

**FACTORS INFLUENCING THE UPTAKE OF HEALTH  
INSURANCE SCHEMES AMONG LOW INCOME  
EARNERS IN KIBERA INFORMAL SETTLEMENT,  
NAIROBI CITY COUNTY**

**BY**

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REG. NO. N69/79924/2012**

**A PROJECT REPORT SUBMITTED TO THE  
INSTITUTE OF ANTHROPOLOGY, GENDER AND  
AFRICAN STUDIES IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS OF THE DEGREE OF MASTER  
OF ARTS IN GENDER AND DEVELOPMENT STUDIES  
OF THE UNIVERSITY OF NAIROBI**

**2015**

## DECLARATION

This project paper is my original work and has not been presented in any other university for the award of a degree.

DINAH MUENI MUTINDA \_\_\_\_\_ DATE \_\_\_\_\_

This project paper has been submitted for examination with my approval as the university supervisor;

PROF. W ONYANGO-OUMA \_\_\_\_\_ DATE \_\_\_\_\_

## **DEDICATION**

To my lovely husband Samuel Mingu Nyutu, my pillar and strength, my adorable daughter Nuru Sada Mingu and my precious son Mwendwa Nyutu Mingu.

## ACKNOWLEDGEMENT

There are many people who have greatly contributed in various ways towards the completion of this undertaking. To all, I am deeply indebted. However, a few merit mention, essentially because they went a mile further in achieving the success of this academic endeavor.

My most sincere thanks go to my university supervisor, Prof. W. Onyango-Ouma, who exercised immense levels of patience in guiding, correcting and in the refinement of this work as it progressed. His unfailing encouragement, constructive suggestions, useful literature tips and his personal generosity was great. I am also indebted for the support and cooperation of my lecturers at IAGAS, including IAGAS members of staff. Special thanks also go to my colleagues in IAGAS for their intellectual and moral support.

I wouldn't also forget the great co-operation I received from the household respondents in Kibera as well as the key informants. They received me with love and voluntarily provided me with the information I required to complete this study.

My family in a special way supported and inspired me throughout my studies. To my husband, Mingu, my daughter, Nuru and my new born son, Nyutu for courageously withstanding the many days and nights when my attention was greatly biased and dedicated to completing my studies.

To God, through whom all things are possible, I owe this, one more great achievement. Finally, all errors of faults and judgment are entirely mine.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

AIDS	Acquired Immuno deficiency Syndrome
CBHI	Community Based Health Insurance
EA	East Africa
HIV	Human Immuno deficiency Virus
HFS	Health Financing Schemes
KCBHFA	Kenya Community-Based Health Financing Association
KII	Key Informant Interviews
KIIG	Key Informant Interviews Guide
KMMS	Kenya Ministry of Medical Services
KNBS	Kenya National Bureau of Statistics
KES	Kenya Shillings
MDGs	Millennium Development Goals
MSF	Medicin San Frontiers
NHIF	National Hospital Insurance Fund
NSHIF	National Social Health Insurance Fund
PHCE	Public Health Care Expenditure
SACCO	Savings and Credit Cooperative Society
SPSS	Statistical Package for the Social Sciences
SSRA	Sacco Societies Regulatory Authority
STD	Sexually Transmitted Disease



UNDP United Nations Development Programme

USD United States Dollar

WHO World Health Organization

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## **ABSTRACT**

The main objective of this study was to examine the factors that influence the uptake of health insurance through the National Health Insurance Fund (NHIF) scheme by government among low income earners in Kibera slum, Nairobi City County. More specifically, the study sought to find out health insurance schemes available for uptake among Kibera residents, factors influencing voluntary uptake of NHIF among the Kibera residents and measures necessary to enhance access/uptake of NHIF among the Kibera residents.

The methodology involved purposive sampling of 3 villages out of the 12 villages in Kibera. This was mainly informed by security concerns in selecting 3 villages. Stratified sampling was then done on the three villages to obtain a sample of 125 households. Purposive sampling was then done to obtain key informants who comprised 1 NHIF official in charge marketing for the informal sector, 2 health facility administrators from Mbagathi District Hospital and Kenyatta National Hospital and 1 person from the CIC Insurance Company. Therefore, the total number of Key informants was 4.

The study found out that there was low uptake of NHIF cover among most of the respondents. This was hampered by low levels of knowledge about not only NHIF but also of other health insurance schemes available for low income earners. Among the few who were members of NHIF, most had their premiums payed by check off system through their employers. Only few among the NHIF members made payments directly for themselves through either cash or M-pesa payments. Default rates on monthly premiums for those who paid for themselves posed a big challenge in accessing health care since services could not be provided to them if they had arrears on their premiums. Given that most respondents were not on formal employment, they depended either on their daily or weekly wages to make payments for their premiums. The

irregular flow of this income was therefore a challenge for them to maintain their membership of NHIF.

In order to improve uptake of NHIF cover among low income earners, there is need for increased knowledge and awareness of NHIF among the citizens. More innovative approaches need to be developed for more and more people to get to know about availability of this fund and the amount of premiums payable. NHIF offices also need to be made available at the grass roots level where they can be easily accessed. There needs to be a policy to regulate employers who engage casual labourers to accord their employees NHIF cover as this is not currently in place and many casual labourers do not enjoy NHIF benefits.

# CHAPTER ONE

## BACKGROUND OF THE STUDY

### 1.1 Introduction

Even though Africa has the highest disease burden compared with other regions, it has the lowest per capita spending on health, partly due to its low gross health care financing strategies (African Union 2010).

Health is a basic necessity for sustenance of life and ranks as one of the aspects in the bill of rights of the Constitution of Kenya 2010. Government administrations get endorsed by their citizens on the basis of the promise to deliver quality, affordable and dependable health services. However, with the ever changing economic patterns and costs of living, the cost for health continues to rise every so often. The situation in developing countries is made worse with low GDP levels and an ever competing development needs with shrinking income sources. This leaves developing nations with limited capabilities of subsidizing health services. Though alternatives like cost sharing have been pursued, households still have to go into their pockets to pay for health service (WHO-website).

A national social protection system mechanism was introduced in Kenya to provide medical insurance for the Kenyan population. Social health protection systems are mechanisms that countries use to address the challenges related to providing access to health care services to their citizens, especially the poor segments of the population. The benefits of extending social protection in health include reducing financial barriers associated with access to health care services and protection from financial catastrophe and impoverishment related to health care expenditures (WHO 2007).

One of the categories of social health protection systems is the social health insurance, which is a financing scheme where monies are pooled into a common fund and used for paying for

healthcare costs of members. Contributions are usually collected from workers, self-employed individuals, businesses, and in some cases the government, particularly where a universal coverage model is adopted (Kirigia et al 2006).

Under the National Hospital Insurance Fund (NHIF) Act no. 9 of 1998, a universal social health insurance scheme had never been implemented. This is however deemed to change since the government introduced the National Social Health Insurance Fund (NSHIF) Bill in parliament in the year 2004. The Bill was passed by parliament in December 2004 but the President declined to assent to the Bill and sent it back to parliament due to a number of concerns. One of the concerns was that, the Bill was deemed too expensive to implement and financially unsustainable and the implementation mechanism was also not clearly spelt out (Kirigia et al 2006).

As the government prepares to re-introduce the NSHIF legislation in parliament, it is important to have a better understanding of factors associated with participation in the current National Hospital Insurance Fund (NHIF) Act No. 9 of 1998, particularly among the poor, as well as a determination of the proportion of individuals without access to health insurance among this demographic group. Along with pensions and paid leave, medical benefits are considered one of the basic hallmarks of a “proper” job in Kenya and much of East Africa. This, however, is in most cases off the table simply because often, even employers cannot afford it, let alone the employees (WHO 2007).

Only three per cent of Kenyan adults have any form of insurance, and that includes everyone on the government-run National Health Insurance Fund. Statistics show that private health schemes are the preserve of big corporate clients, and still, often only available to permanent employees, not to the part-time, casual, or blue-collar cadres. The majority of Kenyans hence pay for health care by cash upfront for outpatient services or through *harambees* for in-

patient expenses especially when the bills are high. Among low income earners, this is an uphill task considering that they have limited resources (Mungai, 2014).

Nearly all Kenyan insurance companies have recently been cashing in on the low-end market as more Kenyans take medical cover. CIC, CFC, UAP and Britam Insurance companies are among key stakeholders targeting low-income earners, a target group that a number of insurers are warming up to as they seek new revenue streams in an industry that has witnessed near stagnant growth (Mungai, 2014). Other players like Safaricom and *Changamka* Micro insurance have introduced a low-cost health insurance product called *Linda Jamii*. This low-cost flexible scheme allows users to subscribe for the policy via mobile, pay for premiums by M-Pesa, and access health care in 630 ‘second-tier’ or relatively affordable private hospitals around the country (Mungai, 2014).

Marketing micro-insurance requires that products are developed to suit organised groups like farmers or casual workers to knock out the high cost of administration for low-priced products and win higher numbers with a single sale. The benefit of marketing through organized groups is the advantage of pooling resources hence making it easier for the members to access health insurance. Under *Linda Jamii*, for Ksh1, 000 (\$11.7) per month, or Ksh12, 000 (\$141) annually, users and their families are entitled to out-patient benefits worth Ksh50,000 (\$588) per year and inpatient benefits worth Ksh200,000 (\$2,352) per year (Mungai, 2014). This leaves out individuals from informal settlements who are not in any form of organized groups and makes it a challenge for them to access and afford health insurance.

In a country where 80 per cent of jobs are in the informal sector, and even taking a sick-day off work means losing earnings for that day, the scheme also gives a cash payment of KSh500 (\$5.8) per day for every day one is admitted in hospital, with a limit of 60 days.



Significantly, the policy has no exclusions on any pre-existing chronic conditions such as diabetes, HIV/Aids, hypertension or tuberculosis (Mungai, 2014).

A stable and regular income source is an important element for accessibility of health insurance in any market set up. However, due to low incomes that are irregular and not guaranteed among dwellers of informal settlements, this may be yet another luxury given the numerous competing demands on the little incomes. Besides income level, this study therefore aims to examine other factors that limit the uptake of the Kenyan National Health Insurance Fund (NHIF) among urban slum dwellers.

