ACCESS TO HEALTH CARE: A CASE OF HIV/AIDS ORPHANS AND VULNERABLE CHILDREN (OVCs) IN A NAIROBI CITY INFORMAL SETTLEMENT.

A THESIS SUBMITTED IN PART FULFILMENT FOR THE AWARD OF THE DEGREE OF MASTERS OF PUBLIC HEALTH OF THE UNIVERSITY OF NAIROBI.

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August, 2005.
DECLARATION

I, Francis K. Muma, do hereby declare that this thesis is my original work and has not been presented to any other institution for the purpose of obtaining a degree.

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Date: 25th October 2005

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DEDICATION

This thesis is dedicated to all those children orphaned or made vulnerable by HIV/AIDS, hoping this work will make a small contribution in the struggle, and to all men and women of goodwill.
ACKNOWLEDGMENTS

I...do not cease to give thanks for you, making mention of you in my prayers...

-Ephesians 1:16-

This thesis has truly been a joint effort, and my warm gratitude goes to the many people who contributed their time, skills and expertise to make it from idea to documentation. I would like to thank my friends, colleagues and faculty members who made this research work possible.

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Warmest thanks goes to my research assistants for facilitating interviews with orphans and vulnerable children (OVC) household respondents in Kibera. If it were not for their accurate enumeration of the necessary data, the realization of the objectives of this study would remain a nightmare forever.

I am deeply aware of, and thankful to all those anonymous respondents who courageously shared their domestic and personal stories and made this research possible. This research is theirs; it is their knowledge and ideas for the future of their children, brought out through speaking with me and my research team about their households.

The Department of Community Health, University of Nairobi, and its staff did a sterling job in sourcing a wide range of research materials for me, including electronic databases and/or entrusting me with large numbers of documents.
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<tr>
<td>APHRC</td>
<td>African Population and Health Research Center</td>
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<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>CSD</td>
<td>Child Survival Development</td>
</tr>
<tr>
<td>FCG</td>
<td>Family Care Giver</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
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<tr>
<td>GoK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>HAART</td>
<td>Highly Active Anti-Retroviral Treatment</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>JICOSHEP</td>
<td>Jitengemee Community Self-Help Programme</td>
</tr>
<tr>
<td>KAOC</td>
<td>Kenya Aids Orphans Center</td>
</tr>
<tr>
<td>KDHS</td>
<td>Kenya Demographic and Health Survey</td>
</tr>
<tr>
<td>Kg</td>
<td>Kilogram</td>
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<tr>
<td>KICOSHEP</td>
<td>Kibera Community Self-Help Programme</td>
</tr>
<tr>
<td>Ksh</td>
<td>Kenya Shilling</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NASCOP</td>
<td>National AIDS and Sexually Transmitted Diseases Control Programme</td>
</tr>
<tr>
<td>NCB</td>
<td>National Capacity Building</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>ORS</td>
<td>Oral Rehydration Salts</td>
</tr>
<tr>
<td>OVCs</td>
<td>Orphans and Vulnerable Children</td>
</tr>
<tr>
<td>PC</td>
<td>Provincial Commissioner</td>
</tr>
<tr>
<td>PLWHA</td>
<td>People Living With HIV/AIDS</td>
</tr>
<tr>
<td>PMO</td>
<td>Provincial Medical Officer</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV/AIDS</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Education Fund</td>
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OPERATIONAL DEFINITIONS

Health: Is a state of complete physical, mental and social well-being and not merely the absence of a disease or infirmity ¹.

Health care access: This implies the ability of a population to use a specific facility or service given the existence of certain barriers, which may be physical (distance, travel time), economic (travel cost, charges) or social and cultural (caste or language barrier) ².

Child: For purposes of legal interpretations and connected intent, a child is any human being under 18 years of age ³⁴.

Vulnerable children: Includes children living with HIV/AIDS, those whose parents are sick with HIV/AIDS, and more generally, children who are especially at risk because of poverty, discrimination or exclusion whether as a consequence of HIV/AIDS or not i.e. children living in high-risk settings due to either a high HIV prevalence or proximity to high-risk behaviours as in households on or near truck routes, brothels, slums etc ¹². For purposes of this study, vulnerability is restricted to having either one or both parents sick with HIV/AIDS.

Orphan: A child aged under 15 years who loses his or her mother (maternal orphan), father (paternal orphan) or both parents (double orphan) ³⁷.

Key Informant: Is a person who is likely to have in-depth insight, knowledge and experience about the issue or activity and is recognized as a leader in the particular field of interest ³⁵.

Focus Group Discussion (FGD): Is a group discussion that gathers together people from similar backgrounds or experiences to discuss a specific topic of interest to the researcher. It is a technique that allows a small group of respondents to be guided by a skilled moderator into increasing levels of focus and depth on key issues of a research topic. Such an approach creates interactions that usually stimulate richer responses or new and valuable insights into the study topic. It is also a way of illuminating conflicting opinions and their reasons ³⁵, ³⁶.
**Household:** Is an entity comprising of a person or group of persons generally bound by ties of kinship, though not always, who normally reside together under a single roof or several roofs within a single compound and who share the community life in that they are answerable to the same head and share a common source of food and other domestic amenities.

**Pharmacist:** This refers to a professional trained to prepare and dispense medicines and to provide information about them. However in the context of this study, the word 'pharmacist' was used to denote any individual (including shopkeepers) who had the ability to dispense medication regardless of whether professionally trained or not.

**Health indicator:** Is an aspect that is a pointer or an index of measuring or assessing the health status of an individual or community.

**Health determinant:** Is an element that influences the health status of an individual or community either positively or negatively.

**Quack:** A totally unqualified individual posing as an expert, especially an individual pretending to be a physician.
EXECUTIVE SUMMARY

Introduction and background

Access to health care is all about receiving support and treatment, the links between treatment and prevention and how they can combine to reduce the impact of infections; and the barriers to receiving treatment. Children who have been orphaned by HIV/AIDS may not receive the health care they need. This is sometimes because it's assumed that they are infected with HIV and their illnesses are untreatable. However, most AIDS orphans are not HIV infected. Research by UNAIDS shows that about 2/3 of children born to HIV positive parents do not contract the infection. Thus HIV/AIDS orphans are at a greater risk of dying of preventable infections because of the mistaken belief that when they become ill, it must be due to HIV/AIDS and, therefore, no point in seeking medical care.

Study objectives

The study examines the effects of HIV/AIDS on orphans and vulnerable children’s (OVCs) access to health care. It identifies health care determinants and challenges to health, including morbidity pattern, perceived quality of health care support and health-promotion within OVCs.

Methodology:

A descriptive cross-sectional study design consisting of judgmental/purposive sampling was used to select the study locations. The study population was OVC’s parent/s, family caregivers/guardians and community key informants. A household with a child less than 15 years of age orphaned or made vulnerable by HIV/AIDS or a related illness was the sampling unit whereas the sampling frame included all households with children less than 15 years of age orphaned or made vulnerable by HIV/AIDS or related diseases in Kibera division. Sample size was determined using Dobson’s formula for descriptive studies. Data was collected using both quantitative and qualitative techniques. Quantitative data was analyzed using SPSS computer
package whereas qualitative data was analyzed thematically in line with the study objectives and the summary so obtained incorporated into validating the results of data analyzed quantitatively.

Results:

Out of the 399 respondents interviewed, 46.4% were males while 53.6% were females. The results indicate that surviving OVC parents headed 37.6% of the households whereas the rest had a close relative as the head. The mean age of the head of household was 34.7 years. The results indicate that malaria was the most common illness that affected the OVCs. The most preferred choice of treatment was buying over-the-counter medications. Lack of funds was the main reason for the delay in seeking medical help.

Of the OVCs attended to by allopathic care providers in health facility settings, 32.6% of them ended up being admitted in various health institutions. Approximately 21% of the admissions had their bills waived by the respective institutions whereas another 4.6% absconded due to inability to pay. About 52% of the guardians spend between Ksh.1-249 on medication for a sick OVC while 17.2%, 8.4% and 22.6% spent between Ksh. 250-499, 500-749 and more than 750 respectively per OVC per single disease episode. About 11% of the household’s gross income was spend on medical costs per every OVC who fell sick within a month.

The OVC-guardian perception of what constituted quality health care included presence of well trained personnel, regular supply of drugs and other utilities, appropriate and functional diagnostic equipment, positive staff attitudes and affordable services. These aspects varied for each health care facility considered in this study.
Conclusions:

The majority causes of morbidity in the study area are due to diseases and conditions that are preventable through observing basic hygiene and environmental manipulation. Malaria was cited as being the most common illness that affects OVCs in the area. Other common illnesses as perceived by the respondents included respiratory conditions, gastro-enteritis including worm infestation, typhoid fever and malnutrition.

Access to quality health services for OVCs in Kibera is only universal in principle but in practice, these services are not fully accessible or are of insufficient quality. For example, there is high probability of misdiagnosis of diseases by the respondents. Although malaria was cited as the most common illness that affected the OVCs, more needs to be done to ascertain the diagnosis. This is because in most of the times treatment was based on the assumption that every time a child had fever, it must have been due to malaria. Secondly, from FGDs and key informant interviews, medically unprofessional people operated most of the private health institutions. With the majority of the OVCs buying drugs over the counter, drug-resistance may increase due to irrational use of the drugs as well.

With more than a third of the heads of households living below the poverty line (less than one dollar a day) and only 5.1% having gross household income of Ksh. 9,000 and above, poverty remains a serious problem in Kibera leading to inability to afford quality health care services.

The findings also indicate that quality of health care in the publicly funded health care institutions was below the guardians’ expectations. Poor quality of health care was demonstrated by shortage of drugs, inadequate personnel and lack of diagnostic equipment among others. The results further revealed that availability of and physical accessibility to health care outlets not obstacles to health care. This is because of the area’s proximity to Kenyatta National Hospital and Mbagathi District hospital.
Policy recommendations

There is need to address the material needs of AIDS-affected households, whether in form of income-generating activities/projects, vocational training, food, clothing or school fees. HIV-positive parents and guardians are very vocal about the need for material support to provide for their many dependants.

There is also need to promote and improve the provision of quality health care to OVCs at an affordable cost. It is important to introduce a social insurance scheme whose premium regimen can be affordable by low income households.

The government through the ministry of health should ensure adequate supply of drugs, more trained personnel and diagnostic equipment such as laboratories and x-ray machines in order to enhance access to treatment for OVCs. Government officers from the relevant fields should also increase their surveillance in getting rid of quacks in Kibera who go about dishing out drugs to unsuspecting clients with full disregard of the ethics of medical practice in Kenya. Further, the government should explore the role of alternative health care providers.
1.1. THE HIV/AIDS CONTEXT

Barely two decades ago, little was known about Human Immunodeficiency Virus (HIV) and the Acquired Immunodeficiency Syndrome (AIDS) and, to this day, confusion exists regarding the origin of HIV/AIDS. AIDS is the disease manifestation caused by HIV. The virus causes illness by weakening the immune system of the affected individual. People with AIDS can become very ill or die of illnesses that healthy people fight off, like diarrhoea. The virus can live in the body for many years without causing any visible or obvious illness. In some people, it may take 10 years or more to go from HIV infection to AIDS while for others, it may take as little as six months. HIV can be transmitted to others from the moment a person becomes infected, before AIDS and obvious illness develop. As the immune systems weaken, people infected with HIV start to feel more tired and may start loosing weight. In addition, they may suffer from common illness like diarrhoea or coughs that do not respond to treatment. In Africa, it is estimated that mortality due to AIDS occurs within six months of diagnosis with AIDS particularly those not on anti-retrovirals but this can vary widely.

The tragedy is that AIDS is now causing serious health, social and economic problems in countries and communities that are least able to combat the disease. In the developed countries, new drug therapies and changes in behaviour have significantly reduced AIDS-related mortality. In developing countries however, AIDS-related deaths continue unabated. The disease affects all levels of the society, leaving hardly any families untouched. In Sub-Saharan African countries, the pandemic is worsening the poverty situation in addition to reversing social and economic gains. The poor cannot afford the most elementary prophylactics, such as condoms while the cost of medical treatment is beyond the reach of the majority of the people. Despite the known and scientifically proven benefits of antiretroviral agents, only a few Kenyans have access to the antiretroviral medications.
1.2. STATEMENT OF THE PROBLEM

Despite the compelling evidence of the expanding OVCs crisis resulting from the AIDS pandemic, the health of OVCs has received little attention from stakeholders addressing the AIDS pandemic. Research by UNAIDS shows that about two-thirds of children born to HIV-positive parents do not contract the virus and grow up to be as healthy as any other child. Available evidence also shows that HIV/AIDS orphans are at greater risk of dying of preventable infections and diseases because of the mistaken belief that when they become ill, it is due to HIV/AIDS and, therefore, are not taken for medical care.

