INFLUENCE OF HIV AND AIDS PSYCHOSOCIAL STRESSORS PREVALENCE ON GIRL-CHILD EDUCATION IN KENYA

BY

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DECLARATION

Declaration by the Candidate

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

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Abstract

The need to address psychosocial stressors of HIV and AIDS implication on girls' education led to this advocacy and participatory study. The study was on girls the infected with HIV or affected by HIV and AIDS psychosocial stressors. The study investigated the prevalence of psychosocial stressors of HIV and AIDS among girls in schools, the coping strategies adopted by infected or affected girls and the psychosocial support available to the girls. The purpose of the study was to investigate the prevalence and impact of psychosocial stressors of HIV and AIDS on girls' education in Kenya. The theoretical framework was Transactional theory of Coping Process and Cognitive Psychosocial Stressors Prevalence Model (CPSPM) was developed during the study. The study adopted mixed approach research methodology. The target population was 773 affected girls' between the ages of 11-19 years in primary, secondary schools and those who had dropped out of school in Maseno division. Purposive sampling technique was used to identify girls infected or affected by the HIV and AIDS in schools while snowballing technique was used to trace 15 girls who had left school prematurely. The study sampled 148 teachers and 294 infected or affected girls and the Maseno education officer. Pilot study was done and test re-tests in Kisumu East district in five schools to establish the validity and reliability of the instruments of the study. Data was collected using questionnaire, document analysis, observation and interviews. The cross tabulation and χ^2 (CHI-SQUARE) was used for data analysis while hypotheses were tested at significance level of 0.05. The study established that prevalence of HIV and AIDS psychosocial stressors index to be 80% prevalence. The psychosocial stressors were identified as isolation, discrimination, grief, low concentration, absenteeism, poor coping strategies which have led to poor academic performance and dropping out of school altogether. Psychosocial support offered to girls by NGO's and the government ministries in support provision is lacking. The findings can be used as a basis by stakeholders to strategize on provision of psychosocial support and build resilience using CPSPM among girls to be able to realize their full potential in school and become self actualized individuals who are a resource to the community and the nation.

Dedication

To all girls' who are either infected or affected by HIV and AIDS pandemic in Kenya and Sub Saharan Africa and to my parents Mr Sevelino Nyaga Mbutitia and Mrs Jesida Mati Nyaga for believing in girl-child education and laid this important foundation .

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List of Abbreviations

AIDS: Acquired Immune Deficiency Syndrome

AMPATH: Academic Model for Providing Access to Healthcare

CDC: Centre for Disease Control

CNS: Central Nervous System

CVD: Cardiovascular Disease

EFA Education for All

FAO: Food and Agricultural Organization

HIV: Human Immo-deficiency Virus

IDU: Injection Drug Use

IOM: Institute of Medicine

KAIS: Kenya AIDS Indicator Survey

MOE: Ministry of Education

NACC: National Aids Control Council

N.G.O: Non-Government Organisation

NCST: National Council of Science and Technology

NK: Natural Killer Cells

OVC: Orphaned and Vulnerable Children

PTSD: Post-Traumatic Stress Disorder

UNESCO: United Nations Educational, Scientific and Cultural Organisation

UNICEF: United Nations International Children's Education Fund

UNAIDS: United Nations Programme on HIV/AIDS

WHO: World Health Organization

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Special thanks to my family members, my husband Muriithi and my children Joy, Peace and Patience for their moral support and inspiration to go on even when times were hard. To my parents Nyaga Mbutitia and Jesida Mati who believed in girl-child education and invested their hard earned resources in my education I sincerely appreciate their efforts as they laid this very important foundation. To all those mentioned in this acknowledgment your input is priceless in this study and may God Almighty bless you all with good health and long life. Amen.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Overview

The study investigated the prevalence of psychosocial stressors of HIV and AIDS, the coping strategies used by girls, the provision of support and their effects on the girl-child learning in Kenyan schools. Under this chapter the following were discussed: the background to the study, the problem statement; objectives and research questions; the significance of the study; the justification of the study, the scope of the study; the limitations and delimitations of the study, the assumptions of the study, theoretical framework, conceptual framework and the definition of the operational terms.

1.1 Background to the Study

HIV means Human Immunodeficiency Virus. HIV is a virus that is transmitted from person to person through the exchange of body fluids such as blood, semen, breast milk and vaginal secretions. Nevertheless, HIV is mainly spread through heterosexual contact in Kisumu County. This mode of transmission accounts for 97% in Kisumu County according to NACC (2009) but it can also be transmitted by sharing needles when injecting drugs, or during childbirth and breastfeeding. As HIV reproduces, it damages the body's immune system and the body becomes susceptible to illness and infection. There is no known cure for HIV infection, but it can be prevented.

AIDS means Acquired Immune deficiency Syndrome because people acquire the condition rather than inherit and leads to deficiency within the immune system and

has number of manifestations so it is a syndrome. Acquired immune deficiency syndrome, or AIDS, is a condition that describes an advanced state of HIV infection. With AIDS, the virus has progressed, causing significant loss of white blood cells (CD4 cells) or any of the cancers or infections that result from immune system damage. Those illnesses and infections are said to be "AIDS-defining" because they mark the onset of AIDS. Like HIV, there is no known cure for AIDS.

The statistics of the global HIVand AIDS epidemic published by UNAIDS (2010)indicate that at the end of 2009, women accounted for 57% of all adults living with HIV worldwide. The number of children thought to be orphaned by HIV and AIDS was over 16.6 million by 2009. An 'orphan' is defined by the United Nations as a child who has lost one or both parents and 14.8 million of these children live in sub-Saharan Africa. By the end of 2009 there were 1.4 million children orphaned by AIDS in Kenya.

AIDS in children was first described in USA in 1982. By June 1998 a total of 8,280 children under the age of 13 with AIDS had been reported to the Centres for Disease Control and Prevention (CDC) in United States of America. Ninety-one percent of the cases in 1997 involved prenatal transmission (Lindsey, Zimmer, & Paediatric Adolescent Scientific Committee., 1998). Initial interventions in paediatric HIV and AIDS focused on the medical urgency and terminal nature of the disease. Understandably, there was little attention given to long-term psychosocial issues and adjustment. Improvements in medical treatment, however, have resulted in a decline in AIDS incidence in both children and adults (Lindsey, et al., 1998). A survey data presented at the Paediatric AIDS Clinical Trials Group (PACTG) meeting in United States of America indicated that the largest groups of paediatric HIV and AIDS

patients were children in the 8 to 12 year-old age ranges that were infected pre-natally (Barbarin, 1990). The paediatric report indicates that 56% of HIV infected children and adolescents between the ages of 12 and 21 are long-term survivors. These children, who many predicted would not survive, are now facing academic, social, and emotional issues related to living with a chronic health condition.

Even with the expansion of antiretroviral treatment access UNAIDS (2010) it is estimated that by 2015, the number of orphaned children will still be overwhelmingly high. The extent of HIV and AIDS pandemic is unprecedented in human history. It is likely that many more will be infected, millions may die and millions will be orphaned. The disease threatens the social fabric of whole communities, societies and cultures (UNAIDS, 2001B). UNAIDS (2010) in the global summary of AIDS epidemic indicates that there were 33.3 million people living with HIV, among them adults are 30.8 million, where 15.9 million are women and 2.5 million are children below 15 years. Out of the total population of people living with HIV 22.5 million are in sub-Saharan Africa and this makes 68 percent of all people living with HIV, the region carries the greatest burden of the epidemic.

Globally there are 9.3 million young women between the ages of 15-24 years living with HIV and AIDS compared to 3.5 million young men living with the HIV and AIDS (UNAIDS 2010). For every 15-19 year old boy who is infected with HIV and AIDS, there are 5-6 girls infected in the same age group. Education among other things serves as a weapon to empower people against the HIV and AIDS. Sub-Saharan Africa has suffered greatly as AIDS has earned the dubious distinction of being one of the leading killers in the region. Within Sub Saharan Africa, countries in Eastern like Uganda and Kenya while in Southern Africa region countries like

Zimbabwe and South Africa have experienced rapid growth in HIV infection. The average HIV prevalence rate for those aged 15 - 49 in 15 Eastern and Southern African countries were estimated at approximately 15 per cent compared to 8 per cent for entire Sub-Saharan Africa (Kelly, 2008). Nations need to respond to the high rates of orphan-hood and children's vulnerability in Sub-Saharan Africa in a decisive way. The response by nations is essential for the survival of both the millions of children affected by AIDS, the community and social structures that serve them. HIV and AIDS in Sub-Saharan Africa is more than a development crisis- it is a humanitarian emergency with long political and economic consequences (UNAIDS, 2010).

The reduction in national productivity and growth that accompanies HIV and AIDS pandemic has quickly begun to reverse the development gains of the past years. Improving primary education access for all children, honours a child's basic right and reflects economic gains for the country and communities in question. The economic and social impacts of HIV and AIDS in Eastern and Southern Africa have been manifested in the deterioration quality and quantity of their education. Without an educated populace, Africa will continue to struggle to make economic and development gains. Areas which are heavily affected by AIDS are particularly disadvantaged and they deserve special consideration (UNAIDS, 2000b). When young girls coping repeatedly with death and grief without a mother or father to give care and loving attention, relocate while not knowing how long the situation may last, these girls have aged before time and they have become "juvenile adults", who are vulnerable, scarred and wary of life (Kelly, 2008).

Apart from human suffering, trauma and grief that orphans' experience, the growth in their numbers is leading many countries to experience unanticipated educational

problems. The girl-child is becoming more marginalized as she becomes the caregiver and provider to the sick parent(s) and the siblings who are sick or otherwise in the absence of parents due to death as a result of AIDS. These added responsibilities for the girl-child can lead to trauma, grief, stress, fatigue, absenteeism and dropping out of school as they try to cope with the situation (UNAIDS, 2007).

Research examining the psychological well being of chronically ill children indicates that chronically ill children are at a greater risk of developing adjustment problems (Friedman & Mulhern, 1992). These adjustment problems an increased risk for depressive symptoms, behavioural problems, academic difficulties, and feelings of isolation and withdrawal (Frank, Blount & Brown, 1997). According to Caldwell (1999) greater risks arise from practices that encourage girls to accept older men in preference to their peers, customs such as early marriage and wife inheritance. Child-rearing practices and initiation messages encourage girls to be non-assertive and to accept subordinate status in relation to their husbands and other men, and social norms that inhibit girls' discussion of sexual health and accord inferior status to men (Caldwell& Caldwell, 1999). This scenario has created more challenges to the girl-child as she strives to pursue education in an HIV and AIDS ravaged environment. There is no research that has been conducted in Maseno to establish the effects of HIV and AIDS psychosocial stressors on girls' education. Kiyiapi (2007) did a study on psychosocial issues of orphaned youth by HIV and AIDS in Western Kenya where her sample was drawn from the university. There was a need to address the psychosocial issues at upper primary and secondary school and the effects they have on girls education especially their academic performance. This was to fill a gap and provide a base on which policies can be developed to deal with HIV and AIDS psychosocial stressors among female learners in Kenyan schools. The current study

assessed the prevalence of HIV and AIDS psychosocial stressors and their effect on girls' academic performance.

With a large number of pre-natally infected children approaching adolescence, issues of ART adherence, substance use, sexuality, secrecy, peer relationships, and planning for the future has become increasingly important. Additionally, there is great concern over adolescents who are becoming infected with HIV. These adolescents who are infected with HIV through sexual contact or injection drug use (IDU) are likely to have psychosocial issues that are distinct from adolescents who were pre-natally infected. Research in these areas can help communities and nations to better understand the psychosocial effects of HIV and AIDS and effectively intervene to prevent and address psychosocial problems.

1.2 Statement of the Problem

The medical fraternity and psychologists have recognized that acute and chronic medical conditions in the paediatric population have the potential to bring about a range of psychosocial challenges not only to patients, but also to family members as noted by IOM (2006). Of these conditions, HIV and AIDS present perhaps the most complex psychosocial issues of any medical condition (IOM, 2006). The overlapping of social, individual, family, financial, cultural, and illness factors pose a challenge to communities and healthcare teams that strive to provide comprehensive services to this population. In Sub Saharan Africa there are 2.3 million children under the age of 15 who are living with HIV (UNAIDS 2010).

The visible face of HIV and AIDS highlights the social and economic hardships of children and adolescents whose right to basic needs are constantly violated notes Kelly (2008). The psychosocial burden of HIV and AIDS pandemic may seem less important, less urgent and less compelling to governments and communities, but to the affected individuals, it is urgent and their psychosocial concerns are real and require urgent intervention (Kiyiapi, 2007). The emotional demands on young people whose parents have HIV and AIDS are many. Long before the parent dies, the adolescent experiences trauma and stress related to caring for terminally ill parents (Bauman & Germann, 2004). Caring for ill parents or siblings is unpaid and can increase a girl's workload by up to a third. Girls often struggle to bring in an income whilst providing care and therefore many families affected by AIDS suffer from increasing poverty. Often in households where both parents are ill from AIDS, the responsibility of main caregiver is taken on by a daughter or daughters, even if it means they have to miss school (UNAIDS 2010).

The need to address the long-term psychosocial needs of paediatric HIV and AIDS patients has been recognized. The long-term effects of HIV and AIDS psychosocial needs include school, family, social, and psychological adjustment (Bennett, 1994). HIV and AIDS constitute a chronic stressor world over. The children have to bear hardship and responsibility on account of parents' death, sickness and unemployment. They are stigmatized by peers and treated as social outcasts. They are burdened by protracted grief for lost family members, lost homes and lost opportunities (Kelly, 2008). The children feel inadequate and they are likely to suffer Post-Traumatic Stress Disorder (Ndethiu, 2001). The early identification of psycho-social stressors can lead to timely support and care, giving girls effective coping skills which reinforces a sense of competence and encourages positive responses in future.

1.3 Purpose of the Study

The intent of this concurrent mixed methods study was to establish the prevalence of psychosocial stressors of HIV and AIDS pandemic among girls' and their effects on girls' education in Kenya. In this study the questionnaire was used to measure the relationship between the prevalence of HIV and AIDS psychosocial stressors and girls academic performance. At the same time the prevalence of psychosocial stressors was explored using interviews, document analysis and observations with the teachers and girls in Maseno area. The reason for combining both quantitative and qualitative helped to explain the results in more depth as noted by O'Cathain, Murphy & Nicholl (2007). Numeric data and detailed views were used to advocate for change for girls affected by HIV and AIDS psychosocial stressors

1.4 Objectives of the Study

The study was guided by the following objectives:

i. To establish the prevalence of HIV and AIDS psychosocial stressors among girls and their effects on their academic Performance.
ii. To investigate the HIV and AIDS psychosocial stressors coping strategies effects on girls' academic performance.
iii. To determine the effects of girls' characteristics (age, class level, school type and parental status) on the prevalence of HIV and AIDS psychosocial stressors among the infected and affected girls.
iv. To find out whether teachers' characteristics (sex, working experience and designation) affect the provision of psychosocial support to girls' affected by HIV and AIDS psychosocial stressors.

v. To establish the impact of psychosocial support provision to girls affected by AIDS psychosocial stressors on girls academic performance

1.5 Research Questions

The study was guided by the following research questions:

The subsidiary questions which are relevant to the study were:

i. What are the effects of HIV and AIDS psychosocial stressors' prevalence on the academic performance of girls in schools?
ii. What strategies do the girls' use to cope with HIV and AIDS psychosocial stressors and are they affecting their academic performance?
iii. Which of the following girls' characteristics (age, class level, type of school and parental status) influence the prevalence of HIV and AIDS psychosocial stressors?
iv. In what ways are teachers' characteristics (sex, working experience and designation) influencing the provision of psychosocial support to girls' affected HIV and AIDS psychosocial stressors?
v. Does the psychosocial support affect positively or negatively the academic performance of the girls?

1.6 Hypotheses

The study was guided by the following null hypotheses:

Ho_1: That the prevalence of HIV and AIDS psychosocial stressors has no significant effects on girls' academic performance in Kenyan schools.

Ho_2: That the Girls' HIV and AIDS psychosocial stressors coping strategies have no significant impact on girls' academic performance.

Ho_3: That girl's characteristics (age, class level, type of school and Parental status) have no significant influence on the prevalence of HIV and AIDS psychosocial stressors.

Ho_4: Teachers' characteristics (sex, working experience and designation) have no significant influence on the provision of psychosocial support.

Ho_5: That the Psychosocial support provision for girls affected by HIV and AIDS psychosocial stressors have no significant influence on their academic performance in Kenya.

1.7 Justification of the Study

Poverty, HIV and AIDS thrive on each other and unfortunately education, like health and social support is inequitably accessible to the poor notes Sen (1990). HIV and AIDS is a creature of culture and circumstance, local perceptions and behaviours, customs and religious belief. It is virtually impossible to generalize about good practice. What works to break the power of HIV and AIDS in a given place may not work in another (Parkhurst, 2000: Coombe, 2002).

According to UNAIDS (2010) over 7000 new HIV infections were reported every day in 2009, of whom 97% are in low and middle income countries. Out of the 7000 new

daily infections 1000 are in children under 15 years of age, 6000 are adults aged 15 years and in the older people 51% are women and 41% are young people between the ages of 15-24 years). Every 14 seconds a child is orphaned in sub Saharan Africa (UNAIDS, 2010). So much has been said on consequences like death and increasing rate of orphan-hood due to AIDS but there is need to assess the influence of HIV and AIDS psychosocial stressors prevalence on girls' and their education in Kenya.

It was found necessary to carry out this study in this part of the country where the prevalence of HIV and AIDS is 19% according to NACC (2009). It is against this background that the study was conducted in Maseno division in Kisumu County of Western Kenya to assess the psychosocial stressors posed by the HIV and AIDS among affected and infected girls in schools and their effects on their learning. The study can help the stakeholders to understand what is ailing girls who are infected and affected by HIV and AIDS psychosocial stressors and take steps that can make them realise their full potential. This kind of study has not been conducted anywhere in Kenya and can be used to inform other studies in other areas with high HIV and AIDS prevalence.

1.8 Significance of the Study

The study gives insight on the current prevalence of psychosocial stressors of HIV and AIDS pandemic in Maseno division of Kisumu County. The study can help the guardians, teachers, communities and the MoE to strategize on how to help the girl-child in pursuing her education in the face of HIV and AIDS pandemic and be able to realize their full potential. The study provided an avenue for advocacy for the girl-child especially girls affected by the psychosocial stressors of HIV and AIDS

pandemic. The findings can help the parents, teachers, communities and relevant government ministries to establish the psycho-social difficulties faced by the infected and affected girls in school and strategize for effective measures to deal with such difficulties. The study made suggestions that can help girls cope with the effects of psychosocial stressors of HIV and AIDS pandemic as they pursue their education therefore helping girls to make the best out of a situation that they cannot change to their benefit, community and the nation at large.

Recommendations have been made which can be used by the education stake-holders to effectively give the psychosocial support to the girl-child affected by HIV and AIDS psychosocial stressors. Learning for girls in a world ravaged by HIV and AIDS pandemic cannot be the same as an AIDS free environment. The study made recommendations based on the findings especially the need to equip teachers with skills that can enable them identify these stressors among girls, help the girls with the coping skills and effectively provide support especially emotional support therefore building competency among affected girls.

1.9 The Scope of the Study

The paradigm of the study was advocacy/participatory combining quantitative and qualitative research methodologies. The study is an action agenda for girls' who are affected AND infected by HIV and AIDS psychosocial stressors. The girls need social justice so the study addressed the issue of discrimination, isolation and empowerment as Creswel noted in (2009). This study was conducted in Maseno Division of Kisumu West district in Kisumu county Western Kenya, East Africa (Appendix, L) The study investigated the impact of psychosocial stressors of HIV and AIDS pandemic on girls'

education in Kenya. The independent variables investigated were the psychosocial stressors of HIV and AIDS pandemic such as; Isolation, discrimination, grief, secrecy, stigma, financial difficulties, concentration difficulties and social withdrawal. The study also investigated coping strategies like; thought suppression, avoidance, talking about the stressor, mental disengagement, optimist and pessimist's personality, distraction coping strategies, culture and social support provided to the girls in schools and how they interact with the education in Kenyan schools.

1.10 Limitations

The stigma associated with HIV and AIDS was a challenge to the research because many people were not willing to talk freely about HIV and AIDS pandemic, the respondents were encouraged that being HIV positive is not the end of the world and knowing ones status is better so as to plan one's life and live positively. Another limitation was cultural beliefs that prevent families or communities from disclosing the cause of death of the people said to be close to them. To overcome this, the researcher gave a short talk on the purpose of the study and assured the respondents of confidentiality of any information in order to overcome fear of disclosing information. The study was conducted within Maseno division of Kisumu County in Western Kenya. The findings of the study cannot be generalized to all other girls' who are either infected or affected by the HIV and AIDS pandemic in Kenyan schools, because HIV and AIDS is community and culture specific that similar studies need to be conducted in specific areas especially areas with high HIV and AIDS prevalence in Kenya.

1.11 Assumptions of the Study

The study made the following assumptions:

i. That those responses given by the respondents were sincere and honest.
ii. That the schools have records of girls affected by HIV and AIDS psychosocial stressors.
iii. That the schools sampled offer the same curriculum and have the same professionally trained teaching staff.
iv. That the teachers are aware of the existence and prevalence of HIV and AIDS psychosocial stressors within schools and communities in which they live in.

1.12 Theoretical Framework

1.12.1 Transactional Coping Theory

The study was based on transactional theory of coping process which was developed by Zeitlin & Williamson (1994). They were of the views that coping is framed as a process of interaction between an individual and an environment. Coping is what people do when they successfully manage transactions within their environment. Coping is the reaction to the question: what do I do? Before one can cope other psycho-social processes occur, not necessarily sequentially or consciously in answer to the following questions: Who am I (identity formation)? How and what do I feel (emotion regulation)? How do I think (cognitive regulation)? What are my beliefs (normative regulation)?

According to Zeitlin & William (1994) the environment makes constant demands on the individual. The individual experiences these demands as stress (anxiety, tension). These demands can be ones' sickness, sickness of a loved one, or death of a loved one. The girl has to decide how to manage the situation that is causing anxiety and stress. The outcome of decision made is coping response or reappraisal. The coping response influences the girls' environment in school and at home. This can present new demands on the individual like being discriminated by teachers, peers and relatives or not being able to cope with school work or the response may alleviate anxiety and stress (see figure 1.1).

The following example illustrates the way transactional coping process can apply among girl(s). A girl whose mother is infected by HIV, this situation causes anxiety and stress to the girl. The girl experiences emotional tension and fatigue because she has to take care of her sick mother and other siblings. The girl believes that if she engages in a relationship with a respected person in the society, her personal value and worth may increase (self-esteem) and she may decide to cope with trauma by having sexual relations with a man who has a social standing. Her choice increases her susceptibility to infection, yet provides her with lunch money and passing grades. Her stigmatized family seeking social acceptance may strengthen her acquaintance with an admired community figure who in this case is the teacher. If she becomes pregnant or infected with HIV or both she may be abandoned by the teacher and be disowned by the family, this adds to her personal trauma and distress already experienced by the family. Instead of the outcome alleviating the anxiety and stress it presents new demands on the girl who is abandoned by the man, disowned by family, is pregnant and HIV infected hence increasing the stigma experienced by the family. The cycle continues and this leads to rapid spread of HIV.

The fundamental process of coping is the same for everyone, although people differ in age, gender, culture and social-economic situation. The transactional coping process illustrates the universal stages of coping with a stressor (see figure 1.1). The demand or the internal or external stressors in this study are caused by HIV and AIDS for those that are infected or affected. This causes stress to the individual and she experiences physical, mental or emotional tension. Depending on the way the girl has been socialized she will give meaning to the situation faced and make a decision to be able to cope. The coping process affects the thinking of the girl and therefore the feelings which eventually determines how the girl will behave either in school, at home and within the community.

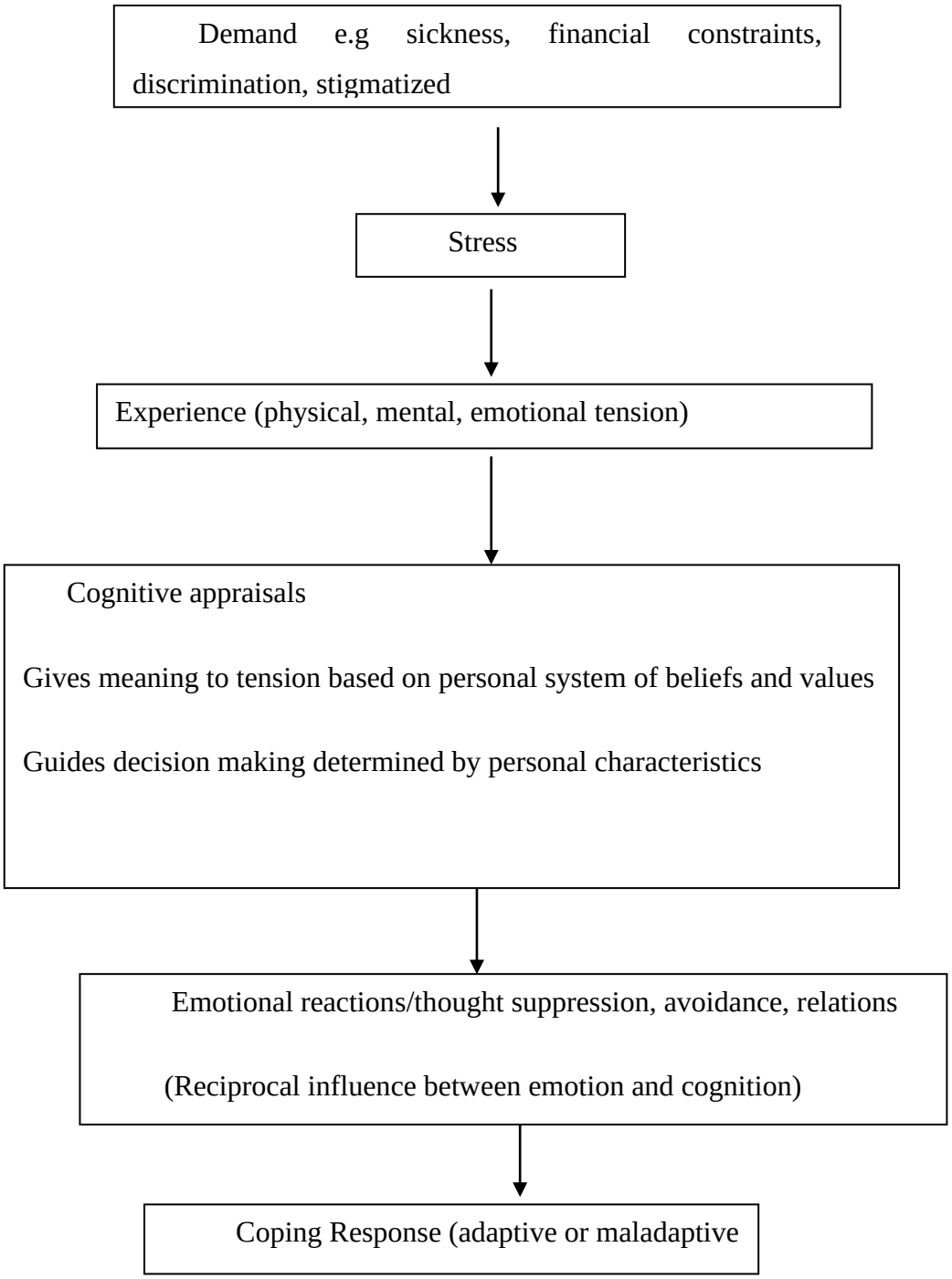

Figure 1.1. The stages in the Transactional coping process

Source: **Adapted from Zeitlin and Williamson(1994)**

HIV and AIDS trigger multiple anxieties in a girl. The stressors may be environmental demands like exclusion from school, having no money for a funeral and basic necessities. Internal challenges may be bewilderment at drastic changes in family circumstances, profound grief at the loss of a parent, or having to suppress expressions of sadness. The girl-child may experience anguish trying to find out what is happening to her when she is removed from a familiar community and placed in institutional care. She will wonder how these changes will affect her well-being: who will cuddle her now? Who will tell her comforting stories? Where will she get food? What will happen to her brothers and sisters? What is expected of her now? Cultural beliefs and values are fundamental guidelines in the subsequent cognitive process of determining what an event means.

The psychosocial stressors pose demands which are either internal or external on the girl-child and this causes anxiety. The stress causes physical, mental and emotional tension to the girl. The girl gives meaning which is cognitive appraisal to what she is experiencing and makes decisions based on belief systems and values. The decision made determines the coping strategies employed by the girl-child and this in turn influences emotional reactions. It is at this point that the girl needs support to be able to cope with the whole situation. If the girl is not given the support she is likely to make decisions which increase the demands on her and this makes coping difficult (see figure 1.1).

When a girl is faced with a stressing situation due to HIV and AIDS which deprives her of both maternal and community care, she will ask herself what she should do to alleviate her situation and this is what is called cognitive appraisal. The implementation of the decision constitutes the observable outcome such as getting

married, poor academic performance or leaving school. Whatever the girl does is an indicator of the unobserved psychological processes that preceded the coping response. The study made an inquiry into existing internal and external demands posed by HIV and AIDS to girls and how they cope with these situations. The study used the transactional theory to explore the relationship between the prevalence of HIV and AIDS psychosocial stressors, coping strategies, consistency of caring and their affects on girls' academic performance. The study investigated the role of teachers, educational officers and community in supporting the girl-child to cope with the psychosocial stressors of HIV and AIDS while in school. The study analyzed the relationship between coping and mediating variables like the girl's age, class level, parental status and type of school attended by girls. The research explored the beliefs that make the girls to choose certain ways of coping with the internal and external demands in the face of HIV and AIDS pandemic in Maseno division of Kisumu West district, Kisumu county western Kenya.

1.13 Conceptual Framework

The conceptual framework of this study can be referred to as the Cognitive Psychosocial Stressors Prevalence Model (CPSPM). The model is developed based on transactional theory taking into consideration the prevalence of psychosocial stressors of HIV and AIDS. The CPSPM is conceptualised to consist of the following domains: Psychosocial stressors, Individual Characteristics, environment, Intervening strategies, Coping Strategies and Cognitive/behavioural change. Each of the domains is made up of a number of elements which determine the functioning of and its influence on the individuals' personality manifestation (see figure 1.2)

The domains are described in the subsequent paragraphs:

Psychosocial Stressors' Prevalence which are independent variables are widespread events that expose individuals to adverse environment and life experiences. In this study the elements that were considered as psychosocial stressors and their widespread were: isolation, discrimination, grief, secrecy, stigma, financial difficulties, concentration difficulties, poor performance and social withdrawal.

Individual Characteristics are mediating variables and in this model they are conceptualised to be personality traits of the participants. In this study the elements of individual characteristics considered focused on teachers and girls characteristics. The teachers' characteristics were: sex of the teacher, working experience and designation of the teacher and their influence on support provision to the girls. The girls' individual characteristics considered in this study were: age and the parental status

Environment is a covariate and it is in this context that an individual interacts with the psychosocial stressors. Examples of these environments are: schools, prisons, urban settings, rural setting, schools, class and hospitals. Under this study the elements of the environment considered were: the class, the school and home.

Psychosocial support is action taken to alleviate or eliminate the psychosocial stressors. Examples of psychosocial support considered in this study were: emotional (counselling, love, spiritual encouragement), informational (guidance, information giving, teaching life skills) and instrumental (provision of basic needs, donation of items, fee payment)

Coping Strategies are independent variables and they refer to the course of action taken regarding the stressor or reaction an individual takes to deal with the psychosocial stressor. The study considered the adaptive and maladaptive coping strategies as used by the girls. The adaptive coping strategies being used are visiting VCT, use of condoms, attending seminars, seeking guidance and counselling services, accepting ones status, seeking support from able relatives, NGO's, government agencies and knowing their rights. The maladaptive coping strategies being used by girls to deal with HIV and AIDS psychosocial stressors are: missing lessons, drop out of school, engage in irresponsible sexual behaviours, seek employment, early marriages, seek divine intervention, begging and commit suicide.

Cognitive/Behavioural Change is dependent variable which is the mental functioning of an individual after interacting with HIV and AIDS psychosocial stressors under specified environment. In this study the outcome of learning was used as a measure of cognitive change. The study measured cognitive change using the academic performance of the girl-child both in primary and secondary school.

The psychosocial stressors which are either acute or chronic prevalence was established by the study. The psychosocial stressors interact with individual characteristics of teachers and girls. The personal straits of girls such as age and parental status are moderated by the environment to determine the coping strategies adopted by the girls. The teachers' characteristics of sex, working experience and designation significantly influence the intervention strategies through the provision of psychosocial support. The coping strategies both adaptive and maladaptive and the intervention strategies do not have a significant effect on the girls' cognitive change

as measured using academic performance which was found to either very poor or poor (see figure 1.2).

The main independent variable is the prevalence of psychosocial stressors of HIV and AIDS pandemic; the girls' characteristics determine the coping strategies used and the teachers characteristics influence the psychosocial support offered to the girls who are in school or out of school. The study established the relationship between the stressors, personal characteristics of the girls, coping strategies or the action taken to deal with the stressor and which influence of the teachers characteristics on provision of psychosocial support and the environment in which both girls and teachers are operating in where there is no cognitive change hence poor academic performance. Academic performance for the girl-child is therefore a function of coping strategies, psychosocial support, the environment and individual characteristics of the girls and teachers personality traits as moderated by HIV and AIDS psychosocial stressors. Therefore the relationship between the independent and dependent variables can be represented using the following expression: AP= f(cs, pss, env, ic.)pst.Where:

AP = academic performance (D.V),f= function of, cs= coping strategies (I.V), pss=psychosocial support(I.V), env=environment (M.V), ic= individual characteristics(M.V),pst=psychosocial stressors (I.V).

Academic performance is a function of coping strategies, psychosocial support, environment and individual characteristics as moderated by psychosocial stressors of HIV and AIDS pandemic among girls. This is illustrated in figure 1.2

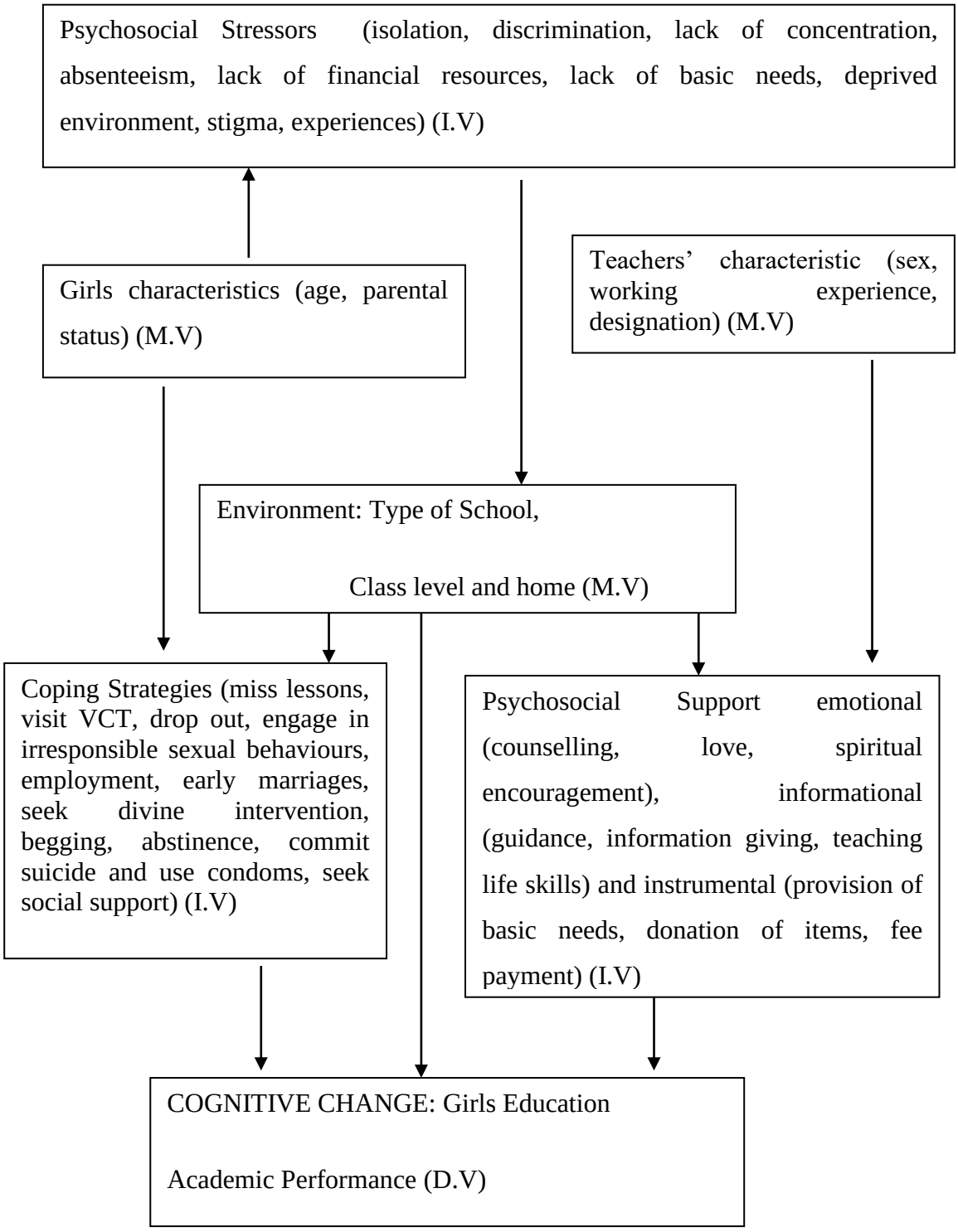

Figure 1.2.The Cognitive Psychosocial Stressors Prevalence Model (CPSPM)

Source: Researcher

1.14 Operational Definitions of Terms

The following terms were used in the study with the following meaning

Academic Performance

The study used the girls' percentage scores on written papers as measured using three terms mean scores from schools.

Acute stressor

Sometimes called shock and arises in response to a terrifying event. It threatens the individual; it is critical but lasts for a short time e.g. relocation, accident or physical sickness.

Affected Girl

Girl whose parents are suffering from AIDS, living in child headed households, living in families caring for orphans, have been orphaned by AIDS and living in communities severely devastated by HIV and AIDS.

AIDS

Means Acquired Immune Deficiency Syndrome which is a medical condition where a person's immune system is too weak to fight off infections.

Challenges

The difficulties or problems faced by the girl-child as she pursues her education in an environment ravaged by HIV and AIDS pandemic.

Chronic stressor

In this study chronic stressors were: grief, sickness, discrimination, isolation, stigma lack of concentration, cognitive deficits and deprived environment.

Class level

A standard/grade in primary or Form in secondary schools where pupils/students meet regularly to study under the guidance of a teacher in one room. The study used standards 6-8 for class level in primary schools and Forms 1-4 in secondary schools.

Coping Strategies

The course of action taken regarding the stressor by girls. In the study these included seeking guidance, visiting VCT centres, seeking divine intervention, attending seminars, seeking employment, begging, seeking help from able relatives, seeking bursaries, missing lessons, accepting the reality of HIV and AIDS, dropping out of school, engaging in sex with men to give the money and knowing one's rights.

Deprived Environment

Girls living in homes and schools where basic necessities like food, clothing, shelter, financial resources and care/security are scarce or unavailable due to death or sickness of one or both parents as a result of AIDS.

Girl-Child

A young female person between the age of 13-24 according to the UN. This study looked at females who are attending primary, secondary schools and those out of school between the ages of 11-19 years old.

HIV

Human Immunodeficiency Virus which infects a sub-group of white blood cells known as T cells. It is also known as Lentivirus ("Lenti" means "slow") because it gradually destroys the immune system taking as long as 10 years leaving the host unprotected against infections.

Infected Girl

The study considered young females between the age of 11-19 with HIV since birth or have been newly infected due to lack of economic or gendered power hence experiences psychosocial stressors due to HIV infection.

Learning

Act, process or experience of gaining knowledge/skill which leads to transformation of behaviours and attitudes and it can happen consciously or unconsciously. The study used learning among girls by establishing their academic performance and behaviour change.

Learner-Characteristics

The study used this as a feature to identify, tell apart or describe the affected girls like age, class level, the type of school attended and the parental status whether alive, sick or dead due to HIV and AIDS.

Parental Status

The study considered the father or mother being alive and sickly, one dead or both dead due to AIDS making the female learner to be an orphan and others missing school to take care of their sick parents/siblings.

Prevalence

Widespread or occurrence for example in Kisumu County where Kisumu West district and Maseno division is situated the HIV and AIDS prevalence is 19%.

Psychosocial Support

The help given to HIV and AIDS infected and affected girls to foster resilience aiming at resumption of normal life. In the study it is the process of meeting a person's emotional, social, mental and spiritual needs, promoting the psychological and emotional wellbeing, as well as their physical and mental development.

Psychosocial Stress

Is a specific type of experience that threatens girls' social status, self worth, acceptance or respect and feels she does not have control over it. The study dealt with HIV and AIDS infected and affected girls stress resulting from their interaction with teachers, other learners, parents/guardians and the community.

Psychosocial Stressors

According to this study these are a variety of life events that expose girls' to adverse environments and life experiences like isolation, stigma, discrimination, disease (sickness), abuse, deprivation and adverse social environments or situations (like being a caregiver to an ailing family member).

Psychosocial Stressors Prevalence

Widespread occurrences of life events like isolation, stigma, discrimination, sickness, abuse, deprivation in social hierarchy among the learners

Stress

It is a response to events both internal and external that tax ones abilities and resources ability to cope. Like prolonged sickness of a loved one, multiple loss, concentration deficits, discrimination by peers, physical, emotional and sexual abuse and caring for the siblings.

Stressor

A stimulus that throws the body's equilibrium off balance. In the study the following stressors were investigated: sickness, grief, isolation, homeless, discrimination, stigma, schoolwork, medical regimes and lack of resources especially financial.

Support Provision

The process of furnishing girls with means of sustenance or livelihood to maintain or to hold them up in the adversity of HIV and AIDS in the study this was the provision of food (lunch programme) clothing, medicines, fee payment, guidance and counselling.

Teacher-characteristics

The study distinguished trait possessed by a particular teacher like sex, working experience and designation.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

The reviewed literature helped the researcher to get ideas of other researchers, to understand the gap to be filled by the study. This chapter contains the following sub-headings: HIV and AIDS Pandemic and education, Stress and sources of stress, Effects of stress, Coping strategies, The nature of HIV and AIDS, HIV and AIDS in the paediatric population, Psychosocial co-morbidities among HIV infected youth.The impact of psychosocial stressors of HIV and AIDS, Psychosocial stressors and their effects on patients, Links between stress and disease, Stress and progression of HIV and AIDS, Effects of HIV and AIDS on families and community, Intervening strategies of HIV and AIDS stressors and the conclusion

2.1 HIV and AIDS Pandemic and Education

Kenya is home to one of the world's harshest HIV and AIDS epidemics (WHO, 200). An estimated 1.6 million people are living with HIV; around 1.2 million children have been orphaned by AIDS; and in the year 2009, 80,000 people died from AIDS-related illnesses in Kenya according to UNAIDS (2010). Kenya's HIV prevalence peaked during 2000 and, according to the latest figures dated (2011), it has dramatically reduced to around 6.3 percent. Many people in Kenya are still not being reached with HIV prevention and treatment services. Just under half of adults who need treatment and only 1 in 3 children needing treatment are receiving it. This demonstrates that Kenya still has a long way to go in providing universal access to HIV treatment,

prevention and care. Even though awareness of HIV and AIDS in Kenya is high, many people are living with stigma and discrimination (WHO, UNAIDS & UNICEF, 2010). Studies have shown that although people are aware of the basic facts about HIV and AIDS, many are not addressing issues of stigma. (National Aids Control Council, 2009).

