FACTORS INFLUENCING THE UPTAKE OF HEALTH INSURANCE AMONG KENYAN LOW INCOME CLASS IN KENYA: A SURVEY STUDY OF KOROGOCHO SLUMS RESIDENTS, NAIROBI

BY

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DECLARATION

Declaration by the Student

This research project is my original work and has not been presented to any other examination body. No part of this research should be reproduced without my consent or that of Management University of Africa

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DEDICATION

I hereby dedicate this project to my husband Mr. Joseph M. Ng'ang'a who gave me endless support and motivation throughout my study, it is also for my children Adrian Kagiri and Sheila Wambui for their love, support and encouragement and finally to all researchers whom are undertaking similar projects.

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ABSTRACT

Health insurance has been considered as key to achieving universal health care by various countries. This is with the aim of ensuring that every citizen should have access to needed healthcare services that are effective and of acceptable quality and that no one should risk financial ruins as a result of illness. However, recent statistics still indicate that in Kenya, currently 26.6% of total health expenditure is out of pocket. Out-of-pocket spending on healthcare has been found to drive the poor into more poverty and poses a barrier to their access to healthcare. This study aimed at determining factors influencing the uptake of health insurance among Kenyan low income class in Kenya: a survey study of Korogocho slums residents, Nairobi.

The objectives of the study were to determine the extent of uptake of health insurance among Kenyan low income class in Kenya in Korogocho slums resident in Nairobi County, to determine the factors influencing uptake of health insurance, the preferred type of health insurance scheme between private and public health insurance and the level of satisfaction for those already having health insurance cover. The independent variables in this study were socioeconomic factors, the available health insurance providers, the preferred health insurance provider and client's satisfaction.

The dependent variable for the study was uptake of health insurance which was determined by the extent of health insurance uptake. The study was carried out in Korogocho slums in Nairobi County. The study was a descriptive cross-sectional study. The sample size was (n=384) which was determined through the formula n = Z2p(1-p)/d2. Respondents were sampled through stratified random sampling method where eight hospitals formed the stratum. Data was collected by use of self and researcher administered questionnaires by the researcher for a period of two weeks. Collected data was analyzed using SPSS version 20 to draw both descriptive and inferential statistics. Uptake of health insurance was found to be 46.1% majority of them being those employed in the formal sector, and also majority being covered by NHIF. Level of knowledge on health insurance was found to be 52.6%, which could be a major factor contributing to low uptake.

Significant relationship was found between gender, level of education and marital status and level of uptake of health insurance. Employment status, nature of employment and terms of employment were also found to influence uptake of health insurance. Despite high uptake being on public health insurance, majority of the population preferred private health insurance. The study drew conclusion that level of uptake of health insurance was low; uptake was being influence by gender, level of education, marital status, and status, nature and terms of employment. The study recommended that there is need for intensified efforts to raise people's knowledge on health insurance and its uptake, to improve the flexibility of features of NHIF to integrate more of those working in the informal sector, the public health insurance companies to improve their service delivery hence become the scheme of choice for more members of public and also improve on their satisfaction.

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CHAPTER ONE:
INTRODUCTION

1.1 Background to the Study

Governments and international organizations worldwide have recognized that equitable health systems are essential for achieving health related sustainable development goals. Therefore, reliable healthcare financing systems have been considered essential for ensuring universal healthcare access. This would mean that every citizen should have access to needed healthcare services that are effective and of acceptable quality and that no one should risk financial ruins as a result of illness. The 58th World Health Assembly which was held in 2005 called for nations to move their health systems towards universal coverage so that all individuals can have access to key promotive, preventive, curative and rehabilitative healthcare at an affordable cost so that equity in access can be achieved. Different countries have adopted different health financing systems ranging from universal health insurance coverage by means of National Health Insurance Services to having multiple providers of health insurance and little pre-payment coverage. A healthy population makes a wealthy nation. It is believed that a healthy nation

is a wealthy nation (Pritchett and Summers, 1996). Accessibility to health care is crucial to any country as it is translated to good health which increases individuals' productivity. Accessibility to healthcare also has a positive externality to the society as it prevents infection of diseases to other members of the society since they can access healthcare. In addition, individuals with poor health tend to be less productive and this affects the entire economy negatively.For a country to achieve its development goals, it has to devise appropriate mechanisms that can ensure that her people are healthy enough to steer their own economic development. Kenya is a developing country and therefore, health insurance schemes are seen as a sustainable way to ensure health lives and promote well-being for all at all ages in order to attain high social economic development. This paper basically examines factors influencing the uptake of health insurance schemes among dwellers and residents in Nairobi City of Kenya.