Provision of health care to all Kenyans is a basic human need and is an essential precondition of overall economic development of the country. In Kenya, this is well outlined in the Sessional Paper number 10 of 1965, the Constitution of Kenya and in the development plans. In line with these provisions, the government's main objectives have been to strengthen and carry out measures for the eradication, prevention and control of diseases, provision of adequate and effective diagnostic, therapeutic and rehabilitation services for the whole population, and; to carry out biomedical and health service research as a means of identifying more efficient and cost-effective methods for the delivery of health care services.

Consequently, this thesis seeks to address the major health problems of HIV/AIDS orphans and vulnerable children in Kibera, the barriers the OVCs face in accessing health care and what can be done to improve access to health care services among OVCs.
1.3. STUDY OBJECTIVES

The broad objective of this dissertation is to assess the health problems of OVCs in Kibera and the barriers the OVCs encounter in accessing health care. However, the specific objectives are:

i) To identify the main health conditions affecting OVCs in Kibera slums.

ii) To determine the level of utilisation of health care services by OVCs in Kibera slums.

iii) To assess OVCs and/or their guardians' perceptions of the quality of care provided in the available facilities.

iv) To identify the barriers to access to health care for OVCs in Kibera.

1.4. STUDY JUSTIFICATION

The traditional extended family networks for caring for OVCs are breaking down, with some children orphaned two or more times as aunts and uncles die as well. Grandparents with no income struggle to look after young orphaned children. The grandparents themselves may be in need of health care. The death of a grandparent leaves a situation where there is nobody else in the extended family willing to care for the children, giving rise to orphan households headed by older siblings. Further more, there is a greater reluctance by families to take on HIV infected or orphaned children, partly because of fears that somebody else in the family will contract the virus and partly because of the stigma associated with it. Other reasons include the financial obligations and emotional costs associated with caring for orphaned children.

Information on access to health care for OVCs is important for two reasons: first, because young people are citizens in their own right, yet largely unable to act as self-advocates, and second, because their health determines the health of the future population. Thus the study is critical both as a reflection of the current health status of families (as indicated by the health status of the OVCs) and as a predictor of the health of the next generation. An in-depth understanding of child's access to health care provides planners and policy makers with strategic direction to demonstrably improve the health and quality of life of children. Indicators based on assessment
of child health and access issues as demonstrated in this study are important for identifying progress, problems and priorities, changes over time, and newly emergent issues affecting OVCs in Kenya.

In addition, the findings and recommendations of this study would provide planners and policy makers with information that will allow them strategize on how OVCs could access health care through community-based approaches that do not cut OVCs off from their social origins.
CHAPTER 2: LITERATURE REVIEW

*I applied my heart to know, to search and seek out wisdom and the reason of things.*

-Ecclesiastes 7:25-

2.1. AN OVERVIEW OF HIV/AIDS

Africa is the global epicentre of AIDS accounting for an estimated 83% of all the world’s reported AIDS deaths since the first case was reported. By the end of 1998, at least 34 million people living in sub-Saharan Africa had become infected with HIV, and some 11.5 million of these have already died. An estimated 12 million African children have been orphaned due to AIDS before age 15 and the number of AIDS orphans is expected to grow dramatically in the next 10 years. Although a lot of research has been done, the extent of the impact of the pandemic in Africa is still unknown. The figures available are estimates. Lack of the necessary infrastructure in terms of transportation, health facilities, trained data collectors and processors prevent deeper knowledge and understanding of the pandemic.

A key priority to addressing the orphans and vulnerable children’s (OVCs) access to health care is by increasing access to key pharmaceutical products such as quality generic drugs, vital medicines including drugs for palliative care, such as pain medicine, antibiotics for the treatment of infections and highly active antiretroviral treatment (HAART). The epidemic also affects a larger number of people in the extended families, where people are bound by tradition to feed, cloth and counsel relatives whose households are devastated by the disease. Caring for relatives who have full-blown AIDS and paying for their treatment and burial expenses depletes people’s savings, causes financial and emotional stress and exacerbate poverty. Relations in the extended families, Africa’s ultimate safety net in times of need, are already beginning to experience the burden of AIDS-related problems such as taking care of the medical and other needs of orphans and other vulnerable children in the community.
Infants can acquire HIV from their infected mothers during pregnancy, at the time of delivery, or after birth through breastfeeding. Although less common, infants may also become infected with HIV from contact with infected blood or blood products or HIV-contaminated medical equipment. In the absence of interventions to prevent mother-to-child transmission studies suggest that 25%-45% of HIV-infected breastfeeding women pass on the virus to their babies. About 20% of this transmission takes place during pregnancy and the following 80% transmission occurs during delivery (40%) and through extended breastfeeding, up to 24 months (40%) 60.

The epidemic is also responsible for declining life expectancy and changing population structures in many counties. In parts of East Africa, for example, where HIV infection rates are around 10%, HIV already more than doubles the probability of dying at an early age 59. Life expectancy has decreased by 20% to 40% in countries such as South Africa, Uganda, Kenya, Zambia, Zimbabwe and Botswana. The epidemic will eventually create a population “chimney” in these hard-hit countries, with relatively few persons older than 40 years remaining alive to care for young and the elderly 61.

The 2003 Kenya Demographic and Health Survey (KDHS) indicate that 7% of Kenyan adults are infected with HIV. Women are particularly vulnerable to HIV infection than men, for example, 3% of women aged between 15 years and 19 years are HIV infected compared with less 0.5% of men in the same age bracket. Almost 9% of all women (8.7%) are infected with HIV, compared with 4.6% of men. Women between the ages 20 and 30 years are especially vulnerable. The peak prevalence among women is at age 25-29 years, at 13% while prevalence rises gradually with age among men to peak at the age of 40 to 44 years (9%). Only in the 45-49 year age group is HIV prevalence among men (5%) higher than that of women (4%) 61. Men and women residing in urban areas have a significantly higher risk of HIV infection (10%) than rural residents (6%) do. Nyanza province and Nairobi have the highest total rates of HIV infection at 15.1% and 9.9% respectively. Prevalence in the other provinces ranges from 4% to 6%, except in North Eastern province where the prevalence is less than 1%. In Kenya, HIV prevalence varies significantly among ethnic groups. The Luo have the highest prevalence at 17% of men and 25.8% for their women. Prevalence is also high among the Taita/Taveta at 9.7%. Men and
women in polygamous unions are more likely to be HV-infected than those in monogamous unions (11.6% compared with 6.9%) 62.

Kenya has observed an upsurge in the number of orphans due to the higher deaths occasioned from HIV/AIDS related infections. Data on orphaned children (i.e., children under 15 years of age who have lost either one or both of their natural parents) shows that 9% have lost their fathers, 4% have lost their mothers and 2% have lost both of their biological parents. Altogether, 11% of children below 15 years have lost one or both parents and are considered orphans. Corresponding data from the 1998 KDHS shows a slight increase in the level of orphanhood, from 9% to 11% of children below 15 years of age. Nyanza province has by far the highest level of orphan hood, with almost one in five (19%) children under 15 years having lost one or both of their biological parents 62.

In Kenya, the annual number of AIDS deaths is still rising steeply and has doubled over the past six years to about 150 000 deaths per year. New infections, however, may be dropping to around 80 000 each year. The majority of new infections occur among youth, especially young women aged 15-24 and young men under the age of 30 (Table 1).

Table 1: Kenya's HIV/AIDS prevalence, 2003

<table>
<thead>
<tr>
<th>Description</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult (15-49) HIV prevalence rate</td>
<td>6.7% (range: 4.7%-9.6%)</td>
</tr>
<tr>
<td>Adults (15-49) Living with HIV</td>
<td>1100 000 (range: 760 000-1 600 000)</td>
</tr>
<tr>
<td>Adults and children (0-49) Living with HIV</td>
<td>1 200 000 (range: 820 000-1 700 000)</td>
</tr>
<tr>
<td>Women (15-49) Living with HIV</td>
<td>720 000 (range: 500 000-1 000 000)</td>
</tr>
<tr>
<td>AIDS deaths (adults and children) in 2003</td>
<td>150 000 (range: 89 000-200 000)</td>
</tr>
</tbody>
</table>


Since 1984, over 1.75 million Kenyans have already died. In 2001 alone over 260,000 Kenyans died of AIDS while in 2002, approximately over 300,000 people died of AIDS related illnesses in Kenya. One of the most devastating aspects of HIV/AIDS in Kenya is the impact on the country's most vulnerable population - children. Already there are an estimated 1.5 million orphans who have lost the mother or both parents to AIDS 58. These children need care, shelter,
education, guidance, love, affection, and upbringing. UNICEF forecasts that the number of orphaned children under 15 years of age in Kenya will increase dramatically to exceed 2.2 million by the year 2010.

Many of the orphans have been forced into the streets, scavenging from garbage bins for food. They have no shelter from the ravages of the unpredictable tropical habitat. The social system that could have absorbed these children is no longer effective. Already, children between 8 and 10 years old head many families while child abuse and exploitation are becoming common. According to Linah Kilimo, the minister of state for home affairs, the ministry's policy is to encourage communities to take care of orphans and vulnerable children. "We need to support communities to take care of their orphans," she said. The community is an essential element in the life of individuals, providing context, cultural identity and a network for care and support.

2.2. The importance of health

By definition, health is a state of complete physical, mental and social well-being and not merely the absence of a disease or infirmity and therefore a commonly asked question is: Why is health important and why the focus on orphans and vulnerable children (OVCs) access to it? Part of the answer lies in the obvious recognition that health is an integral part of human well being. However, there is a good deal of ambiguity on how to interpret well being. First is whether well being refers to the avoidance of suffering and relief from pain and how to account for the things that do not relate to the well being.

There are some specific attributes associated with good health which we have reason to value. Being healthy makes life more pleasant, nicer and more desirable. This recognition takes us towards the classical utilitarian perspective which states that health is a state of being able to do things that we value doing. If, for example, being healthy allows a person to take better care of others (for example ones own children, or those of others, or our neighbours, or simply other people whose predicaments appear to us to be unjust or unfair), then this can be seen as one of the emotional fulfilment of god health.
Another central reason for good health is longevity of life i.e. the wit to avoid death, especially premature mortality. Good health may certainly help a person to live longer. Living long is indeed a much-shared inspiration, especially so in regions in which people tend to die early, like Sub-Saharan Africa and Kenya in particular where life expectancy is estimated at 58 years for men and 60-62 years for women.38

2.3 Determinants of child health

Available evidence indicates that the key factors which influence child health are; healthy child development, biological and genetic endowment, access to better health care services, stable income and social status of the parents or guardians, availability of social support networks, education of the parent/guardian and/or of the child, social environment, physical environment, personal health practices and coping skills and culture.49 All these factors are however interrelated.

New evidence on the effects of early experiences on a child’s cognitive development, school readiness and health in later life has led to a growing consensus about early child development as a powerful determinant of health.50 For example, a child’s development is greatly affected by his or her housing and neighbourhood, family income and level of parents’ education, access to nutritious foods and physical recreation, genetic makeup and access to dental and medical care.52 Development stages from conception to age six have the most important influence in the human life cycle. Early positive stimulation in life improves learning, one’s behaviour and health.51 Tobacco and alcohol use during pregnancy can lead to poor birth outcomes. A loving, secure attachment between parents/caregivers and babies in the first 18 months of life helps children to develop trust, self-esteem, emotional control and the ability to have positive relationships with others in later life whereas infants and children who have been neglected or abused are at higher risk of injuries and experience a number of behavioural, social and cognitive problems later in life.50,51

The basic biology and organic make-up of the human body are a fundamental determinant of health. Genetic endowment provides an inherited predisposition to a wide range of individual responses that affect health status.51 Although socio-economic and environmental factors are
important determinants of overall health, in some circumstances genetic endowment appears to predispose certain individuals to particular diseases or health problems \(^5^3\). Studies in neurobiology have confirmed that when optimal conditions for a child's development are provided in the investment phase (between conception and age 5), the brain develops in a way that has positive outcomes for a lifetime \(^5^1\).

Health services, particularly those designed to maintain and promote health, contribute to child health. The health services continuum of care includes treatment and secondary prevention. Disease prevention activities in areas such as immunisation have had good impact on child health and must continue if progress in child health status is to be maintained \(^5^2\).

Income improves living conditions while the socio-economic status of the parents determines the health status of the child. Research shows a strong relationship between income level of the mother and the baby's birth weight. Mothers with high incomes have babies with higher birth weights, on average, than those with low incomes \(^5^4\). The study further reveals that children from low-income earners are more likely to die earlier and to suffer more illnesses than children of parents/guardians with higher incomes, regardless of age, sex, ethnicity and place of residence. The study concludes that equitable distribution of income in a given society may be an important determinant of health.

