HEALTH-SEEKING BEHAVIOUR AMONG RESIDENTS OF THE INFORMAL SETTLEMENT OF KIBERA, NAIROBI

BY

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2002
DECLARATION

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

Signature  

Edwin O. Onyancha

This thesis has been submitted for examination with my approval as the university supervisor.

Signature  

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DEDICATION

To my dear wife, Anne and my son Nyambane for their patience. I owe much of this work to you.
ACKNOWLEDGMENTS

I am greatly indebted to the MISSIO German for the graduate study scholarship and for Fr. Aylward Shorter's kindness in organising this. I remember my supervisor Dr. Isaac Nyamongo who tirelessly read through my work and for his professional guidance. I am particularly grateful to my parents who encouraged me to pursue graduate studies and for my wife and son for their patience and understanding. Finally I wish to thank all those respondents in Kibera who patiently answered my many questions.

May the Almighty God bless you all abundantly.
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ABSTRACT

This study investigates factors influencing health-seeking behaviour among the informal settlers of Kibera, Nairobi. It specifically addresses the following: whether beliefs on the cause of diseases influence the types of therapy used, whether the perceptions about the cost of treatment influence choice of sources of therapy and whether education influence therapy choice.

A total of 140 respondents (35 from each of the four villages: Lindi, Gwatekera, Laini Saba and Makina) were systematically sampled and interviewed using a standard questionnaire. In-depth interviews of 20 key informants (five from each village) were undertaken and two Focus Group Discussions (one comprising of health service providers and the other women with children under-five years) were conducted. Two case histories of people who had chronic illnesses were carried out as well.

The study found that beliefs about cause of diseases influence types of therapy used during the first stages of an illness. However, switching of therapies is common during follow-up stages and in episodes of chronic illnesses. Secondly, the study reveals that in the initial stages of illness, the respondents utilise health-care sources they consider affordable such as Government clinics and hospitals or indigenous healers. However, when an illness persists for a longer period or does not respond to treatment, the respondents usually change the source of therapy from cheaper to expensive ones.
Thirdly, the findings show that there is no association between level of education and therapy used. Qualitative data reveal that the choice of therapy depends on affordability, the seriousness of the illness, as well as the prospects of recovering. It is concluded that health-care outcome is determined by perceptions about disease causation and the cost of treatment.

It is recommended that improving hygienic levels of Kibera, and creating awareness through public health education on causes and management of common ailments, as well as enhancing the residents' incomes through skills training and involvement in income-generation activities to enable them access health care services should be emphasized. These measures will enable residents to make informed health care choices. Recommendations for future research are also identified.
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CHAPTER ONE: INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

Anthropologists have often made important distinctions between disease, illness and sickness in order to stress the different perspectives of various actors involved in the experience of illness and healing. Disease is seen as an objective view of health that is empirically distinguished by science and symptoms (Hardon et al., 1995). It is a universal condition or a pathological abnormality indicated by a set of symptoms. On the other hand, illness reflects the patient's perspective, which is a subjective view of an individual towards health (Hardon et al., 1995). This view is influenced by the cultural, social and emotional context in which it occurs and by the individual's background and personality. As a result illness may be present where disease is absent. For instance, a particular culture can recognise a pattern of symptoms and signs as illness and therefore, provide aetiology, a diagnosis, preventive measures and a regimen for healing this condition. Sickness refers to the influence of the society at large on illness, and the individual suffering from the ill health. It also refers to a social recognition of being unable to function normally or a situation where a patient is unable to execute his or her social roles. This means that becoming sick is a social process involving others at all stages. Sick individuals are assigned different social roles and are often exempted from work and other social responsibilities (Foster and Anderson, 1978; Helman, 1990; Kleinman, 1980).

In order to attain a state of good health, individuals engage in a process of identifying symptoms, evaluating them and acting upon them. This process entails health-seeking behaviour, which refers to the strategies that people employ to decide
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In order to attain a state of good health, individuals engage in a process of identifying symptoms, evaluating them and acting upon them. This process entails health-seeking behaviour, which refers to the strategies that people employ to decide
the options to use during any stage of an illness episode. Usually, these are patterns of resort to alleviate disease or illness.

Health-seeking behaviour is determined by many factors including myths regarding the origin of disease, cultural construction of illness, economic power, the duration of an illness and notions about pain and gender relations. In any given situation, these factors continually interact and guide health care choices. An understanding of these pertinent factors in health care will no doubt unveil people’s health-seeking behaviour.

The physical environment in which people live in predetermines their health-seeking behaviour. People living in both urban and rural areas are exposed to various health challenges that define how they seek health-care. The people living in slums and shanty places in urban centres experience unique health problems different from those of their rural counterparts. As early as 1974, Vogel and his colleagues outlined the three major health problems in urban areas. These included housing, water supply and sewage and refuse disposal (Vogel et al., 1974). These problems are more intense in the slum settlements where there is a conspicuous absence of basic services. The majority of the people living in slums work in the informal sector engaging in occupations that are poorly paying. These include selling of vegetables, charcoal, water and shoe making, among others. A few who work in the formal sector, either in government or private offices, hold lower cadre jobs that are unstable as well as poorly paying. The little money they get as wages or salaries is used to meet their most immediate basic necessities, such as food, rent, paying school fees and transport. Little, if any, is left for their health care. Apart from their low economic
power, the unsanitary conditions in which they live expose them to different health problems. Studies have established that diseases such as malnutrition, diarrhoea, intestinal worms, malaria and STDS/AIDS, are common among these populations (Owiti, 1993; Waruinge-Muhindi, 1994). These people turn to various methods to cope with their health problems.

This study focused on the health-seeking behaviour among people living in Kibera slums. These are seen as people living in poor neighbourhoods, in houses mainly constructed of mud and wattle, in land occupied on temporary licenses, in areas where the supply of clean drinking water is limited or obtained from kiosks, in areas with poor sanitation, lacking toilets and waste disposal, in areas with limited electricity supply and, generally characterised by a poor infrastructure (particularly limited supply of public health services, roads, schools and recreational places).

1.2 Problem Statement

Health problems in developing countries have generally been attributed to poverty and ignorance. This has emerged as a result of a carry-over of development policies over the years that are blind to the plight of the poor, especially in the health care provision. These policies often ignore social, economic and cultural factors that influence treatment patterns and management of diseases. As a result, this has created gaps in the fight, management and treatment of diseases. This study examines some of these factors and their implications on health care seeking in informal settlements of urban areas.

Therapeutic options are open to the people and can be resorted to at different points, or used simultaneously in any illness episode (Foster and Anderson, 1978;
Helman, 1990; Klienman, 1980; Maclean, 1978; Nyamongo, 1998; Nyamongo, 2002; Ryan, 1995; Scot, 1978). These options range from self-diagnosis and treatment with home remedies, herbal medicine and modern pharmaceuticals, resort to traditional healing, faith healing to use of modern medicine. It appears that there is a possible hierarchy of decision-making processes in health care through which health decisions are made. These are influenced by factors such as economic status, level of education, accessibility of health-care sources, perceptions of the seriousness of the condition, the cost of service and the treatment offered. This study examines the factors influencing decision-making in therapeutic choice.

As already stated, people living in the slums are often faced with poor housing, lack of clean water, lack of proper waste disposal, and lack of sewage systems, among other basic necessities. These conditions expose them to different diseases, including those that can be prevented. Waruinge-Muhindi (1994) study in Kibera reported that 26% of children died before their first birthday and 49% died when they were between one and two years old. The high child mortality among those between one and two years was attributed to exogenous causes related to the insanitary or poor environmental conditions. Alderete and colleagues have argued that rural-urban migration implies not only a geographical relocation, but also a disruption of ideological, cultural and social structures, as well as social networks and gender roles (Alderete et al., 1994). This disruption reduces migrants' coping strategies in times of crises such as illness/sickness. Shanty town dwellers work in occupations such as construction, low level government administration and plantation work, which not only pay low salaries, but also exposes them to a myriad of health conditions.
Alderete et al., 1994). These factors have rendered people living in the informal settlements vulnerable to both health and economic problems. But despite their vulnerability, little is known regarding the extent to which socio-economic and cultural factors influence, if at all, the knowledge of causation of illness, their choice of therapeutic options, shaping of their perceptions on health and utilisation of available health-care sources. Furthermore, there is lack of information to show how modern, traditional and other forms of indigenous healing, interface in the treatment and management of diseases among these people.

In the light of the above, this study proposed to answer three questions:

1. How do people's beliefs about the cause of disease influence their choice of therapy?
2. In what ways do perceptions about the cost of treatment contribute to decision-making regarding the choice of sources of therapy?
3. How do education levels influence choice of therapy?

1.3 Study Objectives

The overall objective of this study was to investigate and analyse the health-seeking behaviour of the people living in the informal settlement of Kibera in Nairobi. Specifically, the study focuses on the following objectives:

1. To investigate how beliefs about the cause of disease affect choice of therapy.
2. To determine the extent to which perceptions about the cost of treatment affects the choice of sources of therapy.
3. To assess the extent to which the level of education influences choice of therapy.

1.4 Study Justification

Many previous studies on health-seeking behaviour are rural based (Jansen, 1978; Nyamongo, 1998; Nyamwaya, 1992; Ryan, 1995; Sindiga, 1992; Young, 1981). Urban studies on health-seeking behaviour are few (Vogel et al., 1978; Chavunduka, 1978). As a consequence, there is a paucity of data on health problems of low-income urban poor. Furthermore, data on urban groups are often omitted or presented as aggregates along with that of high-income groups. However, health conditions of the urban poor, especially those living in the informal settlements are worse than those of the rural poor. A study focusing on their health-seeking behaviour no doubt highlights their plight.

Considering that there exists a wide range of therapeutic options to choose from, people are likely to shift from one choice to another as they attempt to maximise the therapeutic outcome. An understanding of the factors affecting therapy preferences in the urban slums provides information that may direct policy formulation.

The people living in the urban informal settlements hold a wide range of occupations including salaried employment in the lowest echelons of the formal and informal sectors. Usually, they are a low-income group. Those that are unemployed among them are often forced into occupations that are marginal and, sometimes, illegal. These include prostitution, brewing of illicit beer, and theft. These jobs generate little income that is spent on the most basic needs, thus leaving little for.
health care. The results from this study will help in informing policy makers to develop responsive policies geared towards meeting their health needs.
CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL MODEL

2.1 Introduction

In this chapter, literature relevant to the study topic is reviewed. The first section deals with determinants of health-seeking behaviour. The second section reviews literature on ethno-medical systems. The third section deals with culture and health. The fourth section reviews literature on public health care delivery in Kenya. In addition, a theoretical orientation, which forms the framework for the analysis, and its relevance to the study, is presented. In section five the Health Belief Model is adopted to explain the different factors that influence health-seeking behaviour. Hypotheses are formulated and operational definitions of concepts given.

2.2 Determinants of Health-Seeking Behaviour

Health-seeking behaviour is seen in a broader sense as all things done to alleviate and control disease and illness. This is determined by a medical system existing in a given society. A medical system is “a patterned interrelated body of values and deliberate practices governed by a single paradigm of meaning, identification, prevention and treatment of sickness” (IDRC, 1980). Each medical system has attributes such as concept of disease causation, nosology, prophylaxis, therapy-seeking and therapy-selecting behaviour, therapy management and choice, range of practitioners, practitioner specialisation, diagnosis of health problem and therapy procedures and drugs and other pharmacopoeia (Yoder, 1982). The medical system reflects part of the cultural and social patterning of the society of which it is part of (Fabrega, 1975).
Disease and illness are intricately interwoven in the social status of the group concerned (Fabrega, 1975). A person who contracts an illness or is attacked by a disease is unable to perform his or her functions within the social group. This group which comprise of family members, neighbours and/or friends is affected by the individual’s illness and helps to select a therapy for the patient. Among the Maasai people of Kenya, a patient is given traditional medicine at home. However, if she or he fails to respond to the home treatment, elders consult one another on therapy and recommend a specialised healer (Sindiga, 1994). A study by Danesi and Adetunji (1994) in Nigeria found that epileptic patients used alternative treatment between one and 5 years before seeking hospital treatment. Hospital treatment was sought when alternative medicine failed to control seizures. The study further revealed that relatives, friends and neighbours influenced health-seeking behaviour of epileptic patients in either seeking for alternative medicine or hospital treatment. This implies that home therapy group is crucial in decision-making regarding health-seeking strategies pursued by the patient.