HIV and AIDS pandemic is interfering with the acquisition of the skills, knowledge and ability for girls to be able to positively adapt to the environment. Girls are less likely to attend school either because of decreased income due to AIDS, they are infected by HIV or because they are retained at home to care for relatives who suffer from AIDS and related diseases (Kelly, 2008). This practice leaves them uneducated and unable to earn a living, to protect themselves from infection, or break out of the social traps, for example, abuse and early marriage that expose them to increased risk of HIV infection.

Even without HIV and AIDS, the education sector faces major challenges. The goal of eliminating gender disparities in primary and secondary education by 2015 poses an even greater challenge, given the proximity of target date as well as the greater likelihood of girls' dropping out of school in the HIV and AIDS context. Countries failing to achieve universal primary education because of below average performance will be less able to respond to the impact of HIV and AIDS pandemic. Therefore changes in education system that can help low-income countries like Kenya to progress toward EFA will also help them respond better to HIV and AIDS (Kelly, 2000b).

The tremendous potential of education and the crippling impact of the HIV and AIDS pandemic on education present both an enormous opportunity for countries that act to mitigate AIDS effect on education but grave danger for those that do not. The divergent paths will be most evident in Africa, where the predominance of youth in the population promises rich rewards for an education focused strategy, but dire consequences for a passive strategy that succumbs to the vicious cycle engendered by HIV and AIDS (see figure 2.1).

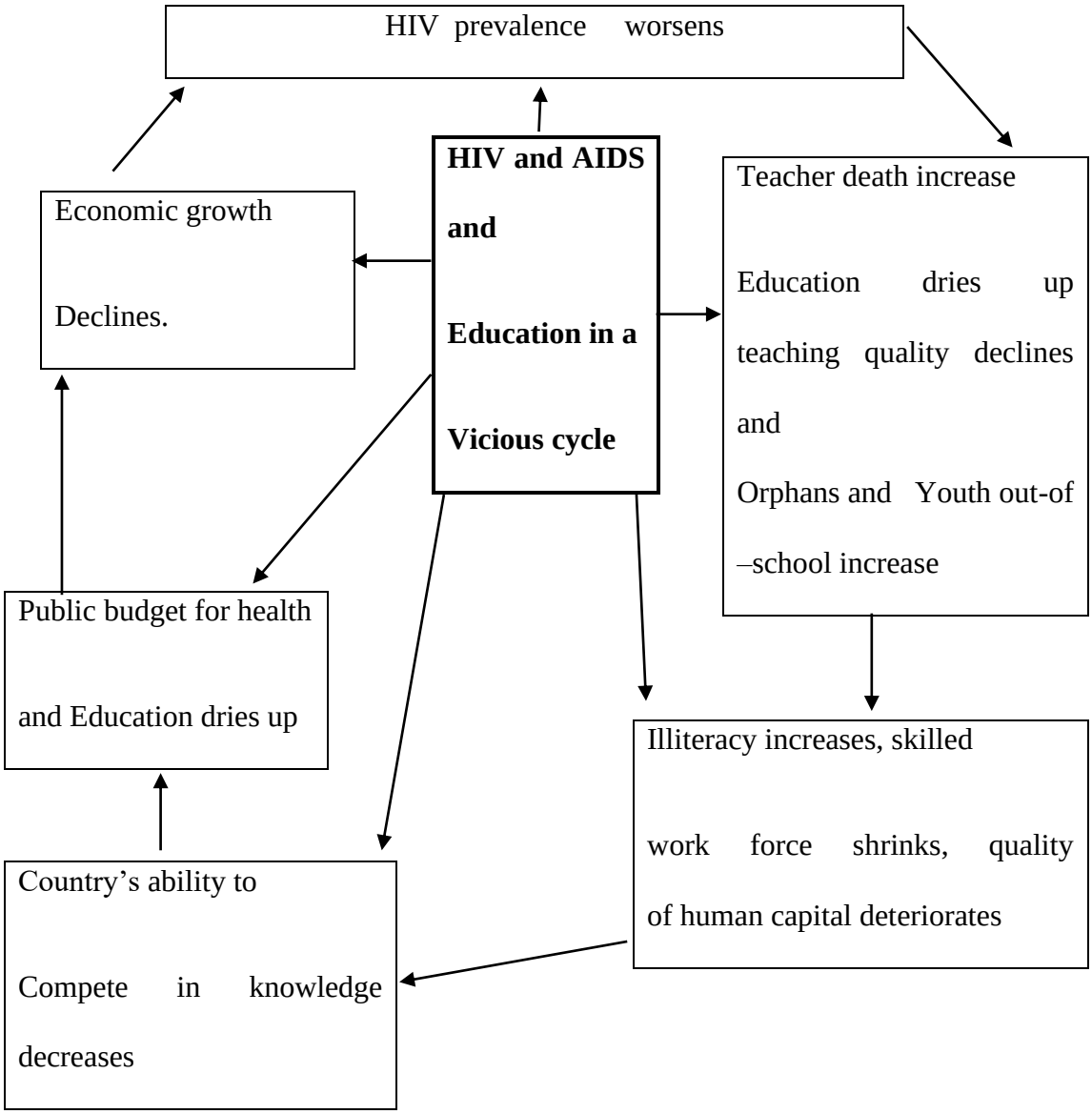

Figure 2.1HIV and AIDS and education

Source: UNAIDS 2001a

HIV and AIDS has a pronounced adverse impact on both the supply and quality of education. The impact of the pandemic has been felt in the following areas of education; supply and quality, demand, AIDS orphans, school-age girls and costs of education. Education can be a very effective tool to prevent and manage HIV and AIDS because it promotes the social well-being and reduces poverty at the same time promotes national productivity hence better living standards for the population.

Education does not only reach the young but also the teachers and the communities who are crucial in addressing the problem at its roots. Kenya National AIDS Strategic Plan II through NACC has recommended greater community ownership of programmes and systems that deliver health services.

To mitigate the devastating effect of HIV and AIDS on education especially that of the girls the current study was conducted in Maseno division of Kisumu West district (Kenya) to establish the prevalence of psychosocial stressors of HIV and AIDS pandemic and how they affect the girls' academic performance. The study also examined the coping strategies used by the girls to deal with the psychosocial stressors in Maseno division of Kisumu West District of Kisumu county where the HIV and AIDS prevalence is 19%. The study considered the interventions of the government, NGO'S, school and community level to provide psychosocial support to the infected and affected girls.

A study in 72 capital cities in Sub-Saharan Africa showed significantly higher HIV infection rates not only for girls, but also for all adults, where the gap between male and female literacy rates was larger (Over, 1998). The HIV and AIDS epidemic reduces girls' already low enrolment in secondary and tertiary education. In Africa secondary school enrolment rates particularly for girls are already extremely low, and the disparity between male and female enrolment in Universities and colleges is also high (UNESCO, 2001). Girls in secondary education are more likely to contract the HIV and AIDS and drop out earlier than boys, the epidemic is likely to worsen the gap between male and female enrolment in tertiary education. In some countries the epidemic contributes to making the education system itself a source of risk especially for girls, this is because there is abuse and harassment of school-age girls. Girls are

harassed on their way to and from school especially where they travel long distances. Girls are coerced into sex in exchange for educational advancement or other favours (Cohen, 2001).

A study in Tanzania found that a quarter of primary school girls having sex with adult men, including teachers: receiving money or presents was one of the reasons for engaging in sexual activity. In Uganda 22% and 50% in Kenya of the school-age girls who engage in sex anticipate receiving gifts or money in exchange for sex (Coombe, 2000b). Typically sex is with older men and such sexual relations expose the girls to increased risk of HIV infection.

2.2 Stress and Sources of Stress

Stress is a general term describing the psychological and bodily response to a stimulus that alters one's equilibrium (Lazarus & Folkman, 1984). Stress is largely an issue of personality because it is one's interpretation of an event that determines the reaction or response. Stress affects people positively or negatively, in this study stress that affects a person negatively was the one under consideration for example it prevents students from concentration and effective studies. Sources of stress are factors responsible for stress which are signals or stimuli in the environment. When students are exposed to stimuli that cause stress they are likely not to achieve their full potential academically, socially and emotionally. There are different types of stressors namely: physical, environmental, social and psychological stressors(Cohen & Herbert, 1996). When the psychological and social stressors are considered together this means one is considering the psychosocial stressors.

Physical stressors are easily identified, for example, acute psychological stressor like working against a deadline while a chronic stressor is feeling pressured by work. Example of social acute stressor is getting fired while chronic social stressor is isolation due to stigma and discrimination due to loss of employment. It is the perception of whether or not a stimulus is a stressor that is crucial for determining whether the stress response will occur (Lazarus & Folkman, 1984). An individual appraises a stimulus in two phases: first the stimulus is assessed for the likelihood of danger and this is referred to as primary appraisal. This assessment is followed by secondary appraisal which is the determination of the resources available to deal with the stressor. The question is " Am I in danger?", and then followed by "What can I do about it?" the third step is coping: that is the person experiencing stress takes some course of action regarding the stressor, its effects or his/her reaction to it.

It is clear that certain stimuli such as illness or injuries are associated with physical stress, similar associations apply to certain types of psychological and social stressors. One such stimulus is the lack of a sense of control. Actual control is not important; what is important is whether an individual perceives a sense of control (Shapiro, Schwartz, & Astin, 1996). The perception of control can affect ones performance (Shapiro, Schwartz & Astin, 1996).

Perceived lack of control in the face of a stressor can lead to the onset of learned helplessness. Although warning of an upcoming stressor can reduce the sensations of stress, vague information can make the stress worse. In the face of a catastrophic stressor, such as diagnosis of a terminal illness, perceived control increases stress. Research looking at the role of social class in the perception of control and health found that people with lower incomes perceived less control in their lives and were in

poorer health, those who have a greater sense of control, regardless of income had better health (Lachman & Weaver, 1998). People experience internal conflict when they have to make difficult choices which involve competing goals, actions, impulses or situations.

Life's hassles can be a source of stress. All the daily hassles –the "little things" (sometimes not so little but ongoing) like health of someone in the family, having too many things to do, misplacing or losing things, trying to lose weight and many others add up to create stress. Those who report more daily hassles also report more psychological and physical symptoms of stress (DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982). These people are more likely to have suppressed immune systems and have higher cholesterol levels (Twisks, Snel, Kemper, & Van Mechelon, 1999). The stress of daily long term caretaking of a sick person creates a risk of illness for the caregiver. Interruptions are another feature of daily life that can be a stressor especially during a mentally challenging task and this can increase the cortisol levels (Earle, Linden, & Weinberg, 1999). Therefore what one perceives as a stressor depends on the amount and nature of stress he/she is already experiencing. If one perceives the situation as an improvement, then he/she will perceive the stimulus as less stressful than if one perceives things as getting worse (Sapolsky, 1997).

Environmental stressors like bad lighting, noise, crowding, demands of shift-work while others relate to job itself, like physical and mental workload, level of control of the job and time pressure. People bring their personal characteristics to work with them and some of these can create stress not just for the individual but for those who must interact with them. Chronic stressor on the job, physical and mental exhaustion

and a sense of little accomplishment add up to stress. Employees with stress feel tired all the time, often show symptoms of depression and frequently feel trapped in the job and are cynical about it. Jobs that require involvement and commitment to others such as nursing or teaching have a higher risk for employee stressed than jobs without those elements. Personal characteristics as well as working conditions contribute to stress. Those who take their work more seriously than necessary for example and those in jobs requiring involvement with others who do not obtain satisfaction from this involvement are more likely to experience stress (Shapiro et al., 1996).

Another source of stress is an individual's personality type. There are three type of personality: Type A, Type B and Type C personality. The Type A is an ordinary normal person operating at his maximum possible speed. He or she wants to achieve a big goal but he thinks that time is very limited and as a result he or she develops the following behaviour: Exaggerated Sense of time urgency: Since the type A thinks that time is running out and since his or her goals are too big he or she always races with time. The type A is a very competitive person, he or she considers everything to be a challenge and he or she can handle more tasks at the same time than ordinary people. The type A personality believes that price for over achievement does not come for free therefore subject to tremendous amounts of stress(always running, having lots of things to do & racing with time)(Miller, Chen & Zhou, 2007). Type B personality are individuals who are relaxed in nature and have no sense of time urgency and this helps the person not to feel stressed while doing tasks. Type C personality type is not assertive and this means that they often suppress their desires and wishes so as not to offend others and these results to tremendous stress and even depression over time.

Barefoot, Dodge, Peterson, & Dahlstrom (1989) found that increased mortality was associated with an untrusting and cynical view of people, repeated negative emotions in personal interactions and recurrent expressions of overt anger and aggression in the face of difficulties or frustrations. Venting one's anger makes people more likely to act aggressively and maintain their anger. The way life's little social stressors become large stressors for hostile people can be seen as an interaction of events at the levels of the group and individual. Social stressors which by definition are events at the level of the group are influenced by hostility and the characteristics of the individual. Specifically the way hostile people perceive of and think about other people affects their physiological responses to social stimuli. The study investigated the psychosocial stressors associated with HIV and AIDS illness, the daily duties of the students, the female students' environment (home and school) and personality traits.

2.3 The Effects of Stress

There are numerous physical, cognitive and psychosocial disorders that have been linked to stress. The American Psychological Association has summarized the most common physical effects of stress on the internal systems of human's body:

2.3.1 Physical Effects of Stress

The physical effects of stress are summarised below:

Nervous System is affected when the body suddenly shifts its energy resources to fighting off the perceived threat. In what is known as fight or flight response, the sympathetic nervous system signals the adrenal glands to release adrenaline and cortisol. These hormones make the heart to beat faster, raise blood pressure, change the digestive process and boost glucose levels in the bloodstream. Once the crisis passes the systems usually return to normal**.**

The contraction of muscles for extended periods can trigger tension headaches, migraines and various musculoskeletal conditions. Stress can make an individual's breathing harder and cause rapid breathing, which can bring on panic attacks in some people.

Cardiovascular System is affected by acute stress – stress that is momentary, such as being stuck in the traffic can cause an increase in heart rate and stronger contractions of the heart muscle. Blood vessels that direct blood to the large muscles and to the heart dilate, increasing the amount of blood pumped to these parts of the body. Repeated episodes of stress can cause inflammation in the coronary arteries, thought to lead to heart attack and high blood pressure.

Gastrointestinal System where stress may prompt one to eat more or much less than one usually does. If an individual eats more or different foods or increase the use of tobacco or alcohol one may experience heartburn or acid reflux. The stomach may react with "butterflies" or even nausea or pain and one can vomit if the stress is severe enough. In the Bowels stress can affect digestion and which nutrients the intestines absorb. It can also affect how quickly the food moves through one's body system leading to either diarrhoea or constipation.

In the reproductive system men with excess levels of cortisol, produced under stress, can affect the normal functioning of the reproductive system. Chronic stress can impair testosterone and sperm production and cause impotence. While in women stress cause absence or irregular menstrual cycles or more painful periods and can also reduce sexual desire.

Immune system the immune system is the internal system which is designed to protect human beings from any external bodies (viruses or bacteria). It costs a lot to the body meaning that it has very high energy usage. Under stress the body needs energy to run or fight! This is why it changes its chemistry to suppress the immune system. This explains why people usually get ill before or after exams or big challenges at work. The body pumps sweat for no reason even when it is cold. The sweating is not caused by extensive physical work. It starts from palms and armpits and can show up on face and the whole body. Tingle is where an individual have a slight stinging feeling in the arms, fingers, legs or toes. Sometimes the feeling is like one has thousands of needles stuck in legs**.** Numbness is when as a result of stress a person cannot feel anything in a particular part or parts of his/her body legs, arms.....Headaches might be caused by different reasons, one of them being chronic overwork and stress. In addition tensions and deep disappointments can also result in stress and terrible headaches. A person who is stressed feels tired, one wants to rest or sleep. Tiredness is natural consequence of long working hours or conflicts and is one of the most common physical effects of stress. www.stressorg(accessed online).

2.3.2 Cognitive Effects of Stress

This is the excitation caused by stress that makes complex and subtle thought processes more difficult. There is too much noise in the nervous system. This leads to

phenomena such as "freezing" (being unable to think straight or remember important information) in an exam. Under stress, a person becomes more reactive and impulsive and more likely to do something that looks maladaptive (harmful, not constructive) to others. One type of cognitive and motor activity can be performed well under stress: this is the type of activity psychologists call over-learned. Over learned activities are things you have repeated so many times you could probably do them in your sleep. Most academic material is not over learned...at least, not until you are a teacher and you have given the same lecture many times. The more superficially something is learned, the more likely it is to become unavailable to one's memory in an emergency.

Mild stress is a small amount of adrenaline-perhaps the amount stimulated by a caffeine drink or an impending test-increases the brain's ability to form new memories. Mild stress also makes actions of all kinds more likely. An impending deadline may suddenly unleash a student's ability to write a term paper, after weeks of procrastination. Severe stress can immobilize people, but mild stress usually has an activating effect. www.stressorg Accessed online.

2.3.3 Psychosocial Effects of Stress

The most frequent psychosocial effects of stress are: aggression, apathy depression, low self esteem and guilt. Aggression is an emotional state of anger towards oneself, another person or sometimes towards the whole world. Apathy is a feeling that an individual does not care about anything and does not want to do anything. The apathetic person is not interested in the events around or in the future and cannot do anything to protect themselves in case of a danger. Guilt is a feeling which comes when a person have already done or want to do something which is classified as wrong. Often the thought which results in guilt might be unconscious. www.stressorg.

Depression is another effect of psychosocial stress. This is a state in which an individual feels sad and cannot enjoy anything because the situation is so difficult and unpleasant. Present and future look so dark and obscure resulting in suspicions and fears suppressing the pleasure from the usual simple things. Nightmares are the bad dreams an individual often have, which might result to a state of chronic fear and depression. Bad mood and lack of mood at all are the slighter forms of apathy and depression. They are not so unpleasant and usually manifest as unwillingness to talk and share or indifference towards any undertakings of the team. Tension on the other hand is the feeling which comes with the strong will to do something even if it is not so clear what exactly. It comes because the person is ready to do something but at the very moment the person cannot or does not have the resources needed. Inability to focus is similar to forgetting facts for short period of time. A person is aware that something has just gone through his or her mind but cannot recollect it. It is there but one cannot use it immediately… Or one listens to somebody and until the person finishes his or her sentence the stressed individual has already forgotten the beginning. www.stressorg

Low self esteem is common among stressed people and this is the feeling that one is good for nothing and cannot do anything of true value. All people look better and more skilful to do their job than the person under stress. Irritability is another psychological effect of stress when an individual is easily annoyed and feel irritated by everything and by everybody. Disappointment is the state of feeling rather sad because something has not happened or something is not as good as one hoped. Loneliness is the unhappiness because an individual does not have any friends or does not have anyone to talk to. One then feels isolated by relatives, friends and colleagues and feels that nobody cares about or understands their problems and worries. One is

worried always and the person keep son thinking about problems being faced or about problems that might happen and one feels scared with no specific or direct threat (www.stressorgaccessed online).

The numerous effects of stress increase susceptibility to infections, a host of viral linked disorders ranging from the common cold and herpes to AIDS. In addition stress can have direct effects on the skin (rashes, hives, atopic dermatitis, the gastrointestinal system (GERD, peptic ulcer, irritable bowel syndrome, (ulcerative colitis) and can contribute to insomnia and degenerative neurological disorders like Parkinson's disease. www.stressorg accessed online.

Because stress can impair the functioning of the white blood cells it can play a role in the length of time a wound takes to heal. Although stress can't cause cancer, there is evidence that it can affect the growth of some cancerous tumours especially for people living with HIV because it suppresses the immune system. Stress has been associated with rapid progression of HIV to full blown AIDS. Cohen & Doherty, (2007) suggest this may be as result of complex and demanding drug treatment and could affect compliance. They noted that autonomic nervous system changes caused by stress may influence virus replication. Social stressors such as divorce and bereavement were particularly significant. Since 2000 the findings have consistently demonstrated an association of stress with progression of AIDS. Individuals differ with regard to rate of progression through the successive phases of HIV infection. Some remain asymptomatic for extended periods and respond well to medical treatment, where as others progress rapidly to AIDS onset and suffer numerous complications and opportunistic infections. Stress may account for some of this variability in HIV progression. The study investigated the prevalence of psychosocial

stressors of HIV and AIDS among girls infected or affected by HIV and AIDS the feeling of distress, feeling fatigue, isolation, discrimination protracted grief and their effects on girls' academic performance in Kenyan schools.

2.4 Stress Coping Strategies

Coping is taking a course of action regarding the stressor and its effects or it's an inclusive term for the multitude of techniques that people employ to deal with stress. The strategies are either problem-focused or emotional focused. Problem focused is when an individual actively tries to remove or work around a stressor to ameliorate its effects for example one thinks on how to manage the stressor, seeks advice, assistance, information, puts other activities to hold in order to cope with stressors or waits to act until the appropriate time (Ingledew, Hardy & Cooper, 1997). Problem-focused coping strategies alter either the environment itself or the way in which the person and the environment interact. This type of coping is more common when people believe that their actions can affect the stressor.

Emotion-focused coping strategies change a person's emotional response to the stressor. This type of coping usually reduces arousal where an individual gets moral support, sympathy and understanding from others. One focuses on and talks about the feelings, reinterprets the situation in a positive way, reduces efforts to deal with the stressor(learned helplessness) or turns to other activities to distract attention from the stressor. Emotion-focused coping is used when people think that their actions cannot affect the stressor itself and so they must alter their perception of or response to the stressor. Whether a particular strategy is effective depends in part whether the environment can in fact be changed (Ingledew, et al, 1997)..

Problem-focused coping strategy can only be effective when applied to factors that are affected by the level of stressors in an individual's lives. The more stressors they face, the more people are likely to use avoidance strategies like distraction, behavioural or mental disengagement which aim to decrease the focus on the stressor and increase the focus on other matters (Ingledew, et al, 1997). People who perceive less control over the events are less likely to use problem-focused coping strategies involving direct action and more likely to use emotion focused strategies such as distraction and emotional support (David & Suls, 1999).

Thought suppressionis purposefully trying not to think about something emotionally arousing or distressing (Wegner, Schneider, Carter & White, 1987). Suppressing emotional thoughts actually magnifies both the intensity of the thoughts and physiological reactions to those thoughts (Clark, Ball, & Pape, 1991). Positive reinterpretation is necessary where the events are recast in a more positive light.

Humour is the tendency to amuse others by use of tricks, jokes or unusual/strange gestures and it induces laughter. Humour is an effective form of emotion focused coping. Humour provides an opportunity to vent emotions, mentally disengage and make a positive reinterpretation of a stressor (Robinson, 1977a, 1977b). People who have a great sense of humour appear to have different appraisal of a situation. They are more likely to view a potentially stressful situation as challenging rather than threatening and are more likely to develop realistic expectations of their own performance (Martin, 1996).

For good or ill one way to cope with stressors is aggression which has been defined as "behaviour directed towards the goal of harming another living being who is motivated to avoid such treatment" (Baron & Richardson, 1994, pg 5). External factors like noise and heat can spark aggression in some people and the target is usually innocent people. Depression and pain are also associated with increased aggression. These unpleasant experiences have in common ability to predispose people to making a negative appraisal of a stimulus particularly if the potential for threat is ambiguous. The propensity to misread the intentions of others, interpreting them negatively is referred to as "the hostile attribution bias" (Dodge & Newman, 1981). Frustration which results when an obstacle is placed in the way of achieving expected gratification has long been thought to be a precursor to aggression (Dollard, Doob, Miller, Mowrer, Sears, Ford, Horland, & Sollenberger, 1999).

Relational aggression is the term for non physical aggression that damages relationships or uses relationships to injure others psychologically, for example by socially excluding them (Crick & Grotpeter, 1995). Narcissists are people who think well of themselves but the feelings of high self-esteem are not firmly grounded in reality (Bushman, 1998). These are people who have an inflated unjustified view of themselves. The ability to control oneself and impulses toward aggression are related to a host of factors including community standards, the likelihood of punishment, ability to monitor behaviour and conscious decision not to control oneself.

Different people typically use different coping strategies when experiencing a stressor. People with hardy personality, the constellation of personality traits associated with health, have a strong sense of commitment to themselves and their work, a sense of control over what happens to them. Similar to the concept of self-

efficacy and a person's view of life's ups and downs as challenges, but as opportunities to learn, rather than as a stressor (Pengilly & Dowd, 1997).

Optimism and pessimism are personality traits that serve as buffers against stress. Optimists have positive expectations about the future and work hard to attain them even when the going is rough. During stressful periods, optimists generally report a higher level of psychological well being (Scheler & Carver, 1993). Pessimism is associated with anxiety, stress, depression and poor health (Robinson, & Roter, 1999). Pessimism is divided into two: True pessimism in which negative expectations are anchored in the past experiences of failure. Defensive pessimism where more negative outcome is expected than is warranted by facts.

Optimists are more likely to use problem oriented coping strategies that involve direct action and are more focused on coping. They are more likely to accept the reality of a stressful situation and try to make the best of it to learn and grow from experience. Pessimists, when faced with a stressor rely on denial and attempt to avoid dealing with the stressor or give up when the stressor seems too difficult to manage (Scheler & Carver, 1993).

Avoiders are referred to as repressors and non-avoiders as sensitizers. Repressors use avoidant strategy such as thought suppression, trying not to think about emotionally arousing distressing matters whereas sensitizers habitually think about these things. Use of avoidant strategies has possible negative effects on health (Jamner, & Leigh, 1999).

Social support, the help and support gained through interacting with others, buffers the adverse effects of stress. Certain types of positive relationships such as a good

marriage, positive contact with friends and family, participation in group activities and involvement in a religious organization can lengthen life expectancy. The benefits of social support can also be gained simply by holding hands and making some other kind of physical contact (Sapolsky, 1997). Social support may also provide a buffer against depression and it is related to immune system functioning. Perceived social support is the subjective sense that support is available should it be needed, and it is distinct from the actual size and variety of social network. Enacted social support is specific support that is provided to an individual, such as when a friend brings a meal when one is feeling unwell. Research has shown that it is perceived social support that provides the buffer against stress (Cohen & Wills, 1985).

The focus on mind-body interventions is for one to adopt the stimulus. These interventions often address changes in awareness and consciousness. Natural methods like relaxation, meditation and hypnosis all involve mind-body interaction and can lead to alterations in heart and breathing rates, hormone secretion and brain activation. Many mind-body interventions for people who are physically ill provide specific cognitive and behavioural coping strategies, relaxation training, disease related information and supportive environment in which to address fears about the illness. These interventions can lead to improvement in mood and immune system functioning, pain control and decreases in emotional distress and better coping strategies (Timmer-man, Emmelkamp, & Sanderman, 1998).

Women generally report more stress with multiple roles than do men. Women who are employed outside the home generally do more work than men in their “second shift” at home cooking, cleaning and shopping (Phillips & Imhoff, 1997). Culture can determine what constitute a stressor as well as when and how to ask for assistance in

coping with stressors. Culture plays a role in helping people experience a sense of control over stressors. Different cultures bring different meaning and defining how much control a person believes he/she has over the stressor. Culture also plays a role in defining the choice of coping strategies as well as in the use of social support (Patterson, Semple, Shaw, Yu, He, Zhang, Wu & Grant, 1998). Stressful living situation such as abuse or lack of emotional or financial resources can create a chronic stress response and inhibit the development of effective coping strategies. In addition children tend to imitate the health behaviours of their family members and peers, so if those people have bad health habits the children are more likely to acquire those habits by adulthood (Taylor, Repetti, & Seeman, 1997).

Girls and young women are highly vulnerable to HIV and AIDS and lack of education makes them more so (Coombe & Kelly, 2001). Pre-teen and early teen infections are realities that should cause greater concern and merit greater attention because they are the future of the nation. Because every child today is growing up in a world where AIDS is a devastating reality, this means that every child is affected by the epidemic, whether they are infected or not. Child rights organization, Plan International has warned that failure to send girls to school is costing the world's poorest countries, particularly in Africa, billions of dollars a year. With girls more likely to contract the disease and drop out earlier than boys, the epidemic is likely to worsen the gap between male and female enrolment in school (UNESCO, 2001). The study established the specific coping strategies by observing the overt behaviours and psychological symptoms of stress exhibited by the girls. The studies so far done on prevalence of psychosocial stressors and coping strategies are on the general population but this study was on gender and HIV and AIDS specific and addressing the education of those using different type of coping strategies.

Culture plays a role in defining the choice of coping strategies as well as the use of social support (Patterson, Semple, Shaw, Yu, He, Zhang, Wu & Grant, 1998). Stressful living situation by the girls such as abuse or lack of emotional or financial resources have created a chronic stressors and inhibit the development of effective coping strategies among girls hence influencing the academic performance of girls. Kiyiapi (2007) did a research on psychosocial issues of youth orphans in western Kenya at university level. The study found out that most orphans felt responsible for their siblings well-being while adapting to their own situations. The study also found that double-AIDS orphans and single AIDS orphans are depressed and have poor self-esteem, they are withdrawn and felt-pity about them-selves and others are ashamed of their status and the kind of cloth they wore. This study looked at the prevalence of HIV and AIDS psychosocial stressors facing girls who are either infected or affected at primary and secondary school. The study also investigated the adaptive and maladaptive coping strategies adopted by the girls and the effect of the coping strategies on girls' academic performance hence help identify coping strategies that boost girls' performance in school.

2.5 The Nature of the HIV and AIDS Problem

The counter attack against HIV and AIDS initially focused on preventing the spread of the disease. But by 2003 the reality was that HIV and AIDS pandemic had spread worldwide creating a complex set of social, behavioural, governance, economic and psychological problems that together constitute a completely distinct phenomenon. The scale of AIDS pandemic is enormous. By the end of 2010, over 40 million people were living with HIV and AIDS (UNAIDS, 2010), nearly 25 million people had died of AIDS, and more than 16.6 children under the age of 15 had lost their mothers or

both parents (UAIDS, 2010 estimates). Other than AIDS being a human tragedy, the epidemic has profound impact on growth and poverty. The UNAIDS estimates a loss of more than 20% of gross domestic product in the worst – affected countries by the year 2020. Unfortunately there is little evidence, for example in programmes directed at poverty reduction in Africa, and that the consequences of HIV and AIDS for general populations are being factored into governments' planning for development (Collins & Rau, 2000).

In Kenya the disease spreads very rapidly through sexual contacts. According to NACC (2009), 80%-90% of infections are among young people between the ages of 15 to 49. Despite the efforts made by the Kenya government there is evidence that the pandemic continues to spread very rapidly and threatens to wipe out an entire generation. HIV and AIDS therefore, came into an already miserable situation and helped dampen the future of the Kenyan youth. It is like the many destructive forces had all 'conspired' to create a conducive environment for AIDS to take root. Thus HIV and AIDS is best seen as a crisis within a crisis as stated by Muindi, Kiio, Kombo, Wainaina & Kithinji, (2003).

The HIV and AIDS pandemic is fuelled by the disadvantage it creates and sustains misery and poverty. Thus more people become susceptible to infection and vulnerable to psychosocial impact of the pandemic. In these circumstances the puzzle is how to achieve sustainable development essential for effective response to the pandemic under conditions where the pandemic is destructive of the capacities essential for the response (Cohen, 2001). Education intrinsically offers hope; as well as it always has, that individuals and communities may rise above circumstances. Unfortunately education, like health and social support, is inequitably accessible to the poor.

Moreover, education systems in high prevalence countries are themselves under attack by the pandemic and may therefore be unable to respond appropriately to the needs of learners and educators affected by the disease, especially the most vulnerable. Regrettably, education on its own provides no protection against HIV (Shisana & Simbayi, 2002).

Most devastating and far-reaching, perhaps, is the pandemic's impact on education systems. HIV and AIDS is draining the supply of education, eroding its quality, weakening demand and access, drying up countries' pools of skilled workers, and increasing the sector's cost. The full scope of the pandemic's impact on education becomes apparent when viewed in the context of the formidable challenge already confronting the sector. The time for business- as –usual is past. No country can afford not to act. The worst affected countries need to arrest the pandemic's ravages and protect future generations, while low-prevalence countries need to recognize the speed with which complacency can lead to crisis and tremendous opportunity for saving lives and financial resources through prevention. The pandemic called HIV and AIDS is undoing the development gains of the past three decades especially in Africa. HIV and AIDS is the most significant issue in developing-country education today, and perhaps the biggest challenge to development. In this new context, education can no longer be "business as usual". Learning institutions in an AIDS-infected world cannot be the same as those in an AIDS-free world. Challenged by this pandemic, the paradigm of education is shifting (World Bank, 2001b).

HIV and AIDS is unequivocally the most devastating disease ever faced, and it will get worse before it gets better (UNAIDS, 2001a). Education serves as a weapon to empower people against HIV and AIDS. Unfortunately the economic and social

impacts of HIV and AIDS in Eastern and Southern Africa have been manifested in the deterioration of their education systems. Without an educated populace Africa will continue to struggle to make economic and development gains. Areas where the prevalence of HIV and AIDS pandemic is high like Kisumu County with 19% are particularly disadvantaged and they deserve special consideration and this is why a division in Kisumu County was chosen as a study area (NACC, 2009). The pandemic reduces girls' access to education because girls are more likely to be retained at home than boys in case of a drop in household income due to deaths or sickness of parents or siblings. This confines girls to a life of servitude, hence continuing a cycle of poverty as they are less likely to send their own children to school. Girls are more likely to contract HIV and drop out of school earlier than boys and therefore the pandemic is likely to worsen the gap between male and female access to education (UNESCO, 2001). The study investigated the psychosocial stressors of HIV and AIDS pandemic that are specific to this region and what impact the psychosocial stressors have on girls' academic performance in Maseno division of Kisumu County. The adaptive and maladaptive coping strategies were determined as used by girls in the face of HIV and AIDS pandemic in this cultural context and community at the same time establish their effects on girl-child learning.

2.6 HIV and AIDS in the General Paediatric Population

General Paediatric population refers to the children below 15 years of age. HIV/AIDS is one of the leading and fastest growing causes of child vulnerability in the world. The pandemic affects an increasing number of children every year leaving them with ailing or absent caregivers, on the streets, stigmatized or sick themselves and often

without the support they need to overcome these circumstances. Youth represent the group at the greatest risk of contracting HIV and AIDS while also representing a potentially powerful source of change. Despite the lack of empirical psychosocial research in general paediatric HIV and AIDS, clinical observation suggests that this population is at risk for adjustment problems in a number of areaslike family issues, isolation, and neuropsychological and behavioural concerns (Nagler, Adnopoz, & Forsyth, 1995).

It is important to realize that many families are coping not only with HIV-related issues, but also with additional stressors related to daily living. These include poverty, violence, and drug abuse (Lipson, 1994). Thirty percent of women who contracted HIV globally between 1990 and 1996 did so through injection drug use (IDU) (Draimin, 1995) and the majority of HIV positive children contracted HIV through vertical transmission (Lindsey, Zimmer &Paediatric Adolescent Scientific Committee, 1998). These facts suggest that a significant subset of these children is coping with parent drug use and all of the psychosocial ramifications involved in such a situation.

Other concerns reported by families in sub Saharan Africa dealing with HIV and AIDS involve interacting with the medical environment and addressing medical concerns (Lipson, 1994). Additionally, they are coping with hospitalizations, clinic visits, and important medical decisions. Caregivers are often required to manage their children's medical condition as well as their own, and possibly, that of other family members. The medical regimen associated with HIV and AIDS can be notoriously difficult to follow. Not only must caregivers adhere to their own medication regimen,

they must convince their children to comply with medication that tastes bad and pills that are difficult to swallow because of their large size.

Families dealing with HIV and AIDS are also faced with concerns of separation and grief. It was estimated that as many as 24,000 children in the United States had been orphaned by AIDS (Kristjanson, 1991). Children who lose a parent must cope not only with grief over their loss, but possibly with significant disruptions to their home and family life, such as placement in foster care or the home of another relative (Lipson, 1994). Social support and increased age has been associated with improved grief outcomes (Spinnetta & Maloney, 1987) and paediatric HIV and AIDS patients may be lacking on both counts. In the event of a parent's death, many grandmothers are being called upon to raise their grandchildren. These grandmothers experience grief regarding the loss of their own children, as well as the stress of assuming parenting responsibilities at a late age. Additionally, families are experiencing multiple losses. HIV and AIDS is unique in its ability to strike multiple members of the immediate family as well as the larger community, thus severely compromising traditional social support systems.

Paediatric HIV and AIDS patients who die may leave behind not only grieving parents, but also grieving siblings. The topic of children's reactions to sibling death is one that does not receive widespread attention, but there is evidence that the sibling relationship is one of the most important social relationships (Tasker, 1992). Better family adjustment following the death of a child has been shown in the oncology literature to be related to open communication and social support (Graham-Pole, Wass, Eyberg, & Chu, 1989). Siblings and parents of deceased paediatric HIV and AIDS patients may be at risk due to the social isolation associated with HIV.

Another unique aspect of HIV and AIDS is the secrecy, stigma, and isolation that accompany it. Despite improvements in understanding of HIV and AIDS, those who are infected continue to face possible fear, rejection, and prejudice if and when their diagnosis becomes known. It is not only friends and community members who are not told of an individual's illness. Adults who are infected may not tell immediate family members, spouses, partners, or children (Slavin, O'malley, & Koocher, 1982). Cultural issues may impact communication patterns, attitudes toward HIV infection, and willingness to access social and psychological support systems.

Children are often not told of their own HIV infection, or that of parents and siblings. Parents have indicated that they are uncomfortable discussing HIV status with children for a variety of reasons. One of these is the fear that children will be unable to keep the diagnosis a secret from peers and other community or family members resulting in social rejection of the child and the family (Lipson, 1994., Slavin et al., 1982). Parents also report a desire to protect their children from the knowledge that the parent and/or one of the children have the illness. This is especially true if one or more close family members or friends have already died from AIDS. Additionally, parents report that they are uncomfortable and uncertain how to address questions regarding how the virus was transmitted to parent and/or child (Lipson, 1994). Parents may feel guilty or ashamed about the method by which they contracted HIV. Mothers, especially, may be trying to cope with their own feelings in having transmitted the virus to their children. There is a large body of literature in paediatric psychology addressing the question of disclosing disease status to paediatric patients. A great deal of this literature is drawn from research that has been conducted in the area of paediatric oncology. In general, it has been well established that children have better emotional adjustment if they are told of their diagnosis and allowed to discuss their

condition openly with their family and medical caregivers. This is true even in situations where the child is terminally ill (Lipson, 1994, Hanna & Mintz, 1995).

Unfortunately, there is little research regarding disclosure of diagnosis specific to paediatric HIV and AIDS. Specifically, research has not been conducted to assess whether concerns about social ostracism and related psychosocial effects outweigh the need to discuss the child's (or other family member's) HIV and AIDS diagnosis. Preliminary evidence show that children with HIV or AIDS who were not told of their diagnosis exhibited increased levels of social isolation as compared to children who knew their diagnosis (CDC, 1998). Professionals should attempt to provide families with information regarding the benefits and consequences of disclosing HIV status to a child (Slavin et al., 1982). Open communication about health status is considered optimal, but this must be weighed against a family's concern about social rejection (CDC, 1998). Families may request help formulating an explanation that is developmentally appropriate and answer questions about disease process, prognosis, and transmission. Situations involving cognitive or developmental delay may not be appropriate for disclosure if a child's ability to keep the diagnosis private or their ability to understand the situation is impaired (CDC, 1998). Disclosure should be undertaken in an environment that is supportive with adults ready to provide appropriate information and reassurance.

The expression of HIV infection in the central nervous system (CNS) is variable across children and within children across time (Michaels & Levine, 1992). Documented symptoms of CNS involvement include attention and concentration difficulties, language problems (particularly in expressive language), motor skills

deficits, lagging social development, and failure to achieve, or loss of major milestones (Loveland, Stehbens & Contant, 1994).

Children with HIV and AIDS have been reported to exhibit a number of behavioural and psychosocial difficulties including hyperactivity, attention deficits, social withdrawal, and depression. It is oftentimes difficult to ascertain whether symptoms of these disorders are behavioural/emotional or neurological in nature. Cognitive deficits, learning disabilities, and developmental delay related to CNS symptoms of HIV infection can directly impact on academic performance. It is unclear to what extent the behavioural, neuropsychological and developmental deficits are also related to social circumstances such as maternal HIV infection, impoverished environment and chronic illness in general (Loveland, et al., 1994). Careful assessments must be used to tear apart cognitive, social and neurological contributions to these problems. The HIV and AIDS in general paediatric population shows that many children are infected and affected by the pandemic. The study investigated the HIV and AIDS stressors, their effects on cognitive ability and the coping strategies employed by girls to cope with the stressors at home and in school. The girls in primary school and Junior secondary school (Forms 1 & 2) fall within the category of the paediatric population. The study also determined the psychosocial support available to the paediatric girls with HIV and AIDS in the impoverished environment.

2.7 Psychosocial Co-morbidities among HIV-Infected Youth

Morbidity is a Latin word (morbidus) meaning sick or unhealthy. It is a diseased state while co-morbidity refers to the simultaneous presence of two medical conditions e.g. being HIV and at the same time being stressed. Psychosocial co-morbidities of HIV

and AIDS refer to the presence of HIV (disease) and other challenges like developmental, poverty and unemployment which have adverse effects on an individual. For youth who are at risk of HIV infection, normal stressors associated with adolescent development often are exacerbated by poverty, violence, racism, homelessness, and child abuse. These factors greatly increase adolescents' risk of becoming substance users and developing mental disorders, which, in turn, can lead to risk-taking behaviours that may expose them to sexually transmitted infections (STIs), including HIV.HIV-infected adolescents face additional stressors associated with the disease, including loss and bereavement, cycles of wellness and poor health, barriers to care and social services, anxiety, and depression. Poor coping skills or inability to adapt to their diagnosis makes them vulnerable to abusing alcohol and other substances (Hanna & Mintz, 1995).

Its worthy noting that children infected with HIV are at increased risk of developing central nervous system disease characterized by cognitive, language, motor, and behavioural impairments. Each of these conditions can have a significant impact on an HIV-infected adolescent's ability to learn and on his or her academic and learning achievements. For example, "difficulty remembering things" may be related to psychological distress but also can be a symptom of HIV-associated cognitive impairment. HIV-infected adolescents with psychosocial co-morbidities include; the stigma of mental health conditions, the cultural challenges of addressing mental health, successful approaches to care and referrals, the rights of youth with psychosocial co-morbidities, and a review of common psychoactive medications used in the treatment of youth with HIV and AIDS (Loveland, et al., 1994). The effects of psychosocial co-morbidities among HIV and AIDS female youth prompted the current study to investigate their effects on girls learning and academic achievements.

The conditions discussed above have negative impact on an HIV-infected adolescent's ability to perform academically.

2.8 The Impact of Psychosocial stressors of HIV and AIDS

The psychosocial stressors are life events exposes an individual to an adverse environment and experiences as a result of HIV and AIDS e.g. isolation, discrimination, stigma, sickness, abuse, deprivation, adverse social environment/situations (being a care giver to an ailing family member). The girl perceives threat whether real or imagined and discerns that she may require resources that she does not possess. For example a threat to her social status, self worth, acceptance or respect and feels she does not have control over it.