Support from families, friends and communities is associated with better health and helps children maintain a sense of mastery and control over life circumstances \(^5^3\). The caring and respect that occurs in social relationships, and the resulting sense of satisfaction and well being, seem to act as a buffer against health problems \(^5^3\). This social support networks involves a child having someone to confide in, someone to count on in a crisis, someone to count on for advice and someone who makes such a child feel loved and cared for.

Education is closely tied to socio-economic status and effective education for children and lifelong learning for adults are key contributors to health and prosperity for individuals, and for the country. Education contributes to health and prosperity by equipping people with knowledge and skills for problem solving and by improving their ability to access and understand health
The authors reveal that children (and even adults) with low literacy skills are more likely to be unemployed and poor, and therefore more likely to experience poorer health and to die earlier than their counterparts with high levels of literacy. In addition, people with higher levels of education have better access to healthy physical environments and are able to educate their children than people with low levels of education.

Unemployment for the parent or guardian is associated with poor health for the whole family. People who have more control over their work circumstances and fewer stress related demands of the job are healthier and often live longer than those in more stressful or riskier work and activities. Employment has a significant effect on a person and family’s physical, mental and social well being. Paid work provides not only money, but also a sense of identity and purpose, social contacts and opportunities for personal growth. When a person loses these benefits, the results can be devastating to both the health of the individual and that of his or her family. Unemployed people have a reduced life expectancy for themselves and family members and suffer more health problems than people who have a job. A related study by World Health Organisation (WHO) found that high levels of unemployment and economic instability in a society cause significant mental health problems and adverse effects on the physical health of unemployed individuals, their families and their communities.

Other factors that influence the health and well being of children include values and norms of the society. Furthermore, social stability, recognition of diversity in culture, safety, good working relationships, and cohesive communities provide a supportive society that reduces or avoids many potential risks to good health. Better social environment for children involves parents/guardians volunteering to work with not-for-profit organisations or being involved in community organisations and making donations, either financial or in kind, to charitable and not-for-profit organisations within the community they live. This helps in building high levels of trust and a sense of group membership within the children’s minds and hence foster psychological well being of children. Also likely to be reduced is family violence which could have led to devastating effect on the health of the children in both the short and long term.
The physical environment is an important determinant of health. At certain levels of exposure, contaminants in air, water, food and soil can cause a variety of health conditions including birth defects, respiratory illness and gastrointestinal ailments. Factors related to housing, indoor air pollution and the design of the transportation systems could significantly influence children's physical and psychological well being.

Personal health practices and coping skills refer to those actions by which individuals can prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health. Available evidence shows that personal life "choices" are greatly influenced by the socio-economic environments in which children live, learn and play. Coping skills, which seem to be acquired primarily in the first few years of life, are important in supporting healthy lifestyles. These are the skills people use to interact effectively with the world around them, to deal with the events, challenges and stress they encounter in their day-to-day lives. Effective coping skills enable people to be self-reliant, solve problems and make informed choices that enhance health.

2.4. Health indicators for orphans and vulnerable children

The study sought to explore six core desirable child health indicators, citing purpose and evidence for each. The indicators included poverty and family income, OVC education level, OVC household insurance coverage, ambulatory care sensitive conditions (ACSC) among OVCs, public vs. private health care provision for OVCs and OVC guardians’ cultural beliefs pertaining to ill health. All the child health indicators examined in this study are measures of risk status. A change or lack of change in the risk is associated with health status.

In the context of this study, poverty is defined as the inability of the head of the household to sustain himself/herself (including family members) above one dollar a day. Poverty is associated with inadequate nutrition, which is in turn associated with delayed growth and development and hence poor health. Children born in poor settings are also at risk of impaired cognitive development during early childhood whereas those living in poor families are more likely to have difficulty in school, to have children during adolescence and to become adults who earn
lower incomes and have higher unemployment rates. Poverty may also lead to increased OVC school-drop out rates. Youth who drop out of school are at increased risk of having lower earnings and a less stable employment history. Children without health insurance are less likely to receive curative care the way insured children would and that uninsured new-borns are more likely to experience adverse outcomes as prolonged hospitalisation or death compared to privately insured infants. Ambulatory care sensitive conditions (ACSC) involves medical conditions that are less likely to require inpatient hospitalisation if timely and appropriate primary care is received. Reflecting access to regular source of care, this indicator might be used to measure the extent of risk in an area based on socio-economic conditions, proximity to health care, health insurance status, and provider availability. The benefits of incorporating prevention and early diagnosis and prompt treatment of conditions as opposed to hospitalised medical care are increasingly apparent. Preventive services for early detection of disease have been associated with significant reduction in morbidity and mortality. Various studies have also shown that the level of resources (e.g. the number of primary care practitioners) will affect utilisation of services, which in turn affects health status. Public against private health care provision for OVCs is a measure of equity and will affect health status on grounds of affordability and other perceived aspects of quality health care. As a private-public initiative, this indicator should represent a shared vision and acknowledge a shared responsibility for improving the health and quality of life for HIV/AIDS orphans and vulnerable children in Kibera slums. The promotion of public/private provision of health care ensures that everyone benefits from access to quality health services and safe environments in which to live, work and play. Strategies expected to emerge from this private-public mix should help attain the opportunities needed to improve health and well being of the target population. Culture is the belief patterns of a certain community. A sick child can become a victim of the conflict between culture and modern medical technology. For instance, symptoms can worsen to the point of death as the parent/guardian struggle to appease the “offended” spirits. This clearly implies that availability of services and resources alone is not enough to ensure access to health care services. Recognition of a disease is endowed within one’s cultural perception of the disease as a critical determinant for the appropriate preventive and help-seeking behaviour.
2. 5. Care and support

Care and support are based on a concern for the well being of others. Children affected and orphaned by HIV/AIDS need care. They all need support to face the challenges of illness and meet the needs involved. Comprehensive care, an important part of care and support, is about responding to the needs of HIV/AIDS orphans and vulnerable children in a holistic manner. This involves diagnosis, treatment, referral and follow-up. Other important components of comprehensive care include nursing care, counselling and support to meet psychological, spiritual, economic, social and legal needs. In addition, comprehensive care for an HIV/AIDS orphan should happen within a continuum of care. This means responding to a range of care and support needs in different places such as hospital, clinic, community and home over the course of the child’s needs. Responding to these needs requires a co-ordinated response from people with a variety of complimentary skills, e.g. counsellors, nurses, doctors, community health workers, people with HIV, pharmacists etc. It is important that people and institutions involved in care and support work together to have an efficient flow of information, resources and services between them in order to ensure a continuum of quality care and support.

2. 6. Treatment

Treatment is a key element of care and support for HIV/AIDS orphans and vulnerable children. It can be curative (curing disease either temporarily or permanently), preventive (preventing disease from happening or becoming worse) or palliative (reducing symptoms to minimise discomfort and distress). Any action that improves a person’s quality and length of life is a form of treatment. Treatment can thus happen even without the use of medicines, for example, personal and social or psychosocial support is also a treatment. This is because it can provide relief and improve a person’s well being. For medicines to be effective, other forms of treatment must support them. For example, if people feel cared for in their community and have food and water, they are likely to make better use of medicines.

Treatment needs vary according to the stage of illness. Treatment can happen in different places and require different resources depending on the stage of the illness. The needs of OVCs should
be central to deciding where treatment is provided. Such children need treatment to be accessible in different locations at different times. Sometimes, it can start in one place (such as a hospital) and continue in another (such as a person’s home). This can be better for the child/orphan who is ill, and may reduce the cost and complexity of the work. When treatment is being given in different locations, it is important to have effective co-ordination of information, resources and services between the different places.

Health care or treatment should not mean pharmaceutical drugs and medicines used in allopathic (western) system of medicine only. Treatment with drugs must always be linked to and supported by other forms of treatment such as counselling, nutrition and traditional remedies for them to be effective.

Fig.1: An overview of an OVC comprehensive treatment, care and support program

Note that all the programs are interrelated and focused on the OVCs.
2.7. Access to health care for OVCs

Access to health care for OVCs in the context of this study is described in terms of health care seeking behaviour. The concept of health care access and/or health care seeking behaviour is used to mean the factors that play a role in determining if, when, where and why a guardian would choose to seek a solution to the health problems of the OVCs under his or her care. The focus of this study was pharmaceutical drugs, meaning medicines used in allopathic system of medical practice.

A barrier to access to treatment is anything that prevents a person from getting the treatment that they need. Barriers to access are the combined result of geographical, economic and socio-cultural factors. In the context of primary health care strategy, the determinants for utilisation of health care services are summarised as accessibility, affordability, availability and acceptability of the facilities. In less developed countries such as Kenya, distance is an important determinant of medical care utilisation. Evidence from various studies show that patients who live far from health care facilities make less use of such facilities than people who live nearer. In theory, the total price paid (comprising of time and transport costs) is a major determinant of health care utilisation. In addition, patients' perception of the quality of health care influences their health care seeking behaviour. People will be prepared to travel far from their homes because they perceive the quality of health care to be better in those facilities. Some of the quality attributes include availability of medical equipment and supply of drugs, the attitude of medical personnel and organisation of the medical services (e.g. opening times, waiting time etc). Other determinants of health care seeking behaviour include past experience with the health institution, differences in religion, language, ethnicity, attitude towards degree of modernisation between clients and health service personnel or gender of service providers, for example, maternity services in a Muslim community being provided by male practitioners may be less preferred in relation to female providers.
OVCs are often the first to be denied education when their extended families are unable to educate them. In addition, they may be denied access to schooling because of the stigma surrounding AIDS. For example, a study done in Zambia found that 32% of orphans in urban areas were not enrolled in school as compared with 25% of non-orphaned children. OVCs may be denied access to health care services because of their HIV status. Another factor contributing to OVC vulnerability is funeral costs, which consume scarce resources leaving widows and children destitute. OVCs may be emotionally vulnerable and financially frustrated, desperate and are likely to be sexually abused and forced into prostitution as a means of survival. These exposures increase their risk of contracting HIV/AIDS. When a parent dies, children particularly girls may also be denied inheritance and property. In addition, laws and practices that deny widows their rights and property have devastating consequences for children after their father's death.

Household food security is undermined as income and productive capacity fall. The resultant increase in malnutrition in both orphans and vulnerable children may lead to earlier deaths. Studies in urban households of Ivory Coast indicate that when a family member has AIDS, the average income falls by 52% to 67% while expenditures on health care quadruple. Orphans are at a greater risk of being malnourished and stunted than children who have parents are. Food consumption has been shown to drop by as much as 40% in families and communities affected by AIDS.
CHAPTER 3: STUDY METHODOLOGY

3.1. Study design

The research was a descriptive cross-sectional study. Both quantitative and qualitative data were collected to evaluate access to health care services for HIV/AIDS orphans and vulnerable children (OVCs) within Kibera slums. Access was evaluated in terms of physical, economic and socio-cultural determinants of health seeking behaviour of OVCs.

3.2. Study population

The study population consisted of people who had information about a child or children affected by HIV/AIDS through the illness or death of their parents. Information about OVCs in the study area was attributed to an individual’s position within the family unit or within the community. Participants in the study therefore included parents and family care givers/OVC guardians as those with information from the family unit. Health care workers, social workers, local leaders and staff from institutions dealing with the welfare of OVCs in the area were the respondents from the community point of view.

3.2.1. Parents

In households where at least one parent was alive and could communicate fluently with the research team, he or she was guided by the team in filling the structured questionnaire or participating in a focus group discussion (FGD). In situations where both parents were alive and could communicate fluently, the head of the household was targeted. Where the head of the household was absent, the next in seniority in the family regardless of his/her age was interviewed. Where both parents were dead or were too sick to communicate, the family care giver or guardian was interviewed.
3. 2.2. **Family care givers/guardians**

These consisted of the extended kinship to the OVCs including elderly siblings, uncles and aunts.

3. 2.3. **Community key informants**

Key informants provided information concerning morbidity trends and how the community solves its health problems. The key informants included health care workers, local leaders, social workers, and staff of government and non-governmental institutions dealing with OVCs.

3. 3. **The study area**

The study was carried out in Kibera Division in the city of Nairobi. Kibera is the largest and most populous of the eight divisions comprising Nairobi Province. Kibera covers an area of 223.4 square kilometres and has a total population of 286,739 people distributed among 89,086 household units. The division borders Dagoreti, Makadara, Pumwani, Central, Westlands and Kasarani to the North and Embakasi to the Northeast. Kibera borders Machakos District to the East and Kajiado District to the West and South.