## **1.2 Statement of the Problem**

According to the United Nations, addressing the disparities in access to care among the poor and marginalized groups is critical in accelerating the achievement of the Millennium Development Goals (MDGs). However, it is quite evident that in Kenya, only a small proportion of the urban poor and those from the informal sector are enrolled in the NHIF programme (Carrin and Chris, 2005).

Existing evidence shows that efforts to implement social health insurance programs by many African countries, including Kenya are hampered by lack of sustainable health financing mechanisms. The country has made little progress towards achieving international benchmarks including the Abuja target of allocating 15% of government's budget to the health sector (Kimalu et al 2004). Currently, only 6.5% goes to health. The sector is thus largely underfunded and health care contributions are regressive (i.e. the poor contribute a larger proportion of their income to health care than the rich (Adar, et al 2013).

The Kenyan health sector thus relies heavily on out-of-pocket payments. Thus persons with low income levels and many competing needs like food, shelter, clothing and education have little or no capacity to afford health care. They are vulnerable to the shocks that result from catastrophic out-of-pocket health expenditure. Among persons in informal settlements and

those engaged in informal sector of the economy, their uptake of health insurance is low (Muiya and Kamau, 2013).

As the Kenyan government moves toward transforming the NHIF into a universal health coverage programme, it is important to harness the unique opportunities presented by formal and informal microfinance platforms in improving health care capacity by considering them as viable financing options within a comprehensive national health financing policy framework. The government should hasten the plans to implement a universal health coverage programme in order to facilitate improved access to quality and affordable health care for all Kenyans (Carrin and Chris, 2005).

Slum dwellers including those in Kibera face a host of challenges including low including low income levels. The living conditions in the slum are harsh and profoundly unforgiving (Mulcahy and Chu 2007) and pose high risk for ill health and diseases. The congestion, lack of proper drainage and sewer systems, low latrine coverage, poor waste disposal and lack of clean drinking water are just but some of main predisposing factors of infections among slum dwellers (Mulcahy and Chu 2007). Additionally, the prevalence of HIV is significantly higher in Kibera at 14% (Patterson, 2011 p. 12) than Kenya's average of 6%.

Yet the fundamental aim of a functional and efficient public health system is to ensure universal access to available resources in order to provide adequate coverage of the most important health needs of the people. The utilization of such a system is pegged among other things on the ability to afford among the people it serves (Abubakar et al, 2013). This study therefore aimed at establishing the factors that determined the uptake of NHIF among slum dwellers in Kibera.

### **1.3 Research Questions**

The research was guided by the following questions:-

1. What are the Health Insurance Schemes available for uptake among Kibera Residents?
2. What are the factors influencing voluntary uptake of NHIF among the Kibera Residents?

### **1.4 Research objectives**

*General objective:*

To investigate the factors that influence the uptake of health insurance schemes among low income earners in Kibera informal settlement in Nairobi city county.

*Specific Objectives:*

1. To determine the health insurance schemes available for uptake among Kibera residents.
2. To determine the factors influencing voluntary uptake of NHIF among the Kibera Residents.

### **1.5 Assumptions of the Study**

The following assumptions guided this study:-

- 1.5.1 There are different health insurance schemes which are available for uptake among the low income earners.
- 1.5.2 Low income earners in Kenya are not able to access health insurance covers.

## **1.6 Justification of the Study**

It can be established that the proportion of slum residents without any type of health insurance is high yet they are predisposed to many types of diseases, sicknesses and risks due to the fact that the environment they live in exposes them to many health sicknesses/diseases and risks. These health sicknesses, diseases and risks include; HIV and AIDs, STIs, diarrhoea, cholera and dysentery-caused by poor sanitation and unsafe drinking water (Mitullah et al 2003).

Women and young girls are also vulnerable to sexual violence and unwanted pregnancies due to unsafe sexual behaviours. Most of them end up doing abortions, mostly by untrained “doctors” exposing them to further health risks. There are also high cases of malnutrition due to poor diets that causes children to be under weight and vulnerable to many infections. It can also be established that most of the residents of Kibera slums lack access to health insurance despite the fact that the government has made provision for NHIF aimed at reaching its populations on health financing. This therefore underscores the need for a social health insurance program to ensure equitable access to health care among the poor and vulnerable segments of the population (Mitullah et al 2003).

In this regard, the study took interest in the residents of Kibera slum, which is one of the largest informal settlements in Africa with a focus to understand the different health insurance schemes available for uptake and factors influencing voluntary uptake of these schemes among these slum residents. This study was also important because it sought to establish the measures which are necessary to enhance access/uptake of NHIF among slum residents.

It is hoped that the findings of this study will be useful to the Kenyan government as it moves toward transforming the NHIF into a universal health program for its populations.

## **1.7 Scope and Limitations of the study**

This research aimed to identify the factors limiting the uptake of NHIF among the low income earners in Kenya and particularly those living in the informal settlement. To establish this, the research was undertaken in Kibera slums, Nairobi City County. This research had a number of limitations. First, the data used was from only one urban slum in Nairobi and, therefore, the findings are not generalizable to all the slum areas in Kenya. Second, due to the lack of data on respondents' health status (e.g. presence of illnesses, frequency of illnesses), the study was not able to assess the association between health status and having health insurance coverage although previous studies have shown that health status is an important predictor of health insurance coverage.

In addition, no data was collected on out-of-pocket payments and health care utilization; hence, it was not possible to examine the effect of having health insurance on these two outcomes.

# CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

I will review relevant literature on number of works by several authors about the financing of health insurance in Kenya. I will use the available literature to provide a guide for generating the appropriate data collection instruments and a sound theoretical basis and perspectives for discussing and presenting the study findings. The materials reviewed include text books, journal articles, periodicals, print media and any other documentations relating to health insurance financing in Kenya, and factors limiting the uptake of the same among the low income earners, with specific regard to residents of Kibera slums, Nairobi County.

Literature focusing on the determinants of participation in health insurance schemes in Kenya and Africa in general is limited. Studies conducted in a number of Sub-Saharan African countries show that employment in the formal sector was significantly associated with access to health insurance relative to being employed in the informal sector. The low participation of individuals in the informal sector was attributed to a number of factors, including low and non-regular incomes, insecure employment, and insurance scheme design features (e.g. inflexible payment schedules and lack of awareness about insurance schemes) that are not adapted to people's needs and preferences. (Kimani et al, 2012).

In Kenya, it is estimated that 31.6% and 26.3% of the total workforce are engaged in the informal and formal sectors, respectively, while 42.1% are engaged in small-scale farming and pastoralist activities (Kenya National Bureau of Statistics 2009). Existing evidence also shows that membership in both formal (e.g. microfinance institutions such as the savings and credit cooperative organizations-SACCOs) and informal (e.g. community-based savings groups-popularly known as merry-go-rounds) savings and credit schemes, is an important predictor of participation in health insurance programs (Kimani et al, 2012).

According to previous studies, the saving and sharing mechanisms associated with these formal and informal schemes have provided the members with an opportunity to raise and collect funds to be used for various purposes, including payment of insurance premiums and addressing emergencies such as hospital care or funeral costs (Dekker and Wilms, 2009).

The formal savings and credit schemes comprise entities such as SACCOs that enable their members to save their money and also access loans. Membership is voluntary and members are offered a broad range of loan and savings products usually at a cheaper cost and flexible payment plans compared to mainstream commercial banking institutions. SACCOs predominantly provide access to financial services to people (i.e. poor and low-income groups) who would otherwise be excluded from accessing such services by mainstream banking institutions. (Kimani et al, 2012).

These entities have formalized structures of management and are subject to government regulatory mechanisms (Sacco Societies Regulatory Authority (SSRA) (Ed). Informal schemes (e.g. community-based savings groups-popularly known as merry-go-rounds) are formed on the basis of group solidarity mechanism where community members with common interests come together and pool funds by way of making contributions, which are then shared on a revolving basis. Each member receives the entire funds of the group after a set period of time (Mputhia, 2012).

A study on extending social health insurance to the informal sector in Kenya found that in the slums, informal savings groups were common and slum dwellers made monthly contributions, which were then shared on a revolving basis to each member of the group to help them cater for various needs, including funeral and health care costs (Mathauer, Schmidt and Wenya, 2008). Since these groups are not regulated by any formal legal mechanisms, the members depend on good faith and personal commitment and responsibility to ensure that individuals honour their obligations to contribute to the savings scheme. Other actors that

were cited as key determinants of access to health insurance, included ownership of household assets such as land and livestock, higher income and education levels, and provision of social security and welfare services (*Onwujekwe et al. 2013*).

## **2.2 Literature Review**

### **2.2.1 Background on Health Insurance in Kenya**

According to the Kenya National Bureau of Statistics, at the end of 2009, the total population in Kenya was 38.6 million (Kenya National Bureau of Statistics (KNBS)-2010). In Kenya, more than four out of 10 (46.6%) individuals live below the poverty line (World Bank, 2010). Data from the national health accounts show that more than a third of the poor who were ill did not seek care compared to only 15% of the rich (World Bank, 2010).

Additionally, according to the 2005/06 national health accounts, 36% of funds to the health sector came from households and out of these, the out-of-pocket expenditure accounted for more than 29% (Government of Kenya Health Systems 2010 Project). These findings raise concern about equity and financial accessibility to health care by a majority of people in Kenya, particularly the poor who are highly vulnerable to economic shocks that result from catastrophic out-of-pocket health expenditure.

Existing studies show that the poor are more likely to get sick, less likely to use preventive and curative health care, and consequently, have higher mortality rates. According to these studies, one of the factors responsible for these challenges is high out-of-pocket payments for health care (*Ziraba et al, 2009*). The 2010 World Health Report and the 2010 Millennium Development Goals report underscore the importance of reducing disparities in access to health care, particularly among the poor and marginalized groups through universal health coverage (Evans and Etienne, 2012). Extending access to health care to all segments of the population, including the poor is an important objective of the Kenyan government's national



health sector strategic plan and national development agenda as outlined in the Kenya Vision 2030 policy framework (Kenya Ministry of Medical Services).