Health-seeking behaviour is also determined by beliefs on disease causation. Studies have shown that causes of disease and illness are classified as either natural (God-given) or unnatural (human induced) (Mbiti, 1969, Foster and Anderson, 1978, IDRC, 1980). Natural diseases such as diarrhoea, skin rash, malaria, among others may be treated either by modern medicine or indigenous, or both. Human-induced diseases and illness (unnatural) resulting from sorcery, witchcraft, evil spirits, breaching of taboos are referred to indigenous healers (Whisson, 1974, IDRC, 1980). Nevertheless, diseases and illnesses that have multiple causes often attract pragmatic
therapy-seeking, both in modern and in indigenous medicine (Ouko, 1998; Jansen, 1978; Nyamwaya, 1992; Winston and Patel, 1995; Maithya, 1992). Kelner and Wellman study in Canada revealed that people choose to seek care from different types of practitioners: family physicians, chiropractors, acupuncturists/traditional Chinese doctors, naturopaths and Reiki practitioners for particular problems (Kelner and Wellman, 1997). Others used a mixture of practitioners to treat a specific complaint.

A study in Western Kenya, revealed that other factors such as desire for privacy, cost and belief in the efficacy of traditional medicine, strongly influenced health-seeking behaviour among people with sexually transmitted infections (Moss et al., 1999). Several respondents in their sample professed a belief that sexually transmitted infection must be transmitted in order to achieve a cure.

The existing health-care resources within people's reach as well as their perceptions of aetiology and symptom identification influence their health-seeking behaviour. Munguti's (1992) study in Baringo District of Kenya revealed that public health facilities, over-the-counter medications and private facilities were used in the treatment of malaria. Many households used public health facilities as the first choice of care. However, if a malaria episode persisted, other forms of treatment, especially private clinics and medicinal plants were preferred (Munguti, 1992).

Hodgkin's (1996) study in rural Kenya found that distance to the health care service determined health-seeking behaviour. The study revealed that maternal deliveries occurred at home or within traditional birth attendants setting. Significant predictors of choosing informal delivery setting were linked to the household distance
from the nearest maternity bed and whether a household member had a health
insurance.

Health-seeking behaviour is based on decisions made by patients and their
caretakers to achieve desired results. This decision making process takes cognisance
of people’s income, cost of care, severity of the symptoms, perception on the cause of
the disease, the likelihood of success in taking certain strategies, available health
resources and the distance to the care source.

2.3 Ethno - medical systems

Ethnomedicine has been defined as the study of different ways in which people
of various cultures perceive and cope with illness including making a diagnosis and
obtaining therapy (Fabrega, 1975). In this case therefore, ethnomedical system is the
aggregate of a group’s beliefs, strategies, behaviours and interactions with the
environment that pertain to sickness, its management and health status. Good (1987)
asserts that ethnomedical system comprises of all the resources and the responses
available to a community in addressing its health problems, organised spatially and
changing over time. Thus, certain forms of western medicine may be adopted or
adapted into a group’s ethnomedical system (Good, 1987). Nevertheless, the core
concepts, beliefs and practices of that group remain.

In any given society, there is an interaction of different medical systems. This
interaction has increasingly influenced patterns of therapy selection. Within an
African context, traditional medicine is seen as the totality of all knowledge and
practices, whether explicable or not, used in diagnosing, preventing or eliminating a
physical, mental or social disequilibrium. This knowledge relies exclusively on the
past experience and observation handed down from generation to generation, verbally or in writing (Ampofo and Johnson, 1978)

WHO recognises that traditional medicine should be brought up to date, placed on a scientific basis and used in national health care services (Akerele, 1987). Following the 1978 Alma Ata declaration, there has been a rapid growth in the number of practitioners' organisations, especially in Africa. Some of these include Zulu 'isangomas' and the Zimbabwe National Traditional Healers Association. All over Africa, traditional medicine has therefore continued to provide alternative health care to a large clientele.

Helman (1990) notes that modern urbanised societies, whether western or non-western, are more likely to exhibit health care pluralism. Within these societies, there are many people or individuals, each offering the patient their own way of explaining, diagnosing and treating ill-health. Though these therapeutic modes co-exist, they are often based on entirely different premises and may even originate in different cultures.

Haram (1991) reported that Tswana people of Botswana allowed certain external cultural elements to be assimilated into their thought systems. However, these were either fitted into already existing categories of thought, or were regarded as valuable for only particular sorts of ailments. For instance, this did not change certain beliefs regarding disease causality, especially those related to sexually transmitted diseases. In this community, certain persons are believed to have hot and dangerous blood and thereby could cause diseases. These include pregnant women (particularly those in their first three months of pregnancy); widows or widowers,
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women whose children died just after birth or have aborted, and women who have just given birth. Therefore, diseases related to the above causes were managed traditionally (Haram, 1991).

Kimani (1995) points out that traditional health-care, though fluid and unsystematic is popular and regularly sought. It is often conceptualised along ethnic belief systems and behaviour. In her comparative study of rural and urban communities in Kenya, she found out that both modern and traditional health care systems coexist and continue to thrive without much competition. Both systems serve a large clientele who select the service option perceived to fulfil their medical, social, emotional or spiritual needs. Thus, the health-seeking behaviour in any society must be analysed within the context of existing medical systems, whether modern or traditional (Kimani, 1995).

The Maasai of Narok District have a wide range of herbal medicine. The knowledge of this medicine is passed from parents to their children to treat both human and their livestock (Sindiga, 1992). In this community, disease/illness is believed to emanate from the environment via food, water, hygiene, sex and weather changes. However, certain diseases are seen to result from witchcraft and evil spirits. Traditional healers are commonly consulted for all types of illness. When a patient fails to respond to a home remedy, elders consult one another on therapy and recommend a specialised healer.

The Abagusii community of Western Kenya has an elaborate traditional medical system with a variety of practitioners, specialisation, pharmacopoeia and medical paraphernalia. This system exists side by side with modern medicine
The Abagusii people are pragmatic about treatment and will try anything that promises help. Thus, they look at various possible causes when an illness strikes. They may utilise both traditional and modern medicine and make an open-ended search for treatment within the medical systems that are accessible and available until the disease/illness is cured (Nyamwaya, 1986).

Other studies based in Africa have shown that traditional medicine displays the capacity to adapt to the needs of urban populations and provides economic support for a vast majority of people in the informal sector (Chavunduka, 1978; Good and Kimani, 1980; Maclean, 1978). The distribution of allopathic health services appears tilted towards urban areas (Good and Kimani, 1980). In spite of this, illness management and health-seeking behaviour in the African ethno-medical systems have never been fully understood by either scholars or health planners.

Some African countries have made attempts towards integrating traditional medicine into modern health care system. However, such efforts are often limited to traditional birth attendants and herbalists (Akerele, 1987; Nyamwaya, 1992). In Kenya, the Kenya Medical Research Institute (KEMRI) and the Faculty of Pharmacy at the University of Nairobi have sought services of herbalists in their researches on medicine. However, the collaboration is still selective, implying that ethno-medical systems have not been fully integrated into health care delivery.

Both traditional and modern medicine are seen as complimentary and have been used together to treat illnesses. Barrenness, postpartum weaknesses, madness and a number of other illnesses among the Luvale of Zambia are reserved for traditional medicine (Spring, 1980). Similarly, the Keiyo and Marakwet of Kenya see...
women's infertility, infantile diarrhoea, trephining of fractured skulls and mental
illness as best handled in traditional medicine. Conversely, obstetric cases, acute
respiratory infections, trachoma, accidents and fever belong to modern medicine
(Kipkorir, 1980; Nyamwaya, 1981). Therefore, when faced by an actual episode of
illness, a patient may move from one traditional healer to another and from traditional
medicine to a health centre or hospital and vice versa (Nyamwaya, 1981).

Exploring the strengths of non-western medicine over western medicine,
Foster and Anderson (1978) assert that non-western medical systems can conveniently
be considered under the categories of psychosocial support therapies and clinical or
therapeutic acts, especially indigenous pharmacopoeias. Illness in non-western
societies represents a dysfunction not only within the patient's body, but also in his or
her relationship with his or her society, causing perhaps a dysfunction within the
society itself. Therefore, health is conceived as a correct relationship between man or
woman and his or her physical environment, his or her supernatural environment, the
world around him or her and his or her fellow man/woman. This comprehensive
man/woman - environment setting in which people view illness, to a large extent,
explains why the role of the powerful healer (shaman or the medicine man) is
conceived to be far broader than that of his or her western counterpart. The traditional
healer works to maintain harmony between man/woman, his/her society and his/her
environment. The holistic nature of healing within a non-western setting, as discussed
by Foster and Anderson above, determines the popularity of services existing within
the ethno-medical systems.
Kokwaro (1976) points out that traditional medicine as practised in Africa, embraces a wide field of both medicine (science of preserving or restoring health) and pharmacology (a branch of science dealing with drugs). The traditional practitioner provides health care by using plants, animal and mineral substances as tangible objects for treating his or her patients. But, unlike a biomedical doctor, this knowledge is not documented (Kokwaro, 1976). The concepts of diseases in Africa are grouped into either natural (those due to tangible material which affect the body organs), or unnatural (those due to intangible forces). Therefore, the methods of therapy will largely depend on the types of diseases (Kokwaro, 1976).

Kleinman (1980) has suggested that in complex societies, there are three overlapping and inter-connected sectors of health care, each with distinct ways of managing illnesses. These are: the popular sector that is composed of the non-professional, non-specialist domain of society, the folk sector composed of individuals with specialised forms of healing and, finally, the professional sector that is legally sanctioned scientific medicine or biomedicine. Within all these sectors, various forms of health-seeking behaviour are exhibited (Kleinman, 1980).

Whyte (1997) reported that there are changing positions of medicine within the health care system in Uganda. Biomedicine has been made increasingly accessible to people through folk specialists for use in the popular sector. It is no longer limited to the professional institution-based sphere, but competes directly with varieties of African medicine. This form of indigenization must be understood as the cultural and social appropriation. Therefore, both biomedicine and African medicine continue to interface and influence health-seeking behaviour (Whyte, 1997).
Nyamwaya (1992) has discussed five major forms of response to disease and illness in the African setting. These include the use of materia medica in treatment, coping mechanisms for chronic or persistent conditions, preventive action, meaning and explanation seeking within the individual and family concerned, and meaning and explanation in the wider context that involves interpersonal and spiritual factors. In all these, lay concepts of disease, illness causation as well as indigenous medicine influence health-seeking behaviour.

Ethno-medical systems have continued to be relied upon because they provide an attractive alternative. Lasker's (1981) study, in Cote D'Ivoire found out that in addition to widespread borrowing of techniques from other groups, most African societies have several means of responding to illness, primarily in relation to its source. Diseases may come from natural causes, be brought by gods or ancestors in response to deviant behaviour, or may be caused by a member of a group for evil reasons. Ivorians continue to assess the cause of their illness and then seek the most appropriate and available treatment. These include herbal medicine, seeking services of diviners, religious rites, using prophets of syncretic sects that combine Christianity with African traditions, using marabouts (Moslem faith healers) and self-treatment by herbal or western medicine (Lasker, 1981). It is clear that people have no problems in combining various forms of therapy, ranging from ethno-medicine to western medicine. People faced by an illness marshal their efforts from all health sectors to overcome it.