Administratively, the division comprises of 7 locations and 16 sub-locations. The locations include Kibera, Lang’ata, Karen, Mugumoini, Nairobi West, Laini-Saba and Sera Ngo’ombe. The study was undertaken in 3 locations where the majority of the people live. The three locations included Kibera, Sara-Ng’ombe and Laini-Saba, all covering 8 sub-locations namely; Kibera, Makina, Silanga, Lindi, Laini-Saba, Gatwikira and Olympic. Nyayo high-rise in Laini-Saba location was excluded because it is a relatively middle-income area. In Mugumoini sub-location, Mugumoini location, seven designated OVC household respondents were left out of the study because of their being uncooperative to the research team.

Majority of the residents within the area are migrants from different rural areas. Predominant tribes in this area include the Luo and Luyha both from Western and Nyanza provinces. Other tribes are the Kamba, Kikuyu and Kisii. Most of the residents work as semi-skilled or unskilled
labourers, often on casual basis in the city's industrial area. A few of the residents, particularly women, engage in small-scale enterprises e.g. selling of vegetables, food and water.

Motorised accessibility to most parts of Kibera is impossible because of poor physical infrastructure. The city council of Nairobi has provided piped water in isolated points of the slum. Residents queue to fill their water containers at a fee. A twenty-litter container was going for five shillings during the time of this study even though the price kept on fluctuating depending on the consistency of supply. Electricity is scantily provided owing to the poor housing structures. Most of the electrical fittings are located within the government administrative units and social institutions as schools and health care facilities. Environmentally, the filthy corridors separating the mud-covered houses not mentioning the overly littered pathways or “streets” indicate poor sanitation. Kibera however has numerous health care facilities. Individuals own majority of the health care facilities while a reasonable number is owned and managed by non-governmental organisations (NGOs) and church-based organisations. NGOs operating medical facilities include African Medical Research Foundation (AMREF), AMDA International, Kibera Community Self Help Group (KICOSHEP) and KICAC-STARA, a Dutch organisation. Kenya Aids Orphans Centre (K.A.O.C), a church sponsored organisation, is among the many faith-based facilities that provides health care to the residents of Kibera, particularly the orphans and vulnerable children. These organisations play important roles in their diversity: they are advocates for increased access to health care for all people, they have the ability to contribute to policy development, some posses significant technical expertise and they also work at the community level in the day to day provision of services to OVCs and other PLWHAs. Other services offered by these NGOs include provision of home-based care for both HIV positive OVCs and their relatives in addition to networking the PLWHAs. In order to minimise the extend of orphanhood, these organisations play an important role in tackling HIV/AIDS through the implementation of prevention programmes and provision of support for the affected and/or infected.
Appendix vi
Map of Kibera Division indicating Locations
Appendix vii
Map of Kibera Division indicating study locations (Kibera Slums)
3.4. Reasons for choice of study area

The majority of the residents in the slum settlements are of low socio-economic status. Over 50% of the Nairobi residents are estimated to be living in slums that occupy only 5% of the residential land area of the city with about two thirds living on less than one dollar a day. Overcrowding is likely to pose enormous challenges in the areas of health care to all the members of a household. Although poverty has always been considered a predominantly rural phenomenon, recent data show that it is increasingly an acute urban problem as well. For instance, while the proportion of people living below the poverty line increased from 48% to 53% in rural Kenya between 1992 and 1997, it almost doubled from 26% to 50% in Nairobi over the same period. This pattern is probably a reflection of the increase in the proportion of Nairobi residents who live in slums.

Studies indicate that children in slum areas have lower survival chances compared to those in other parts of the country. For instance, the under-five mortality rate is over 151 per 1000 births in Nairobi slums, while the corresponding figure for Kenya as a country (112/1000) and that of rural Kenya (113/1000) are 25% lower. The under-five mortality rate for Nairobi city as a whole stands at 61 per 1000 births, suggesting the mortality rate for the non-slum areas of Nairobi is considerably lower. Evidence from the Kenya Demographic and Health Surveys (KDHS) demonstrate that since the early 1990's, increase in mortality rates have been considerably higher in the slums of Nairobi than in the rural areas. This study seeks to find out whether the high mortality rate in children particularly OVCs are due to aspects related to health care access issues.

Another reason for choosing Kibera is because it has a strong non-governmental organisations' presence working in collaboration with the Ministry of Health. Kibera Community Self Help Programme (KICOSHEP) is one such NGO operating in this community. In collaboration with other NGOs and the Ministry of Health, KICOSHEP is involved in implementing AIDS programmes.
3.5. Inclusion criteria

The criteria for the selection of the study subjects included the following:

- Respondents from households with children aged 15 years and below whom had lost one or both parents to HIV/AIDS or related illness.

- Respondents from households with vulnerable children aged 15 years and below (parents/guardians sick with HIV/AIDS or related illnesses).

3.6. Exclusion criteria

The following criteria were used to exclude respondents into the study:

- Respondents from households with orphans and vulnerable children already placed in orphanages. This is because it was a general assumption that the orphanages were taking care of the OVC health care needs.

3.7. Study variables

The dependent and independent variables considered in meeting the objectives of the study are presented in table 2 below.
Table 2: Dependent and independent variables used in the study

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Independent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent variables were related to OVC's health care seeking behaviour. They included:</td>
<td>The independent variables were:</td>
</tr>
<tr>
<td>Response to an illness; Describes what action was taken in response to an illness.</td>
<td>Household economic status/monthly household income; This was gross monthly income earned from salary/wages and IGAs.</td>
</tr>
<tr>
<td>Choice and reason for health care provider consulted; Describes the particular health care practitioner consulted for a sick OVC.</td>
<td>OVC morbidity; Describes the presence of an illness episode that an OVC suffered 4 weeks preceding the study.</td>
</tr>
<tr>
<td>Choice and reason for health care facility attended; Describes the reasons given by respondents as regards the health care facility attended.</td>
<td>Perceived problems in different health care facilities; Describes problems that were perceived by OVC guardians attending government, parastatal, private or NGO/mission health facilities.</td>
</tr>
<tr>
<td>Polyclinic attendance; Assesses whether there is multi-clinic attendance during a single disease episode in an OVC.</td>
<td>Distance to the health care facility; Describes the distance travelled by an OVC to reach the health facility that was attended first during the illness episode.</td>
</tr>
<tr>
<td>Means of transport to health facility; Describes the mode of transport to the facility and time taken to get to the facility.</td>
<td>Enrolment in any health insurance scheme for household members; Describes the number of households that are enrolled in any health or medical insurance scheme.</td>
</tr>
<tr>
<td>Expenditure on medical care; Assesses the household expenditure on an illness.</td>
<td></td>
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</tbody>
</table>
3. 8. Sampling

3. 8.1. Sampling unit

A household with a child less than 15 years orphaned or made vulnerable by HIV/AIDS or a related illness was the sampling unit for the study.

3. 8.2. Sampling frame

This included all households with a child less than 15 years orphaned or made vulnerable by HIV/AIDS or a related illness.

3. 8.3. Sample selection procedure

Judgmental/purposive sampling was used to select the study locations (Kibera, Sara-Ng'ombe and Laini-Saba Locations from Kibera Division).

Snowball sampling was then used to gain access to the targeted community respondents. This approach was used because the population with the characteristics under study was not easily identifiable due to lack of documentation of the households meeting the inclusion criteria by the relevant government authorities as the Provincial Administration, Ministry of Planning and National Development or the Ministry of Health. The few identified subjects would then name others that they knew and met the required characteristics. Other approaches by the research team included the use of organisations in the study area dealing with people living with HIV/AIDS (PLWHA). This assisted the research team access the parents of the vulnerable children. All those PLWHAs whether the parents or child guardians and were willing to be involved in the study were interviewed. The third approach involved the use of organisations dealing with the welfare of orphans and vulnerable children in the study area such as KICAC-STARA, a Dutch organisation and the Kenya Aids Orphans Centre (K.A.O.C), a church-sponsored body.
3. 8.4. Sample size determination

The minimum required sample size was calculated using the below sample size formula for descriptive studies according to Dobson\textsuperscript{32,33}:

\[
n = \frac{Z^2 p (1-p)}{d^2}
\]

where:

- \(n\) = sample size
- \(p = 0.5\) (assumed that 50% of the OVCs have access to quality health care as perceived by the household respondents).
- \(Z = 1.96\) (reliability coefficient corresponding to 5% significance level).
- \(d = 0.05\) (degree of precision).

Substituting for the equation, \(n = 384\) OVC household respondents.

With 95% confidence interval assuming that 50% of the OVCs in the study area had adequate access to quality health care, at least 384 OVC household respondents were to be selected for the study but eventually 399 OVC household respondents were interviewed.

3. 9. Data collection methods

Data was collected from 31\textsuperscript{st} March to 1\textsuperscript{st} June 2003. Due to the nature of the study problem, a combination of qualitative and quantitative research methodology techniques was used to collect data.

3. 9.1. Qualitative techniques

This included in-depth interviews, focus group discussions (FGDs) and key informant interviews. In-depth interviews were mainly informal conversations with individual OVCs and/or their guardians or heads of households. The probing and flexible interviews were used to
elicit information on the respondents' terminologies and judgements, to capture their perceptions and experiences and to uncover details about the practices, technologies and beliefs pertaining to health care access in the community. With FGDs, a skilled moderator guided small groups of respondents in order to gain deeper understanding of richer responses or new and valuable insights into the study topic. Each FGD consisted of between 6 to 10 participants and lasting between 60 and 90 minutes. Both men and women were included as participants in every FGD conducted. Key informant interviews were used to obtain information from community residents who were in a position to know the community very well.

3. 9.2. Quantitative techniques

The instrument used to collect data was a standard questionnaire, written in English and comprising of both open and closed-ended questions. The questionnaire was pre-tested in 25 OVC household respondents within the study area to ensure validity and reliability. The principal investigator then held discussions with the research assistants before making the necessary corrections on the questionnaire. The OVC household respondents interviewed during this exercise were not included in the actual data collection.

3. 10. Ethical considerations

HIV/AIDS still remains a sensitive topic today regardless of two decades of existence of the disease in the country. Thus being an HIV/AIDS orphan at a tender age and the hardships associated with orphanhood can evoke intense emotional response in the orphans and their guardians. The following ethical issues were then considered:

- Permission to carry out the study was obtained from the Ministry of Education, Science and Technology (MOEST). The offices of the Provincial Medical Officer, (PMO), Nairobi and the Provincial Commissioner, (PC), Nairobi granted approval.

- The objectives of the study were clearly explained to the would-be OVC household respondents. After a clear understanding of the study objectives, such respondents would voluntarily choose or not choose to participate in the study.
The research team maintained the right to privacy in the event of interviewing the participants, i.e. people found by the research team in a household who were not members of that particular household e.g. neighbours would be politely requested to grant the research team time to interview the targeted household respondent.

Confidentiality of the collected data was ensured at all levels of the study.

3.11. Reliability of data

The principal investigator ensured that:

- Research assistants were properly trained before data collection commenced. This involved clear explanation of the study objectives, methodology and interviewing techniques with an emphasis on the need for accurate data.

- The research assistants were instructed to interview the participant if possible in the presence of another member of the family to facilitate recall and appropriate responses. Though this sounds like clashing with issues related to confidentiality, it was applicable in situations where several members of the extended family were caring for an OVC. This was also important in households with elderly or very sick respondents or heads of households. As a function of the phenomenon of “multiple respondents”, the interviewer would then indicate in the questionnaire the consensus arrived at by the “multiple respondents” in a household.

- Recall period on an illness and treatment sought was restricted to four weeks.

- The principal investigator kept on checking the completed questionnaires as often as possible, trying to identify any mistakes, discussed such anomalies if found with the assistants and rectified the situation as early as possible.
3. 12. Data management and analysis

The questionnaire had been partly pre-coded. However, further re-coding was done to accommodate the open-ended responses and reduce some categories of some variables. A code sheet was used to summarise the data and facilitate its entry into an SPSS-PC computer file. Cross-tabulation of variables was applied where necessary. Data collected qualitatively was analysed thematically in line with the study objectives.

3. 13. Limitations of the study

- Some respondents may have given only estimates of their incomes.

- Access to some households would sometimes be very difficult. This was due to the poor physical infrastructure in the study area like lack of proper streets between the mud houses coupled with insecurity in the area. This eventually led the research team not to visit ten of the designated households in different parts within the three locations where the study was undertaken.

- Owing to the nature of the data collected, statistical tests of significance were not applicable in the analysis.

- Some respondents wanted to be enticed with material incentives as food or money in order to participate in the study. Since this was not done, they might have provided the researchers with biased information in order to portray that they are very poor people who needs everybody’s help.

- The results of the study cannot be generalised to all OVCs in informal settlements in the country because the sample was not randomly selected.
CHAPTER 4: STUDY RESULTS AND DISCUSSION

Therefore, leaving the discussion of the elementary principles... let us go on to perfection.