Mental health and HIV and AIDS are closely interlinked; mental health problems, including substance use and disorders associated with increased risk of HIV infection and AIDS and interfere with their treatment, and mental disorders occur as a direct result of HIV infection. Studies have demonstrated a high sero-prevalence of HIV infection in people with serious chronic mental illnesses. Prevalence rates in mentally ill inpatients and outpatients have been reported to be between 5% and 23%, compared with a range of 0.3% to 0.4% in the general population in the United States of America. Some studies have reported behavioural risk factors for transmission of HIV in between 30% and 60% of people with severe mental illnesses. These risks include high rates of sexual contact with multiple partners, injecting drug use, sexual contact with injecting drug users, sexual abuse (in which women are particularly vulnerable to HIV infection), unprotected sex between men and low use of condoms. Besides these behavioural risks, mental disorders may also interfere with the ability to

acquire and/or use information about HIV and AIDS and thus practise safer behaviours or increase the likelihood of situations occurring in which risk behaviours are more common (WHO, 2005).

Psychosocial problems can be created or exacerbated by HIV and AIDS and its treatment, as well as predate the illness. The failure to address these problems results in needless patient and family suffering, obstructs quality health care, and can potentially affect the course of the disease. Social isolation and other social factors, stress, and untreated mental health problems contribute to emotional distress and the inability to fulfil valued social roles, and interfere with patients' ability to adhere to their treatment regimens and act in ways that promote their overall health. Additionally, these problems can bring about changes in the functioning of the body's endocrine, immune, and other organ systems, which in turn could have implications for the course of HIV and other conditions. Families and the larger community also can be affected when psychosocial problems are not addressed. Although it is clear that psychosocial problems influence health, evidence is still emerging on just how they do so. Moreover, some problems (such as poverty) obviously cannot be resolved by the health care system. Nevertheless, evidence clearly supports the need for attention to psychosocial problems as an integral part of good-quality health care. Psychosocial health services can enable patients with HIV and AIDS, their families, and health care providers to optimize biomedical health care, manage the psychological/behavioural and social aspects of the disease, and thereby promote better health (Barton, Clarke, Sulaiman & Abramson, 2003).

A significant body of research shows that the psychological and social stressors such as depression and other mental health problems, limited financial, material resources

and inadequate social support—are associated with increased morbidity and mortality and decreased functional status. These effects have been documented both for health generally and for a variety of individual health conditions and illnesses, including heart disease, HIV and AIDS, pregnancy and cancer (Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002., Kroenke, Kubzansky, Schernhammer, Holmes & Kawachi, 2006., Antoni &Lutgendorf, 2007).

Psychosocial stressors are theorized to affect health adversely in a number of ways. First, emotional distress and mental illness can themselves be the source of suffering, diminished health, and poorer functioning through their symptoms and their adverse effects on role performance. Second, psychosocial problems can adversely affect patients' abilities to cope with and manage their illness by limiting their ability to access and receive appropriate health care resources; adhere to prescribed treatment regimens; and engage in behaviours necessary to manage illness and promote health, such as maintaining a healthy diet, exercising, and monitoring symptoms and adverse responses to treatment (Yarcheski, Mahon, Yarcheski, & Cannella, 2004; Kroenke et al., 2006). In multiple focus groups and interviews, patients with chronic illnesses such as diabetes, arthritis, heart disease, chronic obstructive lung disease, depression, and asthma have identified lack of family support, financial problems, lack of health insurance, problems with mobility, depression and other negative emotions, and stress as obstacles to dealing with their illness and health (Bayliss, Steiner, Fernald, Crane & Main, 2003; Jerant, Friedrichs-Fizwater, & Moore, 2005). Although evidence of adverse health outcomes from these effects is strongest for cardiovascular disease, emerging evidence from animal models and some human data suggest pathways through which these effects can influence the course of other illnesses (Antoni & Lutgendorf, 2007).

A wide range of psychosocial variables may affect the course of illness. For example, several studies have found that individual psychological traits such as optimism, mastery, and self-esteem (sometimes termed psychosocial resources) protect against stress (Segerstrom & Miller, 2004).Psychosocial stressors affect the way the body works and the course of certain diseases. These effects reduce an individual's ability to engage in valued roles, and also have negative impacts on both families and the community. The study investigated the HIV and AIDS psychosocial stressors and their effects on the girl-child emotions, mental health, diminished health and poor functioning hence effects on academic (role) performance of girls in Kenyan schools. The study established there is need to address the psychosocial stressors by the education sector in order to provide good quality education especially to the girl-child.

2.9 Psychosocial Stressors and their Effects on Patients

The study established the psychosocial stressors that are being experienced by girls. Such as; inadequate social support, morbidity and mortality effects, weakened coping abilities and increased mental illness, diminished ability to manage illness, insufficient financial and other material resources, emotional distress and mental illness, impaired adherence to medical Regime and behaviour changes designed to improve health, impaired cognition, weakened motivation, less effective coping and alterations in body functioning due to stress.

Humans are social animals, and inadequate social contact and support can have profound adverse consequences explaining why social support plays a central role in helping cancer patients and their families manage the illness. Although there is

currently no single definition of "social support" (King, Willoughby, Specht, & Brown, 2006; Uchino, 2006), research reveals that it has multiple dimensions. The web of relationships that exist between a person and his or her family, friends, and other community ties and the structural and functional characteristics of that web are generally referred to as the person's "social network" (Berkman, Glass, Brisette, & Seeman, 2000). The number, breadth, and depth of these relationships together make up one's degree of "social integration."

Beneficial social networks provide different types of support to individuals under stress, including emotional, informational, and instrumental support. Emotional support involves "the verbal and nonverbal communication of caring and concern," including "listening, 'being there,' empathizing, reassuring, and comforting" (Helgeson & Cohen, 1996 pg.135); informational support increases knowledge and provides guidance or advice; while instrumental support involves the provision of material or logistical assistance, such as transportation, money, or assistance with personal care or household chores (Cohen, 2004). Each type of support can improve health care outcomes. For example, emotional support may help a girl to cope more effectively with the obstacles they encounter and with their own emotional response to the challenges of illness. Insofar as knowledge may be gained from others about treatment or other aspects of care, informational support can increase the effectiveness of health care utilization and instrumental support helps individuals to act on this knowledge.

Epidemiological studies across a variety of illnesses have found that when individuals have low levels of social support, they experience worse outcomes, including higher mortality rates (IOM, 2001). There is strong evidence that the perception of the

availability of social support protects individuals under stress from psychological distress, anxiety, and depression by buffering them from the effects of stress (Wills & Fegan, 2001; Cohen, 2004; IOM, 2001). Consistent with this evidence, greater social integration has been associated with reduced mortality in multiple prospective community-based studies (Wills & Fegan, 2001). Conversely, well-designed studies have shown social isolation to be a potent risk factor for mortality across all causes of death (including cancer), as well as death due to specific conditions such as heart disease and stroke (Berkman.,Glass., Brisette & Seeman, 2000). Indeed, the relative risk of death associated with social isolation is comparable to that associated with high cholesterol, mild hypertension, and smoking (IOM, 2001). The mechanisms by which these effects occur are not fully known, but there is evidence that social relationships that are stressful, weak, or absent can lead to decreased ability to cope with illness, negative emotions such as depression or anxiety, and immune and endocrine system dysfunction (Kielcolt-Glaser, McGuire, Robles & Glaser, 2002).

Effects of social support on health outcomes have been found specifically among individuals with cancer (Patenaude & Kupst, 2005). A study following 2,800 women with breast cancer for a median of 6 years in U.S, for example, found that women who were socially isolated before their diagnosis had a 66 percent higher risk of dying from all causes during the observation period compared with women who were socially integrated(Kroenke et al., 2006).

Psychological adjustment to an illness involves “adaptation to disease without continued elevations of psychological distress (e.g., anxiety, depression) and loss of role function (i.e. social, sexual, and vocational)” (Helgeson & Cohen, 1996 pg.136). Positive emotional support is linked to good psychological adjustment to chronic

illnesses generally and to fewer symptoms of depression and anxiety (Wills & Fegan, 2001; Maly, Umezawa, Leake & Silliman, 2005). Conversely, unsupportive social interactions are associated with greater psychological distress, decreased social role functioning and higher rates of post-traumatic stress disorder (PTSD) (Bruce, 2006).

The outcomes noted above are problematic in and of themselves, but they may also decrease individuals' ability to take the actions necessary to adhere to treatment, change health behaviours, and otherwise manage their illness. Girls with greater social support are more likely to engage in health-promoting behaviours and exhibit healthy physiological functioning (IOM, 2001). In a meta-analysis of studies of predictors of positive health practices, loneliness and degree of perceived social support were found to have the largest effects (negative or positive direction) on the performance of healthy behaviours (Yarcheski et al., 2004).

Multiple studies have shown that low income is a strong risk factor for disability, illness, and death. Inadequate income limits one's ability to avoid stresses that can accompany everyday life and to purchase food, medications, transportation, and health care supplies necessary for health and health care (Kelly, Bonnefoy, Morgan, & Florenza, 2006). To take just one example, lack of transportation to get to medical appointments, the pharmacy, the grocery store, health education classes, peer support meetings, and other out-of-home health resources can hinder health monitoring, illness management, and health promotion.

Psychological distress is common among individuals with cancer and HIV and AIDS. However, mental health problems and other types of psychological distress (which sometimes predate illness) are not unique to patients (Hegel, Moore, Collins, Kearing, Gillock, Riggs, Clay, & Ahles, 2006). People with chronic conditions such as

diabetes, heart disease, HIV-related illnesses, and neurological disorders also are found to have high rates of depression, adjustment disorders, severe anxiety, PTSD, and sub clinical emotional distress (Kato, 2003).

Depressed or anxious individuals with a variety of co-morbid general medical illnesses (including cancer) report lower social functioning, more disability, and greater overall functional impairment than patients without depression or anxiety (Kato, 2003). Distressed emotional states also often generate additional somatic problems, such as sleep difficulties, fatigue, and pain which can confound the diagnosis and treatment of physical symptoms (Spitzer, Kroenke, Linzer, Hahn, Williams, DeGruy, Brody, & Davies, 1995; APA, 2000). Among patients with a variety of chronic medical conditions other than cancer, those with depressive and anxiety disorders have significantly more medically unexplained symptoms than those without depression and anxiety. Patients with depressive and anxiety disorders also have greater difficulty learning to live with chronic symptoms such as pain or fatigue; data suggest that depression and anxiety are associated with heightened awareness of such physical symptoms. Multiple studies of patients with major depression have also found higher-than-normal rates of unhealthy behaviours such as smoking, sedentary lifestyle, and overeating (Kato, 2003). Depression is associated with poor adherence to prescribed treatment regimens (DiMatteo, Leppe, & Croghan, 2000). Serious health events trigger health-damaging behaviours—such as use of substances and consumption of unhealthy foods—as individuals cope with the distress associated with the illness, they can also motivate people to take up a number of health-promoting behaviours (McBride, Emmons, & Lipkus, 2003; Demark-Wahnefried, Aziz, Rowland, & Pinto, 2005).

Over the course of many serious acute and chronic conditions, however, patients' adherence to health professionals' recommendations for improved health can be quite low. In patients with HIV, non-adherence to highly active antiretroviral treatment regimens and behaviour change is 11.7 percent (DiMatteo, 2004). Depression and other adverse psychological states can thwart adherence to treatment regimens and behaviour change in a number of ways, for example, by impairing cognition, weakening motivation, and decreasing coping abilities.

To achieve healthy lifestyles and manage chronic illness effectively, patients must first understand what they need to do to care for themselves. Distressed psychological states can seriously challenge the cognitive functioning and information processing required in understanding treatments and organizing health behaviours. Stress, anxiety, anger, and depression can impair the ability to learn and maintain new behaviours (Spiegel, 1997) or to undertake complex tasks that require planning and behavioural execution (Wells & Burnam, 1991; Olfson, Fireman, Weissman, Leon, Sheehan, Kathol, Hoven & Farber, 1997).

Distressed psychological states can limit patients' concern about the importance of their health behaviours and contribute to their belief that the benefits of adherence are not worth the trouble (Fink, Gurwitz, Rakowski, Guadagnoli, & Silliman, 2004). Distressed psychological states can also lead to diminished self-perceptions and limitations in personal self-efficacy, which in turn negatively affect health behaviours and adherence. Pessimism about the future and about oneself can forestall the adoption of new health practices and interfere with health behaviours and adherence (Peterman, & Cella, 1998; Taylor, Shelby, Gelmann, & McGuire, 2004). Limitations in personal self-efficacy that derive from both anxiety and depression can interfere

with the behavioural commitment essential to the adoption and maintenance of new health practices. Distressed psychological states can also amplify somatic symptoms, causing additional functional disability and further reducing patients' motivation to change behaviour.

Self-efficacy and emotional resilience contribute to greater engagement in health-promoting behaviours, including adherence to treatment regimens. Conversely, these behaviours can be undermined by ineffective coping with psychological distress. Optimism and positive coping also have been explored as mechanisms through which ill individuals can become more emotionally resilient and better able to cope with and manage the course of their disease. Coping (which involves seeking of social support, positive reframing, information seeking, problem solving, and emotional expression) can bolster one's adjustment to chronic illness (Holahan, Moos, Holahan, & Brennan, 1997), and improving patients' coping strategies can be effective in reducing symptoms of psychological distress that hinder health behaviours and the management of illness (Barton, Clarke, Sulaiman, & Abramson, 2003).

Finding meaning in the illness experience is another coping mechanism that can improve a patient's psychological adjustment (Folkman & Greer, 2000), contributing to a greater sense of control, improved psychological adjustment, and more positive focus (Fife, 1995). Finding benefit also is linked to patients' adherence to antiretroviral therapy for HIV (Luszczynska, Sarkar,& Knol, 2006). Conversely, coping mechanisms that are less adaptive can help in dealing with the immediate emotional distress associated with illness but create longer-term problems. Avoidant coping, which involves denial, emotional instability, avoidant thinking (avoiding thoughts about the reality of the illness), and immature defences, is associated with

less engagement in healthy behaviours (e.g., healthy diet, exercise, adherence to treatment), as well as the adoption of unhealthy behaviours (e.g., smoking, drinking alcohol to excess, abusing psychotropic medications) in an effort to cope with emotional distress (Stanton, Revenson, & Tennen, 2007). Avoidant thinking about the illness is considered "harmful coping" because problems are not faced and solutions are not found, contributing to unhealthy behaviours and non-adherence (Carver, Pozo, Harris, Noriega, Scheier, Robinson, Ketcham, Moffat, & Clark, 1993).

Psychological stress arises from the interaction between the individual and the environment. It is said to occur when environmental demands (stressors) exceed the individual's capacity to deal with those demands (Lazarus & Folkman, 1984). Stress is thought to exert its pathological effects on the body and increase the risk of disease in part by encouraging maladaptive behaviours as described above. People often cope with the negative emotions elicited by stress through behaviours that bring short-term relief but carry long-term risk. Under stress, people generally smoke more, drink more alcohol, eat foods with a higher fat and sugar content, and exercise less (Kiecolt-Glaser, & Glaser, 1988). They also tend to have less and poorer-quality sleep (Akerstedt, 2006).

In addition, stress is thought to influence the course of physical disease more directly by causing negative affective states, such as anxiety and depression. Long-term stressful circumstances that reduce perceptions of control and increase feelings of helplessness, hopelessness, and anxiety damage health and can lead to premature death, in part because of the immune and other physiological responses they produce (WHO, 2003). Individuals are even more vulnerable to the adverse physiological effects of stress when they are exacerbated by other psychosocial factors (e.g., a weak

social network) or the individual has inadequate psychosocial assets to buffer the effects of exposure to stress.

The prevalence psychosocial stressors of HIV and AIDS pandemic like isolation, multiple losses, stigma, concentration difficulties, emotional abuse, social withdrawal, low self esteem, lack of financial resources were investigated during the study to establish their effects on the girls mental wellbeing thus academic performance. The study determined the coping mechanism employed by the girl-child to deal with the psychosocial stressors of HIV and AIDS and their impact on girls behaviours therefore her learning in school. The social support system available to the girls to deal with the psychosocial stressors due to HIV and AIDS and build resilience to adjust well at home and school were also established. The study established the different environments that the girl-child is interacting with, the personal characteristics of the girls infected and affected by HIV and AIDS impacting positively or negatively to their academic performance.

2.10 Link between Stress and Disease

Disease is any condition that causes pain, dysfunction, distress, social problems and or death to the person afflicted or similar problem for those in contact with the person. Disease usually affects people not only physically but also emotionally as contracting and living with many diseases can alter one's perspective on life and personality. Illness refers to the patient's personal experience of disease and it is related to social, economic, political and environmental circumstances. Illness is a state of poor health, subjective perception by a patient of an objectively defined disease. There is strong evidence that chronic stress influences the development and/or progression of certain

illnesses, including major depression and HIV-related illnesses. Substantial research links stressful life events to both diagnosed depression and depressive symptoms (Kessler, 1997; Hammen, 2005). One study found that during the 3–6 months preceding the onset of their depression, 50–80 percent of depressed persons had experienced a major life event, compared with only 20–30 percent of non-depressed persons evaluated during the same period (Monroe, & Simons, 1991). Approximately 20–25 percent of people who experience major stressful events develop depression (van Praag, de Kloet,& van Os, 2004). Moreover, there is consistent evidence that severe events are more strongly associated with the onset of depression than are non-severe events (Monroe & Simons, 1991; Kessler, 1997). In general, major life events that are undesirable and uncontrollable, such as bereavement or job loss are the most likely to be associated with depression (Mazure, 1998). Life-threatening illnesses have also been associated with an increased risk of depression (Dew, 1998). The greatest prevalence of depression in chronically ill patients is reported among those with greater pain, higher levels of physical disability, and more severe illness.

HIV and AIDS is undesirable and uncontrollable event in life that causes stress to the infected and affected persons. AIDS leads to death of loved ones and sometimes leads to loss of jobs because it is associated with higher levels of physical disability and severe illness. These links between death of a loved one due to AIDS, loss of jobs among parents(decreased income), physical disability and severe illness were investigated during the study to establish the psychosocial stress they cause to the girls in school and their effects on girls ability to learn thus academic performance.

2.11 Stress and Progression of HIV and AIDS as a Terminal Illness

Terminal illness is sickness which ends in death and there is no possibility of recovery. The typical clinical course of HIV infection is a gradual progression from an initial phase of no symptoms, to a phase with symptoms, to the onset of AIDS (CDC, 1993). HIV progresses through the following phases: the first phase is infection phase- this is the moment the virus gets into the body, the second phase is the window period phase which is between the time of infection and three month during this phase HIV test is negative and virus is multiplying rapidly and the person is very infectious. The third phase is sero-conversion which occurs three months after infection, the person at this phase may have a flu-like illness lasting a week or two and he/she is well again. The fourth phase is asymptomatic period which lasts between 1- to 15 years. Many remain healthy and the duration of this period depends on one's socio-economic status and the CD4 or T-cells count above 500cell/ml. The CD4 or T-cells are specialised cells used to protect the body against infections. In a normal person the CD4 or T-cells count is between 700-1200 in a drop of blood (size of a pea). HIV attacks these cells and uses them to make copies of HIV and as more and more CD4 or T-cells are destroyed the immune system is weakened and the body is not able to resist illness and infections. The fifth phase is HIV and AIDS related illness experienced on average of 5 years after infection where illness is mild initially with gradual increase in frequency and severity, during this phase the CD4 count is between 500-200cells/ml. The sixth and last phase is AIDS and without ARV therapy one would last for less than 2 years but with ARV one can live for many years. CD4 count is less than 200cells/ml. The viral load is very high and the person is very infectious. Individuals differ with respect to the rate at which they progress through these phases due to one's nutrition, emotional stress and access to health care. Some

remain asymptomatic for extended periods of time and respond well to medical treatment, whereas others progress rapidly to the onset of AIDS, and suffer numerous complications and opportunistic infections (Kopnisky, Stoff, & Rausch, 2004). It has been suggested that psychosocial factors, including stress and depression, may account for some of this variability (Kiecolt-Glaser, & Glaser, 1988., Pereira, & Penedo, 2005).

Although the evidence published before 2000 for the influence of stress on progression through the clinical phases of HIV infection was inconsistent (Nott & Vedhara, 1999), several studies did report associations between stress due to negative life events and more rapid HIV progression (Goodkin, Fuchs, Feaster, Leeka, & Rishel, 1992; Kemeny &Dean, 1995). Studies published since 2000 have been more consistently supportive of such a link (Pereira & Penedo, 2005). Evidence also suggests that an accumulation of negative life events over several years of follow-up predicts more rapid progression to AIDS (Leserman, Petitto, Gu, Gaynes, Barroso, Golden, Perkins, Folds, & Evans, 2002). Moreover, stress has been found to influence the course of specific conditions (especially virus-initiated illnesses), to which persons with HIV are especially susceptible (Pereira, Antoni, Danielson, Simon, Efantis-Potter, Carver, Duran, Ironson, Klimas, Fletcher, & O'Sullivan, 2003).

Evidence emerging from the science of psycho-neuro-immunology—the study of the interactions among behaviour, the brain, and the body's immune system—shows that psychological and social stressors can interfere with the working of the body's organ systems, in particular the immune systems. These effects are thought to mediate the influence of psychosocial stressors on health in general and could potentially play a role in the progression of HIV and AIDS. Immune system processes play a central

role in protecting against infectious diseases by identifying organisms and cells that are atypical, attacking them, and preventing their replication. Chronic stress, depression, inadequate social support, and other psychosocial stressors can create disequilibrium in immune system functioning by either over stimulating some immune system functions or suppressing others (Miller et al., 2007).

Research findings indicate that stress, mood, coping, social support, and psychosocial interventions affect immune system activity and can influence the underlying cellular and molecular processes that facilitate the progression of HIV and AIDS. Findings also suggest the plausibility of improving the health status of HIV and AIDS patients by attending to their psychosocial distress (McEwen, 1998; Antoni & Lutgendorf, 2007). For all these reasons, psychosocial stressors should not be ignored in the delivery of high-quality health care for people living with terminal illness like HIV and AIDS. HIV and AIDS cause physical disability and the normal functioning of an individual is inhibited. Parents have lost their jobs because of this disease; significant others and the girls' siblings are bed ridden and require constant care in such cases there is a drop in the family's income and many occasions girls education is sacrificed. When parents and siblings are sick the girl-child is called upon to provide the nursing care leading to more chores for the girl hence fatigue and truancy. Therefore the study investigated these adverse social and environmental situations among the affected girls and their effect on learning and academic performance in school. As literature was reviewed there is no known study that has been conducted of this nature. The effects of HIV and AIDS psychosocial stressors on education need to be addressed.

2.12 Effects of HIV and AIDS Pandemic on Families and the Larger Community

Failure to attend to patients' psychosocial needs can have ripple effects throughout the family, and may also affect the larger community. Some of these effects can rebound and create additional psychosocial problems for the patient. Family members of patients with HIV and AIDS experience higher-than-normal stress for multiple reasons, including fear of losing their loved one, concern about the suffering of their family member, and the additional demands of providing emotional and logistical support and hands-on care during times of acute illness (Hodges, Humphris, & Macfarlane, 2005). Further, when loved ones experience acute or long-term inability to care for themselves or carry out their familial roles, family members often must assume these roles. Providing this emotional, logistical, and hands-on care and assuming roles previously carried out by the patient require considerable adaptation (and re-adaptation as the course of the disease changes) on the part of family members. These experiences can add to the stress resulting from concern about the ill family member. This cumulative stress, especially in caregivers, can be so substantial that family members acting as caregivers themselves have an increased likelihood of experiencing depression, other adverse health effects, and earlier death (Kurtz,& Kurtz, 2004).

A significant percentage of adults stop working or experience a change in employment (reduction in work hours, interruption in work, change in place of employment) subsequent to a diagnosis of or treatment for HIV and AIDS (IOM, 2006), with implications for their own lives and income. The evidence is not clear as to factors that do and do not affect survivors' return to work (Spelten, Sprangers, &

Verbeek, 2002). Nonetheless, to the extent that unaddressed mental health problems such as depression or other psychosocial problems associated with disease like HIV and AIDS affect patients' desire to continue or return to work, impair their performance on the job, their families, and the workplace. Additionally, to the extent that caregivers give up work outside of the home or reduce their work hours to provide care to a loved one. However, with respect to effects on the larger economy, the financial costs of failing to deliver psychosocial health services to individuals with HIV and AIDS have not been studied. Studies that have attempted to quantify the impact of mental health problems on the cost of medical care have been based on the effect of depression and/or anxiety on those with medical illnesses other than HIV (Simon, Korff, & Barlow, 2002). The family and the community provide the environment in which the affected and infected girls are living. When there are adverse effects on the family and the larger community with increased levels of stress, then this interferes with the ability to provide emotional and logistical support needed by the girls to cope with sickness and the adverse effects of the disease on the family. Girls as caregivers have higher stress levels; their education is sacrificed whenever income declines due to HIV and AIDS in the family. The family and the larger community environment lead to the prevalence of psychosocial stressors experienced by the girls due to HIV and AIDS and this influences girls' learning and academic performance.

2. 13 Intervening Strategies in HIV and AIDS Stressors

HIV-stigma is often layered on top of many other stigmas associated with such specific groups as homosexuals and prostitutes and such behaviours as injecting drug

use and casual sex. These layers of stigma have unfortunately helped to extend and deepen the AIDS stigma to many who are infected with or affected by the disease (Herek, 1993; Rushing, 1995).

Consequences of stigma can be viewed along a continuum from mild reactions (e.g., silence and denial), to ostracism and ultimately violence. Research has shown that AIDS stigma can have a variety of negative effects on HIV test-seeking behaviour, willingness to disclose HIV status, health care-seeking behaviour, quality of health care received, and social support solicited and received (King 1989; Raveis, Seigel, and Gorey 1998).

Silence and denial may be the most pervasive reactions to stigma, as signified by the title of International AIDS Conference: Breaking the Silence. For some individuals, not knowing one's HIV status is far preferable to being tested (Cameron 2000). The fear is that the lack of confidentiality, which is highly likely in many settings, forces disclosure and that individuals can then face prejudice, discrimination, the loss of a job, strains on or the break up of relationships, social ostracism, or violence. (Macintyre, Brown, & Sosler, 2001). All of this prevails when there is little treatment available for the majority of HIV-positive individuals in developing countries. The interventions are grouped into 4 categories: information based approaches, coping skills acquisition, counselling approaches, and contact with affected groups according to Brown, Trujillo & Macintyre (2001). But other intervention strategies can be classified into several categories (e.g. media campaigns can be applied in all four categories) and can be applied to different groups.

Information-based approaches are used in nearly all the interventions and therefore a range of groups (often in combination with another strategy) and are generally didactic. The information can be delivered by advertisement, or through leaflets,

information packs, or presentation in a class or lecture. The information presented should include factual description of the disease, transmission mode and methods of risk reduction.

Counselling as a strategy is used to provide praise and social support for positive attitudes, behaviour change, or maintenance of safe behaviours. Counselling approaches are used for behavioural reinforcement and to teach coping skills acquisition. The counselling intervention reduces anxiety and distress. An example of this approach is a support group for PLWHA, in which individuals receive personal support for resolving issues or situations with spouses, families and communities in a safe environment.

Master imagery and group desensitization are examples of coping skill acquisition techniques which girls can be taught. In master imagery the girl is presented with a hypothetical situation where they have contact with PLWHA and are taught appropriate coping skills for resolving the situation. A combination of information and coping skill acquisition increases positive attitudes toward PLWHA among members of the general community. The girls develop more personal relationship with PLWHA; either through face-to-face conversations or hearing a testimonial from infected or affected individuals and this contact demystifies and dispels misinformation to generate empathy hence reducing stigma and prejudice.

Though interventions may improve tolerance toward those infected, combating the multiple layers of stigma is a challenge. The study addressed the complexity of stigma among girls in and out of school due to HIV and AIDS. The study suggested AIDS stigma interventions therefore reduce/eliminate the marginalisation of girls affected and infected by HIV and AIDS in schools and at home.

2.14 Conclusion

Studies have concluded that all HIV and AIDS patients and their families are at heightened risk for emotional suffering, diminished adherence to treatment, impaired work and social functioning. As a result the girls could suffer additional threats to their health beyond those directly imposed by their HIV and AIDS status. As indicated earlier these risks are greater in populations already experiencing social stressors as; poverty, limited education, language barriers, and/or membership in an ethnic or cultural minority (Barton, Clarke, Sulaiman & Abramson, 2003).

Failing to address these risks like isolation, discrimination, stigma, lack of social support can adversely affect individuals with many different types of illness. However, the trajectory of HIV and AIDS often poses both an immediate threat to life and threats to lifelong physical, psychological, and social functioning as a result of the chronic physical and psychological impairment and disability that can result from both the illness and its treatment. Moreover, treatment for many HIV and AIDS can itself be life-threatening. These multiple threats make attention to psychosocial problems in HIV and AIDS patients and their families critically important. Although reducing psychosocial stressors and improving psychosocial services may not increase HIV and AIDS "cure rates," from the studies it can be concluded that (Segerstrom & Miller, 2004); addressing psychosocial needs should be an integral part of quality HIV and AIDS care.

Although there are complex social, medical and cultural, individual and family factors surrounding paediatric HIV and AIDS, there is a paucity of research examining the psychosocial ramifications of this disease. Evidence from the literature on chronic illness in general suggests that chronically ill children are at risk for adjustment

problems, but that these problems are not inevitable (Loveland, Stehbens & Contant, 1994).

Given that new medical advances are allowing both children and adults to live longer once infected with HIV it has become increasingly important to study the psychosocial effects of HIV and AIDS in different areas of children's life. Based upon conceptualization of HIV and AIDS as a chronic disease and the need for patients to adhere rigidly to medication protocols and develop skills that will facilitate medication adherence, this facilitates the efforts of HIV-infected persons to cope effectively with their chronic disease. The results should be seen in increased quality and quantity of life. Research has been done on addressing psychosocial stressors to improve the quality of health but not the effects on education especially that of the girls. The study was filling the gap of addressing HIV and AIDS psychosocial problems that are affecting the quality of girls' education.

The study investigated psychosocial stressors such as: Isolation, discrimination, grief, separation, secrecy, stigma, financial difficulties, lack of concentration and lack of social support. The study also investigated coping strategies like; seeking guidance and counselling, attending VCT centres and seminars, begging, employment, engaging in sex, missing lessons and dropping out of school. The study determined the psychosocial support provided to the infected and affected girls. The study established the ways in which psychosocial stressors of HIV and AIDS, coping strategies and support provision are affecting girl-child learning in Kenyan schools. This kind of research has not been done in Kenya previously

CHAPTER THREE

RESEARCH DESIGNANDMETHODOLOGY

3.0 Overview

This chapter contains the procedure adopted as the study was conducted. The sub-headings of this chapter are: the study area, the research methodology, the research design, the study population, the sample, the sampling techniques and the study variables. The chapter also focuses on research instruments, pilot study, validity and reliability of the instruments, data collection procedures, scoring of the instruments and methods of analyzing data.

3.1 The Study Location

The study location was Maseno Division of Kisumu West district in Kisumu County western Kenya, East Africa, see appendix. K). The Maseno division is bordered by Emuhaya district to the North, Kisumu North district to the East, Kisumu East district to the south and Kombewa division to the West. The division has two educational zones namely Sianda and Chulaimbo. The division lies within the Longitude $33^{0,}$ 20^{0}E and 35^{0} 20^{0}E and Latitudes 0^{0} 20^{0} S and 0^{0} 50^{0} S (Appendix: L). The Maseno division has an area of 170.2 km^{2} with a total population of 77,554 where 37,248 are males while 40,306 are females (GOK, 2010). The area is inhabited predominately by peasant farmers. The poverty index is 56 % (GOK, 2008) and as observed byCohen (2001) HIV and AIDS thrive on poverty and this remains the case today. Maseno division is within the area receiving services from AMPATH which deals with

prevention and treatment of HIV and AIDS and Umoja project which provides support to orphaned and vulnerable children (OVCs). The researcher worked with AMPATH in Maseno division at Chulaimbo sub district hospital in the social work department and provided psychological counselling to clients infected with HIV and AIDS. Many clients were school going girls.The researcher was familiar with Maseno area, the teachers and some project coordinators, making the collection of this sensitive data easy. Therefore Maseno division of Kisumu County in Western Kenya was chosen as the study location to ascertain the prevalence of psychosocial stressors of HIV and AIDS pandemic, the coping strategies employed by girls and psychosocial support given to the girls and their effects on girls' academic performance.

3.2 Philosophical paradigm

Philosophical paradigm constitutes a way of looking at the world and interpreting what is studied, it may not be explicit but still influences research process. The philosophical worldview adopted by the study was advocacy and participatory which contains an action agenda for reform. The specific issues need to be addressed that speak to important social issues of the day such as empowerment, inequality suppression and alienation. The study was based on advocacy and participatory worldview and wished to stop further marginalization of HIV and AIDS infected or affected girls in the education sector. The advocacy research provides a voice for the infected or affected girls in Kenyan schools by unshackling girls from the constraints of irrational and unjust structures that limit self development and determination as Creswell (2009) notes. The study is change oriented and also wished to empower the

girl-child who is either infected or affected by HIV and AIDS psychosocial stressors through education.

3.3 Research Methodology

The mixed approach research methodology was used to collect, analyze data, and report research findings in a single strand study (Creswell & Clark, 2007; Creswell, 2009). The mixed approach involved the use of quantitative and qualitative approaches in tandem so that the overall strength of the study is greater (Creswell, 2009). The mixed method gave the study the opportunity to expand understanding of the phenomenon using different data sources. The mixed method approach shed light on research which would remain a mystery if only one research methodology was employed as noted by Sheperis, Young & Daniels (2010). According to Creswell and Clark (2007) the use of both approaches in tandem strengthens the overall study.

3.4 Research Design

The study employed concurrent mixed research design where the researcher converged or merged quantitative and qualitative data in order to provide a comprehensive analysis of the research problem notes Creswell (2009). In this design the researcher collects both forms of data at the same time and integrated the information in the interpretation of the overall results. The qualitative data provided the in-depth understanding of the numeric or quantitative data.

There was no manipulation of the independent variables in the laboratory or in the field setting. This is because the psychosocial stressors of HIV and AIDS pandemic,

coping strategies and support services available and their effects on girls' academic performance were already in existence when the study was conducted.

3.5 The Study Population

The study population was made up of all school going girls who are either infected or affected by HIV and AIDS pandemic within the ages of 11-19 years. Giving specific numbers of infected or affected girls proved difficult because of the sensitivity of the issue under investigation. Statistics from the district commissioner's office gave 2558 as the number of AIDS orphans where 1133 are males and 1425 are females. In Maseno division there are 1339 AIDS orphans where 566 are males and 773 are females (Kisumu West District records, 2010). Using the teachers and school records the infected or affected girls by HIV and AIDS were purposively identified in every class or form from standard 6 to Form 4. School going girls within age bracket of 11-19 years who had left school prematurely also formed part of the population.

The total population of teachers in Maseno division was 329 but when the researcher went back for member confirmation, three teachers had died (two were males and one female) and they had not been replaced. So there were 326 teachers where females are 143 and males are 183 (see table 3.1). The rationale behind the use of teachers was that they interact with girls in and out of school and they were used to establish the prevalence of psychosocial stressors of HIV and AIDS among the girls. The same teachers were used to establish the coping strategies employed by the girls and the psychosocial support available to infected or affected girl-child in school.

The total number of mixed primary schools was 75, one pure girls primary school, one special institution, 12 mixed secondary schools and three pure girls secondary school. The total number of the institutions was 92.

3.6 Sampling Techniques

Using purposive technique 30 learning institutions where one special institution, 20 primary mixed schools, one single sex girls' primary school, five mixed secondary schools and three single sex girls' secondary schools were sampled (see table 3.1).In primary the study considered class six to eight because girls in these classes are older and were able to understand the questionnaire. In secondary school Form one, two, three and four were considered and included in the sample table 3.1. In each class three girls were purposively sampled using teachers and school records to obtain 294 girls in both primary and secondary schools either infected or affected by HIV and AIDS pandemic. The 148 teachers were sampled from all classes in primary and secondary school because teachers interact with all pupils/students in school (see table 3.1). Using the teachers and documents like the admission registers, class registers and mark sheets snowballing sampling technique was used to trace the girls between the age of 11-19 who had left school prematurely. The study traced 15 girls within Maseno division of Kisumu County who have left school and were interviewed. The education officer Maseno division was interviewed during the study to give more insight into the variables under investigation.

3.7 The Sample

The sample was selected from Maseno division of Kisumu West district Kisumu County. The division has two educational zones namely: Chulaimbo and Sianda.The sample was made up of 294 girls' and 148 teachers in both primary and secondary schools taking into consideration the distribution of schools within the educational zones. The 148 teachers 77 were males while 71 were females. This made 45.3% of the total number of teachers teaching in Maseno division. Among the teachers respondents 35 were regular teachers, 86 class teachers, three school counsellors, six HOD's /senior teachers, nine deputy head-teachers and one head-teacher (Table 3.1). The study traced 15 girls who have left school who were within the division when the study was conducted. The schools were classified into mixed, pure girls', boarding and day schools and special institution (table 3.1). The girls were selected in primary school from standard 6 to 8 and in secondary schools from Form 1 to 4 in secondary school (Table 3.1). The girls' sample of 294 made 38% of all girls affected by HIV and AIDS in Maseno division. The area education officer was part of the sample to give more insight into the psychosocial stressors, coping strategies and support for the girls.

Table 3.1 The Sample frame

S/NO.	SCH TYPE	Pop.	Ed. Zones	SAMPLE	CLS/FRM	GIRLS	TRS
1	SPECIAL	1	Chulaimbo	1	STD 6-8	9	3
	SPECIAL				LOWER		5
2	PRY MIXED	75	Sianda	10	STD 6- 8	90	30
	"		Chulaimbo	10	"	90	30
					LOWER	-	40
3	PRY GIRLS ONLY	1	Chulaimbo	1	STD 6- 8	9	3
					LOWER	-	5
4	SEC MIXED	12	Sianda	3	FORM 1- 4	36	12
	"		chulaimbo	2		24	8
5	SEC GIRLS ONLY	3	Sianda	2	FORM 1- 4	24	8
	"		Chulaimbo	1		12	4
TOTAL		92		30		294	148

3.8 The Study Variables

According to Creswell (2009), variables should be related to the research questions or hypotheses. The independent variables were psychosocial stressors which are the challenges faced by a girl as a result of being infected or affected by HIV or AIDS as they interact with teachers, other learners and community. Coping strategies being the course of action taken by HIV and AIDS infected and affected girls to deal with the psychosocial stressors relationship to girls academic performance and education. The support provision is help or assistance provided to the girls infected by HIV and affected by HIV and AIDS psychosocial stressors to lessen the burden.

The covariates or mediating variables were: school type attended by the girl-child, pure girls or mixed school or boarding or day school or special institution and the effects it has on the challenges faced by HIV and AIDS infected and affected girls. The class level was the Standard (primary) or Form (secondary) in which a girl is in. The class level impact on the prevalence of HIV and AIDS psychosocial stressors among girls. The age is the length of time a girl has existed and its relationship to psychosocial stressors faced by HIV and AIDS infected and affected girls.

The Teachers' characteristics the sex of a teacher and the relationship to provision of psychosocial support to girls infected and affected by HIV and AIDS. Teachers working experience referred to the period of time a teacher has been involved in the teaching profession and the relationship it has on identifying and helping the infected and affected girls (provision of psychosocial support). Teachers' designation was the title of a teacher which defines his or her duties in school and its relationship to support provision by that particular teacher.

The academic performance and girls' education were the dependent variables. The academic performance were grades or scores which were tallied on average assignment and test scores in all school subjects relating them to psychosocial stressors, coping strategies and support. The role of psychosocial stressors in girls school attendance therefore affecting girls education. Drop-out girls leaving school pre-maturely without completing either the primary or secondary cycle of eight and four years respectively to HIV and AIDS psychosocial stressors prevalence in schools and at homes.

The adjustment mechanisms developed to deal with ill-health like depression, anxiety, stress and low self esteem were components of dependent variables.

3.9 Research Instruments

Data was collected through the use of questionnaire, document analysis, interviews and observation. The instruments comprised of questionnaires with both closed and open ended items; the interviews were conducted using open-ended items where the education officer in-charge of the division, the teachers and girls who had left school prematurely were respondents. The interviews gave respondents a chance to challenge the agenda set by the researcher by raising new issues and asking questions.

3.8.1 Questionnaire

The questionnaire is a cost-effective research tool in data collection. Questionnaires reduce bias and the researcher's own opinions. They were used in this study because they do not influence the respondent to respond to items in a certain manner and when

they have no verbal or visual clues as observed by Creswell (2009). Questionnaires are less intrusive and the researcher used them to collect quantitative data.

The questionnaires for both the teachers and learners were divided into four sections see appendices B and A respectively. Section I was used to collect data on personal characteristics of the respondents while section II had ten closed-ended items which were used to establish the prevalence of psychosocial stressors of HIV and AIDS pandemic and their impact on girls academic performance. Section III: had ten items on impact of girls coping strategies with HIV and AIDS psychosocial stressors and the effects of coping strategies on girls academic performance and section IV was on impact of support provision on girls academic performance for HIV and AIDS infected and affected girls. The teacher's questionnaire (Appendix B) and the girls' questionnaire (Appendix C) were used to collect primary data.

The five point Likert scale was used to isolate the prevalent HIV and AIDS psychosocial stressors faced by girls in school. The five options were: **Strongly agree(SA), Agree (A), Undecided (UD), Disagree (D) and strongly Disagree (SD).** Each of the sections contained 10 closed-ended items on a five point Likert scale and 2 or 3 open-ended items. The questionnaire was administered to the teachers and girls in school.

The girls' questionnaire was in four parts: Section I on girls' bio data where background information was collected. Section II was on psychosocial stressors experienced by girls' infected and affected by HIV and AIDS pandemic in school. The female learners were asked to give the coping strategies they used in section III and the support or help available to the infected and affected by HIV and AIDS in section IV. The female learners were asked to suggest ways through which they can

be helped to cope with psychosocial stressors of HIV and AIDS pandemic and improve their academic performance (Appendix C). In this Likert scale for each section the lowest score was 10 while the highest score was 50.

3.8.2 Interview guide

Interviews are powerful means of both obtaining information and gaining insights according to Mugenda (2004). The interviews collected qualitative data by allowing the researcher to probe the meanings interviewees give to their behaviour ascertaining their motives and intentions. As observed by Sheperis, et al (2010) the interview allowed long response, flexibility, follow-up and in-depth inquiry, therefore helping the researcher to verify and enrich the information obtained by the use of questionnaire.

The interview schedule for the education officer sought to gain more insight into psychosocial stressors of HIV and AIDS pandemic, strategies used by the Ministry of education to deal with the psychosocial stressors, support and suggestions on strategies that can be effective in supporting the girl-child by attracting and retaining her in school see appendix D.

The class teachers' interview guide was used to identify the psychosocial stressors of HIV and AIDS affecting girls in various classes, the coping strategies and the support or help available to the girls. The effects of the stressors, coping strategies and support or help on girls' academic performance were also covered in the teachers' interview schedule as shown in appendix E.

The school going girls who had left school before completing the primary and/or secondary cycle were interviewed (see appendix F). The interview was on the role of HIV and AIDS psychosocial stressors prevalence in girls dropping out, challenges they are facing out of school as a result and suggestions through which girls in such situations can be helped. Detailed notes were taken as the interviews were conducted to enable the study to capture what was observed, heard and experienced during the interview.