The people's indigenous knowledge plays a significant role in determining their health-seeking behaviour. Kennedy and Olsson (1990) study of a rural
community health clinic in Mexico reported that health-seeking behaviour is linked to a person's perceived aetiology and cultural knowledge. The more traditional the perceived aetiology, the more apt the client was to choose a traditional practitioner. This study clearly shows that people are not just consumers of health services, they distinctively evaluate and choose the most appropriate service that suits their needs.

Ethno-medical systems play a crucial role in the management of stigmatised diseases. These are diseases that present symptoms that are embarrassing, uncomfortable and beyond the patient's control. The conceptualised causative factors are sometimes behavioural and the community often seeks explanations in either human social interactions, in the supernatural or the ancestral spirits. Fear of social stigma extends to the patient's behaviour in seeking allopathic health services at specialised centres. Patients are usually reluctant to seek care where they might be seen by those who know them (Kimani, 1995). Therefore, stigma may act as a social determinant in health-seeking behaviour. It is clear that patients with such stigmatised diseases may prefer to seek care further away from their homes. Some diseases such as infertility, STDS/AIDS, mental illness and contraception are sometimes preferably handled by ethno-medical systems.

AIDS prevention programmes have utilised traditional healers to treat STDS and promote behaviour change. For instance, a study in South Africa and Mozambique revealed that ethnomedical research has deepened biomedical understanding of beliefs and practices related to STDS and assisted in designing culturally meaningful AIDS communication strategies (Green, 1997).
Studies of malaria have established that people utilise both cosmopolitan and ethno-medical systems to treat it (Nyamongo, 1998; Mwenesi et al., 1995). Nyamongo (2002) reports that when they have malaria, lay people in Gusii go through different treatment transitions. These are self-treatment, public health care facilities, private health care facilities, consulting a herbalist (or using herbs) as well as not doing anything. Munguti (1992) also points out that although households in Baringo District associated the cause of malaria with mosquito, the community had multiple aetiology that included wild vegetables, water and milk. Various health resources ranging from public health facilities, over-the-counter medications, private clinics to herbal medicines were used. For the first choice of care, many households used public health facilities. Nevertheless, if malaria persisted, other forms of treatment were resorted to such as private clinics and medicinal plants. This study concluded that understanding the community’s perceptions of causes, symptom identification and treatment of malaria is an important step towards the control of the disease (Munguti, 1992).

It is clear that ethno-medical systems play a central role in health care delivery throughout the world. Planners and policy makers of health programmes cannot ignore this role because it coexists with other health systems. An understanding of an ethno-medical system in any given society will, no doubt, provide an impetus to a clear appreciation of its health-seeking behaviour.

2.4 Culture and Health

Culture is both learned and acquired from the community one belongs to (Ember and Ember, 1998; Ferraro, 1992; Keesing 1981). It provides members of a group with a mirror with which to see the world and define behaviour. Health is a
phenomenon of culture. Hardon et al. (1995) view health problems as cultural phenomena. This is because these problems often find their origin in people’s living and working conditions (socio-economic status and gender positions) and lifestyle (behaviour). Similarly, they are communicated to others in ways that are culturally prescribed. In one culture, a sick person may not be expected to show his pain while in another, he or she is expected to do the opposite. Also, health problems are labelled and explained in accordance with existing cultural concepts. For example, the common cultural beliefs that provide illness explanations include the hot and cold ideas, belief in spirits, witchcraft or trust in natural science. In addition, health problems are experienced in a way that has been influenced by prevailing cultural ideas. Whether an illness is considered serious or harmless varies from one culture to the other.

Helman (1990) points out that in most societies, people suffering from physical discomfort or emotional distress have a number of ways of helping themselves or seeking help from other people. For example, they may decide to take a rest or take a home remedy, ask for advice from a friend, a relative or a neighbour. Alternatively, they may consult a doctor, a local priest, folk healer or a wise person. Helman argues that the more complex the society one lives in, the more likely one is to find many therapeutic options. Helman’s argument implies that the society’s health care system cannot be understood in isolation from other aspects of that society, such as social, religious, political and economic organisations. These aspects are a part and parcel of a people’s culture.
Kleinman (1980) has, in fact, argued that a useful way of looking at the process, by which illness is patterned, is through the explanatory model (EM). This is because various actors involved in an individual’s health problem are likely to have different ideas about the origin and character of the problem and about what should be done to solve it. Kleinman’s concept of the explanatory model offers explanations for the origins of a condition and its treatment (Kleinman, 1980). These are notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process. The interaction between EMs of patients and practitioners is a central component of health care. Practitioner’s EMs tell us something about how they understand and treat diseases. The study of patient and family EMs tell us how they make sense of given episodes of illness and how they choose and evaluate particular illness. Through this model, people are able to give meaning to the symptoms as well as to determine possible choices of therapy. EMs seek to explain aetiology, time and mode of onset of symptoms, pathophysiology, course of sickness and treatment. All these are however determined by both personality and cultural factors.

Sick people, as cultural beings, have over the years developed social institutions; aetiological theories and therapeutic techniques to enable them to cope with social and other dislocations occasioned by illness induced disability. Disease, with its pain and suffering, is the most predictable of human conditions and is both a biological and cultural universal (Foster and Anderson, 1978). Societies have developed a disease theory and a health care system. A disease theory system embraces beliefs’ about the nature of health, causes of illness, their remedies and other curing techniques used. On the other hand, the health care system addresses
itself to the ways in which societies organise to care for the sick as well as to utilise
disease knowledge to aid the patient (Foster and Anderson, 1978).

Illness causality is explained both by personalistic and natural causes (Foster
and Anderson, 1978). The personalistic medical system ascribes illness to active,
purposeful intervention of a sensate agent who may be a supernatural being (such as a
ghost, ancestor or evil spirit) or a human being, such as a witch or sorcerer. On the
other hand, natural diseases are those explained in impersonal, systematic terms
where health prevails when there is a balance in insensate elements in the body, such
as heat and cold. The two concepts of explaining causes of diseases as envisaged by
different cultural groups, determine how people seek for therapeutic options.

Within any culture, diseases are analysed in relation to their causes, whether
caused by natural or human induced forces. The types of treatment choices are greatly
influenced by these causes. For instance, the utilisation of biomedical services is quite
common when the cause of illness is believed to be natural. On the contrary, resort to
traditional medicine when disease, is caused by human induced forces is prevalent.
Nevertheless, various studies have revealed that when faced with actual illnesses,
patients use a number of systems simultaneously during the same illness episode
(Nyamwaya, 1992; Sindiga et al., 1995). Jansen’s (1978) study of therapy among the
Bakongo of Lower Zaire, is a classic example of how people embrace both western
and non-western health care. The Bakongo patients would interrupt treatment in
hospitals to return to their homes to seek treatment from a traditional healer. Also,
patients upon arrival at the hospital bear telltale scratches of ‘Nganga’ (indigenous
doctor) treatment. Thus, the Bakongo make a clear distinction between an illness of God and one that entails human cause (Jansen, 1978).

Kawango’s (1992) study in Siaya District asserts that the Luo have preventive, adaptive and curative strategies to cope with ill-health drawing from their culture and ecological environment. Accordingly, interpersonal relationships are directly linked with their health status. Diseases are explained in terms of human agency, ancestral spirits and from breaching of taboos and customs. Usually, biomedicine therapy is used for acute symptoms and natural diseases of inheritance and of physical environment. Conversely, traditional medicine is consulted to deal with underlying causes of human agency, ancestral spirits, evil spirits or breaching of taboos (Kawango, 1992).

The classification of disease causation within any given cultural context influences people’s health-seeking behaviour. A study in Machakos on mothers’ beliefs about measles and diarrhoea and what is done when children are infected by these diseases, found that the perceived aetiological notions about these diseases influenced their beliefs and consequent treatment (Maina, 1978). Ouko (1998) study in Rarieda Division of Siaya District revealed that the respondents believed that measles is caused by either ‘nyawawa’ (evil spirits) or ‘yamo’ (seasonal changes), respectively. Those subscribing to these beliefs tended to use traditional methods, while those who knew that it was caused by a virus tended to use modern methods of treatment. This implies that cultural beliefs determine disease classification and its subsequent management.
Hunte and Sultana (1992) confirmed that people tend to stick to their cultural remedies in the face of cosmopolitan medicine. They reported that in Balochistan (Pakistan), home-based preparations continue to exist. Most of these are largely herbal in nature, and are part of an intricate pharmacopoeia in which women are the primary carriers of knowledge. They pointed out that health-seeking behaviour usually begins within the household, where illnesses are initially perceived and defined, and treatment initiated by the family members themselves (Hunte and Sultana, 1992).

Many communities draw from their cultural beliefs to diagnose and manage diseases/illnesses. Amunyuzu’s (1992) study in Kwale district revealed that bodily change is the concern of most patients suffering from chronic filarial swelling. They felt that their physical appearance influenced community reactions towards them. The community attributed elephantiasis to causes other than mosquitoes. These included witchcraft, illicit sex and consumption of burnt food.

It is clear that cultural beliefs influence health-seeking behaviour. However, culture is also heterogeneous and is not static. This means that it keeps on changing as it adapts to new environments. Nevertheless, cultural beliefs and practices greatly influence people’s health.

2.5 Public Health Care Delivery in Kenya

Good health constitutes one of the basic human needs and contributes significantly towards enhancing and maintaining the productive potential of a people. In recognising these benefits, the Government of Kenya has, since independence, continued to design and implement policies aimed at improving the country’s health status. This is through increasing coverage and accessibility of health services with
active community participation, and consolidating services such as maternal and child health and family planning, in order to reduce morbidity and fertility levels (GOK, 1965; WHO, 1996).

The government has also called for inter-sectoral collaboration with NGOs, traditional practitioners and other ministries involved in the improvement of health status, as well as encouraging NGOs to play a greater role in the delivery and financing of health care services (GOK, 1979; Maneno and Mwanzi, 1991; WHO, 1996).

Kenya’s health system is a multi-provider system where various services, individuals and practitioners coexist and function. These include both western and non-western. Medical pluralism appears to exist and function at different levels: institutional, cognitive and structural, each with a locus of diversity (Kimani, 1995). Patients use health facilities from various system options and interdependence between these systems through the users, although unintentional, is inevitable (Maneno and Mwanzi, 1991; Nyamwaya, 1992).

In the public health sector, the Kenyan Government has committed itself since independence to providing free health services as part of its development strategy (GOK, 1965). This followed the introduction of free outpatient services and the expansion of the health infrastructure. Non-governmental organisations, religious institutions, pharmacies, and others received government support in training, grants and subsidies for medical supplies and equipment. This was to ensure that each person lived within a ten-kilometre radius from the nearest health facility and that primary and preventive health services were extended countrywide. This prompted a rapid
growth in the number of public health facilities, beds and training of medical personnel, after independence.

The government remains the major financier of health care in Kenya, meeting nearly half of the national health care recurrent expenditure (WHO, 1996). The private market (insurance and out of pocket modes) meets 42%, while the missions, companies, donors and NGOs meet 6% (WHO, 1996). The escalating cost of health care threatened the sustainability of the ambitious ‘free medical service’ policy as early as the 1980s. Consequently, the cost-sharing policy was introduced to supplement government spending. The programme generates additional revenues through user charges and collection from the National Hospital Insurance Fund and other third parties.

Owino and Munga (1997) report that the collections from the cost-sharing programme appear to be insignificant in revitalising the short fall in budget allocations. This is attributed to factors such as vested interests, reluctance by the centre to cede financial control to the districts or facilities, implementation and institutional weaknesses, and the ineffectiveness of district treasuries in overseeing the maintenance of correct accounting procedures. Similarly, the systems of waivers and exemptions, provided as a safety net to protect the vulnerable against the adverse effects have not worked well. Only 15% of the households are aware of their existence and merely 5% of the patients seek waivers. 40% of the exemptions are not given on equity grounds but are marred by political interference. As a result, the public health facilities have become prohibitively costly among those seeking waivers.
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and exemptions, because they have to pay additional fees to reach the registration table (Owino and Munga, 1997).