The NSHIF legislation sought to transform the current National Hospital Insurance Fund (NHIF) into a universal health coverage program, which will ensure equity and access to health care services by all citizens. One of the criticisms of the NHIF is its failure to reach out to the majority of Kenyans, especially the poor and those in the informal sector (Carrin *et al.* 2007). For example, the NHIF imposes a penalty that is five times the contribution amount for those who do not make their payments by the due date. This regulation particularly hurts the poor, the unemployed and casual workers in the informal sector, who do not have a steady income that would enable them, pay their contributions regularly.

The NHIF was established by an Act of Parliament in 1966, as a national contributory hospital insurance scheme with the objective of providing Kenyan citizens with access to quality and affordable health care (Retirement Benefits Authority). Contributions and membership are compulsory for all civil servants and formal sector employees, and voluntary for those in the informal sector and retirees. Members under the voluntary category pay a flat rate of Kshs 300 per month (approx. USD 4.00). For those in formal employment, contributions are made based on their income, but usually range between Kshs 150 to Kshs 2,000 per month (approx. USD 2.00 to USD 24.00). Currently, the NHIF only pays for inpatient costs at selected hospitals (mostly government).

Recently, a pilot outpatient service program was launched that allows members to get treatment in selected hospitals without having to be admitted. The NHIF is the most widely available medical cover in the country, with more than 400 accredited hospitals across the country, including government, faith-based and private ones. Payment levels usually vary across hospitals, but generally fall under three types of contract options. (Joint Learning Network on Universal Health Coverage).

The first option applies to primarily government health facilities and beneficiaries' accessing services in these settings are comprehensively covered. The second option includes faith-based hospitals and some private hospitals (mostly in rural areas), where NHIF members also have comprehensive coverage but surgery costs are not covered. The surgery costs are covered on a copayment basis and payments are usually based on a capped amount. Finally, the third option focuses on medical services offered by high-cost private hospitals, where the NHIF provides a daily rebate for hospitalization which ranges from Kshs 400 to 2,000 per day (1 USD = 85 Kshs May, 2011) for a maximum of 180 days per beneficiary per year members. Any costs above this amount have to be borne directly by the beneficiary.

Besides covering the principal member, the NHIF program also covers the principal's dependants, including the spouse and children (under and over 18 years). Nationally, in 2010, an estimated 2 million primary contributors and about 8 million dependants were enrolled in the NHIF program, with a majority (about 74%) residing in the urban areas. Besides the NHIF, in Kenya, individuals can access health insurance through private insurance firms and some extent community-based health insurance (CBHI) organizations. Due to cost considerations, private health insurance is predominantly accessible to the middle and higher-income groups (Kimani, Muthaka and Manda, 2004). Community-based health insurance is relatively new in Kenya having been established in 1999, and as a result it has limited coverage (Mathauer, Schmidt and Wenyaa, 2008).

According to the Kenya Community-Based Health Financing Association (KCBHFA), currently there are nine institutions offering community health financing schemes with 410,997 beneficiaries or about 1% of the total Kenyan population covered. Regardless of this small coverage, KCBHFA has been seen to play a big role in the transformation of National Hospital Insurance Fund (NHIF) towards the National Social Health Insurance Fund (NSHIF) (Mathauer, Schmidt and Wenyaa, 2008).

In Africa, countries such as Burkina Faso, Senegal, Tanzania and Ghana have well developed CBHI schemes that are recognized by the national governments as a key component in the national health financing strategy. Findings from these case studies suggest that CBHI schemes have the ability to reach marginalized population groups such as the poor, women and children, however, more support and strategies from governments are needed to enhance their development and sustainability (Mathauer, Schmidt, Wenya (2008).

### **2.3 Theoretical Framework**

This study adopts the Neoclassical Framework by Grossman (1972) which states that demand for health is considered to have both consumption elements and investment elements. This theory therefore assumes the certainty existence of demand for health where the consumer maximizes an inter-temporal utility. A consumer will therefore demand for health care, hence increase health stock as long as marginal cost of investment in health is lower than the marginal rate of return. Consumption will continue until equilibrium (where the marginal cost of the investment is equal to the marginal rate of return) point is attained.

Given the low income levels among households in informal settlements like Kibera, the cost of health care can both inhibit demand for necessary care and increase consumption of unnecessary care. Individuals will therefore have challenges in taking up health services from out-of-pocket payments and that are beyond their income levels and will willingly take up services that are provided to them at no cost (free of charge) to a point where they may not be in urgent need of these services.

Christianson (1976) affirms this by stating that financial arrangements affect access to care and health outcomes. For example, rates of health care use are more likely to be low among uninsured residents of Kibera with low incomes than among insured individuals. In addition, those lacking medical insurance cover are more likely to experience inadequate care and

adverse health outcomes and are less likely to have a usual source of care, to visit a physician, or to be hospitalized.

Essentially, in neoclassical framework, the existence of health insurance is justified by the risk-averse nature of consumer and the uncertain nature of health care. However, a list of problems that exist in the market for health insurance are also commonly recognized by neoclassical economists, these include consumer imperfect information, adverse-selection, economy of scale, etc.

It can also be established that out-of-pocket payments comprise a substantial share of provider incomes. In this context, it is important to address provider incentives inherent in direct payment as part of a comprehensive policy analysis. For example, in the case of most residents of informal settlements, like residents of Kibera, majorities are not covered by insurance and thus pay for care at the time of service use. Health care financing must be efficient to allow wise use of limited resources since wasted resources lead to impoverishment and important health needs being unmet. (Liu X, 1999)

This theory therefore informs how the different variables in this study relate. Levels of income among Kibera residents determine their ability to take up health insurance. This in turn has a bearing on the health outcomes of individuals. That is, if an individual can afford health insurance, then they can access health care when in need of it thus maintaining a good health status. Income levels also determine the source of health insurance providers available to the residents of Kibera i.e. NHIF, Private insurance providers or Community based health insurance schemes. Knowledge of health insurance schemes and the various types available in the market is another determinant for uptake of health insurance. Thus, if more of the persons living in Kibera do not have the right information of available schemes then this will also be a limiting factor in their uptake of the health insurance services.

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

This section gives a general description of methodologies that were used in this research conducted in Kibera Slum as the site of this study. It describes Kibera's geographical, demographic, economic and social aspects. It also gives a description of the sampling procedure and techniques, data collection methods that were used and data processing and analysis.

### **3.2 Study Site**

The study was done in different villages within Kibera Slum (Figure 1). The 2009 Kenya Populations and housing census puts Kibera's population at 170,070 people (KNBS, 2009). In a study by the French Institute of Research in Africa, (on whether Kibera is the largest slum in Africa) Kibera's estimated population was about 200,000 people. This is very far from the usual 1 million plus figure thrown around (Desgropes and Taupin, 2009).

Kibera is characterized by poor infrastructure and limited delivery of social services such as health care, law enforcement, water and sanitation and livelihood opportunities. It is reported that a large proportion of cases of Gender Based Violence in Nairobi occur in Kibera with residents citing rape, incest, child defilement and abuse, sodomy and assault as the main forms. These forms of SGBV are generally characterized by under-reporting to the extent that actual numbers of cases are estimated to be 5 times those that are reported.

It was initially established as a settlement for Nubians by the British Colonial government as a reward for their service in World War II. But after independence, the Kenyan government reclaimed the land. However the Nubian community continued to build and spread on the

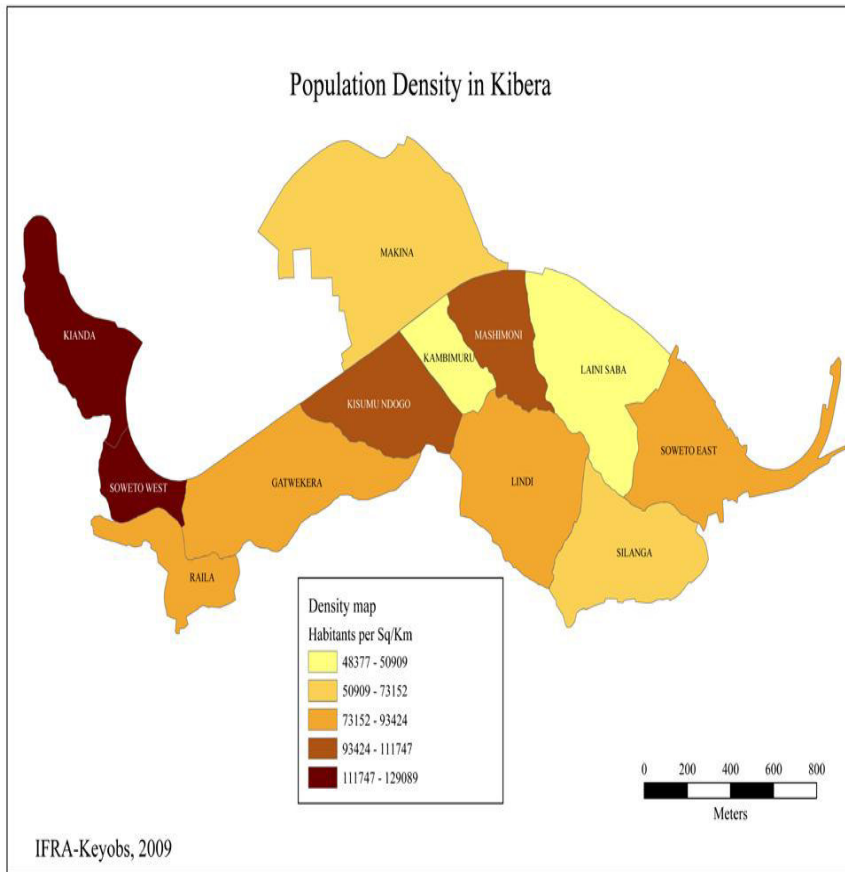
land further welcoming newcomers from all over the country (Desgroppes and Taupin, 2009). This growth was informal and uncontrolled leading to the current slum situation.

