ]
M	Play with Friends	[ ]	[ ]	[ ]

OTHER SOCIO-ECONOMIC QUESTIONS

8.	In your house, do you have? *[tick any items that apply]* Tap (piped) water [a] Electricity [b] Separate bedroom for children and for adults [c] A radio [d] Livestock [e] Toilet/Latrine [f]	

SECTION II Perspectives on Gender and Perceptions about Sexuality			
9	Below there are some statements that are made about these issues. For each statement say whether you agree or disagree		
		Agree 1	Disagree 2
	A The man is the one who should ask for marriage.	A	A
	B The care of children is women's work.	B	B
	C The man should know more about sex than the woman	C	C
	D The woman and not the man is responsible for making sure she does not get pregnant	D	D
	E The man is responsible for supporting the household.	E	E
	F A woman who carried condoms in her handbag appears to be available to anyone.	F	F
	G Young people should postpone having children until they are married.	G	G
	H Women should think more about the consequences of sex than the man.	H	H
	I I think that the man is responsible for deciding how many children there should be in the family.	I	I
	J I think that a girl can refuse to have sexual relations whenever she doesn't want to.	J	J
	K Youth have the right to use health services in order to prevent sexually transmitted infections.	K	

10	For each of the statements below, indicate which one is closest to your situation *(put an X in the corresponding box for Never, Sometimes or Always)*				
		Never 1	Sometimes 2	Always 3	
	A I do what my parents/guardian says	A	A	A	
	B I need to love someone in order to have sex with her/him	B	B	B	
	C I talk about sex issues with my father and/ or male guardian	C	C	C	
	D I talk about sex issues with my mother/ and or female guardian	D	D	D	
	E I talk about sexuality with my brothers or sisters	E	E	E	
11	At what age should a girl start to have sexual intercourse _____*(write age)* [1] Depends on when she marries [2] Don't know *(here record actual age or 1, 2 as entered by pupil)*				
12	At what age should a boy start to have sexual intercourse _____ *(write age)* [1] Depends on when he marries [2] Don't know *(As in 11 above)*				
13	Avoiding sexual intercourse for a long period can be harmful for the health of: • A girl [ ] Yes [ ] No [ ] Don't Know • A boy [ ] Yes [ ] No [ ] Don't Know *(13 girl or 13 boy: record for each either Yes, No or Don't know as entered)*				

14. If you were faced with a situation where you could play sex, how likely or unlikely do you think you would be able to say no?

Very Likely [a]

Fairly Likely [b]

Very Unlikely [c]

Fairly Unlikely [d]

Not sure [e]

15. Thinking of your closest friends in your class at school, how many of them do you think have had sexual intercourse?

None of them [a]

One of them [b]

Two of them [c]

More than two [d]

Not sure [e]

16. From the List Below Tick Your Main Sources of Information On Sexual and Reproductive Health issues						
		Use frequently 1	Use Occasionally 2	Do not use 3	Who is your main source (tick ONE only) (Q16K)	
A	Parents				A	
B	Teachers				B	
C	Radio				C	
D	Newspapers, magazines, brochures etc				D	
E	Pumblets/ Posters				E	
F	Doctors or Nurses				F	
G	Counsellors				G	
H	Friends				H	
I	Other				I	
J	No one tells me anything					

17. If you had a personal concern about sex, who would you most likely talk to?

Mother [a]

Father [b]

Older Sister [c]

Older Brother [d]

Aunt [e]

Uncle [f]

Grandmother [g]

Grandfather [h]

Friends at Home [i]

Schoolmates [j]

Teacher [k]

Pastor [l]

Local Healer [m]

18. Have you ever had lessons at school about any of the following?

	1 YES	2 NO	3 I am Not Sure
The difference between boys and girls	[ ]	[ ]	[ ]
How your body changes as you grow up	[ ]	[ ]	[ ]
Sex	[ ]	[ ]	[ ]