-Hebrew 6:1-

4.1. Summary descriptive statistics of the households visited in the area

Most of the households visited in this study, (40.6%), were from Sara Ng’ombe location with Kibera and Laini-Saba locations accounting for 38.3% and 21.1% respectively of the households sampled. Gatwikira sub-location within Sara Ng’ombe location had the highest number of households per sub-location, accounting for 26.6% of the total households studied. Laini-Saba sub-location accounted for 21.1% of the total households studied while Kibera sub-location had the least number of households in the study accounting for 0.5% households as shown in table 3 below.

Table 3: Distribution of households by locations and sub-locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of households visited</th>
<th>Sub-location</th>
<th>Number of households visited</th>
<th>% of total households visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sara Ng’ombe</td>
<td>162 (40.6%)</td>
<td>Gatwikira</td>
<td>106 (65.4%)</td>
<td>26.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Olympic</td>
<td>56 (34.6%)</td>
<td>14.0%</td>
</tr>
<tr>
<td>Kibera</td>
<td>153 (38.%)</td>
<td>Makina</td>
<td>62 (40.5%)</td>
<td>15.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lindi</td>
<td>58 (37.9%)</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Silanga</td>
<td>31 (20.3%)</td>
<td>7.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kibera</td>
<td>2 (1.3%)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Laini-Saba</td>
<td>84 (21.1%)</td>
<td>Laini-Saba</td>
<td>84 (100%)</td>
<td>21.1%</td>
</tr>
<tr>
<td>Total</td>
<td>399 (100%)</td>
<td></td>
<td>399 (100%)</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2. Socio-demographic characteristics of respondents

A total of 399 respondents comprising of 46% males and 54% females were interviewed during the study. Of the total respondents, 40.9% were OVC guardians while parent respondents were 33.3% and sibling respondents were 24.8%. Most of the respondents, (84.7%), were aged between 20 and 49 years while 11% and 4.3% were aged below 20 and over 50 years respectively. The youngest respondent was aged 16 years, while the oldest respondent was 67 years. The mean age of the respondents was 32.6 years. Note that the respondent was not necessarily the head of the household.

OVC uncles and mothers headed 22.3% and 22.1% of the households visited respectively. OVC older siblings headed 20.8% of the households while aunts, fathers and vulnerable children headed 18.8%, 15.5% and 0.5% households respectively (Fig. 2). About 91% households were headed by people aged between 20 and 49 years while 5.3% and 4.0% heads of households were aged less than 20 years and 50 years and above respectively. However, 2% of the households had 16 year olds as the breadwinners of their families while the oldest head of household was 67 years (0.3%). The mean age of head of household was 34.7 years. Majority of the households, 84.7% had 3 to 8 members while 12.3% and 3% had more than 9 and less than 3 members respectively (table 4). The mean household size was 6 members.

In 7.6% of the total households, the respondents indicated that both the parents of the children in such households were alive though one or both of them could be sick with HIV/AIDS-related illness. In households where either of the parents to the children was alive, mothers and fathers were reported in 23.1% and 14% households respectively. However in 55.5% of the households, the respondents indicated that both parents of the children were dead (table 5).

Respondents in 94% of the households reported that the OVCs below 15 years of age in such households had been to school. Half (50%) of the OVCs were still continuing with studies whereas the others had already dropped from school by the time of the study. Lack of financial support was cited by 96% of the respondents as the main reason why the OVCs had to drop out of school.
Table 4: Household size

<table>
<thead>
<tr>
<th>No. of members in the house</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3</td>
<td>12</td>
<td>3.0%</td>
</tr>
<tr>
<td>3-5</td>
<td>174</td>
<td>43.6%</td>
</tr>
<tr>
<td>6-8</td>
<td>164</td>
<td>41.1%</td>
</tr>
<tr>
<td>&gt;9</td>
<td>49</td>
<td>12.3%</td>
</tr>
<tr>
<td>Total</td>
<td>399</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5: Survival status of parents

<table>
<thead>
<tr>
<th>Both parents alive</th>
<th>One parent alive</th>
<th>Both parents dead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>30</td>
<td>7.6%</td>
<td>92</td>
</tr>
</tbody>
</table>
In most instances, men are the breadwinners of their families yet the study revealed that more male heads of households were dying of HIV/AIDS than their female counterparts resulting in more paternal orphans. The mean period of death for mothers by the time this study was being contacted was 3.2 years and 4.1 years for fathers, a clear indication that loss of father to HIV/AIDS or related diseases was more common than loss of mother. This finding was also in line with the finding that for the 30 surviving but terminally ill couples in the study, the mean period of illness for mothers was 2.1 years while fathers were relatively ill for a longer period, with their mean period of illness being 2.9 years. This eventually leads to more paternal orphans as a result of HIV/AIDS.

To lose one or both parents to HIV/AIDS is to face a childhood of pain and peril. The suffering starts with the grief and horror of watching their parents waste away. Sooner than later all becomes inevitable and the children shoulder the greatest burden of the epidemic: orphanhood and its associated difficulties. Siblings who have barely reached physical as well as economic maturity are now heading families orphaned or made vulnerable by the HIV/AIDS pandemic. Children as young as sixteen years are becoming breadwinners for their families. They look for food and feed their ailing parents. Having two meals for these children is a luxury and one meal is a possibility but going without food at all is the norm. They also struggle to seek treatment for a sick sibling. This could result to poor health, malnutrition, social vices like prostitution and crime, as the siblings search for means to support the families.

At the family level, there is increased burden and stress for the extended family that cares for the young children. Traditional mechanisms of handling orphans which have been the responsibility of the relatives and the extended kinship seem to be overwhelmed in Kibera by the large numbers of orphans that are on the increase by the day. This came out clearly in the FGDs and the key informant discussions. For example, according to Ochieng*, a participant in one of the FGDs: “Mara nyingi sisi wakaaji wa hii kijiji ya Kibera hatuna kazi ya maana. Kazi zetu ni za kubaatisha sana sana kwa mjengo au kuza vitu rejareja kama vile maji, samaki na kudhalika. Hii ni kwa sababu wengi wetu hatukusoma sana na kwa hivyo hatuwezi kupata kazi maofisini. Wengi wetu hapa Kibera wana elimu ya msingi tu. Kwa wale wachache wenyewe walibahatika kupata elimu ya sekondari, wengi waliacha shule bila kukamilisha form four au
pengine kama walikamilisha hio form four, wengi wao hawakufanya vyema katika mtihani. Isitoshe, tunazo boma zetu ambapo tayari zinakaa kutushinda sababu ya hali mbaya ya uchumi. Sasa tukijiongezea hawa watoto wa ndugu zetu waliokufa, basi maisha inakuwa ni ngumu sana. Hawa watoto hatuwabagui kwa sababu wazazi wao wamekufa na ukimwi. Hata kama wazazi wamekufa, bado ni watoto wetu lakini mara nyingi tunashindwa kuwalisha, kuwavalisha na hata kuwanulizia dawa kwa sababu hatuna uwezo wa kifedha”. (In most of the time, us the residents of Kibera slums are not in gainful employment. Our nature of work is by trial and error most of the time in the construction industry or involve ourselves in water vending or fish retailing among other casual and menial jobs. This is because most of us did not get enough education and therefore can not work in the offices/gainful employment. Most of us here in Kibera only have primary school education. For the few who were lucky to make it to high school, majority of them dropped without completing the prescribed course for form four or if some managed to complete the course, then they did not do well in their examinations. Besides, we still have our own households to take care of but this seems to be getting out of our capability due to the prevailing poor economic situation. Now accommodating the children of our deceased brothers and sisters in our households makes life rather very difficult for us. We do not stigmatise these children because of the fact that their parents died of HIV/AIDS. Even if the parents are dead, they remain our children but in most cases, we are unable to feed, clothe or afford medication for them because we do not have the financial capability). When Gladys Adhiambo*, the nursing officer-in-charge at the Kenya Aids Orphans Centre (K.A.O.C) and who participated in the study as a key informant interview respondent was asked in her opinion to suggest what population group had the greatest health needs and what hinders such a group from enjoying health, she had the following to say: “In my own feeling, I think that the HIV/AIDS orphans have the greatest health care needs because they have no parents and their guardians may not be in a position to cater for the cost of their appropriate treatment either in private or public health care institutions in addition to the needs of their immediate family members. Secondly, the OVCs may miss to get the necessary treatment in the public health care institutions because more often than not, these institutions are short of drugs and other supplies and patients are referred to purchase such items from private pharmacy shops. The relatives may eventually fail to purchase the drugs and leave everything to fate”.

* Not their real names
4. 3. Common illnesses among orphans and vulnerable children

About 48% of the respondents cited malaria as the most common illness that affects OVCs in the study area. Other common illnesses include respiratory conditions, (22.1%), gastro-enteritis including worm infestation, (12%), typhoid fever, (9.5%), STI, HIV/AIDS, (3.5%) and malnutrition, (3.3%). In 73.4% of the households, at least one OVC had experienced an episode of illness within a one-month recall period.

Table 6: Distribution of common illnesses reported among OVCs

<table>
<thead>
<tr>
<th>Condition</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>191</td>
<td>47.9%</td>
</tr>
<tr>
<td>Respiratory conditions</td>
<td>88</td>
<td>22.1%</td>
</tr>
<tr>
<td>Gastro-enteritis + worm infestation</td>
<td>48</td>
<td>12%</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>38</td>
<td>9.5%</td>
</tr>
<tr>
<td>HIV/AIDS and STIs</td>
<td>14</td>
<td>3.5%</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>13</td>
<td>3.3%</td>
</tr>
<tr>
<td>Other conditions</td>
<td>14</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

The above implies that the community is under a big disease burden due to commonly preventable conditions which when not timely avoided will translate to hefty financial implications for their treatment.

4. 4. Health facility and service utilisation by OVCs

Different household respondents held different desires and expectations related to disease symptoms in their children. At some point, some would hesitate before consulting medical opinion while others would seek help with the slightest symptoms. Several options were open for the head of the household as a means of coping with an illness.
In 41.7% of the total disease incidences, an allopathic care provider attended to the patients whereas 35.5% were bought non-prescription drugs. Of those who purchased over-the-counter drugs, 45.2% bought anti-malarials (Fansidar, Metakelphin and Orodar) whereas 42.6% purchased antipyretics/analgesics (Aspirin, Bruffen and Paracetamol). Symptom-relieving drugs (cough syrups, anti-histamines or rehydration solutions) accounted for 36.5% of all the drugs purchased over-the-counter. Only 0.9% of the respondents reported having no knowledge of the drugs bought. Traditional healers treated 6.2% of the cases whereas 1.9% were attended to by a quack. Those who did not take any action accounted for 8.6% of the cases (Table 7).

In 42.6% of the households where action was taken against an illness affecting an OVC, the head of the household would do so in less than 24 hours after recognising ill health. On average, 22.3% of the heads of households took action within 24 to 48 hours while 35.1% took action after 48 hours. The mean period of time taken before taking any action was 64.6 hours. Of the household heads who took action within the first 24 hours, 56.7% cited worsening of the disease condition as the precipitating factor. Of those who said action was taken 48 or more hours later, 39.8% cited lack of funds as the main reason for the delay in seeking medical care.

The pharmacy/shop was the most common place to seek medical care for an OVC, with 40.4% of the respondents citing this source. The treatment was symptom-directed. This posed the risk of spending the little money the heads of households had while having misdiagnosed the condition. Privately operated facilities were cited by 17.9% of the respondents whereas the district and the national hospital each had 11.3% utilisation cited. Dispensaries were rarely visited, accounting for a staggering 2.5% utilisation level.

There were also indications that many respondents were polyclinic attendants i.e. they sought treatment for OVCs from more than one health care provider. Majority of the respondents, (65.8%), preferred visiting a traditional healer for a second opinion if the disease condition persisted in a child after first treatment. Only 30% of the respondents sought a second opinion from professionals (Doctors, Nurses, Clinical Officers and Dentists) as shown in Table 8.
The reasons for seeking a second opinion were varied. The most common reason included worsening of the disease as cited by 40.5% of the respondents whereas 27% other respondents had the belief that medication based on the second provider will be comparatively stronger than what they had received from the first health care provider. Another 12.6% of the respondents preferred a second health care provider because of affordability of cost of treatment.