The existing cost sharing restricts access to modern health-care by the poor. World Bank (1992) reported that there was substantial decline in outpatient attendance following introduction of registration fee in 1989 in Kenya (World Bank, 1992). This attendance rose again when the fees was suspended, but fell slightly when treatment fees were re-introduced in 1992 by 5% in five provincial hospitals and 17% in four district hospitals.

Mwabu et al., (1986) found that out of 1,000 people interviewed before the user fee changes, 536 would have used government services, 40 would have visited mission health services, 135 would have purchased private care and 290 would have sought modern treatment. After the increase of user fees, about 97 people could be expected to abandon government health services. Of these, 8 would seek treatment from missionary health facilities, 28 would resort to private clinics and 61 would treat themselves. This implies that with introduction of user fees, many people are resorting to self-treatment.

Asbu (1999) found that introduction of user fee in Eritrea reduced attendance at the tertiary referral hospitals. In Tanzania, it is evident that people are willing, but are unable to pay for biomedical health care – even when they can afford costly traditional medicine (Muela et al., 1999). Unlike biomedical health care, traditional treatment offer other alternatives to cash payments such as compensation in kind or in work and payment on credit (Muela et al., 1999). This implies that introduction of cost sharing has influenced people’s health-seeking behaviour.
The public health sector faces inherent problems in providing its services to people. These include shortage of drugs and malfunctioning medical equipment. Studies have established that public health centres continue to consume second rate drugs or are plagued by drug shortages attributable to financial problems (World Bank, 1992; Deolalikar, 1997; Owino and Korir, 1997; Owino, 1993). The Ministry of Health either delays payments or effects partial payments, thereby leading to a halt in supplies. Pilferage is common and it manifests itself in many shapes such as altering of drug requisition forms, manipulation of store records and ordering of expired drugs. Also, irregularities in drug distribution, the government’s inability to meet its contractual obligations, oversupply of drugs and wasteful prescription practices are common (Owino and Korir, 1997; Owino 1993; Ikiara, 1988). Lack of drugs and other medical supplies in public hospitals undermine their utilisation, especially by the poor.

Kenya’s modern health facilities are spatially inequitable and favour urban areas where only a small population of people live (Sindiga, 1992). Bennett and Maneno (1986) assert that about 57% of the households in Kenya travel more that 4 kilometres to the nearest health facilities. Similarly, the countrywide ratio of health providers and people varies from 1:200,000 to 1:500,000, far below the government target of 1:20,000 and less (Bennett and Maneno, 1986).

It is clear that the public health sector is beset by several problems including poor policies, inadequate personnel, shortage of drugs, transport problems, lack of water, delays in repairs and even lack of stationery. These problems have inhibited the poor from using public health services. Good (1987) and Good and Kimani (1980)
have concluded that inability to reach the modern health facilities is a major reason why most rural Kenyans look to traditional medicine for the treatment of various ailments. Despite this, little has been done to promote other sectors of health-care to complement the public sector.

2.6 Theoretical Model

2.6.1 Health Belief Model

The health belief model (HBM) guided this study. This model was first advanced by Kasl and Cobb (1966), and expounded on by Rosenstock (1966, 1974) and Kirscht (1974). The model brings together factors ranging from demographic to psychological that influence individual judgement of costs and benefits involved in seeking medical help. It was developed to promote an understanding of why families use health services as well as to define and measure equitable access to health care (Anderson, 1995).

The main components of HBM include health behaviour, illness behaviour and the sick role behaviour. It suggests that the people’s use of health services is determined by factors, which either enable or impede their need for the care. Gender and age are some of the demographic factors, which influence a need for health services. Also, beliefs are classified as enabling factors for health services utilisation.

Anderson (1995: 2) defines beliefs as:

... attitudes, values and knowledge that people have about health and health services that might influence their subsequent perceptions of need and use of health services.
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... attitudes, values and knowledge that people have about health and health services that might influence their subsequent perceptions of need and use of health services.
The determinants of the health belief model are socially and culturally determined. Kasl and Cobb (1966) define illness behaviour as any activity undertaken by a person, who feels ill, determines the state of his or her health and discovers a suitable remedy. Within the health belief model, the sick role includes all activities undertaken by someone who perceives him or herself as ill so as to restore good health. Accordingly, an individual will enter any kind of health, illness or sick role behaviour, depending on the perceived seriousness and potential consequences of symptoms, the visibility of the symptoms, availability of information about the disease and assumptions about causation. In addition, the health belief model maintains that the choice of a treatment or preventive action depends on the perceived probability of success of such an action. For instance, the perceived socio-economic costs of an action may prevent or facilitate the adoption of some disease control measures.

2.6.2 Relevance of the Health Belief Model to this study

The health belief model has been used to explain reasons for use and non-use of health services, as well as to analyse decisions that underlie the choice of therapy. In this study, it makes it possible to include demographic factors such as age, gender, ethnicity and how they impact upon health seeking behaviour.

The model was used to identify and explain individual and social-cultural factors, which determined health-seeking behaviour. It enables one to understand perceptions surrounding choices of health options. Similarly, the model can suitably be applied to households, which are units of analysis in this study.
Figure 2.1 present a conceptual model of health-seeking behaviour. It elaborates how various factors inter-relate with one another to determine health care choices made by an individual in any given illness episode. The enabling factors such as benefits involved in seeking medical help, probability of success, information about the disease, assumption about the cause, visibility of the symptoms, seriousness of the symptoms and their potential consequences and beliefs interact with various impeding factors. The impeding factors include cost, income levels, education, gender, age and individual judgement of costs. These essentially determine health care choices (biomedical treatment, self-care, indigenous healing, faith healing or over-the-counter medications).
Figure 2.1 Conceptual model of health seeking behaviour

**Enabling Factors**
- Benefits involved in seeking medical help
- Perceived probability of success
- Availability of information about the disease
- Assumptions of symptoms
- Visibility of symptoms
- Seriousness of symptoms
- Potential consequences of symptoms
- Beliefs

**Impeding Factors**
- Cost
- Income levels
- Individual judgement of costs
- Education
- Gender
- Age

**Health Care Choices**
- Biomedicine
- Traditional healers
- Self Care
- Over-the-counter purchases
- Faith healers

**Health Outcome**
2.7 Hypotheses

The following three hypotheses were tested

1. People’s beliefs about the causes of diseases directly influence their therapy choice.

2. There is a direct relationship between the perceptions about the cost of treatment and the choice of source of therapy.

3. The level of education influences the types of therapy opted for by a patient (or patients’ caretaker(s)).

2.8 Operational Definitions

Dependent Variables

1. Choice of therapy: This refers to selection of health services with the aim of managing an illness. These range from self-care, biomedicine, buying drugs over the counter to resorting to traditional and faith healers.

2. Health Seeking Behaviour: This refers to the process of utilising various health techniques to prevent, diagnose or cure any disease.

3. Source of Therapy: This refers to health-care sources such as Government hospitals and clinics, private hospitals and clinic, indigenous healers, non-governmental and church-run health facilities that people go to when they are sick to be treated.

Independent Variables

1. Perceptions of the cost of treatment: This refers to the attitudes and beliefs that people have regarding the cost charged by various sources of therapy. These attitudes determine whether the cost of service is either affordable or expensive. These attitudes are crucial in decision-making regarding use of those given sources of therapy.
2. Level of education: This refers to the attained highest level of education measured in terms of primary, secondary, high school, college and university or no education.

3. Beliefs about causes of diseases: These consist of a people's way of life or socially accepted way of behaviour and ideas considered true. These are ideas, views and convictions people hold regarding the causes of diseases they have suffered from.

2.9 Assumptions of the study

This study that examined health-seeking behaviour among the residents of the informal settlement of Kibera made the following assumptions:

1. That the residents of Kibera are drawn from different ethnic communities that embrace distinct cultural beliefs, which shape their perceptions about disease causation.

2. That the residents of Kibera belong to different occupations, both in the formal and informal sectors. Their occupations and level of incomes shape their perceptions on the cost of treatment in different health care sources. This determines whether they will use such sources or not.

3. That the residents of Kibera have different levels of education, which determine their awareness on the types of therapies that they can use when they are sick.
CHAPTER THREE: METHODOLOGY

3.1 Research Site

This study was carried out in the informal settlement of Kibera Division of Nairobi. Kibera is located to the south west of the city, approximately 7 Kilometres from the city centre. A map of Kibera Location identifying the study sites is presented in Figure 3.1. The Kibera group of settlements constitute the largest of Nairobi’s informal settlements. According to 1999 population census, Kibera’s population is estimated at 286,739 (CBS, 1999). It was originally established as a settlement for Nubian soldiers who took part in the second World War, during the 1940s, as part of the King’s African Rifles. Before this, the place was a bush-land used by the Maasai community for grazing their cattle. After the war, other migrants began to trickle in. This infiltration process increased especially after independence.
Fig. 3.1: Map showing the study areas in Kibera.

3.1.1 Housing Conditions

Houses in Kibera are constructed of mud and wattle and have corrugated roofs. They are built in rows and subdivided into rooms. These are small usually occupying a size of about 3 square meters and are further subdivided inside by a curtain to ensure privacy or create room for the children. The houses are rented out to tenants at Ksh. 500 - 1000 per month. (Owiti, 1993).

3.1.2 Infrastructure

The informal settlements of Kibera occupy government land using temporary occupation licenses. The Nairobi City Council does not, therefore, provide services to the settlement. Water is obtained from kiosks run by women's committees and sold at costs ranging from 3 - 5 shillings per 20 litres. Sometimes water is fetched from the nearby-polluted Mbagathi River. Another source of water is rain catchment. Residents use pit latrines, which are shared by several households. Where these are not available, people relieve themselves outside, thereby exposing residents to health risks. There are no drainage, sewage or refuse disposal systems. The place is littered with waste normally thrown outside the dwelling units, onto roads and footpaths. There are also open trenches with stagnant water near the dwelling units. All these manifest the poor insanitary conditions common in Kibera.

Electricity is found in some areas but many of the dwellers do not have electricity. Inside the slums, there are only a few planned roads. However, the main access to town has a good tarmac.

There are no Government or City Council clinics inside Kibera slums but a number of private, church-based and a few NGO run health services are available.
The Government and City Council clinics are in areas adjacent to Kibera (Owiti, 1993).

3.2 Sampling Procedure and Study Sample

Kibera is made up of nine villages. Four villages of these were purposively sampled. The villages sampled were Makina, Laini Saba, Lindi and Gatwekera. From each of these villages 35 households were selected through systematic sampling by simply dividing the number of households in a given village by 35 to establish the interview interval. The Central Bureau of Statistic sampling frame provided the list of households in each village. A starting point was randomly selected on the basis of a feature in the middle of a village such as a tree, a church, and a school. Among the selected households, mothers, fathers or adult members above 18 years were interviewed. A total of 140 respondents were interviewed.

In addition, 20 key informants, 5 each from every village were identified through community leaders and interviewed. Two Focus Group Discussions, enlisting health-care providers and mothers with children under-five years from all villages surveyed were conducted. Each Focus Group had a maximum of 12 members, 3 from each village sampled. Further, life history cases of two people selected by health-care providers were interviewed.

3.3 Methods of Data Collection

The study employed various data collection methods. These included structured interviews, key informants, Focus Group Discussions, and life histories. These methods are discussed below.
3.3.1 Structured Interviews

A set of questions were formulated and subsequently pre-tested in the field to assess their suitability. The final questionnaire encompassed both closed and open-ended questions. Open-ended questions were relied upon to elicit more spontaneous information. The principal investigator administered the questionnaire.

3.3.2 Key Informants

A list of discussion topics was used to interview key informants. These were people who held special positions in the community and whose views and opinions were looked upon as representative of the opinions of others in the community. The key informants were recruited from a pool of community health workers, traditional healers, traditional birth attendants, village elders, community mobilisers, religious leaders, nurses from private clinics and women leaders. Key informant interviews were useful in providing specific insights to the issues that had already been identified in the structured questionnaire.