The environmental situation in Kibera is such that the terrain is hilly and sometimes steep which complicates the building process. Residential structures encroach on the riparian areas of the river. There is poor and almost non-existent liquid and solid waste management for both residential and commercial purposes. Unorganized dumping of human and medical waste as well as waste water causes perpetual degradation of the environment and water quality. Where they exist, pit latrines are located inappropriately close to water sources affecting the general environment and community health (Mulcahy and Chu 2007).

Economically, about three quarters of Kibera's households earn less than KES 10,000 per month; with an average of five people per household, this translates to approximately one dollar per person per day (Mulcahy and Chu 2007). With high rates of unemployment in the country, the proportion Kibera's residents engaged in employment mainly depends on the informal sector or engage in casual labour in the surrounding industrial estates and middle class households. This poses a challenge for most households in affording basic needs where three square meals is rare occurrence. Health seeking behaviours are also affected with individuals seeking alternatives to modern medicine which is sometimes not affordable or seeking help when it is almost too late (Chege and Mwisukha, 2013).

There are high rates of unemployment, low income levels, poor infrastructure and poor living conditions in Kibera and this leads to high levels of stress, frustration and destitution. This worsens the already prevailing social challenges in that the Kibera residents live under. Crime and insecurity is also significantly high with sexual gender based violence is prevalent. HIV/AIDs prevalence is also high at 14% (Chege and Mwisukha, 2013).

Figure 1: Kibera Map showing the 12 Villages.



### 3.3 Sampling Procedure and Techniques

A sample of the households was obtained through the assistance of the Assistant County Commissioner 1 of Langata sub county. From the administrative records, Kibera Slum is subdivided into 12 villages, namely, Kianda, Soweto West, Raila, Gatwekera, Makina, Kisumu Ndogo, Kambimuru, Mashimoni, Lindi, Lainisaba, Silanga, and Soweto East. These are further subdivided into seven Administration blocks where there is an Administration Chief. These are; Kibera, Olympic, Lindi, Laini Saba, Kibera High rise, Kibera Golf Course and Mugumoini. The sizes of these seven blocks are almost equal.

Purposive sampling was done for the 12 villages to pick 3 villages which the research focused on. The reasons for purposive sampling were because of security concerns and accessibility to the 3 villages. However, efforts were made to ensure that the villages chosen

gave a representation of the entire Kibera Slum since one village was on the farthest and Eastern most side, the other in the central and the third one in the farthest Western side of Kibera. These were Kianda, Lindi and Silanga respectively.

Stratified sampling was then done on households from the three villages to obtain a sample of 125 respondents. Given that the population of Kibera is 170,070 (KNBS, 2009), then on average each village had approximately 13,082 residents. Assuming that each household had an average of 8 persons, then there were 1,635 households in each village. Taking a confidence level of 95% and a confidence interval of 1.5, there was a sample of 42 households per village making a total of 125 households which were reached in this research. The household heads were the respondents to the questions on the uptake of NHIF and the factors that determine their uptake to HFS. In total, the sample size for this research was 125 respondents.

Purposive Sampling was also done to identify key respondents who included 1 NHIF official in charge marketing for the informal sector, 2 health facility administrators from Mbagathi District Hospital and Kenyatta National Hospital and 1 person from the CIC Insurance Company. Therefore, the total number of Key informants was 4.

### **3.4 Data Collection Methods**

#### ***3.4.1 Household Survey***

Using a standardised questionnaire (Appendix 2), data was collected from 126 household heads in Kibera through face-to-face interviews with the researcher. The researcher administered the questionnaires and filled in the responses from the respondents on questions asked. Unique observations noted during the interviews and not found in the questionnaires, were recorded in a note book. The residents of Kibera provided information on how they cater for medical expenses and the challenges they face in getting health insurance.



### ***3.4.2 Key Informant Interviews***

A checklist of questions (Key Informant Interview Guide) designed for each category of key informants was used to interview 4 KIs who included; 1 NHIF official in charge marketing for the informal sector, 2 administrators from public health facilities namely; Mbagathi District Hospital and Kenyatta National Hospital and 1 marketing officer from the CIC insurance companies. The study sought to find out what challenges there are for low income earners in Kibera to access health services, health insurance and what can be done to enhance their uptake of the health insurance products.

Responses of the key informants were recorded or written down in form of notes in a small notebook. Unique issues that arose from the interviews but were not of immediate necessity for this study was also noted down. The key informant from NHIF provided information on the available products for low income earners and the challenges there are in uptake of the same among slum dwellers. Key informants from health facility administration provided information on the percentage of low income earners who meet their medical hospitalization bills through insurance cover and what challenges they face. The key informant from the insurance companies provided information on the products available for low income earner, the trends in the uptake of these products and the factors limiting the uptake of these products.

### **3.5 Data Processing and Analysis.**

This was done in three main stages (Miles and Huberman 1994). These are data reduction, data presentation and conclusion drawing. Data reduction involved selecting, simplifying, abstracting and transforming the data from written-up field notes and questionnaires. The data was sorted out to identify similar phrases, relationship between variables. Common sequences between the variables was also noted.

The data collected using the questionnaire was then coded before being entered in a computer for analysis. As a result, a code book was developed to ease entry of the codes into the computer. Computer software, Statistical Package for Social Sciences (SPSS) was used for this process. Once, the data entry process had been completed, the computer package was used to run the analysis. Each variable was analysed in accordance to the code book which was developed. From the computer analysis, a print out of frequency tables and cross tabulations was produced.

Out of the frequency tables and cross tabulations, the second stage of analysis according to Miles and Huberman (1994) was done. A descriptive report was developed from interpretations and inferences out of the frequency tables and cross tabulations. This descriptive report was informed further by the data collected from key informants. Data presentation was done by use of pie charts and tables showing percentages and frequencies e.g. on how the slum dwellers in Kibera take up NHIF or other HFS and the factors which hinder their uptake.

The final stage of data analysis was drawing of conclusions and recommendations. This was done from the consistencies which were observed in the data and then conclusions were drawn. At the same time, recommendations were made with the guidance of the conclusions which were drawn. The recommendations focused on measures which need to be put in place to enhance uptake of NHIF and other HFS among low income earners in Kenya. Elaborate professional counsel from the supervisor of this research project was highly relied on in all stages in this research.

### **3.6 Ethical Considerations**

I enhanced research integrity by maintaining intellectual honesty in undertaking this research.

I took measures to ensure that I avoided plagiarism and any unethical use of other people's

work that can amount to a dishonest practice. This is because my research had to be approved by an ethics review committee to make sure I did not violate any ethical considerations.

With respect to collection of information by use of primary data, I gave critical focus on objectivity as opposed to subjectivity. In this regard, I gave both sides fair consideration by ensuring that my own personal biases and opinions did not get in the way of the research.

When conducting interviews to get information, I began by letting the subjects know of the purpose of my findings. Further to this, I chose the subjects who were only beneficial to my research.

When reporting my findings, I accurately represented my observation, or what I was told in the interviews. I did not take interview responses out of context, nor discussed small parts of observations without putting them in the appropriate context.

## **CHAPTER FOUR**

### **AVAILABILITY OF HEALTH INSURANCE SCHEMES IN KIBERA**

This chapter begins by looking at the socio demographic characteristics of the respondents in terms of gender, age, level of education, occupation and marital status explains the options for health insurance schemes available to the people of Kibera. It then continues to determine whether the respondents were aware of NHIF and any other scheme known to them. It also explains the membership of the respondents in any of these schemes, how much and how often they contribute to these schemes and the challenges they face in making these contributions.

#### **4.1 Socio demographic characteristics**

Table 1 below shows some of the socio demographic characteristics of the respondents who were interviewed in this study. In general, an almost equal proportion of men and women were interviewed with the largest proportion being within the age bracket of 18-29 years. The highest education level attained by a majority of the respondents was secondary education. The informal but regular sector was the largest proportion of occupation my most of the respondents. This constituted occupations such as dressmaking, carpentry, running a kiosk or small grocery shop among others. The largest proportion of respondents, 68 per cent lived with a spouse with the biggest proportion of family, 36.8 per cent had 5 and above family members. Table 1 below gives a clear snapshot of the various demographics.

**Table 1:** Social demographics of the various respondents in the study (n=125).

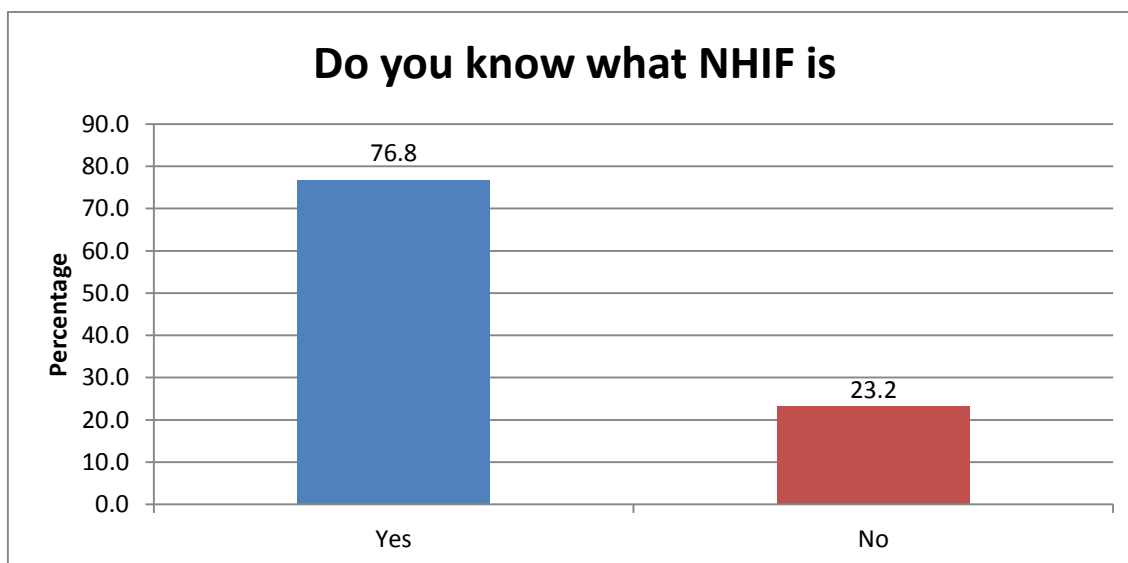
Description of variable	Frequency	Percentage
<b>Gender</b>		
Male	61	49.6
Female	64	50.4
<b>Age</b>		
18-29	53	42.4
30-39	39	31.2
40-49	21	16.8
50-59	9	7.2
60-69	2	1.6
70-79	1	0.8
<b>Education level</b>		
Primary	50	40.8
Secondary	55	43.2
College	20	16.0
<b>Occupation</b>		
Formal employment	28	22.4
Informal irregular employment	24	19.2
Informal regular employment	60	48.0
Student	6	4.8
House wife	7	5.6
<b>Marital status</b>		
Living with partner	85	68.0
Single	24	19.2
Separated	10	8.0
Divorced	10	8.0
Widow	5	4.0
<b>Number of dependants (including spouse and children)</b>		
1 – 2	32	25.6
3 – 4	47	37.6
5 and above	46	36.8

Source: Field data, 2014

## 4.2 Knowledge of NHIF

From the analysis done, a majority of the respondents, 76.8 per cent, had knowledge of NHIF while 23.2 per cent did not have knowledge about it. This is illustrated in Figure 2 below.

