

The Impact of HIV/Aids on Primary Education

A Case Study on Selected Districts of Kenya

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Dedication

To Emily, Anne and Mom Dolly

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Abstract

This study compares, describes, and analyzes the impact of HIV/Aids on primary education in Kenya in terms of enrolment, participation, completion and drop-out rates of pupils in selected urban and rural case study schools in two districts, Homa Bay and Murang'a. Special attention has been paid to the gender perspectives, including traditional gender roles and the cultural patterns prevailing around the case school communities. A multi-disciplinary approach has been applied, combining qualitative and quantitative methods and techniques.

Particular consideration has been given to the ethical matters related to this study. Information has been collected utilizing techniques such as focus group discussions (FGD), participant and non-participant observation, and interviews. Indications for research, policy, planning, and implementations have been analyzed. Findings suggest that the HIV/Aids pandemic has added numerous challenges to education both at the micro and the macro-levels but more at the micro-level where it affects the individual, a particular household, or a particular community.

Findings also suggest that the impact of HIV/Aids on pupils goes far beyond enduring the suffering and death of an infected family member. The child is at risk of the stigma and tragedy that accompanies the disease. This includes becoming an Aids orphan. These children are part of the increasing numbers of street children who engage in drug use and are being exploited as child labor. The study also shows that HIV/Aids has taken its toll among pre-teens, teens, young adults, the middle-aged, and the aged. The youth become exposed to HIV/Aids due to several biological, socio-cultural, and economic factors. Evidence of high rates of teenage pregnancies confirms that the youth are engaging in early sexual activities and increasingly being predisposed to HIV/Aids. The study compares two case districts and from this analysis it is concluded that inequality contributes to the prevalence of HIV/Aids. Poverty and inequality are linked to school enrolment, participation, completion and drop-out rates. High mortality among infants and children are impacting school enrollment. Some of the would-be-parents in these communities believe that a child might not live long enough to receive a return on investment from education.

Increased Aids mortality is found to have a direct impact on the schools studied in terms of drop-outs, absenteeism, low participation, enrolment, and premature completion of basic schooling. Schoolgirls who came from Aids afflicted homes are found to be more burdened with responsibilities leading to lower enrolments and completion rates in school than boys. Evidence of young girls being pushed into marriage, or in Murang'a lured into the illicit sex trade was apparent especially those who had become victims of "trial marriages". Cultural differences between the two tribes pertaining to what types of HIV/Aids awareness campaigns would be effective were incidental.

Descriptors: HIV/Aids, impact, effects, strategies, primary education, youth, orphans, street children, enrolment, participation, completion, drop-out, Family Life Education, Gender, Kenya.

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Acronyms and Abbreviations

Aids	Acquired Immuno-deficiency Syndrome
AidsCAP	Aids Control and Prevention Project
AMREF	African Medical Research Foundation
DDC	District Development Committee
DEO	District Education Officer
DFRD	District Focus for Rural Development
DN	Daily Nation (Newspaper)
EAS	East Africa Standard (Newspaper)
EFA	Education for All
FGD	Focus Group Discussion
FIDA-K	Federation of Women Lawyers in Kenya
FLE	Family Life Education
GDP	Gross Domestic Product
GNP	Gross National Product
GOK	Government of Kenya
GRID	Gay Related Immune Syndrome
HIV	Human Immuno-deficiency Virus
IIE	Institute of International Education
IMF	International Monetary Fund
KCPE	Kenya Certificate of Primary Education
KDHS	Kenya Demographic and Health Surveys
KIE	Kenya Institute of Education
Ksh ¹	Kenyan Shillings
MOE	Ministry of Education
MOH	Ministry of Health
NASCOP	National Aids/STD Control Program
NDP	National Development Plan
NGO	Non-Governmental Organization
OP	Office of President
PTA	Parent Teachers Association
RAP	Rapid Assessment Procedure
RATEMA	Rangwe Teachers Movement against Aids
SAP	Structural Adjustment Program
SAREC	Swedish Agency for Research Cooperation with Developing Countries
Sida	Swedish International Development Authority

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SONY	South Nyanza Sugar Company
SPSS	Statistical Package for Social Sciences
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TAPWAK	The Association of People With Aids in Kenya
TBA	Traditional Birth Attendant
TSC	Teacher Service Commission
UNAids	Joint United Nations Program on HIV/Aids
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank
WHO	World Health Organization
WOWESOK	Widow and Orphans Society of Kenya
Zero Grazing	Monogamy (The Art of Embracing Mono-Partnership)

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Chapter One

Perspectives of the Research

1.1 General Background of the Study

In Kenya, education is viewed as the pillar of all development activities. One of the government of Kenya's guiding philosophies for education is the concern that every Kenyan has the inalienable right, no matter his or her socio-economic status, to basic education (National Development Plan (NDP), 1997). This part of the education policy is articulated in the Ominde Commission of 1964 and the Ndegwa Commission of 1971. For this reason, there has been rapid growth in enrolments, which has enabled the stock of human capital to rise much faster than the overall growth in population, leading to an upgrading of the quality of the labor force (NDP, *ibid.*).

Radical critics of the human capital theory, such as Bowles and Gintis (1975) have also supported the importance of investment in education for promoting human productivity. They too, contend, however, that education should be examined more critically in its relationship to development. Fägerlind and Saha (1989), when they opine that the link between education and development is complex and contingent on economic, social and political development goals, also express this view. They maintain that since societies are always in the process of changing, so does the relationship between education and development. They see education has having many other positive developmental effects; the more education girls have, the lower the rates of infant and child mortality and the better the general health and nutritional status of families will be. Education is of particular importance in increasing life chances for the most disadvantaged sectors of any population, including girls and women. Because of its size, the status of teachers and the contact with young people, (Kelly, 2000) sees the education sector as having an important role in responding to the Aids epidemic.

Despite the above commendable achievements, Kenya faces several problems on the education front, primarily relating to the decline of completion rates, financing and relevance of education. Gender imbalance at secondary and tertiary levels is also an area for critical concern. Government policies to eliminate gender imbalances at all levels of education will be the key to the elimination of gender biases in society (NDP, 1997). Besides the mentioned problems in Kenya's education system, the HIV/Aids pandemic has also come to add more challenges to education and development as a whole (Nalo *et al.*, 1996). As Aiken (1987) pointed out, many activists maintain that without a vaccine, the

only means for Aids prevention is through education. The need for educational programs for the prevention of Aids has been nationally recognized, and the government is emphasizing the role of educational activities as part of the national fight against Aids. The education system in this case will encompass all aspects of primary level education in terms of enrolment, demand, participation, drop-out¹ and completion.

While expounding on the impact of HIV/Aids on education, Gachuhi (1999) has defined Aids as a war, and the education sector is in the frontline. Gachuhi has observed in some parts of Kenya that teachers are falling ill, dying, or else taking time off to care for relatives or to attend funerals. According to her study, in one Kenyan province, between 20 and 30 teachers die each month. As Aids continues to take its toll, there will be schools with no head teachers. Such a scenario will therefore have a negative impact on the education system's ability to plan, manage and implement policies and programs. Because of the presence of HIV in the classroom and school, the process of teaching and learning itself has become more complicated and difficult.

According to the latest statistics from the National Aids and STD Control Program (NAS COP) of the Ministry of Health (MOH), has revealed that more than 1.9 million adults and 900,000 children in Kenyan are already infected with the killer virus. The infection rate has risen from 5 percent in 1990 to 14 percent in 1998. In urban areas HIV prevalence is about 18 percent while in rural areas it is about 12 percent (NAS COP, 1999). At the same time, 22 percent of girls in the age range 15-19 in the country are infected with HIV, and 4 percent of the boys in the same group are HIV positive. The worrying aspect here is the rising prevalence of HIV/Aids among the youth. The number of adolescent pregnancies in the country has also now risen to between 50 and 60 percent monthly, compared with 10 to 20 percent 10 years ago. Out of the four million Kenyans at risk of contracting the killer disease, 25 percent were adolescent female youth. The sessional paper on Aids from 1994, after being adopted by Parliament, gave the go-ahead for the introduction of Aids education in schools. Among the key contributors to the formulation of the paper were Christian and Muslim leaders (DN, Jan. 21, 1999).

As is evident from the many sources, the HIV/Aids pandemic seems to be the single most important health challenge that Kenya has faced in its post-independence history. It is the only known health problem that has the potential to reverse the significant gains made in life expectancy and infant mortality. The HIV/Aids pandemic is therefore becoming much more than just a health problem, as it encompasses economic, social and cultural dimensions. It is taking away the community's ability to recover readily from illness, depression and adversity, such as poverty or the like. The nation loses expensively trained manpower, while the cultural, legal and socio-economic consequences of the disease are aspects with which the country has yet to cope (NDP, 1997; World Bank, 1997, 1999). It is currently estimated that the cumulative economic impact of HIV could be as high as 15

¹ Drop-out rate is the percentage of pupils enrolled in a given grade of education in a given school-year who are not enrolled in any grade during the following school year.

percent of the GDP by the end of the year 2000, up from 2 percent in 1994 (DN, Jan. 21, 1999). From a gender perspective, women are doubly at risk, firstly as potential victims and secondly as traditional health care providers. Other expected consequences of the pandemic are an increase in families headed by children. Barnett and Blaikie (1992) have also pointed out the grave economic and social implications of such an epidemic and its effect on the labor force, increase of the number of orphans, the loss of trained specialists, and the economics of the health care burden.

Kelly (2000) has conceptualized and summarized HIV/Aids as having the potential to affect education in ten different ways. These are in areas such as: demand, supply, resource availability, special needs of increasing number of orphans, interaction between and within schools and the community, curriculum modification, new roles for teachers and the education system, organization, planning and management of the education system, and finally donor support to education.

1.2 Aims and Objectives of the Study

The overall aim of this study is to analyze the impact of HIV/Aids on primary education in Kenya and reactions to the pandemic among pupils and teachers, the authorities, and the local communities.

More specifically, the objectives of the study are to:

- 1 Examine the impact of HIV/Aids in terms of pupil enrolment, participation, drop-out, and completion with special focus on the two cases of the Homa Bay and Murang'a Districts.
- 2 Compare the impact of HIV/Aids on female and male pupils².
- 3 Compare the impact of HIV/Aids with other factors affecting primary education in Kenya.
- 4 Discuss some possible strategies in the struggle against HIV/Aids.

1.3 The Significance of the Study

The HIV/Aids pandemic is as powerful as ever; it is eroding the gains made over the past decades, both at the micro and macro levels. The pandemic is now composed of distinct epidemics, each with its own features and force, and disproportionately impacting on the developing world. There is the general devastating impact of HIV/Aids in Kenya touching upon the aspect of HIV/Aids, the children and youth, as well as women. The pandemic within Kenya shows that each region has become increasingly diverse and fragmented.

² A young person who is enrolled in an educational program particularly, primary school.

The concern of the present study is the question as to how the youth's education is currently being affected by HIV/Aids in the selected case districts. How does the education system respond to the impact of HIV/Aids? There is also a misconception that prevails among some Kenyans that HIV/Aids only affects other people and not themselves. This is one area too that this study will make explicitly clear to its readers, by highlighting some case examples of the impact of HIV/Aids on education within the case school community. The idea of rationalization and denial is a human way of trying to cope with stressful situations, and throughout this thesis, there will be highlights on some of those areas where there is rationalization and denial.

Whilst there may be some similarities across societies, there should be no presumption that what works in one country (X) for example, will work in the other country (Y) and vice versa (Thomson 1993). Therefore, one of the challenges that confronts this study is to provide insights for the design of policies relating to the youth and Aids. This hopefully should explicitly take into account social, cultural and economic conditions, both in terms of differences, and correspondingly be most effective as a result of the impact of HIV/Aids on the individual youth. There is also the question of the effect the individual youth has on education. Even though this thesis could be intended for a specific audience, it will be important to understand that the HIV/Aids epidemic in Kenya is several epidemics in one. It is an epidemic of misinformation, rumors and myths. It is an epidemic of denials, rationalizations and stigmas. It is a public health epidemic, as well as an epidemic of ignorance. The thesis will therefore anticipate a wider audience, and of this audience, among the key people will be the researchers and academicians in the field as well as educational planners and policy makers who could take into consideration the reports in this thesis when deliberating on issues relating to HIV/Aids and education.

1.4 Scope and Limitations of the Study

The scope of this study has been limited to only observing the impact of HIV/Aids on education and very little on the reverse; that is, how education affects HIV/Aids. It has been observed that HIV/Aids affects other sectors of national development as well. The most immediate effects are of course felt by the person who becomes sick, and then usually by his or her immediate family or household. Between the extremes of the individual and the macro-economy there are also effects on communities, and economic and social sectors. It is at these middle levels, which include both, productive and service sectors, that intervention may be most urgently required. This thesis endeavors to provide some ideas as to how the educational sector is being affected and what types of response are required.

The study relies very much on the impact of HIV/Aids on youth within the formal education system in Kenya, yet there are other youths who are not within this formal education system and who are affected in one way or the another. In relation to the

limitation on the youth, it is also evident that the study is limited to primary education³. This is due to the fact that primary education is the only kind of education which is widely offered in Kenya; the kind of education every one must have as a basic human and civil right; and the one which forms the basis for recruitment to further education. It is also the only level of education which can be found in all the communities in Kenya.

The time frame too, has also been a major limitation in this study. Both the field study and the actual research lasted for a period of four years during which there were rapid changes and developments in the fields of HIV/Aids research. The impact of HIV/Aids on education which is the core objective of the study constantly experienced new developments as time went by, and thus had influence on the study.

The third limitation has to do with the research topic. Most of the existing literature on HIV/Aids and education has solely and exhaustively looked at the impact/effect of education on HIV/Aids and not the reverse. This has made the availability of related literature rather scarce. The fourth limitation of the study is in the follow-up. This study could come up with totally different findings, if it had the opportunity to develop into a longitudinal study, in which the sample area or persons were studied over a period of time and the results compared periodically. Gender balance was also a very crucial limitation. Within the sample schools, there was not an equal representation between boys and girls in the school/classrooms. This limitation must have definitely influenced the study's perspective on gender analysis.

The sixth limitation of the study can be found in the dispensation or biases in the sample areas. Language and cultural difference in one of the case districts could have had a certain degree of bias in interpretations. This limitation is twofold: on the one hand, in one of the districts, I had the upper hand over the local language and culture as I could speak the local language fluently and was also accustomed to their culture. On the other hand, in the second district I had a handicap with both the local language and the culture. In such circumstances, I then had to rely very much on a translator, especially when conducting interviews or during group discussions with the parents and the community elders.

Lastly, ethics governing the research constituted a limitation to the study. The ethics were spelt out clearly by the research governing council in Kenya, under the office of the president (OP). Confidentiality of the respondents was to be assured at all times and levels. It somehow slowed down the responses, making the study somewhat less cost- effective.

³ Sometimes referred to as elementary education. It is the education programs that are normally designed on a unit or project basis to give pupils sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, art and music. These subjects serve to develop pupils' ability to obtain and use information the children need in their home, community, country, etc.

1.5 Structure of the Dissertation

The general organization of this book is as follows: perspectives of the research, the conceptual framework and the methodology, descriptive chapters concerning the context of the study, chapters analyzing the case studies and research results, summary and discussion of the results. The initial chapter of this book outlines the general background, aims, objectives, scope and limitations of the study. Chapter two provides the conceptual framework which the study is based upon and gives a description and interpretation of the model and also introduces the concepts and definitions that are relevant for the study. This chapter then provides the methodology that is used in this study. Chapter three is also descriptive, presenting the research place, the Kenyan case, by providing pertinent aspects of political, economic and socio-cultural dimensions. This chapter also gives an empirical overview of some of the relevant literature. The case study districts of Homa Bay and Murang'a are also taken up in this chapter where the demographic patterns (indices) in the two districts are brought up for comparison. This includes such areas as health, education, population, cultural practices and differences, HIV/Aids prevalence rates etc. Different themes and the empirical overview of HIV/Aids is discussed in chapter four and includes such topics as women and Aids, the situation of children and the youth etc. The chapter also reviews HIV/Aids dimensions from an international perspective, an African regional perspective, and the situation in sub-Saharan Africa. The Aids situation in Kenya is discussed in detail in chapter five, where problems such as those of orphans, girl-child, teacher management, finances and many more, are introduced.

Case study findings are then discussed in the subsequent chapters six and seven. A full description of the case schools and the school communities is given as well as summaries and discussions in both chapters with each of the chapters having its own unique sets of data gathered, mode of analysis and interpretations. The final chapter eight of the book includes a summary and discussion of research results and in addition includes a number of general as well as specific recommendations to the people they are intended for. There are also suggestions for further research.

Chapter Two

Conceptual Framework and the Methodology

2.1 Introduction

The purpose of this chapter is to present the conceptual frame of reference for this study as well as the methodology. The major concepts underlying this study are: Human Immunodeficiency Virus (HIV), Acquired Immune Deficiency Syndrome (Aids), primary education, enrolment, participation, completion, drop-out, economic development, culture, religion and society. The conceptualization of the impact of HIV/Aids on primary education in Kenya is evolving from the few studies that have been carried out in the recent past on HIV, Aids and Education. A generated conceptual model, taking into consideration key variables in this study, will, therefore, not only guide the study, but the reader as well. Figure 2.1 below, is a guide to this thesis, which also helps in elaborating the conceptual model in Figure 2.2.

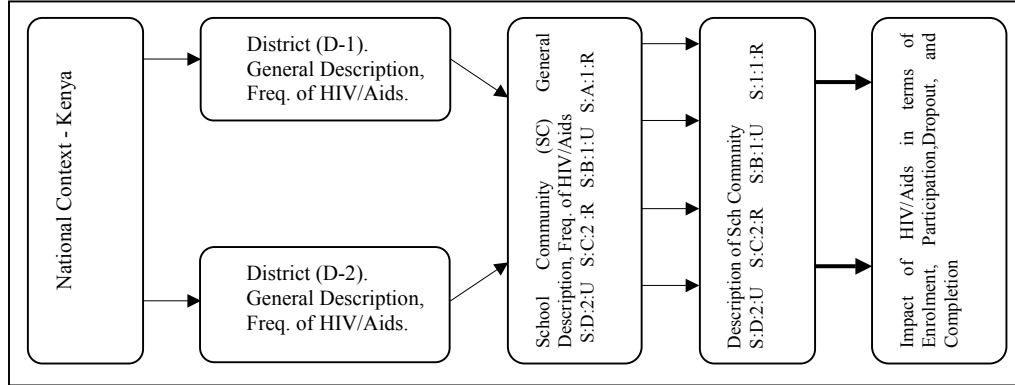


Figure 2.1 The Guiding Scheme

This chapter offers reviews and explanations of concepts relevant as well as offering discussion of related theoretical issues based upon the general literature surrounding the theme of the study. Today, many people are accustomed to hearing about Aids: Aids policies, people with Aids, Aids education, etc. People also talk about the “Aids virus”, which is HIV. Sometimes the acronyms Aids and HIV are used as if they had the same

meaning. In this study the concepts within the two acronyms will be treated distinctively, but in relation to each other. However, the study is also aware of critics of the HIV=Aids=Death paradigm and whose literature is beginning to cause confusion within the mainstream advocates of the impact of HIV/Aids on development (see: 4.1, 4.1.1).

The guiding scheme in Figure 2.1 specifies the units of analysis to be studied. Decisions about the cases studied, both case size and strategies, are discussed. The School Community (SC) and the pupils in this case actually form two of the core units of analysis. The primary focus of data collection was therefore on what is happening to individual pupils in the individual case schools. The findings from these cases will therefore not be used to form a generalization on the impact of HIV/Aids on education in Kenya, but will remain as absolute findings in the cases studied. However, this will not bar any attempts to make inferences, as there is empirical evidence that shows similarities. The study then focuses on and compares groups of pupils involved in different units of analysis, differentiated on the basis of their school location (province, district, urban and rural, boys and girls). There were also groups such as those of the Parents and Teachers Association (PTA). There were also those units forming the formal organizations such as the church leaders, village elders, district medical personnel, that also constituted different units and levels of analysis. The study then goes on to compare gender aspects.

2.2 Concepts and Definitions Relevant to the Study

HIV/Aids: The Human Immunodeficiency Virus (HIV) is the virus which is believed to cause Aids, the Acquired Immune Deficiency Syndrome. Aids is the name of the illness caused by the virus, HIV. It is now a known fact that most people infected with HIV do not have Aids. Many will not have any symptoms of illness for ten years or more. A person infected with HIV is said to have Aids only when he or she develops certain serious diseases or conditions. The condition called Aids is not what is spread from person to person. It is the virus called HIV that is spread to other people by infected persons who may be without symptoms and ignorant of their infection. Many more people are infected with HIV than have been diagnosed with Aids. Terms such as “Aids-infected” should be avoided - it is unclear whether this means someone infected with HIV or ill with Aids (UNAids, 1999; Tuju, 1996; Piot, *et al.* 1994; Barnett, & Blaikie, 1992; Cadwell, 1989).

Aids is a new disease. As Douglas (1966) puts it: “disease does not only affect the physical body, it also affects the ‘social body’, and the relationships between people”. As with any other illness, Aids makes people dependent, less able to play their part in their family or household. It may put them in a condition of socially defined “impurity”. Aids adversely affects the country’s development. By depriving the economy of a qualified and productive labor force, restricting the tax base, and raising the demand for social services due to the increase of orphaned children, widows and the high cost of health care, Aids poses a great challenge to Kenya’s development (Sessional Paper on Aids No. 4).

Gender Koivula (1999) has noted that: “Sometimes the word gender is taken to mean ‘about women’. The confusion that only women are sexed is not surprising since maleness has regularly in history been interpreted as universality (Nelson, 1996). However when the term gender came into usage it was applied to particularize the psychological, cultural, and social dimensions of femaleness and maleness. So, the distinction made between the two terms, gender and sex was intended to clarify the cultural versus the biological. Given these definitions it is often stated that there are two sexes, female and male, and that the cultural expression of what is feminine or masculine in a person are dichotomous, resulting in two genders” (Kessler & McKenna, 1978). Thus, feminists in the 1960s and the 1970s introduced gender not as a grammatical term but as an analytical tool to help distinguish between a biological dimension (sex) and a cultural one (gender). According to this distinction, a person is not born female or male, but becomes, through the influence of society, feminine or masculine. Some feminists extrapolated from this position that in order for women to be equal to men, they should be equally masculine, and they obviously did not think about the reverse. Some adopt the above definition, which replaces sex by gender on the assumption that gender is a cultural concept. However, such a definition is not adequate in answering the central question of whether biology is the cause of women’s degradation.

According to Fägerlind and Saha (1989), gender differences constitute a polemic matter. They fully agree that there are profound biological differences between men and women, and that these differences might be the key factors which lead to segregation of women in different societies. Odiwuor (1998) defines gender as referring to attributes and opportunities associated with being male or female and the socio-cultural relationships between women and men; girls and boys. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context specific and changeable. In most societies there are differences and inequalities between women and men in activities undertaken, access to and control over resources as well as decision-making opportunities. Gender is part of a broader socio-cultural context. Other important criteria for socio-cultural analysis includes class, race, poverty level, ethnic group, and age.

Formal Education: Education has different levels of distinction between formal, informal, and non-formal education (Fägerlind and Saha, *ibid.*). All these distinctions have common goals, which, according to Furtado (1977), are to increase the efficiency of the production system of a society. Another goal is the satisfaction of the population’s basic needs, and lastly, the attainment of the objectives sought by various groups in a society, which are linked to the use of scarce resources. Hallak (1991) also shares the above argument when he emphasizes that formal education encourages community involvement in the collection and management of resources. Colletta (1994), defines “formal education as the deliberate and systematic transmission of knowledge, skills, and attitudes (with the stress upon

knowledge) within an explicit, defined, and structured format for space, time, and material, with set qualifications for teacher and learner.

2.3 Conceptual Model for the Study

The conceptual model adopted in this thesis will serve the purpose of guiding the study, and will facilitate the understanding and interpretation of the specific data gathered from school communities, with special focus on the two districts of Homa Bay and Murang'a. The incorporating approach in this model emphasizes the impact of HIV/Aids on education with emphasis on enrolment, participation, completion and drop-out. While at the same time also trying to understand this impact on other inter-relationships such as economic development, society, culture and religion. This also includes the gender aspects, when the model introduces the interdependence between the effects of HIV/Aids on male and female pupils and education. Another interesting focus of the model is to compare the impact of HIV/Aids and other factors affecting education in Kenya. The concepts in the model appear broadly based. It is therefore assumed that the model will capture a wide range of issues and will therefore lead to a better understanding of the purpose which it is meant to achieve. The conceptual model in Figure 2.2 then leads the study to the principal objectives (where it some possible strategies in the struggle against HIV and Aids are discussed).

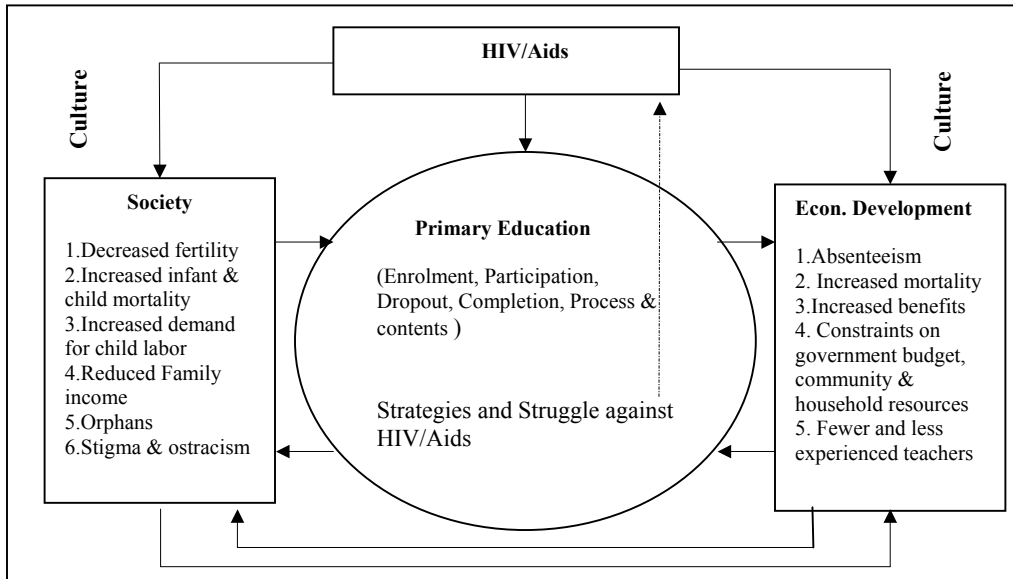


Figure 2.2 The Conceptual Model of the Study

2.3.1 HIV/Aids

The effect of HIV/Aids cannot be understood in meaningful or practical terms without a comprehensive grasp of the interplay of demographic, cultural, economic, social, psychological and other relevant factors and dimensions that converge in the mode of acquisition. Underlying this problem of broader synthesis and general conceptualization is an inadequate understanding of the Aids phenomenon itself, since it tends to involve unique economic and cultural circumstances.

Aids kills young economically productive people, bringing hardship to families, increases expenditure on health care and adversely affects the country's development. By depriving the economy of a qualified productive labor force, restricting the tax base, and raising the demand for social services due to the increased number of orphaned children, widows and the high cost of health care, Aids poses a great challenge to Kenya's development (SPA-No. 4, 1997).

Reviews of previous studies, particularly those undertaken by Barnet and Blaikie, 1992; Cadwell, *et al.*, 1993; Shaeffer, 1994; World Bank, 1997; Gachuhi, 1999; Kelly, 2000), provide clues concerning areas of attention in this research. Although the elite classes of society can be seriously affected, the greatest impact lies on the poor. Particularly among the poor, the pandemic represents a major threat to the health, well being, and rights of infants, children, and youth. Part of this threat is direct, through risk of infection from mothers, transfusions and unsterile skin-piercing instruments, and coercive or consensual sexual activities. Part of the threat is indirect, through the impact of parental illness and death, abandonment and of orphanhood, family poverty, and a deteriorating home environment that often results from the presence of HIV/Aids.

2.3.2 Economic Development

The flow of development knowledge, methodologies, and expertise need not either be limited to one direction, that is, from North to South. It is clear that underdevelopment, unemployment, poverty, social injustice, and gender inequities form a common bond between all countries regardless of their GNP *per capita* or geographical location. Though local circumstances vary, successful, community-driven methods to alleviate poverty, increase girls' education enrolments, reduce environmental stress or increase economic opportunities for women that have been born in the South should be brought to the so-called developed nations. Perhaps sustainable development models conceived in 'Third World' environments of relative resource scarcity offer the best alternative to the gluttonous economic growth model of the 'First World', and the export of models should flow from South to North (Sharma & Meares, 1995).

In many cases “development” itself contributes to vulnerability to infection, as when economic changes force many out of rural life, pushing young men to leave their villages for the cities, and young women into urban factories or “hospitality” work, disrupting families and increasing commercial sex (Miller & Carballo, 1989; Weeramunda 1990). Stress on development has been accompanied by a somewhat belated recognition of the significance of gender. There is a greater understanding of the double impact of HIV on women as both those at greater risk of infection and those on whom the burdens of care fall most heavily (Altman, 1995). The impact of HIV infection on development programs is only now becoming appreciated. HIV infection is associated with often fatal illness, thereby increasing overall morbidity and mortality. A study such as this therefore needs to have an overview on the impact of HIV/Aids on population growth, health care cost, maternal and infant mortality, life expectancy, labor, productivity, income and economic growth. On a more general level, the education system itself will necessarily be affected as it tries to respond to, and cope with, the more immediate, more micro-level impact of HIV/Aids on education.

However, it should not be taken for granted that education has “positive functions” only. There are many other views as well. Fuller (1991), for instance, argues that primary school life in Malawi closely resemble retarded passages to modernity. Whether a pupil gets genuine knowledge or not is not an important matter. Becker (1975, 1992) recognizes the importance of the family environment as the “caring organization”, while seeing the school as formally aimed at transmitting the knowledge and skills needed for living and working in society in more shared and structured ways. Becker also argues that families are becoming increasingly unable to provide the necessary welfare activities for their children. In cases of scarcity of resources (school fees), Shaeffer (1994) has noted that girls are the ones most likely to leave school first, “what money is spent is likely to go to educate male children. Once a family begins to rely on a child’s labor, it is highly unlikely he or she will ever return to school”.

2.3.3 Education as a System

Education has the potential to contain the HIV/Aids pandemic and to assist in coping with its causalities (Kelly, 2000). While making an attempt to study systematically the impact of HIV/Aids on the education sector, we have specified the education areas that the study ought to look into. HIV/Aids is affecting education in Kenya on several fronts, key areas being the objectives of education, content and methods, operations, planning and management. What do schools teach, and what should they teach in order to promote economic development? The emphasis of this question is on learning subjects useful for practical life, for example mathematics, physics and chemistry, or even more practical and vocationally-oriented subjects like typing, woodwork and industrial arts.

From the conceptual model in Figure 2.2, we are trying to create a link between education and development (economic development). From a general point of view, it has been argued that education can support or contribute to economic growth: an educated population is more productive than an uneducated one, irrespective of type of society. Any attempt to define and correlate development with education has to emphasize first the distinction between formal, informal, and non-formal education.

Primary education in particular is a cornerstone of economic and social development (Lockheed, *et al.*, 1991). It improves the production capacity of societies and their political, economic and scientific institutions. It also helps reduce poverty by mitigating the effects of poverty on population, health, and nutrition and by increasing the value and efficiency of the labor offered by the poor. As economics world-wide are transformed by technological advances and new methods of production that depend on a well trained and intellectually flexible labor force, primary education becomes even more significant.

Primary education has two main purposes: to produce a literate and numerate population that can deal with problems encountered at home and at work, and to serve as a foundation on which further education is built. In many countries in the developing world, education systems are unable to meet their objectives. First they do not teach children already in school the core skills contained in their national curriculum, second they do not provide all school age children, particularly girls, with the opportunity to attend school (Lockheed, *et al.*, *ibid.*). As a result these primary education systems are ineffective, and they jeopardize national efforts to build a base of human capital for development. They are also of the opinion that complete primary education helps alleviate poverty and advance economic and social development. A diverse body of literature demonstrates that adults in developing countries who have higher levels of educational attainment have more paid employment, higher individual earnings, greater agricultural nutritional status, and more “modern” attitudes than adults who have lower educational attainment. They are also more likely to send their children to school (Lodiaga, 1992). These characteristics are dimensions of development. Primary education has other benefits for individuals and society as well. When the formal education of children is also affected by HIV/Aids, this will ultimately lead to a reduction in demand for, in supply and quality of education, thus leading to greater difficulty in increasing school enrolment, completion rates and overall learning achievement. However as Chinapah *et al.*, (1992) points out:

African primary or basic education development is increasingly confronted with problems of enrolment stagnation or decline, quantity erosion, ineffectiveness and rising costs. The primary educational systems in many countries in the region cannot absorb all school-age children for the minimum years of education required; instead they are producing too few primary school completers and a massive amount of undereducated primary school leavers. These are often associated with problems of structural and educational inequalities, educational wastage, curriculum relevance, academic achievements, teaching-learning educators and parents.

The relationship between education and development has been the center of much discussion and controversy since the 1950s. The conviction that education, in its formal form, makes a positive, and indeed an essential, contribution to the development of countries has shifted from unbridled optimism during the 1950s and 1960s to guarded hope and even despair in the 1980s. It is further argued by Löfstedt, 1980; Fägerlind and Saha, 1989 that all education systems are immersed in a dialectical process whereby education and the changes in a society are reciprocally related. Changes in education as well as in society occur as a result of this interaction. Any analysis therefore of educational changes in a given country will involve taking into account the social, political and economic system of that country. Daun (1996), while agreeing with the above-mentioned opinions, categorizes the functions of education into different levels such as political socialization, manpower production, and the allocation of people to various positions in a social hierarchy. He states that the role of education has not been the same over the years. Education, for example, was used for nation building at the time when nation states were being formed. According to Carnoy and Levin (1985), education was split up between two major powers. On the one hand, there is education for opportunity, equality, democratic participation and the expansion of rights; while on the other hand, there are the powers of education for training a more efficient work force and contributing to capital accumulation.

2.3.4 Strategies in the Struggle against HIV/Aids

Kelly (2000) has observed the need to equip young people with the information which they rarely get from their parents or senior family members, and which they no longer get from traditional training such as is customarily provided at the time of initiation. Kelly (ibid.) further agrees with the opinion of Gachuhi (1999) that until recently little more than anecdotal evidence was available about the relationship between Family Life Education (FLE) in developing countries and safer sex. This explains why most studies on FLE in developing countries have been relying on evaluations of FLE school-based programs in industrialized countries, principally in the United States.

Intervention to stem the spread of HIV throughout Kenya is as varied as the contexts in which we find the interventions themselves. Not only is the HIV epidemic dynamic in terms of treatment options, prevention strategies and disease progression, but sexual behavior, which remains the primary target of Aids prevention efforts world-wide, is widely diverse and deeply embedded in individual desires, social and cultural relationships, and environmental and economic processes. This makes prevention of HIV, which could be an essentially simple task, enormously complex, involving a multiplicity of dimensions. Either implicitly or explicitly nearly all prevention intervention is based on theory. Most rely on the assumption that giving correct information about transmission and prevention will lead to behavioral change. Yet research has proven numerous times that education alone is not sufficient to induce behavioral change among most individuals (Kiragu, *et al.*,

1993). The UNAids secretariat has also confirmed through a major literature review that FLE or sex health education does not lead to earlier or increased sexual activity. In its conclusion, the secretariat confirmed that FLE encourages young people to postpone their sexual initiations and lower their risk of unwanted pregnancy, STDs and HIV infection (UNAids, 1999). The FLE intervention is therefore based on individual psychosocial and cognitive approaches that educate individuals in practical skills to reduce their risk of contracting HIV and other STIs (Kiragu, *et al.*, *ibid.*).

According to Tuijnman (1999), social, cultural and economic changes have been building up for a long time, propelled by ‘global’ developments in technology, trade and financial services, manufacturing and agriculture. These developments interact with other factors, such as migration, urbanization, emerging new values and attitudes to family, work and leisure. Tuijnman (*Ibid.*) summarizes the whole logic that “these new situations bring new opportunities but also dilemmas”.

2.3.5 Interpretation of the Model

In order to unravel the complexity which seems to surround the education-development debate, one must view the relationship between education and society as a dialectical one. Society in its broadest sense includes dimensions like culture, which are also considered to be of utmost importance in this study. As viewed by Fägerlind and Saha (1989), the contradiction lies in the fact that education is both an agent of change and in turn is changed by society. For example, it acts both as a producer of social mobility and as an agent for the reproduction of the social order. As such, education in any society is part of a dialectical process with the economic, social and political dimensions of society.