The main objective of this survey was to establish the factors influencing the uptake of health insurance among Kenya's low income earners class with a focus on the role played by household income. According to Kenya National Bureau of Statistics, lower middle income earners get between Sh30,000 to Sh49,000 while middle income earners get between Sh50,000 to Sh99,999. In Kenya, 42% of the population lives in low income and are below poverty line.A logistic model is used to establish the parameters of the decision to take up health insurance. The estimation results indicate that income, marital status, education, health status and awareness about insurance are the main determinants of health insurance uptake. The study found out that there was low uptake of insurance cover among most of the respondents. This was hampered by low levels of knowledge about health insurance schemes available for low income earners.

Default rates on monthly premiums for those posed a big in possessing valid health insurance. This is due to low incomes as well as uncertainties of earnings of those in informal sector who depended either on their daily or weekly wages to make payments for their premiums

1.1.1 Role of health insurance in Universal Health Coverage

Health insurance is a form of a common fund where the members pool funds which are used to meet healthcare expenditure. Health insurance in Kenya consists of the National Hospital Insurance Fund (NHIF), Private Insurance Companies, Employer's Schemes and Community Based Health Insurance Scheme. The health insurance schemes are voluntary except for the NHIF which is compulsory to all individuals in a formal employment.

Health care services are very expensive for individuals especially in developing countries to afford. This is the reason why the government has to heavily subsidize the health sector so as to increase affordability and accessibility by all its citizens (Schenone, 2012). The Kenyan government spends approximately 6% of her Gross Domestic Product (GDP) on healthcare sector (Kenyan healthcare sector, 2016).Despite the government getting extra finances from Nongovernmental Organizations (NGOs) and donations to support health care sector, this has not been enough to sustain the sector.

Several empirical studies have also shown that the poor are less likely to undertake health insurance yet they are more exposed to diseases because of the environmental conditions they live in and are also highly prone to malnutrition. In addition, their affordability level of health care is lower compared to the rich. Bearing in mind that substantial proportion of the Kenyan population is poor, this survey will be of importance in establishing the factors that individuals consider in undertaking the decision to take up or not take up health insurance (Mitullah (2003).

1.2 Significance of study Survey

1.3

This study looks into the factor that influences individuals' decision to take up health insurance among them including health insurance awareness, age among other factors such as gender, marital status, and health status and education level. The findings of the study will be useful in sensitizing the insurance stakeholders on the whether their recent moves are of significant impact and also on other factors which are of importance on health insurance uptake. The findings from this study will be relevant to the Ministry of Health and other development partners by identifying the factors that determine informal sector employees' enrollment in the NHIF among informal sector workers in Kenya. The findings will also be useful in helping in redesigning the health insurance products such that they fit almost all individuals in the society.

1.3 Problem Statement

There is negative impact on health indicators when a large proportion of the population is without health insurance. 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. This is the situation in Kenya where many people have to directly pay for health services whenever they need them; which has led to catastrophic spending to a level of impoverishing the family unit through sale of assets and diversion of their meager income into health care services. Universal health coverage is desired by all nations. In order for Kenya to achieve universal health care, mechanisms should be put in place to ensure coverage reaches a large proportion of the population which is mainly the informal sector since they constitute 77% of Kenya's total employment

1.4 Research Questions

The research was guided by the following questions:-

a) What are the Health Insurance Schemes available for uptake among low income earners in Korogocho?
b) What factors influencing voluntary uptake of Health Insurance among the Korogocho Residents?

1.5 Research objectives

General objective:

To investigate the factors that influences the uptake of health insurance schemes among low income earners in Korogocho, Nairobi city county.

1.6 Specific Objectives:

a) To establish the health insurance schemes available for uptake among Korogocho residents.

b) Estimate health Insurance Coverage in Korogocho Residents

c) Establish accessibility of health Insurance in Korogocho

d) Assess awareness of benefits of health insurance schemes

1.7 Assumptions of the Study

The following assumption guided this study:-

The residents of Korogocho are majorly low income earners with low access of information and awareness of health Insurance Schemes available for uptake.

1.8 Scope and Limitations of the Survey

This research aimed to identify the factors limiting the uptake of health insurance among the low income earners in Kenya and particularly those living in the informal settlement. To establish this, the research was undertaken in Korogocho slums, Nairobi City County. This is only one urban slum in Nairobi and did not focus on other informal settlement areas.

CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

We review relevant literature on number of works by several authors about health insurance in Kenya where we consider 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 Korogocho slums, Nairobi County.

About 6% of Kenya's GDP is spent on the healthcare sector. This amount is not enough to cater for all health care expenses. Despite the chipping in of donors and nongovernmental organizations (NGOs) in subsidizing the health sector, individuals still have to incur out of pocket (OOP) expenses to cater for their health. The OOP expenses are usually very high as the majority of the Kenyan citizens are below the poverty line.