*Figure 2: Respondents' knowledge of NHIF*



Source: Field data, 2014

Out of the respondents who knew NHIF, 89.5 per cent had knowledge of NHIF and its benefit as being a national insurance scheme that covers for inpatient hospital expenses and that it does not cover outpatient medical costs. This great level of knowledge of NHIF among the respondents is a clear indication that awareness campaigns of the scheme have been successful in informing the public on its benefits. The other 10.5 per cent of respondents who had knowledge of NHIF could not clearly describe what it was an indication of lack of proper information on what the insurance scheme is about.

## 4.3 Knowledge of other health insurance schemes.

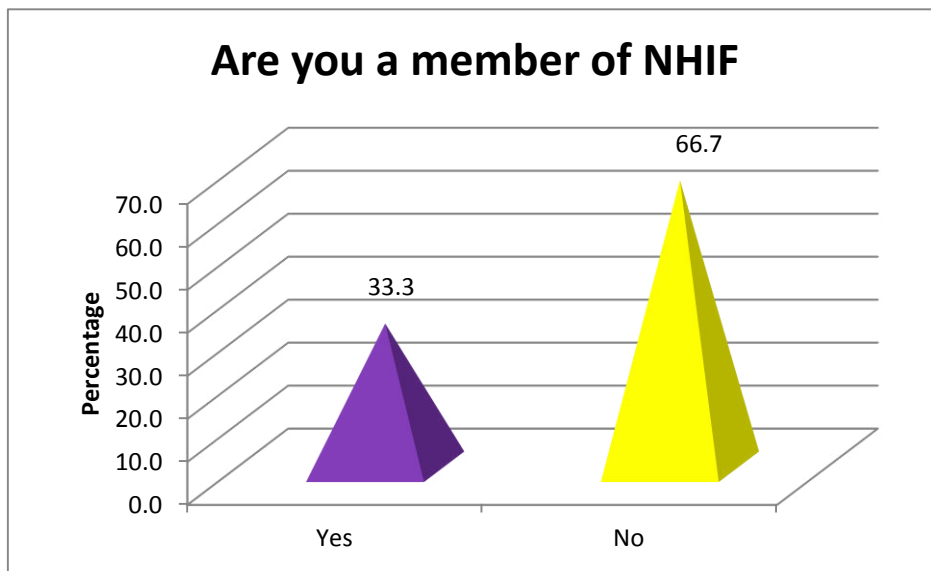
Only 22 per cent of respondents had knowledge and could mention at least on other health insurance scheme. Lack of knowledge of other health schemes available was high among respondents at 82 per cent as illustrated in the table below. This is an indication that information and awareness about availability of other health insurance options is limited. Therefore, these other health insurance options are not readily available to the residents of

Kibera. Other health insurance schemes mentioned were from providers such as Africa Air Rescue (AAR), Britam, Amref, St.Johns Ambulance, Bima by Madison Insurance, Panafric, Afya kamili by UAP insurance and CFC. This shows that knowledge of health insurance schemes was limited among the respondents thereby limiting their capacity to exploit existing opportunities around them.

#### 4.4 Membership of NHIF

However, the greater knowledge of NHIF did not translate to a higher level of membership to any of these schemes much so to NHIF. An indication that after all, NHIF services are not readily available to the residents of Kibera as much as they were informed about it. Out of the respondents interviewed, 33.3 per cent were members of NHIF whereas 66.7 per cent saying that they were not members of the same scheme. This is illustrated in figure 3 below.

*Figure 3: Respondents membership of NHIF*



Source: Field data, 2014

Distributing respondents' knowledge of NHIF versus their membership with the insurance scheme, we note that those who had no knowledge of NHIF was a hinderance for them having membership with NHIF. Knowledge is therefore a factor for having NHIF cover. This is illustrated in table 2 below.

*Table 2: Distribution between respondents' knowledge and their NHIF membership*

Respondents' knowledge of NHIF	Respondents' membership with NHIF		Total
	Yes	No	
Yes	40	58	98
No	0	27	27
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Source: Field data, 2014

Further analysis showed the ability to pay for NHIF monthly premiums was greater among respondents who were salaried in contract to respondents who paid their monthly premiums by themselves either by cash or through M-pesa. This therefore means that persons with more stable incomes and hence stable occupations were most likely to have NHIF cover than those who had irregular incomes hence unstable and irregular forms of occupation. This is as illustrated in tables 3 and 4 below.

*Table 3: Distribution of mode of payment used by the respondent to pay to NHIF vs. their membership with NHIF*

Mode of payment used by the respondent to pay to NHIF	Respondents membership with NHIF		Total
	Yes	No	
Cash	10	0	10
M-pesa	6	0	6
Not applicable	0	84	84
Salary	24	1	25
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Field data: 2014



**Table 4:** Distribution of occupation of respondent vs. their membership with NHIF

<b>Occupation of respondent</b>	<b>Respondents membership with NHIF</b>		<b>Total</b>
	<b>Yes</b>	<b>No</b>	
Formal employment	9	5	14
Informal sector (regular-saloonist, carpenter, plumber, retailer, small business holders)	16	51	67
Informal sector (irregular-casual labour, house helps)	13	9	22
House wife	1	7	8
Unemployed	0	8	8
College student	1	5	6
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

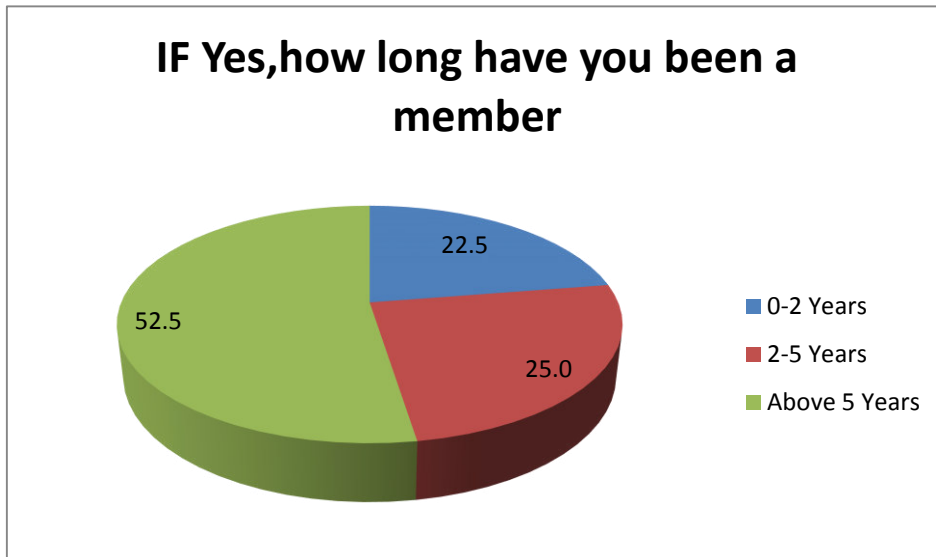
Source: Field data, 2014

#### **4.5 Duration of NHIF membership**

Whereas knowledge of NHIF among the respondents was high at 76.8 per cent, uptake determined by membership into NHIF was low at only 33.3 per cent. This shows a big gap between knowledge and accessibility of NHIF services. Reasons that limit up take of NHIF cover will be discussed in the latter sections of this report.

Among the respondents who were members of NHIF, a large proportion, 52.5 per cent had been members for a period exceeding five years as illustrated in figure 4 below.

Figure 4: Duration of NHIF membership

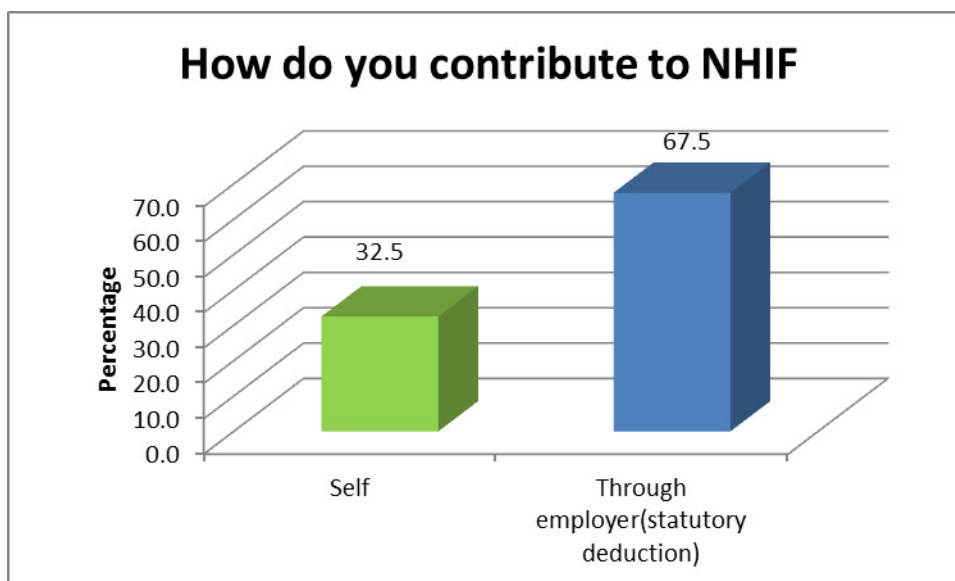


Source: Field data, 2014

#### 4.6 Mode of contribution

In addition, those who were members of NHIF, a larger proportion of the respondents of 67.5 per cent, had their membership contributions paid by the employers through monthly contributions an indication that they are formally employed, while 32.5 per cent made their contributions individually. This is illustrated in figure 5 below.