19	Have you had discussions about the following topics with your friends in the last six months *(put a cross in one of the boxes on each line)* We have talked about:				
		Not at all 1	Sometimes 2	Frequently 3	
	A.Use of condom	A	A	A	
	B. How to avoid AIDS	B	B	B	
	C. Sexual intercourse	C	C	C	
	D. How to avoid having children	D	D	D	
	E. When to have children	E	E	E	
	F. Taking the HIV/AIDs test	F	F	F	

SECTION III Knowledge about reproductive health		
20	What can a girl or boy do to avoid pregnancy? *{Write down as many ways as you know}* _____ _____	

21 Can you get any health disease by touching your private parts?
[ ] Yes [ ] No [ ] Don't Know
(Here let us record Yes, No or Don't know as entered by student)

22	Have you already heard of Sexually Transmitted Infections (STIs)? A Yes [a] B No If no, don't answer the following four questions [b]	
23	Which type of STDs have you heard of? (Write as many names as you know) _____	

24	How does one know if he/she has an STI?. *Tick all the symptoms that you know* A Injuries to genital organs [a] B Abdominal pain [b] C Difficulties in urinating [c] D Itching around sexual organs [d] E Discharge [e] F Blood [f] G Don't know [g] H Other ..... (specify) (h)	
25	What can a girl/boy do to avoid getting an STI *(you can choose more than one answer)* A Use a condom [a] B Use other modern contraceptives [b] C Wash the vagina/penis after sexual intercourse [c] D Put herbs in the vagina [d] E Drink herb tea [e] F Sexual abstinence (do not have sexual intercourse) [f] G Stick to the same partner [g] H Others, please specify _____	
26	Where can you go to get treatment for an STI *(you can choose more than one answer)* A Health Centre/Hospital/Clinic [a] B Pharmacy/Chemist [b] C Community Development Worker [c] D Traditional healer [d] E Spiritual guide/church/etc [e] F Family member [f] G Friends [g] H Nurses home [h] I By medicine from a shop [i] J Don't know [j] K Others, please specify _____	

27	Have you heard of HIV/AIDS? [ ] Yes [ ] No - *if no, go to question 31* *(Record Yes or No as entered)*	

Student knowledge about HIV/AIDS			
28	How can someone catch HIV/AIDS? *(can tick more than one)*		
	A	Sexual relations	[a]
	B	Sex with a prostitute	[b]
	C	Not using a preservative	[c]
	D	Blood transfusions	[d]
	E	Injections	[e]
	F	Sharing razor blades	[f]
	G	Kisses, embraces	[g]
	H	From mother to baby during pregnancy	[h]
	I	Mosquito bites	[i]
	J	Sitting on a latrine	[j]
	K	Don't know	[k]
	L	Other	[l]

29	Students Knowledge about AIDS	Yes 1	No 2	Don't Know 3
	A. Traditional healers can cure AIDS	[A]	[A]	[A]
	B. You can get AIDS by sharing materials with students who are HIV positive	[B]	[B]	[B]
	C. Only immoral people get AIDS	[C]	[C]	[C]
	D. The most common way of getting AIDS is through sexual intercourse with an infected person	[D]	[D]	[D]
	E. Pregnant women can pass AIDS to their unborn children	[E]	[E]	[E]
	F. You can simply tell by looking that someone is HIV positive	[F]	[F]	[F]
	G. One can get AIDS by donating blood	[G]	[G]	[G]
	H. There is no cure for AIDS	[H]	[H]	[H]
	I. Using condoms helps to prevent AIDS	[I]	[I]	[I]
	J. Having sex with a virgin is one way to cure AIDS	[J]	[J]	[J]

30.	**School Environment Statements**			
		Agree 1	Disagree 2	
	A. HIV/AIDS is a big problem in this school'.	A	A	
	B. Fighting and bullying are common in this school	B	B	
	C. In this school, girls are fearful and anxious about their personal safety	C	C	
	D. In this school, boys are fearful and anxious about their personal safety	D	D	
	E. Students are able to discuss their problems with teachers	E	E	