The study considers that human psychological functioning is shaped by the social circumstances in which individuals are raised. There can be differences in language, value systems, and the overall social, economic, and material organization of life, and that these differences are bound to have an impact on individuals as psychological beings. Ramirez (1997) points out that sometimes critics of cultural analysis overlook the dynamism that is generated by the rampant inconsistencies and conflicts within the broader world culture itself. In his observation, Ramirez (*ibid.*) states that beyond conflicts of interests among individuals and beyond the dualistic inconsistencies between individuals, there are also contradictions inherent in widely valued cultural goods: equality versus liberty, progress versus justice, efficiency versus individuality.

What the study is trying to consider is that at every level of the HIV/Aids impact on education, there is an equal impact on the culture as well; the impact is on values, ideas, beliefs, etc. The study will then try to demonstrate how some cultural beliefs have escalated the spread of HIV/Aids in some of the communities under study vis-à-vis traditions and religious beliefs and conflicts. It is also important to point out that the study

will not spare detailed elaboration on modern youth cultures including the pop-music culture and television culture.

As can be seen from the conceptual model, the arrows are indications for directions or placements, reflecting on the relationships between and among elements and units of analysis in the study. The different arrows in this conceptual model show that there is a relationship between the various units of analysis and that they are interactive, i.e. acting upon or influencing each other. Primary education, which in this case is our focus as far as the education system is concerned, shows a dialectical connection with the other dimensions, such as the society and economic development, which are constantly being affected by the HIV/Aids pandemic. From the conceptual model, we also find that the impact of HIV/Aids on education affects the development at the society level: families no longer have enough money to keep their children in school and to contribute to the maintenance of the school. Which gender is most likely to be affected more than the other is also taken up in this study while discussing the impact of HIV/Aids on the youth. In the past, interactive studies of schools and classrooms have simply failed to use gender as an organizing principle (Deem, 1978). This could have had a negative effect on research, giving an impoverished picture of school life, compared with one that has noticed that gender is an issue in school. The importance of gender not only in its own right, but also as a way of throwing other issues into relief, will be focussed upon throughout this study.

2.4 Design and Methods

In this section, the methods employed in this study will be presented. The discussion is focussed upon the following major phases: design of the study, case study, data collection, data management and data analysis. The areas of the study were purposefully selected in order to obtain necessary information. There were 2 districts earmarked for the study, each district having 1 urban and 1 rural school selected. Each of the schools also represented the community in which they were located, having a total of 108 pupils (39 girls and 69 boys). These pupils were in Grade 8, the last year of primary education, and were purposefully selected because they were more able to understand and respond to the questionnaires and were also selected for the reason that they were in their adolescence. A total of 57 teachers, 84 parents, and 18 officers from the 2 districts also participated in the discussions. Focus Group Discussion (FGD), questionnaires, in-depth interviews, non-participatory observation and documentary reviews formed the data collection techniques.

There are strengths and weaknesses to any single data collection strategy. In using more than one data collection approach, the researcher was able to combine strengths and correct some of the deficiencies of any one source of data. The study therefore made use of triangulation in its data gatherings. Denzin (1978) has defined data triangulation as the use of a variety of data sources in a study, for example interviewing people in different status positions or with different points of view, data collection methods, and handling of data.

Brock-Utne (1996) has equally noted that one of the conventional ways of treating validity in qualitative research is the recourse of triangulation or multi-method approach, as it is sometimes called. There are four basic types of triangulation, apart from the one described above; there are others such as investigator triangulation, theory triangulation, and methodological triangulation (Patton, 1990).

Denzin (1978) opines that collecting data from different times permits the examination of principles of action and interaction, which are consistent across time, differentiating them from those specific to an era. Similarly with triangulation across space, there are similarities and differences that are across locations identifying geographical, cultural and sub-cultural influences (Cohen and Manion, 1994). Triangulation as described by Denzin includes data composed of aggregation of individual responses, interactive units, and collectivities such as organizations, communities or groups. This latter type of data triangulation bridges the macro-micro level distinctions, and facilitates inclusion of the structural, cultural, interpersonal, personal and interpersonal dimensions (Fielding & Fielding, 1986). In this methodological triangulation, the researcher compared data from the interviews with those from observations and data gathered through FGD.

The research methods that were used in this study were field-oriented. They included qualitative, close-focus research methods, involving in-depth interviews, FGD, participant and non-participant observation. A Rapid Assessment Process (RAP) was applied in selecting within districts the sites for the project. A collaborative approach was also sought with the pupils, teachers, parents, village and community leaders, religious elders, district education, and district health officials, and non-government agencies with Aids as a priority agenda in their service organizations.

2.4.1 Design of the Study

In this section, the rationale for the choice of methods is discussed. The present study seeks to find out the impact of HIV/Aids on education in some 2 districts of Kenya. Various methods are used to justify the case study approach. The case studies in this research have provided thorough, in-depth, comprehensive and well-ordered information concerning the social unit in question. The distinctive need for case studies arises out of the desire to understand complex social phenomena (Yin, 1984). In carrying out any research investigation, it is of the utmost necessity to adopt a systematic procedure to collect the data. There are so many methods of collecting data required for studying a problem, and in most cases, they have their own merits and demerits.

A descriptive survey method was used to study groups differentiated on the basis of geographical location between Homa Bay and Murang'a, and cultural identity in these two regions. All this was carried out through statistical documentation, questionnaires to pupils and open-ended questions to parents and the teachers, and various community leaders such as the church elders and local administrative authorities. Pre-arranged interviews with

open-ended questions lasted for a maximum of 2 hours with each respondent. Approximately 3-4 respondents were interviewed per day, all drawn at random within an area. Prior arrangements for meetings had been made possible by the help of the pilot study, which had been conducted earlier on.

A qualitative analysis of the responses was then worked out differently for each of the questions that were asked, and then separated according to the two provincial districts of Murang'a and Homa Bay. An open-ended discussion with Ministry officials was planned initially in the pilot study, but could not take place effectively due to a large number of prior commitments in their schedules.

The FGD or session was widely used in this study to understand psychological and behavioral underpinnings of parents, teachers and the community on the impact of HIV/Aids on education. The FGD gave the researcher some highlights on questions such as why people behave as they do. In each of our group sessions, there were groups of between 6 and 12 persons. The researcher was in all circumstances the moderator. A cameraman, who assisted with the video taping of the proceedings and a translator, whenever necessary, also accompanied him to the field on most occasions. The groups were carefully chosen (having in mind their opinions and ideas) to balance the discussion. FGD is a qualitative research method and was never considered at any time to be a substitute for quantitative studies. It was rather considered an important input to the latter, and a parallel source of distinct, rich, and pertinent information. A multiple research approach is therefore more capable of disclosing diverse dimensions of behavior. In FGD, cultural factors and the value structures of the social group to which participants belong and on which they have modeled their perceptions are reinforced, and they manifest themselves readily. The FGD model therefore relates to the concept of social character developed as an adaptation of the economic, social and cultural conditions common to most members of the groups or classes within the society. The FGD situation therefore encouraged participants to disclose behavior and attitudes that they might have not consciously revealed in an individual interview situation. They were less on their guard against personal disclosure because the atmosphere was tolerant, friendly, and permissive even when selfish, egocentric, aggressive, or questionable judgements were voiced.

2.4.2 Pilot Study

A pilot study was conducted in 1994, sponsored by the Swedish Agency for Research Cooperation (SAREC). It was carried out over 45 days with visits to appropriate areas for the study. The pilot study was very important for the research, as it provided the researcher with various options for the study. The pilot study also helped the researcher in choosing the geographical proximity, which included the case districts and schools. Other reasons for the pilot study were that: (1) it enabled the researcher to discuss the questionnaire with Kenyan experts in the field of HIV/Aids research in relation to Social Science aspects and

education in particular. (2) It also made it possible to try out the questionnaire and the structured questions on the pupils, teachers, parents and other members of the communities under study, and (3) it also helped in making preparation for the main study. Before the study could even get off the ground, the researcher had first to get a scientific research approval permit from the Kenya Research Ethical Clearance Committee, Office of the President. This meant that the researcher had to make a tentative research proposal, with a tentative research design, with the methodology including case area and case size.

The Pilot study also helped the researcher in ways and means of accessing difficult information, especially that pertaining to HIV/Aids and sexuality, and especially since these are taboo topics in the case communities. The pilot study therefore assisted the researcher in developing appropriate methodology for carrying out such a study. The pilot study was conducted in the two Provinces, picking up one district in each Province. In each of these districts, the researcher identified two schools for the study. One of the schools picked up from each of the districts was in the urban area, and the other was in the rural area. The tools used in the pilot study were later used in the main study as well. These tools were therefore tested during the pilot study to check on their validity and reliability aspects. The initial knowledge about the problem area was gathered by studying previous research work done on the impact of HIV/Aids on societies in general. There were literature reviews, as well as regular participation in various seminars on HIV/Aids.

2.4.3 Purposive Selection of the Cases

This is case study research where the cases have been purposively selected because they serve a particular research purpose. According to Patton (1990) case studies become particularly useful where one needs to understand some particular problems or situations in great depth. Case studies are also useful when one case can identify cases rich in information. By “rich” we mean that a great deal can be learned from a few examples of the phenomenon in question. Case studies are particularly valuable when the research aims to capture individual differences or unique variation from one program experience to another. Regardless of the unit of analysis, a qualitative case study seeks to describe that unit in depth, in detail, in context, and holistically.

Keeping the purpose of the study in mind, it may be mentioned clearly in this section that the investigator has purposively selected 2 Provinces out of the 8 Provinces in Kenya. We also selected 2 districts from the Provinces, and 2 urban and 2 rural schools in the districts spelt out for the study. Within the two Provinces; Nyanza and Central, Homa Bay District was chosen as a case district in Nyanza Province, and in Central Province, Murang’a was chosen as the case district. A total of 4 primary schools, 2 in each district were purposively selected as case institutions. The 2 schools in each district were chosen on the basis of their geographical locations of being urban and rural. This was to help the study with its comparative approach. Since the researcher had guaranteed confidentiality of

the schools and all the participants in the study, letters are therefore used, instead of the school names. We discuss schools A, B, C, and D in the study.

The two districts under study are looked at on the basis of their cultures and traditions, taking into consideration various factors like religion, literacy level and all the socio-economic indices that could highlight similarities and differences in the study. The two districts also contain two distinct major ethnic groups in Kenya, the Luo and the Kikuyu. The two Provinces and districts under study have also exposed in the past a difference in the Aids prevalence rate, as shown in table 2.1, which was also the basis for selecting the two districts for research. In Table 2.1, Central Province had a total percentage of Aids cases of 8.0 percent, while Nyanza had a total of 31.3 percent. The two districts under study had a total Aids percentage of 1.7 for Murang'a and 11.6 for South Nyanza. It is worth noting that in 1994 Homa Bay District was still a part of the greater South Nyanza that was later divided into four new districts. However, what is also important from Table 2.1 is that there has always been a steady increase in reported Aids since 1986.

Table 2.1 Aids Cases by District of Birth as at July 1994

Central Province	1986	87	88	89	90	91	92	93	Total	Total %	1998 Update
Kiambu	0	16	49	85	230	293	270	502	1445	2.9	79,702
Kirinyaga	0	4	10	18	74	102	147	147	502	1.0	14,168
Murang'a	0	9	19	63	184	162	211	244	892	1.7	30,845
Nyandarua	0	1	4	8	26	37	44	13	133	0.2	12,753
Nyeri	0	14	23	144	137	217	227	325	1057	2.1	23,534
Central Total	0	44	105	288	651	811	899	1231	4029	8.0	161,002
Nyanza Province											
Kisii	0	11	30	88	229	323	425	529	1635	3.2	59,359
Kisumu	0	109	288	404	786	798	1003	766	4154	8.3	68,726
Siaya	0	99	324	613	775	694	788	749	4042	8.1	60,943
South Nyanza	0	67	172	644	969	911	1666	1345	5774	11.6	103,820
Nyanza Total	0	286	814	1749	2759	2726	1882	3389	1560	31.3	292,848

Source: National Aids Control Program 1994. Update: Kenya Aids NGOs Consortium 2000.

In this investigation there were 108 pupils. The number of female pupils was 39 and 69 were males. All the 108 pupils were in the final grade of the primary cycle (Grade 8). They had an age range of between 13 years and 18 years of age. The average age was 15 years. There were 12 FGD sessions. District 1, which in this case is Homa Bay, had a total of 29 pupils, with 14 pupils in school A, which is rural, and 15 pupils in school B which is an urban school. District 2 which is Murang'a, had a total number of 79 pupils. In terms of rural and urban population, there were 31 pupils in school C, which is rural, and 48 in school D which is an urban school. Table 2.2 highlights the distribution of the cases.

Table 2.2 Distribution of the Cases

Sample	Female	Male	Total
School A (Homa Bay-Rural)	6	8	14
School B (Homa Bay-Urban)	5	10	15
School C (Murang'a-Rural)	17	31	48
School D (Murang'a-Urban)	11	20	31
Sub Total	39	69	108
Total No. of Teachers	32	25	57
Total No. of Parents	17	67	84
Officers in The districts	2	16	18
Total Sample	90	177	267

Source: Author

2.4.4 Data Collection and The Research Instruments

This section gives an account of the types of data collected, the methods by which they were collected and tools used in the data collection. There was a mixture of data collection techniques in this study, popularly known in the research world as methodological triangulation, involving qualitative data gathered through case studies, and quantitative data gathered by the use of questionnaires. The flexibility of qualitative methodology allows for the use of multiple methods and strategies of analysis. Qualitative methods allow for thorough descriptions of the process. They are concerned with meanings which participants attribute to social interaction and situations (Geertz, 1973).

In this section, the researcher also gives an account of the pilot study. A discussion of the research tools used in this study is also included, with a possibility of showing their weaknesses and strong points as tools for this kind of research. As Ejiaga (1997) points out, the use of multiple sources of data collection rests on the assumption that they would strengthen the construct validity and reliability of the study since they provide measures of the same phenomenon. Both the quantitative and qualitative data for the present study were collected in 1995 after the pilot study in 1994. The modified questionnaires were then administered to the 8th grade pupils in the four case schools, in the two districts of Homa Bay and Murang'a.

Figure 2.3 illustrates a narrative approach to the study. It shows every level of data collection and analysis. It shows the research process and the procedures, with the first level involving the literature review, model development, and level two giving an insight to a pilot study with a comparative approach in the two Provinces of Nyanza and Central. The comparison goes further to the school levels with a division of urban and rural schools. At the school level the researcher had the opportunity to conduct his interviews well enough with both the pupils and the parents and the teachers respectively. Later on within the procedure, the researcher is given the opportunity to interview other leaders such as those in the church, community, the district health official, district education officers, non-governmental organizations and persons within the district development planning offices.

The figure also illustrates how the data collection was carried out to the level of analyzing that data.

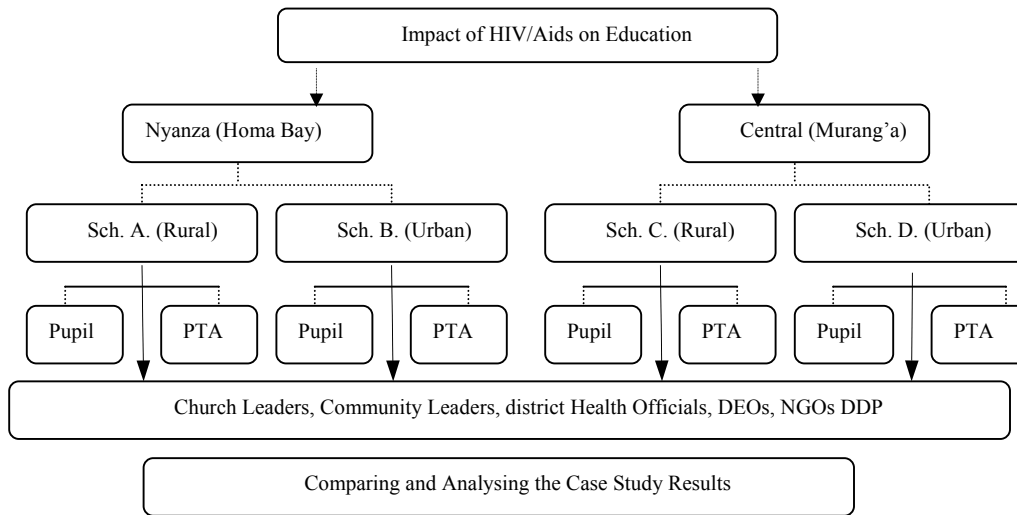


Figure 2. 3 Research Process

A questionnaire that was used on the Grade 8 pupils was adopted from UNESCO. This questionnaire was used for testing the pupils' knowledge of HIV and Aids; also for gauging the pupils' attitudes towards people with HIV or Aids (see appendix). Other tools used in the study were modern technology equipment such as a video camera, tape recorder, etc. which helped in the analysis when demonstrating the reaction and perception of the interviewee to various issues in relation to HIV/Aids and the school. The following Tables 2.3, 2.4, 2.5, 2.6 and 2.7 give a summary of the data collected.

Table 2.3 shows the broader levels of analysis the researcher adopted. It was necessary within the study to gather some information about Kenya as a unit of analysis on its own. The demographic profile therefore enabled the researcher to trace the stages of development in Kenya since independence in 1963. This included population growth, growth and achievements made within education, and general growth indices such as life expectancy and mortality levels. The HIV/Aids prevalence rate in the country was also looked into. It was necessary for the study to have a national prevalence rate in order to pick and choose the case province and districts for convenience in making a comparative study. In summary, these units of analysis looked at the socio-economic profiles in Kenya's eight provinces.

Table 2.3 Data Collection on Demographic Profile of Kenya

Units of Analysis	Information Gathered	Sources
Kenya	Demographic Profile	National Development Plan, Official Reports
Kenya's Education System	Structure, Aims/Objectives, Trends, Financing, etc	Official Documents, Sessional Papers
HIV/Aids	Epidemiological Aspects in Kenya. Impact on National Development, & Education	Official Reports, Research, Literature, Interviews, Discussions

Source: Author

Table 2.4 shows the case districts as one of the units of analysis in this category. The researcher has therefore given information on the demographic profile of the two districts of Murang'a and Homa Bay. Most of this information was acquired from the district development plan, district focus for rural development and government documents. Within the two districts, rural and urban sectors also formed a unit of analysis, where there was a study on possible differences in socio-economic indicators. This aspect will therefore be very important when drawing on the analysis and conclusions of the study. The analysis and conclusions also take into account cultural aspects such as those mentioned below. Culture as an object of analysis will enable the researcher to illustrate most of his connections with the "unknown" in areas such as norms, beliefs, traditions, and practices as experienced in the two cultures of Luo in Nyanza and Kikuyu in Central Province.

Table 2.4 Data Collection on the Case Districts.

Units of Analysis	Information Gathered	Sources
Homa Bay & Murang'a Districts	Demographic Profile	District Development Plan, District Focus for Rural Development, Govt. Documents-Statistical Abstracts, and Economic Survey
Rural & Urban	Socio-economic Indicators	District Economic Surveys.

Source: Author

Grade 8 as a unit of study as shown in Table 2.5 gives a great deal of vital information for the study. It encompasses the key problem area of the study as spelt out in the aims and objectives of this thesis. The impact of HIV/Aids on education has been looked at from the enrolments, participation, absenteeism, demand, and drop-out levels. A comparison has been drawn between the two districts under study, comparing their urban and rural units. From this Grade 8 group, the researcher also ventured into determining some of their awareness levels as far as HIV and Aids is concerned. This was very important for the study as it could give a picture of what takes place in the two districts. It also showed what differs from one social set-up to the other, the rural or the urban. Gender was also a very important unit of analysis. Who is affected most by the Aids pandemic? How do the pupils

view themselves in relation to the existing gender roles? How do the teachers, parents and peers perceive them in regard to their gender? How is HIV/Aids affecting the already existing achievements and gains made in gender equality in the community under study?

Table 2.5 Data Collection on the 8th Grade Pupils

Units of Analysis	Information Gathered	Sources
Schools A,B,C&D in the two districts of Homa Bay and Murang'a	Enrolments, Participation, Absenteeism, Demand, and Drop-out	Class Register, School Records and Files
Pupils HIV/Aids Awareness	Levels of Awareness	Questionnaires, Interviews
Gender	Gender roles	Interviews with the Pupils, Teachers and Parents.

Source: Author

The Parent Teachers Association (PTA), the Medical officer of Health (MOH) and the various community leaders as a unit of analysis are given in Table 2.6. The PTA for example, is a very important segment for gathering information needed for this study. Any vital information on the impact of HIV/Aids on education will always come from either the parents, or the teachers who in this case together with the pupils are the immediate stakeholders. After Structural Adjustment Programs (SAPs) were implemented, the PTA became even more solid in reinforcing development activities within the schools, building new classrooms, buying textbooks, and in some cases even giving remuneration to the teachers. They also became more concerned with the day to day running of the schools, and thus are in a more germane position to react to the effect of HIV/Aids on education at that very lowest level of the school. Much of the qualitative information pertaining to the level of awareness of the scourge, the attitude, and even the perception, will mostly come from this group. Their responses will in most cases reflect upon the pupil community and the school community at large.

Community and church leaders are also sources of information. This group is equally vital in this study, especially in providing information on the impact of HIV/Aids on education, but as viewed by persons outside the school, but who are equally involved in the functioning of the school in one way or another. Most school communities in Kenya, especially in the rural areas, are affiliated to a church of some kind. This, therefore, gives the church leaders some kind of responsibility over the school, and its community, both as spiritual leaders, and also as someone the community relies on whenever they have social problems such as sickness and even death. The church leader therefore has a moral obligation to oversee the impact of HIV/Aids in his community. This whole argument can be extended to the community leaders as well, whose duty is also to monitor the development activities within their communities. With the Aids scourge on the increase in their communities, they were also a very important source of information, especially on matters such as those of culture and traditions. Interviews with these groups therefore yielded very important information that will help in this study, not only in eliciting the

level of impact of the epidemic, but also in showing what promotes or accelerates or even keeps the rate of infection in their communities lower.

The MOH as a unit of analysis was very instrumental in giving accurate data/statistics on the number of HIV and Aids cases handled by their respective hospitals. They were able to provide some very important clues in regard to the rate of the epidemic in their respective districts. They had access to hospital laboratory records, and could therefore discuss with the researcher the scourge pattern especially among the youth within the district. The researcher was also able to learn a great deal from them in matters such as the mode of transmission of the HIV/Aids disease. They were able to discuss not only the medical aspect of the disease, but also the social mode of transmission, as they viewed it within their districts.

Table 2.6 Data Collection on the PTA, MOH and Various Community Leaders

Sources of Information	Information Gathered	Methods/Techniques
Parents Teachers Association (PTA)	Development Activities, Awareness and Impact of HIV/Aids, Coping etc.	Interviews, FGD
Community and Church Leaders	Campaigns, Possibilities to cope, Counseling, Awareness	Interviews, Participation, Observations
Medical Officer of Health	Statistics on Reported Aids Cases, Transmission modes, Situation of the Youth	Interviews, Document and Record Analysis

Source: Author

Data was also gathered from the District Education Officers (DEOs), the Non-Governmental Organizations NGOs, and from the District Development Planners as shown in Table 2.7. It was important for the study to collect some information from the DEOs, since they are the custodians of most of the information that comes from the schools. They have updates of data from each and every school within the district and are in a better position to make inferences on the situation of education in the whole district. From their historical interpolation charts, it was easier to see the trends of demand for education, not only in the entire district but even in the schools under investigation. The same could be found on completion rates, drop-out rates, absenteeism, girl child pregnancy and many other variables under investigation.

There was also information gathered from existing NGOs, especially those that were directly linked to the fight against HIV/Aids. These were the NGOs such as the African Medical and Research Foundation (AMREF), and The Association of People With Aids in Kenya (TAPWAK). Most of this information was about youth and awareness, strategies and responses. There was also information on their development activities in the respective districts, the situation of orphans and girl-child protection from teenage pregnancies. In

some cases the researchers had the opportunity of accompanying some of these organizations to the field and of observing their activities.

Lastly, the District Development Planners (DDPs) also provided vital information especially in regard to development activities that have been going on in their various districts. It was important to see the extent to which developmental activities are either progressing or digressing, and to find out what the causal factors are. This kind of information was very important for the research, especially when it came to analyzing various kinds of findings. The research made use of official documents and interviews and drew on these inferences.

Table 2.7 Data Collection from the DEOs, NGOs and DDPs

Sources of Information	Information Gathered	Methods/Techniques
DEOs	Impact of HIV/Aids on Education on Enrolment, Demand, Participation, Completion, Drop-Out	Structured Interviews,
NGOs,	Awareness Campaigns, Development Activities, Orphan Situation, Girl-child Protection (teenage pregnancy)	Interviews, Participatory Observation, Document Review
DDPs	Development Goals, Achievements	Official Documents, Structured Interview, Development Plans

Source: Author

2.4.5 Data Management

This section discusses how data has been analyzed in the case studies, and the statistical techniques used. This section also includes issues of interpretation of data, their validity and reliability.

Since the research has been based on triangulation, the management of data involves a highly complex set up. As in the focus group discussion technique, the research made use of instruments such as a video camera and tape recorder. Note-taking which included recordings of non-verbal communication complemented the mentioned tools.

Selection of the Provinces: The two Provinces (see section 2.4.3) have very profound historical differences. For one, missionary schools were established at an early stage in Central Province, and these schools dominated in the province. Missionary schools opened up for wage earnings in low-grade, white-collar jobs (Leo, 1984). Another interesting reason for choosing the two tribes was that during the colonial era they were the only tribes that were recruited for African labor. Swainson (1980) states that half of the able-bodied men within the Kikuyu and Luo were working on European farms. It is therefore

interesting to see that these two tribes at one time dominated the labor force in Kenya. This therefore means that it was the Kikuyu and the Luo who were first brought into the capitalist economy of Kenya, even if they were only peripheral actors at that time. It is then important to compare these two tribes once again at the end of the 20th century, in terms of their socio-economic potentials. We should keep in mind the fact that Kenyatta was a Kikuyu and the first president of Kenya. It has been claimed that the Kikuyu people were favored in various ways. The Kikuyu built a monopoly of key positions within the Kenyan elite (Nellis, 1974).

Other factors substantiating a comparison can be attributed to the well up to date infrastructures that have existed in Central Province since independence. There is also a very big difference in the geographical location, which also influences the weather with respect to wind, temperature, cloudiness, moisture, pressure, etc. Most parts of Nyanza Province are not all that favored by weather, especially to foster agriculture, even though it has some agricultural potential. This can be seen in Chapter 3 when discussing Homa Bay and Murang'a Districts. "Most parts of Nyanza Province are dominated by vulnerable middle-class peasants who are always vulnerable when it comes to natural disasters" (Nyong'o, 1981).

In choosing the two case districts the researcher also avoided choosing a district that falls within the provincial headquarters. This could have influenced the ethnic composition on a wider scale, as there are more civil servants from different parts of the country/tribes in the provincial headquarters. As Närman (1995) points out, Central Province has a prerequisite for economic development. A well-educated population is proportionately well provided for in the Kikuyu districts. This was perpetuated by more than a fair share of secondary schools, of which many were comparatively high performing and government maintained. Most of the districts in Central Province have national catchment secondary schools. These are usually prestigious national schools.

2.4.6 Data Analysis

Comparing groups differentiated on the basis of their geographical set up has dominated the analysis of our FGD. Firstly, were those groups from the rural set up: schools 1 and 3 were compared in Homa Bay and Murang'a Districts. The same was done for the urban groups: schools 2 and 4. Similarities and differences were then identified. A comparison was then carried out to determine findings, which might evoke further research. The study made use of background data gathered from the perception questionnaire that was distributed to the pupils. Together with interviews and group discussions and other related methodologies, we were then able to explore and examine the relationship between the variables in the research and the geographical set up of each group in relation to socio-economic factors, cultures, beliefs etc. The research findings are then presented in various parts of this book in tables and in text.

Chapter Three

Kenya and the Case Study Districts

3.1 Background

Kenya has an area of 582,646 square kilometers. Three-quarters of this area are in the arid and semi-arid zones. Kenya lies on the East Coast of Africa, with the Equator cutting across roughly in the middle. South of Kenya is the Republic of Tanzania. Somalia is to the Northeast. Ethiopia and Sudan are to the north and Uganda to the west. The climate of Kenya varies with altitude. The coastal region is usually hot and humid with temperatures averaging between 20°C and 32°C, while inland, at more than 1500 meters above sea level the temperature averages 7°C - 27°C (Ahlberg, 1991).

Kenya came to existence like many other Africa countries in 1884/85, during the Berlin Conference (Griffiths, 1984: 44-45). As a home for the human species it is reputed to have a history stretching back longer than almost any other part of the world (Leakey and Lewin, 1978: 63; Griffiths, *ibid.*). Parts of Kenya, the Inland portion, were formerly a British colony, while the coastal areas were a British protectorate (Macgoye, 1986).

The history of Kenya as a political entity began with the region's inclusion in the British sphere of influence in the late nineteenth century, and the subsequent establishment of a British protectorate and colony there. The British brought together the country's diverse elements under a unified administration and bestowed on it the name *Kenya* after the 5,200-meter peak in the central highlands that the Kikuyu called Kere-Nyaga, the "mountain of whiteness" (Kenyatta, 1971).

Kenya is a republic with an elected parliament and president. Parliamentary and presidential elections are democratically held every five years. The "Nyayo Philosophy" and the "Harambee" spirit are the cornerstones of national development and aspirations. Nyayo philosophy of love, peace, and unity is practically expressed by Kenyans as a commitment for being mindful of each other's welfare. The self-help activity of "pulling and pooling" together resources for development is indeed responsible for tremendous expansion and growth in educational services since independence in 1963 (Chinapah and Lodiaga 1992; Akong'a, 1988).

The World Bank rates Kenya as the 17th poorest nation in the world (1996). However, it fares fairly well when compared with its immediate neighbors like Rwanda with a per capita income of (US \$) 80, Ethiopia \$100, Tanzania \$140, Burundi \$160, Uganda \$190, and Kenya \$250. Average Low income \$380, sub-Saharan \$460, Middle income \$2,520,

World \$4,470,0 High income \$23,420 (World Bank, 1997; Killick, 1983; Lofchie, 1989; and Chege 1987). Kenya's workforce numbers 13 million. 4.3 million (1997) are employed amongst which 1.5 million have properly salaried jobs, 2.8 million are blacksmiths, roadside mechanics, carvers, petty traders and an array of other types, who together constitute the 'Jua Kali' informal sector. Jua Kali is a Swahili word for 'scorching sun' because most of these workers do their work in the open air. The balance of about 8.7 million falls under peasant farmers, pastoralists and idlers. Land per capita is diminishing as a result of subdivisions caused by population growth (Mathui, 1997; Economist Intelligence Unit (1998). There is little reliable data on total employment levels in Kenya due to difficulties in assessing the informal sector. In the 1994-96 Development Plan, the MOPND estimated that 2.24m Kenyans were employed (in 1995) in the urban and rural informal sectors. Table 3.1 and 3.2, shows the demographic summary of Kenya.

Table 3.1 Demographic Summary a.

1.	Population-2000-03-01	28.7 million
2.	Birth Rate per 1000 pop.	45
3.	Death Rate per 1000 pop.	12
4.	Natural Increase (annual, %)	3.3
5.	"Doubling Time" in Years at Current Rate	21
6.	Projected Population : 2010	43.6 million
7.	Projected Population : 2025	63.6 million
8.	Infant Mortality Rate	69
9.	Total Fertility Rate	5.7
10.	% Age:<15	48
11.	% Age:65+	3
12.	Life Expectancy at Birth: Average	56 years
13.	Life Expectancy at Birth: Male	54 years
14.	Life Expectancy at Birth: Female	57 years
15.	Urban	27 %
16.	Married Women Using Contraception:	33 %

Source: *World Population Data Sheet 1995 & CBK, DN March 2000*

Table 3.2 Demographic Summary b.

1.	Population 1993: Under 16 years	13.2 million
2.	Population 1993: Under 5 years	4.9 million
3.	Population annual growth rate: 1965-80	3.6%
4.	Population annual growth rate: 1980-93	3.5%
5.	Crude death rate: 1960	22
6.	Crude death rate: 1993	10
7.	Crude birth rate: 1960	53
8.	Crude birth rate: 1993	44
9.	Life expectancy: 1960	45
10.	Life expectancy: 1993	59 years
11.	Total fertility rate: 1993	6.2

Source: *The State of the World's Children 1995*

3.2 Demographic Characteristics

Kenya is still mainly a rural country with some 85 percent of the population living in rural areas. The country's urban structure forms a strong primary pattern. Nairobi represents about 40 percent of the country's total urban population, and the three largest cities, Nairobi, Mombasa and Kisumu, all with more than 100,000 inhabitants in 1979, account for 57.3 percent (Obudho 1984: 363-8). An update from the 1997-2001 NDP (1997) shows some of the indicators of Kenya's population structure and projections as summarized in Table 3.3.

Table 3.3 Indicators of Kenya's Population Structure and Projections

	1979 (CENSUS)	1989 (CENSUS)	1995 (ESTIMATES)	2001 (PROJECTED)
Total Population (Mn)	16.2	23.2	27.5	31.9
Growth Rates (% p.a.)	3.9	3.4	2.9	2.5
Avg. Population Density (per sq. km)	26	37	43	49.9
Urban Population (Mn)	2.3	3.9	5.3	7.4
Total Fertility Rate	7.8	6.7	5.4	4.8

Source: *National Development Plan, 1997*

The child mortality rate is estimated at 67/1000. Life expectancy is 59 years. The literate population of adults is 61 percent for men, and 49 percent for women. Enrolment in primary schools is 94 percent in total with 92 percent for females. Gross annual income is 381 US\$/person, with a GNP of 4.7 percent.

3.3 Culture

The culture of a country is expressed through its people. It is by the way they live and die, by the values which influence their behavior, by what they eat and how they prepare it, by how they entertain and amuse each other, by how they dress and how they make their clothes. Also, by the houses they live in and how they build them and with what materials, by the language they speak and how they speak it, by their art, their music, their writing and, not least, by what makes them laugh and cry. A people's culture is that way of living that makes them different from other people. It is usually most openly and vigorously expressed in song and dance, in mime and drama, and in painting and sculpture. But it is also there in people's thoughts and their ways of thinking, in their religious beliefs and their moral standards. People who live in towns develop a different culture from people who live in the countryside, even though they themselves originate from the rural areas. It is the young that are the cultural innovators, while the old preserve and maintain the cultural traditions (Mbiti, 1975, 1990).

Kenya's culture, therefore, is as fascinatingly diverse as are the many peoples of which the nation is composed. Paradoxically that very diversity gives Kenya's culture strength and interests that other countries lack (Akong'a 1988). Culture, like human beings, can never stand still. It must be dynamic or it will wither away. The people of modern Kenya live in a social environment which is radically different from that in which their parents and grandparents were brought up. They adopt from and adapt to their cultural traditions, but they change them at their peril. Kenya's colonial history has many examples of the way in which the colonialists endeavored to stamp on and extinguish cultural traditions. Some Christian missionaries felt that aspects of these traditions would be unacceptable to their 'home' congregations, and they used every means to get them banned or changed. But, cultural resistance was strong and the traditions concerned emerged more strongly than ever from this oppression (Mbiti, 1990).

3.4 Kenya's Education System

Recognizing the fact that any organization must have a policy for fulfillment of its mission, Kenya's education policies aim at the achievement of the national goals of education. Policies in place are followed primarily because it is both expedient and advantageous in a material sense or prudent to do so, in relation to the management of public affairs. In Kenya, government policies, including those of education are formulated either by the ruling political party - the Kenya African National Union (KANU) or by the parliament. Policy statements constitute a contractual agreement to meet the needs, aspirations and realistic, rational expectations of the citizens in a rapidly changing society.

Kenya will always enjoy the benefits of education especially in maintaining the *status quo*. Helping maintain the *status quo* is one of the fundamental linkages between education and development that has been supported by human capital theorists including even the radical critics of the theory such as Bowles and Gintis (1975). However, it is important to emphasize that Kenya has to very much rely on her human capital in order to make gains in its national productivity (usually measured in GNP). This would then influence policies concerning education and other development strategies.

3.4.1 Background Information

The foundation for modern education in Kenya was laid by missionaries who introduced reading to spread Christianity, and who taught practical subjects such as carpentry and gardening, which at least at first were mainly useful around the missions. These early educational activities began around the mid1800s along the coast (Eshiwani, 1993). At independence the new national government faced a dilemma in education. The pressing need to train Africans for middle-level and upper-level government service and for the

commercial and industrial sectors of the economy called for a restructuring of secondary and higher education (Kurian, 1992; The Economist Intelligence Unit, 1998).