Figure 5: Respondents' means by which they make contributions to NHIF

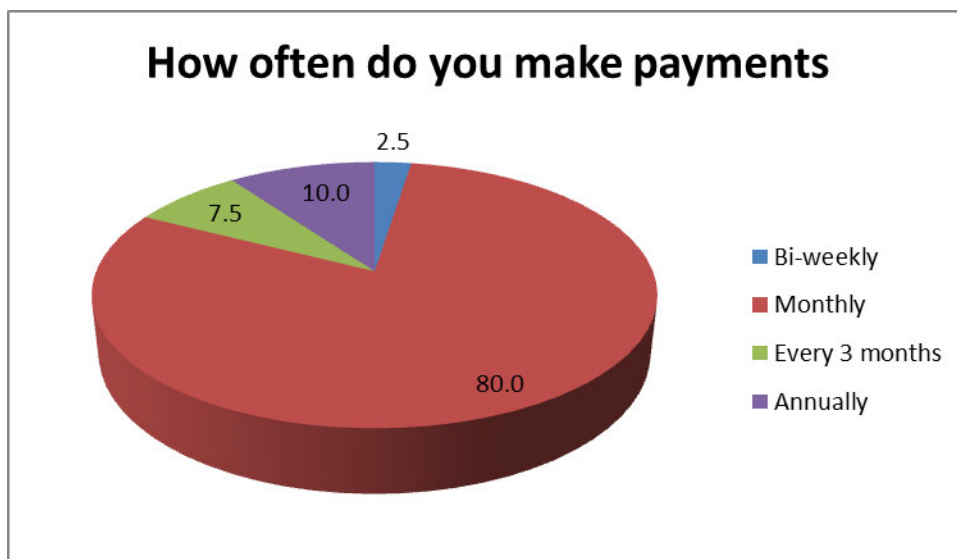


Source: Field data, 2014

#### 4.7 Frequency of contribution

Contributions to NHIF were mostly made on a monthly basis at 80 per cent of all the respondents with NHIF cover interviewed as illustrated in figure 6 below.

*Figure 6: Frequency of payment to NHIF*

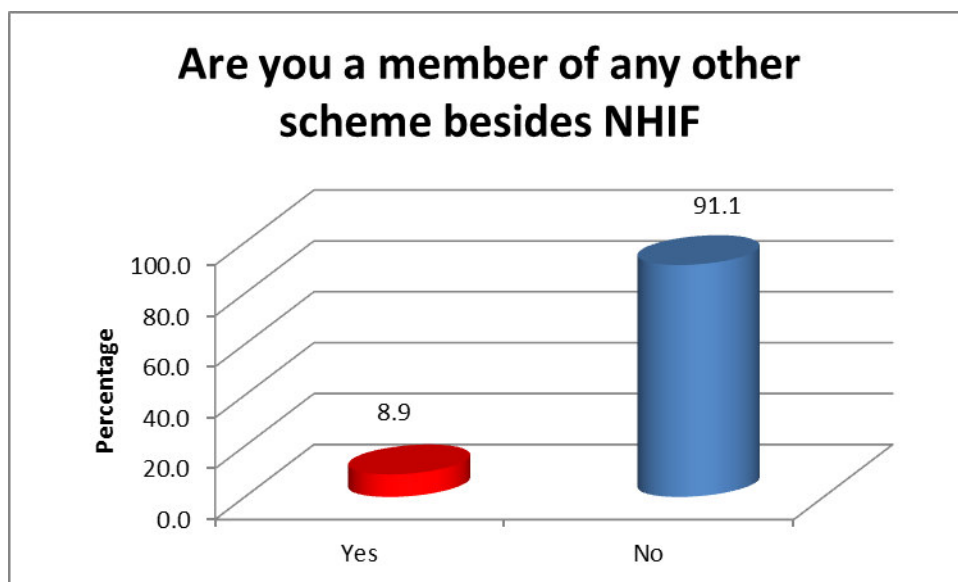


Source: Field data, 2014

#### 4.8 Membership of other health insurance schemes

Among all the respondents interviewed, only 8.9 per cent were members to other health insurance schemes besides NHIF as illustrated in figure 12 below. The schemes mentioned included, Linda jamii by Britam, St. Johns Ambulance, Bima by Madison Insurance and Afya kamili by UAP insurance. The mentioned alternative schemes are from big insurance firms that have targeted the low income segment. However, uptake of these alternative schemes is much lower than in comparison to NHIF's 33.3 per cent. This could perhaps due to cost limitation in comparison with NHIF which still offers the least monthly payment rates. This therefore means that health insurance options available to low income earners are mostly limited to the NHIF as it is the most readily available given the price and affordability factor. Low income earners therefore do not have a wide variety of health insurance options to choose from.

*Figure 7: Respondents' membership to other health schemes*



Source: Field data, 2014

This chapter has described and discussed the socio demographic characteristics of the respondents and further assessed their knowledge of NHIF and other health insurance schemes available to them. It further assessed the respondents' membership to NHIF as well as these other health insurances schemes. In addition, it looked at the duration of time respondents have been members of NHIF, sources of their regular contributions to the scheme and how frequent these contributions are made. The next chapter presents factors that influence the voluntary uptake of NHIF and the challenges encountered by respondents in accessing this cover.

## **CHAPTER FIVE**

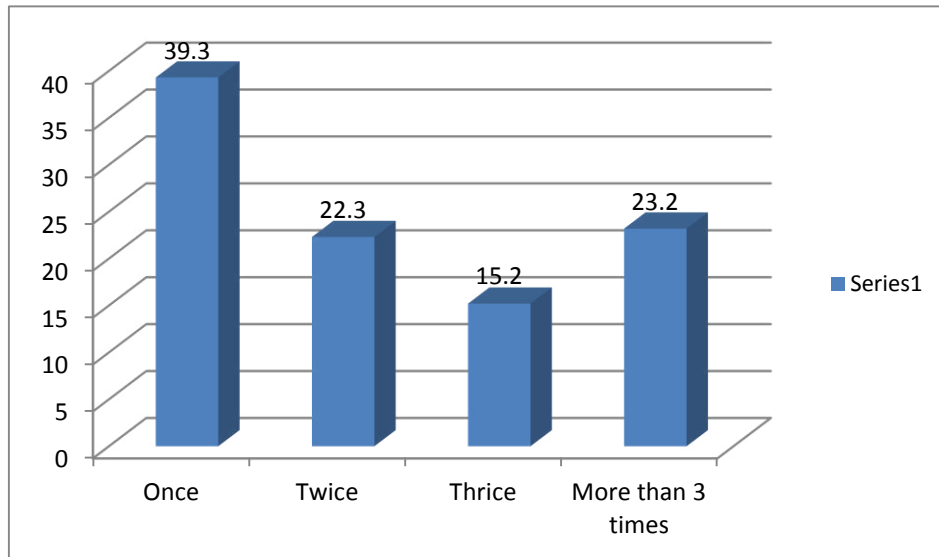
### **FACTORS INFLUENCING VOLUNTARY UPTAKE OF HEALTH INSURANCE AMONG KIBERA RESIDENTS.**

This chapter looks at the factors that influence the voluntary uptake of NHIF and challenges encountered by respondents in seeking this cover. It first determines whether the respondents had a need for medical services, how they met the need, and whether they felt that they could have been better off if they had an insurance cover. This section also explains the amount of money spent by respondents in accessing treatment and the source of the money.

#### **5.1 Frequency of respondents in seeking medical services.**

The residents of Kibera face a variety of health challenges and this is evidence by the number of times they seek medical attention at health facilities nearest to them. Cumulatively, 61.7 per cent of respondents said that they had visited a health facility more than once to seek medical services in the past six months. Only 39.3 per cent of the respondents had visited a health facility only once in the past 6 months. This is illustrated in figure 8 below. It is clear that majority of the respondents' experienced frequent need for medical services.

**Figure 8:** Frequency of respondents in seeking medical services in the last 6 months



Source: Field data, 2014.

The environmental conditions within Kibera which is an informal settlement are such that they do not promote better living standards and therefore healthy living. Distributing the number of times the respondents fell sick and hence sought medical services versus membership with NHIF it was clear that those who sought medical attention more than once in the last 6 months were not covered by NHIF health insurance. This is illustrated in table 5 below.

**Table 5:** Distribution of number of times the respondent has sought medical care in the last 6 months vs. respondents' membership with NHIF

	Respondents membership with NHIF		
	Yes	No	Total
Number of times the respondent has sought medical care in the last 6 months			
Once	14	28	42
Twice	6	19	25
Thrice	3	11	14
More than thrice	11	20	31
N/A	6	7	13
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Source: Field data, 2014

## 5.2 Medical service providers

As evidenced by the high frequency in which residents of Kibera sought medical attention, the following were the most preferred areas where they went to receive these services. Government facilities is one of the areas where 36 per cent of respondents went, private health facilities were the most preferred by of 37.6 per cent of respondents, 12.8 per cent chose to self-medicate themselves while the least 3.2 per cent went to faith based health facilities. This is illustrated in table 6 below. This indicates that almost similar proportions of Kibera residents had preference for private clinics just the same way they preferred government health facilities.