31.	**Statements concerning student sexual behaviour in this school**			
		Agree 1	Disagree 2	
	A. Love relationships among students are common in this school	A	A	
	B. Student pregnancy is a big problem in this school	B	B	

32.	**Statement response concerning sexual harassment in schools**			
		Agree 1	Disagree 2	
	A. Sexual harassment of students by teachers is a serious problem in this school	A	A	
	B. Love relationships between students and teachers are common in this school	B	B	
	C. Sexual harassment among students is a serious problem in this school	C	C	
	D. Sexual harassment among students has got worse in recent years	D	D	
	E. School management deals effectively with sexual harassment by teachers	E	E	

33.	**Statements concerning discrimination against students affected by AIDS**			
		Agree 1	Disagree 2	
	A. Students whose family members are HIV positive are discriminated against by teachers	A	A	
	B. Students whose family members are HIV positive are discriminated against by other students	B	B	
	C. School management has taken firm measures to counter discrimination against teachers and students who have AIDS	C	C	

34. Student and teacher responses to orphan statements			
		Agree 1	Disagree 2
	A. Students who have lost one or both parents have more problems than others	A	A
	B. Students whose parents die often drop out of school	B	B
	C. Orphans receive a lot of help from this school	C	C

35. Statements on the design and delivery of HIV/AIDS education			
		Agree 1	Disagree 2
	A. Students get all the information and advice they need about HIV/AIDS	A	A
	B. The curriculum on health and sexual behaviour is informative	B	B
	C. Teachers are confident teaching this curriculum	C	C
	D. Topics on AIDS are well taught in this school	D	D
	E. Teachers are knowledgeable and can deliver sexual and reproductive health information	E	E
	F. Students are changing their behaviour in response to this curriculum	F	F

HIV Classes and Clubs

36. Are there any HIV Classes and/or Clubs in this school [ ] Yes [ ] No – if No go to 38
(record Yes or No as entered by pupil)

37. How often do they meet? [1] Every week [2] Every month [3] Once every term □

38. Guidance and counselling offered and used			
		Yes	No
	Guidance and Counselling offered		
	Guidance & Counselling services used		

(Record Yes or No as entered by pupil)

39. What other things about sexual and reproductive health would you like teachers to talk about?

_____

QUESTIONS FOR SELF-COMPLETION

SECTION IV Sexual Activity		
	We are now going to ask some more intimate question. If you are in any doubt about the question, please ask the researcher. For our research, it is very important that you answer truthfully and remember that they will be confidential and kept secret.	
40	Have you had sex [ ]Yes [ ] No (If no go to question number 46)	
41	If yes, how old were you, when you had a sexual intercourse first time? __ACTUAL AGE____ yrs	
42	What was your relationship with the person at the time *(put an X in one box only)* ☐ Friend [a] ☐ Stranger or recently met [b] ☐ Forced relationship [c] ☐ Family member [d]	
43	How old was the person with whom you had your first sexual relationship? [a]Below 10 years [b] 10-14; [c] 15-19; [d] 20-24; [e] 25-29; [f] 30; [g]Don't know	
44	Were you in agreement with this relationship? [a] Yes [b] No [c] Don't remember/Don't know	
45	In this first relationship, did you use any method of contraception? [ ] YES [ ] NO *(Record Yes or No as entered)*	
46	What kind of contraceptive? _____	

SECTION V Sexual behaviour Now (with the HIV/?AIDS pandemic)				
46	For each of the phrases, say whether you agree or disagree with each of them.			
		Agree 1	Disagree 2	
	A I can protect from the HIV/AIDS virus	A	A	
	B I am capable of using condoms with each of my sexual partners	B	B	
	C Using condoms all the times I shall not catch HIV/AIDS when having a sexual relations	C	C	
	D My friends use condoms during sexual relations	D	D	
	E My friends suggest that I should use a condom during sexual relations	E	E	
	F My friends say that people like us do not need to use condoms because they do not run any risk of catching HIV/AIDS	F	F	