Education in Kenya has undergone tremendous growth and expansion in terms of educational institutions and enrolment at all levels since independence. This is due to the fact that the government recognizes the importance of education both as one of the main measures of the quality of life led by Kenyans and as a means of improving that quality. Accordingly over the years the government has put great emphasis on the provision of educational opportunities. By 1990, for example, the share of recurrent expenditure going to education amounted to 36 percent of total recurrent expenditure. In addition to the role played by the government, local communities, religious organizations, NGOs and the private sector have all been very active in the provision of educational facilities and services (Eshiwani, 1993; Otiende, *et al.*, 1992; Sifuna, 1990). In 1985, the Kenya government replaced the 7-4-2-3 with the 8-4-4 system of formal education. The new system was intended to meet the increasing demands of the economy for technically and professionally qualified personnel (Sifuna, *ibid.*).

3.4.2 Primary Education

Primary education is in essence the first phase of Kenya's formal education system. It usually starts at six years of age and runs for eight years. The main purpose of primary education is to prepare children for the future; to participate fully in the social, political and economic well being of the nation. The new primary school curriculum has therefore been designed to provide a more functional and practical education to cater to the needs of children who finish their education at the primary school level and also to those who wish to continue with secondary education. Prior to independence, primary education was almost exclusively the responsibility of the communities' concerned or non-governmental agencies such as local church groups. Since independence, the government has gradually taken over from local authorities the administration of primary education. It has also assumed a greater share of the financial cost in line with the political commitment to provide equal educational opportunities to all through the provision of free primary education (Sifuna, *ibid.*).

There has been a remarkable expansion in primary education over the past three decades both in terms of the number of schools established and in the number of children enrolled. At independence, there were 6,056 primary schools with a total enrolment of 891,600 children. At the same time, trained teachers numbered 92,000. In 1990 there were over 14,690 primary schools, with an enrolment of slightly over five million children and nearly 200,000 trained teachers. In addition to the expansion in the number of primary school pupils enrolled, there has been a significant improvement in the participation of girls in education. At independence, only about a third of enrolment in primary schools were girls. By 1990 the proportion of girls had risen to nearly 50 percent. Educating

women contributes significantly to many other desirable objectives, such as reducing the population growth rate⁴. Since independence, the expansion of education facilities has been the single most important challenge on the human resource development front. The government has since then achieved some impressive results in enrolment ratios as shown in Table 3.4.

Table 3.4 Trends in Educational Enrolments, 1963 – 1995 (000's)

EDUCATION	ENROLLED 1963	ENROLLED 1995	MALE/FEMALE	1963-95 ANNUAL
Primary	892	5,545	1.02	5.7
Secondary	30	632	1.18	9.5
University	0.571	44.91	2.79	13.6
Teacher Education/Training	4	16.878	1.05	4.5
Technical	1	8.148	-	6.6
Polytechnic	-	7.927	3.219	-

Source: NDP 1997

From the table, there is an indication that there has been rapid growth in enrolments at all levels of education. The more the rate of enrolment growth rises, the higher the level of education. Secondly, gender disparity in education is close to being eliminated at primary level, but is still significant at all other education levels with the exception of teacher education and training.

Primary education starts for most children from the age of 6 years. In 1995, there were about 5.5 million children enrolled in Kenya primary schools. The national participation rate was 96 percent in 1995 with reference to children from the age 6-14 years. This rate however varies in different provinces and districts. Nationally however, only 69 percent of a given cohort reach Grade 8, which is the terminal point in the new education system (8-4-4). Since 1979, Kenya started running a parallel model basically the North American model, popularly known in Kenya as 8-4-4 (8 years of primary. School, 4 years of secondary education, and 4 years of university education). The ministry's task force on curriculum application recommended:

A structure that should lead to the development of communication skills (literacy) through the teaching of mother tongue, English and Kiswahili languages. The development of numeracy will be done through the teaching of mathematics, while the development of scientific outlook will be done through the teaching of integrated science. The development and acquisition of social and cultural knowledge, skills and attitudes will be done through the teaching of social studies, religious education, music and physical education. Art, craft and home science will provide for practical knowledge and skills (MOE, 1994).

⁴ These pieces of information can be found in various issues of the Statistical Abstract.

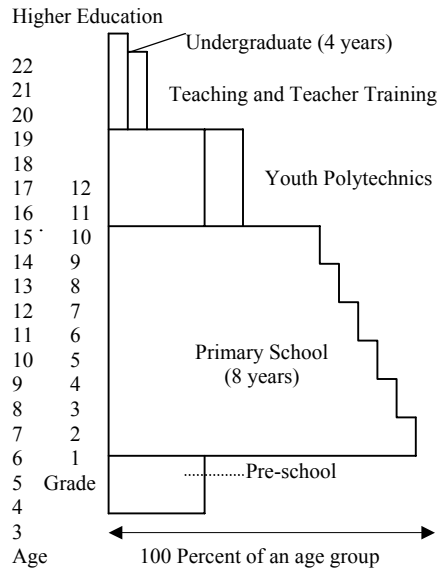


Figure 3.1 Kenya: Structure of the Formal Education System

Source: Kinunda (1994:3127)

3.4.3 The 8-4-4 System of Education

The 8-4-4 System of Education stands for 8 years of primary education, 4 years of secondary education and a minimum of 4 years of university education. The 8-4-4 System of Education was thought to be a step in the right direction and the greatest rationale for realizing Kenya’s manifest dream in the shortest possible time. Firstly, it responds to the challenge of national development. “The concept of 8-4-4 is aimed at responding to the challenges of national development and participation of the youth in development” (Ngeno, 1984). Unlike previous education reforms, which often recommended remedial or additive strategies, the 8-4-4 is a radical education reform responding

directly to the needs of people and country. Education is not a privilege but a right for all in a modern scientific and technological age.

Secondly, the 8-4-4 curriculum is relevant in terms of mass education, varieties of courses and opportunities provided to pupils for further advancement. The education system provides a greater number of pupils with practically oriented curricula promising a wide range of employment opportunities. Thirdly, it ensures “equitable distribution of education resources”. The 8-4-4-education system is a resource equally distributed throughout the country to reduce disparities and to offer all pupils equal opportunities regardless of the place of origin, race, creed, color or sex. Fourthly, it ensures that all graduates of the system possess ‘technical and vocational training’ to enable them to pursue self-employment, salary employment or proceed to further training. The system paves the way for pupils to gain scientific knowledge as well as practical knowledge.

Fifthly, it ensures continuous assessment and evaluation of pupils’ performance. Learner’s achievements were previously assessed on the basis of a final examination, which was taken in an intimidating and threatening atmosphere as far as pupils were concerned. The 8-4-4 system uses both continuous assessment and a final examination for evaluating learner’s achievement in courses. Sixthly, it increases pupils’ “opportunities for

further development". The 8-4-4 ensures that post-primary technical education and training enable those pupils unable to find places in secondary schools to enter craft training centers or technical institutions for diploma or higher diploma courses. This strategy should reduce the number of drop-outs after primary school examinations either because they are too young to take jobs or they possess too limited an education to be gainfully employed. Scientific technological education given at the university level should produce skills and technical manpower that will form the base of industrial society.

Finally, the 8-4-4-education system lays the foundation "for national unity". It is intended to foster a sense of nationhood or national unity. Its core course programs, and electives make education diverse and positive. It promotes mutually collective attitudes and respect, which enable individuals to live in harmony and contribute to building the nation. Kenya is one of the few countries in the Third World with the 8-4-4 system of education, a strategy introduced in the U.S.A in the 1930s and in Canada in the 1950s (Ndeti, 1989).

3.4.4 Challenges to Education in Kenya

Despite the country's achievements in education since independence, Kenya is faced with many challenges. Among these are the challenges of providing basic education for a rapidly growing school-age population; the expansion of programs for the disabled and other vulnerable groups. There are also the challenges of expanding education in arid and semi-arid areas to improve participation rates; the expansion of adult literacy programs; and the expansion of vocational and technical training.

The current enrolment in pre-school education is still very low for this age group. Kenya is committed to improving this participation rate even as the population grows. Kenya will need to provide primary education to over seven million children in the end of 2000 compared with the present five million. Similar expansion is expected at secondary and technical levels and in higher education. With increased sophistication of society, it will be necessary to expand and to diversify adult education programs to reduce the rate of illiteracy and to enable people to improve their quality of life and contribute more to national development. The provision of equal educational opportunity to all groups and districts is viewed as a major component of Kenya's democracy. These developments require the provision of physical facilities such as classrooms, laboratories and workshops; teaching and learning materials such as books and laboratory equipment; teachers and finances. These challenges call for effective mobilization strategies to provide adequate resources to meet basic learning needs (Lodiaga, 1992).

Education in Kenya has also undergone tremendous growth and expansion in terms of educational institutions and enrolments at all levels. According to Kinunda (1994), the physical expansion has been a result of the commitment of the government to education, thereby making a great investment in educating the youth and the effort of people through

the well-known Kenya motto of “*Harambee*” (pulling together). The Kenyan government has therefore been keen on providing universal primary education (UPE) and on eradicating adult illiteracy by the end of the year 2000. This is in an effort to provide basic education for all.

However, there are major problems still which the Kenyan education system faces. Amongst them is the problem of wastage especially at the primary school level. The other major problem is the improvement of the quality of education especially at the primary level. There is lack of adequate facilities, equipment, teachers and a low pupil-textbook ratio. There is also growing unemployment among school leavers, especially from the primary and secondary levels, creating pressure on the government to expand higher education. Kinunda (1994), has also outlined the following challenges the education system in Kenya has to face: challenges such as the provision of education to disadvantaged groups, which includes girls and women in some cultures, street children, children with disabilities, children in arid areas, and increasingly, children of refugees. Kinunda (*ibid.*) continues by opining that the rapid expansion of higher education also poses a problem of quality and relevance of education to the labor market.

3.4.5 Structural Adjustment Programs on Education

Policy reforms have been uneven across sectors and across countries. Kenya’s reform remains incomplete. It has not fulfilled a sound macroeconomic policy goal, which in broader terms means inflation under 10 percent. It has not managed to keep a very low budget and a competitive exchange rate. Social spending is not showing an overall decline, there is misallocation within health and education sectors. Okumu and Gachuki (1996) have pointed out that in education, high school fees, uniform costs and other levies have escalated with the consequence that many poor families are finding it increasingly difficult to send their children to school. There is emerging evidence that school enrolment especially at pre-school and primary levels is gradually declining, a view that has also been expressed by among others Nalo *et al.*, (1996); Tuju (1996); MOPND (1990).

There has also been a low participation rate in primary schools, in particular in the arid and semi-arid districts. This is largely the result of the precarious nomadic way of life that puts a high priority on immediate satisfaction of primary needs. In addition to the low participation rate, there is a high drop-out rate in primary schools. For example, some 41 percent of the boys and 49 percent of the girls who joined Grade 1 in 1975 dropped out by the time they reached Grade 7 in 1982. Some 30 percent of the girls and 20 percent of the boys dropped out in the transition between Grades 7 and 8 (Lockheed *et al.*, 1991)

In the face of the foregoing problems about primary school participation and drop-out rates, the government of Kenya faces a dilemma of having to choose between the IMF and the World Bank policy of substantial cuts in public expenditure and the concomitant introduction of cost-sharing. On the one hand there is the call that all families share

education costs. On the other hand there is the UNICEF-UNESCO advocacy for cost sharing only by the more affluent and secure sectors of the society (Lockheed, *et al.*, *ibid.*). If the government continues to offer educational subsidies to vulnerable groups, public expenditure on education will remain high and this will constitute a heavy burden because of declining public revenues. For example, since the early 1970's to date, major indicators of economic performance have noticeably declined. Growth in the GDP has declined from about 6 percent in 1965-1973 to about 4 percent in 1983-89. The balance of payments has worsened steadily since the early 1970's, and the annual rate of inflation increased from a mere 2.6 percent in 1972 to an all-time high of 22.3 percent in 1982, before gradually slowing down to 11.3 percent in early 1990 (Economic Survey, 1990 p.54).

Finally the adjusted GDP, taking into account changes in terms of trade, confirms the declining revenues going to the government. It is the declining government revenue situation that compels policy makers to accept the IMF-World Bank structural adjustment recommendations as per Sessional Paper No. 1 of 1986. This paper endorsed cost sharing in a number of service sectors including education. The government has been at pains to emphasize that the cost-sharing in education is not meant to burden those parents who cannot afford it. It was unclear as to what impact cost-sharing in education would have on all types of parents, including those who are economically and socially vulnerable.

The Kenya government has already gone some way towards changing the content of education and making the education system more vocational through the 8-4-4 system of education. This was in response to major World Bank recommendations on education in Sub-Saharan Africa to introduce cost sharing and improve quality and content of education. As argued elsewhere (Noor-mohamed 1988a, 1988b), a large part of the burden of educating children, even at primary level, which is supposed to be free, is borne by parents. Parents pay for books, uniforms, the Parents Teachers Association, activity fee, furniture, and building funds, among other contributions. Even though primary education is free, parents almost inevitably have to pay some kind of fees depending upon the category of school: whether the school is maintained, aided, community or high-cost. Maintained schools, which are quite few, indeed, usually charge a nominal fee of approximately US \$ 2 per term. This is paid to the local government. The fee in an aided primary school is about twice that of a maintained school per term while in the community school, which is the predominant type of school, fees are charged at over US \$ 6. High-cost schools usually charge fees double this amount. Those who live far away also have transportation costs paid to PTA's this is how school buses operate. Bus charges can be as high as US \$ 10 per month or even higher (Odada & Ayako, 1988).

These days getting a place in a secondary school has become so competitive that many parents provide private tuition for their children right from Grade 1. Normal tuition fees are about US \$ 5 per month per subject (Odada & Ayako, *ibid.*). At the present time coupled with inflation, the cost of education is much higher, even for parents with a good income. Less fortunate children who lose parents (Orphans) are therefore more deprived of education, especially quality education even if taken into custody. Foster providers seldom

make the same education contribution to their foster/adopted children as they do for their biological ones. In many instances parents contribute to the actual building of the schools through “harambee” donations. For example, harambee institutes of technology and Grade 8 classrooms, among other institutions, have been built through self-help (*ibid.*). In comparison, the governments’ recurrent cost of educating a primary school child in Kenya in 1986/87 was Ksh. 60 per month. However, this has been drastically reduced, as the government continues to shift the burden of education from its expenditure to the parents or the community in general.

Thus, it is not difficult to see that parents shoulder a large part of the cost of education at primary level. In the African family structure of extended families, a single income earner in a family is bound to sponsor a number of children in the family and hence his death adversely affects his dependants. Even though no major study has been undertaken recently to confirm this, it is now estimated that the national enrolment rate of 95 percent has dropped. The drop-out rates are higher at primary school level, and the hardest hit are the urban poor and the nomads in arid and semi-arid areas. In terms of gender, the girl child, it is believed, has been affected more, and girls’ completion rates are likely to have dropped below the current national average of 35 percent. Inadequate learning and instructional materials in general also pose a problem to the quality of education at the primary school level (UNICEF-Dec. 1993).

3.5 Health Care Position in Kenya

Kenya has given priority to improving basic health services since the 1960s. This improvement, together with growth in average income, has resulted in a better overall quality of life for most Kenyans. Official figures give a total of 3,058 health institutions in 1996, up from 2,925 just the previous year. The health sector’s share of central government expenditure rose from 5 percent in 1995/96 to 7 percent in 1996/97 (The Economist Intelligence Unit, 1998). Since 1989, Kenya has reduced government commitment to public health through selective privatization. In December 1989 the Ministry of Health introduced a cost-recovery program known as the Facility Improvement Fund, which covers fees for inpatient and outpatient services at all hospitals and health centers. Kenyans are encouraged to make better use of health centers and dispensaries to relieve demand on hospitals for services.

3.6 Case Study District (Homa Bay)

Homa Bay District is located in South Western Kenya along Lake Victoria, with a population of approximately 790,227. It was until recently a division in South Nyanza District. It is nowadays one of the eight districts of Nyanza Province and borders Kisumu and Siaya to the North, Kisii and Nyamira to the East, Migori and Suba in the South and

the Republic of Uganda in the West. It is located between longitudes 34 degrees East and 35 degrees West and latitude 0 degree, 15 South and 0 degree, 52 South. The district covers an area of 4322 sq. km. inclusive of water surfaces, which cover 1227 sq. km. (GOK, Office V. P. MOPND, H/Bay Dev. Plan 1994-96).

3.6.1 Demographic Pattern

The youth population (0-14 years) accounts for 50.8 percent of the population. At the same time the proportion of the people above 59 years is approximately 3.6 percent of the population. The economic implication of this population distribution is that these two groups are dependent on the working population. In 1979, the dependency ratio was 1:1, and it increased to 1:1.28 in 1993. It was projected to fall to 1:1.2 in 1996, partly due to the declining population growth. In 1979 there were 100 males for every 110 females, and this sex ratio was expected to stay constant until 1996. However, the sex ratio may be higher than indicated, as men in the district prefer moving out into other towns in search of employment (CBS Pop. Projections, 1991).

3.6.2 Employment and Labor Force

The district had a labor force of 315,640 in 1993, which was projected to grow at the rate of 3.1 percent to 345,813 in 1996. The actual labor force estimate could be higher as it excludes 15 year-old school drop-outs and those under 15 years of age who are already engaged in fishing. Fishing alone employs 24,000 people directly and an additional 100,000 people indirectly. Poverty is a major problem in the district. One notices that most of the urban centers lack clean and regular drinking water. This has affected the welfare of the labor force in these centers, resulting in ill health and increased medical expenditures (Republic of Kenya, O.V.P. & Min. of P.N.D, Homa Bay DDPlan 1994-96).

3.6.3 Education Facilities

Homa Bay District has 1,288 educational facilities of which 458 are pre-primary schools, while 762 are primary schools, 53 are secondary schools, 11 are polytechnics, 2 are teacher training colleges, 1 medical training college and 1 farmers' training center. There are also 7 special schools: one for the deaf, a vocational center for the blind, a school for the disabled and a school for the physically handicapped. As regards enrolment in Grade 1 in 1989, most of the children were males. By 1993, enrolment of boys in Grade 4 had increased slightly. The increase could be attributed to transfers and repetition in the previous classes. Enrolment of girls declined between Grade 1 and 4 for the same year. This decline could be attributed to high drop-out rates in the district for the same year. There were 166,312

pupils taught by 5,830 teachers in 6,534 classes. This gives a teacher-student ratio of 1:28.5 and an average class size of 25.4. Table 3.5 shows some of the statistics.

Table 3.5 Distribution of Classes, Pupils and Teachers (by the Divisions)

Division	No. of Schools	No. of Pupils	Classes	No. of Teachers	Pupil/Teacher ratio
Asego	66	22,196	597	577	38.5
Rangwe	105	12,157	815	726	16.8
Ndhiwa	82	16,489	692	572	28.8
Nyarongi	41	8,121	337	257	31.5
Mbita	106	22,278	867	786	28.3
Kasipul	103	29,689	1,036	967	30.7
Kabondo	53	11,918	478	437	27.3
Gwasi	49	9,405	391	347	27.1
W. Karachuonyo	70	13,303	572	487	27.3
E. Karachuonyo	87	20,763	749	676	30.7
Total	762	166,312	6,534	5,832	28.5

Source: District Education Office, Homa Bay, 1993.

Dropouts: Table 3.6 shows some of the statistics as far as drop-out is concerned in this district. The intra-district comparison in the table shows the positions of each division in the drop-out rates amongst boys and girls.

Table 3.6 Percentage of Drop-outs by Division between Grades 1 and IV.

Division	Boys	Percent	Girls	Percent	Total
Asego	765	32	824	37	1,589
Rangwe	726	46	505	37	1,231
Ndhiwa	756	40	699	40	1,455
Nyarongi	373	41	358	41	730
Mbita	693	30	720	31	1,413
Gwasi	275	28	288	32	563
Kasipul	1,638	48	1,155	40	2,793
Kabondo	722	49	505	49	1,227
E. Karachuonyo	1,346	49	1,874	60	3,220
W. Karachuonyo	510	37	1,153	60	1,663
TOTAL	7,803	40	8,081	42	15,884

Source: District Education Office, Homa Bay, 1993.

3.6.4 Homa Bay District and the Aids Epidemic

According to Kenya National Aids Control Program (KNACP), between 1987-95 the district recorded the major increase in reported cases of HIV/Aids. By 1994, the cumulative figure stood at 5,861 cases, which represented over 10 percent of the national figure. By November 1995, the national cumulative figure of the reported cases stood at over 62,000 cases, thus an increment of over 12 percent in one year. According to Ageng'o *et al.*, (1994), Homa Bay District was one of the leading districts with the highest number of cases of HIV/Aids in Kenya. However, the reported number represents only the tip of

the iceberg, as there are many cases which go unreported, because either the victims do not seek medical care, or because some doctors do not record the diagnosis as HIV/Aids. This could be due to the fear of stigmatization to the family or loss of insurance benefits. Some HIV/Aids victims also die of other diseases before being diagnosed as Aids victims or because of the lack of diagnostic facilities for HIV testing in the rural health facilities.

The battle against Aids is rendered difficult, because of its long latency period and because its symptoms are really a mixture of other complaints. Those who know little about the disease believe that the apparent healthiness of themselves and their partners shows that there is no danger. Those who have been taught about the latency period often decide that they may well already have the disease and that there is no point in either being tested or changing their sexual behavior. Families and even hospitals may discuss the sickness merely in terms of an opportunistic disease rather than as a manifestation of Aids (Caldwell *et al.*, 1993).

Socio-Cultural Practices Responsible for the Spread of HIV/Aids in Homa Bay.

The Luo, like many other African communities, practice polygamy. While such a practice would be repugnant to the more delicate feelings of many women, the Luo wife accepts it. Nyanza, just like many other regions in Kenya, was and still is characterized by uniquely high levels of polygamy. This in turn has many implications for family and society. Around 40-50 percent of the currently married women are at some time in polygamous marriages (Caldwell, *et al.*, *ibid.*). However, it can be justified that polygamy is part of the economic setup of Homa Bay District.

There are many important facts in the Aids epidemic. Most African women know that the greatest danger presented to them comes from their husbands, and probably the majority of female Aids victims have been infected by their husbands. Yet, wives are not supposed to talk to their husbands about sex, even if they assumed that they were engaged in extramarital sexual relations (DN, Editorial, 13, Nov. 1995). Another potential reason behind high levels of HIV infection in Homa Bay District, is the customary practice of widow inheritance. Widows of Luo men who died of chronic illness between November 1991 and 1992 were subjects of a study conducted in 1993 to determine the influence of widow inheritance on the epidemiology of Aids in Africa (Okeyo and Allen, 1993). If a woman's husband died from Aids related symptoms, it is possible that she too is HIV infected. When her brother-in-law inherits her, the virus will be transmitted to the brother in law and the vicious circle will continue.

Inheriting widows who are still young, good looking and of childbearing age is increasingly emerging as a lucrative business/career in some parts of Kenya, especially Luo land. These new professional widow inheritors are threatening to wipe out the traditional "Joter"⁵ in Luo (E. A. Standard, 25, Nov., 1995). However, this has become a major concern to medical researchers and other social workers who are attributing the

⁵ A local term used when referring to widow inheritors.

increase of Aids cases in Nyanza and Western provinces of Kenya to the rise of professional widow inheritors. According to Okeyo and Allen (1993), to investigate links between HIV infection and widow inheritance in Homa Bay, an interesting pattern was established. Out of 92 widows interviewed, 51 percent were already inherited, while another 36 percent were planning to be inherited. The mean age of widows was 34 years, that of inheritors 44 years. Eight percent of men were married and one third had a history of previously inheriting other widows after being paid “Professional Fees”.

Another research study carried out by the Widow and Orphans Welfare Society of Kenya (WOWESOK) has also shown that widows whose spouses have died of Aids are still being inherited with mindless impunity by professional “Joter” who hope to gain new wives and property. Despite many crusades against Aids, people still show very little concern. They still advance different reasonings to attribute the death of spouses from evidently Aids-related complications to “Chira” (Strange wasting disease coming from curse). They thereby make it sound normal to inherit widows (EAS, 25, Nov. 1995).

“Chira” (The Curse Concept): No discussion of HIV/Aids in Nyanza province would be complete without reference to the belief in the concept of “chira” which continues to thrive. Chira is a traditional Luo illness resulting from the breaking of a taboo. If it is not dealt with in time by the performing of certain culturally prescribed rituals, then death will be the certain outcome. Naturally, the HIV/Aids pandemic in Western Kenya is complicated by such customary beliefs, together with others such as wife inheritance by one brother on the death of another. Chira can be roughly explained as a curse which befalls persons and families of persons who go against an established taboo or who fail to perform the expected traditional rites. Unfortunately the symptoms of chira resemble those associated with the full-blown Aids (loss of weight, rashes, diarrhea). Attempts have been made in the campaign of the last few years to disassociate the two. Community health workers now teach the difference between the two: the fact that chira can be cured by correcting the “mistake” which had been committed (for example practicing the rites which had not been performed); but that Aids cannot be cured. Also, Aids tends to affect young people while chira is normally believed to affect older people for transgressions they had made earlier in life. Aids also afflicts persons who have observed customary laws as well as those who have not observed them (Blair, *et al.*, 1995).

The concept of chira originally served the purpose of being a method of social control. It was meant to create fear and to entice people into respecting sexual and other behavioral taboos. According to many of the respondents, the existence of chira (or of Aids for that matter) no longer seems to have any impact on sexual behavioral patterns, but that in many cases, it is used as a convenient explanation of death which does not carry the stigma of admitting that a family member died of Aids. In spite of this realization, the concept is perceived by the respondents as one that will continue to exist and which has the potential of reducing the effectiveness of any Aids prevention campaign, at least in the foreseeable

future. Many young men die from the disease leaving behind hundreds of young widows who consequently re-marry and usually become victims of professional widow inheritors, and the vicious cycle continues. Whereas there is a general high level of Aids awareness, especially among educated people, when it comes to death and the fulfillment of customary rites, all reasoning fades away, and people look for solace and personal fulfillment in traditional practice (Ageng'o *et al.*, 1994). According to Ocholla-Ayayo (1976), death alone does not dissolve a marriage in Luo society, or indeed in many other Kenyan communities. Thus widow inheritance is a requirement under Luo customary law. There has existed a traditional belief among the Luo that widows must be inherited in the form of remarriage upon the death of the spouse. This practice has always existed to help take care of the widow socially, economically and sexually to avoid chira from the gods.

HIV/Aids Situation in Homa Bay District: Aids cases were probably present in the district by the time the first case was reported in Kenya in 1984. However, from available records, the first cases of HIV/Aids were reported in 1986 at Homa Bay District hospital when diagnostic equipment became available and screening of donated blood became mandatory. Homa Bay being viewed as a high HIV/Aids incidence area was the subject of a study by Blair, *et al.*, to establish the barriers to behavior change in the region with respect to HIV/Aids transmission. Homa Bay District, combined with the neighboring district of Migori (which until recently were one administrative block) are the places of emergence of 10.6 percent of all reported cases in the country. The two districts combined lead in the number of reported cases among all 52 districts in Kenya (KNAC Programme, Dec. 2 1995, DN).

While sentinel surveillance and other quantitative studies (such as the 1993 Kenya Demographic and Health Survey-KDHS.) provide useful information for the planning and implementation of Aids prevention activities in Homa Bay District and beyond, they leave some questions unanswered. For example, compared with the national average of 40 percent, in Nyanza Province (the province in which Homa Bay is situated) over 50 percent of women and over 60 percent of men know someone who has died of Aids. When asked about perception of personal risk in the same survey, 65.6 percent and 46.2 percent of men and women respectively said that they could possibly become infected (NCPD, CBS, office of the V. P. and Min. of Planning and National Development, Kenya and Macro International INC. MI, 1994). One would expect that on the basis of these figures, people would be changing their behavior to lower their potential risk of infection. This does not, however, appear to be the case, except among a limited number of persons in selected sub-groups of the Kenyan population (NCPD, 1994; Ngugi, *et al.*, 1994).

The United Nations Children's Fund (UNICEF) has been implementing Aids prevention programs in partnership with the Ministry of Health (MOH) in Homa Bay District since the late 1980s. This UNICEF supported study sought to gather, through qualitative research, information, which would help to answer some of the questions

unanswered by quantitative research. It was also intended to use Focus Group Discussions to help identify barriers to behavior change as perceived by the residence of a geographic area which has been particularly hard hit by HIV and Aids. These findings would then be used to improve program design and delivery, as well as to provide a basis for strengthened message development. Since the first Aids case was reported present in the district, there has been an upward increase (MOH, H/Bay 1994).

3.7 Case Study District (Murang'a)

Murang'a District is predominantly occupied by the Kikuyu, one of the ethnic groups in this study. Murang'a, according to legend, is the point where the Kikuyu people originated (Ahlberg, 1991). The Kikuyu are divided into nine clans (*muhiriga*); each descended from one of the nine daughters of the ancestral parents of the Kikuyu. From an historical account, Muruki (1974) and Kenyatta (1971) reiterate that the Kikuyu met with various groups of gatherers and hunters in their approach to the Mount Kenya highlands. Some of them have disappeared as separate tribes, not least due to inter-marriage with the Kikuyu.

The *mbari*, or sub-clan, was a more important unit of social organization. Members of the *mbari* lived for the most part on their own land unit. One of the chief obligations of a man to his wife (or wives) was to provide her or them with fields for cultivation, which meant he had the task of clearing the bush and of ploughing it with the digging stick to make it ready for the harrow (Leakey, 1977). Subsequent cultivation and harvesting responsibilities rested with the man's wife, but if it was needed, particularly during times of illness or incapacitation, additional labor could be drawn from the man's other wives. Communal labor (*ngwatio*) was organized if a household had insufficient labor to carry out an agricultural task. Groups of three to ten women, not necessarily related, would work from day to day on each other's plots. Contemporary derivatives of this type of communal labor continue to exist today. Labor in the pre-colonial Kikuyu economy was largely controlled by kinship ties and responsibilities within the *mbari* (sub-clan), the most important unit of social organization.

3.7.1 Demographic Pattern

From the 1993 population projection data, it was only possible to extract the age structure of the population by comparing the existing age structure of the 1979 population. The same can be done regarding the sex for each age group, so that the rates can be assumed to be constant for both sexes. The percentage of the young population of the age group 0-14 years in 1993 was 52 percent, whereas for those aged above 59 years it was 3.8 percent. This gives a dependency ratio of 1:1.56. This changed to 1:1.57 in 1996. From this analysis, Murang'a District generally has a young population. The percentage of primary school going age is 12.7 percent female, and 13.32 male according to the 1994 population

projections. This changed to 12.8 percent female and 13.2 percent for male in 1996 (GOK, Office V. P. MOPND, Murang'a Dev. Plan 1994-96).

Migration in Murang'a is a phenomenon that has been witnessed in the southern, lower parts of the district, namely Makuyu and the lower parts of Kigumo division. These are largely settlement areas. This has occurred as the result of sub-division of large estates and the subsequent allocation to shareholders. There is a wide ethnic diversity in this lower zone and migration is negligible, as most of the land has been settled, and no further division of land is expected. Migration trends are minimum elsewhere, except for the movement out of the district to key urban areas like Nairobi and Thika by youth in search of gainful employment.

Murang'a has vast natural economic resources including rich volcanic soils, abundant surface and sub-surface water, rich flora and fauna, conducive climate, socio-economic development institutions. The main productive activities include cultivation of tea, coffee, maize and cattle herding (GOK, Office V. P. MOPND, Murang'a Dev. Plan 1994-96).

Murang'a District currently has a population of 1,074,000 (1993 population projections). An estimated 95 percent of this population lives in rural areas and small market centers. The main economic activity in the district is agriculture and livestock breeding. Employment opportunities in the district are in smallholder farms, large-scale coffee and pineapple farms, in the 25 coffee factories, 8 tea factories and 2 milk-cooling plants. Other major employment opportunities are in the informal sector in the 35 urban and market centers in the district. Statistically, both males and females in the age cohort 15-59 are considered to form the labor force of Kenyan society. This number is assumed to be the active labor force in the economy. The numbers of people below the ages of 14 and above 59 are considered dependants. However, this may not be true in practice, since in some districts like Murang'a, child labor is used during peak harvesting seasons, while men and women above 59 years are still active in farming (GOK, Office V. P. MOPND, Murang'a Dev. Plan *ibid.*). The Labor force participation rate is calculated at 92 percent of the labor force. The 1993 labor force projection was 403,000. In 1994 and 1996, the labor force was projected to be 448,000 and 467,000 respectively. Labor force is distributed according to the activities of the sectors in the economy. In Murang'a District, the labor force is absorbed in the agricultural sector, both small and large scale, and in wage employment in public, private and informal sectors. There is no open unemployment in Murang'a as child labor is used for tea and coffee picking during peak periods.

Table 3.7 shows student enrolment in the education facilities. The enrolment in secondary schools increased by 20.1 percent from 24,697 in 1987 to 30,263 in 1992. The change in enrolment in primary schools was 6.9 percent. The number increased from 254,666 in 1987 to 272,334 in 1992. The substantial increase in the enrolment in secondary schools could indicate a decrease in primary school drop-outs. In pre-primary schools in 1987, the enrolment was 27,239 and in 1992 it was 30,006, an increase of 10.2 percent.

Table 3.7 Student Enrolment Trends in Educational Facilities

Division	Pre- Primary		Primary		Secondary	
	1987	1992	1987	1992	1987	1992
Kandara	6582	5079	71919	48314	7541	6328
Gatanga	-	4212	-	28335	-	3240
Kigumo	5848	5232	53571	56924	4911	6203
Kiharu	6120	5665	53477	57883	5103	6818
Kangema	5270	7210	54996	58558	6310	6688
Makuyu	3419	2608	20703	22320	832	986
Total	27239	30006	254666	272334	24697	30263

Source: District Education Office, Murang'a

3.7.2 Cultural Practices

Beliefs and practices regarding HIV/Aids have been influenced by cultural norms. Values have substantially changed with urbanization, modernization of the economy and global socio-economic trends. The following cultural norms, values in a community negate the control and management of HIV/Aids:

Traditional Circumcision: This practice is prevalent in most of the ethnic communities in the country. It is a big gateway to the spread of HIV/Aids. Much research has been carried out to distinguish the relationship between male circumcision and HIV transmission. Conclusions have been drawn that circumcision reduces the risk of HIV infection and STD transmission, which otherwise predisposes one to HIV infection. This, however, is not the case in Murang'a, and most parts of other African communities, as circumcision is performed according to traditional customs and using unsterilized equipment. Circumcision of males is an important initiation rite among Kikuyu, and it is widely practiced. The method has not always been hygienic, and sometimes dozens of young men are circumcised using one knife. The unsterilized knife could be the avenue through which these young men get Aids. There is also the possibility of passing on the virus to the others if one of them is HIV positive. Female circumcision in the district is rarely practiced nowadays. Female circumcision was intended to reduce sexual urge before marriage.

3.7.3 Prevalence of HIV/Aids in Murang'a District

Reported Cases and Trends: The first cases of HIV/Aids in Murang'a District were diagnosed in 1988 when 249 people were screened, and 8 of them were found to be HIV positive. The number increased by another 80 HIV positive cases in 1989, when a total of 987 were screened for Aids. The percentage of HIV positive cases continued to rise from 3 percent in 1988, to 12 percent in 1992. Up to October 1993, the percentage found HIV positive had increased to 13 percent, confirming the increasing trend (MOH, Laboratory Records, Murang'a). By far, the worst affected age group was the 25-49 year-olds,

accounting for 433 cases out of 592. This was 74.8 percent of all cases. The age group below 5 years was not seriously affected, but this could have been due to poor data records as information from the hospital stated that many infants died from Aids related cases (MOH, Murang'a, 1993).

Most of the cases were found in Murang'a municipality with 278 (46.9 percent) cases out of the total of 592 cases. This was followed by cases from outside the district, mainly the Sagana urban center in Kirinyaga, which accounted for 24 percent of the cases. Other urban centers in Murang'a and the surrounding villages included Sabasaba, Kangema and Kahuro. No cases had yet been reported from Gatanga and Kandara because most patients from there went to hospitals outside the district such as Thika and Kiambu. There were, as well, few cases from Makuyu division for the same reasons: the patients went to Thika hospital. Another interesting trend was the higher number of females affected by HIV/Aids. This was explained by the fact that most of the women affected could be prostitutes in the said urban centers.

3.7.4 Socio-Economic effect of the HIV/Aids in Murang'a District

Labor Force. Statistical information available confirms that 83 percent of the population infected by HIV/Aids is in the active labor force age group 20-49 years. The groups at greater risk are among the migrant workers in all sectors of the economy; public, private and informal. The fact that 80 percent of the HIV/Aids cases result from heterosexual behavior also confirms that the people at greater risk are in the sexually active age groups of 15-59 years old. The majority of the labor force is within this age cohort. The above statistics show that the effect of the disease on the district's labor force is great. The reported cases are approximately 173 of all the cases. This implies that in the district there were 888 cases not reported. The reported cases showed that it affects equally all segments of the labor force, the elite, wage earners, workers in the informal sector and farmers. The loss in income, savings, and investments resulting from long HIV/Aids illness and subsequent deaths is very great (GOK, Office V. P. MOPND, Murang'a DDP 1994-96).