Table 7: Actions taken by heads of households in response to an illness in an OVC

<table>
<thead>
<tr>
<th>Action taken</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated by allopathic care provider</td>
<td>135</td>
<td>41.7%</td>
</tr>
<tr>
<td>Bought drugs from shop/chemist</td>
<td>115</td>
<td>35.5%</td>
</tr>
<tr>
<td>No action at all</td>
<td>28</td>
<td>8.6%</td>
</tr>
<tr>
<td>Administered drugs kept at home</td>
<td>20</td>
<td>6.2%</td>
</tr>
<tr>
<td>Treated by a traditional healer</td>
<td>20</td>
<td>6.2%</td>
</tr>
<tr>
<td>Treated at home by a quack</td>
<td>6</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>324</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 8: Choice of practitioner consulted

<table>
<thead>
<tr>
<th>1st Choice Practitioner</th>
<th>Frequency</th>
<th>2nd Choice Practitioner</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist/Shopkeeper</td>
<td>115 (41.7%)</td>
<td>Traditional healer</td>
<td>73 (65.8%)</td>
</tr>
<tr>
<td>Medical Officer</td>
<td>48 (17.4%)</td>
<td>Nurse</td>
<td>17 (15.3%)</td>
</tr>
<tr>
<td>Clinical Officer</td>
<td>41 (14.9%)</td>
<td>Medical Officer</td>
<td>8 (7.2%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>40 (14.5%)</td>
<td>Clinical Officer</td>
<td>7 (6.3%)</td>
</tr>
<tr>
<td>Traditional Healer</td>
<td>20 (7.2%)</td>
<td>Pharmacist</td>
<td>5 (4.5%)</td>
</tr>
<tr>
<td>Dentist</td>
<td>6 (2.2%)</td>
<td>Dentist</td>
<td>1 (0.9%)</td>
</tr>
<tr>
<td>Quack</td>
<td>6 (2.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>276 (100%)</strong></td>
<td></td>
<td><strong>111 (100%)</strong></td>
</tr>
</tbody>
</table>
Facility use showed a distance-decay effect up to a distance of four kilometres or slightly higher. For distances equal to or greater than four kilometres, there was a sharp reversal for the district hospital (Mbagathi) and the Kenyatta National Hospital, thus whereas the number of household members using a facility decreased with increasing distance, there was a rise in the number preferring to attend Mbagathi District Hospital and Kenyatta National Hospital despite the increasing distance. This phenomenon could be explained in several ways. First, the two facilities are being used as referral centres by the peripheral health facilities (dispensaries, health centres, mission, NGO facilities and the private clinics). Secondly, KNH and Mbagathi hospital are perceived by the household respondents to provide superior care especially for illnesses perceived to be more complicated. This is because most of the respondents had the view that the two are some of the hospitals in the country where the best-trained health care personnel in Kenya offer services. In their search for quality care therefore, the clients crowd themselves into institutions where the perceived quality of care is high (where personnel have more training, drugs are available, equipment and laboratories are complete).

Contrary to the distance-decay effect discussion, major drawbacks were cited against the most preferred facilities (KNH and Mbagathi District Hospital). Among the negative attributes to these health facilities were poor staff attitudes (arrogant and uncooperative staff). Private clinics on the other hand had been indicated to be having the most cooperative staff regardless of their higher charges. Nevertheless, some respondents in the study had the feeling that most of the personnel running the private clinics were of inadequate qualifications who were out to make money on desperate service seekers. According to Gladys Adhiambo*, the nursing officer-in-charge of K.A.O.C and a key informant interview respondent, she had the following to state when asked what she felt was the current gaps in the health services provided generally to the residents of Kibera slums: “There is lack of adequate training in most of the people running the private clinics in the area. Even though we don’t have a yardstick to measure their medical qualifications, we know most of them have not received any formal training in the field of health care. Most of them have known about drugs by virtue of having worked in a health service provision institution. Once they come back to the slum, they refer themselves as doctors, nurses or pharmacists and start administering all kinds of medications to unsuspecting clients. This to me poses the risk of drug-resistance developing in the clients because in most of the cases, the
patients get misdiagnosed and under-dosed since the treatment they receive depends on the amount of money they pay for it. It's not a wonder for one to purchase antibiotics worth less than twenty shillings and will never come back”. Mr. J. Nyambega*, a teacher at Raila Centre and school, Kibera said: “Even though I am a non-medical person, I’ve a feeling that most of the private health care facilities in this area are run by unqualified personnel. More so, the same quacks are very expensive when one seeks help from them”.

Even though most of the respondents were within reach to a private medical facility, majority of them did not seek treatment in these facilities due to high consultation and treatment fees compared to public health facilities.

4. 5. Barriers to access to health care services for OVCs in Kibera

The barriers to access to health care services are the combined result of economic, socio-cultural and geographical factors. The determinants of access to health care are categorised as affordability, acceptability, availability, and accessibility of the health care services. This deceptively simple story shared between the researcher and a member of a focus group discussion speaks of the complex set of factors or conditions that determine the level of health service utilisation by every child in Kibera and elsewhere:

"Why is Omondi in the hospital?
Because he has a bad infection in his leg after sustaining a cut while playing in the junkyard next to his father’s mud building. There was some sharp, jagged steel there that he fell on.

But why was he playing in a junkyard?
Because our neighbourhood is kind of run down. A lot of kids play there and there is no one to supervise them. We live in such a neighbourhood because us as his parents cannot afford a nicer place to live since his Dad is unemployed and I as his Mum am sick.

But why is his Dad unemployed?
Because he does not have much education and he cannot find a sustainable job.

But why...?"

* Not their real names
Socio-economic status

In terms of employment, 39% of the total heads of households were employed and received regular monthly salary. Out of this number, 30.3% were uncles to the OVCs whereas 24.5% were the fathers. Only 0.6% of the employed heads of households were vulnerable children. Majority of the employed heads of households (72.7%) earned Ksh. 4,800 or more (on average two or more dollars per day) with the highly paid in the category earning a net salary of Ksh. 12,000 (5 dollars a day). Only 1.3% of the salaried heads of households earned less than Ksh. 2,400 (less than a dollar per day) whereas 26% earned between 1 and 2 dollars per day. One employed head of household declined to reveal her monthly salary citing personal reasons. The mean monthly salary was Ksh. 5,624.40 (70.3 dollars a month, translating to 2.3 dollars a day).

Slightly more than half of the total heads of households, representing 53.2%, were involved in an income generating activity (IGA). Of these, 26.9% were mothers while fathers headed 11.8% of the households. Of the respondents involved in IGAs, 35% earned less than Ksh. 2,400 per month (on average less than one dollar per day) whereas 49% earned between Ksh. 2,400 and 4,800 per month (on average between one and two dollars a day). Only 16% earned more than two dollars a day (more than Ksh. 4,800 per month). The mean household income from an IGA was Ksh. 3,333.90 per month (41.7 dollars per month or 1.4 dollars a day).

Of the total heads of households, 18% had no income at all whereas 15% had their gross income less than Ksh. 2,500 with the highly earning in this category having Ksh. 2,300 per month. Thus on average 33% of the households survived on less than a dollar a day. Only 10% of the total heads of households earned a gross household income of Ksh. 7,500 or more (Fig. 5). Most of the households with no income at all were headed by siblings (28.6%). The mean overall household income was Ksh. 4,710 per month (58.9 dollars or 2 dollars per day).

Of the unemployed heads of households who also did not have an IGA 58.6% depended on financial handouts/donations from friends, relatives, churches and other organisations in order to meet the costs of medication for an OVC in the event of an illness. Another 40% depended on
money earned while as casual labourers in the construction industry. Only 1.4% indicated that the orphans under their care depended on the family savings left behind by the dead parents.

Of the heads of households who had incurred some cost on medication for a sick OVC, 51.9% spent between Ksh. 1-249 while 17.2%, 8.4% and 22.6% respectively spent between Ksh. 250-499, 500-749 and more than 750 per OVC per single disease episode. The mean monthly medical cost per OVC per single illness was Ksh. 536.50. Bearing in mind that the gross household income was Ksh. 4,710, it then translates that a household was to spend 11.4% of the gross income to cater for medical costs per every OVC who fell sick within a month. This is regardless of any other family member above 15 years falling ill.

Of the 135 OVCs that were attended to by allopathic care providers in health facility settings, 32.6% of them ended up being admitted in various health care institutions. Kenyatta National Hospital had 52.3% of the admissions whereas Mbagathi and the mission hospitals had 20.5% of the admissions each. Only 6.8% were admitted in private institutions. Shortage of money to clear hospital bills led to 4.6% of the admitted children being assisted by their guardians to abscond from the hospitals while 20.5% of the admissions had their bills waived by the respective institutions through the assistance of the institution medical social workers. The 75% of the admitted OVCs who managed to pay their hospital bills had to be assisted by close family members and friends to raise the money (Table 9). According to Mr. Pollycap Kenyanitto*, the health co-ordinator for OVCs at the Kenya Aids Orphans Centre (K.A.O.C), Kibera, who was also one of the participants in the key informant interviews, he had the following to say when asked about his views on what areas of health service delivery did he think the government should be making a priority and why: “The provision of health care services to HIV/AIDS orphans and other vulnerable children should be of first priority. This is because these children in most cases do not have relatives readily willing to support them. The relatives say they are already overburdened by their own families and that they cannot take up somebody else’s family.” When Joash Kidiavai*, a counsellor and an ARV provider at the Jitengemee Community Self Help Program (JICOSHEP) in Kibera was asked what he could do to change the way health services were being delivered to OVCs in Kibera if he had the power, he had the following to state: “That the government should consider subsidising the cost of medical services offered to
OVCs than the current rates or waive them altogether. Alternatively, the government should seek for alternative financing mechanisms other than the out-of-pocket spending by the head of the household who is already overburdened by other domestic financial needs. This could be for example by incorporating all the OVCs in an insurance scheme so that they all get treatment with or without money”.

Only 8.8% of the households had their members incorporated in an insurance scheme, with 6.5% under the National Hospital Insurance Fund, 2% under community-based insurance arrangements/welfare associations (e.g. Kibera Abagusii welfare association) and only 0.3% being privately insured (ALICO insurance company). Of the households whose members were not insured, 72.5% of the respondents indicated that the family breadwinners could not afford the monthly premiums. In one of the FGDs, a participant had the following to say: Wengi wetu hatuwezi kuingia kwa insurance kwa sababu hatuna kazi zenywe zinaweza kutuletea pesa wakati wote. Kazi zetu ni za kibarua na hakuna hakika ya kupata hio kibarua kila siku. Isitoshe, hizo kampuni za insurance zinaitisha pesa nyingi sana kila mwezi. Jamani, tutazitoa hizo pesa wapi? (Most of us can not enrol in insurance companies because we have no permanent jobs that can ensure regular income. Our jobs are based on casual arrangements and there is no guarantee of working on a daily basis. Besides, the insurance companies charge very high monthly premiums. Surely, where do we get that kind of money?). Lack of information regarding insurance schemes was quoted by 26.4% of the respondents. Similarly, 93.7% of the total respondents felt that OVCs should not be charged for medical services provided to them, citing poverty as the sole reason.

* Not their real names
Fig. 5: Household income levels

![Pie chart showing household income levels]

Table 9: Frequency of OVC admission

<table>
<thead>
<tr>
<th>Place of admission</th>
<th>Frequency</th>
<th>Mode of bill payment</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Kenyatta National Hospital</td>
<td>23 (52.3%)</td>
<td>Absconded</td>
<td>1 (2.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waived</td>
<td>2 (4.5%)</td>
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<tr>
<td></td>
<td></td>
<td>Bailed out by family friends and relatives</td>
<td>20 (45.5%)</td>
</tr>
<tr>
<td>Mbagathi District Hospital</td>
<td>9 (20.5%)</td>
<td>Absconded</td>
<td>1 (2.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waived</td>
<td>1 (2.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bailed out by family friends and relatives</td>
<td>7 (15.9%)</td>
</tr>
<tr>
<td>Mission Hospital</td>
<td>9 (20.5%)</td>
<td>Waived</td>
<td>6 (13.6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bailed out by family friends and relatives</td>
<td>3 (6.8%)</td>
</tr>
<tr>
<td>Private clinic</td>
<td>3 (6.8%)</td>
<td>Bailed out by family friends and relatives</td>
<td>3 (6.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>44 (100%)</td>
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<td>44 (100%)</td>
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The number of dependants per household head, gross household income and expenditure have direct economic impact on the social fabric of the family, including the ability to access quality health care services. The results revealed that only a few households could afford the costs charged in the health facilities. This implies that affordability of medical services was relative in the study area. Cases of people bypassing a facility and moving to a distant one where they could afford the service were a common feature. Most of those who took action in less than 24 hours cited worsening of the condition whereas those who took action 48 hours or more cited lack of funds. This implies that the demand for health care services is partly determined by the household’s income and the price charged for the service. Families with little or no income postpone seeking health care. With low household income and
lack of funds. This implies that the demand for health care services is partly determined by the household’s income and the price charged for the service. Families with little or no income postpone seeking health care. With low household income and spending some of the income on health care, not including other family expenses as food, clothing, rent, fares and schooling costs, the slum residents could be labelled as “poor”. Similarly, poverty can be labelled as being synonymous with vulnerability to disease. Economic vulnerability therefore affects health-seeking behaviour of the households. Variations in income are likely to have important implications to health through their effects on quality of care received. Household income is thus a major determinant of health seeking behaviour. In the households where the heads of the households did not have any source of income, it was not possible to adequately seek timely medical attention for a sick OVC. Lack of adequate income led to adoption of coping strategies such as absconding payments after treatment. Similarly due to the economic constraints, others had their hospital bills waived by the respective health institutions. Evidence from past studies has demonstrated that low or no income is a deterrent to utilisation of medical care services. For example, Newacheck in his study shows that low income is a barrier to the use of modern primary medical services, even where they are publicly provided.