3.3.3 Focus group discussions

Two Focus Group Discussions were held, one composing of health care service providers ranging from community-based health workers, nurses, traditional birth attendants to public health workers, both men and women. This group was chosen because they constantly interacted with the sick in their villages and could provide accurate information about utilisation of health care services. The second discussion group was composed of women with children under-five years attending child health care clinics. It was also important to get the opinion of women because they were engaged in the care of the sick within their households. All the participants
of these discussion groups were recruited from the four villages selected for this survey. A list of discussion topics was used to conduct the discussions.

3.3.4 Life histories

This study also used life histories by allowing people undergoing long spells of illnesses to tell stories regarding the types of therapies they have used in the course of their illnesses. In this, two respondents, one suffering from Tuberculosis and the other from AIDS were identified by the community health workers and interviewed. They were chosen in order to provide information on health-seeking among people with chronic illnesses.

3.4. Data Analysis

The responses from the structured interviews were cleaned, coded and analysed using the Statistical Package for Social Sciences (SPSS). The data was mainly binary (yes, no, male, female etc). Logistic regression analysis model was used to test the hypotheses of the study. This analysis is used to fit a model to binary data normally described as success or failure. It provides knowledge of the relationship and strengths among variables.

Focus Group Discussions, key informant and life histories interviews were analysed thematically. They were used to enrich quantitatively derived results. Also, qualitative analysis has been used to describe and discuss the data pertaining to attitudes, beliefs and practices. Quantitative analysis provides both descriptive and inferential statistics that is used to discuss patterns of health seeking behaviour and testing of hypotheses in this study.
3.7 Problems Encountered in this Study

The study was seen as replicating the population census because some of the questions asked resembled those of the population census. However, the objectives of the study were clearly explained. Other people asked for favours in order to answer my questions. But, only those willing were interviewed.

There were incidences where some community members wondered why I skipped their houses and interviewed others. I explained my sampling techniques to them and promised that those that were interviewed represented the views and perceptions of Kibera residents.

The short rains that coincided with this study made it difficult for me to access some of the roads in Kibera. This sometimes made me postpone the interviews until the rains receded and the roads and footpaths were dry enough. There was also a problem of lack of enough money. But the small resources were used sparingly to achieve maximum results.

3.6 Ethical Considerations

The proposal for this study was discussed before the Postgraduate Studies Committee of the Institute of African Studies (University of Nairobi). All suggestions and corrections emerging from this were included and verified by my supervisor. In addition, the necessary administrative procedures such as reporting to the local administration in the study site and acquiring of a research permit were fulfilled.

The respondents were not coerced or promised favours to participate in the study. Participation was voluntary and the respondents were promised confidentiality. I have maintained this confidentiality throughout the study. The names of the respondents have been concealed or changed in discussing the findings.
CHAPTER FOUR: STUDY FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study. It is divided into sections following the major themes of the study. The first section presents the background information detailing the characteristics of respondents as well as an overview of the types of health facilities in Kibera settlement.

The second section focuses on how beliefs about the causes of diseases influence the residents' health-seeking behaviour. This section looks at recent diseases that have afflicted people resident in Kibera as well as beliefs about their causes. Also, the types of therapies that have been used to combat such diseases are presented.

The third section focuses on costs of treatment. Specifically I focus on how perceptions about the cost of treatment influence decisions regarding the choice of sources of therapy. The factors determining the use of certain health facilities are presented. The last section presents findings on the influence of education on the types of therapy opted for by a patient or patient’s caretaker(s).

4.2 Background Information

4.2.1 Characteristics of Respondents

The data were collected from 140 respondents (54.3% men, 45.7% women) living in four villages (Laini Saba, Lindi, Gwatwekera and Makina) of Kibera informal settlement. The age of the respondents ranged from 18 years to 67 years (mean age of 30.9 years and standard deviation of 8.45 years). The majority of the respondents (84.3%) were married while 15.7% were single. Eighty-nine percent (or
72) of the respondents that were married represented households that were headed by men while 11% (or 9) were female-headed households. Female-headed households were defined as households headed by women who were widowed, divorced or single but had children from other relations.

A fairly large population of the respondents' (97.1%) were literate. They had at least primary level of education. Those who had primary education represented 49.3%, while 46.4% had secondary education and 1.4% had college education. In contrast, 2.9% had not acquired any form of education. The results of this are discussed in greater detail in section 4.3.3.

Over a half (59.3%) were Protestants, while 23.6% were Catholics and 17.1% Muslims. 43.6% of the respondents were in the formal employment while 40.7% were in the informal employment and 15.8% were not employed. Informal employment was defined as self-employment where one sells his/her wares such as second hand clothes, groceries, or an employment where one uses a skill to earn some income for himself/herself such as carpentry, welding and embroidery. In contrast, formal employment was defined as regular salaried employment such as working in a government office, private and public firm.

A large number of the respondents (81.5%) had a monthly income of between Ksh. 3000 - Ksh. 4000 compared to 16.9% of those with less than Ksh. 3000. Only 1.5% had an income of over Ksh.5000. Respondents' religion, employment and income is presented in Figure 4.1.
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4.2.2 Health facilities in Kibera

Kibera is served by various kinds of health facilities that include church-run clinics, services provided by non-governmental organisations, private clinics, indigenous healers and faith healers. All these offer preventive and curative services to the people afflicted by ill-health.

The Government and City Council Clinics are only located in the neighbourhood of Kibera, but within a walking distance of 5 km. These clinics include Langata Health Centre, Otiende Health Centre, Woodley Health Centre, Dagoretti Corner Dispensary, Ngong Road Dispensary, Kenyatta National Hospital, Mbagathi District Hospital and Armed Forces Memorial Hospital. Civilians whose close relatives work for the army, especially spouses and children of armed forces personnel accessed medical health at the Armed Forces Memorial Hospital.

A large proportion of respondents (83.6%) reported living close to a private clinic. In contrast, only 14.3% reported living near a government health facility while
1.4% and 0.7% lived near a community-based health worker’s home and a church sponsored clinic (Table 4.1).

<table>
<thead>
<tr>
<th>Types of Facilities</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private clinics</td>
<td>117</td>
<td>83.6</td>
</tr>
<tr>
<td>Government Hospital/Clinic</td>
<td>20</td>
<td>14.3</td>
</tr>
<tr>
<td>Community based health worker’s home</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Church sponsored clinic</td>
<td>1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

### 4.3 Factors Influencing Health Seeking Behaviour

#### 4.3.1 Hypothesis 1: Beliefs about the causes of diseases and their management

The respondents were asked to name all the diseases they (or members of their households) have suffered in the recent past. Multiple responses to this question revealed that 90% suffered from malaria, 85% gastro-intestinal related diseases, 55% respiratory systems diseases, 28.6% sexually transmitted diseases, 15.7% meningitis, 13.6% skin diseases and 6.4% diabetes. Only 2.8% suffered from diseases they could not identify or describe (Table 4.2).

There were differences in diseases afflicting both men and women. Although, malaria was common across gender (with a difference of 5.8% between men and women), more men (47.9%) compared to women (37.4%) suffered from gastro-intestinal-related diseases. Also, 30.7% of men suffered from respiratory systems diseases in contrast with 24.3% of the women. 21.4% of men suffered from sexually transmitted diseases compared to 7.1% of women (Table 4.2). These results indicate that the majority of the people suffer from malaria, gastro-intestinal and respiratory system related diseases. Sexually transmitted diseases are more prevalent among men than women.
Table 4.2 Diseases that have afflicted respondents in the recent past (N = 140) multiple responses

<table>
<thead>
<tr>
<th>Types of Diseases</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>126</td>
<td>90</td>
<td>47.9</td>
<td>42.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Gastro intestinal-related diseases</td>
<td>119</td>
<td>85</td>
<td>47.9</td>
<td>37.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Respiratory systems diseases</td>
<td>77</td>
<td>55</td>
<td>30.7</td>
<td>24.3</td>
<td>6.4</td>
</tr>
<tr>
<td>STDs</td>
<td>40</td>
<td></td>
<td>28.6</td>
<td>21.4</td>
<td>14.3</td>
</tr>
<tr>
<td>Meningitis</td>
<td>22</td>
<td>15.7</td>
<td>7.1</td>
<td>8.8</td>
<td>-1.7</td>
</tr>
<tr>
<td>Skin diseases</td>
<td>19</td>
<td>13.6</td>
<td>7.1</td>
<td>6.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Diabetes</td>
<td>9</td>
<td>6.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>2.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

In a multiple response, the majority (69.3%) of the people mentioned mosquitoes as the leading cause of diseases experienced (Table 4.3). This was followed by 47.9% who cited climatic changes while 45% stated dirty and unboiled water. 30% attributed the diseases to lack of toilets and drainage system in contrast with 28.6% who mentioned STD/HIV. 27.9% respondents attributed the diseases to dirty foods as compared to 10.7% reporting bacterial infections. 10% stated that they inherited diseases from their parents, while 7.1% could not identify the cause of their condition.

Differences based on gender showed that more men than women identified mosquitoes as a major cause of diseases that had afflicted them. Also, 27.6% of men attributed the diseases to climatic changes compared to 20% of women. 28.6% of men associated these diseases to dirty and unboiled water in contrast to 16.4% of women. 18.6% of men and 11.4% of women identified lack of toilets and drainage system. More men (20%) mentioned STDs, as compared to only 8.6% of women as a cause of the disease suffered, while 12.9% of men mentioned dirty and not well
cooked food compared to 15% of women (Table 4.3). It is clear from this that there are underlying gender differences in the perception of disease causation (Table 4.3).

Table 4.3: Causes of diseases experienced (N = 140) - multiple responses

<table>
<thead>
<tr>
<th>Causes</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosquitoes</td>
<td>97</td>
<td>69.3</td>
<td>36.4</td>
<td>32.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Air borne/change of climate</td>
<td>67</td>
<td>47.9</td>
<td>27.6</td>
<td>20</td>
<td>7.6</td>
</tr>
<tr>
<td>Dirty/unboiled water</td>
<td>63</td>
<td>45</td>
<td>28.6</td>
<td>16.4</td>
<td>12.2</td>
</tr>
<tr>
<td>Lack of toilet/drainage system</td>
<td>42</td>
<td>30</td>
<td>18.6</td>
<td>11.4</td>
<td>7.2</td>
</tr>
<tr>
<td>STD/HIV</td>
<td>40</td>
<td>28.6</td>
<td>20</td>
<td>8.6</td>
<td>11.4</td>
</tr>
<tr>
<td>Dirty/not well cooked food</td>
<td>39</td>
<td>27.9</td>
<td>12.9</td>
<td>15</td>
<td>-2.1</td>
</tr>
<tr>
<td>Bacterial Infections</td>
<td>15</td>
<td>10.7</td>
<td>8.6</td>
<td>2.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Inheritance</td>
<td>14</td>
<td>10</td>
<td>5.7</td>
<td>4.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Unknown cause</td>
<td>10</td>
<td>7.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Acids in stomach</td>
<td>1</td>
<td>0.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

More specifically, information obtained from FGDs indicated that unsanitary conditions were a major health concern. Respondents related lack of toilets and drainage system, stagnant water and drinking of untreated water, as well as eating of dirty foods as contributing to the diseases they suffered from. These sentiments are reflected in statements made by three key informants. For example; two male informants reported thus,

The health problems here in the slums of Kibera are a direct consequence of poor sanitation. As you can see, there is a lot of stagnant water and most people do not have enough toilets in their compounds. They relieve themselves on papers and throw them outside and this can expose them to a wide range of diseases (Were¹ male, aged 45)

The water pipes are always dry and we are therefore forced to buy water from water vendors. You cannot clearly establish the source of the water but I can assure you that some of it is fetched from Nairobi dam. It is potentially

¹ The names of respondents in this case and in all others have been changed to protect their confidentiality.
dangerous because it mixes with sewage, but most of us do not have a choice
(Onyango, male, aged 35)

And, a female respondent reported the following:

The food consumed here is sold in open places. Some of these places are
nearer to dirty stagnant water where there are flies. Some people eat this food
without washing it because they do not have enough water and so they get sick
(Wanjiku, female, aged 39).