Chapter Four

Overview of HIV and Aids

4.1 Theories into the Origin of Aids

The search for the source of HIV is more than just an interesting exercise. Understanding where the virus came from and how it evolved could be crucial in fighting the disease. Putting forth some of the hypotheses on the origin of Aids would perhaps give the readers a glimpse of what they have always wanted to know and have never been able to find out. Even though it was not part of this study, the researcher found out that it was a very curious question, not only among the elite, but also among rural uneducated folk. These hold the new belief that whoever created the Aids virus also has the antidote, and that “very soon they will come out with its cure”.

Maggiore (2000) argues that “there is no proof that HIV causes Aids. In fact, all epidemiological and microbiological evidences taken together conclusively demonstrates that HIV cannot cause Aids or any illness. The concept that Aids is caused by a virus is not a fact, but a belief that was introduced at a 1984 press conference by Dr. Robert Gallo.” Maggiore (ibid.) further questions Gallo’s credibility in this issue especially when Dr. Luc Montaigner of the Pasteur Institute in France challenged the discovery of the Aids virus in court, by declaring that he was the rightful discoverer and not Gallo. Montaigner also does not believe that HIV alone is capable of causing Aids (Baffour, 1998). The South African president (Thabo Mbeki) who associates the widespread Aids pandemic in Africa with other factors other than HIV, also shares to some extent Montaigners’ views, though he has been recently accused during the Durban Aids conference of giving “Aids dissidents” unprecedented clout (Daily News, 2000).

However, since Aids was diagnosed in 1983, mainstream scientists (researchers) have made significant progress in their understanding of the disease. Two distinct types of HIV have been identified thus far. HIV-1, which has several subtypes, is responsible for the world-wide epidemic. HIV-2, the less virulent of the two viruses, is confined mostly to West Africa, but has recently begun to spread to some countries in Asia. HIV-1 and HIV-2 are thought to have a common ancestor, and new evidence suggests that the viruses diverged sometime before the 1940s (Zhu, *et al.*, 1998). Despite the considerable knowledge researchers have gained so far, a definite source of the HIV virus continues to elude them.

One of the obstacles to developing effective treatments is what researchers call HIV's "star burst" phylogeny, or the rapid genetic variation that the virus has undergone since its beginning. Finding the ancestor of today's HIV virus could help scientists develop more effective treatments or vaccines. Determining the factors which enabled the virus to explode into a pandemic could also help to prevent future public health catastrophes.

In addition to the theories subscribed to by most mainstream scientists, many alternative hypotheses have been put forth. One of them, a small, but well-known group of scientists, argue that HIV does not cause Aids. They contend that Aids is brought about by lifestyle factors such as drug use, inadequate nutrition, and contraction of multiple sexually transmitted diseases (STDs.) Among the general population, a significant percentage believes that HIV is man-made. The supposed motivations for the deliberate creation of HIV range from a plot by the US government to wipe out African-Americans, to a biological weapon developed by Russian scientists. Although many would dismiss such theories as ludicrous, they are widespread and may have important ramifications for treatment and prevention of HIV.

4.1.1 Where did HIV come from?

At this time, most evidence suggests that Aids has its roots in Africa. In the early 1980s, Robert Gallo speculated that HIV crossed species to humans from an African green monkey. Although this idea has since been discredited, it is still widely believed that HIV came into the human population from one or more non-human primate species.

While Africa is the frequent subject of dramatic media reports, evidence has it that the actual numbers of diagnosed Aids cases on the continent are relatively unremarkable. For example, 1981 through 1999 cumulative Aids cases for South Africa, the new epicenter of Aids, total just 12,825. Maggiore (2000) summarizes these findings by stating that "unfounded estimates, rather than unprotected sex, are responsible for the alarming number of Aids cases said to occur in Africa". In another unfounded estimates, United Nations' Aids estimates were cited as the inspiration for a recent news report claiming "a Kenyan dies of Aids every three minutes" (Russell, 1998). If Kenyans were dying at this rate, there would be more than twice as many dead Kenyans in just one year than have ever been actually diagnosed with Aids in the entire period of time known as the Aids epidemic.

Certain Simian Immunodeficiency Viruses (SIVs) are closely related to HIV. Franchini and Bosch, (1989) in their study, found that HIV-2, for instance, has an almost exact counterpart in a virus of the sooty mangabey, a type of African monkey. Western Africa, the habitat of the sooty mangabey, is also the area where the vast majority of HIV-2 cases are located. HIV-2's connection to the sooty-mangabey is probably the most compelling evidence for animal to man transfer of HIV (Doolittle, 1989).

A likely source of HIV-1 has been more difficult to pin down. The closest Simian Virus to HIV-1 discovered to date exists in certain chimpanzees. Because this virus is relatively

rare among chimpanzees, it has been hypothesized that they may have contracted it from another primate species. New SIVs continue to be discovered, so a closer relative to HIV-1 may some day be found. Scientists have long recognized the ability of certain viruses and other diseases to pass from animals to humans. This process is referred to as zoonosis. Once an animal disease has infected people, it may then be passed from human to human. The Ebola virus and the Marburg filovirus are two diseases among many which were introduced into humans from animals through what is known as zoonotic transfer (WHO, 1978; Martini, 1969).

Although it has not been proven that HIV came from primates, an SIV has been known to infect humans. Various means have been suggested through which HIV might have passed from other primates to humans. One theory is that the virus could have been transferred to humans while sooty mangabeys or chimpanzees were butchered for food or kept as pets. The most controversial theories contend that medical science played a role in introducing HIV into the human population. These hypotheses are so contentious because, if proven, the HIV epidemic would have begun as a result of human scientific error. Such a finding would be “incredibly damaging to the image of medicine and medical research,” to say the least (Martin, 1993).

The best known of the human error theories is that polio vaccines, which were given to many Africans in the 1950s, could have been contaminated with HIV. The vaccines were prepared using monkey kidneys. Although HIV has not been found in any of the vaccine batches which have been tested thus far, polio vaccines have been found to be contaminated with various other pathogens. One of these, Simian Virus 40 (SV40), infected millions of Americans, although it does not seem to be harmful to humans. The World Health Organization has publicly refuted the arguments of scientists who suggest that the vaccines could have been the channel through which the virus crossed species (Howard, *et al.*, 1998). Despite this, the controversy continues. A recent letter in *The Lancet* by Morozov hypothesized that polio vaccine stocks could have been contaminated by retroviruses.

The idea that HIV came into the human population through zoonotic transfer has enormous implications for the transfer or grafting of tissue from an animal of one species into an individual of another. If it is proven that zoonosis is the source of HIV, it would lend incredible weight to arguments against xenotransplantation as well as the use of animal organs to produce vaccines. There has also been speculation as to what caused HIV to spread so rapidly in Africa in the 1970s. The tremendous social changes that took place in Africa after the end of colonialism may also have had a significant impact. A recent article suggests that large-scale urbanization, greater access to transportation, and an increase in sexual freedom, for instance, could have allowed Aids to expand from an isolated, rural disease to an urban epidemic. The article also speculates that large-scale vaccination campaigns, perhaps with the multiple use of non-sterilized needles, could have been the culprit (Zhu, *et al.* 1998). Although nobody has been able to pinpoint an exact

source of HIV, scientists have traced several confirmed cases prior to 1981, the year when Aids was recognized as a disease.

4.1.2 Earliest known Aids cases

In 1983 a group of British researchers published a letter in *The Lancet* about a sailor from Manchester who died of Aids-like symptoms in 1959 (Williams, et al. 1983). Although his tissue tested positive for HIV, the result has since been called into question (Balter, 1998).

In 1988, *The Lancet* reported that HIV was found in tissue samples from a Norwegian sailor along with his wife and daughter, all of whom died of Aids-like causes in circa 1976. The father had sailed to African ports and had contracted sexually transmitted diseases at least twice. Tissue samples from the family were tested and all three were found to have been infected by a strain of HIV-1 that is common to West Africa (Froland, *et al.*, 1988). The oldest suspected case of Aids in the United States dates back to 1969. In that year, an African -American teenager from St. Louis died of Aids-like symptoms. HIV or a closely related virus was found in tissue samples from the young man that had been frozen at the time of his death. This case indicates that HIV was present in the United States before the 1970s (Garry, et al. 1988).

The earliest and most compelling evidence of HIV infection is that of an adult male who lived in what is now the Democratic Republic of Congo (Zaire). Dr. David Ho and Dr. Tuofu Zhu of the Aaron Diamond Aids Research Center in New York City and Andre Nahmias of Emory University in Atlanta, Georgia recently succeeded in isolating the virus from a plasma sample taken from the man in 1959. Researchers believe that the ancestor of this strain may date back to the 1940s or 50s and was introduced into humans a decade or more earlier (Zhu, 1998).

From the above revelations, we can deduce that the Aids menace is here to stay with all the confusions surrounding it. It is also evident that by the turn of the century, Aids has become the largest epidemic of all, eclipsing the influenza scourge of 1819. That disaster killed 20 million people, or 1 percent of the world's population, more than twice the number of soldiers who died in World War I. Evidence has it that this epidemic might be of historic scale (Awake: January 8, 1993).

Aids has become the most political of diseases: a contagion within a stigma within a prejudice. Just as OPEC ended the era of cheap energy, Aids has ended the era of cheap sex, with this incurably fatal disease doubling its victims every six months (Simpson, 1986). Aids has become identified with "the subjects of deepest dread"; decay, pollution, death, weakness, corruption; and then Aids itself becomes a metaphor used to describe and typify the horror of other matters. It makes its appearance in bad jokes: ("What's the hardest thing about having Aids? Trying to convince your Mom you're Haitian"); then literally, in the writing on the wall; next it is used in popular speech: ("Why are you all avoiding him? Anyone would think he had Aids!"), and finally in literature. Aids joins a

robust heritage of horrors. Tuberculosis once was thought to be caused by “too much passion, afflicting the reckless and sensual”. Others thought that its successor, cancer, was a disease “of insufficient passion”, arising in those who are sexually inhibited, repressed, inactive (Praz, 1951).

In 1983 (oddly ignoring Aids) Williams wrote that a major difference between “us and our ancestors, profoundly different from earlier ages, is the disappearance of epidemic disease as a serious factor in human life. Nowadays if a few score of people die of an infection, officials declare an epidemic”. If the male chauvinist ignores the human’s point of view, here is the voice of the Western chauvinist. Though it accurately reflects a popular point of view in the West, it is inaccurate.

In the unnoticed Third World, what the West would consider epidemics are merely considered as rare occurrences-Burkitt’s Lymphoma, Legionnaires disease, Toxic Shock Syndrome, Congo Fever, Lassa Fever, O’nyong nyong fever-have all emerged in recent decades. Those most Westerly in their impact, like Toxic Shock Syndrome and Legionnaire’s disease, were quite rapidly brought to heel.

There has often been international political denigration in the naming of such afflictions such as - Spanish Flu, Asian Flu, Mao Flu. The English disease Syphilis has been, in its time, called the French Pox (*Morbus gallicus*), and the Spanish, Portuguese, Italian, Neapolitan, Burundian, German, and Polish disease and so on. Aids has not yet been given a clear nationality. Haiti was damaged by its reputation for harboring it, and African nations have been keen to avoid being blamed for its origins. Black (1986) has perceptively pointed out how “Americans take perverse delight in being proud of their flaws; and many in the United States have adopted Aids as the national disease. If it’s a terrible plague, then it must be ours”. The Russians were reputed to like to think they invented things first (though they have notably failed to lay claim to Aids); Americans like to think that their version is bigger, better, more awful, more something or other, than anyone else’s.

There are marked similarities between the ways in which society responded to previous plagues and pandemics, and the way in which modern society is reacting to Aids; and much may be learned about potential future social developments by a study of the past. A neglected area of study has been how some epidemics have been clean of metaphorical contamination and moral contagion. Some pandemics such as malaria, yellow fever, diphtheria, polio have been relatively unencumbered by such muddling excess baggage. But others have aroused responses familiar to the Aids crisis. Before Aids came to the forefront, no major disease has so richly and obviously linked sex, death and personal behavior so closely as *syphilis* before antibiotics (Crosby, 1972). During the search for the cause of syphilis, biased thinking may have delayed progress. Early victims were identified as homosexuals, rather than according to what their actual behavior was, and a gay drug addict was usually listed as gay rather than as an addict, this made all the differences in the early research funding and care programs for people with Aids.

In most countries of the world, particularly among fundamentalist Christians, the disease called Aids is presented as God's scourge levied against homosexuals, drug users, and prostitutes. Various references to the Old Testament are made to support this view:

If a man also lies with mankind, as he lieth with a woman, both of them have committed an abomination: they shall be put to death; their blood shall be upon them. (Leviticus 20:13), Holy Bible, 1967.

Neither shalt thou bring an abomination into thine house, lest thou be a cursed thing like it, but thou shalt utterly detest it, and thou shalt utterly abhor it; for it is a cursed thing. (Deutronomy 7:26), Ibid. 227.

As in previous major epidemics, bizarre conspiracy and "plot" theories have arisen, blaming Aids on a chemical agent sprinkled on public bathhouse floors, or added to KY jelly; or to a germ warfare agent that may have gone astray (or may even have achieved its intended purpose). Though obviously farfetched, one does not have to travel so far to find such far-fetched claims these days. We now know that for two decades, the U.S. Army explored the practicality of germ warfare by releasing what they thought to be harmless germs in U.S. cities, airports, and subways, (*Washington Monthly*, 1985).

In Russia and Eastern Europe, where Aids is considered a symptom of Western decay, there has been similar reluctance to admit to the potential extent of the problem. In December 1985, Prof. Victor Zhdanov in *Sovietskaya Kultura* admitted to ten cases in the Soviet Union, and an official estimate of 60 cases by the first quarter of 1986 was projected. Sixty cases out of some 400 million people may represent an underestimate. Unofficial reports of Aids death in Czechoslovakia have appeared, and in Hungary, antibody screening of blood donors, homosexuals, and drug addicts seems to have been in operation since 1986. Again, an isomeric politicization of Aids, identifying it with foreign decadence, could have hampered the response to a biological Chernobyl.

4.2 HIV/Aids Epidemic: Global Overview

During 1995, 2.7 million HIV infections occurred in adults (averaging more than 7,000 new infections each day). Of these, about 1 million (an average of nearly 3,000 new infections per day) occurred in Southeast Asia and 1.4 million infections (close to 4,000 new infections per day) were in sub-Saharan Africa. The industrialized world accounted for about 55,000 new HIV infections in 1995 (nearly 150 new infections per day, about 2 percent of the global total). Approximately 500,000 children were born with HIV infection (about 1,400 per day); of these children 67 percent were in sub-Saharan Africa, 30 percent in South and Southeast Asia, and over 2 percent in Latin America and the Caribbean. In mid-July 1996, an estimated 21.8 million adults and children world-wide were living with HIV/Aids. Of the adults, 12.2 million (58 percent) were male and 8.8 million (42 percent)

were female (UNAids/WHO, 1996). Since the beginning of the pandemic, the majority of HIV infections- 26 million (93 percent) have occurred in the developing world. The number of HIV-infected people in South and Southeast Asia is now more than twice the total number of infected people in the entire industrialized world. The UNAids and WHO currently estimates that there were 5.8 million people infected with HIV in 1998, or 16,000 every day. 33.4 million people world-wide were living with HIV in 1998, of whom 13.8 million were women and 1.2 million were children; 13.9 million people have died of HIV and Aids-related illnesses since the start of the epidemic, of whom one-third are women and a quarter are children. About 7,000 young people aged 10-24 are infected with HIV every day, that is five young persons every minute, and around 600,000 children are born with HIV each year, the majority of whom will die within five years (Sida, 1999). The latest statistics from MAP (Monitoring the Aids Pandemic) puts the total number of people living with HIV/Aids as of end 1999 at 34.3 million (MAP, 2000).

HIV has now become the third leading cause of death after malaria and diarrhea in young people between 15-24 years. The World Health Organization (WHO) confirms that 5-10 million people are now infected with HIV-1, and that 15-20 percent of all the total Aids cases are in developing countries. HIV/Aids is still seen as predominantly a medical problem. Progress in developing a vaccine or a cure has been disappointing, and multi-drug therapies are expensive beyond the means of most people in the world. Prevention is currently the only way to slow the epidemic, but current interventions have little measurable impact. The epidemic experience of Central Africa is now being replicated in Southern Africa, South and Southeast Asia and parts of Latin America. A major epidemic appears to be developing also in parts of China, Eastern Europe and Central Asia. As the infection spreads, and with consequent increases in morbidity and mortality, it becomes more and more necessary to plan for its medium and long-term social-economic impact (http://www.uea.ac.uk/menu/acad_depts/dev/odg/hiv_aids.htm).

4.2.1 Aids in Africa

Aids in Africa is a startling and swiftly increasing epidemic that is quickly overcoming epidemic tragedies such as drought, war, famine, and malaria. Loss of life, societal ramifications and the economic consequences of all the above are having a devastating impact on the continent of Africa. Although it is dangerous to look at an entire continent when examining such issues, the entire continent has been gravely effected by this epidemic. The Aids epidemic in Africa is greater than we can imagine, due to lack of ability to gather clear data. By end of the year 2000, many believe that this epidemic will reach astounding proportions. The number of children who will be orphaned alone will place an encumbering debt on African societies. Government, national, international and community support is essential in combating this deadly disease. Appropriate funding based on sustainability must constitute key aspects to prevention and intervention

programs. This epidemic can not be allowed to continue. It must be fought head-on and with support and intervention at the social, cultural, and economic levels.

At a meeting of African Ministers of Finance and Ministers of Economic Development and Planning held in Addis Ababa, Ethiopia, on May 7, 1999, it was stated that overall economic growth rates are rising in Africa over the past couple of years. Dr. Peter Piot of the United Nations Program on Aids (UNAids), who also attended the meeting, challenged this statement by saying that improvements will be seriously jeopardized by the Aids epidemic. He emphasized that along with armed conflict, the Aids epidemic has become the greatest threat to development in much of sub-Saharan Africa. UNAids estimated that Sub-Saharan Africa has 20.8 million people infected with HIV, two-thirds of the world total. But, the full extent of the epidemic is difficult to gauge, because most Aids cases are never reported. Levels of HIV are higher in Africa than elsewhere, because of many social, cultural, and health factors, including the high prevalence of other sexually transmitted diseases and the traditionally rare use of condoms (Anonymous, 1998). Nearly one million African children under 5 years are estimated to be HIV-infected. Approximately 4 million children are expected to be Aids orphans by the end of the year 2000, enabling the epidemic to create what has been termed in a USAID discussion paper as a lost generation. A lost generation includes a large cohort of disadvantaged, undereducated, and less-than-healthy youths (USAID, 2000). In some areas over half the children under 15 years have lost a parent; and the age at which infection occurs is getting lower. Currently nearly two thirds of infections are occurring amongst people under 25 years of age. Also by the end of the year 2000 the World Health Organization expects that some 7.5 million women in Africa could have become infected (Akeroyd, 1997).

Even though there is a strong assumption that HIV/Aids originated from Africa, the first cases of Aids were found in the early 1980s by doctors in the United States through an increasingly noticed rare form of pneumonia. Karposi's sarcoma, a rare form of cancer, was also on the rise. The immune systems of patients were unable to combat these diseases. Since the first records of these cases were found in homosexual men, the new disease was labeled Gay Related Immune Deficiency Syndrome (GRIDS). However, as the disease was soon found in people aside from homosexual men, the name was termed in the US, in 1982, as Acquired Immune Deficiency Syndrome (Aids) (Barnett and Blaikie, 1992). In Africa, the magnitude of the epidemic became apparent in the latter half of 1986, the number of cases reported to the World Health Organization (WHO) rising from 31 in May 1986 to 2,627 by February 1987. In Africa, the disease has spread primarily through heterosexual contact. The rapidity of its diffusion can be partly explained by the lack of health resources, poor general health, long periods of social unrest, and economic disruption. By 1991, infection rates had reached alarming limits for the population in countries such as Uganda. Barnett and Blaikie (1992) point out the grave economic and social implications of such an epidemic and its effect on the labor force: increase in the number of orphans, loss of trained specialists, and the economics of the health care burden.

The prevalence of Aids in Africa came to the forefront in the mid-1980s; however, many African states continued to deny the epidemic. As African countries began to realize the importance of confronting the situation, they began to create national advisory committees for tracking numbers, ensuring the safety of blood donations, and conducting surveys on the knowledge of Aids and other sexually transmitted diseases (STDs). Among the first African nations to take HIV infection seriously were Rwanda and Uganda. The health authorities in those countries not only publicly recognized the existence of Aids, but also requested help from the WHO. Government-sponsored education programs began in those two countries in 1985. Later that year, Tanzania also launched an education program. In 1986, the Kenyan government published educational materials, and the Central African Republic instituted educational programs. Zambia and Zimbabwe launched similar programs in 1987 (Clayton, *et al.*, 1994). Lamptey and Coates (1994) define several factors that influence the heterosexual spread of Aids in Africa. As Table 4.1 outlines, effective programs must provide strategies to combat these factors.

Table 4.1 Factors influencing the heterosexual spread of HIV

Primary factors	Secondary factors
Frequent change of sexual partners	Poor STD symptom recognition and health seeking-behavior
Infrequent and incorrect use of condoms	Poor STD services
High prevalence of STDs, especially genital ulcer disease	Poor availability of access to condoms
	Poor and adverse Aids prevention policies
	Inadequate resources

Note: From Lamptey and Coates (1994).

Sub-Saharan Africa: The Epicenter of HIV/Aids. Unfortunately, many in Africa and elsewhere still view Aids purely as a health problem. Of course it is a disease. But in fact, it is much more than this. Aids is at the heart of the development agenda for Africa. Yamba (1999) has followed the changing patterns of the Aids scourge in the continent, and has observed that “initially the epicenter of the epidemic was the inter-lacustrine part of Central Africa, particularly around Lake Victoria and Eastern Africa. Yamba has observed that this trend has changed, and that the most devastating spread of the virus now appears to have occurred in the southern parts of Africa. Botswana, Malawi, South Africa, Zambia and Zimbabwe are now the countries with the highest levels of HIV infections”. However, the situation in southern Africa is not much different from that in West Africa, where the epidemic also continues to spread in countries such as Ghana and Nigeria. Sub-Saharan Africa is the worst affected region of the world, accounting for 83 percent of all HIV and Aids-related deaths. The mode of transmission in this region is basically or mainly through heterosexual sex, which also leaves a more gender balanced proportional infection of 50:50. Aids now affects every country in the world, but it is sub-Saharan Africa that today is the most affected. By one conservative estimate one-quarter of the population of Africa,

150 million people, have been personally affected by the epidemic. The nine most heavily affected countries in the world are all in Africa. At least 9 million Africans have already died of Aids, and Aids is now the first cause of death. Last year alone, 2 million died. Over 22 million Africans are currently living with HIV or Aids. There are almost 8 million African children under the age of 14 who have lost their mother or both parents to the Aids epidemic (Yamba, *ibid.*).

Impact on Households: Those who suffer the consequences first are families. There is, of course, the emotional impact of seeing a loved one die. At the same time families must cope with significant economic loss. For example, a study in the Ivory Coast (UNAids, 1999) has shown that the average income in families in which a member has Aids dropped by 52-67 percent.

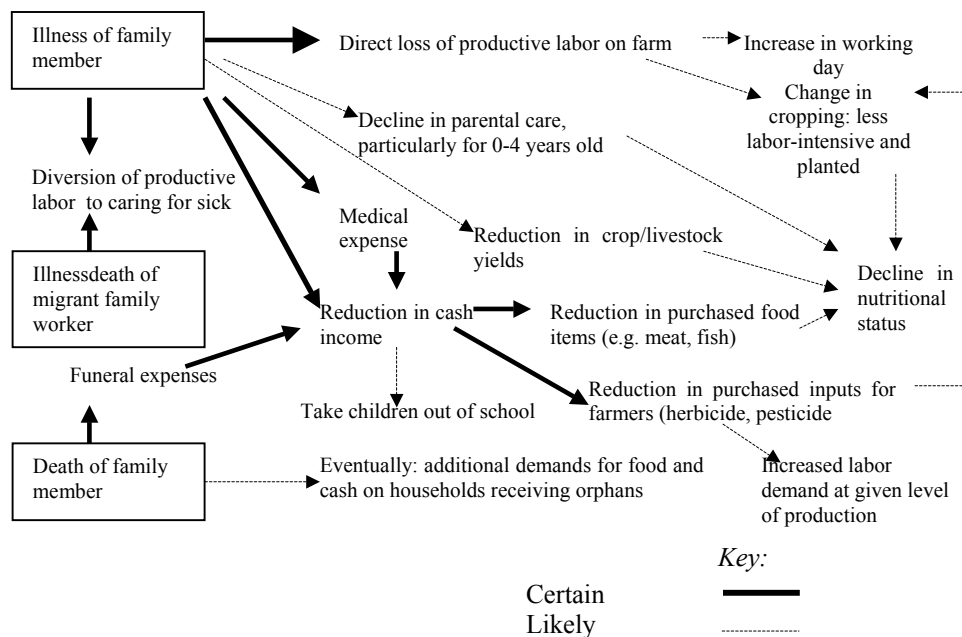


Figure 4.1 The Impact of HIV/Aids on the Household
 Source: Panos Institute⁶

⁶ (1992), *The Hidden Cost of Aids: The Challenges of HIV to Development*, London.

Other surveys in Uganda also showed that one-third of rural households affected by Aids experienced a 50 percent reduction in agricultural output (Barnett and Blaikie, 1992). In the Ivory Coast, family spending on school education was halved, and food consumption dropped by 41 percent, while individual expenditures on health care more than quadrupled (Hyde, 1995; UNAids, *ibid.*). Income loss like this leads to painful choices. Education can become a luxury. That means that one-half of the children left behind when someone dies of Aids cannot realize their full potential. Figure 4.1 shows HIV/Aids impact on the household domestic-farm labor interface in subsistence communities.

Impact on Economic Sectors: These cruel effects on families are also cruel to countries' economies. As income declines, so does purchasing power. Unschooling children mean growing social problems and a loss of competitiveness in a global economy increasingly dependent on knowledge. Food that is not grown must be imported, which in turn cuts down on exports. In Zimbabwe, for example, half of the in-patients in hospitals are there because of Aids-related illness. Models show that by 2005, basic Aids treatments costs will be over 60 percent of the Ministry of Health Budget, and this does not even include the very expensive therapies used in high-income countries. Zimbabwe is not alone. In Kenya by 2005 Aids treatment costs will constitute over 50 percent of the Ministry's budget. Studies show that in some countries, the military is two to five times more likely to be infected by HIV than the general population. What are the implications for national security? (Dunn, 1995; Barnett and Blaikie, 1992, UNAids/WHO, 1998).

UNAids (1999) points out that in Cote d'Ivoire, which is not even the most affected country with HIV/Aids in Africa, teachers are dying of Aids at a rate of almost one teacher a day. What are the implications for the education of the youth and for their future? How will these teachers be replaced? Hyde (1995) has also noted that most governments are suffering from Aids fatigue, and that there are reports of complacency, of tiredness, of pressure on national budgets etc, which leaves most governmental responses favoring the isolation of people with HIV/Aids, or compulsory testing, or openly or covertly encouraging discrimination. In his elaboration, Hyde (*ibid.*) uses a metaphor, which will help this study in determining the linkage between the variables mentioned:

.... Bullets still cost more than condoms, yet governments continue to pour more money into the arms trade than into health care when, for many of them, their countries are being torn apart by internal division which no amount of arms will solve. The excuse that HIV/Aids drugs are far too expensive belies all that market economics teaches about economies of scale...research and development costs could be amortized over a longer period, enabling costs to fall considerably.

The above metaphor could be seen from a different perspective. Let us forget about condoms for a while and think about bullets and education, examining education more critically in its relationship to development.

Impact on the Private Sector: Several recent studies in Africa show that company profits decreased by up to 20 percent as a direct result of Aids. What are some of those costs? HIV and Aids absenteeism make up 52 percent of the costs. Recruitment and training of replacement employees made up another 17 percent. Add to this a reduced pool of skilled labor to replace those lost, due to the hidden impact of children not educated because their parents have died, and it is easy to see that the costs to the economy will be high (Barnett and Blaikie, 1992; Blaire, *et al.*, 1995).

Projections for South Africa suggest that employee benefits, as a percentage of salary, will rise from seven percent to nineteen percent by 2005 because of Aids. These extra costs and the loss of skilled labor have obvious implications for the efforts to attract high-quality foreign investment.

Macroeconomic Impact: There is no doubt that Aids is having a significant negative impact on the most severely affected African countries. For Africa to meet the goal of reducing poverty by half by the year 2015, it needs growth rates of 7 percent per annum. The World Bank has conservatively estimated that countries with high HIV prevalence will lose one percent of GDP growth per capita annually. The cumulative expected loss in Kenya, for example, is expected to be 15 percent over the next decade. Broader measures of human welfare, such as the UNDP's Human Development Index, are also projected to decline dramatically in the Southern African countries because of Aids, Hope (1995).

4.3 Factors Accelerating the Epidemic in sub-Saharan Africa

UNICEF (1999) points out the devastating impact of HIV/Aids on children in sub-Saharan Africa, where it notes that over 90 percent of all Aids orphans live. Countries south of the Sahara account for the world's 21 highest rates of HIV among adults aged 15 to 49 years, the most sexually active segment of the population. In 13 of those countries, HIV has infected at least 10 percent of adults, and in Botswana and Zimbabwe, a quarter of adults are infected (Altman, 1998). For women in sub-Saharan Africa the numbers are quite startling, with 43 percent of pregnant women in Botswana alone testing positive for HIV (UNAids, 1998).

The risk of transmission in Africa is increased by the presence of sexually transmitted diseases (UNICEF, *ibid.*) and sexual behaviors including a high number of sexual partners, especially through commercial sex. Demographic variables also contribute to the spread of the disease, as seen through the high number of infections in migrant miners in South Africa. Also economic and political factors play a role through poverty leading to migration, separation of families, poor education, and prostitution, as catalysts (Piot, *et al.*, 1994). However, rates among educated men in Rwanda, Congo/Zaire, and Zambia were higher, possibly reflecting the ability to travel, worsening of economic conditions, or increased opportunities for sexual encounters. War in several countries has contributed to

the spread of Aids, with limited health services or preventative measures during time of crisis. Urban areas have a much higher infection rate as well (Piot, *et al.*, *ibid.*).

With the ever-rising number of people affected by Aids in Africa, Hope (1995) examined the impact of the epidemic through the human costs, social costs, and economic impact. He found out that low levels of education, crowded and unsanitary conditions, limited access to basic services, high rates of unemployment, and rapid urbanization are all poverty phenomena that are increasingly associated with HIV/Aids. The health care system alone largely under-serves the African population with a patient to doctor ratio of 24,380:1 compared with 5,080:1 for all developing countries. The lack of education in many rural areas and the increasing burden on the health care system has further impact on the epidemic. Socio-cultural factors such as “sexual networking”, polygamy and wife inheritance also contribute to the spread of the disease. With distrust for government in many countries, governmental campaigns may see few results. These conditions affect infant and child mortality, an increased number of orphans, lack of education for children, and increased cost for the health care system (Hope, *ibid.*).

Development in its broadest sense has also been seen to contribute to vulnerability to infection, as when economic changes force many out of rural life. Young men are pushed to leave their villages for the cities, and young women into urban factories or “hospitality” work, disrupting families and increasing commercial sex (Miller & Carballo 1989; Weeramunda, 1990). Stress on development has been accompanied by a somewhat belated recognition of the significance of gender. There is a greater understanding of the double impact of HIV on women as both those at greater risk of infection and those on whom the burdens of care falls most heavily (Altman, 1998).

Some doctors in the industrialized world view HIV/Aids as a chronic, manageable condition. Patients may live as long as a decade, with three years the average. But life is nastier and shorter in the Third World: studies show Ugandans with HIV progress to full-blown Aids in six to eighteen months. Dunn (1995) refers to a 1992 report by M. R. Smailman-Raynor and A. D. Cliff in the *International Journal of Epidemiology* which made useful connections between hunger, crop cycles and the progress from HIV to Aids:

Since the mid-1980s, some regions with high incidence of malnutrition have also been recognized as areas of endemic infection with HIV; research has underlined the deleterious impact of poor nutritional status on the human immune system and the consequent reduction in the body’s defenses to fight invading infection; the growth rate of the Aids epidemic, at district level in Uganda, displays a seasonally recurring geographical pattern.

People with HIV are most likely to develop Aids during the hungry times of year just before harvest, when there is little food available to keep their immune systems up, let alone provide them with enough energy for the intense farm work in the pre-harvest period (Dunn, 1995). People now sell the food from their children’s mouths to pay for medicine

for Aids, malaria and other illnesses, to finance elaborate funerals, and to pay school fees often 65 percent of the cost of sending children to school.

4.4 Women and Aids

The World Health Organization (WHO) reports that in 1993, more than 4 million African women were infected with HIV. Although an HIV prevalence rate as low as 5 per 100,000 infected women of the childbearing ages of 15 to 49 is found in some Eastern European, Asian, and countries in the Pacific, African women are infected at rates as high as 2,500 per 100,000” (Ankrah, *et al.*, 1994). Women are economically dependent on men to provide not only food, but for the basic right to own land (Banda, 1999). In communities where wife beating and rape are considered part of daily life, the manifestations of a disease such as Aids are insurmountable (*ibid.*). Discrimination against women and grave gender inequalities must be faced by policymakers, community members, educators, and the health care system itself in order to protect and empower women to protect themselves.

The underlying reasons for the low status of women in Africa are tradition and culture, illiteracy, ignorance, and poverty, with the limitations they all place on women’s lives. When people’s basic needs such as food, water and housing are met, women’s health is improved (Harrison, 1997). The social and economic barriers that women face are designated as a leading cause of the spread of the Aids epidemic among women (Renaud, 1997; Ankrah, 1997; Clark, 1996; Kiragu, 1996). In a study of women in a prostitute community and their response to the Aids epidemic, Renaud (*ibid.*) discusses the position of women in Senegal as defined in part by the Muslim religion. Traditionally men are given many more rights than women on whom many restrictions are placed. Girls receive less education than boys do, as the women spend more time in the fields and men need education to find jobs.

There is also an argument, which has been posed by Kiragu (*ibid.*), that the burgeoning epidemic among women in Africa is based on social and cultural inequality, and that this inequality must be confronted at the policy level. With the increasing rates of infection among women social, cultural, economic, and basic personal rights for women must be brought to the forefront. He further states that gender inequality of all kinds increases women’s vulnerability to HIV infection in three closely linked ways: Firstly, lack of economic opportunity for women, enshrined in social-cultural practices and reinforced by the legal system, leads to dependence on men, whose interests do not always coincide with the women’s need to protect themselves. Secondly, depriving women of the right to autonomy and control over their own bodies also deprives them of their right to refuse sex and to demand safer sex practices by men. Thirdly, some cultural practices, many either protected by or ignored by the law, are directly and immediately dangerous and can lead to HIV infection. The solution is to empower women through legal reform to take advantage

of economic opportunity, to determine when and with whom they will have sex, and to refuse cultural practices that endanger them.

4.5 Situation of Children and the Youth

According to estimates by UNAids (1999), more than 3 million children and young people world-wide became infected with HIV in 1998. This included almost 590,000 children under 15 and over 2.5 million 15-24 year olds. During 1998, more than 8,500 children and young people became infected with HIV each day, six every minute. Altogether, according to UNAids and WHO (1998) estimates, more than 4 million children under the age of 15 have been infected with HIV since the epidemic began. More than 90 percent of them were infants born to HIV positive mothers who acquired the virus before or during birth, or through breast-feeding. Hundreds of thousands were children under 15 who became infected through blood transfusions or through sex.

Adolescent men and women in the difficult transition years between childhood and adulthood make up a small proportion of the people with Aids worldwide. But the long latency period for Aids obscures the fact that many people who are becoming sick now were infected during their teens. The World Health Organization (WHO) estimates that half the people infected with HIV acquired the infection between the ages of 15 and 24 (Henry, 1993).

The period of youth is a time of experimentation, when young people may engage in unprotected sex, drugs or other risky behavior as a way of asserting their independence. Injection drugs and needle sharing can pose a direct threat of HIV transmission, but use of other drugs or alcohol can also contribute indirectly to unprotected sex by compromising judgement. A study among 3,000 adolescents in Kenya found that young women who reported substance use were more than four times as likely to be sexually active compared with those who did not. At the same time, young men who used alcohol, cigarettes or marijuana were twice as likely to be sexually active as those who reported no substance use (Kiragu & Zabin 1993).