47	*Now could you give us your view about condoms. Even though you* have never had sexual relations, what have you heard about them *(put an X indicating whether you agree or disagree with each statement)*			
		Agree 1	Disagree 2	
	A A condom is cheap, ... OK to buy it	A	A	
	B Only immoral people use condom	B	B	
	C Its easy to put a condom on	C	C	
	D One can have pleasure with a condom	D	D	
	E A condom is difficult to buy because I am embarrassed to ask for it	E	E	
	F A condom does not need to be used with a person that I love to avoid illness	F	F	
	G. A condom can be used to avoid having children	G	G	
48	Now give your opinion. When I shall have sex in the future, I shall use a condom ☐ Only with a partner that I don't know [1] ☐ Always with all my partners [2] ☐ Never with anyone [3]			
49	For each of the following questions say whether you agree or disagree with each of them.			
		Agree 1	Disagree 2	
	A People like myself can catch AIDS	A	A	
	B The AIDS virus can be transmitted by any type of sexual relation without a condom	B	B	
	C Only prostitutes can catch the AIDS virus	C	C	
	D I never embrace someone with the AIDs virus	D	D	
	E I shall not work with anyone who has the AIDS virus	E	E	
	F A person can transmit the AIDs virus whilst appearing healthy	F	F	
	G I am not bothered about avoiding the AIDS virus	G	G	

Section VI Domestic and Sexual Violence
(Q50 – Q53 record a, b, c, etc or a combination where applicable as entered by pupil)

50. Do you think it is normal that there is violence in families and that there is maltreatment of children, youth, women and men

a. Yes b. No c. Don't Know

51. Do you believe that the only real violence or maltreatment is physical beating

a. Yes b. No c. Don't Know

52. What other forms of maltreatment do you consider as violence (you can check more than other one)?

a. Verbal (insults, threats) [ ]
b. Psychological (humiliate, afraid to be blamed) [ ]
c. Sexual (force to have sexual relations) [ ]
d. Other (specify) [ ]
e. Don't know [ ]

53. How do your parents usually tell you off?

a. Verbally [ ]
b. Forbidden to do something you like [ ]
c. Not given any food [ ]
d. Beaten [ ]
e. Left locked up [ ]
f. My parents do not castigate me [ ]
g. Other (to specify).....

54. If you would like to make any commentary, use this space

.....

(Q55 and Q56 record Yes or No)

55. Are you aware of any form of initiation rites? [ ] YES [ ] NO
(If no go to question 58).

56	Have you participated in initiation rites *(choose only one reply)* [ ] Yes [ ] No	
57	What did you think of the experience? *(You can choose more than one reply)* A It initiated me to adulthood B Did not give me the information I hoped for C Was very painful D Informed me how to avoid pregnancy E Informed me about menstrual hygiene F Informed me about when and how to initiate sexual relations G Informed me about familial relationships H Other, please specify	

Section VII View about the Questionnaire

(Q58 – Q61 record a,, b, c etc or combination where applicable)

58. Did you enjoy replying to this questionnaire?

a. Liked it b. Didn't like it

59 Did you think it was difficult to respond to this questionnaire?

a Yes b. No

60. Did you feel embarrassed at any point when replying to the questionnaire?

a. Many times b. A few times c. Not at all

61. Do you think that you learnt anything whilst replying to this questionnaire?
a. Lots of things
b. A few things
c. Nothing

62. If felt uncomfortable with any question or topic, which were these (*you can mark more than one of them*)
a. Sexual practices
b. Use of condom
c. Information about AIDS
d. Talking about Sex
e. Violence
f. None of them
g. Unknown

10 APPENDIX V: TEACHERS STRUCTCURED QUESTIONNAIRE

INDIVIDUAL TEACHERS QUESTIONNAIRE

District ..... DISTRICT .....
Division ..... DIVISION .....
Location ..... LOCATION .....