Together these show that people in Kibera hold a wide range of disease
aetiologies. As clearly revealed (Table 4.4) most these aetiologies are related to the
environment in which they live. There is also a close relationship between
environmental conditions and the types of diseases experienced.

FGDs also revealed other perceived aetiologies. For example, some
respondents believed that other diseases were either caused by a punishment from the
ancestors or evil eyes. These included diseases that exhibited symptoms such as
swellings that could not respond to treatment, festering wounds that could not heal,
mental disorders, impotence, barrenness, deformities and epilepsy. FGDs and key
informants attributed HIV/AIDS to societal curses such as incest and immorality. This
was captured in statements made by two male informants, who reported the
following,

There is a tendency for some people to sleep (to have sex) with their close
relatives and sometimes have children with them. These people always end up
with AIDS because most African traditions do not allow this sort of practice
(Omollo, male, aged 28)

Most people here in Kibera including those who are married engage in sexual
immorality for money. Some of them get involved because they are drunk or
bored and eventually they get infected with HIV/AIDS (Omari, male, aged
25).
Multiple responses (Table 4.4) reveal that health problems are dealt with in various ways. The great majority (94.3%) of the people sought biomedical treatment in hospitals and clinics, while 30% bought over-the-counter medications from shops and chemists. 16.4% did not seek for any treatment, while 1.4% sought for the services of either an indigenous healer or consumed herbs. In 1.4% of the cases, the therapy would not be identified. The overall results also show that more men (52.9%) used biomedical treatment in hospitals and clinics compared to 41.1% of the women. In contrast, a high number of women (17.1%) bought over-the-counter medications compared to 12.9% of men.

Table 4.4 Types of therapies resorted to in alleviating their conditions. \((N = 140)\) - multiple responses

<table>
<thead>
<tr>
<th>Types of therapies</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Treatment in hospital/clinic</td>
<td>132</td>
<td>94.3</td>
<td>52.9</td>
<td>41.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Buying Tablets from shop/chemist</td>
<td>42</td>
<td>30</td>
<td>12.9</td>
<td>17.1</td>
<td>-4.2</td>
</tr>
<tr>
<td>Indigenous doctor and consumption of herbs</td>
<td>2</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No treatment</td>
<td>23</td>
<td>16.4</td>
<td>11.4</td>
<td>5</td>
<td>6.4</td>
</tr>
<tr>
<td>Unknown therapy</td>
<td>2</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The study further revealed that 43% of those who resorted to biomedical treatment in hospital/clinics were employed in the formal sector, compared to 38.6% in the informal sector. In addition, 17.9% of those from the formal employment resorted to over-the-counter purchases compared to 10% from the informal employment (Figure 4.2).
There were slight differences in use of different therapies among major ethnic communities (Figure 4.3) It is clear that use of biomedical treatment, as well as over-the counter medications is common. As stated elsewhere, FGDs revealed that the residents of Kibera avoided seeking for treatment for diseases that were either stigmatised and those that would not heal.
FGDs revealed that a large proportion of Kibera residents utilized biomedical treatment in hospitals and/or clinics inside Kibera and those that are nearby in the initial stages of most ailments. They also utilized over-the-counter medications in illnesses that were not seen as serious such as common colds and scabies. In addition, FGDs revealed that residents of Kibera avoided treatment for those diseases they knew would not heal and those that were stigmatised such as HIV/AIDS, STIs and epilepsy.

It is clear that most people opt for biomedical treatment in hospitals/clinics and buying over-the-counter medications as compared to those that either visit an indigenous healer or decline to seek for any treatment (Table 4.4). As indicated above, information from FGDs confirmed this view.

Logistic regression analysis to determine the relationship between the perceived cause of a disease and health-seeking behaviour is presented in (Table 4.5). The results show an association ($P < .01$) between mosquitoes (as a perceived cause...
of disease) and use of biomedical treatment in hospitals and clinics. Also, there is an association between causes of diseases perceived to be related to unsanitary conditions brought about by lack of toilets and drainage systems and buying over-the-counter medications from shops and chemists (P < .01), as well as between STD/HIV and not seeking treatment (P < .01).

Table 4.5: The relationship between causes of diseases and types of therapies used

<table>
<thead>
<tr>
<th>Types of therapies sought</th>
<th>Mosquitoes df</th>
<th>P value</th>
<th>R</th>
<th>Lack of toilets/drainage df</th>
<th>P value</th>
<th>R</th>
<th>STD/HIV df</th>
<th>P value</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical treatment in hospitals and clinics</td>
<td>1</td>
<td>.0089</td>
<td>.1676</td>
<td>1</td>
<td>.7412</td>
<td>.0000</td>
<td>1</td>
<td>.7431</td>
<td>.0000</td>
</tr>
<tr>
<td>Buying over-the-counter medications</td>
<td>1</td>
<td>.2218</td>
<td>.0000</td>
<td>1</td>
<td>.0010</td>
<td>.2283</td>
<td>1</td>
<td>.0190</td>
<td>.1446</td>
</tr>
<tr>
<td>Seeking no treatment</td>
<td>1</td>
<td>.8218</td>
<td>.0000</td>
<td>1</td>
<td>.7616</td>
<td>.0000</td>
<td>1</td>
<td>.0000</td>
<td>.3541</td>
</tr>
<tr>
<td>Not knowing what to do</td>
<td>1</td>
<td>.7548</td>
<td>.0000</td>
<td>1</td>
<td>.9231</td>
<td>.0000</td>
<td>1</td>
<td>.9501</td>
<td>.0000</td>
</tr>
<tr>
<td>Seeking treatment from indigenous healer and consuming herbs</td>
<td>1</td>
<td>.7441</td>
<td>.0000</td>
<td>1</td>
<td>.8099</td>
<td>.0000</td>
<td>1</td>
<td>.7847</td>
<td>.0000</td>
</tr>
</tbody>
</table>

The above results are further confirmed by data from FGDs and key informant interviews, which reveal that the beliefs about the perceived cause of a disease influenced the choice of therapy. Data from FGDs also indicated that if a person got a mosquito bite, ate dirty food or drank dirty water, he/she is likely to seek for biomedical treatment in hospital or clinics or buy over-the-counter medications. Conversely, if one perceives the cause to be related to the evil spirits or punishment from ancestors, such a person will seek treatment from an indigenous healer and if the cause is HIV/AIDS, such a person is likely not to seek for any intervention.

However, there are exceptions when a chronic disease is involved as demonstrated by two case studies and FGDs. These revealed that people in Kibera
utilised all the existing health care services either at different times or concurrently during a chronic illness. Two case studies conducted among the respondents who had suffered from chronic illnesses illustrated how they resorted to various therapies in the cause of their illness/sickness.

CASE 1:
Mutua who had completed his O-level examination had suffered from what he described as a persistent cough for over a year. In the course of this period, he tried various therapies, which included buying tablets from the shops and chemists, taking indigenous herbs given to him by different indigenous healers, visiting government and private hospitals and taking assorted medications. However, all this had not cured him. He had finally decided to visit a faith healer in order to be prayed for. At the time of this interview, he was taking medications given to him by a friend who was a doctor.

CASE 2:
Mary who was 28 years had been sick since February 1997 to what she believed was caused by change of climate. She suffered from a severe headache, weariness and pain in the back. She had at the beginning of her sickness sought help from Kenyatta National Hospital where she was admitted and discharged after a month. She later returned to Kenyatta hospital because her conditions had not improved. In 1998 she moved to her rural home and began attending a public health centre in the rural area and at the same time taking traditional herbs given to her by traditional healers. She returned back to Nairobi in 1999 and went back to Kenyatta hospital. However, she sometimes attended a private clinic at Eastleigh estate in Nairobi. She is planning to go to faith healers as her next recourse in search for a cure.

It is clear from these case studies as well as from the semi-structured interviews that people in Kibera use both biomedicine and indigenous medicine in alleviating ill-health. This makes them to resort to various health-seeking behaviours in the cause of an illness episode. This is clearly demonstrated by the two typical case studies reported above where it was reported that the patients in both cases resorted to various therapies, including both biomedical and indigenous medicine in the course of their illness. The first respondent resorted to self-treatment by buying over-the-counter medications and taking herbal medication at the first stage of his illness. He
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later visited a government hospital in the second stage of his illness. As the illness persisted he visited a private clinic and later reversed to self-medication and seeking help from those around him.

The second respondent started her treatment in the government hospital during the first stage of her illness. She later resorted to consuming herbs and attending a government run facility. She later sought treatment in a private clinic and was going to visit a faith healer. These two case studies show that patients continue switching from one therapy to another in an episode of a chronic illness. This finding concurs with Alexander (1985) who asserts that Africans frequently utilise both indigenous and modern medicine simultaneously for the same episode of illness or at different times for different illnesses. Other studies (Spring 1980; Nyamwaya 1981; Kipkorir 1980) have also shown that although many African communities categorise diseases according to cause, they see indigenous and modern medicine as complementary. During an illness episode they move from one healer to another and vice versa. This shifting is an earnest quest for a therapy that will ameliorate their conditions.

From the logistic regression analysis together with the qualitative data, it is clear that the perceived cause of diseases influence health-seeking behaviour. These results therefore support the hypothesis that people’s beliefs about causes of diseases directly influence their therapy choice.

4.3.2 Hypothesis 2: The perceptions about the cost of treatment and the choice of source of therapy

The respondents were asked to state the health-care sources they used when members of their households were sick. Responses reveal that 61.4% (N = 140) of Kibera residents used government health facilities, 32.9% private hospitals/clinics and
4.3% used either non-governmental or church-run clinics. Only 1.4% used services of the indigenous healers (Table 4.6). There were no gender differences in the use of government health facilities. However, more men (19.3%) compared 13.6% of women, used private health facilities.

Table 4.6 Use of health-care services (N = 140)

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>86</td>
<td>61.4</td>
<td>30.7</td>
<td>30.7</td>
<td>0</td>
</tr>
<tr>
<td>Private</td>
<td>46</td>
<td>32.9</td>
<td>19.3</td>
<td>13.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Church / NGO</td>
<td>6</td>
<td>4.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Indigenous Doctor/Herbs</td>
<td>2</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

There were slight differences based on ethnic lines. Of those who used government facilities, 70% were Luos, 60.6% Kikuyus, while the Luhyas constituted 56.7% respectively. Among those seeking services from private hospitals and clinics, 43.3% were Luhyas, 27.3% were Kikuyus and 25% were Luos (Figure 4.4).

Figure 4.4 Ethnicity and the sources of therapy sought
Occupation also played a role in the choice of services. 65.6% of those formerly employed sought services from government hospitals and clinics compared to 60% from the informal employment. Conversely, 30% who sought services from private hospital/clinics were in the informal employment compared to 27.9% who were in formal employment (Figure 4.5)

![Figure 4.5 Occupation and the sources of therapy](image)

Multiple responses (Table 4.7) show that different reasons influenced the respondents to use any of the above health care sources. The responses revealed that availability of good laboratory services accounted for 37.9%, cheaper services for 32.9% and friendly staff for 2.1%. Further, 15% of the respondents stated that they used the above services because they were nearer and had drugs. In contrast 6.4% used them because they received treatment on credit, while 2.1% used services that were paid for by their employers. 3.6% used services for other reasons that cannot fit in any of the categories discussed.
There were gender differences in reasons determining use of health services. It was revealed that 22.1% of men and 15.7% of women used facilities because they had good laboratory services respectively. 5.7% of women and 9.3% of men used facilities that were nearer and had drugs. However, a large number of women (18.6%) used cheaper facilities compared to 14.3% of men indicating that women were attracted by cheaper health-care sources (Table 4.7).