3.8.3 Observation Checklist

As suggested by Hannan (2007)the observation technique was used to record the flow of interaction that is dynamics of behaviour. The researcher observed the behaviour of girls and drew conclusions based on the observation, generated explanation, understandings and came up with predictions. The researcher observed the girls and made inferences as indicated in the observation check list see appendix G. For example a pupil/student who had no textbooks, tattered bag and exercise books was taken as a sign of negligence. A girl-child who was not engaging cheerfully in class activities and play with other children implied that the girl is socially withdrawn. The researcher also observed poor hygienic standards/untidiness which implied hopelessness or helplessness and having no motivation. A girl with torn and dirty uniform or no uniform was a sign of a deprived environment. Where there was poor housing such as leaking roofs, broken walls, no food store and no signs of fire and graves with no adult in charge or old grandmothers was interpreted as a deprived environment with high levels of poverty due to death of the productive adults due to AIDS pandemic, see appendix G.

3.8.4 Document Analysis

The documents analyzed were: the school admission registers, class registers, records of AIDS orphans in Kisumu West district office and mark sheets. These documents were analyzed to confirm the number of orphans in the division, enrolment and class attendance of girls from class 1 to class 8 in primary and from Form 1 to 4. The schools admission records were used to trace girls who had left school while mark sheets were used to establish academic performance of the infected and affected girls. The health records in the school were used to identify girls with chronic absenteeism due to illness. According to Sheperis et al(2010)a review of the documents gives additional insight and the researcher used the documents to gain more insight. The responses from the education officer, teachers and girls who had left school together with the research assistants' observation were cross checked to make viable conclusions for the study.

3.9 Pilot Study

A pilot study was conducted in Kisumu East district in five schools where three were mixed primary schools and two secondary schools. After piloting the research instruments were discussed with the supervisors and where necessary modifications were done. Threats to a study's validity and reliability exist at almost every turn in the research process. No one researcher can see all the potential problems, so the team approach was used during the development of the study design as suggested by Last

(2001). The researcher created and followed study protocols to minimize the threats to validity and reliability. This study ensured validity and reliability of the instruments using supervisors and piloting as discussed under section 3.9.1 and 3.9.2 respectively.

3.9.1 Validity

Validity is the best available approximation of the truth or falsity of a given inference, proposition or conclusion. Validity is the degree to which an instrument measures what it purports to measure. It is the accuracy, truthfulness of inferences that are based on the data obtained from the use of a tool or scale for each construct or variable in the study (Sheperis, et al., 2010). When data is a true reflection of the variable, the inferences based on such data are accurate and meaningful. Validity is a matter of degrees and therefore no data can have perfect validity. This study estimated construct validity because it was dealing with intangible variables and the supervisors were used to establish the extent to which the construct under investigation was measured based on the theory of the study. Piloting was done and supervisors were given the responses from the piloted study. The supervisors reviewed the items hence helped the researcher to improve the items using the supervisors' comments to make the instruments valid.

Content validity was established in two stages; at item development stage and judgment stage. The inter-raters judgment was used for content validity. The two judgments are necessary to measure the extent of each item for defining the traits and the set of items that represents all aspects of the traits. In estimating content validity the study ensured all variables in the study were well catered for by the items. The

researcher then tallied the proportion of cases in which the raters' agree and determined the stability of their agreement as noted by Sheperis, et al. (2010).

3.9.2 Reliability

Reliability is consistency or stability of the measurement or degree to which instruments measures the same way, each time it is used under the same conditions with the same results as noted by Creswell, (2009). Reliability is repeatability of one's measurement. A measure is considered reliable if a person's score on the same instrument given twice is similar. Reliability is not accurately measured but estimated according to Creswell, (2009).

Reliability coefficients are correlation coefficients between two sets of scores when the instruments were administered twice through test re-test during piloting. The test-retest was done during piloting after an intervening period of two weeks. The correlation coefficient (γ) was calculated between the two sets of scores. The scores obtained for the teachers questionnaire sub scales after piloting were: section II, γ = 0.86, section III, γ = 0.89 and section IV, γ = 0.84. The correlation coefficient obtained for the girls questionnaire sub scales after piloting were: section II obtained γ = 0.82, section III obtained γ =0.76 and section IV obtained γ = 0.79.

For interview narratives the researcher went back to the field together with the research assistants for member-checking to establish the trustworthiness of report. Any part of the report that the members did not agree with was noted and necessary corrections done to reflect the true responses of the respondents.

3.9.3 Triangulation

According to O'Donoghue & Punch (2003), triangulation is a method of cross-checking data from multiple sources to search for regularities in the research data. This is also called "cross examination". This makes the researcher more confident with results from different methods of data collection which lead to the same result. The study used a combination of questionnaire, observation, document analysis and interview guides to collect data to ensure validity and reliability of the collected information. Triangulation is a powerful technique that facilitates validation of data through cross verification from more than two sources. It was employed in both quantitative (validation) and qualitative (credibility) study as the study employed mixed approach.

By combining the researcher's and two research assistants observations the study hoped to overcome the weakness or intrinsic biases and the problems that come from single method, single-observer. The purpose of triangulation in research is to increase the credibility and validity of the results. According to Altrichter, Feldman, Posch, & Somekh, (2008) triangulation gives a more detailed and balanced picture of the situation.

3.10.4 Scoring of the Research Instruments

The interview guide for the education officer, teachers and girls who had left school prematurely were on psychosocial stressors due to HIV and AIDS pandemic, the coping methods used by the girls and the support or help available to the girls. Using

the interview the effects of psychosocial stressors, coping methods and help available, on girls' education was determined.

An interview guide for the girls who had left school was on psychosocial stressors role in girls leaving school. The challenges girls are experiencing out of school, support they are getting and suggestions on support they need to cope with the psychosocial stressors of HIV and AIDS to improve their livelihood. Field notes were used to categorize the responses given during the interviews and then coded according to emergent themes. Inductive interpretation of the data was used based on the theory of the study which was transactional coping process.

The teachers' and learners' questionnaire were on the psychosocial stressors due to HIV and AIDS pandemic on female learners, coping strategies and support provision and their effects on academic performance. In section I there were six items on personal details for teachers and five items for learners on the same. In section II are items on psychosocial stressors, section III coping strategies and section IV support provision. Each of these sections had 10 closed-ended and 2 or 3 open-ended items. For the ten closed-ended items in section II, III and IV the respondent had five options to choose from. The options were: Strongly agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). These responses were assigned values as follows; Strongly agree (SA) 5, Agree (A) 4, Undecided (U) 3, Disagree (D) 2 and Strongly Disagree (SD) 1.

The maximum score for the teachers and female learners for section II was 50 points which depicts high prevalence of psychosocial stressors due to HIV and AIDS pandemic. The maximum score for coping strategies Section III was 50 and support provision maximum score was 50. A score of 26 and below in section II depicted low

prevalence of psychosocial stressors due to HIV and AIDS. Scores ranging from 27-34 meant an average score on the prevalence of psychosocial stressors and their effects on girls' academic performance. A score within the range of 35-50 depicted high prevalence of psychosocial stressors and serious negative impact on the girls' academic performance. In section III a score of 26 and below depicted poor or maladaptive coping strategies affecting girls' academic performance negatively. Scores that ranged from 27-34 meant an average or adaptive Syndrome coping strategies leading to average or poor academic performance. Scores ranging from 35-50 meant good or adaptive coping strategies leading to good academic performance. In section IV scores of 26 and below showed that there is low provision of psychosocial support affecting girls' academic performance negatively. Scores of 27-34 showed that there was average provision of psychosocial support affecting girls' academic performance. Scores ranging from 35-50 meant that there was high provision of psychosocial support leading to positive effect on girls' academic performance. The 2 or 3 open-ended items responses for all the sections were coded and tabulated into tables of percentages and frequencies.

The study used the documents like; Kisumu west district records, school admission registers, mark sheets and class registers to analyze the girls' enrolment, attendance and academic performance. Academic performance was rated on five point scale which was: Very Good: 70-100 assigned value of 5, Good: 69-55 assigned value of 4, Average: 55-40 assigned value of 3, Poor: 39-30 assigned value of 2 and 29 and below: Very Poor and was assigned value of 1 and these were established using class mark sheets. The raw scores were converted into T-scores while for the psychomotor and affective domain like play and interaction with other learners the study used observation.

3.11 Data Collection Procedures

The researcher obtained a letter of introduction from the School of Education, Moi University in January 2011. The letter helped the researcher to obtain a research permit from the Ministry of Higher Education, Science and Technology through the National Council for Science and Technology to collect data see appendix, N and Q respectively.

Once the permit from the Ministry of Higher Education, Science and Technology was obtained the researcher started the pilot study. The researcher consulted the supervisors to make the necessary modifications to the instruments after piloting. The improvements were made on the instruments; the NCST permit was presented to the District Commissioner Kisumu West and District Education officer Kisumu West. The District Commissioner and the district Education officer gave the researcher authority to collect data in their areas of jurisdiction see appendix O and P. The researcher proceeded to collect data in the sampled schools. The questionnaire was administered face to face where the respondents were visited in the sampled schools while the interviews were also done in person allowing interaction between the interviewer and the respondent. The researcher was assisted by two research assistants to collect data especially in primary schools and among girls who dropped out of school. The research assistants were taught about the purpose of the study, how to administer instruments ensuring confidentiality of the participants.

3.12 Data Analysis

The quantitative data collected by use of questionnaires was coded and converted into frequencies then cross tabulation and Chi-Square factorial (χ^2) were used to analyze the quantitative categorical data. The (χ^2) test is used to determine whether an association (or relationship) between two variables in a sample reflect a significant relationship between two variables in the population. The SPSS (Statistical Package for Social Sciences) was used to code data establish the frequencies, cross tabulated. The (χ^2) test results significant was tested using 0.05 level of significance.

The responses obtained during the interview schedule were coded and themes identified. The analysis involved treating data nomo-thetically (looking for general traits) and identifying the connections between the codes identified first and emergent themes. The patterns in the codes were checked by examining the frequencies of codes across respondents. The analysis was the basis for explication of the data which involved translation of the emergent themes into a narrative account of the respondents. Using research assistants the original narratives were cross-checked to confirm whether the same themes and categories emerged and any differences were reconciled. After the report the members were contacted to confirm the truthfulness of what was recorded. The narratives according to the themes were used for data collected through observation and document analysis.

3.13 Ethical Considerations of the Study

The researcher obtained a research permit from the Ministry of Higher Education, Science and Technology through the National council of Science and Technology**.** The permit was presented to the District commissioner and the District education officer Kisumu west district. The researcher obtained informed consent from the respondents and briefing was done before the commencement of the study. The respondents remained anonymous to ensure their confidentiality. The research assistants underwent training on how to handle ethical issues in research so as to ensure confidentiality was upheld. Debriefing was done after the study to ensure the participants suffered no physical or psychological injury during the study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Overview

This chapter dealt with data presentation, data analysis and interpretation of data. The chapter contains the following sub headings: bio-data of the participants; the prevalence of the HIV and AIDS psychosocial stressors; the challenges of HIV and AIDS psychosocial stressors; the coping strategies and girls academic performance; the personal characteristics of girls like age, class level, type of schools attended and parental status of girls infected or affected by HIV and AIDS and their influence of the prevalence of psychosocial stressors; the teachers' characteristics like sex, designation and working experience and their influence on provision of support to the girl-child and the summary of the chapter.

4.1 Bio data of the Participants

The bio data of the participants dealt with the teachers' sex, working experience and designation. The girls characteristics considered were: age, type of school attended, class level and parental status.

4.1.1 Teachers' Bio data

The teachers characteristics of 148 sampled (n=148) were: male 77(52%) while females were 71(48%). The working experiences of the teachers were are summarised in figure 4.1

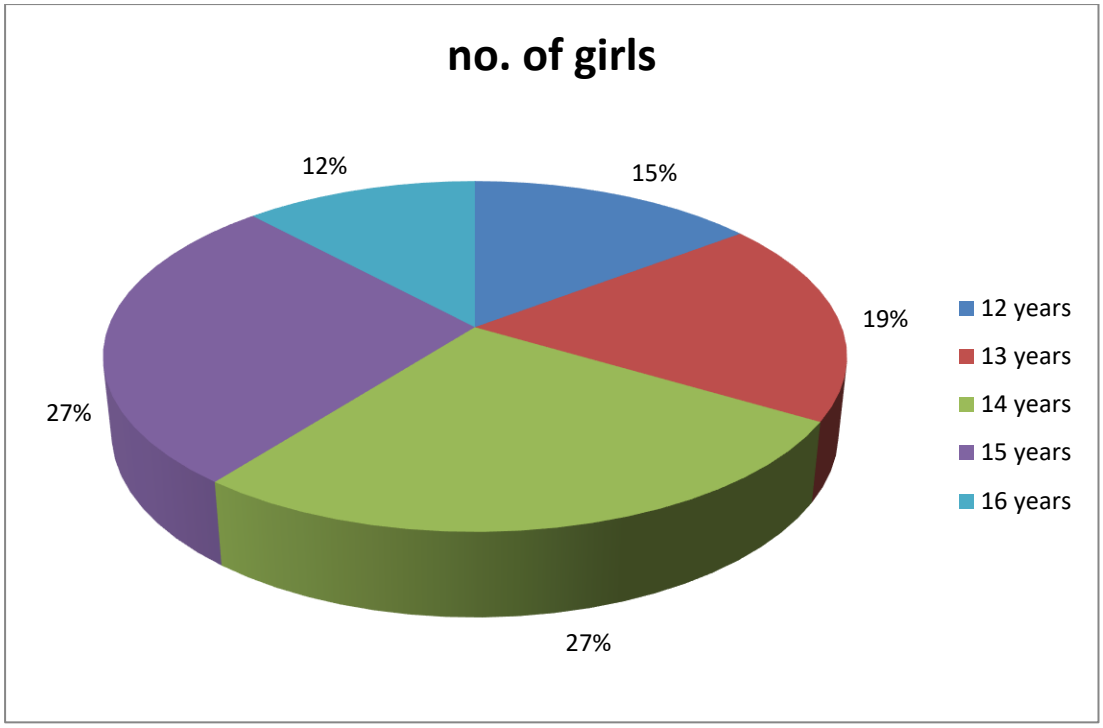

Fig 4.1 Teachers working experience

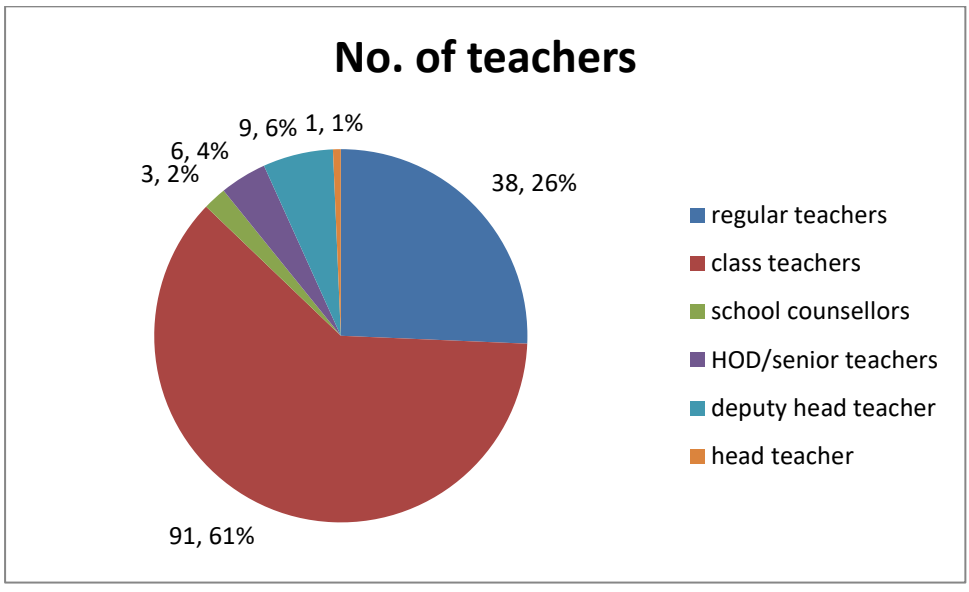

Fig 4.2 Teachers designation

The bio data of the teachers constitutes personal characteristics which may influence the provision of psychosocial support to the girls affected by HIV and AIDS psychosocial stressors, because these characteristics define a teacher's duty in school.

4.1.2 Girls' Bio data

The study sought to determine the age of the girls who participated in the study, and the results are summarised in figure 4.3

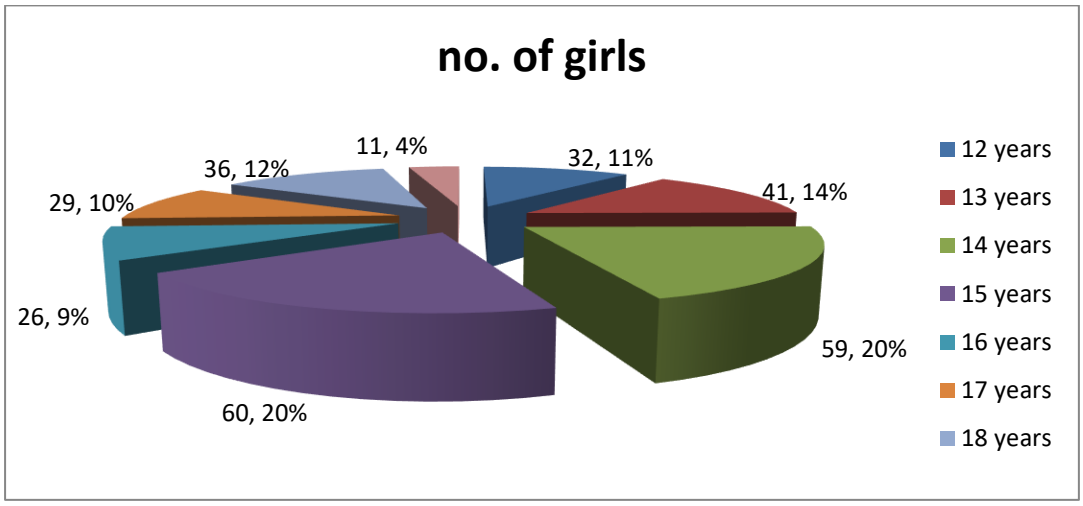

Fig 4.3 Age of girls participants

This implies that girls who responded to the questionnaire were pre-teen and teenagers who are mature enough to understand what HIV and AIDS is all about. They have developed secondary sexual characteristics and are able to offer the much needed labour at home. The class or form of the respondents was as indicated: class six 25(8.5%), class seven 81(27.6%), class eight 81(27.6%) in primary school sector. In secondary school the respondents were distributed as follows: Form One 16(5.4%),

in Form Two 33(12.2%) in Form Three 20(6.8%) and Form Four 38 (12.9%).This implies that girls' respondents are in upper primary and secondary school and there is more school work which the girl has to contend with together with household chores.

The type of school attended by the girls were: Primary single sex (boarding) 6(2%), Primary mixed (day) 186(63.3%), Secondary single sex (boarding) 17(5.8%), Secondary mixed (day) 76(25.9%) and Special institution (boarding) 9(3.1%). This means majority of the girls are attending mixed and day schools where school assignments must be done at home. The Mixed environment in school as noted by Forum for African Women Educationist (FAWE) (2001) is hostile to the girl-child and this means she has more challenges to contend with in the face of HIV and AIDS pandemic.

On the parental status of the girls the results were as indicated: 90(30.6%) both parents alive, 134(45.6%) one parent dead and 70(23.8%) both parents dead. This implies that most of the girls are being raised by a single parent following the demise of one parent due to AIDS pandemic. The study sought to find out which one of the parent was dead in-case the respondent indicated one parent dead and results were mother 41(13.9%) and Father 93(31.6%). This shows that girls find themselves in a female-headed household which is very vulnerable because women are so extensively disempowered and do not have equal access with men to land and resources.

The teachers' indicated how many girls were affected by HIV and AIDS psychosocial stressors in a particular class. The teachers identified 39 girls infected with HIV this number could be higher since out of 148 teachers,' 103 did not provide the information. The number of those who did not provide the information is higher than those who provided the information and this implies that teachers are not willing to

disclose the number of girls infected with HIV due to discrimination and stigma associated with HIV positive status in Luo community of western Kenya. The study identified 108 affected girls in the schools sampled by the researcher. Out of 148 teachers 76 opted not to provide the required information. This can be interpreted as teachers not willing to disclose the information or they are in denial, on the number of girls' affected. Information from Umoja project that is funding a lunch programme for AMPATH clients in ten selected schools indicates that the number of affected children is quite high. This means the number of girls' infected and affected by HIV and AIDS pandemic is far much higher than the number provided by teachers who responded to this item but stigma is very real and many would rather not give specific information and so they were either not sure or do not know.

4.2 The Prevalence of HIV and AIDS Psychosocial Stressors

The psychosocial stressors are stimuli that exert internal and external demand on the body affecting its normal functioning. HIV and AIDS exert demand on girls causing stressor. The HIV and AIDS psychosocial stressors prevalence index is 80% they may have a negative impact on the girl-child learning process.

4.2.1 HIV and AIDS Psychosocial Stressors Prevalence according to Teachers

The study established that due to high prevalence of HIV and AIDS psychosocial stressors girls miss lessons and school. The cross tabulation values indicate that when the prevalence of psychosocial stressors is high the performance is either poor or very poor as shown in table 4.1. When the stressors are low the performance is as follows:

very poor none, poor 1, average 5, good 3 and none indicated very good performance. Those who indicated poor performance with average prevalence of psychosocial stressors were 17 and average performance was 7 and none indicated good or very good performance. Most of the teachers that is 114 indicated high prevalence of HIV and AIDS psychosocial stressors leading to either very poor or poor performance as indicated in table 4.1. This clearly shows that where the prevalence of HIV and AIDS psychosocial stressors is high the girls' performance is either poor. Out of the 148 teachers, 132 (89.9%) indicated poor performance when HIV and AIDS psychosocial stressors prevalence is high. of using the closed-ended items given in section two of the teachers questionnaire. Table 4.1 shows a cross tabulation of HIV and AIDS psychosocial stressors prevalence and girls performance. The cross tabulation shows that there is a relationship between high prevalence of psychosocial stressors and poor academic performance among girls. This means that the psychosocial stressors of HIV and AIDS are placing both external (house-chores and care-providers) and internal (stigma, discrimination) demands on the girl-child and this is affecting girls academic performance negatively hence poor performance.

Table 4.1 Prevalence of Stressors and Girls performance

Stressors prevalence		Academic Performance				
		Very poor	poor	average	good	
		29 and below	30-39	40-55	56-69	Total
Low	Frequency	0	1	5	3	9
Average	Frequency	0	17	7	0	24
High	Frequency	54	60	0	0	114
Total		**54**	**78**	**12**	**3**	**147**

Using the totals tabulated in table 4.1 the χ^2 test statistic obtained was 164.327 with a df= 6 and the Probability value=0.000 which is less than the threshold of alpha = 0.05 and thus the null hypothesis was rejected leading to the conclusion that the prevalence of HIV and AIDS psychosocial stressors has significant effects on girls academic performance in this area according to teachers responses.

The teachers were given an open item to state the effects of HIV and AIDS psychosocial stressors prevalence on girls' academic performance and according to133(95%) of the teachers, discrimination is one of the psychosocial stressors affecting girls' school attendance and academic performance negatively. Other 129(92.1%) cited hospital regimes and visits to the clinics that girls have to follow to for their health as a stressor due to HIV and AIDS that is affecting girls academic

performance negatively. Other teachers 97(69.3%) identified poor performance and bad future for the girl-child as a stressor, 79(56.4%) cited chronic stress and 77(55%) low self-esteem. A number of teachers 53(37.9%) felt that there is increased girl-child drop out while 37(26.4%) teachers cited girls heading homes where parents are sick or dead. This means discrimination and HIV infection among girls are very real to the girls in schools hence affecting their learning process leading to poor performance. The teachers' responses are summarized in Figure 4.4.

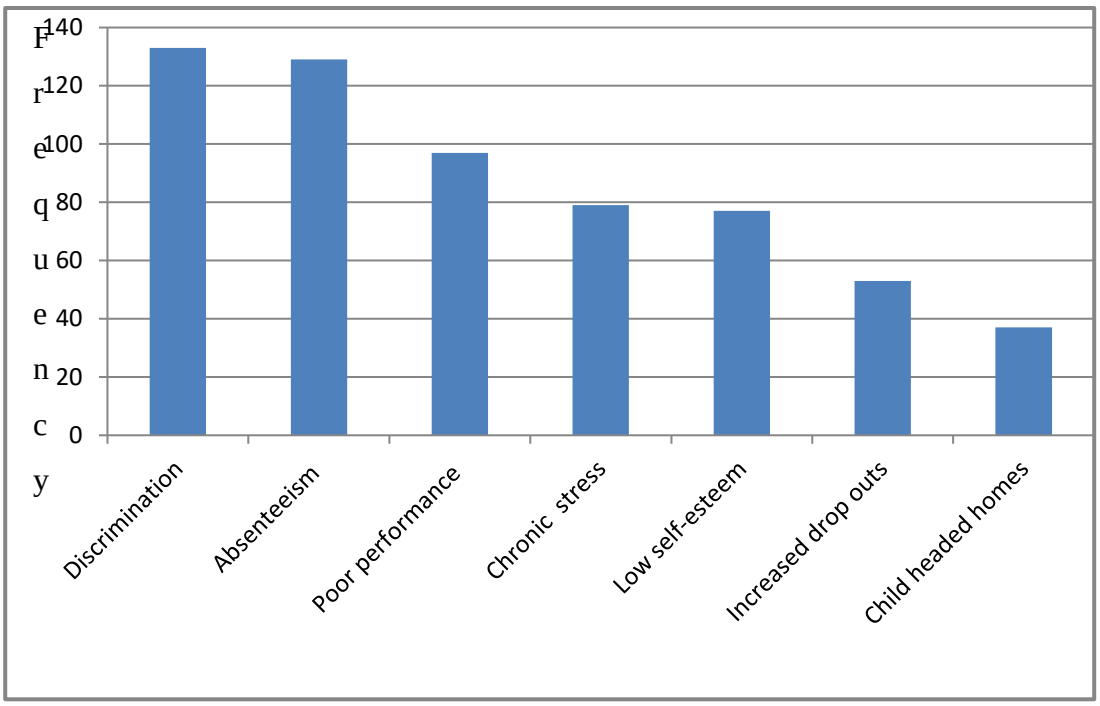

Figure 4.4: Effects of HIV and AIDS Stressors on Girls Learning

4.2.2 Impact of HIV and AIDS Psychosocial Stressors on Academic Performance (Girls responses)

Section II (see appendix C) sought to find out the prevalence of HIV and AIDS psychosocial stressors and their effects on girls academic performance. The results revealed that with low prevalence of HIV and AIDS psychosocial stressors there is of

very poor academic performance as indicated by 24 respondents, poor academic performance by 31 respondents, average academic performance by 14 respondents and 2 respondents good performance. With average prevalence of HIV and AIDS psychosocial stressors the performance was as follows: 24 respondents cited very poor performance, 31 respondents' indicated poor performance and 16 respondents' stated average performance and none of the girls cited good performance. The findings revealed that when the prevalence of HIV and AIDS psychosocial stressors is high, girls' performance was as follows: very poor 28 respondents, poor performance by 86 respondents, average performance was cited by 33 respondents and there was no good performance. The totals were as follows: very poor performance 76(26.3%) respondents, poor performance 149(51.6%) respondents, average performance 63(21.8%) respondents and 2(0.7%) good performances which were only found in case of low prevalence of HIV and AIDS psychosocial stressors. The results clearly show that there is a relationship between the prevalence of HIV and AIDS psychosocial stressors and girls' performance. Where the prevalence of HIV and AIDS psychosocial stressors is high the performance was either poor or very poor. This information is summarised in table 4.2 showing the relationship between prevalence of psychosocial stressors and academic performance according to girls' responses.

Table 4.2: Prevalence of Psychosocial Stressors and Girls Performance.

Psychosocial prevalence	**Academic Performance**				
	Very poor 29 and below	Poor 30-39	Average 40-55	Good 56-69	**Total**
Low frequency	24	31	14	3	**71**
Average frequency	24	32	16	0	**72**
High frequency	28	88	34	0	**150**
Total	76	151	64	3	**294**

The χ^2 test statistic was calculated see table 4.2 and the prevalence of HIV and AIDS psychosocial stressors value was 15.4 with a df= 6 and the p-value=0 .017 is less than the threshold value of alpha = 0.05, and this means that the null hypothesis (**Ho.1**) as stated that the prevalence of HIV and AIDS psychosocial stressors have no significant influence on girls academic performance is rejected. The results indicates that with high prevalence of HIV and AIDS psychosocial stressors, girls' learning process is affected negatively leading to poor performance.

The study sought to find out from the respondent problems they are facing due to HIV and AIDS that affect their academic performance and the majority 75(25.5%) girls indicated that they do not concentrate in class, thinking of their dead parent(s) while 48(16.3%) stated that they do not attend school frequently, 41(13.9%) no moral support and 41(13.9%) cited lack of school fees, food, clothing and shelter. Other girls 6.5% cited the teachers and students lack accurate information about HIV and AIDS. The 13.6% who did not respond to this item could be in denial of HIV and AIDS existence and the problems faced or just refusing to open up just as the teachers had indicated earlier. This implies that most girls are not able to concentrate in class

due to psychosocial stressors of HIV and AIDS especially the loss of a parent(s) leading to poor performance as revealed in table 4.3.

Table 4.3Problems leading to Poor Academic Performance (girls)

HIV and AIDS Problems	Frequency	Percent
Not able to concentrate in class	75	25.5
Not attending school frequently	48	16.3
No moral support	41	13.9
Lack of school fees, food, clothing and shelter	41	13.9
None response	40	13.6
Ignorance by teachers and students	19	6.5
Students and teachers talk negatively about me and this affects my performance negatively	17	5.8
Loss of my parents makes me feel so lonely	6	2
I'm not infected with HIV and AIDS	4	1.4
Loss of parent who was paying school fees	1	0.3
Nothing is affecting me academically	1	0.3
Not able to do well in class	1	0.3
Total	**294**	**100.0**

The data in table 4.3shows that most girls are not able to concentrate in class due to the loss of a parent or both through death as a result of HIV and AIDS. This means that problems the girls are experiencing as a result of HIV and AIDS are leading to poor academic performance among them.

4.3 Challenges due to HIV and AIDS Psychosocial Stressors

The challenges are problems or difficulties which are being experienced by teachers as they teach in HIV and AIDS ravaged environment, the girls are also faced with difficulties in the same kind of environment just as the Ministry of education in its effort to offer quality education.

4.3.1 Challenges as Identified by Teachers' Interviewed

The teachers were asked to identify the challenges among female learners in their specific schools in relation to HIV and AIDS pandemic. The teachers identified poor performance among girls as one of the major challenges where 96.7% mentioned this as one of the major challenges and it was closely followed by frequent absenteeism with 93.3% and these two are closely related. One of the class teachers in a mixed secondary school reported that;

> *Girls frequently absent themselves from school to take care of the young ones who are left at home when they are underage and cannot take care of themselves).*(see App. I sentence No.2).

All the challenges identified by the teachers were tabulated and summarized in table 4. 4.

Table 4.4: Challenges Faced by Affected and Infected Girls

Challenges faced by infected or affected girls	Frequency	Percent
poor academic performance	29	7.9
frequent absenteeism	28	7.6
lack financial resources	24	6.5
lack concentration	22	6
repeating or deferred studies	22	6
increased number of orphans	22	6
negative thoughts	20	5.4
Withdrawn	20	5.4
taking care of their siblings	20	5.4
difficult to control always using sickness as an excuse	18	4.9
dropping out of school	18	4.9
Stigmatization	18	4.9
Discrimination	16	4.4
no motivation coz they believe they have no future	16	4.4
early marriages	13	3.5
seek help from older men who exploit them sexually	13	3.5
taking care of the sick parents	12	3.3
early pregnancy	11	3.0
Depression	10	2.7
Old grandmas taking care of the young	9	2.4
poor performance in sports	7	1.9

Totals are more than 100% some respondents gave more than one response

The teachers identified frequent absenteeism caused by the psychosocial stressors and this affect the girls' academic performance negatively. The girls suffer from low self-esteem therefore lacking motivation to work hard in school. Many are mistreated by the relatives they live with making them to be frustrated and they are not able to concentrate in class. One teacher in a mixed primary school reported:

> *There has been frequent trend of absenteeism by most of the girls leading to them missing many lessons and this has greatly contributed to poor performance, there is also poor treatment back at home by their guardians i.e. some are even being sent away from home and because of this girls cannot concentrate in class activities hence poor academic performance.*(see App. I statement No. 1, 2 & 4).

Many affected girls have so many chores to cater for at home finding it difficult to do their school work and even to revise, this makes them to withdraw from class activities and when they are overwhelmed they opt out. The girls tend to have negative thoughts now that they are orphans or infected and they believe that their future is bleak**.** When teachers pester them with class work and good performance, many infected girls have responded to teachers using statement like; *"I am not motivated to work hard in school when I know my days are few (I will die soon)"*(App. J sentence No.24).For girls who are breadwinners they have to look for food, water, firewood, cook, clean the utensils and clothes for their siblings before they can start looking at their school work and so they are always tired. In the child-headed homes food is scarce and concentration becomes very difficult in an empty stomach and this means performance is dismal. Girls who are infected are sickly, they have to visit hospitals where they are often hospitalized, making it difficult for them to catch up with the other learners. Other girls have to take their siblings to hospitals who are sickly due to HIV infection. This really affects their self esteem and with low

self esteem the performance is certainly poor. HIV and AIDS psychosocial stressors prevalence academic performance negatively see table 4.5.

Table 4.5: HIV and AIDS challenges that affects girls Academic Performance

HIV/AIDS and girls academic performance	Frequency	Percent
Absenteeism leads to poor performance	22	14.1
Low self esteem-dismal performance	19	12.2
No motivation hence poor performance	19	12.2
Lack of time to do school work	17	10.9
withdrawal from class activities	17	10.9
Dropout of school	13	8.3
Negative thoughts hence poor performance	11	7.1
Frustration hence poor performance	11	7.1
Breadwinners so they are fatigued hence no concentration	10	6.4
Harsh guardians who mistreat the girls hence poor performance	6	3.8
No food therefore poor performance	6	3.8
sickly girls who are frequently hospitalised perform poorly	5	3.2

totals are more than respondents interviewed due to multiple responses

4.3.2 Effects of Psychosocial Stressors of HIV and AIDS pandemic Teaching

The teachers were asked to indicate the effects of HIV and AIDS psychosocial stressors on teaching in an environment ravaged by HIV and AIDS pandemic. Of the

148 teachers 38 indicated that they have found it difficult to cover the syllabus due to absenteeism and they find themselves repeating lessons because of the learners absenteeism when the lesson was taught. Another 15 teachers indicated that they feel frustrated because they spend so much time advising the girls but there is no behavioural change among them. Asked why there is no behavioural change among girls a head teacher in mixed primary school gave this report:

*Some cultures like once a girl reaches puberty she cannot sleep under the same roof with the parents. This means that the girl spends the night at the grandmothers' house, kitchen if it is separate from the parents' house, a brothers' house who is not living in the compound, or any other relative's house. The girl has to clear all her household chores and do their school work before proceeding on to where she is supposed to sleep. No one, especially the parents/guardian takes time to ensure the girls have really gone to this specific house. This means parents/guardians relax on their responsibility of guiding their children especially girls who are very vulnerable. This movement from one house to the other at night is not safe and all these parents/guardians cannot be sure of where their teenage daughters sleep(*see statement 22, 23, 24 and 25Appendix 1).

Girls would benefit more academically if teachers and parents/guardians assist, direct and guide the learner particularly the girl-child who because of the "over-protected" upbringing tend to need more focused attention.

Other 15 teachers said they have to deal with girls who do not finished their school work while 14 teachers said girls are slow in understanding concepts due to emotional distress. Again other 14 teachers said they find it difficult teaching girls who report to school late and already tired. About 25 teachers don't feel motivated to teach due to absenteeism and poor performance among these girls and they have found themselves doing more guidance and counselling where applicable instead of teaching. As 14 teachers indicated that they guide and counsel they are only doing trial and error because they lack necessary skills and techniques to effectively guide and counsel the

learners. According to 10 teachers the girls are so emotionally unstable that they have found themselves being required to give tender care while 5 teachers said they provide basic needs to some needy pupils or students. This clearly shows that being a teacher in an environment ravaged by HIV and AIDS can never be business as usual, the challenges are real and they have affected the teaching profession negatively. The HIV and AIDS challenges facing the teacher in HIV and AIDS ravaged environment are tabulated in table 4.6.

Table 4.6: HIV and AIDS Challenges Affecting Teaching

HIV and AIDS Challenges Effects	**frequency**	**Percent**
Poor syllabus coverage.	23	17.3
Frustration due to no behaviour change by girls	15	11.5
Having to contend with undone homework	15	11.5
Due to emotional stress girls are slow in understanding	14	10.4
Teaching fatigued girls has proved to be difficult	14	10.4
Work extra hours to help those who miss lessons	14	10.4
So much time used in guiding and counselling instead of teaching	12	9
No motivation due to absenteeism and poor performance in exams	11	8.2
Need to provide tender care in school.	10	7.5
Helping financially the desperate girls (giving money)	5	3.8

**Totals are more than 100% due to multiple responses*

4.3.3 Prevalence of Psychosocial Stressors among Girls drop-outs

The study had targeted at least 20 girls who have left school without completing the cycle of eight years for primary and four years for secondary, but only managed to interview 15 girls who were still within Maseno division by the time the study was carried out. For the girls who have left school prematurely the study established that the psychosocial stressors of HIV and AIDS pandemic in this phenomenon. According to a deputy in a mixed secondary school said that; "*Many more girls have left school but they have moved to major towns in search of green pastures and they are working as house helps, barmaids and as dancers"(*see appendix I statement no.11). The 15 girls traced were from the sampled schools but from the interviews many others have dropped out but moved into towns where the researcher was not able to reach them.

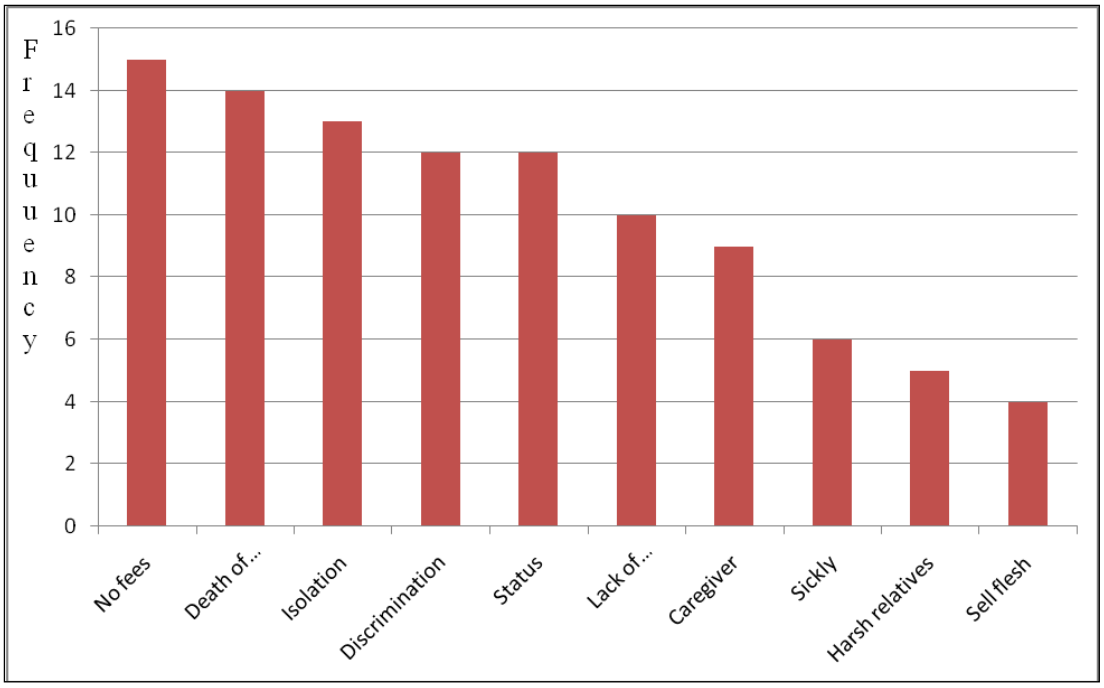

Figure 4. 5: HIV and AIDS Related Problems leading to drop-out among girls

Girls interviewed stated that they left school because they lacked school fees (100%) while 93.3 % identified the death of their parents due to AIDS. One of the girls' who have left school prematurely said;

> *When my parents died, there was no body to pay my school fees and cater for my young siblings, so I have given up my education for the sake of my siblings hoping they will succeed and become responsible.* (see App. J statement No. 1, 2 & 7).

Many left school because they were isolated by friends and teachers, being discriminated by other learners and feeling that people in school hated them because of their status. One girl who have left school in primary school reported that; *"I felt rejected by everybody around me in school and therefore I decided to leave school in search of acceptance elsewhere".*(see App. J sentence No.5).

The infected girls are sickly and when they miss school due to sickness they are not able to catch up with the other learners, concentrating in class becomes very difficult for them once they know their HIV and AIDS status. One infected girl who has accepted her status said *"I find myself thinking so much about my status, I know there is no future for me because death is soon coming my way"* (*Akinyi not her real name)see App. J statement No.6. This is stigma, HIV and AIDS stigma is layered on many other stigmas.

Girls have found themselves being the sole breadwinners of their families after the death of their parents. Relatives have mistreated them, preventing them from cultivating the piece of land left for them by their parents. Other relatives have been so harsh to these children that they have destroyed their houses in an effort to chase them away from the household. This confines the girl-child to life of servitude, thus continuing a cycle of poverty as they are less likely to send their children to school creating another generation vulnerable to HIV infection.

Girls infected by HIV or affected HIV and AIDS psychosocial stressors have developed negative attitude towards education because they are isolated by fellow students and teachers', still they have to fend for their siblings. These responsibilities have made some to be involved in sexual immorality to try and cater for their siblings needs. As one of the girls who have dropped out of school puts it:

> *When I was in school I was isolated from other students because they had bad thoughts about me because of my status. This has made me to feel very bad and have a bad attitude towards education, still there is a lot I have to do like involving myself in the provision of family needs and this has led me into temptation of sexual immorality".*(see Appendix. J sentence No. 3, 9 & 10).

The girls are using readily available resources to cater for themselves and their siblings needs, further exposing the girls to HIV infection. The girls' responses are summarised in figure 4.5. This clearly indicates that stressors as a result of HIV and AIDS are real and they have serious negative impacts on the girl-child education in the area covered by the study.

4.3.4: HIV and AIDS Psychosocial Stressors from Home Observation

The effects of HIV and AIDS pandemic are devastating as witnessed during the observation as the study was conducted. Below is an account of the happenings in girl-child headed home that had dropped out of school.