1. Sex [M] Male [F] Female

2. How old are you? __AGE_____ yrs

3. Marital status [a] single [b] married [c] widow/er [d] separated
(If single, widowed or separated please go to Q6)

4. Are you living with your spouse? [ ] Yes [ ] No.
(record Yes or No as entered by teacher)

5. If not how often do your visit her/ him? [a] every weekend [b] once a month
[c] Only during school holidays [d] whenever I can.

6. How far is your salary collecting point? ...ACTUAL KMS..... kms

7. Do you have to spend overnight whenever you go to collect your salary?
[ ] Yes [ ] No *(Record Yes or No)*

8. What is your educational background? [a] untrained teacher [b] P1- IV
[c] S1 [d] Other Specify ...***Record specification or d***

9. How long have you been a teacher? ..... Yrs

10. How long have you been teaching in this school? ..... Yrs ..... months

11. Is this your home area? [ ] Yes [ ] No
If not which your home;

District .....
Division .....
Location .....

Where were you born (District) .....

12. How many days have you been absent from teaching this term?

[a]None [b] 1 – 5 days [c] 6 – 10 days [d] 11 – 15 days [e] More than 15 days
OTHER SOCIO-ECONOMIC QUESTIONS

13	In your house, do you have Running water [a] Radio [b] Television [c] Separated Bedroom for Children and yourself [d]	

14. How do you spend your free time?

[a] Hang out with friends [b] Play games [c] Visit friends

[d] Other specify .....

SECTION II Perspectives on Gender and Perceptions about Sexuality					
15	**Below there are some statements that are made about these issues. For** each statement say whether you strongly agree, more or less agree or disagree				
		Strongly Agree 1	More or less agree 2	Disagree 3	
	A The man is the one who should ask for marriage.	A	A	A	
	B The care of children is women's work.	B	B	B	
	C The man should know more about sex than the woman	C	C	C	
	D The responsibility of avoiding pregnancy is entirely the woman's	D	D	D	
	E The man is responsible for supporting the household.	E	E	E	
	F A woman who carried condoms in her handbag appears to be available to anyone.	F	F	F	
	G Young people should postpone having children until they have finished studying.	G	G	G	
	H Young people should avoid having sex until they get married	H	H	H	
	I Women should think more about the consequences of sex than men.	I	I	I	
	J I think that the man should decide how many children there should be in the family.	J	J	J	
	K Youth have the right to use the health services in order to prevent pregnancy and/or STDs.	K	K	K	

16	Can you get any health disease if you masturbate/touch yourself 1=Yes 2=No 3=Don't know *(Record Yes, No or Don't know as entered by teacher)*	
17	At what age should a girl start to have sexual relations __AGE in YRS_(*write age)* ☐ 1 = Depends on when she marries 2= Don't know *(record 1 or 2 if age not specified)*	
18	At what age should a boy start to have sexual relations _____ *(write age)* ☐1 = Depends on when he marries 2 = Don't know *(as in 17 above)*	
19	Sexual abstinence (avoiding sexual relations for a long period) can be harmful for the health of: • A girl ☐ Yes ☐ No ☐ Don't Know • A boy ☐ Yes ☐ No ☐ Don't Know *(19Girl or 19Boy: Record Yes, No or Don't know)*	
20	Now could you give us your view about condoms *(put an X indicating whether you agree or disagree with each statement)*	

		Strongly Agree 1	Agree a little 2	Disagree 3	
	A A condom is OK to buy it	A	A	A	
	B Condom is for immoral people	B	B	B	
	C Its easy to put a condom on	C	C	C	
	D One can have pleasure with a condom	D	D	D	
	E A condom is difficult to buy because I am embarrassed to ask for it	E	E	E	
	F A condom does not need to be used with a person that I love	F	F	F	
	G A condom can be used to avoid having children	G	G	G	