With regard to insurance coverage, only a small number of households had their members covered by an insurance scheme. The essence of health insurance is the sharing of risks. It is a mechanism designed so that those who are fortunate enough to be healthy and in gainful employment subsidise for those who are at risk; with a clear understanding that should those who are well now fall sick later on, their costs will in turn be covered. With an overwhelming majority of the respondents citing poverty as the main reason for not having an insurance cover, it meant that access to health care was not guaranteed. It’s against this background that the merits of health insurance as a potential source of health care financing should be considered.
Perception of care offered to OVCs

The perception of quality of care varies from one facility to another. The respondents' considerations on what constitutes quality health care includes the presence of well-trained personnel, regular supply of drugs and other health care utilities, appropriate and functional diagnostic/laboratory facilities and equipment. Other factors were positive staff attitudes and affordability of the services.

Of the respondents who gave their opinion about positive attributes of different health care facilities, 27.4%, 24.2%, 23.3% and 21.5% in that order cited Kenyatta National Hospital, Mbagathi District Hospital, government health centres and government dispensaries respectively as possessing well trained personnel.

The attribute of the institutions being well equipped with drugs and other supplies and equipment including diagnostic services as x-ray and laboratory tests were cited by 32.6%, 31.4%, 21.1% and 20.4% of the respondents in that order for Kenyatta National Hospital, Mbagathi district hospital, government health centres and private clinics respectively whereas 51.2% cited low consultation and treatment costs as reason for visiting traditional healers with 11.5% and 2% respectively citing this reason for Kenyatta National Hospital and the private clinics. Majority of those who bypassed the private clinics, (90.5%), cited higher consultation and treatment costs as the major hindrance while staff incompetence was highlighted by 78.9% of those who would not wish to have their sick children attended to by a traditional healer.

Positive staff attitudes towards their clients was highly cited in the private clinics by 52.2% of the respondents. This attribute was also reported in Kenyatta National Hospital, Mbagathi district hospital, dispensaries and health centres by 27.4%, 25.2%, 27.2%, and 26.3% of the respondents respectively. Negative staff attitudes were high in Kenyatta (45.8%), Mbagathi district hospital (29.7%), government health centres (21.6%), and government dispensaries (18.7%) in that order.
On the contrary, government dispensaries (48.7%), government health centres (42.4%), mission hospitals (26.3%), Mbagathi district hospital (19.6%), and NGO health care facilities (12.8%) were reported as having inadequate supply of drugs and other essential supplies and equipment, including diagnostic services as x-ray and laboratory services.

The results of the study suggest that in order for the health care professionals and planners to be successful in their attempts to maximise the health benefits of the OVC fraternity, they need to identify the lay peoples’ knowledge of the determinants of “an acceptable quality of care”. This is the acceptable standard of quality of service as perceived by the recipient and not necessarily as judged by the health care professionals. Based on this definition, KNH and Mbagathi district hospital were identified by the respondents to be offering quality services to OVCs. On the other hand, the primary publicly funded institutions; the dispensary and the health centre, did not meet the expectations of the respondents in terms of the quality of services. A large number of the respondents quoted these institutions as having chronic shortage of drugs and other essential supplies. Compared to the private facilities, the publicly funded health care facilities were far much cheaper and therefore could easily form the first contacts with the household members if the quality of their health care was improved.

Physical barriers to health care access

With regard to the mode of transport, 21.1% of the respondents used motorised transport (public or privately hired) to and from the nearest health care facility. On average 92% of the households spent less than Ksh. 49 on public transport whereas those who hired private transport spent Ksh. 50 and above. The mean cost of transport using public means was Ksh. 24.40 whereas that of using private transport was Ksh. 179.70.

Half of the respondents, (50.9%), lived within less than a kilometre from the nearest health care facility. Only 0.8% of the respondents indicated that they lived 4 or more kilometres away from the nearest health care facility (Table 10). Although the traditional healers did not have permanent consultation sites, they were accessible to the majority of the respondents. We established that the traditional healers visited their patients/clients at their homes. They kept on
moving from house to house and “street to street”. The mean distance to the nearest health care facility was calculated as 0.996 Km. All the 399 respondents indicated that they could walk to and from the nearest facility. The mean walking time to and from such a facility was 33 minutes.

Of the total respondents, 47.9% preferred taking their sick OVCs to the nearest health care facility. Nearness to the health facility was the most cited reason for choosing the facility, with 63.4% of the respondents citing this reason. Other factors cited included affordability of medical care (39.3%), availability of drugs and other supplies (11.5%) and competent and co-operative staff (11%). Those who would not prefer taking their sick children to their nearest health facilities had 43.8% citing shortage of drugs and other essential supplies whereas 40.4% cited high costs of treatment in such facilities. Other reasons given were staff incompetence, (26.9%) and poor physical infrastructure to access the facility (5.8%).

Table 10: Type of facility and the distance to the nearest health facility

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<tbody>
<tr>
<td>&lt; 0.9</td>
<td>155 (38.8%)</td>
<td>40 (10%)</td>
<td>5 (1.3%)</td>
<td>2 (0.5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (0.3%)</td>
<td>50.9%</td>
</tr>
<tr>
<td>1.0-1.9</td>
<td>76 (19.0%)</td>
<td>26 (6.5%)</td>
<td>9 (2.3%)</td>
<td>7 (1.8%)</td>
<td>5 (1.3%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>31.2%</td>
</tr>
<tr>
<td>2.0-2.9</td>
<td>26 (6.5%)</td>
<td>14 (3.5%)</td>
<td>5 (1.3%)</td>
<td>6 (1.5%)</td>
<td>4 (1.0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>13.8%</td>
</tr>
<tr>
<td>3.0-3.9</td>
<td>2 (0.8%)</td>
<td>2 (0.5%)</td>
<td>2 (0.5%)</td>
<td>3 (0.8%)</td>
<td>6 (1.5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3.8%</td>
</tr>
<tr>
<td>≥4.0</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (0.8%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>259 (64.9%)</td>
<td>82 (20.6%)</td>
<td>21 (5.3%)</td>
<td>18 (4.5%)</td>
<td>18(4.5%)</td>
<td>0 (0%)</td>
<td>1(0.3%)</td>
<td>399 (100%)</td>
</tr>
</tbody>
</table>

As mentioned earlier, distance to a health facility may determine utilisation of the facility and hence access to health care services. Analysis of the results of this study however reveals contrary to this expectation because majority of the respondents lived close to a health facility. This finding was complimented by the observation that all the respondents in the study could walk to and from the nearest health facility within an average period of time of half an hour.
CHAPTER 5: CONCLUSIONS AND POLICY RECOMMENDATIONS

This is where I will end my story. If it was well written and to the point, this is all I wanted; if it was dull and uninteresting, this is all I could accomplish.

-2 Maccabees 15:37-38-

5.1. Conclusions

The majority causes of morbidity in the study area are due to diseases and conditions that are preventable through observing basic hygiene and environmental manipulation. Malaria was cited as being the most common illness that affects OVCs in the area. Other common illnesses as perceived by the respondents included respiratory conditions, gastro-enteritis including worm infestation, typhoid fever and malnutrition.

The pharmacy/shop was the most common place to seek medical care for an OVC followed by the privately operated facilities. This was because services in such facilities could be offered piece-meal i.e. according to how much money one had. There was also the argument that the service-seekers could make arrangements to clear the bill in instalments. This raises doubts on the professional ethics and qualifications of the people running such facilities. A well-trained practitioner/professional will be the last person to think of giving treatment halfway as per client’s ability to afford. The district and the national hospitals were less utilised for outpatient services for sick OVCs but were the main institutions to seek admission if the illness became serious. The available dispensary in the vicinity was rarely utilised.

With the overwhelming majority buying non-prescription drugs, chances are that drug-resistance may develop in some cases due to irrational use of the drugs. This then implies that the burden of disease in the community may still persist.
The quality of care as perceived by the care seekers, the cost of such care and waiting time in a facility are among the factors that influence the decision on where to seek care. The findings revealed that the quality of health care services for OVCs as perceived by the care seekers in the public health institutions was below their expectations. This situation is largely attributed to inadequate inputs such as shortages in drugs, inadequate personnel and lack of diagnostic equipment. This further explains why people bypassed nearby facilities (either private or public) and opted for farther away health care facilities.

As revealed in the study, access to quality health services for OVCs in Kibera is only universal in principle but in practice, these services are not fully accessible or are of insufficient quality. For example, there is high probability of misdiagnosis of diseases by the respondents. Although malaria was cited as the most common illness that affects the OVCs, a lot needs to be done to ascertain the truth about the diagnosis. This is because most of the time the treatment was based on the assumption that every time a child had fever; it must have been due to malaria.

Current treatment costs, even if subsidised, make treatment unaffordable to many, and may result in the risk of treatment interruptions for those who can afford treatment only intermittently.

With more than a third of the heads of households living below the poverty line (less than one dollar a day) and only a small number having gross household income of Ksh. 7, 500 and above and considering the average household size and other domestic spending, poverty is therefore a common phenomenon in the study population resulting to inability to afford quality health care for OVCs. The analysis also showed that households with low income spent a significant proportion of their income on medical care for OVCs. High expenditure on medical care for OVCs implies less expenditure on other priorities such as schooling, food etc. For example, when asked what services would help them to better provide for OVCs, the guardians prioritise material assistance and means of improving their income.

Availability and physical accessibility of health care outlets was not an obstacle. This is because the national referral hospital is within the reach of the residents. In addition, the area has
numerous other health care institutions, ranging from private to mission and NGO facilities including a government district hospital and publicly funded dispensary and health centre.

In a situation whereby the traditional healer is the most sought practitioner for a second opinion and looking at the reasons the respondents advanced for seeking a second opinion, it then implies that the respondents still uphold popular African beliefs that ill health is not only pathological in aetiology but also culturally rooted. The belief in witchcraft and bad omen in the event of a disease was rife in this urbanite community. As a consequence, the sick child could become a victim of the conflict between culture and modern medical technology. Symptoms could worsen to the point of death as the guardians struggled to appease the “offended” spirits. Recognition of a disease is thus endowed within one’s cultural perception of the disease as a critical determinant for the appropriate preventive and help-seeking behaviour.

5.2. Recommendations

Findings of this study has demonstrated the need for OVC-related interventions. The data also indicates that caregivers, both parents and guardians, have needs of their own that need to be addressed in order to improve and prolong the capacity to care for children affected by HIV/AIDS. Based on the study findings, the following are the recommendations:

Stakeholders in the health care industry (including the government, NGOs, faith-based organisations and private institutions) should strive to reach children affected and infected by HIV/AIDS. One way to reach such children is by linking programmes for children affected by HIV/AIDS with care and support programmes for PLWHAs. This link will strengthen the responsiveness of care and support programmes by enhancing the future welfare of children.

The wider society (including the government, NGOs, faith-based organisations and private institutions) should emphasize on addressing the material needs of AIDS-affected households, including those headed by HIV-positive parents and by guardians. This can be in form of income-generating activities, vocational training, food, clothing or school fees. For instance, while an OVC on treatment may use household savings to pay for the treatment, being on treatment may call for continued income to the household.
The government should step up efforts to stock the publicly funded health institutions with drugs, more trained personnel and diagnostic equipment. Emphasis should be placed on improving the current infrastructure instead of constructing new ones. On the same note, the government should step in to investigate the professional qualifications of the people serving in the health care institutions in the study area. Particular concern should be directed towards the private health care facilities.

To promote and improve provision of affordable and quality health care to OVCs, it is important to introduce a social insurance scheme whose premium regimen can be affordable to this group.

Furthermore, the government should explore the role of alternative health care providers. One particular group of individuals that could be involved in care and support are the traditional healers. Their involvement fits well with an identified need to tap into the broad cultural beliefs of the community. Promoting public/private mix has the potential of enhancing a sense of public interest, accountability and community participation. Public/private mix can be promoted by giving incentives to faith-based and NGO facilities already providing services to OVCs in Kibera. Such incentives could include supply of drugs from government stores, secondment of health care personnel and tax-free imports of equipment and drugs.