"Akinyi" (not her real name)

In a small village in Maseno, the Umoja project workers provide services to orphans in the surrounding rural communities. The project is resourced by people from USA (Indiana State) and staffed almost entirely by orphaned and OVC from the local community, and they visit each home and school where orphaned and OVC's are sponsored once a month. During the visit, the group members' check on the children and drop off donated goods such as flour, oil, salt and clothing. One of the families they assist is headed by a 14-year-old girl named "Akinyi", who lost both parents to HIV and AIDS. "Akinyi", who has cared for her 10-year old brother and 8-year-old sister since she was ten, is at home when the volunteers arrive. The house and the granary stands dilapidated and empty lacking basic necessities. Outside is neither livestock nor trees for shade. Soon after the visitors go inside, two men and a woman from the

homestead next door enter without asking permission. They sit against the far wall and stare at "Akinyi" throughout the visit. "Akinyi" does not attend school because she has to care for her siblings. Her brother attends school inconsistently because he does not have uniform or school supplies—when he tries to attend in his only set of clothes, the other children make fun of him. "Akinyi's" sister is sickly and does not attend school. "Akinyi" uses five to ten days a month travelling to the health centre with her sister. Because she is a child herself, "Akinyi" cannot make health decisions for her younger sister, which has made access to needed health care difficult. The Umoja visitors have been able to speak to "Akinyi" without the neighbours' presence only once. During this particular occasion the girl busted into tears and could not be consoled. The visitors' could not get her to calm down enough to talk. They stayed as long as they could, but had to move on to visit the other families. The visitors believe that the men and the woman probably take the food that they bring to "Akinyi" and her siblings every month, and they fear that "Akinyi" is sexually abused as well.

From this observation the emerging themes are; fear, intimidation, poverty, desperation, hopelessness and abuse. All these are stressors which are causing both external and internal demand on the girl-child hence affecting girls learning.

The researcher observed how girls who have left school due to HIV and AIDS stressors are interacting with their neighbours. The observation made is that the interaction is not a cordial one meaning that these girls are suffering from rejection by their neighbours. The neighbours discriminate against them and treat them as outcasts who are nothing but burdens to them. Due to this treatment many girls have adopted

a lifestyle that depicts a people who are either seeking attention or are hopeless. Their dressing is quite revealing, small tight skirts, while others are poorly dressed with dirty clothes due to lack, negligence. Those who are dressing in very revealing clothing are seeking attention and acceptance and when noticed by the opposite sex they are easily lured into sex. The girls are moody due to stigma, where relatives and neighbours treat them as outcast fearing that they are likely to be infected. The girls had distressed faces and they look unhappy. The homes are deprived; the roofs are poor and leaking, the walls have gaping holes in them, no beddings and no food in the stores. In some homes there were no signs of fire having been lit for days, meaning there is no cooking for days and this means girls and their siblings are going for days without food. These deprived environments have pushed girls out of these homes so as to seek means to cope with the stressing environment (survival). Girls use relational aggression because they feel they have lost control over what happens to them. The girls no longer care about their safety, and the argument is that HIV takes long to kill but hunger kills within days. These problems are as result of parent (s) death or sickness due to AIDS. The harsh environments have pushed girls out of school and into the streets. This explains why girls are willing to do anything including selling their flesh to fend for themselves, grandmothers and siblings.

The study summarises the following psychosocial stressors of HIV and AIDS pandemic leading to poor academic performance among girls.

i. Problems with primary support group, for example death of a family member; health problems in family; disruption of family by separation; removal from the home(relocation); sexual or physical abuse; neglect of child; discord with siblings especially when a girl becomes pregnant.

ii. Problems related to the social environment- e.g. frequent death or loss of friend making girls to experience protracted grief; inadequate social support; living alone; discrimination; difficulties adjusting to life in the absence of parents and sickness.

iii. Educational problems-academic problems where girls are not able to concentrate due to the many responsibilities they have to bear, having known their status, frequent sickness leading to frequent absenteeism hence poor academic performance in school. Discord with teachers and classmates who have negative talk about the girls and isolate them while the school environment is unable to cater for the needs of the girl-child making girls to keep off from school.

iv. Housing problems where girls are homelessness; inadequate housing; unsafe neighbourhood; discord with neighbours and this is clearly indicated by a visit to *Akinyi's home.

v. Economic problems: where girls are experiencing extreme poverty; inadequate finances; no school fees, insufficient welfare support girls to sell the only resource available to them therefore perpetuating the viscous cycle of HIV.

vi. Problems with access to health care services: girls cannot access adequate health care services and transportation to health care facilities is unavailable.

vii. Problems related to interaction with the legal system/crime: many times girls are victims of crime (sexual abuse) and they are not willing to open up due to fear believing no one cares.

4.4 Coping Strategies and girls Performance

This is the course of action taken by the girls in the presence of HIV and AIDS psychosocial stressors. The actions taken are determined by the girl's characteristics, the environment, the beliefs and values of the girl-child which are dictated by the community. The course of action can have either positive or negative impact on girls' academic performance. When coping is adaptive the impact on school work and life is positive while maladaptive coping strategies have negative effect on girls school work.

4.4.1 Girls' Coping Strategies with the HIV and AIDS psychosocial stressors prevalence

The coping strategies used by the girls to deal with the psychosocial stressors of HIV and AIDS pandemic and their impact on girls' academic performance were investigated using questionnaire see appendix. B; Section III using teachers. The findings were as follows: teachers who cited adaptive or good coping strategies were 10 where seven gave average performance while three recorded good performance by the girls' in-case of adaptive or good coping strategies with HIV and AIDS psychosocial stressors.

Teachers who cited average or adaptive syndrome with HIV and AIDS psychosocial stressors were 47 and out of these respondents one cited very poor performance, 27 poor performances and 19 average performances, none of the respondents indicated good performance with adaptive syndrome coping strategies. The teachers who

reported maladaptive or poor coping strategies were 88 where 40 said girls performance was very poor while 48 teachers reported poor performance none of the teachers reported average or good performance when maladaptive or poor coping strategies with HIV and AIDS psychosocial stressors exist. This means that there is a relationship between the coping strategies and performance. When the coping strategies are maladaptive or poor the performance is either poor or very poor as reported by 116 (80%) of the teachers who provided information on these items. Only 16(17.9%) reported adaptive syndrome coping strategies leading to average performance and only 3 cited adaptive or good coping strategies leading to good performance. This information is summarised in table 4.7. Teachers were asked to provide information on coping used by the girls because they interact with girls in class, in school and in the community.

When HIV and AIDS psychosocial stressors exert demand on the girl-child she experiences emotional and cognitive tension. Depending on the environment at home and school the girl gives meaning to the stressors based on her values and belief leading to a reaction(s). The reaction(s) is/are the coping strategy(ies) adopted by the girls for example missing school, engage in irresponsible sexual behaviours, seeking divine intervention (praying all the time) and many visits to VCT clinics which impact on girl-child academic performance negatively and leading to either very poor or poor academic performance.

Table 4.7: Coping Strategies and Girls Performance

coping strategies		Performance				
		29 and below	30-39	40-55	56-69	
Adaptive	Frequency	0	0	7	3	10
(syndrome)	Frequency	1	27	19	0	47
Maladaptive	Frequency	40	48	0	0	88
Total		**41**	**75**	**26**	**3**	**145**

The Chi-Square test statistic obtained for coping strategies and girls academic performance values was114 with a df=6 and a P-value =0.000 which is less than the threshold of alpha=0.05 which means that coping strategies have significant influence on girls academic performance (see table 4.7).The cross tabulation and chi-square value indicate that there is a significant relationship between coping strategies and academic performance among girls.

4.4.2 Coping Strategies and Girls Academic Performance according to girls

The study sought to find out from the girls the coping strategies they used to deal with HIV and AIDS psychosocial stressors and their impact on academic performance. The findings of the study were as follows: out of 294 girls sampled 289 girls provided information in the items see appendix C; section III. Good or adaptive coping

strategies were recorded by 64 girls where 22 had very poor performance, 32 poor performance, 9 average performances and 1 good performance. Average or adaptive syndrome coping strategies were recorded by 142 girls where 41 cited very poor performances, 68 poor performances, 30 average performances and three good performances. Poor or maladaptive coping strategies had 83 girls with 13 citing very poor performance, 46 poor performances, 23 average performances and 1 good performance. The totals on coping strategies were: 76(26.3%) very poor performances, 146(50.5%) poor performances, 62(21.5%) average performances and 5(1.7%) good performances as shown in table 4.8. This shows that there is a relationship between coping strategies and girls academic performance. Most of the girls had poor or maladaptive coping strategies where 222(76.8%) had either poor or very poor academic performance as shown in table 4.8.

Table 4.8: Girls coping strategies and performance (girls)

Girls coping strategies		**Students performance**				
		very poor	Poor	Average	Good	Total
Adaptive	Frequency	22	32	9	1	64
syndrome	Frequency	41	68	30	3	142
Maladaptive	Frequency	13	46	23	1	83
Total		**76**	**146**	**62**	**5**	**289**

The Chi-square value for the coping strategies and academic performance value calculated (see table 4.8) obtained was 9.52 with a df= 6 and a P-value=0.146which is greater than the threshold of alpha = 0.05 and this means that coping strategies have no significant influence on girls academic performance. The maladaptive coping strategies adopted by the girls to cope with psychosocial stressors of HIV and AIDS have no negative impact on girls academic performance according to girls. These results can be interpreted as girls believe that whether coping strategies are adaptive or maladaptive they have no significant effect on their academic work. This explains why there is no behaviour change among the girls despite the teachers and NGO's efforts to help the girl-child.

Using an open ended item the teachers were required to provide information on coping strategies used by girls affected by HIV and AIDS psychosocial stressors. From the teachers responses 36% said that girls miss many lessons when they are overwhelmed by school work. Others frequently visit VCT clinics making them to be absent from school and this affects their academic work negatively, 16% of the teachers believe that this is a cause of poor performance among infected and affected girls. The teachers who cited girls leaving schools prematurely were 14%, while 11% of the teachers said that girls engage in irresponsible sexual behaviours, 9 % said that girls engage in employment as house helps, barmaids, while others join dancing troupes. Others 10% of the teachers said girls resort to early marriages, 4% seek divine intervention (praying all the time and have no time to study), 3% go to towns and villages begging, 2% said girls commit suicide, those who cited that girls observe abstinence were 1% the same as those who engage in safe sex by using condoms (Figure 4.6).

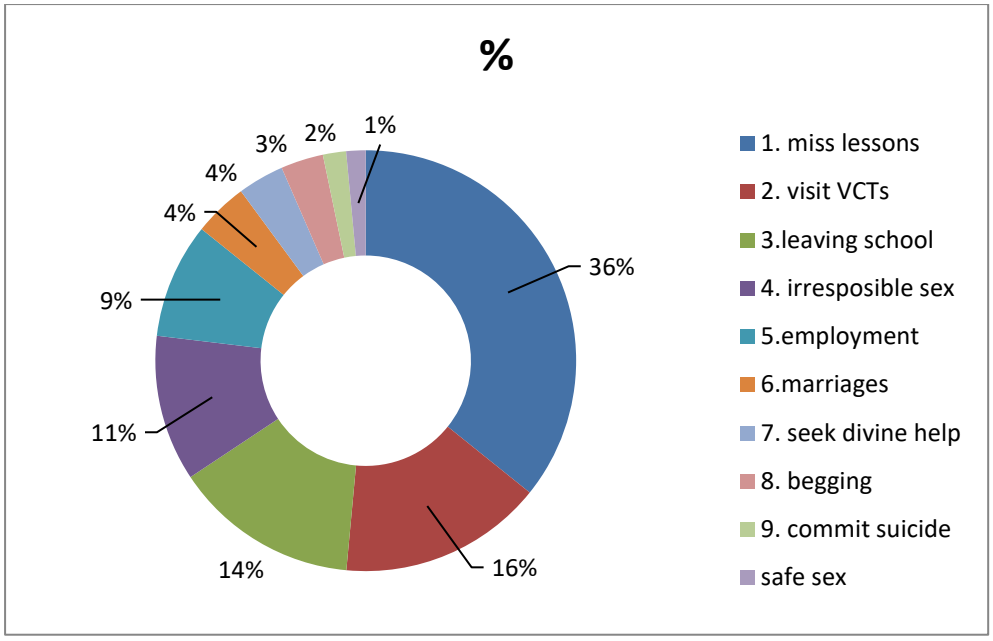

Figure 4.6: Coping Strategies used by Affected Girls according to Teachers

As indicated by the teachers all these coping strategies adopted by the girls have a negative impact on girls learning in this area. While others drop out from school altogether, others engage in activities that do not allow them to attend school regularly or concentrate in their school work and according to the teachers these girls performance is dismal. The coping strategies whether adaptive or maladaptive tend to vary from one girl to another. However the results show that whatever coping strategies adopted by the girls whether adaptive or maladaptive the academic performance is either very poor or poor.

Through open ended item, the study sought to gain more insight on coping with the results are summarised in table 4.9. For this item 44 (15%) of the respondents did not provide information and this can be interpreted as the respondents not aware of the coping strategies they can use or they ignored the item because it required one to write. The responses are summarised in table 4.9. From the results abstinence is the

most preferred coping strategy in dealing with the problems of HIV and AIDS pandemic. This means girls have information, but they are not putting this information into practice because pregnancy, irresponsible sexual behaviour putting them at risk of HIV infection and early marriages are still common practices among girls in schools of this area.

Table 4.9: Ways of dealing with HIV and AIDS Challenges

Ways of dealing with HIV/AIDS pandemic problems	Frequency	Percent
Abstinence	108	36.7
Guiding and counselling	68	23.1
None response	44	15
Being faithful to your partner, abstaining and using condoms	34	11.6
Being open to others about your status	14	4.8
Avoid peer pressure and concentrate in studies	6	2
Caring for those affected with HIV/AIDS	5	1.7
Have good relationship with people	5	1.7
Accepting one's status	4	1.4
Creating public awareness through campaigns and media	4	1.4
Medical assistance	1	0.3
Not sure	1	0.3

The study sought from the girls' ways they use to cope with HIV and AIDS and how the coping strategies affect their school work using an open-ended item. The results were as follows: 94 (32%) of the respondents stated coping strategies like seeking guidance and counselling have improved their school work, 70(23.8%) stated that HIV and AIDS gives them stress, 51(17.3%) that the environment is hostile to them, 26(8.8%) stated they try to seek positive social support and 4 (1.4%) indicated personal decisions. Respondents who did not provide information for this item were 46 (15.6%) probably they were not willing to give any information or they just ignored the item. Most of the girls indicated that positive coping with the HIV and AIDS problems had positive impact on their academic performance because positive coping helps them to improve in their school work. The girls' responses in this item are summarised in the Figure 4.7. Girls are only indicating adaptive coping strategies while the teachers are indicating maladaptive coping strategies and here there is discrepancy between what the teachers and girls are saying. Girls know what is right to do but from the teachers responses they are not doing it as indicated by no behaviour change among girls.

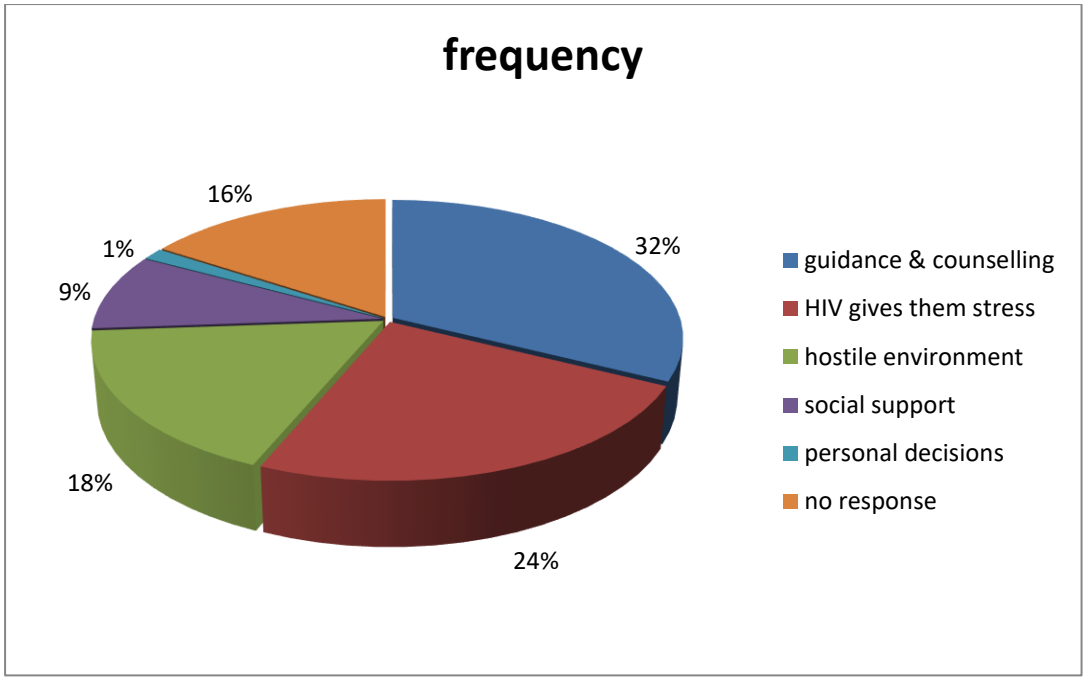

Figure4.7: Coping Strategies according to Girls Ratings

4.4.3 Teachers Perception on Coping Strategies by Infected or Affected Girls

According to the teachers, girls adopt different coping strategies which have either positive or negative effects on their academic performance. Many girls are engaged in both household chores and school work which is proving quite a task for the girl-child. Others have accepted the reality of life and are trying to move on though this is still not doing them any good academically. When they have not been able to do their home work, they just miss school and teachers keep on complaining about an explained absenteeism. When asked why she misses school quite often a girl in class seven reported the following *"..... how can I come to school with unfinished homework when I very well know that this attracts an obvious punishment from my teachers?"*(see App. J sentence No. 44).

When this trend continues for some time, girls eventually become overwhelmed by the school work and they give up school. There are girls who are seeking guidance and counselling, others are visiting VCT centres, while some avoid thinking about the problem at hand (thought suppression) and some seeking bursaries to be able to cater for their school fees. Girls who seek and find support whether instrumental, informational or emotional are able to make the necessary adjustments and perform fairly well academically. But those who choose to deal with their challenges all alone have found the path difficult and many are either performing very poorly or they have dropped-out of school altogether. Coping strategies used by girls as given by teachers during the interview are summarised in table 4.10.

Table 4.10: Coping Strategies used by girls according to Teachers

Coping strategies	Frequency	Percent
Try to fend for their families	13	14.4
Acceptance of the reality of life	11	12.2
Keeping away from school	11	12.2
Trying to do both school work and house chores	10	11.1
Advising them to visit VCT	10	11.1
Seeking guidance and counselling	9	10
Abandoning school altogether	9	10
Starting to understand themselves	8	8.8

Trying not to think about their problems	5	5.5
Seeking for bursaries	4	4.4
Total	**90**	**100**

**Totals are more than 30 because teachers gave more than one response*

4.4.4 Coping Strategies used by Girls who had Left School

Girls were asked how they are coping now that they have left school and 10 out of the 15mentioned seeking guidance and counselling services, eight said that they talk to friends and friendly relatives, seven said they tried to ignore the negative talk about them, five said they have been attending seminars, four said they are employed and doing small business and three said they have taken time to know their rights to avoid being mistreated and abused. These are the skills girls have adopted to survive outside school in a world ravaged with HIV and AIDS. The coping strategies adopted by girls who had left school pre-maturely are summarised in table 4.11.

Table 4.11: Coping Strategies Used by Girls who had left School

Coping Strategies	**Frequency**	**Percent**
Seeking guidance and counselling	10	24.4
Talking to friends and relatives	8	19.5
Ignoring the negative talk about myself	7	17.1
By attending seminars	5	12.2
Employment	4	9.8

Doing small business	4	9.8
Knowing my rights	3	7.3
Total	**41**	**100**

The totals are more than 15 because respondents gave more than one response

Girls who have left school were asked what they are doing since they left school and 10 said that they are engaging in small businesses to feed their vulnerable grandmothers and siblings. Six of the girls said they are doing household chores and working in the farm at the same time, while others said that they are doing quarrying and being house helps in the neighbours' houses who can afford to pay. When asked who they are living with, eight of the girls said they are living with their grandmothers, two with the guardians, two with their step-mothers and three alone with their siblings.

Grand mothers do not have the energy to work; neither do they know where they can get help for their granddaughters so as to continue with their school. These grannies are still mourning the death of their children who are the parents of these children and life seems meaningless. Those living with the guardians and step mothers said that they feel mistreated. One of the girls' who had left school prematurely said *"my stepmother with whom I am living with takes me as her worker"*. (see App. J sentence No.32). Some reported to have guardians/relatives who will not allow them to dig the small farms to earn a living and even want to sell the little property left behind by their parents like cows to deny them the only means of survival. This information is summarised in Figure 4: 8.

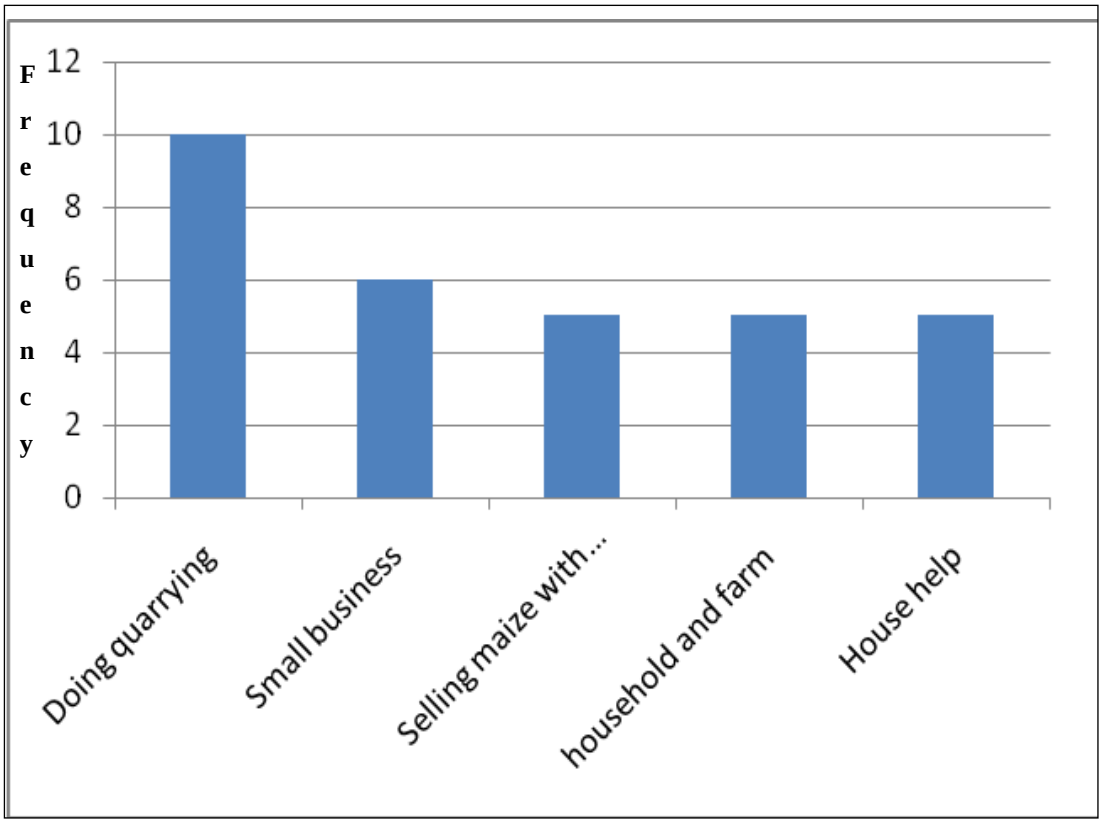

Figure 4.8: Work being done by those who have left school

4.4.5 Difficulties Faced by the Girls since they Left School

From the participants responses 17.2 % identified loneliness as one of the major challenges that they are facing because nobody want to associate with them and they have been labelled as failures in life. Many are the days they go without food and the relatives and friends have abandoned them. The parent's relatives and friends have rejected them and a girl who has left school summarised the challenges she is facing with her siblings by saying;

> *They (relatives and friends of the deceased parents) avoid us because they only see us as problems." "Me and my siblings have been misused by the relatives and have to work extra hard to fend for ourselves though we are not old enough." I have been doing sand harvesting and quarrying, though it is dangerous I have no option because life demands I work to cater for my needs and that of my siblings.* (see App. J sentence No. 22,28, 29 & 34).

These girls have low self esteem and because of the frustrations they undergo they are easily lured by men who promise them better life. According to one of the teachers in one of the Primary schools *"by the time the girl turns 15 years old she has many admirers, and pregnancy is almost guaranteed because girls engage in unprotected sex*".(App. I sentence No. 18). This means another extra mouth to feed and a possibility of HIV infection. This creates a vicious cycle of poor generation who cannot afford to take their children to school. The challenges due to HIV and AIDS as identified among girls who have left school are summarised in table 4.12.

Table 4.12: Difficulties faced by girls who have left school due to HIV and AIDS

Difficulties	Frequency	Percent
Loneliness	11	17.2
No food	10	15.6
Being isolated by relatives and friends	10	15.6
No parental care and comfort	9	14.1
Negative thoughts	8	12.5
Mistreatment from relatives esp stepmothers	7	10.9
Me and my siblings work (child labour).	5	7.8
Fear of meeting teachers and classmates	4	6.3

Total	**64**	**100**

The totals are more than 15 because respondents gave more than one response

4.4.6 Coping with HIV and AIDS Pandemic Related problems out of School

Most of the girls acknowledged difficulties they face, but still others said they have been seeking guidance and counselling services though trained personnel are scarce especially out there in the villages. Eight of the girls said that they are building strong relationships where they can fall back when need arises and at the same time accepting their situation. Some participants said that they are attending more seminars to learn more on how to cope and trying as much as possible to avoid bad company. Some said that they are trying to keep themselves busy avoiding idleness for an idle mind is the devils workshop while a few that is two of the girls said they have been trying to seek help from relatives who are able and are able to empathize with them. Coping strategies that involve seeking social support, positive reframing, information seeking, problem solving and emotional expression boosts girls' adjustment to the problem of being out of school and the challenges due to HIV and AIDS pandemic. This information is summarised in table 4.13.

Table 4.13: Coping with Problems related to HIV and AIDS pandemic

Coping Method/ Strategy	Frequency	Percent
Seeking Guidance & Counselling	11	29.7
Building strong relationships to lean on in-case there is need	8	21.6
Accepting my status	8	21.6

Attending seminars	5	13.5
Avoiding bad company	4	10.8
Keeping myself busy	4	10.8
Trying to seek help from relatives who are able	2	5.4
Total	**37**	**100**

4.5 Girls Characteristics and Prevalence of Psychosocial Stressors

Age, class level, school attended and the parental status of the girl may have direct influence on the psychosocial stressors experienced by girls. The older a girl is the more demands are placed on her at school and at home therefore increasing the prevalence of HIV and AIDS psychosocial stressors. As one of the teacher's said the chores at home increase as the girls age increases and he used the following statement to show the difference between a girls chores and a boys chores in a typical morning *"Atieno (girl)go fetch water, wash the utensils, prepare breakfast and your siblings before going to school while you Otieno (boy) check on the animals before going to school".* This shows that girls have multiple chores while boys have just one or two chores before going to school so the girls are already tired before starting school.

The class level has an impact on the prevalence of psychosocial stressors because the school assignments are more in upper primary and secondary school. This means the girl has to deal with so much school work at home and at the same time many household chores hence more stressed. The school attended especially day mixed school provide a different environment from the single sex boarding school. Girls have to walk long distances from home to school are harassed by men on their way to and from school because the men happen to know their pathways (route).

The parental status of the girls referred to parents being both alive, one dead or both dead. For girls' whose parents are alive but sickly they have extra work taking care of the sick parents and this increases the work load by a third, in case one parent is dead if it's the mother the girl takes up the role of the mother and others suffer the mistreatment by stepmothers when the father remarries. In case a father is dead then the girl finds herself in a female headed household which is so disempowered socially and economically. All these girls' characteristics may combine to increase the prevalence of HIV and AIDS psychosocial stressors leading to negative effects on their learning hence poor performance.

4.5.1 The Age and prevalence of HIV and AIDS Psychosocial Stressors

The study sought to find out the effects of girls age on the prevalence of HIV and AIDS psychosocial stressors and the results were as follows:

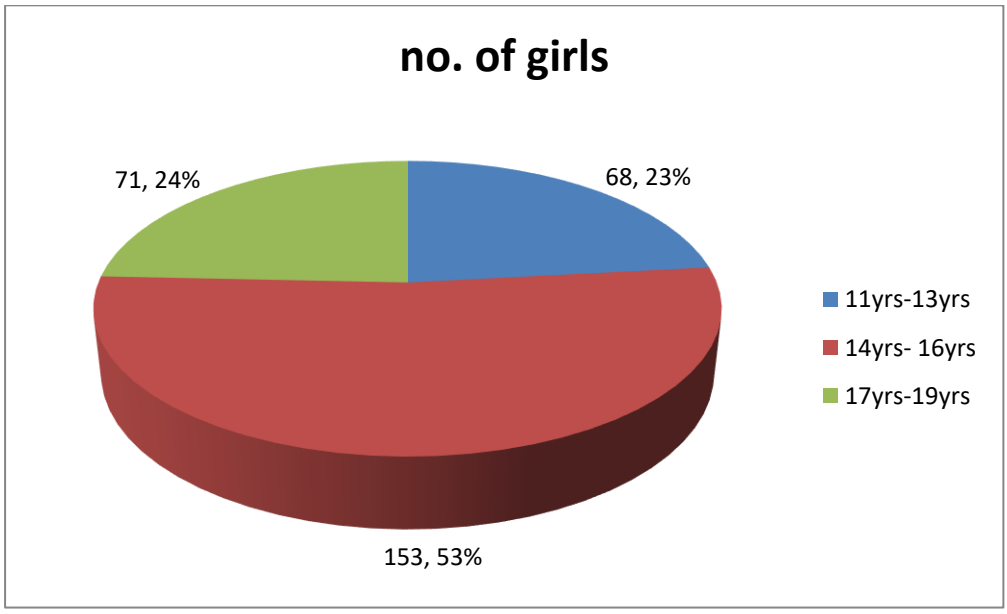

Figure 4.9 Age of girls who participated in the study

The 11- 13 years old were 68 and 15 out of these indicated low prevalence of HIV and AIDS psychosocial stressors, 10 indicated average prevalence and 40 indicated high prevalence. Those within the age of 14-16 were 153 where 37 indicated low prevalence, 41 average prevalence and 75 indicated high prevalence of psychosocial stressors. The 17-19 year olds were 71 and 19 had low prevalence of HIV and AIDS psychosocial stressors, 20 stated average prevalence and 32 indicated high prevalence. The total number of girls who responded were 289 and 71(24.6%) stated low prevalence for all ages, 71(24.6%) average prevalence for all ages and 146(50.5%) stated high prevalence for all ages. These are mixed results for all the girls since they are either pre-teen or teens and this explains why prevalence of psychosocial stressors is high for all girls within this age group. From the results 71(24.6%) and 146(50.5%) recorded either average or high prevalence of HIV and AIDS psychosocial stressors (table 4.14). For these pre-teens and teens age groups there are more demands at home in form of household chores and in school in form of school assignments increasing the stressors experienced. Already beliefs and values have been imparted on these girls and this makes them to experience more psychosocial stressors due to HIV and AIDS pandemic.

Table 4.14 Girls characteristics (age) and Academic Performance

Age	**Prevalence of psychosocial stressors**

			low	average	High	Total
age range	11-13	frequency	15	10	40	65
	14-16	frequency	37	41	75	153
	17-19	frequency	19	20	32	71
Total			**71**	**71**	**146**	**289**

The chi-Square test statistic value was5.15 with a df=4 and the P-value= 0.272 which is greater than the threshold of alpha = 0.05 (see table 4.14) which leads to the conclusion that girls age in this study have no significant influence on the prevalence of HIV and AIDS psychosocial stressors. The Ho_3 is accepted because girls age in this study did not have significant influence on the prevalence of HIV and AIDS psychosocial stressors. This can be explained because the study considered pre-teens and teens therefore they are experiencing similar psychosocial stressors. The tabulation in table 4.14 clearly shows that the age considered in the study has no significant influence on the prevalence of HIV and AIDS psychosocial stressors. Girls whose age is between 11-19 years were considered by the study and all are able to provide the much needed labour at home.

4.5.2 Class level and Prevalence of HIV and AIDS psychosocial Stressors

The study sought to find out the influence of the class level on prevalence of HIV and AIDS psychosocial stressors. The findings were as follows: Standard 6-8 low prevalence was stated by 40 girls, average prevalence was indicated by 36 and high

prevalence was cited by 107 total 183. In secondary school Form One and Two, 20 girls indicated low prevalence, 19 stated average prevalence and 10 girls indicated high prevalence of HIV and AIDS psychosocial stressors. In Form Three and Four, 11 girls indicated low prevalence, 16 indicated average prevalence and 30 indicated high prevalence of HIV and AIDS psychosocial stressors. The total number of girls who provided information was 289 and the results were distributed as follows: 71(24.6%) low prevalence, 71(24.6%) average and 146(50.5%) indicated high prevalence of HIV and AIDS psychosocial stressors table 4:15. The class level has a relationship with the prevalence of HIV and AIDS psychosocial stressors. The upper primary school girls are facing more psychosocial stressors, Forms One and Two the prevalence is average and Form Three and Four the psychosocial stressors are high. In upper primary school there is a lot of school assignment and this also happens in senior secondary school classes. There is a relationship between the class level and the prevalence of HIV and AIDS psychosocial stressors. This implies that the class level has significant influence on the prevalence of HIV and AIDS psychosocial stressors.

Table 4.15: Girls Class Level and Psychosocial Stressors

Prevalence of Psychosocial stressors					
Class Level		Low	Average	High	Total
std 6-8-pri	frequencies	40	36	107	183
Form 1-2-sec	frequencies	20	19	10	49
Form 3-4-sec	frequencies	11	16	30	57
Total		**71**	**71**	**146**	**289**

The Chi-Square test statistic value for class level in relation to stressors prevalence was 23.6 with a df=4 and P- value=0.000which is less than the threshold alpha = 0.05 (see table 4.15) this leads to conclusion that the class level has significant influence on the prevalence of HIV and AIDS psychosocial stressors prevalence. In Junior secondary that is Forms 1 & 2 the psychosocial stressors prevalence is average this can be explained by the fact that school work is not very intense at this level and the affected or infected find it easy to cope with school work. The null hypothesis Ho_3 that girls' characteristic (class level) has no significant influence on the prevalence of psychosocial stressors is rejected. The Chi-square test statistic shows that the class level has significant influence on the prevalence of HIV and AIDS psychosocial stressors experienced by girls in the area covered by the study.

4.5.3 Observation on Class Level and Prevalence of psychosocial Stressors

It was observed that the number of girls in each class declined as one moved from class one upwards. In lower mixed primary school girls are more than boys but in class 6 these numbers drastically decline. The ratio of girls to boys in lower classes is 3:1 but the opposite is the case from standard 6 to 8 where the ratio of girls to boys is 1:3. The study established that most girls leave school in standard 6 and 7. These are girls whose age is between 12 and 16 years old. The girls repeat classes due to poor performance and many have become fatigued with school work. These girls' labour is essential at home especially where the parents are dead or sickly due to AIDS. It is in the upper primary classes where there are many school assignments to be done and many girls who are infected or affected by HIV and AIDS are not able to cope so they

opt out of school because they are overwhelmed by school work and household chores.

In mixed secondary school the highest number of absenteeism was reported in Form 2 and 3, in the same classes' pregnancies were very common. In Form four girls seem to have developed better coping skills and they are able to remain in school. Girls in Form two and three are the worst hit by absenteeism and according to teachers all girls who become pregnant were either partial or total orphans or most if not all are either in Form two or three. The study further observed that in Form 1 there were 22 girls where the total enrolment was 56, Form 2 there were 10 girls, but started in Form one when they were 15, so five had dropped out for one reason or another total enrolment was 32. In Form 3 there were only three girls and total enrolment in Form three was 28 and in Form 4 there were four girls out of the total enrolment of 26. Using documents analysis and observation there were three girls were mothers in Form 1, in Form 2 there were four girls who were mothers, Form 3, out of the three girls, two were mothers and in Form 4 out of the four girls two were already mothers, one was expecting during the time of the study while the other one girl had been married before. Looking at such statistics it clearly shows that the girl-child in this region is seriously threatened and interventions have to be prompt and effective because this seriously undermines the country's achievement of MDG's.

4.5.4 School Type and Prevalence of HIV and AIDS Psychosocial Stressors

The study identified five types of schools which were: single sex primary boarding, single sex secondary boarding school, mixed primary day, mixed secondary day school and special institution. The study sampled one single sex primary boarding

school and six girls provided information as follows: one indicated low prevalence of psychosocial stressors, another one stated average prevalence and four indicated high prevalence of HIV and AIDS psychosocial stressors. In mixed primary day schools where most of the respondents were sampled, 27 indicated low prevalence, 24 indicated average prevalence and 135 indicated high prevalence of psychosocial stressors. Girls single sex secondary boarding school the results were as follows: 3 indicated low prevalence, 3 indicated average prevalence and 11 indicated high prevalence of HIV and AIDS psychosocial stressors. In secondary school mixed day schools; 12 indicated low prevalence, 18 showed average prevalence and 46 indicated high prevalence of HIV and AIDS psychosocial stressors. In the special institution one girl indicated low prevalence and 8 indicated high prevalence. The total number of girls who provided information were 294 where 44(15%) stated low prevalence, 46(15.6%) indicated average prevalence and 204(69.4%) indicated high prevalence of HIV and AIDS psychosocial stressors table 4.16. The mixed schools whether primary or secondary indicated high prevalence of HIV and AIDS psychosocial stressors. The cross tabulation of school type and prevalence of HIV and AIDS psychosocial stressors shows that there is positive relationship between the two variables see table 4.16.

Table 4.16: The Type of School and Prevalence of Psychosocial Stressors

		Prevalence of Stressors			
Type of school		26 and below	27-34	35-50	Total
Primary single se	Frequencies	1	1	4	6
Primary mixed	Frequencies	27	24	135	186
Secondary single	Frequencies	3	3	11	17
Secondary mixed	Frequencies	12	18	46	76
special institution	Frequencies	1	0	8	9
Total		**44**	**46**	**204**	**294**

The Chi-Square test statistic values for the type of school and psychosocial stressors was 7.42 with a df=8. And a P- value=0.492(see table 4.16) which is greater than the threshold alpha= 0.05 which means that the type of school attended by girls have no significant influence on the prevalence of HIV and AIDS psychosocial stressors. There is no relationship between the type of school attended and the prevalence of HIV and AIDS psychosocial stressors experienced by girls. This means that Ho_3**:**that there is no significant influence of school type on the prevalence of HIV and AIDS psychosocial stressors is accepted because the results reveal that the school type hasno significant influence on the prevalence of HIV and AIDS psychosocial stressors. As indicated in all schools majority of the girls' affected by HIV and AIDS are experiencing high (35-50) levels of psychosocial stressors.

4.5.5 Observation on Type of School and Prevalence Psychosocial Stressors

In day mixed primary and secondary schools girls were observed in and out of class and many girls showed distressed faces, very dry faces which showed troubled young minds. Most of them lacked basic items, like school bags, no textbooks, torn/tattered and dirty uniforms which indicated high levels of poverty or negligence by parents/guardians. The HIV and AIDS infected or affected girls seemed absent minded and they were not participating in class activities. The girls seem to have lost hope and showed signs of resignation or learned helplessness (people who have left everything to fate). This state of hopelessness and helplessness does not give girls room to concentrate in class and this leads to poor performance.

In schools where girls are boarders it was not easy to notice the HIV and AIDS affected or infected girls, this is because in single sex boarding schools the environment is fairly the same for all girls and these boarding conditions have reduced the psychosocial stressors for the girls infected or affected by HIV and AIDS pandemic. Unfortunately these boarding schools are few and expensive especially at primary level and only those who have sponsors have been able to attend such schools. Girls who are in boarding schools do not have household chores to cater for in the morning before going to school and in the evening after school, they have food and for a while they are able to keep away from the deprived homes environment. From the teachers responses the girls in boarding schools who are infected and affected spend most of their time seeking divine intervention (praying) instead of revising and this affects girls' academic performance negatively and this means the coping strategies adopted by girls in different type of schools are different. HIV and

AIDS infected or affected girls are able to perform fairly well in boarding schools unlike day mixed schools where girls have to contend with very many other responsibilities. This means the type of school attended by the girl determines the prevalence of psychosocial stressors.

4.5.6 Parental Status and Prevalence of HIV and AIDS Psychosocial Stressors

The study sought to find out the influence of parental status on the prevalence of HIV and AIDS psychosocial stressors. A cross tabulation of parental status against the prevalence of HIV and AIDS psychosocial stressors was done. When both parents are alive the results were as follows: 44 girls' indicated low prevalence, 42 indicated average prevalence and four stated high prevalence of HIV and AIDS psychosocial stressors and this leads the study to conclude that when both parents are alive girls experience less psychosocial stressors and the four who indicated high prevalence can be interpreted as parents being alive but are sickly and girls are the caregivers to such parents. In case of one parent being dead, no one indicated low prevalence, 3 indicated average prevalence and 127 indicated high prevalence of HIV and AIDS psychosocial stressors. Girls with both parents dead, none indicated low prevalence, one stated average prevalence while 69 indicated high prevalence. The total number of girls who provided information for this item was: 290 and 44 indicated low prevalence, 46 average prevalence and 200 indicated high prevalence. This clearly shows that there is a relationship between the parental status with the prevalence of HIV and AIDS psychosocial stressors. Only in a few cases where girls have guardians who are genuinely concerned are low prevalence of HIV and AIDS psychosocial

stressors experienced. In case of one parent or both dead the girl-child experiences more psychosocial stressors (table 4. 17a).

Table4. 17(a) Parental Status and Prevalence of Psychosocial Stressors

			Prevalence of Stressors			
	Parental Status		26 and below	27-34	35-50	**Total**
	Both alive	frequencies	44	42	4	90
	One dead	frequencies	0	3	127	130
	Both dead	frequencies	0	1	69	70
Total			**44**	**46**	**200**	**290**

Table 4.17(b) shows that the level of HIV and AIDS psychosocial stressors for girls who have lost either a father or mother. Those who indicated low prevalence of psychosocial stressors were three when either mother or father was dead while 131 indicated high prevalence of psychosocial stressors. When a mother dies the father remarries and the stepmothers are mistreating and overworking the girlsat home while the father is busy feuding for the family. When a father passes on due to AIDS the girl finds herself in a female headed household threatened with the customs of wife inheritance. The women are reduced to objects with no sexual rights since the society is only interested in fulfilling the cultural demands and hence protecting itself from alleged bad omen or taboos as it was noted by Nyakwaba (2005).

Table 4. 17 (b): Father/Mother dead and Psychosocial Stressors

Dead Parent			Stressors		
			27-34	35-50	Total
	Mother	Frequencies	2	39	41
	Father	Frequencies	1	92	93
Total			**3**	**131**	**134**

The Chi-square test Statistic for the parental status and prevalence of HIV and AIDS psychosocial stressors (see table 4.17(a) was 255 with a df = 4 and a P- value=0.000 which is less than the threshold alpha = 0.05 which means the parental status have a significant influence on the psychosocial stressors experienced by the girl-child. The Ho_3 which was stated that there is no significant influence of parental status on the prevalence of HIV and AIDS psychosocial stressors is rejected because the test statistic shows that there is significant influence.

The chi-square values obtained indicate that the class level and parental status have a significant influence on the prevalence of psychosocial stressors so the null Hypothesis HO_3rejected for class level and parental status while for age and type of school was accepted. The class determines the amount of school work a girl has to contend with in school and when the girl is overwhelmed she seeks ways of coping. So girls miss lessons in the morning or afternoon or school to fend for themselves, siblings and grandmothers. When this goes on for a while the girl is not able to catch

up with her school work and her performance is dismal and to avoid more embarrassment she opts out of school.