21	Now give your opinion. "When I shall have sex in the future, I shall use a condom ☐ 1. Only with a partner that I don't know [1] ☐ 2. Always with all my partners [2] ☐ 3. Never with anyone [3]	

22	For each of the following questions say whether you agree or disagree with each of them.				
		Yes certainly 1	More or less 2	Certainly not 3	
	A People like myself can catch AIDS	A	A	A	
	B The AIDS virus can be transmitted by having sexual intercourse without a condom	B	B	B	
	C AIDS is in the condom	C	C	C	
	D Only prostitutes can catch the AIDS virus	D	D	D	
	E I can embrace a person even if I suspect he/she has the AIDs virus	E	E	E	
	F I can work with anyone even if I know he/she has the AIDS virus	F	F	F	
	G A person can transmit the AIDs virus whilst appearing healthy	G	G	G	
	H I am not bothered about avoiding the AIDS virus	H	H	H	
23.	**School environment statements**				
		Agree 1	Not Sure 2	Disagree 3	
	A. HIV/AIDS is a big problem in this school.	A	A	A	
	B. Fighting and bullying are common in this school	B	B	B	
	C. In this school, girls are fearful and anxious about their personal safety	C	C	C	
	D. In this school, boys are fearful and anxious about their personal safety	D	D	D	
	E. Students are able to discuss their problems with teachers	E	E	E	
24.	**Statements concerning student sexual behaviour in this school**				
		Agree 1	Not Sure 2	Disagree 3	
	A. Love relationships among students are common in this school	A	A	A	
	B. Student pregnancy is a problem in this school	B	B	B	

25. **Statement response concerning sexual harassment in schools**					
		Agree 1	Not Sure 2	Disagree 3	
	A. Sexual harassment of students by teachers is a problem in this school	A	A	A	
	B. Love relationships between students and teachers are common in this school	B	B	B	
	C. Sexual harassment among students is a serious problem in this school	C	C	C	
	D. Sexual harassment among teachers is a problem in this school	D	D	D	
	E. Sexual harassment among students has got worse in recent years	E	E	E	
	F. Sexual harassment among teachers has got worse in recent years	F	F	F	
	G. School management deals effectively with sexual harassment of students by teachers	G	G	G	
26. Statements concerning discrimination against students affected by AIDS					
		Agree 1	Not Sure 2	Disagree 3	
	A. Students whose family members have AIDS are discriminated against by teachers	A	A	A	
	B. Students whose family members have AIDS are discriminated against by other students	B	B	B	
	C. School management has taken firm measures to counter discrimination against teachers and students who have AIDS	C	C	C	
	D. Students whose family members have AIDS are frequently absent from school	D	D	D	
	E. Students whose relatives have AIDS experience declining performance in class	E	E	E	
	F. Students whose parents have AIDS usually drop out of school	F	F	F	

27.	**Student and teacher responses to orphan statements**				
		Agree 1	Not Sure 2	Disagree 3	
	A. Students who have lost one or both parents have more problems than others	A	A	A	
	B. Students whose parents die often drop out of school	B	B	B	
	C. Orphans receive subsidized education from this school	C	C	C	
	D. The local community has AIDS orphans support programmes	D	D	D	
	F. The school offers counselling service to students with problems	F	F	F	
28.	Teacher support statements				
		Agree 1	Not Sure 2	Disagree 3	
	A. Teachers can discuss their personnel problems with school management	A	A	A	
	B. Would teachers who are HIV positive be properly supported by school management	B	B	B	
	C. In-service training on HIV/AIDS has been adequate	C	C	C	
	D. Teachers in this school enjoy teaching HIV/AIDS related topics	D	D	D	
	E. HIV/AIDS related topics taught at the primary school level are adequate	E	E	E	
	F. I am uncomfortable with teaching some of the HIV/AIDS related topics	F	F	F	
29.	Statements on teacher discrimination				
		Agree 1	Not Sure 2	Disagree 3	
	A. Teachers who are HIV positive are discriminated against by the Ministry of Education	A	A	A	
	B. Would a teacher who is HIV positive be discriminated against by school management	B	B	B	
	C. Teachers who are HIV positive are discriminated against by other teachers	C	C	C	
	D. Teachers who are HIV positive are discriminated against by community	D	D	D	
	E. Teachers who are HIV positive are discriminated against by students	E	E	E	