UNAids (1996) estimated that 8.2 million children will have lost their mothers to Aids by the end of 1997, before they turn 15. An estimated 6.2 million orphans under the age of 15 were alive at the end of 1997, struggling to survive after the death of their mother or of both parents from Aids. More than 95 percent of these children live in Africa south of the Sahara. Most children orphaned by Aids are concentrated in those countries most affected by the epidemic. For example, data provided by the US Bureau of the Census and the World Bank indicate that 1.7 million Ugandan children have become orphans as a result of Aids since the beginning of the epidemic. According to UNICEF, children orphaned by Aids are the largest and fastest growing group of children in difficult circumstances in Zimbabwe. UNAids and WHO estimate that by 1997, approximately 7 percent of the country's children under 15 will have lost their mothers to Aids. The socio-economic

fallout from the epidemic in hard-hit communities and countries affects even children who are neither infected with HIV nor orphaned by Aids.

An AidsCAP study (Forsythe, *et al.*, 1994) estimated that by the year 2005 Kenya's Gross Domestic product (GDP) will be 14.5 percent less than it would have been had Aids never occurred. Per capita income is projected to be reduced by 10 percent. Denial or neglect of their recognized human rights exacerbates the vulnerability of girls to HIV infection. Gender discrimination results in inadequate control over their exposure to sexual HIV transmission and poor access to socio-economic opportunities. Commercial sexual exploitation and domestic sexual abuse of children are contributory risk factors for HIV infection among children.

Figures reported to the 1996 World Congress against Commercial Sexual Exploitation of Children indicated that world-wide more than 1 million children enter the sex trade every year. An unknown number of children world-wide are at risk of sexual abuse by relatives, other members of the child's community or strangers. Estimates suggest that there are as many as 100 million children and adolescents in the world who are working or living on the street, often in violent and dangerous situations. The physical and mental abuse of children may increase the likelihood of their engaging in risk-taking sexual behavior and thus increasing their vulnerability to HIV (WHO, 1999). Around one-third of the 33 million people living with HIV in the world at the end of 1998 were young people aged 15-24. Around half of all new HIV infections occur in the same age range. This is an age when most people start their sexual lives. In 1998, nearly 3 million young people became infected with the virus - that is more than five young men and women every minute of the day, every day of the year. A recent study in Malawi measured annual HIV incidence at nearly 6 percent in teenage women, as compared with less than one percent in women over 35 (WHO, 1999).

In the developing countries, which saw over 95 percent of the world's new HIV infections in 1998, there are hundreds of millions of 15-24 year-olds, an enormous segment of the population. Where they have been able to access appropriate knowledge, skills and means, today's young people have shown a remarkable propensity to adopt safer behavior, more so than previous generations or older adults (WHO, *ibid.*). In Malawi, Tanzania and Zimbabwe, condom use among people under 25 is noticeably higher than among older groups. In Senegal, two out of five women under 25 and two-thirds of men used condoms with non-regular partners in 1997, compared with less than 5 percent at the start of the decade. In many countries in both the industrialized and developing world, 15-19 year-olds are increasingly abstaining from sex in the face of HIV. In Uganda, for example, by 1995 over 50 percent of the men and 46 percent of the women in that age-group said they had never had sex, more than a three-quarter increase over the 1989 figures for either sex.

In several urban clinics in Uganda, HIV infections among pregnant teenagers aged 15-19 have substantially decreased, in some cases falling to under 5 percent from over 20 percent at the start of the decade. Neighboring Tanzania has seen similar decreases in HIV incidence among women under 25. In both rural and urban settings in one area of the

country, HIV infection in young women has fallen by almost two-thirds (UNAids, 1998). Girls are also exposed to HIV earlier than boys. A preliminary analysis of multi-site studies sponsored by UNAids and its partners shows that in western Kenya, nearly 1 girl in 4 aged 15-19 is already living with HIV, compared with 1 boy in 25. In Zambia in the same age group 16 percent of girls versus just 1 percent of boys are HIV-infected. In Rwanda, rates for boys and girls are similar through the teens, but in their early 20s females are significantly more likely to be infected - 14 percent of women versus 9 percent of men. In Ethiopia, condom use has been promoted as a prevention strategy among young people. As a result, condoms have become more available and less costly, and their use has become a socially accepted norm among young people. Condom sales increased from 3 million pieces in 1991 to 20 million pieces in 1996 (UNAids, February 1999).

These population percentages tell only part of the story. There are special reasons why young people are specially vulnerable to the contraction of what is above all a sexually transmitted virus. One is that adolescence and youth are times of discovery, emerging feelings and the exploration of new behavior and new relationships (Odiwuor, 1989). Sexual behavior, an important part of this, can involve risks; the same is true of experimentation with substance use, including alcohol, illicit drugs, and other substances (Odiwuor, 1998). Poverty can also increase young people's risk of acquiring HIV infection. In cities around the world, millions of teenagers trade sex for money or food. Families who cannot afford dowries sell some of their young daughters into prostitution. Other boys and girls live on the streets to escape poverty and abuse at home and most of them exchange sex for survival.

A higher youth dependency ratio therefore means a greater demand for government-supported health and education services. UNICEF estimates that there will be approximately 600,000 orphaned children below the age of 15 years by the end of the year 2000. Most of these children drop out of school and are usually deprived of the long-term opportunity for wage employment. Thus, as Saoko *et al.* (1996) puts it, a spiral of poverty is established or reinforced.

The younger children need to start school and the older ones must be kept in school. This makes the content and quality of education these youths receive important. Barnett and Blaikie (1992) make a case for a predominantly agricultural and vocational curriculum recommending that these children will have to earn their own living from an early age. At the same time such a view effectively excludes a large number of people from other, more academic, types of education. As Barnett and Blaikie argue, the orphans created by the epidemic should not be doubly penalized by exclusion from the best education available.

Chapter Five

HIV/Aids in Kenya

5.1 Introduction

This chapter attempts to analyze the problems of HIV/Aids in Kenya in different sectors of development. It also shows the general demographic indicators for the country, as well as various forms of statistics on the HIV/Aids scourge. In this chapter we provide a large amount of different sources of statistics, which also illustrate some of the confusions as far as the HIV/Aids statistics in Kenya are concerned. However, much of the statistical confusion comes about due to the fact that there is no central unit for the dissemination of statistics on HIV/Aids. This argument could be extended also to the census data, where census statistics have always been doctored and manipulated to suit ethnic groups and politicians. This view is also shared by Ochieng (DN: 20/2/2000), when he expresses the same opinion in an article, *Kenyan Tribes: How to Lie with Census Statistics*.

The HIV/Aids pandemic is the single most important health challenge that Kenya has faced in its post-independence history. It is the only known health problem that has the potential of reversing the significant gains made in life expectancy and infant mortality. The HIV/Aids pandemic is therefore becoming much more than just a health problem as it encompasses economic, social and cultural dimensions. The nation loses expensively trained manpower while the cultural, legal and socio-economic consequences of the disease are aspects with which the country has yet to cope (NDP, 1997).

According to DN, the latest statistics from the National Aids and STD Control Program (NAS COP) of the Health Ministry revealed that of the more than 1.5 million Kenyans infected with the killer virus, two thirds are people under the age of 25. At the same time, 22 percent of girls in the age range 15-19 in the country are infected with HIV and four percent of the boys in the same group are HIV positive. Another worrying aspect is the rising prevalence of Aids, which rose from three percent in 1993 to nine percent in 1997 mostly among the youth. There is an increase in adolescent pregnancies in the country to between 50 and 60 percent monthly as compared with 10 to 20 percent 10 years ago. Out of the 1.5 million Kenyans at risk of contracting the killer disease, 25 percent are adolescent female youth.

5.2 HIV/Aids and the Economy

Aids affects the overall economic output of the nation. The loss of young adults in their most productive years of life will certainly affect overall economic output. If Aids is more prevalent among the economic elite and educated people with well paid jobs, the impact is felt to an even greater extent than the absolute number of Aids deaths would indicate. Aids-related expenditures include medical care, drugs and funeral expenses. These are costs which deplete personal savings, which could have gone to investments. Reduction in investment could lead to reduction in economic growth (NACP, MOH, & NCP&D, 1994).

As many as 300,000 new adult cases and 115,000 new pediatric Aids cases may develop during the next 5 years. This will have major effects, not only on the individuals, their families and the health system, but also on the communities and society as a whole. Major impacts expected include an overburdened health system which will over-stretch the health budget, drained community resources disintegration of family structures, an increasing number of orphans and abandoned, children worsened status of women, a decline in economic growth and its implications for national security (NACP, 1992-1996). According to the Kenya National Aids Control Program, Aids has affected several sectors other than health. It notes the negative impact on investment as families use savings for medical care and funeral expenses. In sectors with highly mobile labor, such as the military, transportation, extension services and banking, infection levels and the loss of life are likely to be particularly high. In so far as key people in society die, managers, skilled labor and professionals, the impact may be extreme (S.A. Bulletin, 1995).

Agricultural production in both cash crops and subsistence crops (which apparently sustain these communities) will also be negatively affected, particularly those that are labor intensive. The impact on agriculture is likely to vary according to the agricultural system. In rainy areas, where a variety of crops are planted throughout the year, families can cope relatively well with the loss of a few laborers. They may reduce area cultivated and cut back on the number of crops planted, but may still be able to produce an adequate amount of food. In dry areas, where farming depends on one or two crops that must be planted and harvested at specific times of the year, the impact is likely to be more severe. In these areas the loss of a few workers at the crucial periods of planting and harvesting can significantly reduce the size of the harvest. In these areas, the loss of labor force because of Aids could make it difficult for families to feed themselves (NACP, MOH, NCP&D, 1994).

A loss of agricultural labor is likely to cause farmers to switch to less labor-intensive crops. In many cases this may mean switching from export crops to food crops. Thus Aids could affect the production of cash crops as well as food crops. Aids is an expensive disease that will require a considerable amount of resources from the health system. A study by Forsythe, *et al.*, (1992) estimated that the cost of hospital care for Aids patients averaged about Ksh. 27,200 during the course of the illness. If this expenditure rate remains constant, the total hospital costs for Aids care, expressed in 1992 in Ksh., will

increase to about Ksh. 3,700 million by the end of the year 2000 and then to Ksh. 4,800 million as half of public expenditure for health care. Clearly this will place a tremendous burden on the public health care system to provide adequate care for Aids patients, while still trying to meet all other health needs of the population. The demand on health services caused by Aids can also be illustrated by looking at the number of hospital beds (see Figure 5.1). Not all people with Aids seek hospital care. But for those who do, the average length of stay is considerably longer than for most other diseases, perhaps as long as 60 days in total. In 1992, as much as 15 percent of all hospital beds in the country were occupied by Aids patients. As the epidemic grows, so will the hospital bed requirements. By the end of 2000 about half of all hospital beds will be required for Aids patients. Such a situation will leave an insufficient number of beds for patients with other illnesses (Forsythe, *et al.*, 1992).

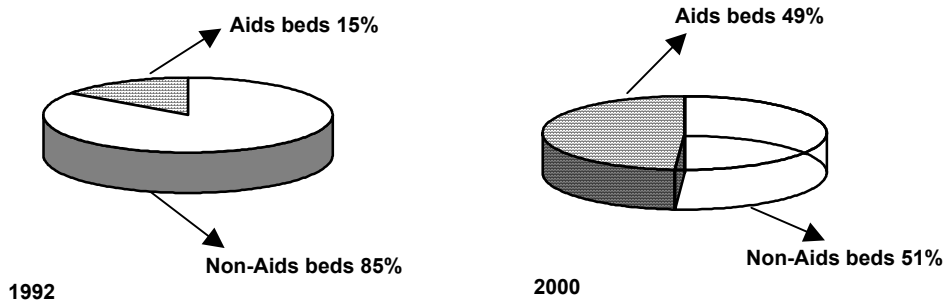


Figure 5.1 Hospital Beds: HIV/Aids Patients
 Source: NACP, MOH & NCP&D, *Aids IN KENYA: 1994*

According to projections made by AidsCAP, in Forsythe, *et al.*, 1995, HIV/Aids could increase labor costs for some Kenyan businesses by 17 percent by the year 2005. These were findings preliminarily based on the impact of HIV/Aids on Kenya’s commercial sector. The preliminary results suggested that absenteeism, training costs and HIV- related health care would cause the greatest losses to Kenyan businesses. The study identified a number of ways that business could be affected by Aids (see Figure 5.2). These include increased expenditures for health care, burial fees, and recruitment and decreased revenues resulting from HIV/Aids absenteeism, funeral attendance, labor turnover and labor lost during training.

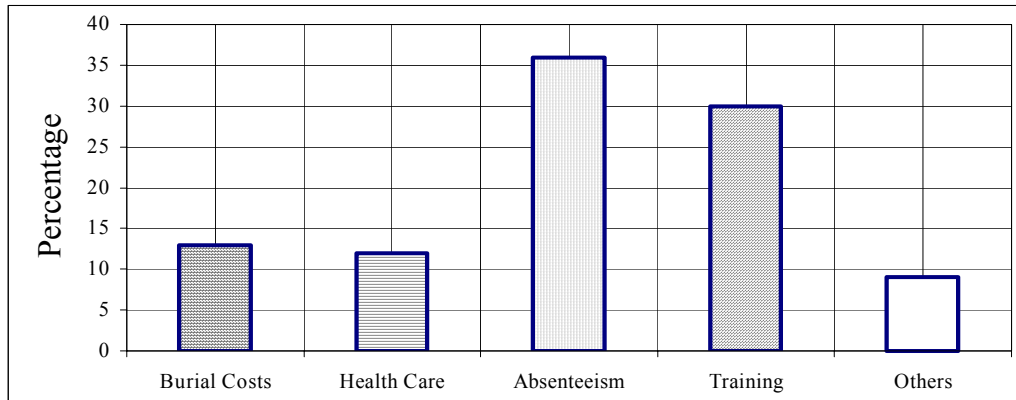


Figure 5.2 Aids-Related Costs to Kenyan Businesses

Source: Forsythe, *et al.*, 1995

According to a study by Forsythe *et al.*, (1995) Kenyans spend much of their time attending funerals of their relatives and friends who are victims of Aids. The transportation costs of bodies to be taken long distances are also high, besides care for the orphans (DN, Dec. 2, 1995). At the family level, Aids has effects in several areas; economically and emotionally. There is an increase in medical expenses, reduction of earning capacity of the affected family member since he/she is unable to perform optimally. Loss of one or more family members through death is dehumanizing and in most cases results in socio-economic loss to the family.

Another study was conducted to measure the impact of HIV/Aids on Africa's commercial sector [a Kenya case study, (Forsythe, *et al.*, 1994)]. The initial assessment in Kenya was designed to determine how HIV and Aids are currently affecting the commercial sector and to estimate how this impact may change over time. The results would be used to help companies plan for the future and as a tool to communicate the potential financial benefits of HIV/Aids prevention programs in the workplace to business managers and policy makers within the commercial sectors. Interviews were conducted with managers of 16 companies, and they focused on management views on the impact of Aids as well as assessing current prevention programs and needs for the future. The companies selected represented a diversity of industries in the formal Kenyan economy and a willingness to be interviewed for this assessment (*ibid.*). All the managers interviewed knew of at least one employee who had died of Aids, and all believed that Aids would, some time and in some way, affect their operations. Almost 90 percent of the managers knew of a current employee who was either HIV-infected or had shown symptoms of Aids (*ibid.*).

Though all of the managers had dealt with HIV infection and/ or an Aids death among their workforce, very few of the managers felt that HIV/Aids was *currently* affecting their operations. However it is important to note that all of the managers anticipated that HIV would affect their operations in the future, even if they were uncertain what that impact would be (ibid.).

Table 5.1 Management Views on HIV/Aids Impact:

	YES	NO
Know of employees' Aids death	100%	0%
Aids will affect operations	100%	0%
Know employees with HIV/Aids	89%	11%
Aids will affect medical expenses	29%	71%
Aids will affect labor relations	22%	78%
Currently affecting operations	6%	94%

Source: Forsythe, et al., 1994.

Thus, the detailed financial analysis as conducted for this study is likely to be particularly useful in determining what specific impact can be expected and how large this impact might be. There are many ways business could be affected. Anticipated costs were based on existing literature regarding the impact of HIV/Aids on business and those identified by these Kenyan businessmen.

In terms of increased expenditures (Table 5.2), the analysis assessed additional costs associated with health care, burial fees, and recruitment. In terms of decreased revenues, issues of decreased productivity due to absenteeism related to HIV infection and Aids, and funeral attendance of co-workers were specifically addressed. Production time lost during the interim required to hire new employees was also assessed. Revenue loss caused by the reduced productivity of newer employees relative to the more experienced employees who were lost to Aids-related morbidity or mortality was analyzed (Forsythe, et al., 1994).

Table 5.2 Aids-Related Factors Affecting Business:

Increased Expenditure	Decreased Revenues
Health care	HIV absenteeism
Burial fees	Aids absenteeism
Recruitment	Funeral attendance
	Labor turnover
	Training
	Productivity losses

Source: Forsythe, et al., 1994.

The calculation of these costs was based on projections regarding the future spread of HIV/Aids and the estimated change in expenditures and revenues that could be caused by this spread. The typical company was expected to incur HIV/Aids costs averaging an annual loss of US \$ 140,00 per company as of 1992; by the year 2005, it was projected that

annual costs would average US \$ 403, 000 per business. Eventual differences in expenditures within these types of industries may reflect labor intensity, as well as differences in salary levels and benefits provided. HIV/Aids to a Kenyan business on a per employee basis can vary tremendously. On average these companies currently spend US \$ 90 per employee on HIV-related costs. This is projected to rise to US \$ 260 per employee by the year 2005 (Forsythe *et al.*, 1994).

Table 5.3 Cost of HIV/Aids Per Employee US \$

	1992	2005
Heavy Industry	16.45	39.03
Transportation	30.83	75.12
Wood Processing	114.62	331.09
Sugar Estate	137.81	137.81

Source: Forsythe, *et al.*, 1994.

5.2.1 Situation of Health and The Health Care Position in Kenya.

The poverty that characterizes African countries is often expressed through health indicators such as life expectancy, mortality levels including infant mortality, disease and health conditions, availability of basic amenities like housing, water supplies and trained manpower. Life expectancy at birth varies according to sex. As in most other countries, Kenyan females have a longer life expectancy than men. According to the 1979 census life expectancy is 56.9 years for females and 54.1 for males (Republic of Kenya 1981). Infant mortality, especially post-neonatal mortality, is a good development indicator. During the post-neonatal period, deaths usually increase in proportion due to environmental factors, whereas deaths occurring during the first four weeks of life are more connected with pregnancy and incidents directly after birth. Thus, post-neonatal mortality reflects the overall nutritional and health conditions of a country.

Studies of the determinants of mortality in Kenya generally indicate that the principal determinants of mortality in recent years have been the prevalence of malaria (Anker *et al.*, 1977: 16-26). This factor explains regional variations as well: in such areas as around Lake Victoria and in the coastal regions of the Indian Ocean where malaria is greatly prevalent all the year round. This is reflected in the higher mortality rates especially for children, whereas in the Central Highlands, where the climate is not favorable to malaria, the death rates are lower.

Many illnesses in Kenya are transmitted by insects and animals, and by the consumption of contaminated water for washing and drinking. The situation is compounded by the relatively common lack of understanding of sanitary principles, and by malnutrition, which both cause specific disabilities and lower resistance, and by Aids. Infectious respiratory diseases and malaria account for a majority of illnesses and deaths. Malaria remains a major health risk, despite long-standing programs to control its spread,

including spraying of mosquito-infested areas and free distribution of anti-malaria prophylaxis. Other common illnesses include tuberculosis, dysentery, and parasitic and venereal diseases. Filariasis, transmitted by a bite from an infected black fly, mosquito, or mangrove fly, is common in coastal regions. Kala-azar (visceral leishmaniasis), transmitted by a bite from an infected sand fly, is a serious health problem in certain northern areas. Sleeping sickness, transmitted by tsetse flies, is a problem particularly in the Lambwe Valley and the Samia area in Busia District in western Kenya. Many people suffer from leprosy, especially in western Kenya. Measles is a problem that especially afflicts young children. Other leading causes of infant mortality are gastro-enteritis, colitis, kwashiorkor, tetanus, and whooping cough. Anemia due to protein deficiency is widespread. Vitamin A deficiency, various parasitic infections, and trachoma, which causes blindness, are also common in Kenya, as are skin diseases. Fortunately, epidemic diseases, such as smallpox and cholera, have largely been controlled.

Since independence, the Ministry of Health has been charged with the principal responsibility for providing health services. Its functions include devising health policy planning, organizing and administering central health services; training health care practitioners; coordinating activities with other government departments and non-governmental agencies; and complying with international health regulations. Additional medical services are provided by private organizations and church groups.

Many Kenyans also have recourse to traditional methods of diagnosis and treatment. There is widespread belief that illness and deaths are caused by malevolent spirits or angry ancestors, or are the result of the conscious or unconscious misconduct of the sick person or a member of their family. Traditional cures involve finding the cause of afflictions through divination, as well as restoring the social equilibrium brought on by the affliction through magical acts and sacrifice (Kaplan, *et al.*, 1976).

The Aids virus arrived late in Kenya compared with nearby countries like Uganda. Increasingly, the Kenyan government has made allowances for Aids in preparing development plans. In October 1996 the government reported that a total of 65,000 Aids sufferers had sought hospital care. According to a report released in May 1994 by the Ministry of Health, a total of 130,000 cases had been documented. The 1994-96 development plan forecasted that the HIV-infected population in Kenya would rise from 448,000 in 1990 to 1.27 million by 1996, and that Aids-related deaths would increase from 20,000 to 80,000 in the same period.

Since the 1960s, Kenya has given priority to improving basic health services. This improvement, together with growth in average income, has resulted in a better overall quality of life for most Kenyans. Official figures give a total of 3,058 health institutions in 1996, up from 2,925 just the previous year. The health sector's share of central government expenditure rose from 5 percent in 1995/96 to 7 percent in 1996/97 (The Economist Intelligence Unit, 1998).

5.2.2 Major Constraints of Aids Control in Kenya.

The major constraints that plague Aids control in Kenya include the slow pace of change of sexual behavior, resource limitations, poverty and harsh effects of structural adjustment programs (SAPs) on the vulnerable groups, particularly widows and orphans (Odiwuor, 2000). There is also a rapid increase in the number of people developing Aids and needing medical care and social support, an overburdened NASCOP, and lack of a clear policy framework to guide implementing agencies. Although remarkable efforts have been made in Kenya to control the spread of HIV and to reduce the impact of Aids on individuals, families, communities and the nation as a whole, the epidemic remains powerful and dynamic, evolving with changing and unpredictable patterns in different communities. In communities where the epidemic is advanced and appears to be leveling off in the general population, infection rates are increasing among young women. Within these communities, a new phenomenon of orphaned children and widows has emerged (NASCOP, 1999).

Baltazar (1999) estimated that 220,000 Kenyans would have died from Aids by the end of 1999. This translates to 500 people dying every day or 20 deaths every hour. He opines that out of the 14 million people who died world-wide from Aids in 1999, 11.5 million or 80 percent were from Africa's sub-Saharan region. In his thesis, he sites studies which have shown that men hold the "master key" to the spread of the scourge, since the early and effective treatment of sexually transmitted infections, which are more easily detectable in men than women could reduce the occurrence of HIV/Aids by 42 percent.

5.3 National Context and the Impact of HIV/Aids in Kenya

According to projections, by the year 2010 Aids will have reduced by great margins the population growth rate of a majority of countries. In Kenya the projection has it that the population growth rate will have reduced from 3.7 percent in 1985 to 2.4 percent in 2010. 0.9 Percent of the population will have Aids. It is postulated that by the year 2010, as many as 81.2 percent of the children will have contracted Aids, followed by those in the age group of 25-35 years. Obudho (1995) observes that the incidence of Aids in Kenya has been on the increase particularly in major urban centers such as Nairobi, Kisumu and Mombasa. In Mombasa, Migot-Adhola (1982) found that Luo and Kikuyu came from up-country to work in the hotels and other related sectors. The Swahili settlers then saw little value in the land they had settled, and allowed the newcomers to occupy and buy plots. In the report, Migot-Adhola (ibid.) found that there was an influx of independent traders, craftsmen, and a proportional number of prostitutes, who in this era of HIV/Aids pose a risk to the nation.

According to the Kenya National Aids/STDs control program, the total Number of reported Aids cases in Kenya as of April 1991, was 17,260 of which 60 percent were male. In 1993 the city of Nairobi reported a total of 2,542 cases of which 65 percent were male.

This data may suggest that there are a substantial number of women in Kenya whose husbands are dead or will be as a result of Aids virus. The cases were mainly concentrated in Coast Province: 46 percent, Nyanza: 22 percent, and Nairobi: 15 percent. Adult prevalence was 3.5 percent in 1990, 4.5 percent in 1991, 5.3 percent in 1992, 5.7 percent in 1993, and 6.5 percent in 1994 (EAS, 1st Dec. 1995).

The groups at high risk include teenagers/youth, the sexually active adult population of females and males, prostitutes, truck drivers and migrant laborers. Obudho (ibid.) carried out a study which provided data on knowledge, attitude and practice (KAP) that can be used to design intervention measures/ programs for changing sexual practices in order to avoid STDs, HIV and Aids in Kenya. The other objective of the study was to ascertain sexual practices of groups of people engaging in sex with multiple partners. It was also aimed at investigating the determinants of indiscriminate and casual sex in society; investigating the planning of sex and precautions against STDs, HIV and Aids, and investigating the consequence of indiscriminate sex and casual sex as viewed by members of the society. The study focused on eight districts; Nairobi, Nyeri, Machakos, South Nyanza (Migori, Homa-Bay and Kuria), Kisumu and Busia. The study found a widespread awareness of Aids. However, the actual knowledge of Aids appeared to be lacking, since most respondents associated the disease with other forms of “curses”. As a result of a widespread government information campaign, Aids awareness in Kenya is now approaching 100 percent, but the disease is still spreading rapidly (Lewis, 1994). The reason for this seems to lie in the beliefs of many of the tribal groups in the country. Although they are *aware* of Aids, the extent of their knowledge conflicts with their traditional beliefs. A widely held belief in the western parts of Kenya is that Aids is not a new disease. It is considered to be due to witchcraft and the local languages have different names for it; in Luo it is referred to as “Chira” and in Kikuyu, referred to as “Mukingo”.

According to the study, the younger generation appeared to be more aware of STD's, HIV and Aids, but the awareness decreases with age and increases with the level of education (Obudho, 1995). Of the districts studied, Busia came out as the leading district with a higher percentage of risk behavior, followed by Nairobi, South Nyanza and Machakos. Another important finding according to the Ministry of Health Statistics, is that out of every 20 people with Aids, 13 are married, accounting for about 65 percent of all known cases of Aids in Kenya (Kimani, 1995). This has a major effect on children who lose a mother or father to Aids or any other disease; the victims are actually the children. Statistics show a catapulting speed at which Kenyans have acquired the deadly virus, since the first case was reported in 1984. According to Kenya National Aids Control Program (KNAP) projections, by the end of the year 2000 more than 1.5 million Kenyans will carry the deadly HIV Virus. The country will also witness the deaths of more than 900,000 adults and 200,000 children between 1993 and the turn of the century (Sunday Times, 21st Nov. 1993).

Carlton and Blaire of the UNICEF country office in Nairobi have suggested that the public should view Aids as a development issue, and not as a health problem (Sunday Times, 21st Nov. 1993). This view explains how the government has woven Aids control into its policy programs. “More emphasis should now be given to behavioral changes because Aids is completely preventable”.

Statistics have indicated that an estimated 10 percent of the adult population in urban areas have contracted the disease as opposed to a marginal lower rate of 5 percent in rural areas. This reflects an association between HIV infection and urbanization. According to Ndolo (1995), groups of people most affected are usually unemployed youth who are more prone to sexual advances from older people who may think that young people are safe because they are untouched. The youth are also at higher risk because they are sexually active and likely to have many sexual partners before they settle down in marriage. Despite the global crisis, the “sugar daddy” phenomenon is worrying. Some girls still gravitate toward men old enough to be their fathers for sex liaisons that defy moral reasoning. This makes women especially more vulnerable to HIV/Aids because they are victims of socio-cultural demands and are also biologically pre-disposed (Changing Times, 6th Dec. 1993).

5.4 Perspectives on the Impact of HIV/Aids on Education

The Aids pandemic has brought in new challenges to development issues within the societies, education being the key to these development issues. Others issues are those of poverty and access to food, entitlement, medical care and income. The relationship between men and women is also being affected just as much as the relative ability of states to provide security and services for their people. The relation between the rich and the poor within society and between rich and poor societies as well as the viability of different forms of rural production and the survival strategies of different types of household and community are some of the indication of how HIV/Aids does affect societies and economies (Shaeffer, 1994; Barnett and Blaikie, 1992).

5.4.1 Impact of HIV/Aids on Education

In a study by Saoke *et al.*, (1996), they remark that “while Kenya is losing skilled labor through Aids-related deaths, the formal education system is not providing education to hundreds of thousands of children who would provide the skills for the future”. This is a clear hint to the problems facing Kenya’s education system as a result of the epidemic.

In Kenya, some private universities require an HIV test certificate in addition to academic qualifications before admission. Their line of argument is that a student who is HIV positive and has developed Aids symptoms does not have good studying prospects in terms of following a course, because he or she is likely to fall sick too often. Such institutions also argue that pupils are likely to be demoralized when they find out later that

they are HIV infected and may even abandon their studies. However, Kenya's public universities do not screen freshers/freshmen for HIV as a precondition for admission (Mburugu, 1993).

5.4.2 HIV/Aids on Girls' Education

The gains made in girls' education over the last decade will partly be reversed, for example through the impact of Aids. In larger extended families, when the principle wage earner dies, girls are likely to be the first to be taken out of school to save money or to take care of ill relative, or younger children in the family (Shaeffer, 1994; Nalo *et al.*, 1996; Saoke *et al.*, 1996).

Many sociological studies of contemporary African school children note that both girls and boys know little about biological processes of reproduction, and little about contraceptive methods. Still they engage in sexual intercourse at an earlier age than did previous generations. Omuamanam (1982) has suggested that a number of factors combined account for pupils' ignorance of sexuality and reproduction. More and more children attend boarding schools after their primary education, and are therefore separated from their relatives such as grandparents, whose traditional responsibility it is to instruct them in the society's norms, sanctions and prohibitions concerning sexual intimacy. But children are not exposed to alternative sources of information, because sex education is rarely taught in schools, or discussed between parents and children. The sexual activity of male schoolteachers with girl pupils is another factor that might be facilitating the spread of HIV/Aids, and it is therefore also a problem of increasing concern to parents and administrative officials alike⁷. More and more cases are being reported of male school teachers using their official authority, greater age and experience to take sexual advantage of school girls who are often ignorant of sexual and reproductive processes and practices.

In a study on HIV prevalence rate among teenagers in Kisumu, Kenya, it was found that there was a high rate of infection in young girls than boys within the same age group. The study found that there were few if any HIV infections among boys before the late teens. The study showed that at age 16, there were 17.9 percent infection on girls and no reported cases on boys, while at age 19, there were 33.3 percent infection on girls and only 8.6 percent on boys. The study then concluded that there were crucial factors such as age-mixing which was pushing up HIV rates in young women. If the girls' sole sex partners were boys their own age, they would run little risk of becoming infected (UNAids, 2000).

Schoolteachers are often placed in schools outside their own home district, and are frequently transferred in the course of their careers. Because they move frequently without their spouses, they constitute potential vectors of HIV transmission between communities.

⁷ This is an important area that the author has also contributed to in Sida's policy document: *Teacher Education, Teacher's Conditions and Motivation*. January 2000

School children may constitute a future high-risk group for the introduction and transmission of HIV and other STDs. Studies have shown that the age of the onset of sexual activities is decreasing, and that knowledge of sexual and reproductive processes and of contraception is limited (Obbo, 1987).

5.4.3 HIV/Aids and the Orphan Child in Kenya

One of the saddest aspects of the African Aids epidemic is that it has occurred just as structural adjustment and cost recovery programs are being implemented. These programs have reduced the ability of the medical system to give help with Aids, let alone to extend their services further into the STD field. Caldwell, *et al.*, (1989) has observed that the Structural Adjustment Programs (SAPs) have made it more imperative for schoolgirls to secure money for school fees or for their mothers to earn this money. Subsequently, there are wide-spread reports that transactional sex has increased during the SAPs period rather than declined in the face of Aids, which has subsequently led to an increase in orphan children (Odiwuor, 2000).

Many children in Kenya who have lost their parents through HIV/Aids are today traumatized by the epidemic. Some are orphaned by Aids and sometimes by other problems such as road accidents. It is no secret that if a society is to care for these traumatized children both financially and emotionally, much is needed. Without financial aid for example, these children's chances of obtaining education are lessened, and they tend to become demoralized. The psychological trauma some of these orphans undergo instills a feeling of despair on the part of a child. These victims therefore usually strive for survival by engaging in child labor. While the concept of financial support is something which is easy to understand, emotional support is an area in which the score is dismal. According to Bukusu (1995) efforts to deal with the grief most of these children undergo are insufficient, resulting in emotional starvation. He also remarks that emotional neglect is a big problem in Kenya. Bukusu (*ibid.*) further reiterates that there is a misconception when talking of care for orphans: "what many people think about and actually do is to provide physical and material needs". There is absolute neglect of the emotional needs of the orphaned children. This emotional starvation in orphans often leads to poor concentration on the part of the child. This can also lead them to have tantrums, become short-tempered and hysterical.

Orphaned children usually have only four main destinations:

- a) Staying in their parents' houses to look after themselves (often with relatives a short distance away).
- b) Going to grandparents, uncles and aunts.
- c) Going to more distant relatives or to non-relatives.

- d) Going into some kind of institutional care. There is evidence that fostered Aids orphans are likely to be removed from school on the grounds that they must help with their own support (Caldwell, *et al.*, 1989).

On a more general level, Altman (1995) has observed that the epidemiology of Aids must be understood within its social epidemic context. So too must be the community response to it. Altman (*ibid.*) alludes in his observation to the way the SAPs have affected developing countries, and the ways in which they have done this have increased income gaps within many countries, and remarks that “SAPs have hastened rapid migration to shanty towns which now make up the majority of third world metropolitan areas”.

There are fears according to UNICEF (1992) that the number of children to be orphaned by Aids in Kenya will reach one million in the next ten years. This is perhaps one of the worst impacts of Aids death on young adults. An orphan in this case, as defined by the UN, is a child under the age of 15 who has lost his/her mother to Aids. With this definition, a projection of the number of Aids orphans would increase to 600,000 by the end of the year 2000 and to almost 1 million by 2005 (See Figure. 5.3). New figures suggest that there are almost 800,000 orphans as at April 2000 (UNAids, 2000).

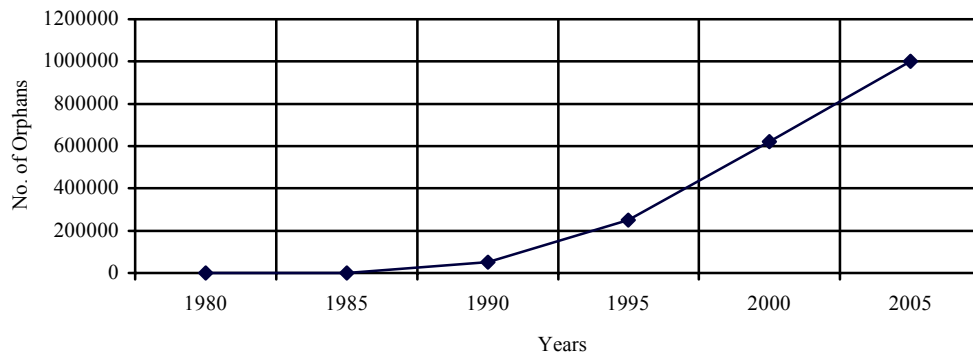


Figure 5.3 Orphanhood and Education in Kenya

Source: KNACP, MOH, NCP&D, UNICEF

Aids orphans may lack the proper care and supervision they need at a critical period of their lives. There will be a tremendous strain on social systems to cope with such a large number of orphans. At the family level there will be an increased burden on and stress for the extended family, who will try to care for these orphans. Many grandparents will be left to care for young children. Some families will be headed by children as young as 10-12 years old. At the community and national levels there will be an increased burden on

society to provide services for these children, including orphanages, health-care and school fees. Many children will go without adequate health and schooling, increasing the burden on society in future years. This study confirms some of the worst fears that have in the recent past been propounded by regional scientists and social workers. Out of 152 children who were in the study conducted by UNICEF, some 40 percent had dropped out of school because they had no school fees, uniforms, text books and local community development-”harambee” (pulling or pooling resources together for a common goal) funds. Out of the remaining 60 percent the future looked bleak. Indeed only five percent were certain they would continue with their education (Saoke & Mutemi, 1995).