4.6 Teachers Characteristics that Influence Provision of Psychosocial Support

The study sought to find out whether the teacher's characteristics like sex, working experience and designation influences the provision of psychosocial support to girls infected or affected by HIV and AIDS psychosocial stressors.

4.6.1 The Teachers Sex and Support Provision

The study sampled 77(52.1%) male teachers while 71 (47.9%) were female teachers. Out of the 77 males who participated in the study, 28 of them recorded low provision of support, 42 stated average provisions and only seven recorded high provision of psychosocial support. Among the 71 female teachers', 12 stated low provision of support, 27 average provision of support and 32 recorded high provision of support to the girls. These results clearly indicate that there is a relationship between teachers sex and support provision to the girl-child. More females are involved in the provision of support to the girl-child than are males. A chi-square statistic for the teachers' sex and provision of support was tabulated in table 4.18.

Table 4.18: Teachers characteristics (sex) and support provision

			support provision			
	Sex		26 and below	27-34	35-50	Total
	male	frequencies	28	42	7	77
	female	frequencies	12	27	32	71
Total			**40**	**69**	**39**	**148**

The Chi-Square value for sex for the teachers and psychosocial support was 25.5 with a df =2and a P-value= 0.000 which is less than the threshold alpha =0.05(see table 4.18) which means teachers sex have significant influence on the provision of support to the girl-child in school.

The sex of the teacher was a significant factor because during the interview the teachers were asked who should give the psychosocial support to the girls and 6 (20%) especially the males said that this support should be given by female teachers who are familiar with girls problems and girls are more likely to open up to female teachers than to male teachers. This implies that the sex of a teacher has an effect on the involvement, ability and effectiveness in providing psychosocial support to the girl-child in school.

4.6.2 Teachers Working Experience and Support Provision

The study sought to find out whether the years a teacher has spent in the profession had any significant influence on the provision of support to the girl-child. The cross tabulation was done for the working experience and support provision variables.

The results: teachers who have served for 1-5 years were 68 and 37 indicated low support provision, 27 stated average support provision and 4 indicated high support provision. Teachers with a working experience of 6-10 years were 30 and 2 stated low support provision, 20 cited average support provision and 8 indicated high support provision. Teachers with working experience of 11-15 years were 11 and none indicated low support provision, 5 stated average support provision and 6 stated high support provision. Teachers with working experience of 16-20 years were 21, one indicated low support provision, eight stated average support provision and 12 indicated high support provision. Teachers with working experience of 21-25 years were nine, none indicated low support provision, four indicated average support provision and five recorded high support provision. Those teachers with 26 years plus of experience were eight and none indicated low provision of support, 3 indicated average provision and 5 recorded high provision of support.

The total number of teachers who provided information in this sub-scale were 147 where 40(27.2%) stated low support provision, 68(46.3%) indicated average support provision and 39(26.5%) indicated high support provision see table 4.19. The results show that the more experience a teacher had the more support he/she was likely to offer to the girls. The professionally young teachers (54.4%) of them indicated low support provision while those with six and more years of experience indicated either

average or high support provision. The results indicate that there is positive relationship between the working experience of a teacher and support provision to the girl-child in this area. Teachers with many years in the field are familiar with the environment under which girls operate and they can be able to offer support to the girls. The teachers were involved in an interview and those who are young in the profession did not seem well versed with the support that girls infected or affected by HIV and AIDS psychosocial stressors need to better their lives. Most of the professionally young teachers confessed that they were not aware of any NGOs that offered psychosocial support to the infected and affected girls. During the interview the teachers with an experience of 16 years and more were well versed with the provision of support and one of the teachers with more than 16 years of experience stated *"after all I am taking care of other orphans at home so I do understand the challenges they are facing"*. (see App. I Sentence No.80).

Table 4. 19: Teachers Working Experience and Support Provision

Working experience		**support provision**			
		26 and below	27-34	35-50	Total
1 -5 years	Frequencies	37	27	4	68
6-10 years	Frequencies	2	20	8	30
11-15 years	Frequencies	0	5	6	11
16-20 years	Frequencies	1	8	12	21
21-25 years	Frequencies	0	5	4	9
26 plus	Frequencies	0	3	5	8
Total		**40**	**68**	**39**	**147**

The chi-square test statistic value for working experience and psychosocial support provision was 65.2 with a df = 10 while the P-value=0.000 which is less than the threshold alpha = 0.05 (see table 4.19) which means working experience of a teacher has significant influence on support provision to the girls. HO_4as stated that teacher's working experience has no significant influence on support provision is rejected. The findings lead to the conclusion that teachers working experience has significant influence on psychosocial support they provide to the girls in school.

4.6.3: Teachers Designation and Support Provision

Out of the 148 teachers who provided information on this sub-scale, 91 were class teachers and 20 cited low provision of psychosocial support, 47 average provisions and 24 high support provision. The regular teachers were 38 and out of these 20 teachers indicated low support provision, 15 average provision and three high support provision. The deputy head teachers were nine and none indicated low support provision, five indicated average support provision and four stated high support provision to the girls. The school counsellors were three and they all cited high provision of support to the girls affected by HIV and AIDS psychosocial stressors. There was only one head teacher who cited high provision of support to the girl-child.

The designation of a teacher determines the duties and responsibilities of that particular teacher in school. Those who are school counsellors are more involved in the provision of psychosocial support than any other teachers as indicated in table 4.19. Unfortunately only three schools had teachers designated as school counsellors

and even those who occupy the office are not formally trained. Class teachers were the majority and they provide the psychosocial support where counsellors do not exist. The designation of a class teacher allows the teacher to have constant contact with the learners therefore making it possible for them to understand the learners' challenges at class level and according to table 4.20 the majority of the class teachers that is 71 indicated either average or high provision of support to the girls. The 20 class teachers who indicated low provision of support could be explained as being professionally young with working experience of 1-5 years or being male because these were teachers' characteristics which, as already noted influenced the support provision to the girls. When the teachers were asked to indicate in the questionnaire the infected and affected girls in their classes, it was easy for the class teachers to indicate the numbers unlike the regular teachers.

Many schools have a post of "senior woman teacher" whose responsibility is to try and help girls discuss and resolve issues and problems that are particularly related to them. The challenge that is associated with this post is that these teachers lack training, there is the problem of generation gap and they have no voice when it comes to sexual harassment of girls by teachers and men in the community. The results are summarised in table 4.20 showing positive relationship between the designation and support provision by teachers in the area of study.

Table 4.20: Teachers Designation and Support Provision

Designation		Support Provision			Total
		Low	Average	High	
class teacher	frequencies	20	47	24	**91**
school counsellor	frequencies	0	0	3	**3**
HOD/senior tr	Frequencies	0	2	4	**6**
deputy	frequencies	0	5	4	**9**
Head teacher	Frequencies	0	0	1	**1**
Total		**40**	**69**	**39**	**148**

The chi-square value for teachers' designation and psychosocial support provision was 36.3 with a df=10and a P- value=0.000(see table 4. 20) which is less than the threshold alpha =0.05. These results indicate that the designation of a teacher has significant influence on support provision to the girls.

The P-value for all the variables that is sex, working experience and designation were .000 all less than the threshold of 0.05and this means that the teachers characteristics that is sex, working experience and designation have a significant influence on the provision of psychosocial support to girls in schools of the area covered by the study implies that the null hypotheses $HO_4$is rejected because the characteristics have significant influence on the provision of psychosocial support to HIV and AIDS infected or affected girls in school.

4.7 The Psychosocial Support for HIV and AIDS Infected and Affected Girls

The psychosocial support is approach used to help girls infected by HIV and affected by psychosocial stressors to build resilience in the context of HIV and AIDS. The approaches are intended to promote psychological and physical wellbeing, helping the girls to adjust and cope well with their situation at school and home.

4.7.1 Psychosocial Support and Girls Academic Performance

The study sought to establish the provision of psychosocial support to girls infected by HIV and affected by HIV and AIDS psychosocial stressors and the impact the support have on girls academic performance see appendix. B Section IV. The teachers who provided information for items in this section were 143 and out of these teachers none indicated low support provision. Two teachers indicated average support provision and out of these two, one related average support provision with poor performance and the other one average performance. The teachers who cited high provision of psychosocial support were 141and out of these respondents one cited very poor performance with high provision of support, nine respondents reported poor performance in the presence of high psychosocial support, 71 indicated average performances and 60 good performance when the psychosocial support is high see table 4.21. According to teachers there is a positive relationship between the psychosocial support given to the girls and their academic performance. As perceived by teachers where support does exists the girls' performance is either average or good

which means that if girls are given the support they are able to adjust and do fairly well in their schoolwork.

Table 4.21: Psychosocial Support and Girls Academic Performance-teachers

Support		**Girls performance**				
		29 and below	30-39	40-55	56-69	Total
average	frequencies	0	1	1	0	2
High	frequencies	1	9	71	60	141
Total		**1**	**10**	**72**	**60**	**143**

The Chi-square test statistic value obtained for psychosocial support and girls' performance was 6.23with a df= 3 while the P- value was 0.101 which is greater than the threshold of alpha= 0.05 (see table 4.21) which means that the provision of psychosocial support has no significant influence on girls academic performance. The results can be interpreted as the type of psychosocial support which was found to be either instrumental or informational has no significant effect on girls performance in school. When schools, teachers, guardians, NGO's and government through the relevant ministries provide the instrumental and informational support they expect instant change on the girls' academic performance. Unfortunately this has not been the case because the emotional support has been lacking and girls are seeking the emotional support in the wrong places hence risk of HIV infection.

4.7.2 Psychosocial Support and academic performance-Girls

The study sought to establish the influence of psychosocial support to girls' academic performance. The results revealed that 13 girls cited low support provision where two recorded very poor performance (29 and below), six recorded poor performance (30-39%) and five recorded average performance (40-55%) in the presence of low psychosocial support. Those who cited average support provision were 85 where 27 indicated very poor performance, 42 poor performances, 14 average performances and 2 good performances when the psychosocial support is average. Those who cited high provision of support were 191 and out of these 45 cited very poor performance, 100 cited poor performance, 43 average performance and three good performances when the psychosocial support is high (see table 4.22)

Table 4.22: Girls Psychosocial Support and Girls Academic Performance

		T- scores for students				
Psychosocial support		29 and below	30-39	40-55	56-69	Total
Low	Frequencies	2	6	5	0	13
average	Frequencies	27	42	14	2	85
High	Frequencies	45	100	43	3	191
Total		**74**	**148**	**62**	**5**	**289**

The Chi-Square value obtained for psychosocial support and academic performancewas5.55 with a df=6 while the P-value was0.475. The P-value is greater than the threshold alpha = 0.05 which means the psychosocial support has no significant impact on girls' academic performance (see table 4.22). As noted earlier this could be interpreted as the type of psychosocial support having no significant impact on girls' performance and unless emotional support is provided by trained personnel this poor performance among girls infected by HIV and affected by HIV and AIDS psychosocial stressors is likely to continue being witnessed for long period in Maseno division.

From the study data HO_5 that psychosocial support has no significant impact on girls academic performance is accepted. The teachers' and the girls' responses chi-square test implies that psychosocial support has no significant influence on girl-child academic performance as shown in tables 4.21 and 4.22.Psychosocial support is essential to girls affected by HIV and AIDS psychosocial stressors in building resilience to make necessary adjustments and cope well in school and at home. From the result **HO_5:** that psychosocial support has no significant impact on girls' academic performance is accepted because the type of support offered currently does not seem to have significant effect on girls' academic performance and tactics being used in support provision need evaluation.

The study further sought to establish teachers views on the type of psychosocial support to be given to girls using open-ended item and the findings were as follows: financial assistance had the highest percent of 87.1%, counselling 84.3%, constant guidance 81.4%, giving girls good diet 65.7%, encouragement 61.4%, giving infected and affected girls love 54.3% and registering the infected and affected in social

support group 52.9%. The teachers who suggested provision of medication to the sickly were 48.6%, teachers who felt that the school management should help the girls were 42.9%, advising 34.3%, giving HIV and AIDS lessons to the girls 22.9%, reduce household chores for the girl-child 5.7%, keeping infected girls status as a secret 5.7% and teaching girls the benefits of abstinence 1.4%. This shows that psychosocial support mostly preferred by teachers is financial assistance (instrumental support) and counselling (emotional) which majority of the teachers indicated that if provided to the girl-child then she is likely to perform well academically as summarised in table 4.23.

Table 4.23: Teachers Suggestions on help for HIV and AIDS Infected and Affected girls

Help	Frequency	Percent
Financial assistance	122	12.8
Counselling	118	12.4
Constant guidance	114	12.0
Good diet to be given to such girls	92	9.2
Encourage those that are not doing well academically	86	9.0
Give the girls love	76	7.9
Registering infected or affected girls in Groups	74	7.8
Give medical attention to those who are unwell	68	7.1
School managers to volunteer support	60	6.3
Advising	48	5.0
Talks to be given by PLWHA	46	4.8
Girls to be given HIV and AIDS lessons	32	3.4
Reduce house work for the girls	8	0.8
Status to remain secret to avoid stigma	8	0.8

****totals are more than 148 because teachers gave more than one type of support***

Girls were asked the kind of support they get, 66.4% of the girls said that they are given food, clothing and school fees, while 16.7% said they get guidance and counselling, 11.9% did not respond, 3.7% said they get drugs/ARV's while only one girl 0.3% mentioned advice. These results show that instrumental support is more available to the girls than any other support and girls are aware of this support. The

girls who said guidance and counselling did not indicate from whom they should seek guidance and counselling services.

Girls were asked to indicate who provides them with help and 25.5% said NGO's, 17.7% friends and well wishers, 15.6% no response, 7.5% teachers, 6.1% government, 5.1% parents and community, 1.2% relatives and 0.6% grandparents. This shows that most of the support available to girls affected by psychosocial stressors of HIV and AIDS comes from NGO's and the government is doing very little, less than what the individual teachers are doing. The assumption of the study is, those who did not respond to the question are not getting any support and probably they do not know where to get the help they need.

The girls were asked to indicate the support they value most and 27.6% identified guidance and counselling, 26.6% said school fees, food and clothing, 22.8% education and 22.8% of the girls did not respond. None response can mean girls not understanding the question or they are not aware of the support available so they cannot tell what they would value more than the other. Those who are aware of support they value guidance and counselling which is emotional support unfortunately schools are seriously handicapped by lack of trained personnel to offer emotional support to the girl-child. Without emotional support girls are frustrated because their needs are not being met and this explains why girls are not changing their behaviour.

The study sought to find out from the girls the goals they would have wished to achieve if there was no HIV and AIDS in this world. Most of the respondents 135(45.9%) stated that they would pursue higher education and get a good job, while 27(9.2%) stated that money used to buy drugs for HIV and AIDS patients would be spared to help the poor and the orphans with 29(9.9%) stating that they would

perform very well academically to meet the expectations of the teachers and the community. This means that girls infected or affected by HIV and AIDS psychosocial stressors have ambitions and unless interventions are geared towards alleviating these stressors girls may not be able to realise these life ambitions and this definitely affects the country's achievement of the MDG's negatively.

During the interviews 61.9% of girls said that they would pursue education to the highest level possible, while 6.5% said they would love a world with no discrimination on the basis of one's health, 4.1% said they would enjoy life, 1.4% said that people would work together and 1% said they would live longer. Out of these responses 7.1% choose not to respond to this item this could be interpreted as girls' not willing to dream anymore because they feel helpless or hopeless in an environment ravaged by AIDS. From the results the majority of the girls dream of pursuing their education to the highest level possible and this implies that most of the girls infected or affected by HIV and AIDS psychosocial stressors dream of attaining higher education if only the HIV and AIDS does not affect their learning.

4.7.3 Efforts by the School Management to Support Infected or Affected Girls

From the teachers responses 27% cited the use of guidance and counselling services, guest speakers 19%, be loved and cared for 16%, provision of basic needs 11%, spiritual encouragement9%, donation of basic items 9%, HIV and AIDS information 3%,peer education3% and life skills 3% see figure 4.10. Many schools are not doing much to avert the crisis and when asked why the schools are not keen, the teachers cited the fact that the numbers infected and affected are overwhelming and that they lack financial resources. In a few secondary schools, teachers have a pool of basic

items collected on monthly basis to assist the infected and affected girls. Unfortunately not all teachers honour their part of the bargain and such projects which are launched with very good intentions fail miserably. Other teachers felt that the school management does not care about the infected and affected girls. One of the teachers said "*….after all girls can get married to men who have money and live a decent life even without so much education, but this is not the case for the boy-child who must be the breadwinner in future"*. (see Appendix. I, statement No. 42). The efforts by the schools and individual teachers are summarised in figure 4.10.

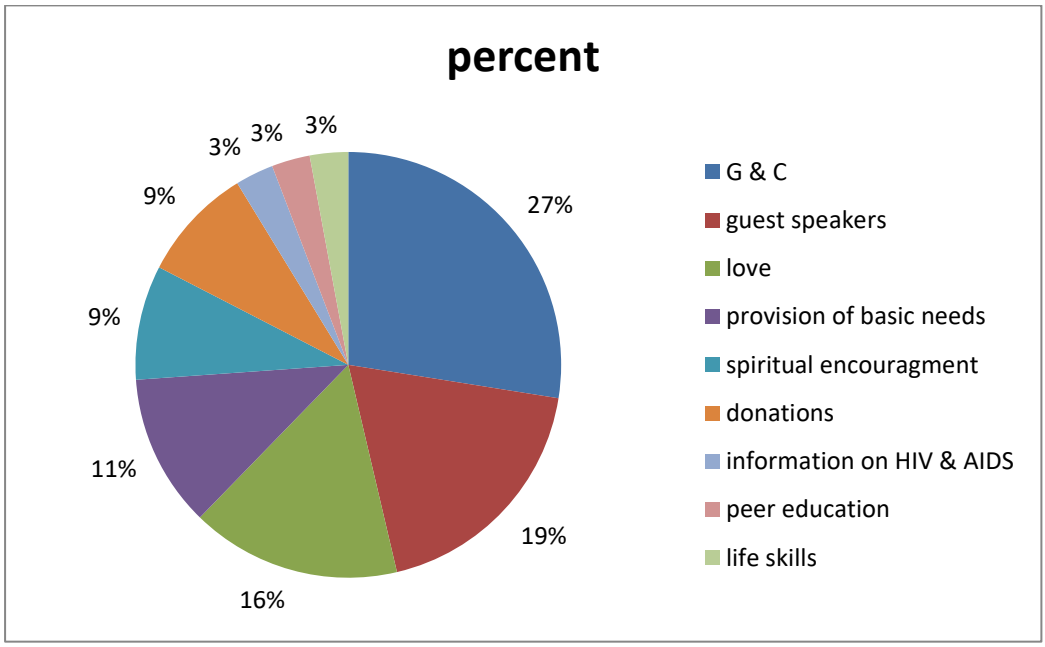

Figure 4.10: School Efforts to Provide Psychosocial Support to girls

Girls were asked to indicate how the support they get can change their life and help them to achieve their academic goals, 67.3% of the girls said that psychosocial support given to them gives them hope in life. Others mentioned that financial assistance keeps them in school and are able to concentrate in class 7.1%, others said

being given information about HIV 6.8%, and 2% acknowledged support helps to reduce stress. Another 1% felt reassured and this enhances their academic performance while 14.6% choose not to respond to this item and this can mean either the girls just ignored the item or they are not receiving any help at all so they cannot tell what type of help available and the effects that help has on their life.

4.7.4 Organizations offering Psychosocial Support to Infected or Affected Girls

The teachers' were asked to name organizations that are providing psychosocial support to affected and infected girls in their schools and the results were as follows: AMPATH was identified by 45% of the teachers, followed by Umoja project with 30%. Others were; compassion International 16.4%, KEMRI 15.7%, CBO's 15%, Plan International 13.6% and UNICEF with 12.9%, Ministry of Public health 8.6%, Ministry of Education and People Living with HIV and AIDS (PLWH) 7.1%, Girl-child Network 6.4%, Save the Child International 5%, Kisumu Youth Olympic Centre 3.6%, Red Cross Kenya 2.9% and Young Men as Equal partners 0.7%. The summary of the government ministries and NGOs operating in Maseno Division as identified by the teachers were summarized in figure 4.11.

From the information given by the teachers there are many organizations both government and NGO which are operating in Maseno division. The organizations are providing mainly instrumental support to the girls in form of food (school feeding programme), school fees and sanitary towels especially the Umoja Project. But from the findings girls are still missing many lessons, they miss school, leave school prematurely and early pregnancies are still very common among the infected and affected girls and these organizations are at a loss. The organizations together with the

government lack trained personnel to offer informational and emotional support to the infected and affected girls and this explains why girls are still dropping out school seeking emotional support despite the material (instrumental) support provided by the government and NGO's within the division.

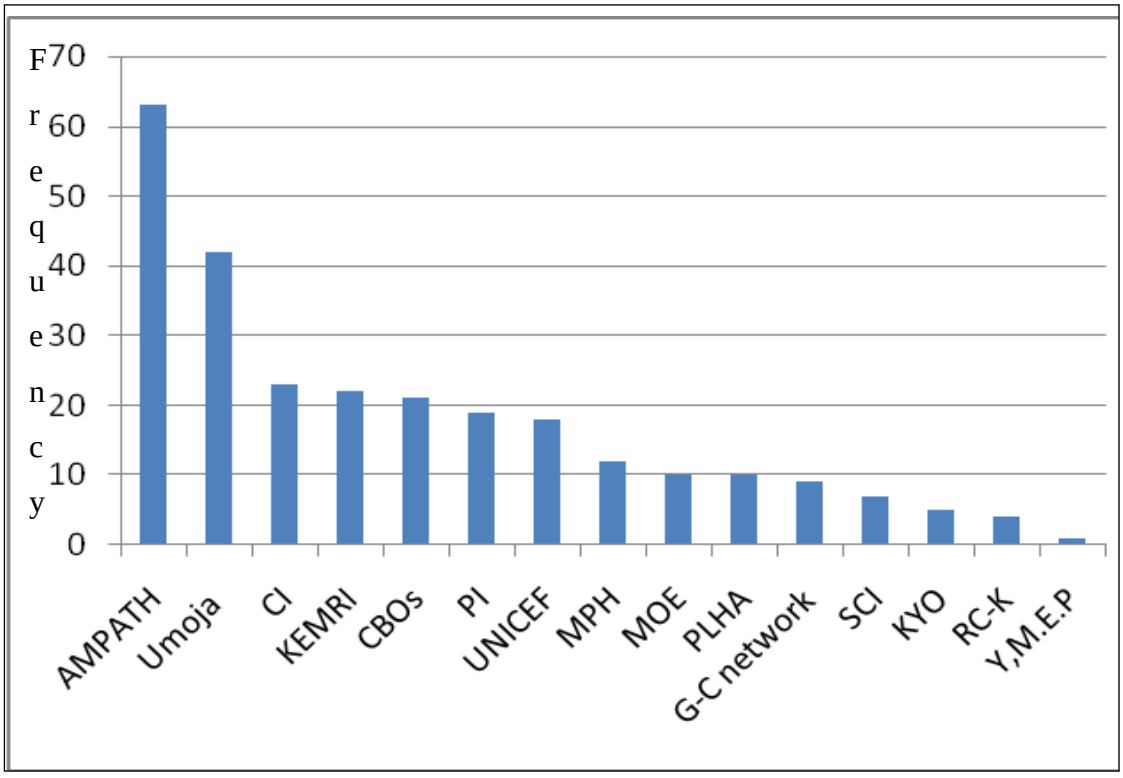

Figure 4.11: Organizations Providing Psychosocial Support in Maseno Division

Abbreviations for figure 4.11.

CI: - Compassion International CBO's: - Community Based Organisations

PI: - Plan InternationalMPH: - Ministry of Public Health

MoE: - Ministry of EducationPLHA: - People living with HIV and AIDS

G-C Network: - Girl-child NetworkSCI: -Save the Child International

KYOC: - Kisumu Youth Olympic CentreYMEP: - Young men as equal partners

4.7.5 Who should Provide Support to Infected or Affected Girls

The teachers were asked who should be involved in the provision of support and 70% said the teachers, 53.3% government, 43.3% parents/guardians, 26.7% spiritual leaders, female teachers20%, well wishers 16.7 %, NGOs 13.3% and communityand relatives were suggested by 10% of the teachers. There is relatively great demand for education and teachers spend so much time with the learners so they should be the ones offering support to the girls explaining why teachers were cited by the majority of the respondents. This clearly shows that teachers are aware that girls really need help and those who cited parents/guardians or relatives felt that it is useless for teachers to work so hard to support the girl-child only for the efforts made in school to be watered down by the parents/guardians or relatives who have a lot of influence on the girls' behaviour. Teachers felt that helping infected and affected girls cannot be one group of people's responsibility but an exercise that should involve the government, the school, the teachers, parents/guardians, relatives, the church and the community. If all these groups of people were involved then the girls can be helped to build their self esteem and resilience hence boosting their academic performance. Those whom the teachers felt should be actively involved in the provision of psychosocial support to girls are presented in Figure 4.12.

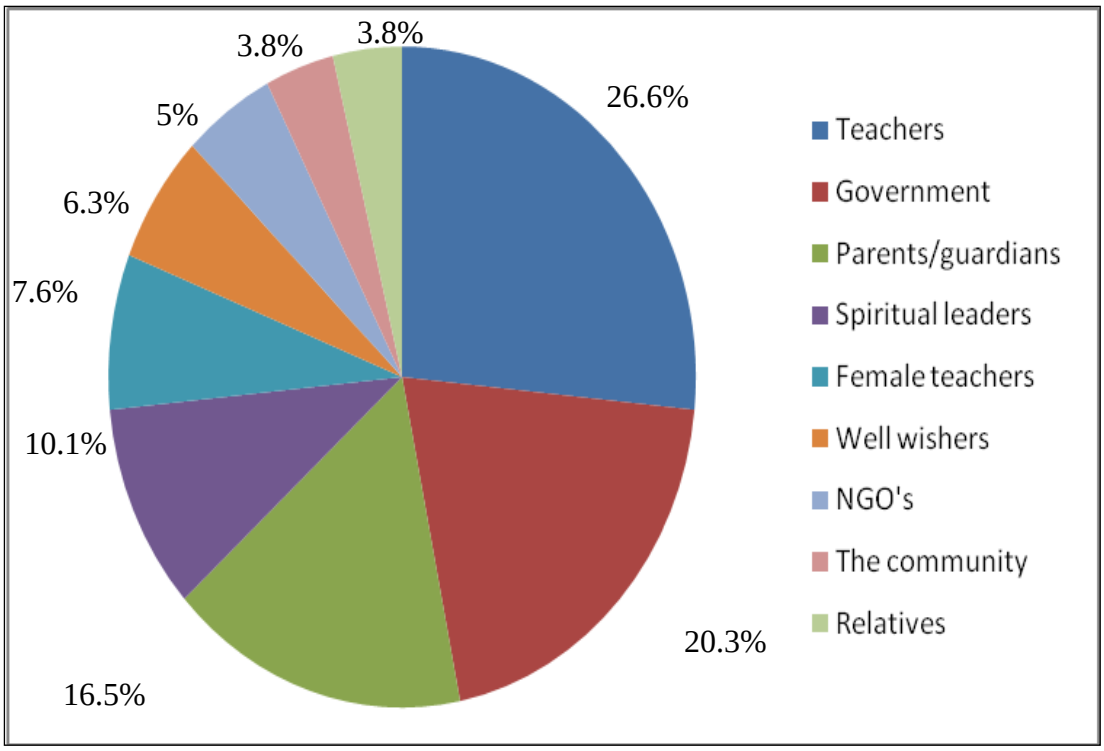

Figure 4.12: Providers of Psychosocial Support

4.7.6 Hope for HIV and AIDS Infected or Affected girls

When girls were asked whether there is hope for girls who have left school, 11 of them said yes there is hope and all of them said that ARVs have given them a new lease of life because they can live to their fullest realizing their life's dreams. Four (4) out of the total 15 girls said that there is no future because people have turned away from them, they lack basic needs, girls are engaging in sexual activities and they are getting infected and re-infected with HIV and AIDS. The same girls said that some girls are resorting to early marriages and for those who are infected they can die any time. Girls who have an optimists personality are able to accept reality, learn and

grow from experience as Scheler & Carver (1993) notes. Girls who are optimists saw hope and bright future for girls infected or affected by HIV and AIDS especially with the availability of ARV drugs. Girls who are pessimists have negative expectations anchored in past experiences as noted by Scheler & Carver (1993) and such girls saw hopelessness and no future for infected or affected girls by HIV and AIDS because death is eminent**.**

4.7.7 Psychosocial Support for Girls who have left School

Girls who have left school were asked to indicate how they can be helped and12 of them wanted to be assisted with what they lack otherwise telling them not to engage in sex is useless. Others felt that guidance and counselling can go a long way in helping the infected or affected girls. Others want girls to be taught about HIV and AIDS to create more awareness, give them moral support and at the same time giving them alternative (vocational) training.

Girls who are willing and they have the potential to perform well in school can be taken back to school and be given a chance to pursue their dreams. Girls should be encouraged to visit VCT centre's to know their status encourage them to live wisely whether they are positive or negative. Those who have job offer especially unskilled jobs should give priority to the affected girls. These measures may help to keep girls busy hence mitigating against idleness. The girls have to be gainfully engaged otherwise they will not only be agents of HIV but also influence other girls who are still in school negatively. As the education officer in Maseno division said

> *…by the time a girl is 15 years old there are things that she must have like body oil, soaps, clothes, perfumes and shoes and any girl who does not have*

these items feels out of place and thus suffers low self esteem. To start with there is only one man who provides these items, but as time goes on the needs increase and the value of these needs goes up. The girls demand for more valuable items leads to having multiple partners to cater for these needs and this definitely leads to HIV infection." (See Appendix. K statement No. 6,7 &8).

Self esteem and emotional resilience contribute to greater engagement in health promoting behaviours. Suggestions from girls on how the girls who have left school prematurely can be helped are summarised in Figure 4.13.

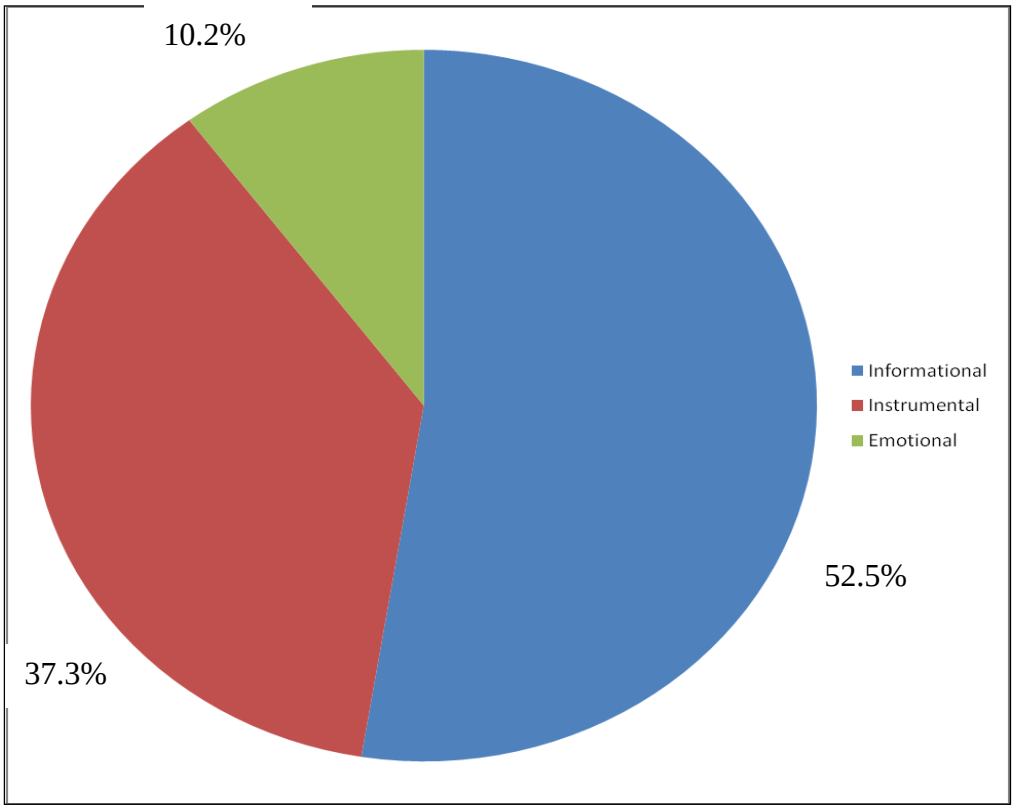

Figure 4.13: Suggested Ways of Helping Girls who have dropped out of School

4.7.8 Challenges Faced in Provision Psychosocial Support

The teachers were asked to indicate challenges they faced as they provide psychosocial support and they identified inadequate resources as one of the major challenges, girls' being uncooperative and refusing to accept the reality of the situation. The teachers are feeling overwhelmed by the large numbers of infected and affected girls' needs, demoralized by the girls' poor performance and no behavioural change. Many girls have refused to open up and they are discriminated by teachers, peers and relatives. The teachers lack the necessary training to effectively offer guidance and counselling to the girls. The teachers are using so much time guiding and counselling instead of teaching and this affects the mean grade in these schools bearing in mind Kenyan schools suffer from the "mean grade syndrome". This leaves teachers in a dilemma whether to guide and counsel or to teach and ignore the girls' problems which again does not help the mean grade. Some parents/guardians have withdrawn their daughters from school, Rape, defilement and incest are common especially among girls who are hard of hearing. Some children who are not affected but needy when they see the infected and affected being helped they become envious especially the needy and there is no government support specifically for infected or affected girls. A teacher summarized the challenges as *"There is still stigmatization by other learners and teachers, there has been lack of openness by either affected or infected girls in the school, lack of support from other teachers or administration as whole."*(App. I sentence No.71, 73 & 79). The challenges faced by teachers as they provide psychosocial support to infected or affected girls are summarised in (Figure 4.14).

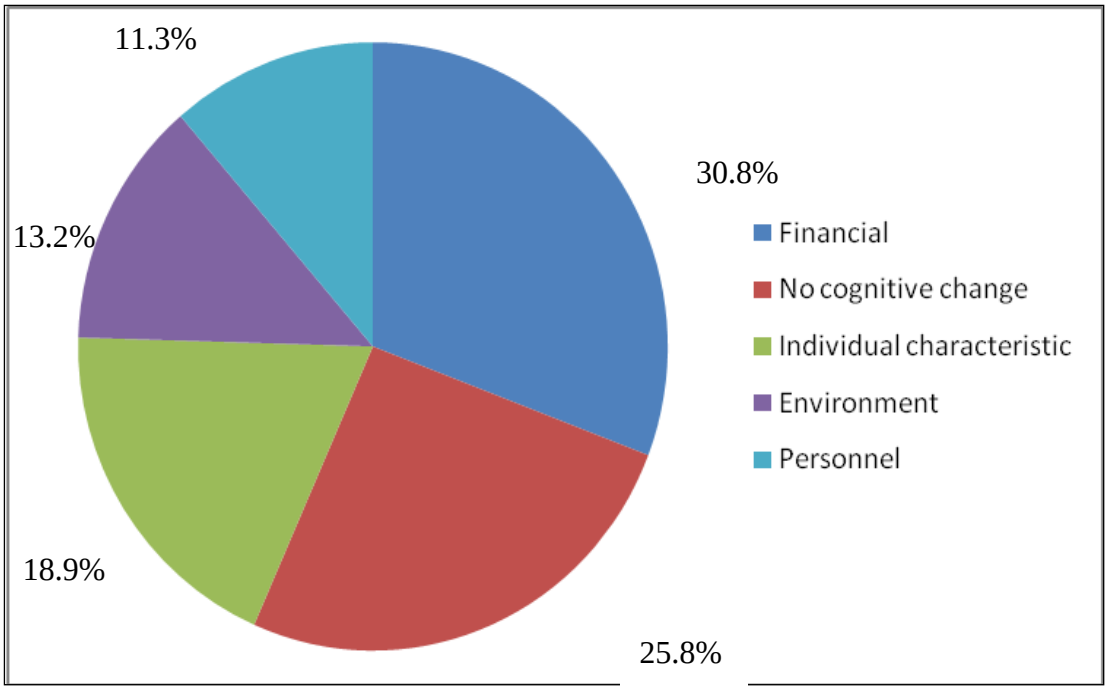

Figure 4.14: Challenges in Provision of Support to Infected and Affected Girls

4.7.9 Suggested Actions to MoE by Teachers

During the interview teachers were asked to suggest solutions to the MoE that can help girls to pursue their education successfully in an environment ravaged by HIV and AIDS pandemic. From the responses 63.3% suggested that girls should be provided with food and sanitary towels, while 53.3% suggested proper guidance and counselling together with a lunch programme. Other suggestions that came from the teachers were to train teachers' in guidance and counselling skills, waive school fees for the infected and affected girls and inviting health professionals to give talks to the girls. The local community needs to be sensitized on the plight of infected and affected girls, while parents/guardians need to be involved in girls school work. Teachers also suggested that there should be recreational facilities for the girls, there

in need to look for well wishers to support girls, provide an office for guidance and counselling and the orphaned girls should be taken to boarding schools. Others felt that HIV and AIDS should be made a compulsory subject from primary level to tertiary level so that learners are well equipped with the necessary knowledge to handle the unique challenges that come with HIV and AIDS pandemic. The teachers' suggestions according to themes are summarised in figure 4.15.

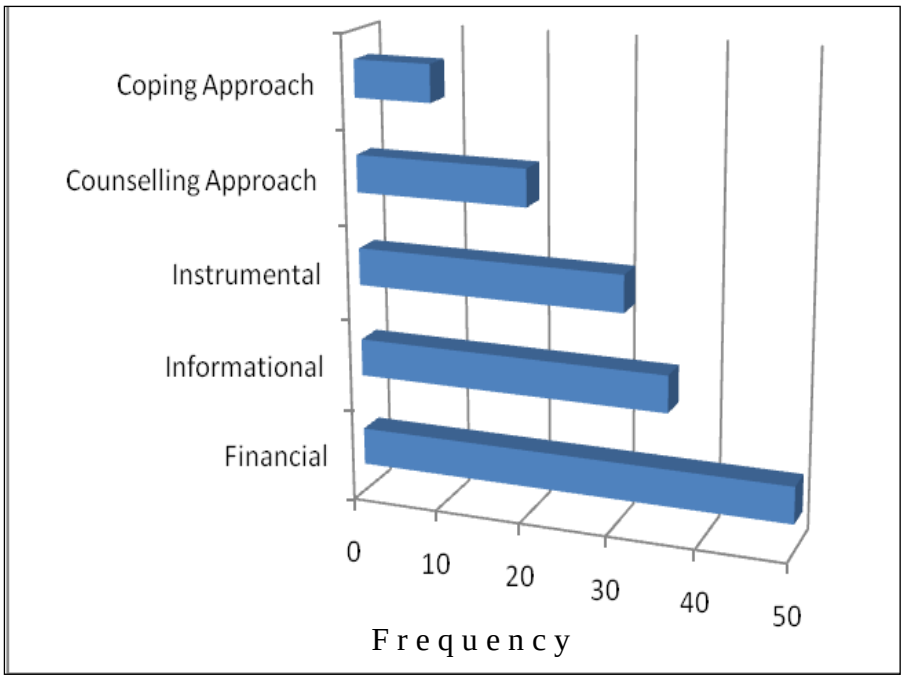

Figure 4.15: Suggestions on how Infected or Affected girls can be helped

As noted before pursuing education in an environment ravaged by HIV and AIDS pandemic cannot be business as usual especially for the girl-child. Out of the 30 teachers who were interviewed, 22 of them suggested that the MoE should provide

financial needs to the girl-child who suffers whenever there is a decline in the family income. Others felt that provision of food, uniforms and health care facilities would go a long way in helping the girls. The MoE should support the feeding programme to avoid girls walking long distances and they have to cook for themselves and their siblings, making them to be late for morning and afternoon lessons or missing the sessions altogether. Teachers confessed that the lunch programme in schools has gone a long way in solving the problem of absenteeism. Many children go to school because of the lunch programme project of Umoja (Umoja has 10 piloted schools where lunch is provided for the OVC) and in these schools enrolment has risen by a third and many teachers in these schools hoped this will eventually translate to better performance. The MoE should introduce HIV and AIDS as a subject from primary to tertiary level at the same time set a department to specifically cater for the girls needs especially the infected or affected. The Ministry through the local educational offices should involve the local communities in alleviating the suffering of the girl-child and teachers should be trained on how to guide and counsel girls who are infected or affected. The teachers further suggested that there should be an assessment team from the MoE to assess the effects of HIV and AIDS on girl-child education and this will help in advocating for the best policies to be adopted to promote girls education in an environment ravaged by HIV and AIDS.

The teachers felt that the MoE can effectively use the mass media to sensitize the learners, teachers and the community at large on girl-child vulnerability in the context of HIV and AIDS. Sensitize them on children's rights whether they are able or disabled especially those who are hard of hearing. Special boarding schools can be established to cater for the affected girls to keep them away from household chores which take up so much of their time and energy. For the infected girls the teachers

suggested that they should have ARV's in school to deal with the problem of absenteeism. For those who have left school, then the MoE should liaise with other ministries like the ministry for youth affairs to provide alternatives like tailoring/hair dressing and beauty courses to enable them earn a decent living. Remedies suggested by teachers for the MoE are summarised in table 4.24.

Table 4.24: Suggested Remedies by teachers for MOE

Remedies by MoE to deal with challenges	Frequency	Percent
Provide financial needs for the girl-child	22	73.3
Provide food, uniforms and health care	17	56.7
Support the feeding programme	15	50
HIV/AIDS to be taught from primary to tertiary level	14	46.7
Thro local communities	12	40
Set department to cater for the girls needs	9	30
Train teachers on G&C	9	30
Assessment team of HIV/AIDS on girls education	8	26.7
Provide other alternatives for the girls instead of academics	7	23.3
Use of mass media to everyone in the communities	6	20
Educate the public on children's' rights	5	16.7
Provide boarding schools for the infected or affected girls	4	13.3
Provide ARV's in schools to avoid absenteeism	3	10

4.8 Summary

This chapter dealt with the results of the study and interpretation of the data. The study established that the prevalence of psychosocial stressors due to HIV and AIDS index is 80% which is high according to scale used of (35-50) in Maseno division of Kisumu West district, Kisumu County. These stressors have posed serious challenges to the teacher, the infected or affected girl-child and the ministry of education therefore affecting the learning of girls' hence poor or very poor academic performance (89.8%) of the girl-child.

With high prevalence of psychosocial stressors due to HIV and AIDS girls have adopted either adaptive or maladaptive coping strategies. According to the results both adaptive or maladaptive coping strategies leads to poor performance and this means girls need to be equipped with skills to cope with HIV and AIDS psychosocial stressors so as to perform well academically. The teachers' perception indicated that girls are using maladaptive coping strategies which affect girls learning negatively while girls' results indicated otherwise.

The personality traits of being an optimist or a pessimist have a positive or negative relationship with psychosocial stressors prevalence. Some girls have learned and grown from the experience of HIV and AIDS and they have accepted reality so they experience less psychosocial stressors such girls can be said to be optimists. Girls who are pessimists have negative expectations even when not warranted by facts and this makes them to experience more psychosocial stressors leading to poor academic performance. The girls' characteristics like class level and parental status significantly influence the psychosocial stressors. As the study results have indicated where there is high prevalence of psychosocial stressors girls academic performance is poor. The

girls class level which creates and environment together with the parental status have significant influence on the prevalence of psychosocial stressors. The teacher's sex, working experience and designation influence significantly the provision of support to the girl-child infected or affected by HIV and AIDS.