Table 4.7: Reasons for preferring to use any of the health services (N=140)

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good laboratory services</td>
<td>53</td>
<td>37.9</td>
<td>22.1</td>
<td>15.7</td>
<td>6.4</td>
</tr>
<tr>
<td>Cheaper services</td>
<td>46</td>
<td>32.9</td>
<td>14.3</td>
<td>18.6</td>
<td>-4.3</td>
</tr>
<tr>
<td>Nearer and drugs are available</td>
<td>21</td>
<td>15</td>
<td>9.3</td>
<td>5.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Service are given on credit</td>
<td>9</td>
<td>6.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other reasons</td>
<td>5</td>
<td>3.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The service providers are friendly</td>
<td>3</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The services are paid by my employer</td>
<td>3</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The results of logistic regression analysis show a significant relationship (P < .01) between cheap services (as a reason for preferring to use a health service) and avoidance of the use of private clinics. Conversely, indigenous healers and use of government health facilities was common (Table 4.8).

Table 4.8 Relationship between cost of service and choice of sources of therapy

<table>
<thead>
<tr>
<th>Sources of Therapy</th>
<th>df</th>
<th>P value</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government hospital and clinics</td>
<td>1</td>
<td>.8686</td>
<td>.0000</td>
</tr>
<tr>
<td>Private hospitals and clinics</td>
<td>1</td>
<td>.0046</td>
<td>-.1844</td>
</tr>
<tr>
<td>Indigenous healers</td>
<td>1</td>
<td>1.000</td>
<td>.0000</td>
</tr>
</tbody>
</table>

The above results are supported by data obtained from the FGDs that revealed that people in Kibera initially avoid private hospitals and clinics because of the high cost of treatment. They therefore engage in self-treatment with over-the-counter and
herbal medications. However, if the ill health conditions persist, they proceed to visit a government hospital or clinic. If they do not recover at this stage, they will resort to a private clinic because of the belief that they will get ‘better treatment’ although the cost of treatment will be high. Even then, they will choose private clinics that treat them on credit, therefore cushioning the cost. This is clearly illustrated by two male respondents below.

I always start by buying drugs from a chemist and sometimes consuming herbs from an herbal doctor. But, if the situation gets very serious, I will be forced to borrow money from my relatives or sell some of my property such as the land I own in my village (Muthoka, male, aged 44)

The seriousness of the disease will force you to raise money from friends and family members. However, if it is not serious, you can always avoid spending a lot of money on consultation. Instead you consume drugs and herbs or go to a cheaper government hospital. (Chege, male, aged 32)

It is clear from the statements made by the above informants that respondents will always try to minimise the cost they incur in seeking health care. However, as the illness progresses, they are prone to seek other alternative sources of money to enable them seek for better treatment. These results therefore support the hypothesis of this study, which stated that there is a direct relationship between perceptions about the cost of treatment and choice of source of therapy.

4.3.3 Hypothesis 3: Level of education and choice of therapies

The third objective was to investigate the extent to which education influenced choice of therapy by patient(s) (or patient’s caretaker(s)). In the study sample, 49.3% of respondents had primary education, 46.4% had completed secondary education and 1.4% had college education. Only a small proportion (2.9%) had not acquired any form of education (Table 4.9). Further, the results indicated that more women
(32.1%) had primary level of education compared to 17.1% of men. However, 34.3% of men had secondary level of education compared to 12.4% of women indicating that more women are not proceeding with education beyond primary level.

Table 4.9 Education levels of the Kibera residents (N = 140)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>%</th>
<th>Male %</th>
<th>Female %</th>
<th>Difference between men and women %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>4</td>
<td>2.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Primary</td>
<td>69</td>
<td>49.3</td>
<td>17.1</td>
<td>32.1</td>
<td>-15</td>
</tr>
<tr>
<td>Secondary</td>
<td>65</td>
<td>46.4</td>
<td>34.3</td>
<td>12.4</td>
<td>25.9</td>
</tr>
<tr>
<td>College</td>
<td>2</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Logistic regression analysis was used to determine relationship between the level of education and types of therapies sought (Table 4.10). The results reveal that the levels of education do not influence the therapy choice. The null hypothesis, which states that the level of education influences the types of therapy, opted for by a patient or patient’s caretaker(s) is rejected.

Table 4.10 The relationship between levels of education and choice of therapy

<table>
<thead>
<tr>
<th>Types of therapies</th>
<th>No education</th>
<th>Primary education</th>
<th>Secondary education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>P value</td>
<td>R</td>
</tr>
<tr>
<td>Biomedical treatment in hospitals and clinics</td>
<td>1</td>
<td>.0566</td>
<td>-.2122</td>
</tr>
<tr>
<td>Buying over-the-counter medications from shops and chemists</td>
<td>1</td>
<td>.6991</td>
<td>.0000</td>
</tr>
<tr>
<td>Seeking no treatment</td>
<td>1</td>
<td>.0529</td>
<td>.2193</td>
</tr>
<tr>
<td>Not knowing what to do</td>
<td>1</td>
<td>.9432</td>
<td>.0000</td>
</tr>
<tr>
<td>Seeking treatment from indigenous healer and consuming herbal medications</td>
<td>1</td>
<td>.9189</td>
<td>.0000</td>
</tr>
</tbody>
</table>
Studies elsewhere (Caldwell, 1979, Mark 1995) show clear relationship between education and health. Caldwell’s 1979 study in Nigeria demonstrated that increased maternal education has an impact on reduced child mortality because education gives women the power and determination to make informed choices. In another study in 14 countries in Africa, it was found that women’s schooling reduces child mortality (Mark, 1995). Why then is there no relationship between level of education and therapy choice in Kibera? The scenario in urban slums such as Kibera is different from that existing in the other studies (e.g. Caldwell 1979, Mark 1995). As already shown the residents are low-income earners and this forces them to balance their expenditure on a number of needs: education, health, food and housing. This determines how much they allocate for every pertinent need and how they make decisions regarding their health.

Data obtained from FGDs and key informants further indicated that one’s level of education is not critical in deciding what therapy is used given the difficult living circumstances. Rather, affordability of the therapy, the seriousness of the illness, the perceived cause of the disease, as well as the success of treatment is important in influencing people’s health care choices. This is clearly underscored by two male informants.

All I am interested in when I am sick is to see some improvement in my condition. So I will resort to therapies that I feel will make me achieve that goal depending on whether I can afford them. It really does not matter whether I have gone to school or not. I only want to be well (Kariuki, male, aged 39).

All people with different education levels come to my clinic and all they are interested in is to recover and get back to their work. If the medication I give them alleviates their conditions, they will obviously come back again when they are sick and even inform their friends who are suffering from similar
conditions. They also know that their diseases cannot respond to western medicine (referring to biomedical treatment). Some of my patients are possessed by evil spirits (Juma, male – An indigenous healer aged 55).

And one female respondent reported the following,

You know we care about meeting our other needs (housing, food and school fees) first before anything. If I am not very sick, I will wait to see whether my conditions will improve. Whatever I do to heal myself does not relate to the education I have. It is my pocket (the amount of money she has), which dictates this. (Beatrice, female, aged 38)

The statements from the three key informants above together with the information collected from FGDs reveal that Kibera residents are more concerned about getting well in order to continue with their jobs. They will choose a therapy that provides them with a cure at affordable cost without necessarily using their level of education as a measure for this.

These finding are similar to those of Ouko (1998). She found out in her study in Siaya District that formal education does not influence the use of certain medical care (herbs, patent medicine, faith healers, and health institution). She concluded that all people whether educated or not utilised both modern and traditional methods of treatment. Osero (1990) and Maina (1978) have also reported similar findings. Osero has concluded that primary level of education had no significant effect on health-seeking behaviour while Maina found that education did not influence the type of medical care mothers selected, but it did influence the use of certain traditional practices.

4.4 Summary of the findings

In this study environmental, social-cultural, mosquitoes and genetic factors were found to influence people’s perceptions about disease causation (Figure 4.6).
Once an individual establishes the cause of a disease, he or she seeks various interventions to manage it. These include biomedical treatment in hospitals and clinics, over-the-counter medications, seeking no treatment and seeking treatment from indigenous healers or consuming herbs.

There was a significant association between the perceptions about the cause of disease and cost of treatment and the interventions undertaken. However, there was no association between education and the interventions used. Therefore, the perceptions about cause of disease and cost of treatment influenced the health-care outcome as demonstrated in Figure 4.6.
Figure 4.6 Factors influencing health-seeking behaviour among people living in the informal settlement of Kibera

Environmental factors e.g. unsanitary conditions:
- Air bone/climatic change (47.9%)
- Dirty and unboiled water (45%)
- Lack of toilets (30%)
- Bacterial infection (10.7%)

Interventions
- Biomedical treatment in hospitals/clinic (94.3%)
- Over-the-counter medications (30%)
- Seeking no treatment (16.4%)
- Consumption of indigenous herbs (1.4%)

Gender Perspectives
- There are underlying gender difference in the perception of disease causation
- More men (52.9%) are likely to use biomedicine obtained from hospital/clinic, while a large number of women use over-the-counter medications
- More men are likely to use expensive source of health care than women.
The findings of this study are also linked with the Health Belief Model, which guided the study. The interaction between the enabling and impeding factors expounded in the Health Belief Model were also found to influence health-care choices and health outcome among respondents in Kibera. Enabling factors such as perceptions about the cause of disease, probability of success in seeking health-care, as well as impeding factors such as individual judgement of cost and gender influenced the respondents’ choice of therapy.
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CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS.

5.1 Conclusions

This study concludes that beliefs about cause of diseases determine the choice of therapies. It is clear that biomedical treatment in hospitals and clinics, as well as buying over-the-counter medication is common in the initial treatment of the diseases. However, a search for a cure prompts patients to switch therapies from one to the other and vice versa, especially where a chronic illness is involved. Usually, this involves the use of biomedical treatment in hospitals and clinics, as well as buying over-the-counter medications and using indigenous treatment. This process is clearly shown by two case studies and FGDs already discussed in the previous chapter. Similar conclusions have been made by Jansen (1978), Nyamwaya (1992), Nyamongo (2002) and Sindiga et al., (1995).

For instance, in his study Jansen (1978) concluded that patients embrace both western and non-western health care. These involve interrupting treatment in hospitals to return to their homes to seek treatment from “Nganga” (indigenous healer). Nyamongo’s (2002) study among the Gusii people has demonstrated how lay people make transitions in therapy choice over a period. Nyamongo’s study reveals that the vast majority of patients switch from self-treatment to other alternatives of health care, usually available outside the home, if their conditions persist. These findings underscore the importance of improving accessibility to all the existing health care systems. The current study deviates from other studies in one key way: it is urban based. Most studies (Nyamongo, 2002; Nyamwaya, 1992; Jansen, 1978) focus either on rural based populations or deal with health-seeking behaviour among specific diseases and ethnic groups.
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It has been shown that people in Kibera adopt a cost-reducing strategy in the initial stages of seeking health care. They will avoid expensive sources of therapies such as private clinics and hospitals and opt instead for Government clinics and hospitals, as well as for self-treatment with over-the-counter medications and indigenous herbs. However, when faced with a serious illness, they will be forced to raise money from other alternative sources, in order to seek for treatment from health care sources seen to be expensive, but yet offering adequate medical treatment. Even in such circumstances, they will carefully choose those sources that treat them on credit. These patterns of health-seeking behaviour have other inherent health implications. Self-diagnosis and reliance on self-treatment as the first action raises questions of misuse of drugs and taking of inadequate doses. Also, the accompanied delay in seeking for adequate medical attention sometimes compound the severity of a disease. It might even lead to death. Thus, it is important to improve access to cheaper health care sources that can be used by low-income people. Alternatively, there is need to improve incomes of Kibera residents' through initiation of income-generation and skills development to enable them access health-care.