Out of those who fail to obtain education, many, especially girls, resort to child labor and prostitution. In fact Nairobi and other leading urban centers in recent years has witnessed a growing number of destitute people (orphans) and increased incidence of child prostitution. Indeed Kenya has recently been cited as being among the child sex destinations for European tourists (Saoke & Mutemi, *ibid.*). This, hence, reduces the proportion of girls in schools, as they take up transactional sex for survival.

Aids orphans often drop out of school because they lack school fees, school uniform, textbooks and harambee funds. Sad as it may be, the problems faced by many of the orphans are so severe that even education is some sort of luxury that is never thought much about. This trend mainly affects girls who are incidentally co-orphaned with boys, as they assume the role of mothers at home (Saoke & Mutemi, *ibid.*). Regardless of who assumes their custody, girls play the role of mothers at the expense of their education to provide some of the essential services to their siblings. Their main occupation is in gathering food for the family. In this desperate struggle for survival they are liable to marry prematurely, or to engage in commercial sex, which predisposes them to a higher risk of HIV infection. The orphans left under custody of aunts, grandparents or other relatives, who normally are not strong enough to provide such basics as food, clothing, shelter and medical care, usually complain of poor diet and repeated discrimination.

About 43 percent of Aids orphans live in grass-thatched mud houses left by their late parents in a state of disrepair. This is a further testimony that most of the burden of Aids in Kenya is borne by the poor and poorest. The most outrageous revelation of the situation is dispossession from the late parents’ properties, which is depressingly rampant. These include the so called “customary” practices which target the “milk” cow for slaughter during the funeral “festivities” and other relatives such as uncles and brothers grabbing properties like land. The orphans are hence left with no choice other than to scrounge for food and other essentials (Saoke & Mutemi, 1995).

Some 68 percent of the orphans interviewed in the study conducted by UNICEF said their parents had left them land. However, the majority complained that after they had dropped out of school, some dominant relatives stood in their way when it came to their right to cultivate the land for their own benefit. The orphans are very vulnerable to unscrupulous relatives, especially when such orphans are girls whose rights over land left by parents are often limited according to customs.

In Homa Bay District, for example, one may find superstitious die-hards. There is a common superstition among some people that when one writes a will, he is causing (calling for) death. Due to this even those who are on the verge of death refuse to write wills in favor of their children, thus leaving them at the mercy of unscrupulous relatives. Not many of them have much property to bequeath, but a will would safeguard the children in terms of provision of the essentials, education included. Examples of this occur quite often in Homa Bay District, where the only cow left by the deceased is slaughtered during the funeral, instead of selling it and using the money to pay the school fees.

Terminal ailments are very dehumanizing. Often close relatives of Aids victims distance themselves from their sick brothers and sisters, hence their children, however young and incapable they may be, absent themselves from schools in a desperate quest for support to their ailing parents (Sunday Standard, AidsWATCH, Feb. 6, 1995). This is because of the fear and resentment and misguided beliefs people have regarding the disease. These relatives treat the sick as unclean and untouchable. The children see their parents suffer from prolonged and often undignified illness, ending in death.

5.5 The Economic Impact of Aids

Aids is already having an impact on the economic development of Kenya in a number of ways. The loss of young adults in their most productive years of life is certainly affecting the overall economic output. The magnitude of the effect could be large or small depending on several factors. If Aids is more prevalent among the economic elite, the best-educated people with the highest-paying jobs, then the impact could be much greater than the absolute number of Aids deaths would indicate. It is also important to consider how private costs of Aids are being paid (Nalo, *et al.*, 1996). These costs include expenditures for medical care, drugs, funeral expenses, etc. Most of these extra expenditures are financed out of savings, and for that reason, there is bound to be reduction in investment, which could lead to a significant reduction in economic growth. Nalo, *et al.*, (*Ibid.*) opines that:

Economies with significant underemployment such as Kenya might expect that those underemployed workers from other parts of the economy especially those in the “informal” sector could replace workers especially those in the “formal” sector who die of Aids. As a result, Aids might be expected to reduce underemployment and increase the average income of the surviving workers.

The economic impacts are likely to be larger in some sectors than others. Certainly, health care and insurance are likely to be significantly affected. The military will also be severely affected. Infection rates tend to be quite high among military personnel since many are young, sexually active men who are away from their families for long periods of time. Other sectors that require a mobile work force may also be adversely affected including

transportation, extension services and banking. The impacts on agriculture are likely to vary by agricultural system. In rainy areas, where a variety of crops are planted throughout the year, families can cope relatively well with the loss of a few laborers. They may reduce the area cultivated and cut back on crops planted, but may still be able to produce an adequate amount of food. In dry areas, where farming depends on one or two crops that must be planted and harvested at a specific time of the year, the impacts are likely to be more severe. In these areas the loss of a few workers at the crucial periods of planting and harvesting can significantly reduce the size of the harvest. In these areas, the loss of labor force because of Aids could make it difficult for families to feed themselves (Barnett and Blaikie, 1992).

5.6 Aids in Other Sectors of National Development

In this section, we refer to some of the extensive studies carried out by Tuju (1996) in Kenya in which he has analyzed the impact of HIV/Aids in different sectors of development. He found out that within the employment sector, it is already difficult enough to even get a response to an application for employment and that many a time, such responses, when they come at all, are only refusals. Besides being lucky and getting an invitation for an interview for a job, the last hurdle could then be a medical examination, which these days in most companies in Kenya invariably includes the HIV test. If the diagnosis is HIV positive, the interview result is often that the person does not qualify for the job. Prospective employers are wary of the prospects of incurring huge medical bills for new employees who are HIV positive, in addition to the ones already on the payroll. Organizations that now insist on a mandatory HIV/Aids test for all prospective employees include the blue chip/white-collar employers such as banks, insurance companies, manufacturers and even some NGOs.

In his studies Tuju (1996) also found out that even the major mortgage companies also insist on an HIV/Aids test before the prospective customer may qualify for a loan. Their simple argument is that HIV positive people will sooner or later become terminally ill and may not fulfil their mortgage obligations. These companies normally insist that the applicant takes out an insurance policy against the mortgage to protect the company from loss, should the person die before he/she completes paying the mortgage. In his precaution note Tuju (ibid.) comments that “if one has ambitions of owning a city or town house through a mortgage scheme, then it is better to think twice about one’s sexual behavior, particularly if it puts one at risk of contracting HIV/Aids”.

In Kenya today, if one wishes to buy a health insurance package or a life insurance policy, there is an HIV/Aids exclusion scheme in fine print. With medical expenses going through the roof, no insurance company in Kenya, as in many parts of the world, has shown a readiness to shoulder the responsibility of covering medical expenses for those who are HIV positive. It is unfortunate, but a fact all the same. As a human being, one may

sooner or later require costly medical attention. Then it is only sensible that one has some medical insurance. Faced with eventuality of death, the person may need to make sensible investments for his/her children so that they do not become destitute in case he/she dies.

Tuju (ibid.) also found out that some churches in Kenya already demand that couples who want to wed undergo an HIV test to satisfy themselves about their HIV status before they take their wedding vows. A survey of Nairobi-based churches established that most Christian leaders discourage people who are HIV positive from getting married. The argument, according to some pastors who were interviewed at the Nairobi Pentecostal Church, is that there is no point in conducting a Christian wedding that is doomed because either one or both spouses may die of Aids-related illnesses soon after the wedding, often leaving HIV positive children behind.

Chapter Six

Case Study Findings

6.1 Introduction

This chapter on case study findings deals with data collected from all the stakeholders within education. This includes pupils, teachers, parents, community leaders, religious leaders, district administrators, etc. Interviews conducted with schoolteachers to assess the current trend in demand for education within the school community is one example of this. This kind of data required analysis of enrolment and completion rates in that particular school vis-à-vis the population ratio in the area. All other factors relating to demographic attributes were therefore collected from the division or district education office and the planning office.

6.2 Data Collection at the School Community Level

The Headmasters in all four Schools (A, B, C, and D) were interviewed. These interviews had the purpose of discovering current trends in the demand for education in each of the respective schools. The interview aim was to find out if there were fewer children needing education compared to what might be the anticipation of the school vis-à-vis the population ratio in the area. These interviews were supported with demographic attributes, which had already been collected from the district planning office.

Information on enrolment and completion rates, demand for education, supply of education, gender issues in school/education, HIV/Aids intervention strategies within the communities, and ways of measuring impact will be dealt with independently at each school community level.

6.3 Data Analysis

Because of both the cost and sensitivity of the data, problems were found during the pilot study when it came to introducing large scale data gathering programs. However, in order to assess the quality of the (already existing) collected data, it is important to provide

sufficient background information about the nature and size of the cases, as well as the circumstances and context of the study.

Distinctions will be made between analysis that provides potentially useful information for planners and policy makers, and analyses that will more directly influence the policy-making process itself as far as the impact of HIV/Aids on youth within the formal education system in Kenya is concerned. The data collection process included focus group discussions with school Headmasters, teachers, pupils, parents and guardians, district education administrators, district health officials, and other community leaders outside the education system.

6.3.1 School A-1

School A in district 1 has a total pupil population of 450, with a single stream up to Grade 8. The school is situated in a poor community, and faces lack of basic materials such as textbooks, teaching aids and teaching materials. However, it is not uncommon for teachers to buy basic textbooks and teachers' guides with their own money. The Parent Teachers Association (PTA) also contributes to the upkeep of the school. For example, the parents are required to supply black oil paint to paint the black walls in all the classrooms in the school. While the mothers offer help with maintenance of the school building by smearing them constantly with mud and cow-dung to keep up the appearance of the school, the fathers help with activities like digging and building new pit latrines. The community had plans to upgrade the school to have a wing for secondary level pupils. However, the construction was never completed.

While we were visiting this school, it so happened that there was also a workshop on HIV/Aids going on, which was organized by the R.A.T.E.M.A (Rangwe Teachers Movement against HIV/Aids) teachers from that division. The Government of Kenya/African Medical and Research Foundation (GOK/AMREF) sponsored the workshop. The workshop was meant to educate drama and music teachers on how to organize extravaganzas on Aids awareness for both school pupils and the community at large. The extravaganzas, besides being performed during school days for the pupils, were also being performed to the general public during public holidays with the approval of the D.E.O. Some of the themes of the workshop were on how to live positively with the Aids disease, abstinence, how to talk to youth about Aids, etc. During the workshop, which had an attendance of 32 teachers, it was resolved that the teacher is the most consistent presence in a youth's life, especially considering the fact that currently, almost all children take part in private tuition during the non school days. It is therefore very important that a teacher knows how to communicate with his/her pupils on the risks of HIV/Aids. The R.A.T.E.M.A workshop proposed a program known as the RATEMA Behavioral Change Education Program, the purpose of which was to send teachers within the division out as

crusaders and fight Aids. These teachers are supposed to share knowledge between themselves and health professionals.

So far the group had performed 13 extravaganzas within a six-month period, and had successfully dispelled misinformation about their purpose. Some members of the community had understood incorrectly that they were spreading Aids rather than spreading information about Aids. The workshop of teachers was also promised a one-week HIV counseling workshop by the AMREF, which also had other ongoing projects in the division. Besides the HIV/Aids project, they also had projects in relation to water and sanitation, mobile clinics and family planning, and provided education on nutrition and training of Traditional Birth Attendants (T.B.A).

The R.A.T.E.M.A workshop included different teachers' choirs that shared harmony and folklore, aimed at sending messages of awareness. The messages in the songs showed the impact that Aids has had on life in this community. One song in particular provided an especially accurate picture, "*Tho Tiekoo Yawa*", literally meaning, "death is finishing our people". This song, from the few lines picked up, is all about the impact that Aids has on the community. Aids has left a lot of homes deserted within this community. The community is worried that their kinsmen are perishing. The second chorus tells of the onset of HIV/Aids and the ensuing resentment. The community thought that the professionals were lying about Aids, but in actual fact it has brought not only death, but poverty as well. The song also goes on to describe the basic symptoms of Aids patients, the wasting away of the victims, it does not have a cure, it is not "chira", it spares nobody, not even a married woman "migogo", children or even widows, "mond liete".

Already, we can see in this scenario that Aids already has its place in the activities of the school. The education system plans its programs with the HIV/Aids pandemic in mind. Rather than spending time teaching academics, teachers devote valuable time to the fight against Aids. The message in the classroom teachings has to be broader to include the community at large. These messages, especially if they are meant for a broader society, must also be appropriate for a wider range of pupils, taking their age group into consideration.

Aids is having an impact on the education system because we can now see that the system is adopting a new method of teaching which involves more creativity and more interaction. The language, as we can see from the song, is the local language, the message can reach not only a greater number of the population, but also gives them the chance to thoroughly understand the message. The language of instruction in the Kenyan school is English and Kiswahili, except for the lower primary school where the local vernacular is encouraged. HIV/Aids has also turned the school into an advocate for sex education (family life education or moral education). Variations could be seen in how the methodologies have been adapted by the individual schools. It would be prudent for the education system to come up with a unified national program.

A. Responses from School A

The number of pupils from this school who responded to the checklist and the perception questionnaire was very low since we were only dealing with those pupils who were in their last grade/grades within the primary level of education. For example, in School A, only “above average pupils” were allowed to proceed from Grade 7 to Grade 8. What this means is that pupils who did not show any probability of passing the national examinations in Grade 8 were then asked to repeat Grade 7. This situation therefore left very few pupils who proceeded to the 8th grade. School A had a total teacher population of 18, with only 1 female teacher. Additionally, the school had a pre-primary unit to cater for those children who have not yet reached the primary school age and this unit too had 1 female teacher taking care of it. The ratio of male versus female members of staff in this school caused some concern to the researcher who felt there was no equal representation within the teaching staff. This unequal ratio of male to female teachers provides the girl pupils with inadequate exposure to female role models.

The poor staffing ratio was attributed to the fact that female teachers tend to marry men who work in the towns, officers in various departments at the divisional or district level. The Teachers’ Service Commission (T.S.C), offers the female teachers the opportunity to be closer to their husbands and thus form the bulk of the teaching staff in urban areas. As one teacher remarked, “a Division Education Officer (D.E.O) with his two wives will always see to it that both are posted near his working place at the divisional headquarters.” The point here is that female teachers dominate urban schools, while the male teachers dominate rural schools.

The Headmaster of school A reported that the school was performing well in the national examinations. He pointed out that in the previous year, the school had 6 pupils joining provincial secondary schools, and several joined the district secondary schools. He did not deny allegations of forcing pupils to repeat Grade 7 if the teachers proved that they could not perform well in the Grade 8 national examination. The Headmaster said this was only done with the mutual consent of both the parents and the teachers.

B. New Roles: Peer Teaching

School A-1 had adopted a method whereby pupils in upper Grades 6, 7 and 8, were required to form a group to help educate each other on matters of HIV/Aids. Some pupils were taught communication skills to help present information on HIV/Aids to others. There is an example of a poem created and recited by a Grade 7 pupil: Brenda Akinyi. The poem is entitled: “Ayaki no, Onang’o ji Otieko” (literally meaning: “Aids is Wiping out the Population”). This poem, coming from a Grade 7 pupil is rich in information, both for her peers, the entire school, and even for the entire community. The poem starts by introducing

HIV/Aids by saying it has no cure yet. The disease takes its victims straight to their graves, leaving behind deserted homes and orphaned children.

The poem then goes on to talk about the youth of today, describing how they dress and carry themselves around imitating movie stars. It then ascertains that a lot of the youth are already dying of Aids. However, the poem also has a message of precaution, warning people to be very careful with quack doctors in the villages who use needles and syringes that have not been sterilized. Furthermore, people should also be very careful about blood transfusions being carried out without proper tests. Lastly the poem gives a word of precaution that the community should look carefully at old traditions and beliefs such as wife inheritance and polygamy.

C. Absenteeism from Class

In our discussion with the teachers from School A, they brought up a new dimension, i.e. the concept of absenteeism. Teachers usually have classes with up to 60 pupils, and on average end up teaching only an average of 40 pupils at a time. Every day, at least 20 pupils are absent from class. By the end of the week, the same pupil could have been absent more than 2 or 3 times. This has a great deal of impact on the effectiveness of the teaching. Furthermore, absent pupils fail to catch up with whatever they missed while absent from the classroom. These pupils never have a follow-up of what was taught during their absence, they say “let bygones be bygones”. As one teacher pointed out during the FGD, “we are just processing half-baked pupils for a future Kenya”. Most of the male pupils in this rural school were basically out of school. They were working at the surrounding Lake Victoria beaches as fishmongers, or simply picking up fish that had been left ashore by the fishermen for their day’s meal or to sell and make some money. Teachers here called for a change in the content and methods of education to take into consideration the current nature of the pupils ‘study habits’.

The teachers have observed that absenteeism of the girls was due to the need to attend a funeral of a relative in some distant place. When it comes to funerals in the neighborhood, or sickness in the families, they are usually attended by the same proportion of boys and girls. The teachers also pointed out that discussion within PTA meetings usually concentrates on financial matters rather than addressing sensitive issues of what happens in pupils’ homes. Another aspect pointed out was that grandparents were left with the responsibility of taking care of their orphaned grandchildren. Some of these grandparents were either too old or too weak to work in the fields. In this case, during the planting, weeding and harvesting seasons, these children had to leave school to help with farm duties. It was also found to be common in this school that during some seasons, most pupils are absent from school, selling pineapples for their parents at the distant district headquarters of Homa Bay. The pupils were absent from the school to take part in the more urgent needs of generating income to support their families. The PTA agreed that some of

the absenteeism could be reduced if the teachers were given the authority to set some type of ultimatum to either the parents or the guardians about school attendance.

D. Fewer Girls Completing Primary School.

We were able to ascertain from the school Headmaster that at the onset of schooling, Grade 1, the ratio of girls to boys is 50:50. This ratio remains fairly consistent until Grade 4. The Headmaster pointed out that the enrolment rate for girls drops from Grade 4 onwards. "Education is not valued so much in this area for girls" thus the number of girls enrolled in school in Grade 8 tends to be very low. A proportion of girls proceed to Grade 7, and when they do not perform well in that grade, the school requests the parents to let these girls repeat, though most parents do express "a wish that their daughters could just go to Grade 8 and finish there." Some parents and guardians like aunts and uncles choose to stay with their girls at home or enroll them in courses. Tailoring is quite popular, since it does not demand a lot of money and is an investment for self-employment. Once these girls are at home, they tend to opt for marriage, as they find it more respectable than to stay at home baby-sitting for their siblings or their relative's children.

It was also reported that girls in this community start school a bit late and that by the time they reach the upper-primary grades, many of them are over 15 years old. The problem in this case is that they have reached the utmost limits of the adolescent stage, and without proper guidance and counseling the first thought that dominates their minds is nothing other than marriage. In answer to the question as to why they start school late, it was reported that the education demand is too high for most of the parents, so these girls always get second chance after the boys to attend school. It has therefore been observed that the highest drop-out rate among girls is in Grades 4, 5 and 6.

From the discussion with the school headmaster, it is evident that boys are more favored when it comes to education, and especially when there are limited resources to be shared between the two genders. This notion, since it is well known in the community, could then be a cause for girls to drop out of school, since they already feel that they are a burden. The girls take solace in marriage as an option since it gives them a sense of belonging and assurance in life. The school headmaster cited a case, where the parents asked a girl from the school in Grade 4 to go help her ailing sister who was married and living in the neighboring village. The sister eventually died from complications which were most likely the symptoms of Aids. The young girl in Grade 4 was then asked to take the position of her departed sister, as wife. She stayed for a while in married life, but on realizing that she could not cope, she then opted out and came back to this school to continue in Grade 4 where she had left some two years before. She could not cope with her schooling either as most of her peers were two years ahead in Grade 6 or as she was now too mature for her grade. She then had to drop-out of school altogether.

E. Girl Child Pregnancy

The school headmaster confirmed that there were at least 3 to 5 cases of pregnancy among schoolgirls each year. He maintained that these pregnancies were caused by out of school youths and adults in the community rather than fellow classmates. The headmaster explained that the girls in the school and especially in the upper Grades, 7 and 8, were notorious for escaping from night prep studies to go to the discos in the local trading centers. These cases had been reported to the administrative authorities, and they were looking into that matter, especially since there were traces of experimentation with alcohol and drugs involved as well. It was important to know whether these girls could be allowed back to school after giving birth. The study established that only girls in Grades 6, 7, and 8 could be allowed to come back and finish their studies, and not as much as those in the lower Grades.

The fact that the pregnancies were caused by persons from outside the school causes a lot of concern. It might be assumed that these girls were looking for a way of getting married earlier to escape from economically unfortunate families. Another hypothesis was that older men in the community were seeking these young, presumably still uninfected girls to impregnate, and possibly get a chance of marrying. Once the girls were pregnant, there was less resistance from the parents to their marrying. More importantly, there was the concern that there might be a lot of unprotected sex in the area. A good number of these youths engage in sex at an age when they cannot fully appreciate the consequence of their actions, including unwanted pregnancies, abortions, and STDs including HIV/Aids. Another lesson we learned here was that girls become sexually active at a much younger age than boys do. Finally, an increase in HIV/Aids related deaths in the community; this situation made the girl child more vulnerable to HIV infection.

F. HIV/Aids Infection within the School

The Headmaster denied the presence of HIV/Aids within the school. Later on when having a discussion with the parents group there was one case that came up. One father confirmed to us that his 12-year-old son, Tobias⁸, had contracted the Aids virus from the needle of a quack doctor. The Father explained that an unreliable doctor who had treated his son for malaria exposed Tobias to the virus. Fifteen months later, Tobias was diagnosed to be HIV positive during a visit to the district hospital for the swellings he had all over his body. Since then, Tobias's class attendance has never been regular. Tobias's father told us how he has spent much of his savings on medical treatment for his son. He was forced to sell

⁸ Unless otherwise indicated throughout the findings, names like Tobias are pseudonyms and the stories have been disguised or even transformed in significant ways in the interest of privacy and ethical considerations.

two of his milk cows, which were an important source of food for the family. The father explained, “the suffering of a child through sickness cannot allow a parent to hold on to any savings, if there were any in the first place.” He was planning to sell the last remaining two cows, so as to enable him to take Tobias for treatment from a herbalist in neighboring Tanzania. The father had been told that this herbalist is quite well known, even outside Africa for his ability to treat terminal illnesses. This treatment would take Tobias out of school for approximately one month.

From Tobias’s story, we can deduce the extent of misconception of HIV/Aids in this community. The message Brenda’s poem sends about being wary of quack doctors is important for this community. More so, the belief that herbalists can treat the HIV/Aids is still very rampant in this community, regardless of whether they are being robbed of their last savings by them.

The school employees described how the community was recently experiencing a great many Aids-related cases of death. No postmortems were done on local deaths, which never reach the district hospital. “Every weekend, there is at least one burial in the area neighboring the school. Just within a three kilometer radius of the school there could be up to three funerals per week.” These included cases of teachers’ deaths as well. In such a situation, the school was affected. In a situation whereby the death of a teacher occurred, all the schools in the community had to take at least three days off to attend and participate at the funeral. The male pupils were organized to help in building temporary shades to accommodate the guests who attended the funeral. Girls had to participate in fetching firewood and water for preparing meals for the guests. It is a custom in this part of the community to feast at funeral places.

The PTA resolved that the custom of feasting at funeral places was a custom that had to be discontinued as it impoverished the bereaved families of whatever last savings they had. In the case of a teacher’s death, all the pupils in the neighboring schools were required to donate one Kenyan shilling (Ksh)⁹ towards the bereaved family to help in buying food for the guests. The teachers were also required to contribute. At the time of this discussion, the PTA confirmed to us that the division had resolved to stop taxing the pupils of this one-shilling funeral fee. There were so many deaths each week that these customs had become financially debilitating. These discussions also outlined the problems being experienced by pupils coming from homes where the death of a parent or parents had occurred. These pupils had sporadic school attendance. Absences were common during the local market days. Furthermore, some of the schoolboys did not attend school to work in the district’s nucleus sugar cane plantation of SONY. These boys could work as cane cutters to provide some income for the family. Most of these cases were in situations where the sole breadwinner had died. It was therefore very predictable that these pupils might never return to school again.

⁹ At the time of this publication, 74 Kenyan Shillings were equal to approximately 1 US dollar.

G. Supply of Teachers

This is one area in which the community, through the PTA, had reason to criticize the government. HIV/Aids does not spare anybody and it has been affecting virtually all categories of people within this particular community. Teachers, who play an important role in the community, have also fallen victim to this killer disease. It is relevant to question how the school/community has dealt with this situation. “Off the record,” the PTA acknowledged that there have been cases of teachers in the community getting sick with the Aids virus. The best support that the Teachers Service Commission (TSC) has offered to them is the chance of being transferred to a school near their home. The problem is that many of these teachers will have to work right up until their deaths. Most of the sick teachers find it impossible and inappropriate to ask for permission to stay away from work on health grounds. They worry that taking sick days could cause them to lose their jobs. The PTA told us that if such permission is granted, then in most cases it is done locally between the school headmaster and the teacher.

It is important that these infected teachers get leave to seek some form of medical attention. The problem is that such leave can lead to a continuous cycle of weeks in the hospital alternating with weeks teaching. The sick leave becomes so regular that the education office would in most cases choose to terminate the teacher’s employment. This could therefore mean additional financial problems for the teachers, leading to an inability to buy the necessary medication. During this period when the teacher is “on and off sick”, his or her teaching lessons are affected. Lessons go uncovered and during the teachers absence supply teachers are not brought in. We learned that a new teacher is usually not brought in until after the ailing teacher has died. It is the pupils who suffer most in such circumstances.

Most schools in this community suffer from understaffing. The procedure a school headmaster has to follow to get a teacher replaced is very cumbersome. The Headmaster has to report the matter to the zonal inspector of schools. He must make a formal request to the divisional level. The chain of hierarchy continues before finally someone gives the authorization for a replacement. Sometimes such replacements could take up to one year before they are sorted out. One observation we made was that the distribution of staff was ineffective. For example, some schools within the zone had more teachers than they actually needed while others, like school A, had too few teachers.

H. Prevalence of HIV/Aids

During the PTA meeting, they all resolved that Aids awareness was very low in this community. The majority of young people were either infected themselves with Aids or affected by the disease via the death of family members, teachers, and friends. In essence, there were actually very few people in the community who could help with the

maintenance and running of the school. In our focus group discussion, the PTA agreed that most people in the community were not aware of their HIV/Aids situations, and this was of concern to the community. The community still saw HIV/Aids as a health and social problem. There were many that held on to traditional beliefs like viewing the disease as a curse. This makes the situation worse for those who never accept that they have Aids.

A discussion with an official from the Ministry of Health who was working in the local dispensary provided some insight into the prevalence of aids. The official described one situation where Joram, after watching his wife and two children die, tested HIV positive himself. This man sold his livestock, like Tobias's father, to pay for the services of a witchdoctor. The witchdoctor diagnosed his problem as "Chira." The witchdoctor explained too that his disease was the result of a curse that he had brought on himself by seeing his mother-in-law naked while she was bathing behind her house over a year ago. The health official explained that most families in the area seek healing from witchdoctors, herbalists or spiritual healers on discovering that they are HIV positive. One consequence of the pandemic in the surrounding school community was the increase in child labor, especially within the large sugar cane plantation of SONY. There were also cases of children who were taken out of school to help care for sick parents and relations. In one case we saw a schoolgirl uprooted from her family to go and help her dying sister.

I. Family Life Education (FLE), Sex Education, and Moral Education

"It does not make any difference what name they give to it", says one teacher. The problem is that not even the teachers will agree to teach about sex, sexuality and morality. Teachers in this school pointed out that the government has failed to approach this subject with sensitivity. The modality used in introducing the FLE to schools is the same modality that the government had used to introduce the unsuccessful 8-4-4-education system. Teachers in school A feel that the 8-4-4 system has failed. They blamed it on improper facilities. "In the 8-4-4 system, we do not have, for example, the practical tools needed in the woodwork class, yet we can maintain the class teaching by giving the pupils theoretical lessons or improvising on these tools and get by." This cannot be the case with FLE, "we cannot improvise a condom" maintained one teacher. More so, no teacher felt comfortable giving this kind of information to children. This is partly due to their lack of participation in the planning stages as well as the absence of some type of in-service training to educate the teacher on this topic.

Teachers in school A have understood the importance of effectively teaching FLE. They see that it has the potential to be confusing for teachers, especially without proper training in the subject matter. These teachers also were of the opinion that before introducing the subject in schools, a proper survey must be carried out, and use must be made of pilot schools in the implementation process.

J. Factors Promoting the Spread of HIV/Aids in School A Community.

It was observed by government administrators, church leaders, and professionals that the practices going on at the fishing beaches along Lake Victoria were a major contributory factor to the spread of HIV/Aids in this area. At the fishing beaches, the FGD was informed that a *laissez faire* attitude had been adopted in these areas. In these places, there are beach leaders whose work it is to oversee what goes on at the beaches. Those who wish to buy fish from the beach have to be registered with the beach leader before they can be allowed to do this. Women are the ones usually sent to the beach to purchase the fish from the fishermen, and carry them inland to the markets.

Most of the fishing is done at night and early dawn, so that by 9 a.m., all the fish is already sold out. A woman who needs fish has one of two options. She can either spend the night at the beach awaiting the fishermen to come in with their catch or she can make the journey to the beach very early in the morning before everything is sold out. The best alternative is to spend the night at the beaches, which usually have makeshift houses and eating-places. The beach leader therefore then assigns these women to men who “take care” of them whenever they come to purchase fish. Any woman who refuses to be assigned a caretaker is never allowed to do business on that beach, and in most cases is chased off of the beach. The beach leaders claim that if she does not want to have a caretaker then it means she has intentions of prostituting herself within the beach with all the fishermen. Our analysis shows us that the “beach leader syndrome” is most likely to be the major vector contributing to the spread of HIV/Aids on these beaches. Also, since most of the major fishing is carried out at night for the small “Omena” (sardines) or at dawn for the “Mbuta” (Nile perch) fish, the fishermen then have the rest of the day idling around, but with a lot of money from the sales. The excess money in the hands of these fishermen attracts young girls and boys of school going age. These girls and boys try to generate income on the beaches. The group also admitted that the “beach leader syndrome” often leads these young people into promiscuous behavior (prostitution) for financial gains.

Another interesting finding came in an interview with a member from the AMREF group that is engaged in the HIV/Aids/STI campaign in the region. The researcher learned that sex hunters usually consider young girls in the rural areas within the district safer than their urban counterparts. The interviewee drew a conclusion to the effect that the rural girls are now suffering the scourge of HIV/Aids due to biased cultural attitudes. In this region, the researcher learned that most men believe that young girls are not HIV positive. There is also a belief that only females can transmit sexually transmitted infections (STIs) and HIV/Aids. “Even when the men take precautions, which is very rare, the underlying reason is to protect themselves from the girls and not to protect the girls.” The cultural practice in the area is that young men from about 14 years old are required to have their own separate sleeping quarters (*Simba*), where they could engage in sexual relationships with different girls. These young girls commonly find themselves wholly unable to negotiate the timing

of sex and the conditions under which it occurs. Many of them feel powerless even to protect themselves against pregnancy.

6.3.2 School B-1

This is an urban school in district 1. It did not show much difference in terms of the magnitude of the problems it faced as compared to the rural school A, though there were some differences in the enrolment rates. In this school, the enrolment rate was higher than in school A, as there was a high demand for education in this community. Most of the parents were relatively well educated, working as civil servants or having their own businesses. The teachers were also more motivated in their work. They had good houses within the school compound, and their pupils were more or less committed to their studies. There were few cases of drop-out, and cases of absenteeism could be traced and attributed to other factors like the abrupt transfer of parents working within the civil service. This could make it very difficult to keep track of the pupils, as was the case in the rural school. Since it was not so easy to keep records of those pupils who transferred to other schools, it was therefore not easy to actualize the causes of absenteeism or drop-out. However, an insight into some information on school B will be able to show whether these drop-outs are due to the impact of HIV/Aids or not.

According to an interview with parents in school A, the name *Ayaki* was designated to mean Aids. In this district, parents noted that there was an increase in death among the community's daughters and sons working in the cities. One of the parents during the discussion was quick to point out that people in the city are less constrained by community norms. Furthermore, better finances give the inhabitants the ability to afford the lifestyles they choose. This often places them at risk of infection. This group was therefore trying to attribute the high prevalence of Aids in their community to the people who move back and forth to the cities.

There were cases of girl pregnancy reported in this urban school and these girls were not allowed to go back to school after they gave birth, a situation which also contributed to the drop-out rates in this school community. This situation could therefore be a contributory factor to unsafe sex within the school community. There were also reported cases of some of the girls getting married at a young age of 13 or 14 years. Another point brought up by a parent was that of sex abuse, either from the teachers or some influential grown-ups. In another interview with one of the church leaders and some people in his congregation, it was pointed out that older men are luring young schoolgirls into sex by offering them presents or money. These older men are taking solace in young girls, under the assumption that they are safer and not yet infected by the HIV/Aids virus. A parent in the congregation, whose daughter was a pupil in school A, reacted by saying, "there is a belief in the community that young girls in school were safe from the virus. This belief was therefore affecting the education of girls in the school community since most people were

targeting these girls for marriage.” The parent was concerned that there should be stricter laws protecting young girls below the compulsory school age from unscrupulous prospective husbands. The Headmaster also added that according to the government records, pregnant girls are allowed back into the school system after giving birth. However, all remains on paper at the ministry and fails to be implemented by the PTA, maintaining that it will give other pupils a bad example.

A. Prevalence of HIV/Aids in School B Community

“Why Homa Bay District has uniquely suffered from HIV/Aids may never be satisfactorily understood”, observes one church leader in Homa Bay town. He feels that the district has certainly suffered tragic misfortune in being exposed to HIV before it made inroads into many other parts of the country. This is largely due to its proximity with Uganda, a country torn by the scourge much earlier than the other countries within the region. He also blamed the socio-cultural factors such as “sexual networking”, polygamy, and wife inheritance as major contributors to the spread of the disease. During an interview with the community church leader, he maintained certain features of Luo social life tend to encourage multiple sexual partners and frequent partner change that makes them especially vulnerable to Aids. The church leader affirmed that the Luo puts considerable value on children and minimal value on marriage. This church leader went on to describe how in the traditional era, sexuality outside marriage was strongly opposed by the Luo culture. However, in modern times, it is not condoned even if it leads to pregnancy. “There is an increase not only in the number of illegitimate children, but also an increase in the number of orphans since the advent of HIV/Aids in this district”. He further went on to caution against trying to prove a relationship between cultural values and the spread of HIV within Kenya. This would require cross-cultural evidence on sexual behavior and not just attitudes, an issue that is always downplayed by the politicians.

There were discussions with teachers in this school as well as with the Headmaster. There was also the FGD with both the PTA and the various community leaders, and the administration leaders, since this school was situated in the headquarters. One very important finding from the discussions with various groups in this school community was eagerness in blaming traditions and immorality for the more rapid spread of Aids in this part of the country and more specifically, among the Luo community at large. The group discussions went further to reveal that the Aids scourge has left many people poor in the community, leaving them with few choices or alternatives in life. As one teacher expressed: “the whole community is sick and nobody seems to have spare money for rehabilitating the school buildings.” As sad as the situation sounds, the Kenyan government is in a state of economic crisis. Priority is being put on the immediate emergencies, which do not include maintenance funds for schools.

The FGD ascertained that the major impact of HIV/Aids in this community has been the creation of poverty within the whole district. This view was expressed by some of the people at the FGD who are also district heads in various ministries such as the Ministry of Agriculture who were able to assess the situation of poverty in all corners of the district.

Some of the church leaders interviewed were quick to point out that ignorance of the fact that Aids is incurable was a major contributing factor to the prevalence of Aids in this community. Some of the members at the meeting were talking on behalf of the school B community, while others were talking on behalf of the entire district. For example individuals from school A, a rural school in the same district, gave information on cases where families had exhausted their resources. These individuals described how families had sold all their belongings as in the example of Tobias's father selling their cows.

In response to a question on wife inheritance in the community, the PTA claimed that they had taken a very clear stand on the issue. They argued that wife inheritance was there to stay within the community. They were of the opinion that the tradition should be redefined rather than used as a scapegoat for the spread of HIV/Aids in the community. "We suggest a modification of wife inheritance for the 21st century, whereby the community leaders go out to make a distinction between HIV/Aids and "*chira*", as well as giving alternative suggestions to wife inheritance without performing sexual rites." One member at the meeting gave his own example where his own blood brother died leaving a wife (34 years old) with 4 children. The man said it is his responsibility to take care of his dead brother's family, educating his children and seeing to it that their grass-thatched mud house never leaks. He said that he has customarily inherited his brother's wives, but has vowed never to perform sexual rites.