30. Teacher performance statements: morale and effort					
		Agree 1	Not Sure 2	Disagree 3	
	A. Teacher morale at this school is high	A	A	A	
	B. Teachers at this school are hardworking	B	B	B	

31. Do you know any people in the local community who have died of AIDS or HIV related illness in the last 5 years? [ ] Yes [ ] No. *(Record Yes or No)*

32. How many of these are in teaching profession? [a] 1 – 2, [b] 3 - 5, [c] more than 5 [d] None.

33. Does a blood test for HIV virus sometimes give you false information?
[ ] Yes [ ] No [ ] Don't know
(Record Yes, No or Don't know for Q33 to Q35 and 37 and 38)

34. Can somebody with HIV virus live up to 20 years?
[ ] Yes [ ] No [ ] Don't know

35 Can someone have the HIV infection without showing any symptoms/being ill?
[ ] Yes [ ] No [ ] Don't know

36 What can one do to live for some more days after being told that he/she has got a virus that causes AIDS?

---

37. Does the School Have HIV Classes and Cubs				
		Yes	No	
	HIV Classes			
	HIV Clubs			
38. Is Guidance and counselling offered and Practise in Your School				
		Yes	No	
	Guidance and Counselling offered			
	G & C services used			
39. 'Are the Counselling Services Provided in Your School at?'				
	G&C activity	Yes 1	No 2	Don't Know 3
	A. Assembly	A	A	A
	B. Group	B	B	B
	C. Workshop	C	C	C
	D. Individual	D	D	D
	E. Classes	E	E	E
	F. General information	F	F	F

Section VI Domestic and Sexual Violence

40. In families in this community					
		Yes 1	No 2	Don't Know 3	
A	Is violence common in families in the local community?				
B	Is there maltreatment of children?				
C	Is there maltreatment of youth?				
D	Is there maltreatment of women?				
E	Is there maltreatment of men?				

(Q41 to 47 record a, b, c etc or a combination as entered by teachers)

41. Do you believe that the only real violence or maltreatment is physical beating?

a. ❑ Yes b. ❑ No

42. What other forms of maltreatment do you consider as violence (you can choose more than one)?

f. Verbal (insults, threats) [ ]
g. Psychological (humiliate, afraid to be blamed) [ ]
h. Sexual (force to have sexual relations) [ ]
i. Other (specify).....

Section VII View about the Questionnaire

43. Did you enjoy replying to this questionnaire?

a. Loved it b. Didn't like it

43. Did you think it was difficult to respond to this questionnaire?

a Yes b. No c. More or less

44. Did you feel embarrassed at any point when replying to the questionnaire?

a. Many times b. A few times c. Not at all

45. Do you think that you learnt anything whilst replying to this questionnaire?

d. Lots of things [ ]
e. Some things [ ]
f. A few things [ ]
g. Nothing [ ]

46. If felt uncomfortable with any question or topic, which were these (you can mark more than one of them)

h. Sexual practices [ ]

i. Use of condom [ ]
j. information about AIDS [ ]
k. Talking about Sex [ ]
l. Violence [ ]
m. None of them [ ]
n. Unknown [ ]

47. If you would like to make any commentary, use this space

11 APPENDIX VI: DATA COLLECTION FORM FOR DEOs

GUIDELINES FOR COLLECTING DATA FROM REGISTERS HELD BY DEOs

Table 1. Number of Teachers in Primary Schools in The District By Sex

YEAR	MALE	FEMALE	TOTAL	
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				

Table 2. Number of Reported Teachers' Deaths in Primary Schools in The District By Sex