**Table 6:** Areas where respondents sought medical services

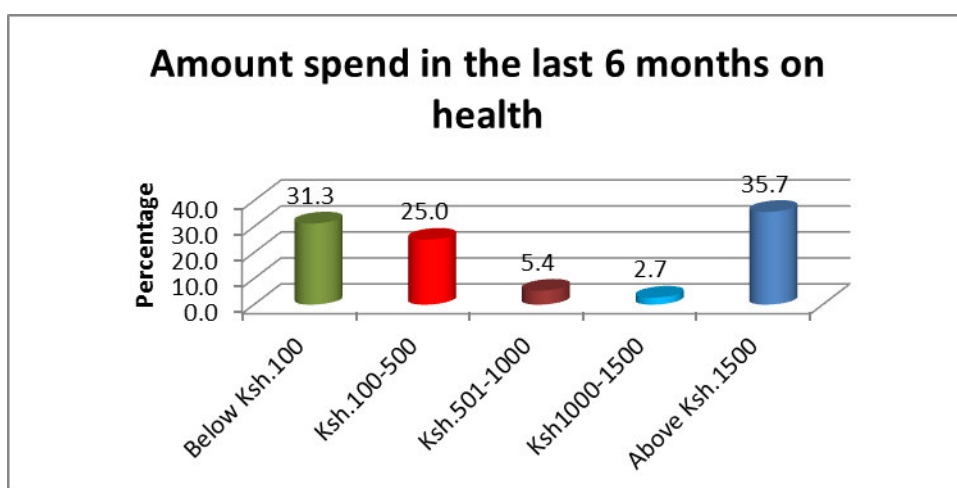
Areas where medical services were sought	Frequency	Percent
GoK facility	45	36.0
Private facility	47	37.6
FBO(Faith based facility)	4	3.2
Self-medication over the counter/chemist	16	12.8
Not applicable	13	10.4
<b>Total</b>	<b>125</b>	<b>100.0</b>

Source: Field data, 2014.

### 5.3 Amount spent on seeking medical services

For those who had sought medical attention, it was established that about 31.3 per cent of the respondents had spent less than Kshs. 100, 25 per cent had spent between Kshs. 100-500, 5.4 per cent had spent between Kshs. 500-1000, 2.7 per cent had spent between Kshs. 1,000-1,500 while 35.7 per cent had spent a sum of over Kshs. 1, 500. This is illustrated in figure 9 below.

*Figure 9: Bar graph showing the amount of money spent by respondents on medical care.*



Source: Field data, 2014.

### 5.4 Respondents' sources of money used to cover medical services

This amount comprised of income by respondents; from wages at 39.2 per cent, salary at 22.4 per cent, borrowing/loan at 12 per cent, 1.6 per cent from sale of asset, 11.2 per cent from donations from well-wishers and 3.2 per cent from employer. This is a clear indication of the source of income of Kibera residents, which mostly come from wages they earn from their informal jobs as illustrated in table 7 below. The analysis also gives a clear indication that medical insurance has not been fully embraced by the low income populace to pay for their medical expenses.



**Table 7: Source of money used to pay for medical services**

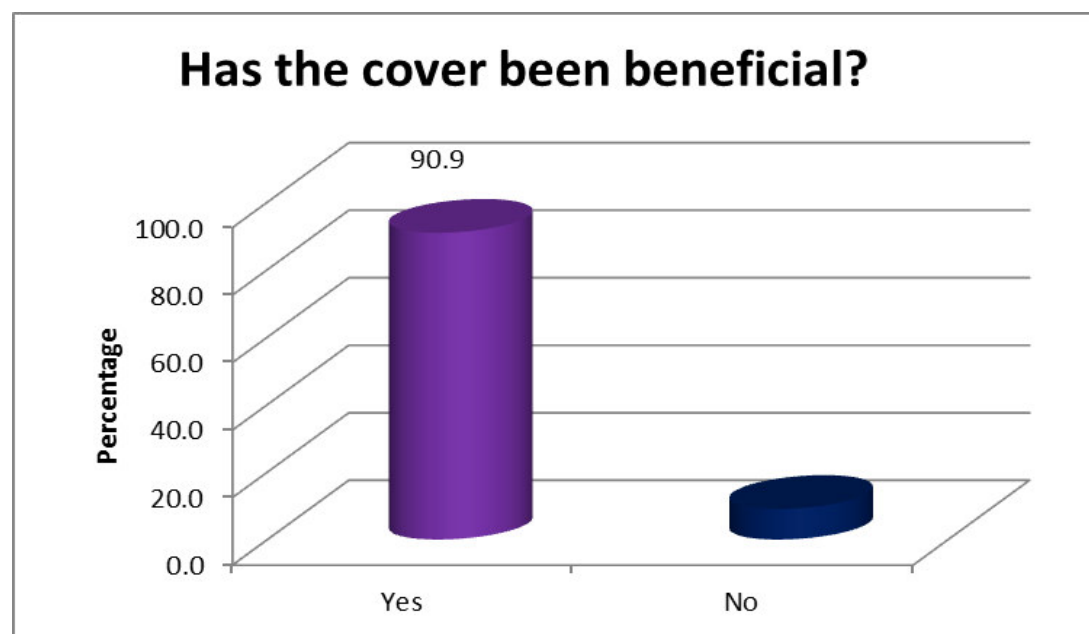
Source of Money	Frequency	Percent
Wages	49	39.2
Salary	28	22.4
Sold a property/asset to get money	2	1.6
Borrowed	9	7.2
Loan from a friend	6	4.8
Donation	14	11.2
Paid for by employer	4	3.2
Not applicable	13	10.4
<b>Total</b>	<b>125</b>	<b>100.0</b>

Source: Field data, 2014.

### 5.5 Benefits of NHIF cover

With respect to benefits of the Insurance cover, the larger number of respondents who had taken up the cover, 90 per cent were aware of its benefits, with a very small 10 per cent stating not to have seen any benefit.

**Figure 10: Bar graph showing respondents who felt they benefited from the cover**

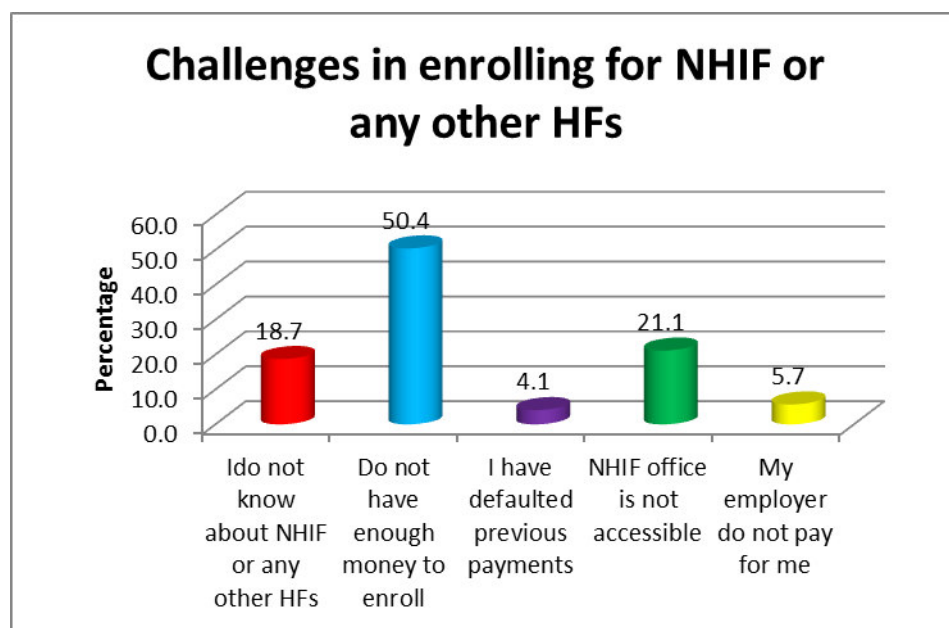


Source: Field data, 2014.

## 5.6 Challenges faced by respondents in enrolling into NHIF

However, the respondents stated that they had faced certain challenges in enrolling to NHIF and other health insurance schemes. Among them, 18.7 per cent stated that they do not know about NHIF or any other Health Insurance Scheme, 50.4 per cent said that they lacked funds while 21.1 per cent said that NHIF and other HIS offices are not accessible. These challenges can be attributed to lack of awareness and education on the importance of health insurance to the residents of Kibera, and by extension, other informal settlements in the country who comprise of low income earners.

*Figure 11: Bar graph showing challenges faced by respondents in accessing NHIF.*



Source: Field data, 2014.

Distributing gender of respondents versus their NHIF membership, it is evident that both genders are almost equal with NHIF cover. However, there were fewer men than women who had been covered by the health insurance an indication that men were less likely to have insurance cover than men. This is illustrated in table 8 below.

**Table 8:** *Distribution of gender of respondents vs. their membership with NHIF*

<b>Gender of Respondents</b>	<b>Respondents membership with NHIF</b>		
	<b>Yes</b>	<b>No</b>	<b>Total</b>
Male	29	32	61
Female	11	53	64
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Source: Field data, 2014

Family size was another determining factor on whether respondents had health insurance cover or not. From the analysis, the bigger the family size, the less likely it was for them to have NHIF cover. Families with smaller sizes had a bigger likelihood of having insurance cover. Table 9 further illustrates this. This was despite the fact that family size did not mean greater premiums payed as long as the children who are dependants were less than the age of 21 years. This is because the main contributor to NHIF makes a single premium for him, his spouse and children or other dependants. The reason bigger family sizes had less probability for having NHIF cover would probably be as a result that bigger families meant bigger responsibilities like food, shelter, clothing, education and transport hence placing health insurance at a much lower stratum in the list of priorities for the family.

**Table 9:** Distribution of size of the family including spouse and/or children vs. respondents' membership with NHIF

Size of the family including spouse and/or children	Respondents membership with NHIF		
	Yes	No	Total
1 – 2	7	21	28
3 – 4	13	38	51
5 and above	20	26	46
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Source: Field data, 2014

The mode of payment of NHIF premiums was another determining factor on whether the respondents had the medical cover or not. From the respondents regular payments by cash or M-pesa and payments through the check off system on the respondents' salaries by formal employers were the most commonest forms of payment. However, payment through salaries were the most used method among respondents with NHIF cover. This therefore means that respondents with formal employment stood a better chance than those without in accessing NHIF. Respondents in the informal sector made their payments either by cash or M-pesa. This is illustrated in table 10 below.