B. Aids Orphans in the Township.

The community elders and the PTA expressed concern at the constant increase in the number of orphans in the township. The headmaster also confirmed that many young girl orphans are often absent from school and eventually drop out to venture into commercial sex work to feed their siblings. This lifestyle exposes them to HIV. A large percentage of orphans drop out of school because they do not have school fees, uniforms and textbooks. In an interview with one of the local church elders in the school community in Homa Bay District, he said, "sad as these facts may be, the problems faced by many children orphaned by Aids are so severe that to them even education is a luxury."

The headmaster of school B gave an example of one pupil, 13 years old, who dropped out of school because her last parent, her mother, started wasting away with sickness and did not have any more strength to carry on. The young girl therefore took up a job in a local grocery store, helping with the packing of sugar and salt, so that she could help feed her two younger brothers and a sister. The wages she was getting were very meager, about

Ksh. 500 (US\$6.7) per month. The shop owner took advantage of her situation and the following year, added her to the line-up of his wives, where she was number three.

Within the PTA discussions, another dimension of the effects of HIV/Aids on education in this community was brought up. A case was described where two eleven-year-old twin brothers, Peter and James, and their younger sister Jane, who was seven, were left in the custody of their aunt. The aunt hired them out to work as baby sitters, telling them that the money they would earn would be used to educate them, when in fact, she ended up using the income to educate her own children. The orphans reported the matter to their former school headmaster with the hope that the headmaster could get them into an orphanage. The children hoped to get a chance of continuing with their education in the orphanage. The opportunity never came up as the homes were becoming overcrowded. Later, the twins abandoned the house-help job and resorted to begging in the streets of Homa Bay town. They went on to work at the lakeside car wash and became exploited by another opportunist. However, the twins liked the car wash job, as it not only provided them with some skills, it also gave them the opportunity to have money of their own.

Another case is David, a Grade 5 pupil in school B. His parents were once working in this town as civil servants, but they died at different times within a span of two years. David, whose home is not so far from town, was left an orphan, to be taken care of by his 67 year-old grandmother. When we talked to the PTA, they were very much aware of David's case and many similar cases. The PTA said that orphans who are taken care of by their grandparents find it difficult to meet the financial costs associated with schooling e.g. the compulsory school uniforms, books, pencils, and all the other things that should enable a child to function normally in the school. David's elderly grandmother had to make several journeys to the school to explain her financial dilemma to the headmaster. The headmaster maintained he could not bend the rules for just one pupil. David therefore had to drop out of school not for any other reasons than lack of school uniform, pencils and exercise books to write in.

The members of the PTA in this school were of the opinion that perhaps the Kenya government could call for the introduction of a law on property rights to ensure that children orphaned as a result of Aids had access to their parents property when they died. The teachers in this school described how they routinely put aside what little they could from their meager salaries. "We the poor teachers give more help to needy children than all the parliamentarians with their bulky incomes," retorted one teacher.

Fourteen-year-old Billy Boy dropped out of school B in Grade 7 after his father, who was the breadwinner, died from Aids-related symptoms. The father was a government employee in this town and had put in many years of service. Billy Boy claims that when his father died, his uncle promised to let their lives continue normally as it was before his father's death. The uncle inherited Billy Boy's mother and all their assets. The uncle then went on and made claims on Billy Boy's father's death gratuity and insurance from the government, claiming that he was the sole custodian of the family. After laying his hands

on all the money, the uncle took off, never to be heard of again. This led to Billy Boy dropping out of school, as there were no means to pay for his education. He then had to assume the responsibilities of taking care of their home including his mother who had started showing signs of the terminal disease.

Throughout these case studies, we were not only able to learn about the cause of drop-out in school B, but also the exploitative nature of some of the caretakers. It is also evident that most of the orphans would be willing to keep up with their studies if there were no financial constraint. Orphans roam the streets and market place in Homa Bay town where they are likely to get menial jobs as laborers, or commit petty crimes to survive. There was evidence that Aids children whose parents have died from Aids are particularly vulnerable to this scenario. This can put the child into a cycle in which Aids controls their destiny.

B. Absenteeism from School

The proximity of school B to the town makes it easier for children who do not have proper supervision from parents and guardians to miss school. The reasons they miss school are the same as in school A. The teachers in this school do not know how to cope with the large amounts of absenteeism, which makes it difficult for them to cover the material in the national curriculum. This situation has put pressure on the teacher to offer private tuition to the pupils during holidays in order to cover the syllabus.

Nonetheless, through some conversations with different persons in the community, it was made evident to us that some have recommended that one way to fight the Aids scourge affecting the youths is to put pressure on them to marry earlier. According to the PTA, this is based on the belief that it might reduce sexual experimentation before marriage. To some of the parents, being in a monogamous relationship will help the pupils both avoid infection and complete their studies. It is of great concern that such a view might be accepted among educational planners at a national level. The researcher did not find any case of a married pupil in either of the two schools in Homa Bay District. However, it would be more reasonable to maintain that such a case, if it does exist, would also be a cause of rather than a deterrent to absenteeism from school. Even faced with a widespread Aids epidemic, it will take exceptional resourcefulness from individual pupils to keep them safe from the risk of becoming infected.

It is important to note that the impact of HIV/Aids on education in this area is also extended to those with physical disabilities. There was one case in the study where a parent of a blind pupil showed concern. This blind boy's mother expressed sentiments as to why persons with handicaps like her son were not taken care of in the dissemination of information about Aids. "Will the blind persons be considered only after they have all been wiped out by the scourge?" The researcher felt that it was a very important case worth noting to the attention of the policy makers and all the agencies concerned with the HIV/Aids menace and information dissemination.

6.3.3 School C-2

The school was in the rural area of Murang'a District and had a total of 655 pupils, including 331 boys and 324 girls. There were 48 pupils in Grade 8, 25 boys and 23 girls who responded to the checklist. The school had a double stream except for Grades 5 and 6, which were single. There was a teaching staff comprised of 16 teachers. There were ten male and six female teachers. The school also charged pupils 300 Kenyan shillings towards a development fund.

An interesting finding in this school was that the majority of pupils had no knowledge of anyone in their neighborhood suffering from HIV/Aids. However, 98 percent of these pupils had heard about Aids, and knew that it was one of the major health problems facing Kenya. On the other hand, they did not think it was a problem in their school. Subsequent discussions with the teachers gave similar findings. One exception was the story of a person who contracted Aids in the village adjacent to the school community. The teachers pointed out that the person had been living in Nairobi, and probably returned to this village to die. Within this school HIV/Aids was seen as "their problem" and not "ours". The researcher was not prepared for such a response. Especially after looking at the district hospital records, which clearly showed the extent of the epidemic in this region. The researcher was in a dilemma about how to continue with any type of productive discussion about Aids or the moral behavior of pupils. It was in this type of atmosphere that the first discussions ended.

Later, he asked the headmaster to be given a second chance to visit the school and talk with the teachers and parents. It took a period of six months for the second visit to be arranged. The atmosphere was a bit more relaxed than in the first attempt. From a more anthropological perspective it was obvious that this community was quite stoic. The local people never share news of family sickness with those other than members of the immediate family. Information about sickness or death is kept within the confines of the family. In this case study, their stoic attitude was being seen as a means of bearing any tragedies they were faced with. They do not confide in strangers making them dispassionate to researchers. One of the parents said that there was a lot of secrecy in their culture. "People do not talk openly about their illnesses or diseases to outsiders. Sickness is a family matter, involving only close relatives". That could have been the reason why the researcher was not getting enough responses from the school. The responses were contradicting the district's HIV/Aids prevalence figures. The second visit yielded more information. Rapport had been established with the members of the PTA and they were willing to share some information with the researcher.

A. Trial Marriages

This was an issue that was very prominent within the discussion with the PTA group in this community. Through our FGD, parents repeatedly talked about the concept of trial marriage. This came up in their responses to a question on why there were fewer girls in the upper-primary classes. They all agreed that trial marriage has become common, and is even supported by most parents. One of the teachers attempted to explain trial marriages to the researcher. She pointed out that young people cohabit for some time, even have children before the formal marriage ceremony occurs. In these cases, the woman ends up by being “thrown out” of her family. The result of these circumstances is that many young single mothers whose trial marriages did not work end up out of school and unable to have regular paying jobs.

Even in situations where these girls did not practice “full time” prostitution, a lot of them were engaged in prostitution in one way or another. Prostitution became their only option of getting income to help feed their children. This situation posed a risk of spreading the HIV/Aids epidemic and it jeopardized national gains in combating illiteracy levels among girls. This aspect of girl pregnancy has forced school C to look closely at whether or not they should accept the girls back to school after giving birth.

B. Aids Orphans in the School Community

A DEO pointed out that Aids orphans suffered from loss of identity, disinheritance, rejection, and other problems within this community. This prompted these orphans to engage in child labor as a means of survival. The young children selling mangoes and passion fruit to motorists on the main roads to the capital city of Nairobi or to the Provincial capital town of Murang’a, was one example of this. In most cases, these children eventually ended up dropping out of school, contributing to the number of uneducated in the workforce.

The PTA group also pointed out some examples of what they viewed as HIV/Aids related problems in the community. *Mukingo* (the community vernacular word for Aids) was observed and attributed by the community as the cause of some of the farms lying fallow. The PTA agreed that there were already farms that were never attended due to sickness in the families. In some cases, small children were needed to help with work in some of these farms.

In response to this scenario, the researcher saw the importance of developing some type of sustainable economic growth, which has also been advocated by the government and even NGOs. This is viewed as the best way to fight against the increase in child labor, bring about social progress, poverty alleviation, and step up the provision of universal primary education. It is true that parents are forced to rely on child labor at a time when they cannot help themselves. It is important that the question of child labor in this

HIV/Aids pandemic gain political support. A member of the teaching staff pointed out that a larger percentage of girls than boys were being forced out of school to work. This was so because parents placed little value on the girls' education. The alarming poverty level within the community was seen as a result of conditions laid down by donor community implementation policies such as retrenchment of workers. The PTA described how many children whose parents have lost their jobs due to retrenchment have been forced to seek employment to insure financial survival of the family. However, the PTA did admit the need to address HIV/Aids as one of the contributory factors to drop-out. They accepted the fact that the community relies on child labor, and that many orphans had to get employment to survive. The difficult question posed by the PTA was how the situation leading to child labor, and the related child abuse, could be resolved.

A member of the PTA, who spoke to the researcher anonymously, stated that, "The Aids pandemic has become a major catastrophe in this community and needs to be addressed as a matter of priority". He said that it was the politicians who were downplaying the statistics for their own selfish ends. Meanwhile, places like Nyanza Province were soliciting the best resources and awareness campaigns they could get. He said in Kiswahili "*rafiki yangu, hi maneno ya ukabila kati ya wakikuyu na wajaluo, sasa imezidi. Hi maneno ya ukimwi sasa mpaka tuipigania pamoja kama vile tulipigania Uhuru*". A direct translation of his statement is: "my friend, the issue of tribalism between the Kikuyu and the Luo tribes should not come in the way of our fight against HIV/Aids. We should all fight it together as we did for Independence." This man, who was in his seventies, was able to see through the gimmicks that politicians were playing on the HIV/Aids issue. By downplaying the statistics on the Aids scourge in Central Province, the politicians there thought that they would have their consciences clear about the impact of HIV/Aids in their province, while in reality they were just playing hide and seek with the devil himself (Aids scourge)¹⁰.

It was not until 1999 that supportive evidence to the above findings came out in DN, Monday, July 26, 1999, *Aids Drive to Target Grassroots*. In the report, "The Nyeri declaration 1999", all the political leaders from Central Province led by the official opposition leader of Kenya, Mwai Kibaki, agreed that the Province should end their culture of silence on Aids. The leaders agreed with the research findings that the culture of silence serves to contribute to the increase in Aids related deaths. The article described how Aids has claimed thousands and left almost two million Kenyans infected with the HIV virus. The leaders, who had gathered to discuss the Sessional Paper No. 4 on Aids in Kenya, wanted to end the culture of silence on issues of sex and sexuality. The deeply rooted culture of silence in Central Province has negatively affected any attempts for social, cultural, economic and psychological research on Aids in this part of the country. This

¹⁰ It is possible that tribalism has also had its role to play in the spreading of HIV/Aids in some communities in Kenya.

current move by politicians will enable volunteers and researchers to discuss issues on HIV/Aids with pupils and locals in this province with relative ease.

C. Absenteeism

There were some cases of absenteeism as well as drop-out in the school. Drop-out was attributed to both drug-related reasons and low academic performance. If a pupil did not feel like repeating the grade, they opted out of school completely, thus increasing the drop-out figures in the school. In Grade 8, which was under investigation, there were two cases of girls dropping out because of pregnancy. These girls would never be allowed back to school after giving birth.

The traditional circumcision ceremony was also a cause of absenteeism in the schools. This ceremony usually occurred during a particular season. The young initiates were kept out of school for a while during these initiation seasons.

Other observations relating to school and other related fees were not mentioned as an influence on education in the school C community. This could be due to the fact that the area was agriculturally productive, having a lot to sell as cash crops as well as meeting the needs for home consumption.

6.3.4 School D-2

This was the oldest school in Murang'a District. It is a municipal urban school, with 618 pupils; 326 girls, and 292 boys. Some of the pupils in this school come from the neighboring towns of Maragwa and Sagana, as well as the district of Kirinyaga, 11 kilometers away. Most of the parents in this school are civil servants or work in business. The school has two streams with a total of 16 classes from Grade 1 to Grade 8, divided into East and West streams.

School D also has an academy, which is another unit of the secondary level, which was started by the PTA, otherwise, the whole institution is under the same administration and management. In the previous year there were 76 pupils who sat for the primary school certificate (KCPE). Out of that number, 50 managed to join national secondary schools. This school has very strict rules when it comes to absenteeism. It follows the Ministry of Education's rules, which stipulate that when a pupil is absent from school for three weeks, his/her name will be struck off the school registry. The researcher also found out that the school charges different kinds of school fees. For example, Ksh. 400 per term is charged for maintenance, Ksh. 1,500 for the development fund, Ksh. 1,200 for examinations. They also charge Ksh. 200 for lunches for those pupils who do not go back home during the lunch break.

The school had 23 staff members, six of whom were male. The teachers in this school were proud to point out that they usually completed the national curriculum requirements

by the month of May. This meant that they were left with six months for review. This was cited as an important reason why they performed so well on the national examinations. Thirty-two pupils in Grade 8 responded to the checklist and the perception questionnaire during the exercise. All the pupils who participated had heard of HIV/Aids. There were 2 cases of drop-out in this school during the academic year. One was drug-related and the second was due to pregnancy.

A. Participation

The school's deputy headmaster told the researcher that he could recall a few cases where pupils might have been affected by Aids-related deaths. From his recollection, the deputy headmaster had asked the teachers to keep this type of information secret to avoid any possible stigmatization of the pupils involved. Even so, the teachers observed that those pupils affected interacted less with the other pupils than the other children in the class did. This eventually affected their overall participation.

The school staff in school D expressed concern about the burden the caretakers of the four pupils affected had to endure. Furthermore, they expressed concern that the financial stress these orphans were under when it came to meeting the general costs of the school was great. They also predicted an increase in the number of orphans in this school. The PTA had been helping to meet the financial aspects of running and maintaining the school. It was anticipated that this financial support would decrease in the future, which would lead to an inability to maintain the facilities and this aspect could steadily drop, so that buildings are left deteriorating without proper maintenance. This point was not seen as an immediate problem for this school, especially since there were many pupils in the queue to be admitted. The deputy headmaster said the impact of HIV/Aids on education in urban schools is difficult to see, especially considering the waiting lists for entrance. In urban schools, the mobility of pupils depends to a great extent on their parents and how mobile their jobs are. In many cases, their parents are civil servants who can be transferred without consideration as to whether their children's education will be interfered with. He also pointed out that urban schools are a bit different from rural schools. For example, urban teachers are much less familiar with the family background of their pupils. "Our work begins at eight and it is not until after five o'clock that the urban school teachers are free to think of their own problems", says the deputy headmaster.

Asked about the participation method of harambee, the teachers present at the group discussions said that it was still cherished by both the parents and the teachers. This practice helps enable the purchase of textbooks and educational material for the school. It also helps in soliciting resources for maintenance of the school. The teachers then showed the researcher a swimming pool, which was expected to be renovated through harambee.

B. Awareness

Awareness was quite high due to many reasons. When we met with the teachers, they told us that this school has received a lot of visitors who gave lectures about the HIV/Aids menace. They were very pleased with the visits, and in particular, when they were visited by The Association of People With Aids in Kenya (TAPWAK) organization. The teachers reported that most of the pupils were really touched by some of the stories told by the TAPWAK group members. The pupils as well as the teachers and some of the parents who came for the lecture expressed fear of catching HIV/Aids. “Some of the pupils even cried” reported the Deputy Headmaster.

One of the teachers told the researcher that “campaigns against HIV/Aids were more effective when the spokesperson was a real victim rather than an intellectual or a well dressed politician in a big fancy car. “It seems a lot of people are making a good livelihood from the HIV/Aids menace” said one interviewee. There were some very strong sentiments expressed about how information should be disseminated about Aids within the schools. This needs to be looked into more thoroughly.

The teachers in school D suggested a nation-wide campaign that would involve both lectures and films to help educate pupils, teachers and parents about Aids. In addition, they suggested the financing of drama, poetry, and song competitions with an Aids theme as a means of increasing the level of discussion and awareness about the topics of HIV and Aids. They saw these types of supplements to community Aids education programs and other similar initiatives targeting youth.

C. Meeting with Education Officials

The researcher also met with the DEO who provided some analysis of the impact of HIV/Aids on education. He said that with some support from local politicians, it was possible for his department to look at the effect Aids has had on the community. The education officer pointed out that behavior change is a process which must involve changes in the community and their values. He made this comment in response to a question about the stoic attitude in the community. The officer also pointed out that education was playing an important role in influencing community norms and values relating to such topics as drug abuse, sex education, and the prevention of sexually transmitted diseases. The officer also opined that the education system should respect the sensitivity of these issues within the community.

The officer did not think that it mattered whether the school community was in an urban or a rural setting when it came to the impact of HIV and Aids. However, he pointed out that Aids was affecting the education system in Kenya on several fronts and that the street children, common to the urban environment, brought unwanted elements into the schools. The DEO pointed out that the presence of glue and petrol sniffing among school

children had usually been connected with street children. He pointed out that drug use was just one of a constellation of factors besides unemployment, broken homes, physical and sexual abuse, and created a “risk environment.” This was an environment of not only violence, but also a high number of cases of HIV and STDs among children and young people in the schools. The DEO showed some concern that the pupils’ already overburdened study time had to take on the subject of HIV/Aids.

Our discussions with the education officer also touched on the sensitive question of FLE, a topic usually directed by the church. Who should teach it? The officer retorted by saying, “Teaching and preaching are two different things, the persons to impart this kind of knowledge should be the teachers rather than the preachers.” He said the information required sensitivity, and a thorough understanding of the topic. This would require some type of training in the areas of sexuality, sex education, morality, and child psychology.

In response to the question about orphans, the DEO stated that he had observed an increase in the number of street children in the township during the past five years. He could not ascertain whether the figures are rising due to the Aids scourge or for other reasons. He also said that there were statistically significant increases in both truancy and the number of children dropping out of school, especially in the rural schools. He said most of the absentees were orphans with single parents who were not able to provide for the basics of life including education for their children. For the few orphans who were still going to schools, there was evidence that most of them were not well taken care of. They came to school without clean uniforms and showed signs of malnutrition.

Based on the school enrolment figures in the district, the education officer had observed that most children between the ages of six and 14 years were working, either with their families in agriculture plantations, or in domestic services. The officer could not attribute this to just HIV/Aids *per se*, but rather to a combination of poverty, a high population growth rate, and rapid urban migration from the district.

D. Meeting with a Health Officer at the District Hospital

The health officer confirmed that there were large numbers of cases of HIV/Aids in the district. From the medical reports, the researcher learned that one out of five secondary school pupils in the district who participated in a voluntary blood donation had their blood infected. The health officer blamed the situation on the education system, which provided inadequate counseling or sex education to the youth. The health officer had observed that young girls were more vulnerable to STDs and HIV/Aids because of their limited knowledge about their bodies and sex and their reluctance to discuss sexual matters with their male partners. The health officer went on to give her views on cultural practices. She noted that young adolescent boys felt the need to prove their masculinity, which leads them into risky behavior. This is not surprising in an environment where abstinence is seen as a sign of psychological disorder and cowardliness.

From her analysis, the health officer noted that while boys face equal dangers of catching STDs and HIV/Aids they have some advantages over girls. Young girls are at a disadvantage because they are less likely to seek immediate treatment because lesions are internal and discharge can be confused with period flow or vaginal fluids. Furthermore, young girls who might be aware of the symptoms of STIs fear seeking help from public health facilities for fear of being branded prostitutes. In her concluding remarks, she noted that girls between 14 and 24 years are twice as likely to contract STIs as older women. A young woman's relatively immature genital tract has fewer layers of mucous membrane and is more liable to infection. Finally, she recommended that the "education sector, while trying to develop FLE or sex education, should solicit the expertise of the health sector in designing this delicate curriculum."

6.4 Summary and Analytical Discussion

This study has shown that the underlying reason behind the rapid spread of the Aids menace in Kenya is not that the people are unaware of the virus. But, rather it is that they do not actualize, comprehend, admit, and accept the seriousness of Aids. Aids is now an integral part of life in Kenya. It transcends all tribal and social barriers. It has taken its toll among pre-teens, teens, young adults, the middle-aged and the old. The youth are exposed to HIV/Aids because of several factors. The key ones include biological, socio-cultural and economic factors. The high rates of teenage pregnancies confirm that the youth are engaging in early sexual activities and are increasingly predisposed to HIV/Aids. In analyzing the impact of HIV/Aids on education, one needs to look at what is happening at the community level. This includes analyzing the effects Aids has on the community. These effects involve such concepts as behavior change within the community relating to sexual norms and values.

The education system in Kenya, public and private, formal and non-formal, also plays an important role in influencing community norms and values, including sexual norms and values to support the discussion of delicate topics such as drug abuse, sexuality and sex education, STDs and condoms etc. These are some of the challenges present as a result of the impact of HIV/Aids on education in Kenya. The education system is therefore required to have cultural sensitivity in regards to attitudes in the community. Sex does start very early among the school pupils and in most cases it is generally unprotected sex, as demonstrated by the consequences of unwanted pregnancy, HIV infection and other sexually transmitted infections (STIs) on the youth. There are also a lot of cases among teachers, both unreported and reported cases. Sexual abuse and sexual exploitation of children, often associated with poverty and dysfunctional families, opens the door to major HIV risks in Kenya. Girls subjected to sexual abuse in childhood are typically robbed of self-esteem and a feeling of control over their lives, which increases their risk of engaging in commercial sex later on. Drug use also increases the risk of HIV.

The impact of HIV/Aids on education in Kenya is already being felt at all levels. The micro-level (the family level, community level etc.) and the macro level are equally feeling the impact. The education system in Kenya has accepted HIV/Aids as a problem it must deal with. The Ministry of Education has embarked on serious Aids awareness campaigns within and around the school community. The education system has also started new roles for the schools. The content and methods of teaching are systematically being altered to include knowledge about sexuality and the transmission and prevention of STDs and HIV/Aids. The education system is trying to embark on attitude-related approaches, especially towards the status of girls and women. Attention to the plight of orphans is being stepped up.

The study found that there were high rates of absenteeism among children in some of the communities. This situation therefore led to poor participation in class, hindering the class from keeping up with the national curriculum. Most of the male pupils in the rural schools around Lake Victoria were constantly out of school, working at the beaches as fishmongers, or simply picking up fish that have been left ashore by the fishermen for their day's meal. Some of the findings in this study have shown an early age for the commencement of sexual activity for girls, marked by the number of girls dropping out of school due to pregnancy. This impact is soon to be a national problem. Children are dropping out of school for various reasons, which need to be discussed at the macro level. They leave school before attaining at least some minimum level of literacy, numeracy, and "life skills." It is also a cultural phenomenon that the socialization of girls in these communities dictates submissiveness. This was therefore creating a situation where girls could not negotiate or reject sexual advances.

Demand for schooling is on the decrease, especially in the rural communities. In the urban areas, the number of street children is on the increase. There is an increase in the number of children living and surviving on the streets. These children are forced to adopt survival strategies that are necessary to survive the harsh realities of street life. Their lives are characterized by poverty, a breakdown of social norms, illicit trading, etc. These children are ending up in the streets in the urban areas as beggars, thugs, prostitutes, or as members of all sorts of anti-social groups. In the rural areas, the extended family is now stretched to breaking point trying to take care of its orphans. This was particularly noticed in the Homa Bay District. Future uncertainties are leading parents to save whatever little resources they have for any eventualities. This mostly includes sickness and funeral expenses that may befall the family. In this scenario, the study did not see any chances of savings, especially towards the education of children. In the rural areas studied, nutrition is critical, Aids is slowly challenging agricultural productivity, leaving hungry children who cannot concentrate on their studies.

The Kenya economy is in dire straits. The only way it can win the battle against the spread of Aids is for the government to take up the challenge to seek funds to ensure the dissemination of information on this scourge. Everybody has a responsibility. Some of the

clergy interviewed supported the preaching about the consequences of immoral behavior. “Churches are the right venues for public talks and lectures on Aids”, said one clergy member. Excessive intake of alcohol and substance abuse were also some of the key factors pointed out as accelerating the spread of HIV in the communities studied. Within the case study districts, there were significant cases of increased urban migration and poverty within the Homa Bay District of Nyanza Province. Women’s powerlessness and prostitution were mentioned in both districts, be it in the rural or the urban set up.

At the micro-level of the society, families and the communities within the sample schools expressed concern that people do fall ill and some of the cases could easily be attributed to HIV and Aids, given the already existing general symptoms and situations.

Lastly, the fight against Aids has been sidelining the pupils with special needs, and especially those with handicaps such as blindness, the dumb and those who are deaf. The youth in these categories are equally sexually active and for that reason need to be involved in the campaigns. The campaigns should not leave behind those persons who are mentally handicapped even though they have been relegated to the role of bystanders even in issues such as Aids. Table 6.1, summarizes key information found in each school community.

Table 6.1 Summary of Key Information on each of the School Communities

School Community	Reported Cases					
	Participation Rates	Absenteeism Rates	Completion Rates	Drop-out Rates	Others	
Homa Bay District	A1	Low, decline in projected pupil number	High, pupil labor required at home	Very low, especially girls	High, pupils cannot afford schooling	Peer teaching on HIV/Aids, Repetitions, poor staffing, and girl-child pregnancy. Increased overall mortality, poverty, orphanhood, HIV infection
	B1	Average: teachers & pupils motivated	Minimal	High on boys but low on girls	High on girls	Peer teaching on HIV/Aids, Repetitions, girl-child pregnancy. Increased overall mortality, poverty, orphanhood, HIV infection
Murang'a District	C2	Average	Minimal, mostly due to child labor required at home, traditional rituals	Average on girls, but high on boys	Average on boys: drugs-related	Trial marriages, Ostracism of Aids orphans. Repetitions, girl-child pregnancy. Increased overall mortality, poverty, orphanhood, HIV infection
	D2	High	Low	High	Low	HIV/Aids awareness high, financial stress on orphans, increase in the number of orphans in the school

Source: Author

Chapter Seven

Perception of HIV/Aids in the selected School Communities

7.1 Introduction

Chapter seven builds on a questionnaire that was administered to 108 eighth grade pupils who were from the two districts of Homa Bay and Murang'a. These were the only pupils from their respective schools who had qualified to sit the end of the year national examinations. Those pupils who failed to perform well in Grade 7 were forced to repeat the grade and did not fit into our category of pupils. The chapter brings to the study a separate kind of data processing, which is mostly concerned with aspects of analyzing and interpreting the perceptions of the pupils on aspects of HIV/Aids. These are aspects such as those of behavior and attitude towards HIV/Aids, which is *sine qua non* for the fight against HIV/Aids disease. In one of the responses to question thirteen on page two in the survey questionnaire (see appendix), one of the pupils responded that it is important to teach about HIV/Aids in schools because "we want to know what causes it, if it is a germ, what kind of germ, and the way it can be cured". The pupil also wanted to know how it is spread, how it can be prevented, who the first person to get Aids was, and which country it originated from. From this response, there is still a lot more for the pupils to learn about HIV/Aids than has been covered by the schools already. It is important to note that HIV/Aids campaigns and promotions focussing on the youth have also faced obstacles from various divisions, especially with different religious groups. Some of the religions in Kenya have for a long time objected to the introduction of FLE on youth sexuality and the risks of HIV/Aids and pregnancies. However, the school is still a central place of learning and is the only official institution which has contact with all children, teenagers, their families and their immediate surroundings. Bearing this in mind, the school can clearly have a systematic and long-term influence on attitudes.

Attitudes to HIV/Aids and STDs were evaluated in this study. The findings included positive attitudes towards delaying sex, personal responsibility, and condoms as a means of protection. Aspects of social attitudes such as confronting prejudice, being supportive, tolerant, and compassionate towards people with HIV and Aids were also looked into as well as sensible attitudes about drug use, multiple partners and violent and abusive relationships. An example of some of the questions on this level of data processing can be

found in Question ten, page two of the questionnaire; which states: “Has your Behavior/Attitude changed as a result of learning about Aids?” The responses in this section are either “Yes”, “No” or “Not sure”. This is later on analyzed and interpreted to find out if there are any differences between the groups under investigation. Finally, efforts are made to come up with some suggestions on how to formulate youth-focussed interventions whenever necessary.

In as much as the study has been concerned with the impact of HIV/Aids on education, it is necessary to consider the awareness aspect. It is the awareness level that will make the much needed impact to ameliorate the situation. The spread of HIV infection can be stopped. It is an issue encompassing questions of awareness, education, and resources, all of which need to be addressed in detail. From the literature review we found that HIV prevalence responds very slowly to behavioral changes in populations due to the chronic nature of HIV infection. Thus HIV surveillance data cannot indicate whether prevention interventions are having the desired short-term effects on changing behavior. It is against this background that the study would like to highlight some of the vital tools that have been used in awareness campaigns, and how this information has affected the behavior of these pupils. During the national conference on HIV/Aids/STDs in Nairobi, Ole Tawuo and Verstraten (1998) presented the following findings from the sample they investigated of 876 pupils from 15 primary schools in Kajiado District of Kenya. Among 421 girls and 455 boys from classes 5 to 7, with a mean age of 14, the following was observed. 83.4 percent, 856 had heard of STDs. In addition, 67.8 percent had heard of HIV, 63.5 percent and 64.4 percent could correctly define the meaning of HIV and Aids respectively. It was found that 49.2 percent could state at least two correct ways in which HIV is spread and 47.8 percent could state at least two correct ways of preventing HIV infection. Of those surveyed, 84.8 percent had heard of condoms. Magazines and newspapers were the most commonly cited source of information about condoms. Schoolmates and radio were cited as the most common source of information on STDs (32.2 percent and 23.9 percent) respectively. Furthermore, 40 percent thought that nobody in their community could get Aids. It was found that, 35.6 percent felt that they were at risk themselves, 26.6 percent would not help a friend with Aids, and 51.1 percent were already sexually active. The onset of sexual activity was 12 years old. Of those that reported being sexually active, 20.7 percent of them reported having had only one sexual partner in the last three months. Of those surveyed, 25.8 percent had used condoms, while 23.8 percent used a condom during the last sexual contact. Health facilities were the source for condoms for 28.6 percent followed by chemists and kiosks at 15.0 percent and 12.5 percent respectively. Females and under-14 year old pupils were less knowledgeable on STDs, HIV prevention and condoms and less likely to have ever engaged in sex. Pupils in boarding schools were less sexually active and lower in condom use.

In conclusion, the two questionnaires showed that the knowledge levels on STIs are satisfactory in primary school but can improve. They also indicated that sexual activity does begin at an early age. In one study in Uganda Shuey *et al.*, (1999) also found that

social interaction methods were effective on the youth and reduced the number of sexually active pupils from 42.9 percent to 11.1 percent within an intervention group.

The current study highlighted the sources of information on HIV and Aids and some of its questions also aimed to find out what else the pupils knew about sexually transmitted diseases, how they can be contracted, and how they can be avoided. The intention was to give the pupils a chance, not only to show their level of awareness, but also to gauge their perception level as far as HIV/Aids is concerned. Testing the HIV/Aids knowledge levels of pupils in our study also showed that a gap exists in the general understanding of the suitability and effectiveness of the sources and channels used for the dissemination of HIV/Aids information to school pupils. Otherwise, if the information is channeled wrongly, it might lead to anxiety and fear in the pupils.

7.2 Perceptions of Pupils Regarding HIV/Aids

The following responses gave a picture of the sources of information on HIV/Aids and some of the most serious health problems facing the country as viewed by all the pupils who participated in the study. These included pupils from school A and school B which are rural and urban schools in district 1 (Homa Bay) and school C and school D which are also rural and urban schools in district 2 (Murang'a).

Here we must point out that there were some distinct differences between the two sets of schools; that is, the rural and the urban schools. Television and films, which predominate in the urban sectors were an area that required a special kind of analysis in terms of the kind of messages they exhibit, and how they influence the behavior and culture of the youth in these areas. As had been observed by Tuju (1996), it is important to understand the nature of our contemporary cultures. James Bond 007 and other heroes and heroines on films and TV usually get a social reward, normally a sexual partner, at the end of their victory in the film. This type of contemporary culture, which now predominates in the global village, has left the youth with a mixed perception towards HIV/Aids, as it influences their behavior in the opposite direction to the awareness messages, which advocate abstinence.

A. Religion and Culture

Of those pupils who responded to the survey, 95 percent stated they were religious. Five percent did not respond to the question on religion. We could not conclude whether these 5 percent were actually not religious. However the point here was to gauge how religion could be used in the fight against the HIV/Aids epidemic, which is one of the recommendations in this thesis. This was based on the finding that 95 percent of the respondents stated that religion was a very important tool in helping them deal with problems in their daily life. It is thus clear that religion was crucial in determining the

behavior and practices of its members and may therefore have major association with the youth's health and sexuality.

There have been an enormous number of debates in Kenya on whether the youth should be taught about their sexuality in schools. A solution to this kind of debate is the first step forward in solving the Aids menace in Kenya amongst the youth. There was the traditional African family life education, which did consider effective ways of dealing with youth sexuality. It is important to note at this point that mourning over the disappearance of traditional institutions, which governed youth sexuality, will not help at this juncture. However, it is important to note that times have changed and will continue to change, in most cases for a better future. There are aspects of negative change, which cannot go unnoticed. An example is the increase in prostitution, which now has support structures of boarding and lodging facilities, endorsement of casual sex as shown in the movies, and several other developments, which promote risky sexual behavior.

Within the two cultures studied, the Luo in district 1 and the Kikuyu in district 2, there is a difference in handling sexuality. A typical example is that within the Kikuyu, it was traditionally accepted for boys and girls to engage in premarital sex after circumcision. A virgin bride brought shame to the family because she had not been adequately prepared. The researcher got a glimpse of this concept when discussing with a Kikuyu elder Mzee. Kamaru, 73, the concepts of *mambura* (ritual sexual rites) performed at the closure of a circumcision festival. The Kikuyu dual cosmology, *Ngai* (the creator) and *Ngoma* (ancestors) affected every aspect of their life including sexual relations. Intercourse, either performed in marriage or practiced by young initiates according to the established norms, was expected to support the very foundations of society, in the same way as sacrificial offerings to *Ngai* or the *ngoma* were expected to save the individual and the entire community from death and disaster.

Among the Luo community, Mzee. Obunga, 70, explained that chastity was highly valued especially among girls and often attracted a larger dowry. On the other hand, there is an exception since an unmarried girl who visits her married sister is culturally allowed to sleep with the sister's unmarried brothers-in-law. The Kikuyu culture is not free from such contradictions as seen in their custom, *ombani na ngweko* (platonic love of fondling). The Kikuyu custom, *ngweko*, though contrary to the spirit of true Christianity, could help explain why there is a difference in the HIV/Aids prevalence in the two cultures. One of the two cultures under investigation holds the belief that there is a difference between the circumcised and the uncircumcised groups. According to one view, those who are not circumcised are more prone to HIV/Aids/STIs than their fellow circumcised counterparts.

B. Health Problems

In the questionnaire, it was important to find out from the respondents what they considered the most serious health problems and diseases which Kenya is facing today.

The respondents had to write down the diseases, as they understood them, without alternatives to pick from and they could also mention as many as they could. We then picked out the most commonly mentioned diseases and treated the rest as “others”.