YEAR	MALE	FEMALE	TOTAL	Number aged 18 - 30	Number aged 31 - 39	Number aged 40 - 50	Number aged 50+
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							

Table 3. Number of Teachers' Retirements (early and mandatory) in Primary Schools in The District By Sex and age

YEAR	MALE	FEMALE	TOTAL	Number aged 25 - 30	Number aged 31 - 39	Number aged 40 - 50	Number aged 50+
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							

Table 4. Number of Teachers' Absentee days in Primary Schools in The District By Sex and age (Please take a sample of 30 schools only) **SECOND TERM OF 2001**.

School	MALE	FEMALE	TOTAL due to Illness	Number aged 25 – 30	Number aged 31 - 39	Number aged 40 - 50	Number aged 50+

Example in Completing table 4. If for the 30 schools only 3 male teachers in school A where absent for one day each the entry at the male column is 3. If for the 30 school only 3 male teachers were absent for 3 days each and 2 of them for one day each the entry in the male column is (3*3)+(2*1)=11 MALE DAYS.
In the ***total due to illness column***, please enter total (male and female) reported absenteeism due to illness.

12 APPENDIX VII: DATA COLLECTION FORM FOR HEADTEACHERS

SEMI-STRUCTURED INTERVIEW WITH HEADTEACHER/DEPUTY HEADTEACHER

1. The idea here is to look at how the teaching stock has changed over the five years. The suggestion is to complete the following table. Ideally, this should be a break down for sex and by 5 or 10 year age groups.

Attrition of teaching staff, 1995-2000							
	95	96	97	98	99	00	01
Initial N (at beginning of school Year)							
Deceased							
Ill-health							
Medical retirement							
Compulsory retirement (e.g. at 55							
Voluntary retirement (e.g. 45-54							
Redeployed to MoE							
Deserted							
Dismissed							
Resigned							
Transfer out of school							
Newcomers							
N at end of school year							

2. Teacher Absenteeism
Number of days teachers were absent in total during the last three terms by reason

	This term		Last term		Two terms ago	
	Male	Female	Male	Female	Male	Female
Total						
Broken down by reason						
Sick						
Funeral						
Other people sick						
School-related						
Other						

3. Statements about Teachers

	Agree	Not Sure	Disagree
A. Teacher morale at this school is high	A	A	A
B. Teachers at this school are hardworking	B	B	B
C. Teachers absenteeism is a serious problem in this school	C	C	C
D. Sexual harassment among teachers is a serious problem in this school	D	D	D
E. Sexual harassment among teachers has got worse in recent years	E	E	E
F. Sexual harassment among students is a serious problem in this school	F	F	F
G. Sexual harassment among students got worse in recent years	G	G	G

4. Have public funds for education been reduced? ( ) Yes () No
5. How much of the salary bill is being paid to sick but inactive teachers Kshs. P1 to/year
6. What is the cost of educating a student in upper primary (standard 5-8) in this school per year? KSHS..... (include school fees and other levies, books etc).
7. What is the cost of educating a child lower primary in this school (1-4)? Kshs ....
8. Who pays for cost of educating orphaned children in this school? Teachers/ Community
9. In this school what is the performance of orphaned children compared to other child? .....Initially fair but declines if not guided.....
   Initially fair but declines if not guided.
10. Do children who get orphaned have declining performance in school ( ) Yes ( ) No

FOR USE GOING THROUGH TEACHERS REGISTERS

Ask then for each child whether the child had ever stopped attending school, whether s/he had ever repeated, and whether ever absent ask them to complete the last column with A-G

A II;
B Death in family;
C No teacher;
D Sickness in family;
E Needed at home;
F Sent home;
G Other

	Ever Stooped Attending (Y/N)	Ever Repeated a class (Y/N)	Ever Absent this Term (Y/N)	Reason for absenteeism (A-G)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				