The study concluded that the level of education does not influence the choice of therapy. In fact the financial resources at one's disposal, attitudes about the success of the treatment, as well as the perceptions about the cost and cause of a disease play critical roles in such decisions. However, creation of awareness on the common diseases and their causes and where various therapies can be accessed through public health education remains crucial.
5.2 Study recommendations

This study has given information related to factors influencing health-seeking behaviour among residents of Kibera. Based on this, the following recommendations are made.

(1) There is need for the government and non-governmental organizations to create awareness through public health education on the common causes of diseases in Kibera and the existing health services to enable the residents make informed health-care choices on the prevention and management of diseases.

(2) There is a need for the government and non-governmental organizations to enhance the capacity of Kibera residents to enable them address their own health needs in a cost-effective way. This can be achieved through training community-based health workers (CBHW), peer educators, indigenous healers, faith healers, as well as community-based organisations in order for them to participate effectively in both preventive and curative health care.

(3) There is need for the government, non-governmental organizations, as well as the business community to assist the residents of Kibera to enhance their incomes, through skills training and involvement in income-generation activities to enable them access basic needs such as health.

(4) There is need for Kibera residents, the government and non-governmental organizations to improve sanitary conditions such as drainage systems and toilets to reduce diseases related to environmental factors.
5.2.1 Recommendations for future research

This study identified the following areas for future research.

1. There is a need for scholars and researchers to carry out studies on folk beliefs related to treatment of specific common diseases in Kibera such as malaria, typhoid, sexually transmitted diseases and HIV/AIDS and how they determine health-seeking behaviour.

2. A study to find out the factors determining health-care choices among women attending antenatal and post-natal services should be undertaken by scholars and researchers.


Use of Alternative Medicine by Patients with Epilepsy: a Survey of 265 Epileptic Patients in a Developing Country. Epilepsia, 35(2):344-51


Fabrega, H. 1975.


Foster, G. M. and Anderson, B.G.1978


Good, C.M. 1987.


Helman, C. G. 1990.

Hodgkin, D. 1996.


IDRC, 1980
Traditional Medicine in Zaire: Present and Potential Contributions to the Health Services. Ottawa: IDRC.


Helman, C. G. 1990.

Hodgkin, D. 1996.


IDRC, 1980
Traditional Medicine in Zaire: Present and Potential Contributions to the Health Services. Ottawa: IDRC.


Health Care and Consumer Choice: Medical and Alternative Therapies. Social Science and Medicine, 45(2):203-12


Kimani, V. N. 1981.


Utilization of maternal and Child Health Services: Results from Two Rural Communities Survey. Paper Presented to the IHPP Conference, Lagos, Nigeria, January 1990.


Choices of Treatment among the Yoruba. Culture and Curing: Anthropological Perspectives on Traditional Medical Beliefs and Practices. London: Peter Owen.


Maneno, J, and Mwanzia, J. 1991
12 Years of Primary Health Care in Kenya. Nairobi: Ministry of Health, WHO and UNICEF.


Mbiti, J.S. 1969.

Foundation for Effective Strategies to Control Sexually Transmitted Infections: Voices from Rural Kenya. AIDS Care, (9): 95 – 113.


Child Malaria Treatment Practices Among Mothers in Kenya. Social Science and Medicine, 40(9):1271-7


Health Care Switching Behaviour of Patients in a Kenyan Rural Community. Social Science and Medicine.54(3):377-386.


Osero, J.O. 1990.


Sindiga, I 1992


Spring, A. 1980.

UNICEF 1996.

Vogel, C.V, Muller, A.S, Odingo, R.S, Onyango, Z and De Geus (Eds.) 1974.


Appendix I - Questionnaire

Section 1: Background Information:

101. Village

102. Sub - Location

103. Name of Respondent

104. Sex: 1. Male
    2. Female

105. Age of Respondent


107. Relationship with household head?
    1. Head
    2. Spouse
    3. Child
    4. Son/Daughter in-law
    5. Grand child
    6. Parent
    7. Sibling
    8. Other relative
    9. No relation

    1. Catholic
    2. Protestant
    3. Muslim
    4. African traditional religion
    5. African Christian religions
    6. Other (specify)

109. Ethnic Background?
    1. Kikuyu
    2. Luhya
    3. Luo
    4. Kisii
    5. Kalenjin
    6. Kamba
    8. Other (specify)

110. Level of Education.
    1. No Education
    2. Primary
    3. Secondary
    4. High School
    5. College
    6. Others (specify)

111. Have you undertaken any practical skill training?
    1. Yes
    2. No

112. What kind of training?
    1. Capentry
    2. Tailoring
    3. Masonry
    4. Welding
    5. Other (specify)

113. How many people live in this household?

Section 2: Social-Economic Status.

201. What is the material used to build this house?
    Roof
    Floor
    Wall

202. What is the source of water for this household?
    1. Piped Water in the house
    2. Piped water (communal)
    3. Vendor
    4. River/well
    5. Rain water
    6. Other (specify)
Appendix I - Questionnaire

Section 1: Background Information:

101. Village: .................................................................

102. Sub - Location: .............................................................

103. Name of Respondent: ............................................................

104. Sex: 1. Male
     2. Female

105. Age of Respondent: ...............................................................  


107. Relationship with household head?
     1. Head
     2. Spouse.
     4. Son/Daughter in-law
     5. Grand child
     6. Parent
     7. Sibling.
     8. Other relative.
     9. No relation.

     1. Catholic
     2. Protestant
     3. Muslim
     4. African traditional religion
     5. African Christian religions
     6. Other (specify)

109. Ethnic Background?
     1. Kikuyu
     2. Luhya
     3. Luo
     4. Kisii
     5. Kalenjin
     6. Kambá
     8. Other (specify)

110. Level of Education.
     1. No Education
     2. Primary
     3. Secondary
     4. High School
     5. College
     6. Others (specify)

111. Have you undertaken any practical skill training?
     1. Yes
     2. No

112. What kind of training?
     1. Carpentry
     2. Tailoring
     3. Masonry
     4. Welding
     5. Other (specify)

113. How many people live in this household? ....................

Section 2: Social-Economic Status.

201. What is the material used to build this house?
     Roof ..............................................................
     Floor .............................................................
     Wall ............................................................

202. What is the source of water for this household?
     1. Piped Water in the house.
     2. Piped water (communal).
     3. Vendor
     4. River/well.
     5. Rain water
     6. Other (specify)
203. What type of toilet facility is used by this household?
   1. Flush toilet (own)  2. Flush toilet (communal)  3. Pit latrine.  4. V.I.P latrine.  5. No facility

204. What is your main occupation?

205. Approximately what is your monthly income

206. How many members of your household earn some income?
   1. One.  2. Two  3. Three or more.

207. How much of your money do you spend per month on the following (State whether you spend
   1. most of it, 2. Some of it. 3 very little of it. or 4. None of it.
   Education/Fees...........................................
   Health....................................................
   Food............................................................
   Rent............................................................
   Clothing........................................................
   Other(specify)..............................................................

208. Has any member of this household failed to seek medical help from a health care facility because
   of financial disability?
   1. Yes  2. No

209. If yes, what happened to the sick individual eventually?
   1. Died  2. Resorted to cheap herbs  3. Resorted to faith healers
   4. Used self-medication with over the counter drugs 5. Other
   (specify)...............................................................................................

Section 3: Health Care Facilities:

301. Which is the nearest health facility from your home?
   1. Government Hospital  2. Private Clinic
   3. City council clinic  4. Community based health worker’s home
   5. Church sponsored clinic  6. Traditional healer’s home
   7. Other (Specify)..............................................................................

302. How far is the nearest health facility from your home?.................................

303a. When you or members of your household are sick, where do you mostly go for treatment?
   3. Traditional healers  4. Faith healers
5. NGO/church hospital clinic
6. Community health worker
7. Other (specify)

303b. Why do you or members of your household go to this place?

1. Good laboratory services
2. Service Provider belongs to my tribe
3. The services are cheaper
4. The staff is friendly
5. Other (specify)

304. What are the most recent diseases that have afflicted members of this household?

305. Has anyone in this household fallen sick during the last one month?
1. Yes  2. No (If No Skip to 401).

306. If Yes, what was the illness?

307. Which member of the household fell ill?

308. How severe was the illness?

309. What was done to cure the illness? (List all the things done chronologically)

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<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
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</thead>
<tbody>
<tr>
<td>Bed rest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use herbs at home</td>
<td></td>
<td></td>
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<tr>
<td>Self treatment with patent medicine</td>
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<tr>
<td>Visited traditional healer</td>
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<tr>
<td>Visited Private clinic</td>
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<tr>
<td>Visited Public hospital/Clinic</td>
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<tr>
<td>Visited City council clinic</td>
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<tr>
<td>Visited Faith healer</td>
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<tr>
<td>Visited Street vendor</td>
<td></td>
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<tr>
<td>Visited Community based health worker</td>
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<tr>
<td>Visited an Injectionist</td>
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</tbody>
</table>
310. Who decided where to seek for initial help?
   1. Father.
   2. Mother.
   3. Elder brother/sister
   4. Self
   5. Other (specify).................................................................

311. Who decided where to go for subsequent help?

312. Why was this course of action taken?
   1. It was the nearest source
   2. Was the cheapest
   3. Well equipped with labs
   4. Drugs are available
   5. Don't know
   6. Other (specify).................................................................

313. For how long had the patient stayed without treatment or medicine?
   1. Less than a week
   2. 2 - 3 weeks
   3. A month.
   4. Other (specify).................................................................

314. Why did the patient have to wait?
   1. No money for transport
   2. No money for consultation
   3. No money to buy drugs
   4. Lack of time to go for treatment
   5. Unfriendliness of the service provider
   6. Other (Specify).................................................................

315. What was the distance travelled to the source of help? ...... Km.

316. What mode of transport was used?
   1. Public transport
   2. Personal vehicle
   3. Taxi
   4. Walked
   5. Other (specify).................................................................

317. How long did it take for the patient to receive treatment at the health facility?
   1. Immediately
   2. Half an hour
   3. One hour
   4. More than one hour
   5. Other (specify).................................................................

318. If it took more than time, what was the reason for this?
1. No service provider was available
2. Too many patients
3. Unfriendliness of the service provider
4. Other (Specify) ..................................................................................

319. How would you evaluate the reception at the health care facility?

1. Very good
2. Good
3. Poor
4. Very poor

320. Did the person feel better after treatment?

1. Yes  2. No

321. If Yes, how soon did he/she take to recover?

1. Immediately
2. After a month
3. Not recovered
4. Other (specify) ..................................................................................

322. Who mostly attends to the following chores for the sick members of your household?

1. Cooking ...................................................
2. Washing ...................................................
3. Giving medicine .........................................
4. Feeding ....................................................
5. No one in particular ....................................

Section 4: Beliefs about Disease and Their Treatment

In the table below, name all the diseases you know, their causes and their preferred mode of treatment.

<table>
<thead>
<tr>
<th>401. Diseases</th>
<th>402. Causes</th>
<th>403. Mode of Treatment</th>
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</table>

82
1. No service provider was available
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3. Unfriendliness of the service provider
4. Other (Specify)

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3. Poor
4. Very poor

320. Did the person feel better after treatment?
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321. If Yes, how soon did he/she take to recover?
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Appendix II - Focus Group Discussions Topics.

1. Common diseases
2. Places where people go for treatment when sick
3. Decision-making process of choice of treatment
4. Management of chronic illnesses
5. Care of the sick members
6. Treatment of diseased associated with punishment from the ancestors/evil spirits
7. Cure through folk intervention
8. Access to health care facilities
9. Suggestions to improve health care provisions in Kibera
Appendix III - Case Study Interview Topics

1. Name of the patient
2. Age
3. Sex
4. Marital status
5. Education status
6. Occupation
7. Length of the illness
8. Perceived cause of the disease
9. Symptoms?
10. Types of therapies used (chronologically)
11. Types of therapies to used in the near future
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1. Name of the patient
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