The psychosocial support given to girls infected or affected does not have significant effects on girls' academic performance. In order for the girl to cope with the psychosocial stressors of HIV and AIDS to be able to learn and perform well academically more than what is being offered needs to be done. Unfortunately there are many challenges being faced by the teachers and the ministry of education as they try to provide the psychosocial support, so many girls performance is rated between poor and very poor and girls continue to drop out of school. This means that the psychosocial stressors of HIV and AIDS have compromised the quality and quantity of girls' education in this area. There is need for concerted efforts from parents/guardians, teachers, religious leaders, the community, NGO's and the government to provide instrumental, informational and emotional psychosocial support hence build resilience among girls in and out of school.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter contains the summary of all chapters so far discussed, discussion of the results in chapter four for example, the prevalence of psychosocial stressors, the coping strategies, the girls characteristics and prevalence of psychosocial stressors, the teachers characteristics and provision of psychosocial support and the psychosocial support available to the girls. This chapter also dealt with the conclusion and recommendations.

5.1 Discussion

The overall purpose of this mixed approach study was to add to a body of knowledge on HIV and AIDS infected or affected girls in and out of school. The study was to gain insight and inform communities, governments and NGOs to examine the services through the lens of quality improvement. The research set out to address five objectives targeting girls between ages 11-19 years. The research targeted girls because they remain disproportionately vulnerable to HIV infection. In sub-Saharan Africa, 75 per cent of young people (aged 15-24) living with HIV in 2007 were female (UNAIDS/WHO unpublished estimates in UNICEF, 2008). The proportion of women living with HIV is growing in almost all regions of the world, including Latin America, the Caribbean, Asia and Eastern Europe (UNAIDS, 2007). Actions to address gender and power dynamics within education and prevention of HIV

approaches are therefore crucial in containing the spread of the pandemic hence minimising its effect on education especially that of the girls.

Vulnerability occurs when ‘people are limited in their abilities to make and effect free and informed decisions’ (UNICEF, 2000). These people vary within countries and communities, but often include children and young people living in extreme poverty; girls and women; children and young people exploited sexually, economically or in other ways; children and young people discriminated against and marginalised on grounds of gender, ethnicity, sexuality, disability and HIV status. During the time of scarcity, several factors contribute to increased HIV vulnerability, particularly among women and girls. These include loss of livelihoods and lack of access to basic services; increased sexual violence against women and girls; breakdown of social networks and institutions that usually provide support and regulate behaviour; disruption of health and education services reducing access to HIV prevention, HIV-related treatment and care (UNESCO & UNHCR, 2007). HIV and AIDS-related vulnerabilities are present in the majority of schools and educational settings, as well as in communities. This includes physical, psychological and gender-based violence perpetuated by teachers and other school staff and that between students both in and outside of the school setting (Pinheiro, 2006). Girls are often disproportionately affected and at risk of gender-based violence (Clarke, 2008). Overall, knowledge levels related to HIV are low, and young females are less likely than young males to have an accurate, comprehensive knowledge. Only 30 per cent of males and 19 per cent of females aged 15-24 in developing countries have comprehensive and correct knowledge about HIV and how to avoid transmission (UNICEF, 2008).

The research set out to determine the prevalence of HIV and AIDS psychosocial stressors, the coping strategies adopted by girls to deal with the HIV and AIDS psychosocial stressors and the support available to HIV and AIDS infected and affected girls. The personal characteristics of the teachers and girls were established in relation to coping strategies and support provision to the girl-child. All these were tackled in relation to the impact they have on girls' academic performance in different type of schools. Much progress has been made by government in scaling up responses to ensure universal access to HIV prevention programmes, treatment, care and support. In particular, access to treatment has expanded rapidly. However, HIV prevention efforts are not keeping pace and there is need to play a much more prominent role in HIV and AIDS approaches.

Barriers and resistance to the implementation of HIV and AIDS education can be as a result of many factors such as: personal characteristics of girls and teachers (often exacerbated by lack of studies and data); social resistance to teaching these topics; misunderstanding, suspicion and opposition on the part of societal gatekeepers (i.e. cultural, community and religious leaders); insufficient training or absence of training for teachers who need to deliver programmes and lack of time because there is a syllabus to be covered. As noted education has tremendous potential to prevent the HIV and AIDS while the same pandemic has a crippling effect on education and countries must act, otherwise grave danger for those that do not (Fig 2.1). An education focused strategy to deal with HIV and AIDS promise rich rewards for the youth but dire consequences for a passive strategy that succumbs to the vicious cycle engendered by HIV and AIDS (Fig 2.1). HIV and AIDS have a unique aspect of secrecy, stigma, isolation and discrimination that girls have been subjected to in school and at home hence affecting their learning negatively.

Girls have dropped out of school; they are becoming pregnant, getting into early marriages, being involved with multiple sexual partners and being infected and re-infected with HIV. The study established that HIV and AIDS psychosocial stressors prevalence is high, the coping strategies adopted whether adaptive or maladaptive are determined by the culture, personal beliefs and values of the girls. Many NGOs and government ministries are providing mostly instrumental support in the area covered by the study. The instrumental support given is piece meal, there is lack of coordination explaining why girls are not performing and dropping out of school despite the support provided.

5.1.1 HIV and AIDS Psychosocial Stressors Prevalence among Girls

The prevalence of psychosocial stressors of HIV and AIDS is high in Maseno division of Kisumu County. HIV and AIDS have profound consequences for schools and education; it affects the demand and supply for education. The intensification of the pandemic means that there are fewer children to educate (as HIV affects the fertility of infected women and cuts short the lives of others). Girls enrolled in school are being removed to care for sick relatives or to take on other family responsibilities especially if the mother is dead and the step mothers are making them their workers. Household incomes and savings have been depleted, affecting capacity to pay for schooling and in such cases girls are withdrawn from school. Again many adults who are infected by HIV and AIDS see little value in investing in education for their children when the future seems bleak. For example, in Swaziland by the year 2004, school enrolment was reported to have fallen by 36 per cent as a result of HIV and

AIDS, with girls being the most affected (United Nations Office for the Coordination of Humanitarian Affairs – OCHA, 2004).

The study established the prevalence of HIV and AIDS psychosocial stressors in the area which have a significant influence on girls' education. Lack of financial resources and basic needs (deprived environment),death of parents and guardians causing multiple grief, isolation by learners, friends and teachers, discrimination by other learners and teachers, rejection because of being infected or affected by HIV and AIDS, stigma associated with the pandemic, not being able to concentrate, having to take care of the siblings, being sickly leading to absenteeism, relatives mistreating them, being involved in irresponsible sexual behaviour to cater for their needs, siblings and vulnerable grandmothers. The psychosocial stressors cannot be resolved by the health care system. All these psychosocial stressors due to HIV and AIDS pandemic have a significant influence on girls' academic performance as girls have difficulty remembering things due to psychological distress and making others to opt out of school. The study concurs with UNAIDS, (2008), that the pandemic creates and sustains misery and poverty making the girls susceptible to infection and vulnerable to psychosocial impact of the pandemic. The results of psychosocial stressors in relation to academic performance of the girls was cross tabulated and the result showed that where there is high prevalence of HIV and AIDS psychosocial stressors, the girls academic performance is either poor or very poor. Both the teachers and the girls are aware that psychosocial stressors exist due to HIV and AIDS pandemic. The teachers acknowledge that teaching and learning in an environment ravaged by AIDS cannot be business as usual.

Due to HIV and AIDS psychosocial stressors the teachers acknowledge that they are facing a number of challenges as they teach; poor syllabus coverage, frustration due to no behaviour change among girls, girls not doing their home work, slow in understanding due to emotional distress, difficulty teaching fatigued girls, spending so much time guiding and counselling instead of teaching, no motivation due to absenteeism and poor performance, need to provide tender care and being called upon to chip in (give active help like money)to assist in desperate situations among girls in school. On the other hand the girls indicated the following challenges due to HIV and AIDS: loneliness, no food, isolation, no love and care, negative thoughts, child labour and fear of meeting teachers and classmates after leaving school prematurely. These stressors are competing stimuli which cause stress to the girls making them to experience physical, mental and emotional tension. The HIV and AIDS psychosocial stressors are major life events which are undesirable and uncontrollable and they are associated with increased risk of depression among girls just as Dew (1998) noted.

With the death of parent(s) or sibling(s), or parent(s) or sibling(s) sickness girls labour at home has increased as they are the caregivers to the young in the absence of the parent(s) and the sick parent(s) or sibling (s). These responsibilities are making girls to be tired even before they go to school and while in school making concentration in class difficulty hence poor performance. FAWE (2001) found out that girl-child labour is one of the factors responsible for the declining enrolment rates in primary sector in Kenya. With high prevalence of HIV and AIDS psychosocial stressors girls labour has increased hence poor performance and increased number of girls drop-out.

According to Ochieng & Otunga (2006) 12% of primary and secondary school pupils/students are HIV positive. As noted earlier, in every one boy infected within

this age there are five to seven girls infected and this means girls are vulnerable. These girls are not aware of their status because parents/guardians fear that they will be unable to keep the diagnosis a secret from peers and other family members resulting in social rejection of the child and the family as noted by Lipson (1994). The parents desire to protect the children from the knowledge that the parent and/or one of the children have the illness especially if a family member or friends have already died from AIDS. Girls would better adjust if they are told of their status and allowed to discuss their condition openly with their family and medical caregivers even in situations where the girl is terminally ill (Hanna & Mintz, 1995). This means that parents/guardians need to be counselled on the need to disclose their status and that of their children and discuss openly with the teachers to help the girls adjust and cope with academic work in school despite the illness. Girls who are victims of HIV and AIDS need to be equipped with knowledge, skills and courage that will enable them to face life positively. This knowledge, skills and courage will enable the girls to make informed decisions and choices in life concerning their education and career after being made to understand that there is life after HIV infection.

5.1.2 The Coping Strategies Adopted by Girls

The coping strategies adopted by girls are either adaptive or maladaptive. The adaptive or good coping strategies are: seeking social support, seeking guidance and counselling services, visiting VCT clinics, attending seminars, abstinence, knowing their rights and accepting their status. While maladaptive or poor coping strategies are: missing lessons and school, dropping out of school, engaging in irresponsible sexual behaviours, early marriages and committing suicide. According to teacher's

perception, adaptive coping strategies lead to better performance while maladaptive coping strategies leads to poor performance among girls. According to girls whether the adaptive or maladaptive coping strategies are used the academic performance is poor.

The girls have right to know which means that education should include access to a full range of information and resources that will enable girls to know how to protect themselves and others from infection. Contrary to what policy-makers, parents and communities at times wish to believe, many girls are sexually active from their mid teenage years onwards, with the peak vulnerable years being the ages of 15-24. The study established that most girls who have left school are within the age range of 14-17 years. According to teachers, girls who are orphaned early become mothers or get married in an attempt to seek acceptance. The environment makes constant demand on the girl-child causing anxiety and the way a girl copes influences the girls environment in school and at home.

For example during the study a girl in Form four was identified as an orphan and pregnant. This girl lost her father in Form three first term, three months later the mother died and her being the eldest child together with her siblings were left under the care of a maternal uncle. Five months later the uncle died and the situation was so desperate. This was second term Form 4 and the girl was pregnant despite the efforts the school has made to keep her in school and provide her with personal needs. This girl was in a health club known as "*The World Starts With Me"* which gives substantial information concerning HIV and AIDS. This means that the girl had information and knowledge but still this did not stop her from seeking emotional support which the school and the care givers failed to provide. The girl engaged in a

relationship hoping to improve her personal value and worth. Unfortunately this did not alleviate the anxiety and stress but presented the girl with new demands, that is pregnancy, possibility of HIV infection, stigma and being rejected by her own siblings. This transactional coping process is being used by many girls in the area covered by the study exposing them to risk of HIV infection.

When girls were asked how they are coping with the psychosocial stressors of HIV and AIDS 73.3% said that they are seeking guidance and counselling services,53.3% building strong relationships and accepting their status. Other 33.3% said they are attending seminars, 26.7% are avoiding bad company, as well as keeping themselves busy and 13.3% are trying to seek assistance from relatives who are able. This means that early interventions, starting at the primary level of schooling (and before onset of adolescence or dropping out of school) are critical and potentially life-saving for the girl-child. As girls seek guidance and counselling proper guidance and counselling should be offered to avoid girls being frustrated and unwilling to cooperate when their needs are not met. This explains why teachers are getting frustrated because the girls do not cooperate, opening up to the teachers because the teachers lack the skills to offer proper guidance and counselling. The study therefore conclude that the teachers need to be equipped with skills to be able to equip the girls psychologically, socially, morally and academically to adjust not just in school but also at home and community in the face of HIV and AIDS.

According to the teachers different coping methods have either positive or negative impact on the girl-child learning. Girls who cope by thinking positively, accepting their status and seeking social support are able to build buffers to the adverse effects of psychosocial stressors of HIV and AIDS hence able to make necessary adjustments

in their academic performance. Girls who have negative thoughts, seek out for sexual favours from older men, miss lessons or keep away from school as a way of coping with the psychosocial stressors have created new demands on themselves and many have found themselves pregnant, possibility of being HIV infected, rejection by siblings and relatives, getting married to older men and their performance is very poor. This very poor performance among girls leads to dropping out of school. This means the gender disparity that exists in education is widening due to HIV and AIDS pandemic leading to further marginalising of the girl-child. As Wachira, (2007) puts it, education of girls and women is one of the most powerful forces of development in low income countries to enable girls and women to participate fully in national development, they need education and especially university education that equips them with skills and knowledge relevant to the needs of the society. Education can provide an effective tool to prevent and manage HIV and AIDS; unfortunately just like health education it is not accessible to the poor making it difficult for the poor countries to achieve EFA goals by 2015.

The coping strategies adopted by the girls are significantly influenced by the personal characteristics like the age of the girl, the class level, the type of school attended and the parental status. When a girl is faced with the HIV and AIDS psychosocial stressors the girl becomes restless, tense and revolutionary because a need exists and it is not being satisfied. The avenue sought by the girl to reduce the state of restlessness, tenseness and imbalance may be detrimental to the functions of the girl in school, at home and the society. Coping involves seeking social support, positive reframing, information seeking, problem solving and emotional expression which can bolster a girl's adjustment to chronic illness and difficulty situations improving coping strategies hence effectively reduce symptoms of psychological distress that

hinder healthy behaviours therefore the study concurs with Barton, Clarke, Sulaiman & Abramson (2003). This means girls who are experiencing chronic psychosocial stressors due to HIV and AIDS can be helped to improve coping strategies to reduce the distress and promote healthy behaviours. Avoidant or maladaptive coping involves denial, emotional instability, irresponsible sexual behaviours, early marriages, missing lessons and school, trying not to think about the situation they are in (thought suppression) and unhealthy behaviours like abusing drugs in an effort to cope with distress. Though the girls are in denial the results from teachers indicate that the maladaptive coping strategies have a negative impact on girls' academic performance.

The cumulative stress especially among the caregivers can be substantial that family members acting as caregivers have an increased likelihood of experiencing depression, adverse health effects and earlier death as Kurtz & Kurtz (2004) states. Girls who are caregivers in the area covered by the study give up school work or reduce their school work hours to provide care to a loved one leading to low productivity hence poor performance.

5.1.3 Psychosocial support to HIV and AIDS infected or Affected Girls

The level of psychosocial support is low and un-coordinated. The support is being offered by NGO's, churches through community based organizations (CBO's) schools, MOE and ministry of Public Health. Psychosocial support helps to build resilience in girls. It also supports families to provide for the physical, economic, educational, social and health needs of children. Girls can be resilient, but when faced with extreme adversity and trauma, they and their families need extra support.

Psychosocial support builds internal and external resources for girls and their families to be able to understand and deal with adverse events. Some girls need specific, additional psychosocial support depending on the life events experienced. The psychosocial interventions usually target girls who have experienced extreme trauma or adversity, or who are not receiving the necessary support from caregivers who are families, NGO's and communities.

Many things can impact on a child's psychosocial wellbeing, including poverty, conflict, neglect and abuse. As noted the area covered by the study the poverty index is 56% and HIV and AIDS have compounded poverty and sexual abuse in the area. As a result of HIV and AIDS, girls have experienced traumatic events such as illness and death of parents, violence and exploitation, stigma and discrimination, isolation and loneliness, and lack of adult support and guidance. As noted in the results of the study the type of psychosocial support being offered in this area have no significant impact on girls' academic performance. Therefore there is need for appropriate psychosocial support which helps girls and their families to overcome these challenges, and builds coping mechanisms, trust and hope for their future therefore reducing the state of hopelessness and helplessness.

Families and communities are best placed to provide psychosocial support, and interventions should work through families and communities to support the girl-child. The aim should be to keep girls in supportive and caring environments, and to strengthen families to provide for the full range of their needs. Psychosocial support needs to be part of comprehensive programming in the education sector. It should not be provided as a stand-alone service like it is currently happening in many schools through the Ministries of Education, Public Health and NGOs. However, girls living

with HIV may need extra support to deal with their status. The girls need to manage, adhere to treatment, disclosure and coping with illness in their family. These can be addressed through interventions that use a variety of approaches, such as guidance, counselling and family therapy. The support programmes need to use interventions to strengthen families and caregivers to provide psychosocial support alongside addressing girls' other needs especially emotional needs. Programmes also need to understand and respond to the different ways that adverse events can impact on children. For example, how a child responds to grief and trauma may vary considerably depending on their age, gender and circumstances like class level, the type of school attended and the parental status whether sick or dead.

Institutions are often particularly poor at providing for girls' psychosocial needs. Unfortunately from the study girls depend on teachers for psychosocial support and the teachers are ill equipped to provide this support. Out of the responses from the teachers 70% want the teachers to provide psychosocial support arguing that teachers spend a lot of time with the girls than parents/guardians. While 53.3% of the teachers want the government to provide psychosocial support, 43.3% parents/guardians, 26.7% spiritual leaders, 20% female teachers, well wishers 16.7%, NGO's 13.3% and community and relatives had 10%. To provide psychosocial support programmes need to support families to provide for their comprehensive needs as noted the needs are lacking among many homes (deprived home environment) due to AIDS. The study established that 68(45.9%) have an experience of 1-5 years and the professionally young teachers are not well versed with the provision of psychosocial support to the learners. Psychosocial wellbeing is linked to girls' access to education, health, family care, nutrition, play and social participation which are all being compromised by HIV infection and its psychosocial stressors. Psychosocial support

should not be a stand-alone intervention like it is currently being done by a few teachers and NGO's in Maseno division of Kisumu County rather it should be long-term, integrated approach to the needs of the girls and their families.

Girls living with HIV have specific psychosocial support needs. These may be different from children dealing with the impact of HIV and AIDS on family members. Psychosocial support must consider how girls respond differently to adverse situations based on their age, personality and circumstances for example school attended and parental status. The investment in support is particularly important in the early stage of childhood development (pre-school), yet this is often overlooked in HIV programmes and teachers and communities seem concerned only when girls start developing secondary sexual characteristics. Support at the community level needs to be backed by external efforts especially by policy-makers. This includes providing social welfare, as well as legislation that helps communities to support girls such as child protection policies and laws on inheritance rights which will cater for disempowerment of women. Psychosocial support can be a difficult type of programme to assess as its outcomes may not be clear for a long time. Currently, there is limited measurement of psychosocial support impact on children especially girls.

For policies and programmes to be successful, it is essential that the concerns and experiences of key stakeholders are comprehensively taken into account in the design and implementation of interventions through psychosocial support. This includes in particular girls, people living with HIV, teachers, administrators, parents and community leaders as UNESCO(2008) notes. Unfortunately from the study only a few teachers are involved through NGOs, very little or no help is forthcoming from the government for the infected or affected girl-child and this is why teachers are

suggesting there should be a special department to cater for the girls needs from the MoE headquarters to schools in the villages especially in areas with high prevalence of HIV and AIDS and the pandemic psychosocial stressors.

Psychosocial support must incorporate the knowledge, experience and concerns of girls, which can only be achieved through their active participation in planning and implementation. The girls' involvement is important for addressing stigma and discrimination, as well as dispelling myths and misconceptions. It is also critical for ensuring that those living with HIV are equal partners in the very process that should support them and aim to meet their needs. This is why people who have similar experiences as the girls infected and affected by HIV and AIDS are to be mobilised to give talks to the girls so as to encourage them. As the study established that both girls and teachers wish people with similar experiences with HIV and AIDS who are coping well together with health experts be invited into schools to help girls build resilience in the face of HIV and AIDS. When PLHA share their experiences with girls they help them to acquire life skills, make informed decisions and choices hence boosting their academic performance.

Involving teachers, as one of society's most valuable assets, is also key in the provision of psychosocial support. As noted teachers characteristics like sex, working experience and designation have significant influence on psychosocial support provision. The MoE can engage more female teachers who will act as role models to the girls and give them emotional support which is seriously lacking in this region. More teachers also need to be allocated duties in relation to provision of psychosocial support. This brings in the training of teachers and many agreed that they lack the knowledge and skills to handle the HIV and AIDS infected or affected girls in their

respective schools. Teachers are seriously concerned about absenteeism among girls, poor performance, school dropout and early pregnancies and it is important all stakeholders like parents/guardians, community and concerned government ministries to address these issues in HIV and AIDS ravaged environment like Maseno division of Kisumu County where prevalence is 19% (NACC, 2009).

5.2 Conclusion

Globally, enrolment in education is expected to increase by 34 per cent (or 32 million students) by 2015 (UNICEF, 2008). This increase represents an opportunity to extend more and better schooling to all children especially girls, and to introduce HIV prevention and support activities to a substantial number of girls. The girl-child school attendance, enrolment and performance in Maseno division are adversely affected by the prevalence of psychosocial stressors of HIV and AIDS pandemic thus further marginalising the girl-child. Failure to send girls to school is costing poor countries particularly in Africa and this includes Kenya billions of dollars per year and it is worsening the gap between male and female enrolment in schools of Maseno division where HIV prevalence is 19% (NACC, 2009).

The number of children orphaned by AIDS continues to increase and according to UNAIDS, (2010) every 14 seconds a child is orphaned in sub Saharan Africa. In 2007, the number of children who had lost their parents to AIDS in sub-Saharan Africa alone was estimated to be nearly 12 million (UNICEF, 2008; UNAIDS, 2008). While all orphans are vulnerable to HIV infection due to a weakened family ‘safety net’, orphaned girls tend to be more vulnerable to exploitation of all kinds (including, child labour and sexual exploitation) (UNAIDS IATT on Education, 2004). As stated

by one of the girls interviewed *"my stepmother has made me her worker and mistreats me"* (see App. J statement No.32).Another girl said *"me and my siblings work so hard, more than we should and many times the people we work for refuse to pay us and we have no one to help us out."* (see App. J statement No.34). Girls infected or affected by HIV and AIDS require care, support, social protection and continuing education that take into account their additional needs for treatment, literacy, positive prevention messaging and the elimination of stigma and discrimination as the study concurs with UNICEF (2008) and UNESCO (2008).

Starting psychosocial support early before girls are sexually active (and before large numbers of girls drop out of school), and develop progressively in a logical sequence throughout the developmental and educational experience to prepare girls to deal with the issues they may face as they grow up, because as the study noted the age of the girl has an influence on the psychosocial stressors experienced. Interventions by all stakeholders that is parents, teachers, communities, NGO's and government must be tailored to cater for girls age, class level, parental status, type of school and cultural context of the girl (environment). Particular approaches may need to be developed to cater for the reality of age-diverse (age mixing) in classroom settings as Lloyd(2007) noted. The CPSM can be applied in helping the girls from pre-school hence preparing them before adolescence.

Looking at the many organisations operating in Maseno division, there are still too many isolated interventions. In this context, it is important to note that education systems, and the partners involved, could still make significant progress in improved monitoring and evaluation of the impact of interventions to ensure the approaches are evidence-based. The girls who are most at risk of HIV infection are often the young

between 14-24 years old and these are adolescents who are currently in schools and colleges. The NGO's and the government are mainly offering instrumental and informational and no emotional support and this explains the frustrations of the NGOs when girls get pregnant, leave school prematurely while others are getting married. As noted in the schools especially single sex boarding secondary schools are trying to support the girls but the teachers and school management register disappointment when these girls become pregnant or drop-out of school.

Information alone cannot prevent HIV but more needs to be done to support the girl-child emotionally in the face of HIV and AIDS psychosocial stressors. There is need to address the economic and social barriers that prevent girls from going to school and from progressing through the system, such as: maintaining separate sanitation facilities for girls; providing scholarships to deal with poverty and other incentives such as school uniforms and school feeding programmes; and increasing the number of female teachers, managers and decision-makers to act as role models. In this context, all efforts must be made to guarantee that educational environments are safe to promote equality, tolerance, respect, justice and dignity especially for the girl-child. The government through the MoE need to ensure that national plans and educational system give priority to achieving EFA goals especially for the girl-child.

From the findings there is need to consider the context (environment) communities, taking into account differences between districts, regions and population characteristics (such as vulnerable or displaced groups).As noted earlier what may work to break the power of HIV and AIDS in the region covered by the study may not work elsewhere. The response to the AIDS pandemic in Kenya has to be specific to regions and communities as study concurs with Coombe (2002). Social (gender roles),

economic (poverty), cultural (values and belief systems) and psychological factors affect the spread of the pandemic and its impact and thus require a periodic assessment. The study reveals that there is high prevalence of psychosocial stressors due to HIV and AIDS and they are affecting the girl-child education especially academic performance negatively. Girls in this particular part of the country lack effective coping skills so they are using maladaptive coping strategies leading to negative effects on girls education. The country, schools and communities must get the balance right.

The study is an advocacy for renewed action and scaled up commitment to education sector to strategize and respond to HIV and AIDS infected or affected girls. International commitment to address the pandemic is real. The study serves as a support and interface to co operation between the government through relevant ministries like MoE, Public Health and Special programmes, NGO's, Communities and schools to build the understanding and commitment required for a successful and strategic response to HIV and AIDS and girls education. This can be done by providing quality and well coordinated psychosocial support to build resilience among infected or affected girls.

From the findings of the study girls orphaned by AIDS need:

i. Basic material needs like food, clothing, shelter, security and psychological health
ii. Support from a concerned or connected adult caregiver and external support for example by the church, health caregivers and community at large
iii. They need essential services like health and education
iv. Protection from stigma and discrimination

5.4 Summary

So much has been said on consequences like death and orphan-hood due to AIDS (Kelly, 2008) but there is need to assess the influence of HIV and AIDS psychosocial stressors prevalence on girls' education in Kenya. The study established the prevalence of psychosocial stressors of HIV and AIDS, the coping strategies used by girls, the provision of support and their implication on the girl-child learning in Kenya. The study used Cognitive Psychosocial Stressors Prevalence Model (CPSPM) which is based on the transactional theory of coping process. In this model psychosocial stressors are conceptualised to consist of the following domains: Psychosocial stressors, individual characteristics, environment, intervening strategies, coping strategies and cognitive/behavioural change. The prevalence of HIV and AIDS psychosocial stressors, the coping strategies, teachers and girls' characteristics and psychosocial support provided influence girls learning differently.

Girls use either adaptive or maladaptive coping strategies in the face of HIV and AIDS psychosocial stressors which do not have significant effect on girls' learning. The class level and parental status of girls infected and affected by HIV and AIDS have a significant influence on the prevalence of psychosocial stressors among girls. The teachers' sex, designation and working experience were found to have significant influence on the provision of support to the girl-child affected and infected by HIV and AIDS psychosocial stressors. Psychosocial support available to girls infected and affected by HIV and AIDS psychosocial stressors have no significant influence on academic performance. However psychosocial support provision is faced by many challenges. Therefore the study made a number of recommendations that can improve girls' education in areas ravaged by HIV and AIDS.

5.5 Recommendations

Based on the findings of the study the following recommendations were made:

i. The MOE need to set up a department to handle the impact of HIV and AIDS on girls' education and a department at school level to handle infected and affected girls special needs due to HIV and AIDS psychosocial stressors especially in areas where HIV and AIDS prevalence is high e.g. Kisumu County with 19% prevalence rate.

ii. The MOE and relevant government authorities like NACC have to play a critical role in developing and supporting non-formal education on HIV and AIDS. In this context, HIV prevention among girls must take a broad outreach approach to ensure information, resources and services are available at times and appropriate for young girls who have dropped out of school.

iii. HIV and AIDS content should be a compulsory subject and ensure implementation (with clearly outlined expected results and outcomes) and sufficient attention to the topic. To maximise impact, lessons should be linked to and reinforced through knowledge, skills and attitudes acquired in other curriculum subjects hence empowering the girls by giving the accurate information about HIV and AIDS.

iv. Advocacy is essential to gaining commitment from all stakeholders, and in particular from decision-makers who play a pivotal role in moving the response forward and in overcoming resistance from societal gatekeepers.

v. MOE need to be equipped to monitor and assess impact of HIV and AIDS psychosocial stressors and to ensure that decision-making is informed by successful practices. All stakeholders must commit to advancing the evidence based on HIV and AIDS, girls' education and to ensure that lessons from research like the one that has been carried out inform policy reform and decision-making.

vi. Use participatory and interactive approaches, which allow girls to explore values and attitudes and to gain new skills and knowledge to help them cope with the psychosocial stressors. Staff from health clinics or other external service providers to deal with topics which teachers may find difficult to cover.

vii. It is important to develop strong linkages with communities and with care and support services(such as health, youth and social action) to ensure a supportive environment for girls who are at risk and need of care and support as the study established that girls require parental or maternal care in order to adjust. It is also an important entry point for addressing stigma and discrimination and other

social behaviours that increase the vulnerability of girls. The support builds resilience in girls and reduces their vulnerability.

viii. The Cognitive Psychosocial Stressors Prevalence Model (CPSPM) can be used in identifying HIV and AIDS psychosocial stressors in the provision of psychosocial support, help girls develop adaptive coping strategies so as to improve girls learning and academic performance.

5.6 Suggestions for further research

The study suggests the following areas for further research:

i. There is need to do a similar study on the boy-child who is also faced with HIV and AIDS psychosocial stressors

ii. Similar studies to be done in other districts or divisions found inregions with high HIV and AIDS pandemic prevalence.

iii. This study has established that psychosocial support is necessary but not significant factor to boost girl-child enrolment and performance, therefore a longitudinal study need to be done to assess the influence of psychosocial support or interventions on girls' learning and academic performance.

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APPENDICES

APPENDIX A

Introductory Letter

Mbutitia F.N.

School of Education

Dept. of Educational Psychology.

Moi University

P.O Box 3900-30100

ELDORET.

Dear Respondent,

RE: INFLUENCE OF HIV AND AIDSPSYCHOSOCIAL STRESSORS ON GIRLS EDUCATION.

You are kindly requested to respond to the questionnaire given. Your responses will help to improve the delivery of education for the girl-child who is either infected or affected by the HIV and AIDS pandemic in Kenyan schools.

Be assured that the information you give will be treated with utmost confidentiality.

Please do not write your name anywhere in the questionnaire.

Thank you for sparing your very precious time to respond to this questionnaire.

Yours faithfully

MBUTITIA F.N. (Researcher)

APPENDIX B

Teachers' questionnaire

The questionnaire has four sections, respond to all items in the four sections.

Kindly do not write your name anywhere in this questionnaire.

Section I: Personal Details

In this section you are kindly requested to mark (x) in the boxes provided or fill in the blanks as sincerely and appropriately as possible.

1.Indicate your Sex: Male ☐ Female ☐

2. What is your working Experience (in years)……

3. What is your Designation: Regular Teacher ☐ Class Teacher ☐

School Counsellor H.O.D/Senior Teacher Deputy ☐

Head teacher Head teacher ☐

4. If a class teacher in (3) above indicate: Class/Form: ……

5. How many boys and girls are in your Class/Form:

Boys…… Girls……

6. Indicate how many girls are infected or affected by HIV/AIDS in your class/school……..

Section II: Influence of HIV and AIDS psychosocial stressors prevalence on girls education.

Choose the option that best suits your opinion of the statement given. The options are: **strongly agree 5, agree 4, undecided3, disagree2 and strongly disagree1**and respond appropriately to the other items. Please be sincere.

serial	Statement	Option				
1	HIV and AIDS infected or affected girls are isolated by teachers and other learners and this affects their learning.	5	4	3	2	1
2	Discrimination of girls infected and affected by HIV and AIDS is common in school and at home and this leads to poor performance.	5	4	3	2	1
3	HIV and AIDS affected or infected girls are not able to concentrate in class so they perform poorly.	5	4	3	2	1
4	Affected or infected girls have to attend to medical regimes and hospitalization leading to frequent absenteeism hence poor performance.	5	4	3	2	1
5	HIV and AIDS infected or affected girls lack financial resources which create chronic stress therefore affecting their school work negatively.	5	4	3	2	1
6	HIV and AIDS have led to deprived environment which affecting girls' learning therefore poor performance.	5	4	3	2	1
7	Mistreatment by relatives of girls infected or affected by HIV and AIDS affects their academic work negatively.	5	4	3	2	1
8	HIV and AIDS infected and affected girls suffer from chronic stress and this affects their memory and class work.	5	4	3	2	1
9	HIV and AIDS infected and affected girls have difficulty adjusting to a life in the absence and sickness of parents hence affecting their academic performance negatively.	5	4	3	2	1
10	HIV and AIDS infected and affected girls lack the family "safety net" exposing them to exploitation leading to poor academic performance.	5	4	3	2	1

11. Based on your own experience explain the effects of HIV and AIDS pandemic on girls' attendance…….....

.....

12. From your own experience explain the effects of HIV and AIDS pandemic on girls academic performance in your class…….....

……

Section III: Influence of HIV and AIDS Psychosocial Stressors Coping Strategies on Girls' academic performance Scale

In this section choose the option that best suits your opinion of the statement given and respond to other items that follow appropriately. The options are: **strongly agree 5 (SA), agree 4(A), undecided3 (U), disagree2(D) and strongly disagree1 (SD)**. Please be sincere.

serial	**Statement**	**Options**				
1	Girls infected or affected by HIV and AIDS keep away from teachers and this leads to poor academic performance	5	4	3	2	1
2	Girls Infected or affected by HIV and AIDS engage in sexual activities as a way of survival and this affects their academic performance negatively.	5	4	3	2	1
3	Girls who have a positive attitude towards their condition are able to cope better with HIV and AIDS challenges hence do well in their school work.	5	4	3	2	1
4	Girls who think negatively about their condition situation are not able to cope with HIV and AIDS leading to poor performance.	5	4	3	2	1
5	Infected or affected girls by HIV and AIDS pandemic are hostile and this affects their academic performance negatively.	5	4	3	2	1
7	Infected or affected girls seeking social support to cope with HIV and	5	4	3	2	1

	AIDS problems improves their academic performance.					
8	HIV and AIDS infected or affected girls avoid thinking about the illness and this makes them not to do well in academics.	5	4	3	2	1
9	Girls infected or affected by HIV and AIDS find themselves in foster homes or relatives homes and this affects their academic performance.	5	4	3	2	1
10	HIV and AIDS infected or affected girls lack methods of dealing with HIV and AIDS challenges and this affects their school work negatively.	5	4	3	2	1

11. Basing on your own observation, list down ways that girls use in trying to cope with HIV and AIDS pandemic challenges…….....

……

12. In your view how do the coping methods you have listed in (11) above affect girls academic performance?…….....

……

Section IV: Influence of Support Provision on girls academic performance

Choose the option that best suits your opinion of the statement given below and appropriately respond to other items that follow. The options are: **strongly agree 5 (SD), agree 4(A), undecided3 (U), disagree2(D) and strongly disagree1 (SD)**.

serial	**Statement**	**Options**				
1	Girls who receive verbal and non verbal communication from a concerned adult cope well with HIV and AIDS stressors.	5	4	3	2	1
2	HIV and AIDS infected or affected girls who receive care adjust well and are able to cope with their school work.	5	4	3	2	1

3	Girls infected or affected by HIV and AIDS but receive reassurance and comfort do well academically.	5	4	3	2	1
4	Girls who know more about HIV and AIDS and accept their status cope effectively with their school work.	5	4	3	2	1
5	HIV and AIDS infected or affected girls who receive guidance are able to cope well and perform well in their academics.	5	4	3	2	1
6	Girls who are infected or affected by HIV and AIDS who receive financial assistance perform well in school.	5	4	3	2	1
7	Girls infected or affected by HIV and AIDS who receive food, Shelter and clothing do well in their academic work.	5	4	3	2	1
8	HIV and AIDS infected or affected girls who belong to social support groups cope with their school work and do well.	5	4	3	2	1
9	Parent/guardians and teachers should be all involved in providing support to infected and affected girls.	5	4	3	2	1
10	Girls who are infected or affected by HIV and AIDS and receive support at home and school cope well with their academic work.	5	4	3	2	1

11. Please list the help that you think should be given to the HIV and AIDS infected or affected girls to enhance academic performance….....

……

12. Suggest ways through which the help given to the infected and affected girls can be improved in a school set up…….....

……..

13.Name some of the organizations involved in helping girls infected and affected by HIV and AIDS pandemic …….....

THANK YOU

APPENDIX C

Girls' questionnaire

The purpose of this questionnaire is to help establish the challenges facing girls infected and affected by HIV and AIDS while in school, how they cope and the support given to them. The questionnaire has four sections: **Kindly do not write your name anywhere in this questionnaire.**

Section I: Personal details scale

Kindly mark (x) appropriately in the boxes provided or fill in the blanks as required. Please be sincere and honest

1. Indicate your age in years...……

2. Indicate your class/Form……..

3. Give the type of school you attend: Primary single sex ☐ Secondary single sex ☐

Primary mixed ☐ Secondary mixed ☐

4. Are your parents: Both alive ☐ One dead ☐ Both dead ☐

5. In case one of your parents is dead indicate whether: Mother ☐ Father ☐

Section II: Influence of HIV and AIDS psychosocial stressors prevalence on girls learning scale

In this section choose the options **strongly agree (SD) 5, agree (A) 4, undecided (U) 3, disagree (D) 2 and strongly disagree (SD) 1**that best suits your opinion of the statement given and fill the blanks that follow appropriately.

Serial No.	**Statement**	**Option**				
1	Loss of my parent(s) to death due to AIDS has affected girls academic performance negatively.	5	4	3	2	1
2	Sickness of parent(s) due to AIDS has made girls to miss school often.	5	4	3	2	1
3	Mistreatment from relatives and neighbours due to problems of HIV and AIDS have made girls not to do well in school.	5	4	3	2	1
4	Students and teachers talk negatively about girls infected or affected by HIV and AIDS affects them in school.	5	4	3	2	1
5	Many friends and classmate don't like talking and playing with girls infected or affected by HIV.	5	4	3	2	1
6	Concentration in class due to many duties at home as a result of AIDS is difficult for girls.	5	4	3	2	1
7	Girls are not able to catch up with the rest of the class after missing school due to hospitalization and attending clinics.	5	4	3	2	1
8	Being taken care of by relatives or foster homes makes girls lonely and this affects their academics negatively.	5	4	3	2	1
9	Hopeless and helpless is common among infected or infected girls, hence lacking motivation to work hard in school.	5	4	3	2	1
10	Being in a home with no basic needs makes girls not to perform well in school.	5	4	3	2	1

11. In your own view which problems due to HIV and AIDS really affect your academic performance……

……

12. State some of the goals you feel you would be able to achieve if you were not affected by HIV and AIDS…….

.....

Section III: Influence of HIV and AIDS Psychosocial Stressors Coping Strategies on Girls Education scale

In this section choose the option that best suits your opinion of the statement given. The options are: **strongly agree (SD) 5, agree (A) 4, undecided (U) 3, disagree (D) 2 and strongly disagree (SD) 1**and then respond to the items that follow appropriately.

Serial No.	**Statement**	**Option**				
1	Girls avoid thinking about AIDS and this affects their school work.	5	4	3	2	1
2	Girls isolate themselves as a way of dealing with their feelings about HIV and AIDS in my family.	5	4	3	2	1
3	Girls avoid situations that make them feel helpless due to the pandemic affecting their academic work.	5	4	3	2	1
4	Girls are easily lured by the opposite sex due to problems of AIDS and they are not able to do well in school.	5	4	3	2	1
5	Girls work after school and weekend to cater for the family needs making me tired and this affects my school work.	5	4	3	2	1

6	Girls spend a lot of time seeking God's help to deal with HIV and AIDS problems neglecting school work.	5	4	3	2	1
7	Girls go through many problems daily because of HIV and AIDS have made them hostile to classmates and teachers	5	4	3	2	1
8	Girls who have not accepted that HIV and AIDS has affected their families and school work.	5	4	3	2	1
9	Girls who seek support to handle the effects of HIV and AIDS perform well in school.	5	4	3	2	1
10	HIV and AIDS infected or affected girls who find meaning in their situation are able to do their well in school work.	5	4	3	2	1

11. List some ways that you find easy to use in dealing with the problems of HIV and AIDS pandemic……

……

12. In which ways do your coping methods with HIV and AIDS problems affect your school work? ……..

.....

Section IV: Influence of Support Provision for HIV/AIDS affected or infected girls' education

Choose the option: **strongly agree (SD) 5, agree (A) 4, undecided (U) 3, disagree (D) 2 and strongly disagree (SD) 1.**, that best suits your opinion of the statement given and respond to the items that follow appropriately.

Serial No.	Statement	Option				
1	Girls who are infected and affected by HIV and AIDS need a caring concern to be able to perform well academically.	5	4	3	2	1
2	Girls receiving verbal and non verbal communication from a caring adult deal with HIV and AIDS and perform well.	5	4	3	2	1
3	Girls who are HIV and AIDS infected or affected, who find meaning in their environment do well academically.	5	4	3	2	1
4	Girls infected or affected by HIV and AIDS who receive reassurance and comfort are able to do well academically.	5	4	3	2	1
5	Girls who know more about HIV and AIDS are able to find meaning in the illness and are able to do well in school.	5	4	3	2	1
6	HIV and AIDS infected or affected girls who seek advice and guidance are able to perform well in their academic work.	5	4	3	2	1
7	Girls who are infected or affected by HIV and AIDS who receive financial assistance perform well in school.	5	4	3	2	1
8	Infected or affected girls who have food, clothing and shelter are able to do well academically.	5	4	3	2	1
9	HIV and AIDS infected or affected girls who are assisted with household chores are able to perform well academically.	5	4	3	2	1
10	Support at home and school to the HIV and AIDS infected or affected girls enhances their academic performance.	5	4	3	2	1

11. What kind of help do you get to deal with problems due to HIV and AIDS?.....

……

12. Who provides help you need to deal with HIV and AIDS challenges? ……

……

13. What kind of help that is given to you to deal with HIV and AIDS problems do you value so much…….....

……

14. In what ways do you think the help offered can make you achieve your academic goals in an environment where there are many problems as a result of HIV and AIDS?.....

THANK YOU

APPENDIX D

Interview Guide for Educational Officer

The interview schedule is part of the research examining the psychosocial stressors facing the girl-child as she pursues her education in the face of HIV and AIDS pandemic in Kenya.

1. What is the Ministry of Education doing to help girls cope with problems associated with HIV and AIDS pandemic while in school?
2. Basing on your observation does age and class level of infected and affected girls by HIV and AIDS influence their academic performance?
3. What are the challenges facing the Ministry of Education in dealing with problems associated with HIV and AIDS pandemic in schools especially in your area of jurisdiction?
4. How is the Ministry of Education mobilizing help from schools and communities to help girls infected and affected by HIV and AIDS pandemic in schools?
5. What suggestions would you give to the Ministry of Education to adopt in order to effectively manage the challenges of HIV and AIDS pandemic among girls in schools?
6. What organizations are involved in helping HIV and AIDS infected and affected girls in schools?
7. What type of help do these organizations give to these girls?