Health insurance came in as a way of hedging against the OOP expenses that one is likely to incur in the event of sickness. Health insurance providers in Kenya can be categorized into the National Hospital Insurance Fund (NHIF), Private Insurance Companies, Employer's Schemes, and Community Based Insurance Scheme. These health insurance providers cover both the principal member and the dependents. By the year 2015, only 25% of the Kenyan population had enrolled in health insurance schemes. This proportion is low as compared to other African countries like Rwanda and Ghana whose health insurance coverage was 91% and 60% by the same time respectively (Kenyan healthcare sector, 2016).

2.1 Background of health Insurance

NHIF is the largest of the health insurance providers covering about 88.4% of those enrolled in health insurance schemes. It was established in 1966 and is a compulsory scheme for all individuals in formal employment. Any citizen who has attained 18 years of age is eligible for enrollment in NHIF (Mwaura et al, 2015). Those in informal employment contribute Kshs 500 monthly while the contribution for those in formal sector depends on their level of income.

Initially, NHIF covered only the inpatient services but it has currently expanded to cover outpatient services. From the year 1966, NHIF has undergone tremendous transformations in ensuring that it is accessible to all the citizens. Some of the remarkable transformations include the use of Information Technology to ensure efficient communication and faster enrollment of

the members. It has also partnered with various organizations in order to subsidize its services and opened its branches countrywide so as to ease accessibility by the citizens (Kenyan Healthcare Report, 2016)

Private insurance companies are the second largest health insurance providers in Kenya. Although private health insurance companies have been in existence from time in memorial, they become popular in Kenya around 1980s. By the year 2016, private insurance companies covered only 9.4% of the individuals enrolled in health insurance schemes. The country had 51 registered private insurance companies with only 29 offering health insurance by the year 2013 (Ndungu T.W, 2013). Despite a large number of these companies, only a small percentage of the population is enrolled. This may be attributed to the high premiums charged by the insurers and lack of awareness of its existence which blocks out the poor and those in rural areas from taking up health insurance from the private insurance companies (Mwaura & Pongpanich 2012).

The leading medical insurance providers in Kenya include Jubilee, Madison, Resolution and AAR insurance companies. Private insurance companies have also undergone several transformations in an effort to capture a large market base. Some of the transformations include partnering with financial institutions especially the banks so as to increase the availability of its services to the public. Private insurance companies have also improved in consumer awareness of their existence through rigorous advertisement as most people are unaware of the products they offer. They are also educating people on the importance of health insurance as the insurance industry is still viewed with a negative perception among individuals (Gitau,2013).

Employer-based insurance schemes can be grouped under private insurance since the employers enter into a contract with the private insurance companies on behalf of their employees. It is also voluntary among the employees.

Kenya health insurance providers offer two types of covers; outpatient and inpatient cover. It is worth noting that the insurance providers do not meet all the cost involved but cover the majority of the expenses incurred in the treatment. The extent of the cost met depends on the type of insurance and package one has.

Several studies have been undertaken to investigate factors that influence uptake of health insurance in Kenya and all over the world. Kimani et al (2014) study on the ownership of health insurance scheme among women revealed that demographic factors, wealth level and the form of employment have an influence on the uptake of health insurance. Women employed in the formal sector were more likely to own health insurance. The aged, married, those with high levels of education and the households headed by females had a higher level of health insurance ownership. The main advantage of this study was the data source; Kenya Demographic and Health Survey 2008/09 which was a nationwide data. The shortcoming of this study is that it concentrated on health insurance uptake of women only.

Ndung'u T. T. (2015) argued that uptake of NHIF in the informal sector was influenced by age, gender, education level, income and awareness level. The study used descriptive statistics to arrive at its conclusion. Uptake was high among the aged, females, those with a high level of education and income. Majority of the people (91.0%) were aware of the existence of NHIF. The main limitation of this study is that it was based on a case study of Nairobi County only and concentrated on middle class which might not be a representative of the whole country. The study did not also consider the uptake of otherhealth insurance providers like private insurance and CBHIS.

A number of theoretical literature incorporate health insurance into their framework. According to consumer theory, health care is a normal good like any other good and is derived from medical care. The utility is maximized subject to consumer's preferences, income and relative prices of other goods. A consumer will, therefore, choose a health care provider who will give him maximum utility. One is, therefore, more likely to choose to uptake health insurance if the price of the substitutes like user fee increases and if his income increases.

State-dependent theory suggests that consumers maximize their utility subject to their tastes, health status, expected pay off, socioeconomic factors and the degree of risk averseness. The less risk-averse individuals are less likely to own health insurance. The poor are less likely to own health insurance as their expected pay off are less in the event they are sick since they can comfortably use self-treatment which can be cheaper than premiums they ought to pay. Consequently, those with good health status and low income are also less likely to insure as the cost of the premiums is higher than the expected out of pocket payments and also that their affordability level is low (Schneider, 2004).