School A-1: It had a total pupil population of 450 with only 14 in Grade 8 responding to the questionnaire. From the responses all the pupils agreed that Aids was the most serious health problem they are facing. It was immediately followed by malaria, then STDs such as gonorrhoea, chlamydia, syphilis, and genital herpes. These pupils also pinpointed typhoid and diarrhea as serious health threats to them. The number of pupils responding to different health problems were as follows: Aids, 14; STDs, 11; Smallpox, 1; Asthma, 5; Malaria, 12; Typhoid, 10; Measles, 7; Diarrhea, 10; and Others, 5.

The researcher was amazed by how much they knew about Aids, although they were not very sure what the words HIV and Aids stand for. The majority of these pupils were also aware of how Aids is caused. The only problem was that these pupils did not have a local vocabulary that could help them explain or understand the concept of a virus. They could not describe what Human Immunodeficiency Virus stands for, especially at a level of being able to take productive decisions on the problems of the HIV/Aids menace.

The next question was concerned with finding out, from what source they had heard information about Aids. The pupils' sources of information on HIV/Aids as indicated by pupils in school A were as follows: School, 14; Radio, 7; Newspapers, 5; Friends, 11, Family, 5; Church, 10; Hospital, 13; Handouts, 9; and Others, 6. It is important to note that in school A, which is a rural school in district 1, the family seldom discusses anything to do with HIV/Aids. In this case, the family, as a source of information about Aids, was reported by only 5 pupils. This could clearly support the arguments of traditional beliefs that HIV/Aids does not exist but only *chira*. However, the importance of the school in the fight against HIV/Aids should be emphasized. We clearly see that schools have a key role to play in HIV/Aids prevention, and must deliver HIV/Aids education. This should be done not only to fight against the pandemic, but also to call a halt to exclusion and discrimination against those infected. The school's focus in the struggle against HIV infection should be on risk behavior. Only 5 pupils indicated newspapers as a source of information about Aids. This could be attributed to the difficulty people have in affording them. The Hospital was second to the school. This could be due to the frequency in which these pupils visit hospitals and clinics either because they are sick or due to sickness within the family.

School B-1. There were 15 pupils in Grade 8 responding to the questionnaire. Some of the most serious health problems as viewed by pupils in this school were as follows: Aids, 14; STDs, 11; Smallpox, 1; Asthma, 1; Malaria, 1; Typhoid, 7; Measles, 8; Diarrhea, 5; and Others, 9.

The next question was about sources of information about HIV/Aids as pointed out by pupils in school B. Radio, 13; Newspapers, 13; School, 13; Hospital, 12; Friends, 10; Church, 9; Family, 8; Handouts, 4; and Others, 1. It is not surprising that in this urban school pupils get most of their information about HIV/Aids from the newspapers and radio. This could be explained by the fact that most of their parents are working class, unlike peasants in the rural community. They can somehow afford to buy newspapers at least once in a while and they have radios, which can transmit news and information. The kind of information being sent out through the radios and newspapers and other forms of information dissemination is sometimes suspect. This can be partly attributed to the reluctance on the part of families to name an Aids related illness as the cause of death of a family member. This is a common practice, enabling a family to avoid the stigma associated with Aids and to problems with insurance claims. The most common cause of death cited in the press is that people are dying after short illnesses or in some cases long illnesses bravely borne. This has helped in creating a false impression that things may not be that bad while in fact the HIV/Aids epidemic is ravaging Kenya. What was astonishing in this school was that poster/handouts are among those mechanisms that transmit the least information about HIV/Aids. This could be attributed to the content of HIV/Aids posters, which have been carrying the same information for too long. The same argument can be applied to billboards as well. These posters can stay with the same information for far too long until nobody even notices their existence regardless of their size. When we talk about the dynamism of posters/billboards/handouts, we reflect upon the importance of changing the style of disseminating information to the youth. When we asked the pupils about the big billboard in front of their school with pictures and information on HIV/Aids, one pupil remarked “that billboard has been there for more than one year, until we no longer even notice its presence and the vital information it carries.”

School C-2. This school is a rural school and it is a sharp contrast to school A, which is also a rural school in district 1. Of the 48 pupils who participated in the exercise, 98 percent of these pupils had heard about Aids, and knew that it was one of the major health problems they are facing. Some of the most serious health problems as indicated by these pupils were diseases such as Malaria, Typhoid, STDs, TB and others. These pupils also identified diarrhea as the least of the health problems. Strangely enough, these pupils reported Cancer as one of the problem diseases. How they came about the knowledge of Cancer was actually a mystery to the researchers. It could also be important to find out why they reported Cholera, an illness not common in this part of the country. We expected reference to Cholera in district 1, but pupils in neither school A or B mentioned this with any frequency. The number of pupils responding to different health problems were as follows: Aids, 46; STDs, 21; TB, 19; Cholera, 23; Malaria, 33; Typhoid, 32; Measles, 8; Cancer, 7; Diarrhea, 5 and Others, 21.

The next question was about sources of information about HIV/Aids as pointed out by pupils in school C. Radio, 47; Newspaper, 46; Hospital, 45; Church, 33; Family, 31;

Friends, 33; School, 30; Handouts, 24 and Others, 3. Handout/Posters were amongst their smallest sources of information. Once again the importance of sources of information such as radio and newspapers clearly give an indication of the socio-economic status of this community. Despite being in a rural community, pupils in school C were well informed about HIV/Aids, from the very expensive mechanisms of information dissemination. Amazingly, the school was not found to be the leading source of information. An explanation of this can be drawn from the discussion in Chapter 5 on the importance of traditions and culture in this community, especially the culture of confining the discussion of health problems to the family and not talking about sickness with strangers (stoic attitude). Peer influence is also very important in this community, especially when it comes to imparting knowledge on matters dealing with sexuality and HIV/Aids. This can be traced back to the traditional circumcision ceremonies, where peers are grouped together for the function as well as given practical education on matters surrounding sexuality. Any focus of reaching the youth in this community with knowledge on HIV/Aids would therefore be very practical if it involves peer teaching.

School D-2: It is an urban school with 32 pupils in the 8th grade that participated in the exercise. All the pupils who participated in answering the questionnaire had heard of Aids. Most of the pupils in this school either had parents who were civil servants or doing business in the town. The school had 23 members of staff and only 6 were male. The teachers in this school were proud to point out that they were usually through with the national syllabus by the month of May every year. This meant that they had six months for review with their pupils, and that is one of the reasons why they perform well in the national examinations. School D had 2 cases of drop-out, out of which one was drug related, and the other was due to pregnancy. This school was also following the Ministry of Education's regulation that if a pupil is absent from school for 3 weeks consecutively, then his/her name is struck from the school register. In school D, of all the pupils who participated in the exercise 95 percent had heard about Aids, and knew that it was one of the major health problems Kenya is facing. Some of the most serious health problems facing the country as viewed by the pupils in school D and the number of pupils responding to different health problems were as follows: Aids, 27; STDs, 19; TB, 20; Cholera, 15; Malaria, 12; Typhoid, 7; Measles, 1; Cancer, 1; Diarrhea, 30 and Others 31. We thought it strange that these pupils were also reporting Cancer and Measles as some of the problem diseases. How they came about the knowledge of Cancer and Measles was actually a mystery to the researchers. It could also be important to find out why they were reporting Cholera, while it is evidently known that Cholera is not rampant in this part of the country. We were expecting reference to Cholera in district 1, but pupils in neither School A nor B never mentioned this in any proportion either.

The next question was about sources of information about HIV/Aids as pointed out by pupils in school D. School, 14; Radio, 22; Newspaper, 25; Friends, 9; Family, 14; Church,

6; Hospital, 14; Handouts, 12 and Others, 1. Compared to the findings in school B, school D's more expensive mechanisms for disseminating information received greater responses. That is, newspapers and transistor radios dominated among their sources of information about HIV/Aids. Handouts were also well represented as a means of obtaining information. Sources such as newspapers and radio clearly give an indication of the socio-economic-status of this group. Being an urban community, pupils in school D were well informed about HIV/Aids, because of these very expensive sources of information dissemination. Newspapers being the leading source of information for these pupils on topics of HIV/Aids can also reflect on the pupils' ability to read and comprehend. This is a fact that is annually being proved in their results in national examinations. Amazingly, the school is not the leading source of information. It is also evident how little the church is doing to propagate HIV/Aids awareness to pupils in this community. This has been elaborated on in Chapter 6, which deals with the interviews with church leaders and community leaders.

'Others' here refers to information coming from either youth organizations having contact with individual schools and also familiar with the young people. These groups could enhance design of programs with credible messages and create a climate for social and peer support for responsible and preventive behavior. There were also Aids NGOs visiting schools and the surrounding communities. These NGOs or groups, involved in either prevention or support activities also have first-hand experience of the disease and its impact, and can provide valuable assistance in the design and delivery of credible messages about HIV and Aids.

7.3 Summary

Table 7.1 Summary of the Health Problems as Reported by Pupils in the Four Schools

Health Problems	Number of Pupils Responding			
	School A-1 (14)	School B-1 (15)	School C-2 (48)	School D-2 (31)
Aids	14	14	46	27
STDs	11	11	21	10
TB	--	--	15	20
Cholera	--	--	23	15
Malaria	12	1	--	12
Typhoid	10	7	32	7
Measles	7	8	8	1
Cancer	--	--	7	1
Diarrhea	10	5	5	30
Smallpox	1	1	--	--
Asthma	5	1	--	--
Others	5	9	21	31

Table 7.2 Summary of the Sources of Information about HIV/Aids

Sources of Information	Number of Pupils Responding			
	School A-1 (14)	School B-1 (15)	School C-2 (48)	School D-2 (31)
School	14	13	30	14
Radio	7	13	47	22
Newspapers	5	13	46	25
Church	10	9	33	6
Family	5	8	31	14
Hospital	13	12	45	14
Friends	11	10	33	9
Handouts	9	4	24	12
Others	6	1	3	1

Chapter Eight

Summary, Discussion, and Recommendations

8.1 Introduction

This chapter reviews the main research findings of the study and provides recommendations for policy, action, and research. Section 8.1.1 includes the summary and discussion of the results as indicated in the conceptual model. In section 8.1.6 and 8.1.7, the study offers recommendations, for further research, action and policy planning.

The study has been exploratory in nature, examining the impact of HIV/Aids on primary education in some case school communities in Kenya. No apparent generalizations have been arrived at within this study, nor has the study tested any hypothesis or even confirmed a theory. However, the study has drawn some conclusions on how HIV/Aids has affected education in school communities in two distinct districts in Kenya.

Ever since HIV/Aids found its way into Kenya as an epidemic, with the first case diagnosed in 1984, the disease has had a crippling effect on all the major gains Kenya has made. The need for educational programs for the prevention of Aids became nationally recognized and soon after, the role of educational activities as part of the national fight against the Aids pandemic was emphasized. Until then, the HIV/Aids pandemic had only added more challenges to education. The impact HIV/Aids has on education is so enormous that throughout this study we have discussed them on two levels, at the micro-level and the macro-level. It is at the micro-level where its impact is felt most and this is also the area that this study focused on. In particular the study considered how Aids affects the individual or a particular household, or a particular community, especially those communities that were under study. However, it was discovered that little has been researched about the impact of HIV/Aids on education. Yet from the economic point of view, in the case schools it was evident that HIV/Aids was threatening to offset the gains of child survival programs implemented by the government. The study found that the consequences or impact of HIV/Aids on pupils goes well beyond the suffering and death of an infected member of a household, but includes risks, stigma, and even the tragedy of Aids orphans.

8.1.1 Summary and Discussion of Key Findings

The problem with the widespread Aids menace in the case communities studied is the fact that almost everyone in these communities has heard of Aids, yet they do very little about it. The problem, as was explored by our study, was that the people in these communities do not actualize, comprehend, admit or even accept the seriousness of the Aids menace. Strangely enough, most people in these communities saw HIV/Aids as an integral part of their daily lives. The study gathered evidence showing that the youth were being exposed to HIV/Aids due to several factors, key factors being biological, socio-cultural and economic factors. Peer pressure, cultural practices, socialization and denials were some of the key findings in this study, which needed special attention whenever such issues as HIV/Aids and youth arose. Evidence of high rates of teenage pregnancies confirmed that the youth were engaging in early sexual activities and were being increasingly predisposed to the HIV/Aids.

It is evident that Kenya's economy is in dire straits. One of the ways it can win the battle against the spread of Aids is for the government to take up the challenge to seek funds to step up the dissemination of information about this scourge. Everybody has a responsibility. This study included interviews even with members of the clergy, some of whom supported the preaching about the consequences of immoral behavior. They felt that churches were the right venues for public talks and lectures on Aids. The levels of trust in the church were a fundamental question in the communities visited. Trying to influence or question their beliefs would have proved to be counter-productive. Instead I tried to analyze the impact the church could have on the community's understandings of the damages Aids was causing. The community leaders pointed out that excessive intake of alcohol and substance abuse were also some of the key factors accelerating the spread of HIV in those communities studied.

8.1.2 HIV/Aids and Economic Development

The relationship between HIV/Aids and development and how this relationship impacts on education was included in this study. There were key factors in this symbiotic relationship whereby an increase in the poverty level was also seen to correspond with an increase in the severity of the HIV/Aids menace. In comparing the situation in two case districts of Homa Bay and Murang'a, we were also able to conclude that different forms of inequality contribute to the prevalence of HIV/Aids.

Absenteeism as an economic aspect within this study has been confined only to the school level. However, the study also managed to look into absenteeism from duties out of school, which eventually reflect back to the communities studied. Absenteeism, be it from regular wage-earning work or even farm-work at homes or within the community, did impact pupils education. The informal sector (*jua Kali* as is known in Kenya) of the

economy, which is the backbone of the communities studied, was feeling the impact of HIV/Aids as workers were routinely absent due to sickness or to attend a funeral. Absenteeism was also an all too common occurrence within the school community, not only of the pupils, but also of their teachers due to an Aids-related condition. The study also found that the social welfare of the communities studied was also on the decline while families in the communities that were hit intensely by the epidemic needed assistance to cope with the impact.

Increased Mortality

Given the research methods used in this study, reaching a valid conclusion with sufficient supportive evidence about an increase in the mortality rate was difficult. However, towards the completion of the thesis, Kenya's population census was carried out after an interval of ten years and the results showed that there was a decrease in the projected population. Kenya's population projection in 1993 for the year 2000 was approximately 32 million in the absence of HIV/Aids (see Table 3.3) and could be reduced to 30 million in the presence of Aids¹¹. The recent census population data puts Kenya's total population at 28.9 million—more than one million below the expected figure. This was a big shock for the Kenyan government, and there was even report of concern growing that government officials were now trying to manipulate the census data after the disclosure overturned the common belief that Kenya's population had hit the 30 million mark.

In Homa Bay District it was much easier to estimate the mortality figures as the communities here were more open to discussing the HIV/Aids menace with the researcher. However, the stoic culture in Murang'a District made initial efforts to verify mortality rates impossible, but our efforts were saved by the local district hospital records where we did get a glimpse of the mortality levels in the district. Here too, it was high; especially the HIV/Aids related cases. The most immediate and visible impact of HIV/Aids, in some of the cases we were involved with, were the cases of children infected at birth. These children had not lived to enroll in school. From the FGD, we received information that a great number of children were dying before they could be enrolled in schools. Some of the would-be-parents, in these communities, held a perception that investment in education will not give returns due to the increase in child mortality within their communities. They were therefore not keen on any investments in education for their children. They gave various reasons for the high mortality rates including lack of immunization in the rural areas, yet nobody ever mentioned the effects of HIV/Aids on child mortality. There were some cases of children being enrolled in schools but then dropping out in order to earn money to support their families and also to help with health care expenses for their ill parents or siblings.

¹¹ National Council for population and Development, Central Bureau of Statistics, and Macro International, Inc. *Kenya Demographic and Health Survey* (KDHS), 1989, 1993.

Constraints on Community and Household Resources

While many Kenyans are at risk of infection with the HIV virus, the youth within the formal education system in Kenya are particularly vulnerable. This is due to unsafe sexual behavior, experimentation with alcohol and drugs, and failure of the community to see them as risk groups. Since the risk is great, the government is doing everything possible to reduce these risks, which are already impacting on an already tight government budget. The same symbiotic relationship referred to earlier is also witnessed when the government, the household and even the community tries to cope with the situation. The study found that different forms of rural production and even the survival strategies of different types of households and communities were turning to the government budget to sustain themselves. The community and even the households expect the government to offer social welfare and provide basic necessities such as good medical care and free education for the ever increasing population of orphan children.

Fewer and Less Experienced Teachers

There was evidence of fewer teachers (shortage of teachers) in all the schools visited. Structural Adjustment Programs (SAPs) inflicted on the Kenyan government by the major international donors was the first source of blame for this shortage. The SAPs advocated downsizing within the teaching profession, which the Kenya government has been trying to implement. This study however found that sick teachers in the rural schools never took official sick leave, especially when sick leave was on a routine basis. They feared rumors and stigmatization and that their sickness might be associated with the HIV/Aids disease. They feared rumors of their sickness being associated with HIV/Aids and the discredit this would cause them. This situation then put the schools concerned in the situation of having too few teachers at any given time. Most of the headmasters who participated in the study blamed the situation on the government policy on the replacement of teachers, which is cumbersome, slow and lethargic. On the other hand, it was much easier for the government to terminate the contracts of the sickly teachers than to offer them sick leave and better medical benefits so that they could seek proper treatment in better medical institutions.

From the FGD we found that teachers have fallen ill and even died of what was seen as Aids related symptoms. Because of HIV/Aids in the classroom and the school, the process of teaching and learning itself has become more complicated and more difficult and its quality has deteriorated. In urban communities of both Homa Bay and Murang'a Districts, this impact was still barely noticeable, hidden by the normal processes of change and subsumed by the more obvious and immediately visible problems of poverty, drought, and other illnesses. The situation is exponentially getting more difficult for teachers, as their morale is being affected. They face greater stress as they seek to compensate for their sick colleagues. Those teachers who are still within the profession are also facing threats of job cuts from the SAPs and some were complaining about the replacement process as they

were being overburdened with extra classes to teach. The majority of them were considering the option of quitting teaching altogether. Some had already quit to get into informal sector employment or other better avenues. Those teachers who remained within the schools we studied were mostly less experienced teachers. Teachers in the urban schools expressed concern that they were less familiar with the family background of most of the pupils in their schools and that such a situation could hamper their ability to offer counseling to a needy pupil.

Gender Perspective

This study, which was more concerned with what happens at the individual level, drew many conclusions from the various cases it encountered, especially those that were gender related and could provide insight into the HIV/Aids pandemic in the community. The study also found that HIV/Aids is not a gender-neutral disease even though it tends to affect both men and women equally. From the findings, we were able to draw the conclusion that schoolgirls who came from Aids-afflicted homes were more burdened with responsibilities. This situation then leads to lower school enrolments among female school children. If they were ever enrolled at all, then their participation in school was usually very low, their completion rate was also very low as they could not cope with their studies, and some time had to repeat a class, which after sometime then led to eventual drop-out from the school.

In all the school communities studied, the impact of Aids has been detrimental to the gains made in female participation rates in education over the last decade. Within extended families, the study found that whenever a principle wage earner dies, girls are the ones most likely to be taken out of school first. These choices were based on economic reasons or the need of the girl to be a caretaker of ill relatives or younger children in the family. In Homa Bay District, there was evidence of young girls being pushed into marriage, while in Murang'a some girls in such a dilemma were lured into the illicit sex trade, especially those who had fallen victim to what in this study has been termed "trial marriages".

8.1.3 HIV/Aids and Society

Within the communities studied, we were able to conclude that the immediate cause of the HIV/Aids pandemic was linked to the modes of transmission of which unprotected sex was probably dominant. There were also cases where the transmission was due to ignorance, for example, in the case of using the services of a quack doctor who uses non sterilized syringes and needles. This has also proven to be a very good vector for the HIV virus. Needless to say, the communities we visited exhibited some form of societal denial of the scourge at some level or other. We also gathered that the HIV/Aids disease reached its pandemic status in the school communities we were studying due to factors such as the poverty brought about by famine or drought. There was also a weak or non-existent

government commitment at the onset of the disease. From our FGDs, we could add onto this list other factors such as the prohibitions surrounding the discussion of issues like sex or sexuality.

As already mentioned, the onset of sexual activity starts very early in all the school communities studied. In most cases, sex is generally unprotected as demonstrated by the consequences of unwanted pregnancy in these schools. The sex activities eventually brought the HIV infection and other sexually transmitted diseases (STDs) to these youth. This early sex is often forced and dangerous sex, though the study did not prove this fact. However, there were reports of sexual abuse and rape in some of these schools. It was also ascertained that these undesired sexual advances were most often perpetrated not by strangers, but by the young woman's intimates for example friends, relatives, and boyfriends. There were also a lot of reported and unreported cases naming schoolteachers themselves in cases of rape and sexual abuse of female students, in which case, if it ended up in pregnancy, the girl had to drop out of school. The researcher was able to conclude that sexual abuse and sexual exploitation of these children was often associated with poverty and/or dysfunctional families. Girls subjected to sexual abuse in childhood are typically robbed of self-esteem and a feeling of control over their lives, which increases their risk of turning to prostitution later on.

There were a lot of discussions by the communities visited on the alternative ways of reducing the Aids scourge among the youth. The PTA acknowledged the dilemmas facing the youth, in addition to their cognizance of youth and adolescent behavior concerning experimentation with sex and drugs. On the issue of sex, there were some members of the PTA who believed that going back to traditions and embracing the old cultures such as early marriages between boys and girls could reduce the scourge immensely. Some of the people in the rural communities shared their personal experiences of early marriage. There were suggestions that the communities might contain HIV/Aids among the youth if there was a return to the old traditions of arranged marriages for the youth before the age of fifteen years. Drug use was another very important factor, which increased HIV risk in some of the schools studied. It was also ascertained that this drug use was affecting education. However, drug use is just one factor in the constellation of factors besides unemployment, family fragility, and physical and sexual abuse that were found to create a "risk environment" for the spread of the HIV virus among children and young people.

This study concluded that children were dropping out of school for various reasons, an issue that needs to be discussed at the macro-level. They were leaving school before attaining at least some minimum levels of literacy, numeracy, and "life skills." In some instances outsiders (researchers) had mistaken some of these communities cultural phenomena, for example that the socialization of girls dictated submissiveness. Some of the women or girls in these environments were subjected to a situation where they could not negotiate or reject sexual advances because of their poverty status.

Even though the urban school communities could be seriously affected, the greatest impact was on the poor rural school communities. The study found that poorer families and

communities spend less on nutritious food, adequate shelter, routine preventive health measures, non-Aids-related health care, education and other basic needs. The schoolgirls within these poorer families, as far as the gender perspective is concerned, were at a special disadvantage. On the one hand they had fewer opportunities in terms of schooling and employment, land ownership, security over land entitlement, wage-earning and profitable self-employment. On the other, they were at a special risk, often gaining access to income through sexual relationships with men. For widows and orphans, the study found that in some cases they lost their land, shelter and inheritance to uncles and brothers-in-law, forcing some of them to depend on relatives for almost everything. Furthermore, this created a situation wherein widows and orphaned children were forced to migrate to towns, where they became a part of an urban underclass of street children and commercial sex workers. The women in these cases were forced to earn their living through prostitution.

Lastly, it is worth noting that within our findings on how HIV/Aids affected education in our case study communities, there also emerged a new finding on how this impact is being extended to handicapped pupils, who in every instance have always been sidelined in the awareness campaigns. Our study showed that the blind, the deaf, and even the mentally handicapped have been neglected in issues such as HIV and Aids. Most of the research and the campaigns about HIV and Aids have hardly addressed those pupils with special needs.

Increased Demand for Child labor

This study found that there was constant absenteeism of children from certain families in some of the communities. This situation therefore led to poor participation rates in class, leaving the class lagging behind the national syllabus. Some of the male students in the rural school around Lake Victoria were habitually out of school. The demand for child labor is not anything new in the communities we studied. However, it has been on the increase as parents and children alike are becoming affected. The study showed that in a situation where the household was affected, generally the income fell due to increase in expenses for medical care, funerals etc. If the parents were inflicted first, which was mostly the case, then the children would probably skip some classes or lessons or even an entire school session to support the family, girls and boys alike, though they had different roles to play. However, it was found that girls had more roles to play at home, and that meant that they did stay away from school more than the boys, which also explains why there were higher drop-out rates among girls.

There were indications of a decrease in demand for schooling. However, it can be assumed that since there was a high prevalence of HIV/Aids in some of the communities studied, it was normal that the demand for schooling was going down since obviously there was evidence of lower birth rates following the early deaths of potential parents. The other assumption, which needed another kind of study, was that of transmission of HIV from

mother to child, which could also have been increasing infant and child mortality rates and contributed to the numbers of children entering school.

In the urban areas, the street children were also on the increase. These children are forced to adopt survival strategies in order to survive the harsh realities of street life. Their lives are characterized by poverty, breakdown of social norms, illicit trading, etc. These children end up on the streets in the urban areas as beggars, thugs, prostitutes, and as members of all sorts of anti-social groups. In the rural areas, the extended family is now stretched to breaking point in an effort to care for its orphans. This was particularly noticeable in Homa Bay District. Future uncertainties have forced parents to save whatever little resources they have for unseen eventualities, such as sickness and funeral expenses that may befall the family. In this scenario, it is difficult to envision the possibility of savings, especially towards the education of children. In the rural areas studied, lack of nutrition is critical, Aids is making agricultural production more challenging and hungry children cannot concentrate in class.

HIV/Aids and the Orphan² Situation

The orphan situation in the case study was an important area of concern. There were a growing number of orphans in all the four school communities studied though most cases were reported within rural schools. Cases of increases in the mortality rate among the orphans were also reported. They were also facing difficulties due to conditions such as poor nutrition; being overworked by their guardians and lacking supervision or proper care. The situation most of these communities were ending up with was an increase in the numbers of abandoned, exploited and unschooled children. In fact orphaned and street children were becoming synonymous terms.

The extended families that were willing to take care of orphan children were mostly in the rural areas. It is also in these rural areas where the traditional care structure still exists. An interesting finding was that most of the families who were able to accept the orphans were themselves living in abject poverty. The financially able relatives could extend help, but only from a distance rather than take these orphaned children into their homes. Education in this case was therefore a low priority for their new caretakers who were focused on the more important aspects of survival. The orphans faced many problems so that to most of them, education was a luxury they could not afford. They could not meet the basic school requirements such as school fees, uniforms or even a simple meal to keep them concentrating in class. The children felt justified and obligated to pursue petty labor that could at least bring them some food to share with their grandparents at the end of the day. The relationship between the grandparents and the orphans was basically a symbiotic one, where they each benefited by having each other's company. Otherwise, these children

² There were three categories of orphans identified in this study, those pupils who have lost their fathers, those who have lost their mothers, and those who have lost both parents to Aids.

in most cases would have ended up in a situation of premature parenthood, whereby they have full responsibility to take care of themselves and their siblings.

HIV/Aids, Stigma and Ostracism

Stigma and ostracism due to HIV/Aids was another very important area encountered in this study. Cases of drop-out, absenteeism or low participation in the schools we studied were in some way a result of the above factors. The majority of the pupils, who had in one way or the other been affected by HIV/Aids, expressed feelings of exclusion from their peers. They felt a lack of social acceptance by their classmates or in some cases even by their teachers. Such a situation was aggravated due to lack of understanding and in most cases, due to lack of any form of counseling in these schools.

Trauma related to family illness and death, or ostracism, discrimination, and stigma suffered by children due to infection or HIV/Aids in the family was something which should be brought to the attention of the policy makers. It is an urgent situation that needs policy deliberation as a means to help affected children cope with the HIV/Aids menace.

8.1.4 HIV/Aids and the Family Life Education

Family Life Education (FLE) is basically a fear-based curriculum and from our FGD with the case school communities we gathered information that stressed a full involvement and consideration of the socio-cultural factors surrounding the individual pupil. Most parents were in favor of the introduction of FLE in schools as they acknowledged the fact that they did not have the courage to teach or even discuss with their children topics that involve sex and sexuality. With the increasing HIV/Aids infection among the youth, all the case school communities were willing to accept any form of education that would equip their youth with appropriate and correct information that could enhance their understanding of their sexuality and HIV infection. It was learned that there were some religious groups that were promoting rumors that the FLE program, which the government was intending to introduce, was not going to discuss abstinence, but simply disseminate information on how to have sex. It was therefore most important to evaluate the contents of this information bearing in mind that most of these communities have an inherent trust in what the church says. There were pockets of people who resented the introduction of FLE. However, we concluded that it was imprudent of the government not to involve the parents and the community leaders in their round table talks on the introduction of FLE in schools.

8.1.5 The Role of Cultural Activities in the Fight against HIV/Aids

A very important dimension of our study was the prevention strategies. Just as much as we were looking at the impact of HIV/Aids on education, we were also keen on finding ways

and means in which education could have effects on HIV/Aids. The concept of culture was therefore very crucial, especially since we were dealing with two distinct cultures of Luo in Homa Bay and Kikuyu in Murang'a Districts respectively. The findings in this study show that cultural differences in the two tribes mattered less when it came to HIV/Aids awareness campaigns. Some of the examples for this argument were found in school drama and music festivals. In both districts, the pupils and the teachers expressed a satisfaction in the Aids campaign messages carried out in drama and songs. When the local culture was imbedded in the drama, pupils tended to grasp the messages quite well. Songs were also a good means of imparting the HIV/Aids awareness messages as the pupils could for a very long time recall the songs. The messages in the songs were then mastered as they sung these songs even when working in their farms at home. FLE was found to be inspired by a wealth of ideas, especially when it was taught in a traditional setup in the form of story telling and folklore, or in some cases as a teaching for initiation. The Kikuyu culture was seen to be persistent in this way, especially through their peer teachings before and after the circumcision ritual when sexuality was discussed openly with the elders as well. The Luo did not have these kinds of teachings any more, they had disappeared with past generations. There no longer existed any traditional setup for sexuality teachings, neither did they have any initiation ceremonies where the youth could get some informal teachings in matters of sexuality or even just positively discuss sexuality with their peer groups.

8.1.6 Recommendations for Further Research

There is a need for more research in this field, and emphasis should be put on identifying priority areas in order to maximize the limited available resources. This study therefore sees the need to place emphasis on research that will improve the quality of interventions. The study is therefore specifically encouraging research in the areas of: Anthropology, Psychology and even in Behavior change, Determinants of sexual practices amongst youth, Traditional practices (sexual) and other factors that predispose individuals to HIV infection, Aids mobility and morbidity, Impact of Aids cost (direct and indirect), The impact of Aids on women. As part of the research protocol, this study suggests that future research in these areas should ensure that findings are disseminated to the potential users through established Aids bulletins, journals, reports, newsletters, and Doctoral dissertations. The study also suggests the development of indicators for measuring the impact of Aids on various sectors of the economy and the overall status of the Aids epidemic in Kenya. As women are affected by Aids in unique ways, efforts should be made to strengthen their capacity to avoid high-risk practices. Research on this area should therefore deliberate on gender issues and Aids. It should advocate the protection of women and children against sex abuse and other gender related dictates that put women in subordinate positions. Furthermore, increasing the girls' education may increase their income earning potential and thus their economic value.

The practice of widow inheritance and belief in *chira* are likely to continue for some time. It may be more effective not to make attempts to abolish the practice or belief but to modify it into a less dangerous form and to emphasize the differences between *chira* and Aids. Research should also look into the care of Aids orphans. When everything else fails, individuals succumb to the Aids scourge, leaving behind affected and infected offspring. Research is necessary to assess and establish the magnitude of Aids orphans, their specific needs and existing coping mechanisms for coping with the problem.

8.1.7 Recommendation for Action and Policy

Action can be taken to slow the spread of HIV and to avert the serious personal, social and economic consequences that would result from a continued Aids epidemic. Much is being done today in Kenya to educate people about the dangers of Aids. However these efforts are not enough. HIV is still spreading rapidly in most parts of the country and in order for prevention efforts to succeed, a number of changes are required. Among the most important are:

- (a) Strong political commitment by top leaders and strong support by the top leaders of Kenya are crucial to the success.
- (b) Adoption of multi-dimensional approach to Aids intervention. It is clear that Aids is not just a health problem. It is affecting all areas of society. It is therefore important that all sectors of society be involved in the solution of this problem.
- (c) Establishment of an effective National Aids Council for the effective co-ordination of other related Aids prevention programs.
- (d) Incorporation of effective FLE into school curricula in order to inform young children about how they can protect themselves from Aids.

The ministry of education should encourage Aids awareness campaigns for school pupils to be undertaken by volunteers who have been infected as well as those who are affected, encouraging in most cases peer teaching. These campaigns and lectures could then be complimented by intellectual and professional views. Other complimentary activity could be for the ministry of education and probably that of culture and social services to invest in mobile cinemas, with Aids awareness pictures, slides or videos that could enrich the awareness especially in the rural school communities. There is also a need to broaden the understanding that HIV/Aids is several epidemics in one. It is an epidemic of misinformation, rumors, myths, denials, rationalization, stigma and ignorance, which the youth ought to be aware of in order to help fight the pandemic.

Appendix 1

Survey Questionnaire for Pupils¹²

Dear Pupil,

In the following pages you will find a questionnaire which seeks information from you about Aids. The information you give will be most helpful in setting up school and community programs which can find answers to problems concerning Aids and the virus which causes the disease.

The questionnaire has been designed to enable you to answer quickly and easily.

We assure you that all the information you give will be kept in strictest confidence.

Please answer frankly where choices are given. Tick (✓) the option which matches your answer. Otherwise, write out the information asked for in the blank space after the question.

Thank you for your cooperation in this survey.

SIGN. -----

¹² The Questionnaire is adapted from UNESCO (1991): Education for the Prevention of Aids, No. 1, Aids School Education Center, Paris.

General Information, Background and Perception Questionnaire

1. Sex: -----Male-----Female

2. School: ----- 3. Grade/Level: -----

4. Age:
-----Less than 13 Years -----13 years
-----14 years -----15 years
-----Above 15

5. How important is religion in helping you deal with problems in your daily life?
-----Very Important
----- Important
-----Not Important.

6. What do you think are the most serious health problems or diseases facing your country today?

7. Have you heard about the disease called Aids/HIV? *
Yes ----- No -----

8. From what source did you get your information about HIV/Aids?
-----School
-----Radio
-----Newspaper/Magazine
-----Friends and Schoolmates
-----Family and Relatives
-----Church
-----Clinics /Hospital/Doctors
-----Public Posters/Handouts

II STATEMENT ABOUT Aids/HIV. (Tick (✓) the column which shows most closely the way you feel about each statement)

	YES	NO	NOT SURE
1. A person can catch HIV from someone who has the Aids disease			
2. A person who looks healthy but who has HIV can pass it on to other people			
3. A person can be infected and have the HIV that causes Aids but not have any symptoms			
4. A woman who has HIV/Aids can pass it on to her baby			
5. A person can get Aids by being bitten by a mosquito or other blood sucking insects			
6. A person can catch HIV by:			
(a) Touching the body of a person who has Aids			
(b) Kissing a person who has Aids			
(c) Eating with a person who has Aids			
(d) Using cups and utensils used by a person who is infected by HIV			
(e) Sharing needles/syringes with people who have Aids			
(f) Having sex with prostitutes			
(g) Having sex with many people			
(h) Having sex with a man/woman who is HIV positive			
(i) Wearing the clothes of a person who has Aids			
(j) Blood transfusion or receiving blood from a person who is HIV positive			
(k) Injecting using needle used by person who is HIV positive			
7. There is no cure yet for persons who have HIV/Aids			

YOUR REACTION TO EACH STATEMENT. Please (*) the appropriate column. The column headings have these meanings: S. A.; Strongly Agree, A.; Agree, U.; Uncertain/Undecided, D.; Disagree, S. D.; Strongly Disagree.

	S.A.	A	U	D	S.D.
1. All teachers should know about Aids and HIV Infection					
2. A doctor who finds out that his patient has HIV should tell the patients' immediate family					
3. Students infected with HIV should not be allowed to attend school with other children					
4. Only bad people get Aids					
5. Having sex outside marriage is morally wrong					
6. Drug abuse leads to Aids					
7. Aids victims should be shunned/avoided					
8. People who are infected by HIV are easy to spot in a crowd					
9. People who have Aids should be isolated from healthy people					
10. Aids is a punishment for over-indulgence in sex					
11. Aids education will only make students want to experiment with sex					
12. Only sexually active persons can get infected with HIV					
13. Sensitive topics on sexuality should be learnt from the home not the school					
14. Only girls with loose morals get STD					
15. It is unnatural for persons to abstain from sex					
16. A person has a right to choose to have sex with another person of the same sex					
17. Any unnatural sex act is bad					
18. Even married couples who are faithful to each other can contract Aids					
19. Many youngsters are confused about the problems concerning sexuality					
20. If a pregnant woman finds that she is infected with HIV, she should have an abortion.					

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