**Table 10:** Distribution of mode of payment used by respondents to pay NHIF vs. their membership with NHIF

Mode of payment used by respondents to pay NHIF	Respondents membership with NHIF		Total
	Yes	No	
Cash	10	0	10
M-pesa	6	0	6
Not applicable	0	84	84
Salary	24	1	25
<b>Total</b>	<b>40</b>	<b>85</b>	<b>125</b>

Source: Field data, 2014

This chapter has demonstrated that the factors that influence voluntary uptake of health insurance among Kibera residents include their knowledge and awareness of NHIF and other health insurance schemes, income levels, mode of payment of NHIF cover whether paid through their employers or by themselves, medical service providers available and size of family or number of dependents. The next chapter will into recommendations regarding factors that could lead to increased uptake of NHIF among low income earners.

## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusion

The purpose of this study was to determine the health insurance schemes available for uptake and determine the factors influencing the voluntary uptake of NHIF among Kibera residents in Nairobi City County. Administration of questionnaires and key informant interviews was done to collect primary data while documentary materials provided secondary data that informed this study.

Majority of the respondents, 76.8 per cent had knowledge of NHIF and among these, almost all, 89.5 per cent knew the benefits NHIF had in their lives. However, this great knowledge did not translate to higher levels of enrolment to NHIF or any other of the available health insurance schemes. This was as a result of different factors that include high levels of skepticism and lack of insurance education among the low income populations.

Low income levels played a limiting factor among the respondents in accessing NHIF cover. The largest population of the respondents, 67.2 per cent were engaged in informal employment meaning that their income was a limiting factor in them getting NHIF cover.

Even for those with informal employment that had NHIF cover, the mode of payment either through cash or M-pesa was another limiting factor. Unlike respondents with formal employment who had their regular payments made through their salaries as statutory deductions, those from the informal sector made these payments by themselves with high defaulter rates given that their incomes were not stable.

Size of family was another determining factor on whether respondents had NHIF cover or not. Smaller families had a greater probability of having NHIF cover than bigger families. Bigger families it seems had many competing priorities such as education, house rent, food,

clothing etc. and health insurance did not top the list of these priorities. Coupled with low income levels, most respondents from larger families did not therefore have NHIF cover.

For medical insurance cover not to be a preserver of the rich, there is need to create awareness and education and take the necessary steps to penetrate the low income market. The next part of this chapter therefore looks at the various recommendations to increase coverage of NHIF among low income earners.

## **6.2 Recommendations**

This study has applied its findings to develop possible recommendations which can be implemented. The following recommendations are suggested:

1. There is need for public awareness, education and sensitization on NHIF and other health insurance schemes so as to increase knowledge on the services available.
2. The state needs to ensure easy accessibility of NHIF and other health insurance schemes for low income earners. The state should facilitate easy registration of NHIF at grass root level at least in all health facilities so that citizens are able to apply for cover without having to travel to the nearest NHIF office majority which are in urban centers.
3. The state should enact a law and policies that compulsory require informal sector employers to accord their employees NHIF cover besides pegging statutory deductions of the cover to a certain wage/income limit as is the current practice.
4. The claim process should be made smoother and shorter so as to enable efficient service delivery to the beneficiaries of the cover.
5. The amount of contributions to NHIF should be reduced to enable affordability by low income earners and hence reduce the incidences of defaulting on premiums among low

income earners. This is because low income families have fewer resources to spare for health cover among many competing basic priorities.



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# APPENDICES

## Appendix 1: Transmittal letter



University of Nairobi  
Institute of Anthropology, Gender and African Studies  
Masters of Art- Gender and Development Studies.

Dinah Mueni Mutinda  
P.O BOX 11964-00100

### **NAIROBI.**

To All Respondents

Dear Sir/Madam

**RE: STUDY ON THE INFLUENCING THE UPTAKE OF NATIONAL HEALTH INSURANCE A CASE OF NHIF AMONG LOW INCOME EARNERS IN KIBERA INFORMAL SETTLEMENT, NAIROBI CITY COUNTY.**

My name is Dinah Mueni Mutinda, a Masters student at the Institute of Anthropology, Gender and African Studies, University of Nairobi. I am undertaking the above mentioned research in partial fulfilment of a Masters of Arts Degree in Gender and Development Studies. The overall objective of this research is to establish the different Health Insurance Products available for the Kibera residents and the factors which influence their uptake of this health insurance most particular, the NHIF, and what needs to be done to enhance their access and uptake to NHIF. I therefore kindly request your cooperation in the answering of the questions in this questionnaire. The information you give will be used by the researcher purely for academic purposes, in an ethical manner and you are assured of confidentiality of all information obtained. I thank you and appreciate your cooperation in this exercise.

Signed

**Dinah Mueni Mutinda**

**ND/79924/2012**

## Appendix 2: House Hold Head Questionnaire

### Respondents Bio-data

1. Name.....
2. Gender: i. Male   
  
ii. Female
3. Age.....
4. Education level.....
5. Marital status: i. Married   
  
ii. Single   
  
iii. Separated   
  
iv. Divorced   
  
v. Widow   
  
vi. Widower
6. Size of family (including spouse and/or children)
  - i. 1
  - ii. 2
  - iii. 3
  - iv. 4
  - v. 5 and above

7. Category of dependents
- i. None
  - ii. Spouse only
  - iii. Spouse and children
  - iv. Children only
  - v. Others

8. Year started living in Kibera.....

9. Previous residence.....

10. Zone/Section/Village.....

11. Occupation.....

**SECTION A: QUESTIONS FOR HEADS OF HOUSEHOLDS.**

9. Do you know what NHIF is?
- i. Yes
  - ii. No

10. Please explain in each case?  
.....

11. If NO go to question 13.

12. Do you know the benefits of NHIF?
- i. Yes
  - ii. No

Explain.....

13. Are you a member of NHIF?

i. Yes

ii. No

If No, go to question number 23.

14. If yes, how long have you been a member?

1. (0-2 years)

2. (2-5)

3. (Above 5 years)

4. N/A

15. How do you contribute to NHIF?

i. Self

ii. Through employer (statutory deduction)

iii. N/A

16. How much do you contribute to NHIF?

i. Ksh.160 per month

ii. Ksh. 200 per month

iii. Other (specify)

iv. N/A

17. If you pay NHIF by yourself, which is your most preferred mode of payment

i. Cash

ii. M-Pesa

iii. Other (Specify)

iv. N/A



18. How often do you make your payments
- i. Daily
  - ii. Weekly
  - iii. Bi-weekly
  - iv. Monthly
  - v. Every 3 months
  - vi. Bi-annually
  - vii. Annually
  - viii. N/A

19. Have you ever defaulted on your payments in the last 6 months?
- i. Yes
  - ii. No
  - iii. N/A

20. If yes, how often
- i. Once
  - ii. Twice
  - iii. Thrice
  - iv. More than three times
  - v. N/A

21. Who pays for you are your NHIF if you are not paid for by your employer
- i. Self
  - ii. Spouse
  - iii. Relative
  - iv. Other (specify

v. N/A

22. Do you know any other HFSs besides NHIF? Please list them.

.....

23. Are you a member of any other scheme besides NHIF?

i. Yes

ii. No

If No, go to question 28 & then question 30.

24. How much do you contribute?

i. Below Ksh.100

ii. Ksh.100-200

iii. Ksh.201-300

iv. Above Ksh.300

v. N/A

25. Who pays for you?

i. Self

ii. Relative

iii. Other

iv. N/A

26. If you pay for yourself, what is the source of your contribution?

i. Wage

ii. Salary

53

- iii. Donation
- iv. Other
- v. N/A

27. Has the cover been beneficial to you?

- i. Yes
- ii. No.
- iii. N/A

Explain in each case.

.....

28. What has been the challenge in enrolling to NHIF or any other HFSs?

- i. I do not know about NHIF or any other HFS
- ii. Do not have enough money to enrol
- iii. I have defaulted previous payments
- iv. NHIF office is not accessible
- v. My employer does not pay for me
- vi. Other (specify).....
- vii. N/A

**SECTION B:**

*(I am of the opinion that these other questions below are relevant to the household respondents since this will be good to capture information especially for respondents who are not members or do not know NHIF or any other medical insurance scheme so that they can also be active in the survey).*

29. How many times in the last 6 months have you sought medical attention

i. Once

ii. Twice

iii. Thrice

iv. More than 3 times

v. N/A

30. Where did you seek your medical services

i. GoK facility

ii. Private facility

iii. FBO (faith based facility)

iv. Self medication over the counter/chemist

v. Traditional healer

vii. Spiritual healer

viii. Other (specify)

ix. N/A

32. How much did you spend in the last 6 months on health?

i. Below Ksh.100

- ii. Ksh.100-500
- iii. Ksh.501-1,000
- iv. Ksh.1,000-1,500
- v. Above Ksh.1,500
- vi. N/A

33. Where did you get money to pay your medical expenses?

- i. Wages
- ii. Salary
- iii. Sold a property/asset to get money
- iv. Borrowed
- v. Loaned (kukopa) from a friend
- vi. Donation
- vii. Paid for by employer
- viii. Other (specify)
- ix. N/A

34. What would be your recommendation to make it easier for you to access health insurance

## **Appendix 3: Key Informant Interview Guide**

### **NHIF:**

1. What products are available for low income earners and what do they entail?
2. Are there similar products from other health insurance firms, and how do they compare with that of NHIF?
3. How do you market the products, is there a deliberate effort by the fund to seek out low income earners?
4. How is the uptake of these products?
5. What are the reasons why the intended target does not take up these products?
6. What recommendations would you give to enhance the uptake of NHIF by low income earners?

### **INSURANCE OFFICIALS:**

1. What products are available for low income earners and what do they entail?
2. How do you market the products, is there a deliberate effort by these products to seek out low income earners in informal settlement?
3. How is the uptake of these products by the low income earners?
4. What recommendations would you give to enhance the uptake NHIF?

### **HEALTH FACILITY ADMINISTRATORS:**

1. What are the rates in defaults in medical payment within the hospital?
2. What are the characteristics of the defaulting population?
3. How many among such population have health insurance covers?
4. How many claims do you receive from NHIF?

5. What are the challenges associated with NHIF?
6. What measures would recommend to enhance efficiency of NHIF with regards to low income earners?