Nevertheless, considerable operations research is needed to identify, analyse, and disseminate best experiences pertaining to treatment, care and support programmes for OVCs. High-priority operations research questions to this effect would include the following:

i) What is the most appropriate mix of treatment, care and support interventions for OVCs in settings with resource constraints as the slums?

ii) What are the most feasible and effective models for resource mobilisation, including risk pooling, insurance and community resource mobilisation?

iii) What is needed to improve the motivation and confidence of health care workers for OVCs? Specifically, what is needed in terms of training, salaries and support for the OVC service providers?

iv) How can the potential of private health care providers for OVCs best be maximised? What are the models for successful public-private sector partnership?
v) How equitable is the provision of treatment, care and support programmes for both OVCs and non-OVCs?

vi) How much will treatment, care and support for OVCs and their ailing parents/guardians cost? What is the benchmark for cost-effectiveness? How big are the externalities associated with treatment, care and support for OVCs and their ailing parents/guardians, and how can these be maximised?

When you sit for your next meal, spare a thought for that child orphaned or made vulnerable by HIV/AIDS who has not had a meal in the last 24 hours let alone being in need of medical attention. A child who when served with a cup of porridge has the will power to eat half of it and give the other half to an ailing mother or father. How much more than a thought, can you spare for such a child!
REFERENCES


55


46. The Kaiser Commission on Medicaid and the Uninsured. *Uninsured in America:* A chart


55. [http://www.wordiq.com](http://www.wordiq.com)


APPENDICES

Appendix I: Study questionnaire

HEALTH CARE ACCESS IN ORPHANS AND VULNERABLE CHILDREN (OVCs) IN THE CONTEXT OF THE HIV/AIDS PANDEMIC

Serial No.......................

SECTION 1:

BASIC SOCIO-DEMOGRAPHIC AND IDENTIFICATION DATA

NAME OF INTERVIEWER.................................................................

1. Village..............................................
2. Sub-Location.................................
3. Location........................................
4. Division........................................

5. Status of respondent:
   1) Father
   2) Mother
   3) Guardian (Relative or other)
   4) Sister
   5) Brother
   6) Vulnerable child
   7) Other-Specify.............................

6. Sex of respondent 1). Male 2). Female

7. Age of respondent in years .................
8. Are both parents to the children in the household alive?
   1) Yes
   2) No

9. If yes in 8 above, what do you think about their health?
   a) Father healthy, mother sick with ______ For _____ (Period)
   b) Mother healthy, father sick with ______ For _____ (Period)
   c) Both sick, Father with ______ For _____ (Period) Mother with _____ For _____

10. If No in 8 above, who is dead?
    1) Father
    2) Mother
    3) Both

11. If father dead,
    i. How long ago? _____ years
    ii. What was the cause of his death? ___________________

12. If mother dead,
    i. How long ago? _____ years
    ii. What was the cause of her death? ___________________

13. How many are you in your household? ____________
14. Who is the head of your household?

1) Father
2) Mother
3) Uncle
4) Aunt
5) Brother
6) Sister
7) Myself (Vulnerable child)
8) Other- specify __________

15. What is the age of the head of your household in years? ______________

16. Have the orphans and vulnerable children in this household been to school?

1) Yes
2) No

17. If yes in 16 above, what is the highest level of education attained by the latest to be in school?

1) Primary
2) Vocational training college
3) Secondary
4) Tertiary college
5) University
6) Other (Specify). .............

18. What made him/her not proceed further than as you indicated in 17 above if he/she dropped? __________________________
SECTION II

MORBIDITY PATTERN AND HEALTH-CARE SEEKING BEHAVIOUR

(Including the geographical, Economic and Socio-cultural determinants of health-care seeking behaviour).

Morbidity trends

19. What do you think is the most common illness suffered in your locality by the OVCs?

__________________________

20. Has any OVC in this household suffered any ailment in the last one month?

1) Yes
2) No

21. If yes in 20 above, then enter the table below.

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</tbody>
</table>

Possible actions to take

1) No action at all
2) Administered some medicines kept at home
3) Administered some drugs bought from the shop/chemist
4) Treated by a traditional healer
5) Treated by an allopathic care provider in a health facility (As an outpatient/Inpatient)
6) Other (Specify)...........

<table>
<thead>
<tr>
<th>Nature of practitioner</th>
<th>Possible places of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Medical Officer</td>
<td>1. Private medical clinic</td>
</tr>
<tr>
<td>2) Nurse</td>
<td>2. GoK Dispensary</td>
</tr>
<tr>
<td>3) Pharmacist</td>
<td>3. GoK Health Centre</td>
</tr>
<tr>
<td>4) Dentist</td>
<td>4. District Hospital</td>
</tr>
<tr>
<td>5) Clinical Officer</td>
<td>5. Kenyatta National Hospital</td>
</tr>
<tr>
<td>6) Traditional healer</td>
<td>6. Mission/NGO facility</td>
</tr>
<tr>
<td></td>
<td>7. Home environment</td>
</tr>
<tr>
<td></td>
<td>8. Other (Specify)</td>
</tr>
</tbody>
</table>

22. How long did it take from the time of onset of the condition (illness) to the time the above action was taken? (Quote in hours or days as may be appropriate) _____________

23. What necessitated whoever took the action to do so after such a period of time?

______________________________

24. If no action taken in 21 above, then why? _______________________________________

25. In 21 above, if the child was given some medicines kept at home, then which ones?

______________________________

26. If drugs were bought from the chemist/shop, then which ones? _____________

27. Why did whoever took action choose to seek medical help in the institution mentioned in 21 above? ________________________________
28. Has treatment ever been sought from more than one health care provider (apart from the one mentioned in 21 above) for the same illness?
   1) Yes
   2) No

29. If yes in 28 above, who else was consulted?

   1) Medical Officer
   2) Nurse
   3) Pharmacist
   4) Dentist
   5) Clinical Officer
   6) Traditional healer
   7) Other (Specify)

30. In line with 28 above, why was the second health care provider consulted?

   ____________________________________________

**Economic determinants of health care service utilisation/access**

31. Is the head of the household or the guardian on a salaried employment?
   1) Yes
   2) No

32. If yes in 31 above, what is his/her approximate monthly total earnings in Kenya shillings?

   __________

33. Do you have any household activity that earns you a regular income?
   1) Yes
   2) No

34. If yes in 33 above what kind of activity/activities?

   __________
35. If no in 33 above, what is your source of money for catering for your health care and other domestic expenses? _______________________

36. Approximately how much does the endeavours engaged in 34 above earn you for the household per month in Kenya shillings? _______________________

37. If a child in this household was admitted in Hospital in the last one month, did the family manage to clear the bill?
   1) Yes
   2) No

38. If yes in 37 above, where did you get the money?
   _______________________

39. If No in 37 above, then how did the family manage to get the child out of the hospital?
   1) Absconded
   2) Waived
   3) Bailed out by a friend/relative ____________
   4) Other (Specify) ____________

40. Do the members of this family belong to any Health insurance scheme?
   1) Yes
   2) No

41. If yes in 40 above, which one?
   1) National Hospital Insurance Fund (N. H. I. F)
   2) Community-based insurance fund (Specify) ____________
   3) Private insurance scheme (Specify) ____________
   4) Other (Specify) ____________

42. If No in 40 above, then why? ________________________

65
43. In your own opinion, do you think that OVCs should pay for medical services offered to them?
1) Yes
2) No

44. If No in 43 above, then why should they not pay?

__________________________

Physical determinants of Health care service utilisation/access

a) Accessibility

45. Approximately how far is the nearest health facility from your place of residence?
(Answer in Kilometres) ___________________________________

46. In 45 above, what kind of a facility is it? ______________________

47. What is your feeling about the distance stated in 45 above?
1) Very far
2) Moderate
3) Near

48. Please fill the table below pertaining the nearest health facility to you

<table>
<thead>
<tr>
<th>Mode of transport used</th>
<th>Time taken in hours (To and from)</th>
<th>Cost in Ksh. (To and from)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td></td>
<td></td>
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<tr>
<td>Riding a bicycle</td>
<td></td>
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<tr>
<td>Public transport</td>
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<tr>
<td>Private transport</td>
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<tr>
<td>Other (Specify)........</td>
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</tbody>
</table>
49. What is your general feeling about the transport cost incurred in 48 above?
   1) Too high
   2) Affordable
   3) Too low

50. If you had choice, would this remain your facility of preference?
   1) Yes
   2) No

51. If yes in 50 above why would you prefer visiting such a facility?

52. If No in 50 above, why?

b) Availability/Acceptability

53. How would you rate the services rendered to OVCs by the following health care facilities?

<table>
<thead>
<tr>
<th>Facility/Institution/Organisation</th>
<th>i. Satisfactory</th>
<th>ii. Unsatisfactory</th>
<th>Reason for being satisfactory or unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>GoK Dispensary</td>
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<tr>
<td>GoK Health Centre</td>
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<tr>
<td>GoK District Hospital</td>
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<tr>
<td>Kenyatta National hospital</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Private medical clinic/Nursing home</td>
<td></td>
<td></td>
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<tr>
<td>NGO medical facility</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mission medical facility</td>
<td></td>
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<tr>
<td>Traditional healer facility</td>
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</tbody>
</table>
Appendix II: Key Informant Interview Questionnaire

Name: ...................................................................................................................................................................
Position: ..............................................................................................................................................................
Organisation (if relevant): ......................................................................................................................................
Contact details:
Phone:.................................................................................. E-mail:.................................................................

First of all I would like to ask you some general questions about health in Kibera Division.

**Question 1:** What do you think are the biggest issues affecting health in this area?

**Question 2:** In your opinion which population groups have the greatest health need and why?

**Question 3:** What, do you think, stops these groups enjoying health?

Now I would like to ask your opinion about the provision of health services in this area.

**Question 4:** What are the biggest issues affecting health service provision in this area?

**Question 5:** What are the current gaps in the health services provided?

**Question 6:** What areas of health service delivery do you think the Government should be making a priority? Why?

**Question 7:** If you could change the way health services were delivered how would you change them?
I would now like to ask you some question specifically about orphans and vulnerable children (OVCs) and their health issues.

Question 8: How can other government organisations and we contribute to OVCs health care provision?

Question 9: What policies do you think should be put in place to achieve improved health care for orphans and vulnerable children in your community and Kenya as a whole?

Question 10: How should OVCs health care be measured?

Are there any other comments you would like to add about the provision of health services in this region?

Thank you for taking the time to share your expertise and knowledge with us. The information you have given us will be collated along with that of other providers and used to develop an overview of the provision of health care to OVCs in Kibera Division.

The information you have provided will be kept confidential.
Appendix III: FOCUS GROUP DISCUSSION (FGD) GUIDELINE FOR HEALTH CARE ACCESS IN ORPHANS AND VULNERABLE CHILDREN

Good morning every one!

My name is Francis Muma from the University of Nairobi’s Medical school where I am undertaking a Master’s degree course in Public Health. Our today’s discussion will be on what happens to the children left behind when their parent(s) die of, or are terminally ill, probably with HIV/AIDS or related illness, in terms of how they access health care services. Feel absolutely free to give your views on this issue since the information obtained from you will probably shine some light on how we can go around the plight of our children’s health care needs at our community, national and even the international levels. All the information you provide will be handled with due respect and confidentiality.

Welcome on board!

Date of FGD......................... Time FGD started..............
Venue of FGD...................... Time FGD ended..............
No. Of participants recruited for the FGD.........................

Socio-demographic characteristics of the participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Age</th>
<th>Marital status</th>
<th>Capacity</th>
<th>Education level</th>
<th>Occupation</th>
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Part i: Morbidity patterns

1. Most common illnesses suffered by OVCs in the community.

Probe for

a). Participant's own perception of the illness.
b). Actions the guardians/care-givers take in the event of an illness on an OVC.

Part ii: Determinants of Health care service utilisation

Barriers to health care access.

Probe for

a). Economic determinants i.e. Cost.
b). Physical determinants:
   i. Accessibility- in terms of distance to the nearest health care facility, modes of transport etc.
   ii. Appropriateness- in terms of availability of drugs and other supplies, staff attitudes etc.
   iii. Availability of different health care service providers in the community and their suitability to the community.
Part iii: Health care service provision status quo

3. Actions to improve access to health care services to OVCs.

Probe for

a) Presence of NGOs and other health care providers to OVCs.
b) Mobile medical services available.
c) Subsidising or even waiving OVCs in the facilities.
d) Types of care received-Curative, Promotive etc- and the community’s feelings towards such care.

Part iv: Conclusions

4. Recommendations to the Government or any other concerned organisation in view of health care provision for OVCs.

Once again thank you so much for your active participation.
Map of Nairobi District indicating divisions:

- Kiambu
- Thika
- Westlands
- Kasarani
- Central Pumwani
- Makadara
- Kibera
- Embakasi
- Machakos
- Kajiado

Distances:
- 1012 Kilometers

Legend:
- District Boundary
- Division boundary