APPENDIX E

Interview Guide for Teachers

The interview schedule is part of the research examining the psychosocial stressors facing the girl-child as she pursues her education in a HIV and AIDS pandemic environment in Kenya.

1. What challenges related to HIV and AIDS pandemic have you identified in school?

2. What efforts is your school making to manage the problems of HIV and AIDS pandemic among the female learners?

3. In what ways have the challenges of HIV and AIDS pandemic affected girls' academic performance in your school?

4. In what ways have the challenges of HIV and AIDS pandemic affected you as a teacher while teaching in school?

5. How are girls coping with the challenges of HIV and AIDS pandemic as a result of sickness/ death parent(s) while in your class/school?

6. Who should be actively involved in providing help to girls' infected or affected by HIV and AIDS pandemic in school and why?

7. As a teacher what challenges have you faced in trying to provide help to the infected and affected girls by HIV and AIDS pandemic in your class/school?

8. Suggest solutions that can be adopted by the school management to help girls pursue education successfully in an environment ravaged by HIV and AIDS?

9. Suggest remedies that can be used by the Ministry of Education to deal with the challenges faced by the girls as they pursue education in an environment ravaged by HIV and AIDS pandemic?

APPENDIX F

Interview Guide for Girls who have left School.

The interview schedule is part of the research examining the psychosocial stressors faced by girls in the face of HIV and AIDS pandemic in Kenya and to what extent they are contributing to girls dropping out of school.

1. What problems related to HIV and AIDS made you to leave school?
2. Since you left school, what have you been doing and who are you living with?
3. What are some of the difficulties that you are facing since you left school?
4. Can you suggest ways through which girls that have left school, can be helped to deal with the problems they are facing?
5. What are you doing now to cope with the problems related to HIV and AIDS pandemic while out of school?
6. In your opinion do you think there is hope for infected or affected girls by HIV and AIDS who have left school?
    a. If Yes what kind of hope
    b. If No why do you think so?
7. Suggest ways through which girls affected and infected by HIV and AIDS pandemic can be assisted in and out of school.

APPENDIX G

Observation Checklist in School

The study observed 15 girls at home and 30 girls in school. The observation took three months.

Observation	**Inference made**
The faces of the girls-happy/jovial /distressed	Coping strategies: humour, avoidance, or thought suppression.
No textbooks, tattered bag, no exercise books	negligence and poverty
Not engaging in play/interaction	socially withdrawn child/girl
Grooming/torn and dirty clothing	hopelessness or helplessness
Poor participation in class	Being absent minded in class
Relationship with the teachers	self esteem, poor-low self esteem

Observation checklist at home (girls who have left school)

Observation	**Inference made**
How girls relate with neighbours	Acceptance/rejection
Lifestyle which depicts coping	Denial/are they grieving/isolated
Type of dressing	seeking attention/hopelessness
Appearance-jovial/moody	Avoidance, or thought suppression.
The housing-poor housing/ no food,	An environment that lacks basic needs
Signs of fire	Whether any cooking had take place

APPENDIX H

Document Analysis

The following documents were analyzed:

DOCUMENT	**WHAT WAS ANALYZED**
Records in Kisumu west district office	Establish the number of AIDS orphans
Admission Register	The admission of girls in different classes
Class register	Class attendance for girls The consistency of attendance
Mark sheet	Marks for evaluation Raw scores-Performance

APPENDIX I

Teachers Responses during the Interview

Researcher	What challenges related to HIV and AIDS are faced by infected and affected girls in school	Statement No.
Respondents	poor academic performance there has been frequent absenteeism by most girls' from school because they take care of their siblings and the infected who are sickly and this makes them to be absent from school.	1
	Frequent absenteeism since they are left with the responsibility of looking or taking care of the young ones who are left at home and they are at a young stage that they cannot even take care of themselves and even do something constructive.	2
	Lack financial resources they cannot also pay the school fees in time due to untrustworthy well wishers who tell them that they are going to pay this leads to psychological torture.	3
	Lack concentration in the class activities since most of them tend to think mostly about what is affecting them back at home especially due to mistreatment by relatives.	4
	Repeating or deferred studies due to poor performance and absenteeism	5
	Increased number of orphans since AIDS has killed most of the parents and guardians and the ones that are left are still those at an early age.	6
	Negative thoughts about life, responsibilities and what people say about them.	7
	Withdrawn especially them who have tested positive and have not accepted their status.	8
	Taking care of their siblings there has been inadequate time to do the home work given to them at school since when they go back home there is a lot of responsibilities that they have to carry out like cooking and taking care of the young ones.	9
	Difficult to control taking advantage of the fact that she is sick and should	10

	not asked anything or disciplined.	
	Dropping out of school early pregnancies especially in Form 2 and 3 at least 2-3 girls become pregnant every term and they are lured by men who have money from fishing	11
	Stigmatization-there is still stigma among most of the student in the school and even to some of the teachers in the school	12
	Discrimination of those infected and affected by their fellows in class and this has greatly contributed to poor performance in class work since there is no unity in them.	13
	no motivation to work in school coz they believe they have no future	14
	early marriages poverty among girls has pushed them to get married early	15
	Seek help from older men who exploit them sexually, there are old men who try to misuse them so as to give them little money that cannot even cater for their needs**.**	16
	taking care of the sick parents who are not able to take up adult responsibilities	17
	Early pregnancy-girls are easily lured by men because they lack personal effects and they grow the number of admirers increase so does the value of personal effects. By the time the girl is 15 years old it is almost automatic that she becomes pregnant because girls are engaging in unprotected sex	18
	Depression and girls are hopeless/helpless and they believe they have a bad future	19
	Old grandmas taking care of the young who are mourning the death of their children	20
	poor performance in sports especially the sick ones	21
Researcher	**How the challenges of HIV and AIDS pandemic have affected girls academic performance**	
Respondents	Absenteeism affects girls academic performance negatively since most of the time they are not in school when lessons are being taught	22

	low self esteem and they spend most of their time thinking about their situation and have no time or reason to work hard in school	23
	no motivation hence poor performance no future because death soon so there is no need to work hard in school	24
	lack of time to do school work because of the many responsibilities at home	25
	withdrawal from class activities because they think negatively about themselves	26
	dropout of school as a result of discrimination in school by fellow learners and teachers	27
	negative thoughts hence poor performance	28
	frustration by fellow classmates and some teachers hence poor performance	29
	breadwinners hence no concentration because of fatigue	30
	harsh guardians who mistreat the girls leading to poor performance	31
	no food therefore poor performance because they are unable to concentrate with empty stomachs	32
	sickly girls perform poorly due to visits to clinics and frequent hospitalization	33
Researcher	**How have HIV and AIDS challenges affected you as a teacher**	
Respondent	poor syllabus coverage due chronic absenteeism and teachers keep on repeating lessons to help the absentees.	34
	frustration from the fact that girls do not act on information given to them-no behaviour change	35
	having to contend with undone homework and do not know how to deal with such girls because as a teacher you know what they are going through at home	36
	due to emotional stress girls are slow in understanding	37
	teaching fatigued girls has proved to be difficult	38
	having to work extra hours in G& C and helping those who miss lessons	39

	so much time used in guiding and counselling instead of teaching	40
	don't feel motivated to teach due to learners absenteeism and poor performance in exams	41
	Some teachers feel that girls can always get married to men who have money but boys are the bread winners in future so more attention should be given to them.	42
	With HIV and AIDS there is constant need to provide tender care in school to girls while in school and a teacher I don't have time.	43
	Missing school to avoid punishment for un done homework and they are not willing to talk to the teachers, they only confide to their peers and ask their peers "how can I come to school with undone home work when I know this attracts immediate punishment from the teachers?	44
	having to keep on giving money (chipping in) to help the desperate girls with basic needs even when one is "broke" (state of not having money)	45
Researcher	**what coping strategies are being used by the affected and infected girls in school**	
Respondent	try to fend for their families while in school	46
	Some have accepted the reality of life and are trying to live positively	47
	Some keep away from school especially when they are overwhelmed by work at home and school	47
	Trying to do both school work, household chores and income generating activities which is proving difficult for many	48
	Advising them to visit VCT to be sure of their status and live wisely	49
	Seeking guidance and counselling	50
	Abandoning school altogether	51
	Trying to understand themselves	52
	Trying not to think about their problems (thought suppression)	53
	Seeking for bursaries to cater for their school fees	54
Researcher	**who should be actively involved in the provision of help to infected and affected girls**	

Respondent	Teachers	55
	Government	56
	parents/guardians	57
	spiritual leaders	58
	female teachers	59
	well wishers	60
	NGO's	61
	the community	62
	Relatives	63
Researcher	**Challenges faced by teachers in the provision of support**	64
Respondent	inadequate resources	65
	un co-operative girls who are not willing to open up	66
	denial by the infected and affected girls	67
	large numbers of infected and affected girls so teachers are overwhelmed by their needs	68
	feeling demoralized due to girls poor performance and no behavioural change	69
	stigmatization by teachers, peers and relatives	70
	girls refusing to talk about the difficult situations they are facing	71
	no training in the field of guidance and counselling so teachers have no skills	72
	no support from the school management some school managers are simply not concerned with the infected and affected girl-child	73
	the mean grade syndrome where schools are more interested in producing good grade at the expense at whatever cost	74
	using so much time on G& C instead of teaching	75
	some being withdrawn from school by parents and guardians especially the disabled	76
	Common rape, defilement and incest especially the ones who are hard on hearing and the guardians take no action against the perpetrators.	77

	Some parents/guardians just damp their disabled daughters in school and forget them	78
	envy from those not infected or affected but needy	79
	I have been taking care of orphans for a long time so I understand the girls very well	80
	no government support in helping the infected and affected girls	81
Researcher	**Teachers suggested solutions to help girls pursue education in an environment ravaged by HIV and AIDS pandemic**	
Respondent	provide food, sanitary towels	82
	proper guidance and counselling	83
	have a lunch programme	84
	trained teachers in guidance and counselling	85
	have fee waived for infected and affected girls	86
	invite health professional to give talks	87
	sensitize the local community affected and infected girl-child support	88
	more involvement of parents and guardians in girls school work	89
	have recreational facilities to such girls to help them deal with their stress	90
	look for well wishers to support the infected and affected girl-child	91
	provide an office for guidance and counselling	92
	affected girls should be taken to boarding schools	93
Researcher	**Remedies by the ministry of education to deal with challenges faced by girls as they pursue their education in an environment ravaged by HIV and AIDS pandemic**	
Respondent	provide financial needs for the infected and affected girl-child	94
	provide food, uniforms and health care (medication)	95
	support the feeding programme to avoid going home for the girls who many times do not turn back to school for the afternoon lessons due to the responsibilities they have to content with at home.	96
	HIV and AIDS to be taught as a subject from pry to tertiary level to avoid misinformation	97

APPENDIX J

Interview Responses from Girls who have left school

Researcher		Statement
	Problems related to HIV and AIDS pandemic that made you leave school	**No.**
Respondent	school-no school fees because there is no one to pay for me	1
	death of my parents has brought negative impact in my education and there is poverty and I cannot continue with my education	2
	Isolation by my friends and teachers since they have negative thoughts towards me	3
	Discrimination by other learners who engage in negative talk about the affected and infected girls who are in school.	4
	People hate me because of my status and I found it difficult to remain in school because I felt rejected by everybody around me and I left school in search of acceptance.	5
	I was not able to concentrate because I kept thinking about my status because I know death is soon coming my way.	6
	I have to take care of my siblings because my parents died at an early age so I cannot continue with my education for the sake of my siblings hoping they will succeed and become responsible people.	7
	Being sickly therefore missing so much and I was not able to cope with school work.	8
	Due to poor performance as a result of stigma I suffered with students and pupils in school	
	Harsh relatives my uncle want to sell the two cows that we depend on so I have leave school to cater for my four siblings and ensure they have the necessities' to go to school.	9
	Still there is a lot I have to do to cater for myself and siblings and this has led me to temptation of sexual immorality.	10
Researcher	**Since you left school who are you living with**	
Respondent	Grandmother who also needs my support	11

	Guardian/maternal uncle/aunt	12
	Stepmother	13
	Alone with my siblings	14
Researcher	**How are you managing being out of school**	
Respondent	Seeking guidance and counselling	15
	Talking to friends and relatives whom I can trust	16
	Ignoring the negative talk about myself especially from my former school mates, teachers and neighbours who are generally hostile towards us.	17
	By attending seminars where we learn more about coping skills	18
	Employment working for neighbours who are able as house help	19
	Doing small business to sustain my grandmother and my siblings	20
	Knowing my rights so as not to be mistreated or abuse (people not to take advantage of me)	21
Researcher	**What have you been doing since you left school**	
Respondent	Doing quarrying and mining though its dangerous for me I must survive	22
	Small business like selling Mandazi's but I incur a lot of losses	23
	Selling maize with grandmother	24
	Doing household chores and working in the farm	25
	Being a house help to neighbours who can afford to pay me	26
Researcher	**Difficulties faced since you left school**	
Respondent	Loneliness because people don't like associating with me especially my former classmate who are continuing with their education	27
	No food most of the time because relatives have abandoned us and even when we work for the relatives they refuse to pay us or pay very poorly.	28
	Being isolated by relatives and friends because to them we represent (burdens) problems.	29
	No parental care, no comfort and those who were my parent's friends have abandoned us.	30
	Negative thoughts about myself and my future (I have no future)	31
	Mistreatment from relatives especially stepmother who treats me as one of her	32

	workers	
	Our parents friends and relatives have abandoned us completely	33
	Since people know nobody can cater for us we are exploited and this leads to child labour in that I and my siblings work for a long time doing hard work and at the end the payment is just a quarter of the work done.	34
	Fear of meeting my former teachers and classmates because of the many questions they ask me and I don't know what to tell them.	35
Researcher	**Suggest ways through which girls like you can be helped**	
Respondent	Being helped with what they lack like food, clothing, shelter and school fees	36
	Thro' guidance and counselling	37
	Create awareness about HIV and AIDS among learners, teachers and community.	38
	Teach girls about the effects of HIV and AIDS to their education	39
	Being given moral support especially by fellow students, teachers, relatives, neighbours and community at large.	40
	Girls be given training in courses that can help cater for their daily needs	41
	Those who can still perform and are interested in pursuing their education should be taken back to school	42
	Visit the VCT to know their status and accept the results as they are	43
	Those who can to give priority to girls when offering jobs for unskilled people	44
Researcher	**How are you coping with the problems related to HIV and AIDS**	
Respondent	Seeking Guidance & Counselling	45
	Building strong relationships to lean on in-case there is need	46
	Accepting my status and living positively	47
	Attending seminars to learn how to cope with the stressors I am facing due to HIV and AIDS pandemic.	48
	Avoiding bad company that can make me do things I would not like to do	49
	Trying to seek help from relatives who are able	50
Researcher	**Is there hope for infected or affected girls by HIV and AIDS pandemic**	
Respondent	Yes-because ARV's are there and one can continue with education, life moves on, there is behaviour change among girls, better future and no more dying early.	51

	No-because people have turned away from us, no basic needs, there are early marriages, sexual activities leading to infection of HIV and one can die any time	52
Researcher	**Suggest ways through which girls affected or infected in and out of school can be assisted.**	
Respondent	Being helped with what they lack	53
	Thro' guidance and counselling	54
	Create awareness about HIV and AIDS	55
	Teach them about the effects of HIV and AIDS to girl-child education	56
	Being given moral support	57
	Be given training in Vocational courses to be able to fend for themselves	58
	Those who can still perform to be taken back to school and those in school to be Provided for with school fees and other basic needs like sanitary towels	59
	Visit the VCT to know their status	60
	Being offered unskilled labour jobs for those that have left school	61

APPENDIX K

Samples of Narrative from the Education Officer (Maseno)

Researcher	**For how long have you been in this station**	**Statement No.**
Respondent	For over 10 years	1
Researcher	**What are the challenges facing the MOE in dealing with problems associated with HIV and AIDS pandemic in schools in your area of jurisdiction?**	
Respondent	There are many challenges we are facing among orphans	2
	Absenteeism, no sanitary towel, tattered or no uniforms and only one pair sometimes they have to wear the uniform while not properly dry and	3
	this negatively affects their self esteem	4
	early pregnancies especially in standard 6, 7 and 8 and Forms 2 and 3	5
	by the time a girl is 15 years old there are things that she must have like body oil, soaps, clothes, perfumes and shoes and any girl who does not have these items feels out of place and thus suffers low self esteem	6
	To start with there is only one man who provides these items, but as time goes on the needs increase and the value of these needs goes up.	7
	The girls demand for more valuable items leads to having multiple partners to cater for these needs and this definitely leads to HIV infection.”	8
	by the time a girl is 15 years old there are things that she must have like body oil, soaps, clothes, perfumes and shoes	9
	Any girl who does not have these items feels out of place and she has to seek ways of acquiring these items and men take advantage of such girls.	10

	To start with there is only one man who provides these items, but as time goes on the needs increase and the value of these needs goes up.	11
	The girls demand for more valuable items leads to having multiple partners to cater for these needs and this definitely leads to HIV infection.	12
	Girls heading homes and having to fend for their siblings	13
	Girls taking care of their sick parents and siblings	14
	Girls are easily lured by men because they lack personal effects due to death of parents who would have provided.	15
	Teachers have found the girls to be indiscipline they don't care about their sexuality	16
	Girls do not take serious their academics (have adopted a don't care attitude)	17
	Girls are suffering but don't seem keen on how they can get out of the situation	18
	Girls have negative attitude towards reading and to them it is cumbersome	19
	Girls are often absent minded	20
	Girls have issues but they are not willing to open up	21
	Girls poor performance causing them a lot embarrassments so they run away from school	22
	The culture is seriously working against us like girls at puberty not sleeping in their parents' house and so parents and guardians do not really know where their daughters sleep.	23
	The proximity to the lake where young men are making a lot of money from fishing and use it to lure girls	24
Researcher	**What is the MoE doing to help girls cope with problems associated with HIV and AIDS pandemic**	25
Respondent	Giving bursaries	26

	Some schools have come up with a kitty to provide sanitary towels	27
	We are trying individual counselling to see whether girls can open up.	28
	MoE has given bursaries to some who are in school and performing well academically but nothing for those who have dropped out	29
	District Education management information System collects data from all schools to establish the number infected and affected and those who are pregnant.	30
	Guest speakers to talk to the girls especially from health department	31
	The use of peers especially boys to talk to girls about life skills	32
Researcher	**Basing on your observation does age and class level of infected or affected girls influence their performance**	
Respondent	The class level has a lot of impact because the bigger the girl the more responsibilities at home. For example from class six pregnancies become serious and absenteeism and this is why girls start dropping out school mainly from class six onwards	33
	From class six most girls are at puberty and they have developed secondary sexual characteristics absenteeism is common hence poor performance	34
	Transition between primary and secondary school for the girl-child is very low.	35
	With many chores at home the infected or affected girls are not able to cope with school work	36
Researcher	**What are the challenges faced by MoE in dealing with problems posed by HIV and AIDS**	
Respondent	We have no trained personnel to offer quality guidance and counselling	37
	The high number of orphans in schools who need assistance and counselling services	35
	Some male teachers taking advantage of the affected girls they pose	39

as well wishers but end up sexually exploiting such girls

Researcher **How is the MoE dealing with problems of HIV and AIDS**

The data collected by Efficiency Monitoring Information Service has been used to improve the girl-child education by giving bursaries especially in areas where HIV and AIDS prevalence is high. 40

Teachers who take advantage of orphaned girls are disciplined unfortunately many guardians try to cover up 41

Researcher **What suggestions would you give to the MoE so as to manage HIV and AIDS psychosocial stressors of HIV and AIDS**

Respondent Train teachers to be able to help infected or affected girl-child 42

Have a department that will constantly be assessing the impact of HIV and AIDS 43

Have an effective way of identifying the infected or affected children 44

Researcher **Which organizations are helping HIV and AIDS infected or affected girls in schools**

Respondent Organizations helping infected or affected girls are Umoja Project, Plan International Kenya, AMPATH, FAWE and Community Based Organisations e.g. Girl Child Empowerment Programme 45

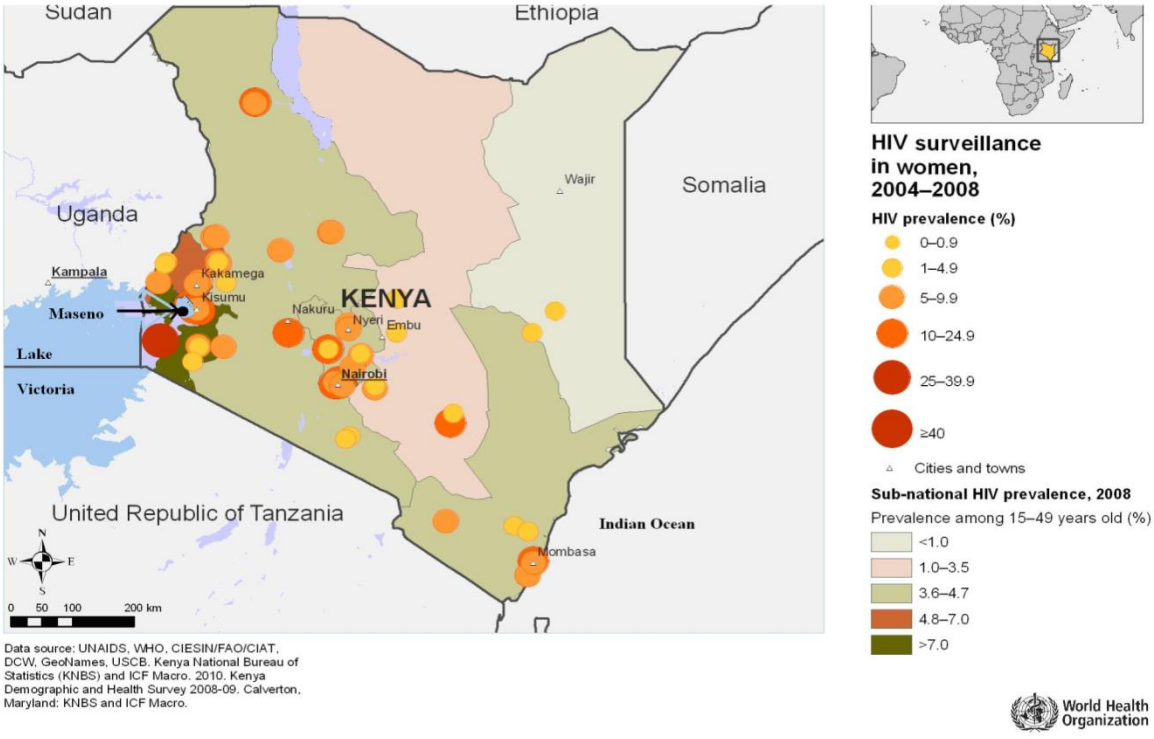
Researcher **What type of help is offered to infected or affected girls by these organizations**

Respondent -The organisations pay school fees for girls, some give food and other basic necessities like sanitary towels. Others have initiated school feeding programmes in selected schools while others have provided furniture and constructed strong classes that can withstand the strong winds experienced in this region 46

A NGO like plan international train teachers on how handle girl-child issues and educate the girl-child on personal issues 47

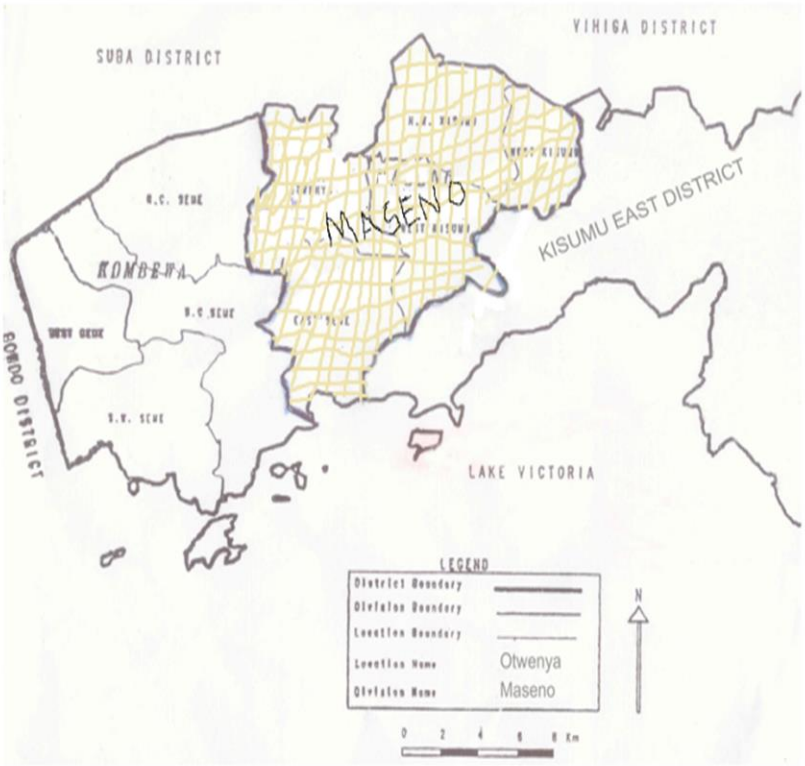
APPENDIX L

Distribution of estimated number of HIV-positive women (age 15–49) per square kilometre, Kenya 2008



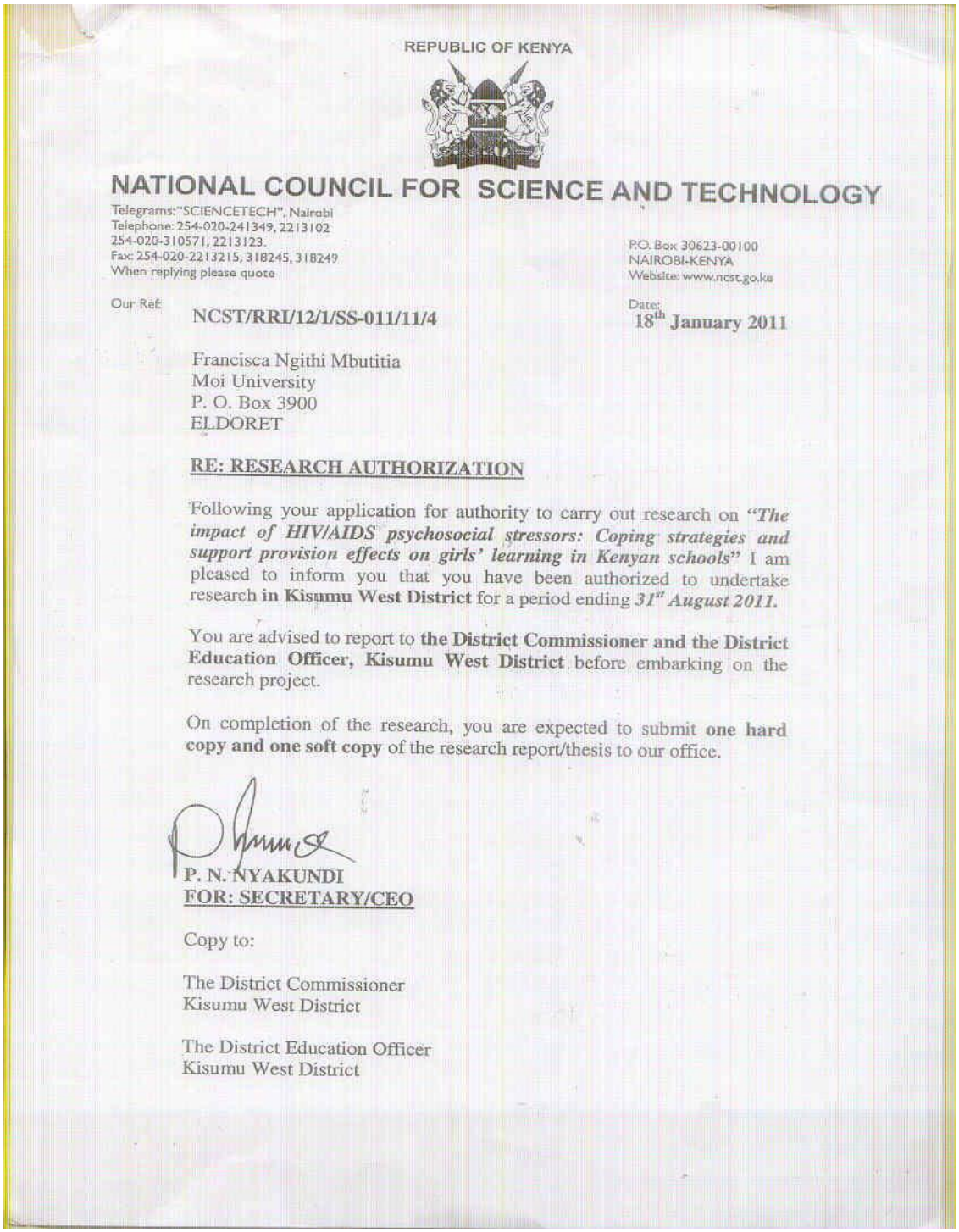
APPENDIX M

The Administrative boundaries of Maseno Division



APPENDIX N

Research Authorization National Council for Science and Technology



REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: NCST/RRI/12/1/SS-011/11/4

Date: 18th January 2011

Francisca Ngithi Mbutitia
Moi University
P. O. Box 3900
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"The impact of HIV/AIDS psychosocial stressors: Coping strategies and support provision effects on girls' learning in Kenyan schools"*** I am pleased to inform you that you have been authorized to undertake research **in Kisumu West District** for a period ending ***31st August 2011.***

You are advised to report to **the District Commissioner and the District Education Officer, Kisumu West District** before embarking on the research project.

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

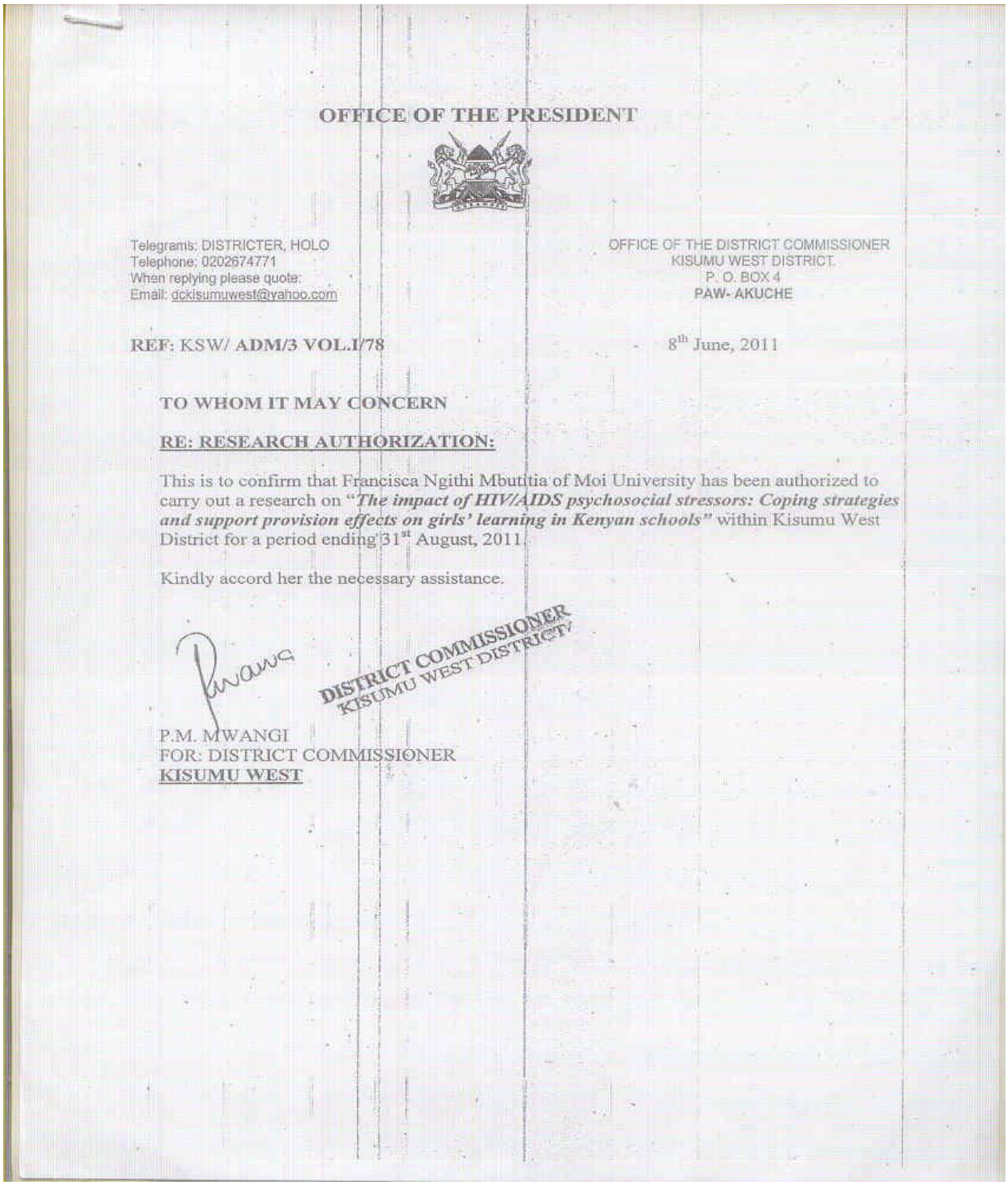
Copy to:

The District Commissioner
Kisumu West District

The District Education Officer
Kisumu West District

APPENDIX O

Research Authorization given by Kisumu West District Commissioner



OFFICE OF THE PRESIDENT

Telegrams: DISTRICTER, HOLO
Telephone: 0202674771
When replying please quote:
Email: dckisumuwest@yahoo.com

OFFICE OF THE DISTRICT COMMISSIONER
KISUMU WEST DISTRICT
P. O. BOX 4
PAW- AKUCHE

REF: KSW/ ADM/3 VOL.I/78

8th June, 2011

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION:

This is to confirm that Francisca Ngithi Mbutitia of Moi University has been authorized to carry out a research on ***"The impact of HIV/AIDS psychosocial stressors: Coping strategies and support provision effects on girls' learning in Kenyan schools"*** within Kisumu West District for a period ending 31st August, 2011.

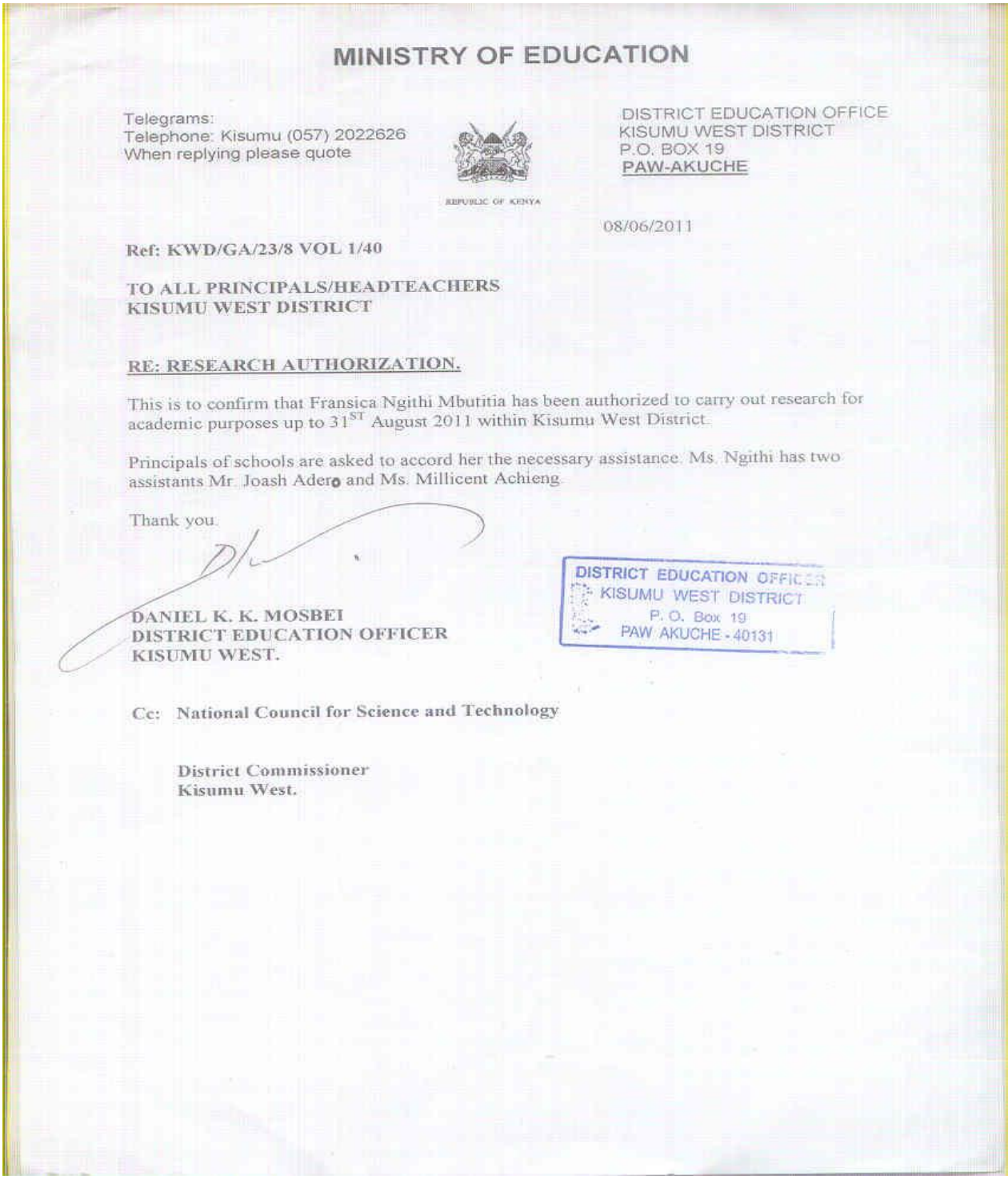
Kindly accord her the necessary assistance.

DISTRICT COMMISSIONER
KISUMU WEST DISTRICT

P.M. MWANGI
FOR: DISTRICT COMMISSIONER
KISUMU WEST

APPENDIX P

Research Authorization given by Kisumu West District Education Officer



MINISTRY OF EDUCATION

Telegrams:
Telephone: Kisumu (057) 2022626
When replying please quote

REPUBLIC OF KENYA

DISTRICT EDUCATION OFFICE
KISUMU WEST DISTRICT
P.O. BOX 19
PAW-AKUCHE

08/06/2011

Ref: KWD/GA/23/8 VOL 1/40

TO ALL PRINCIPALS/HEADTEACHERS
KISUMU WEST DISTRICT

RE: RESEARCH AUTHORIZATION.

This is to confirm that Fransica Ngithi Mbutitia has been authorized to carry out research for academic purposes up to 31ST August 2011 within Kisumu West District.

Principals of schools are asked to accord her the necessary assistance. Ms. Ngithi has two assistants Mr. Joash Adero and Ms. Millicent Achieng.

Thank you.

DISTRICT EDUCATION OFFICER
KISUMU WEST DISTRICT
P. O. Box 19
PAW AKUCHE - 40131

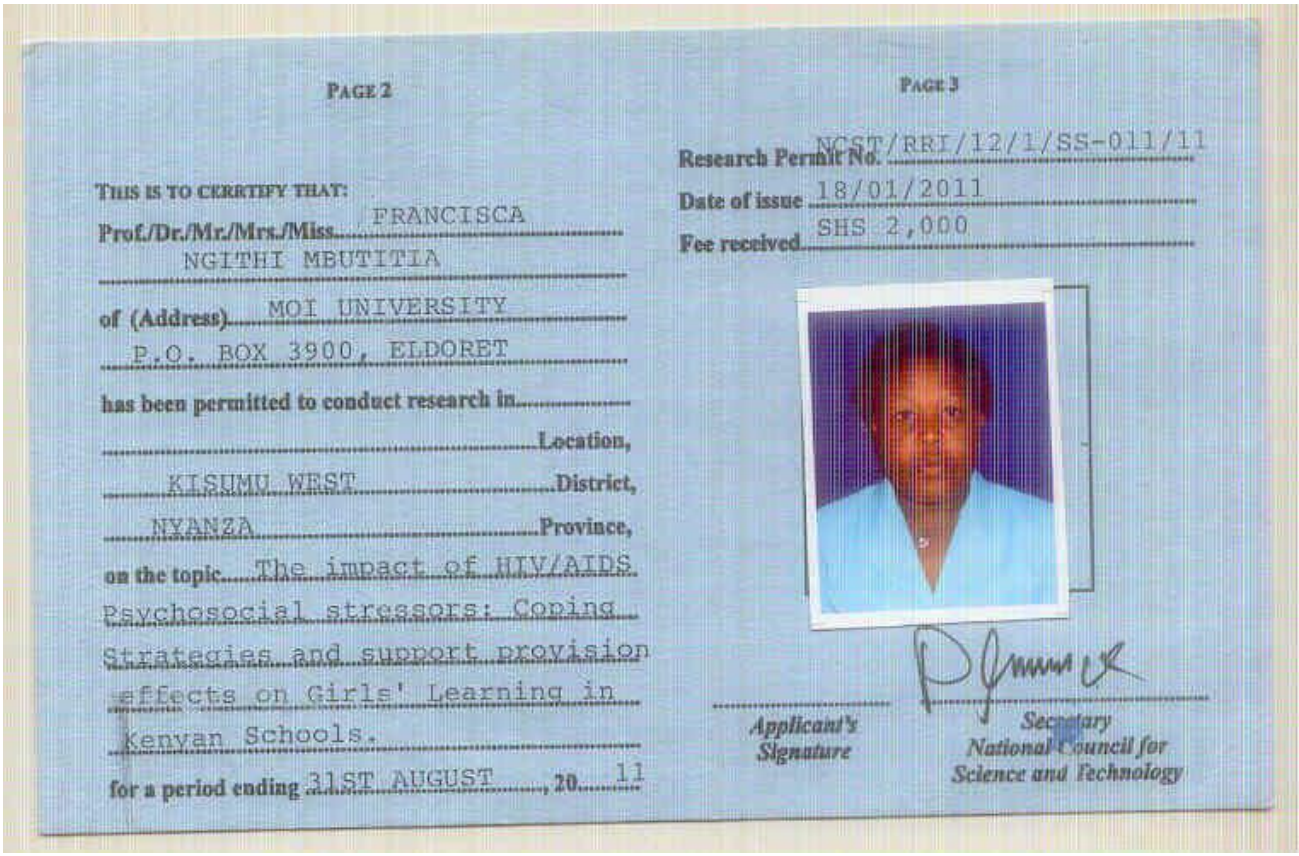
DANIEL K. K. MOSBEI
DISTRICT EDUCATION OFFICER
KISUMU WEST.

Cc: National Council for Science and Technology

District Commissioner
Kisumu West.

APPENDIX Q

Research Clearance Permit



PAGE 2

THIS IS TO CERRTIFY THAT:

Prof./Dr./Mr./Mrs./Miss. FRANCISCA NGITHI MBUTITIA

of (Address) MOI UNIVERSITY P.O. BOX 3900, ELDORET

has been permitted to conduct research in

Location, KISUMU WEST District, NYANZA Province,

on the topic The impact of HIV/AIDS Psychosocial stressors: Coping Strategies and support provision effects on Girls' Learning in Kenyan Schools.

for a period ending 31ST AUGUST, 20 11

PAGE 3

Research Permit No. NCST/RRI/12/1/SS-011/11

Date of issue 18/01/2011

Fee received SHS 2,000

Applicant's Signature

Secretary National Council for Science and Technology