Endowment effect theory is of the view that individuals care more about their current position relative to their previous position; a loss is weighed more heavily than a gain. Individuals will therefore only acquire health insurance coverage if the benefit from it is greater than the cost that will be incurred if health care is met through out of pocket payments. Individuals will also prefer health insurance if the cover fully caters the medical expenses (Schneider, 2004).

According to expected utility theory, individuals are uncertain about their health. They will, therefore, have to make choice between the out of pocket payment incurred if they are uninsured in the event they fall sick or the loss from premium payment if they do not fall sick. Since individuals are risk averse, they will end up acquiring health insurance.

2.2 Health Insurance: The Global Perspective

There are different global experiences on health insurance which al point towards a common goal of universal health care. However, there are huge differences on the role of government in provision of health insurance between the developing and the developed nations. Nevertheless,

health insurance has been considered key method of ensuring universal access to health care in all countries.

2.3 Health Insurance Coverage in Advanced Industrialized Nations

In a country such as the United States, there are both private and public insurers in the US healthcare systems. The responsibility of financing the health system is shared by both the private insurance companies and the government. Therefore the United States is a "multi-payer" system. According to the CDC 2011 National Health Interview Survey, only 18.2% of all persons under 65 years in America were uninsured in 2011 (CDC, 2012).

The public health insurance schemes include Medicare, Medicaid and other public systems. Medicare is a federal program that covers individual above 65 years of age as well as some disabled persons. It is financed by federal income taxes, a payroll tax shared by employers and employees, and individual enrollee premiums. Medicaid is a program for the low-income and the disabled. According to the federal law, it must cover very poor pregnant women, children, elderly, disabled and parents. It is financed jointly by states and federal government through taxes. Other public insurance systems include State Children's Health Insurance Program (S-CHIP) which covers children whose families make too much money to qualify for Medicaid but too little to purchase the private health insurance(Schroeder, 2012).

Private health insurance systems in the United States include employer-sponsored insurance and Private no-group insurance. Employer sponsored insurance involves employers providing health insurance as part of benefits package for employees. This is financed by both the employer and the employees where the employer pays the majority of the premium. The private non-group insurance covers part of the population that is self-employed or retired. It also covers some people who are unable to obtain insurance through their employers. (DeNevas-Walt, Proctor & Smith, 2011).

In Canada, healthcare is financed through a tax-based system through general government expenditure of the federal and provincial governments. The Canada Health Act stipulates the insured health care services which are financed by the federal or the provincial governments while those not insured are financed by out-of - pocket payments and private insurance plans. The federal and provincial governments finances all the medically necessary health services while the private health insurances cover the remaining services such as dental care, prescription of drugs and vision care (Thomson, Osborn, Squires, & Reed, 2011).

In England, health insurance coverage is universal. Every citizen in England is entitle to free health care. Majority of the services are publicly funded through the National Health Service (NHS). However, there are few cost-sharing arrangements of about 12% on drugs prescribed by general practitioners. Private health insurance companies mainly provide supplementary medical plans which reimburse the insured for surgery and other treatment by private hospitals and private specialists. Under the supplementary medical plans, the patients benefit from timeliness

of the services offered by the private healthcare services because of the long waiting lists in the public sector. It only covers for 12% of the population. Out-of-pocket payment also happens for some services especially in the private sector (Boyle 2008).

2.4 Health Insurance Coverage in Developing Nations

Many Low and Middle-Income countries have also found it difficult to sustain health care financing particularly due to the large number of poor people. International policy makers have recommended to them a range of suitable measures for financing the healthcare which includes health insurance schemes such as the social health insurance. This measure is highly supported by the World Health organization following a resolution that it passed in 2005 that it would support a strategy to mobilize more resources for health, for risk pooling, increased access to health care for the poor and delivery of quality care (WHO 2005). Two types of social health insurance schemes exist in the developing nations. These are Government based social health insurance schemes that are organized and supported by governments and Community based social health insurance schemes that operates at the community levels.

Social health insurance has been mandated for people working in the formal sectors in a number of developing countries. Other have adopted an institutional structure where payments are made to provides for services offered to people who are not in the formal workforce as an alternative to out-of pocket payments. In those countries where social health insurance exists, an existing financing system is used to offer insurance to the informal sector workers at a rate of insurance premium which is adjusted according to the social economic status (Acharya, et al, 2012).

Taking Mexico as a case example, the country adopted Seguro Popular, in 2003, which is a national health insurance scheme which operates under the Ministry of Health. This scheme provides access to a package of comprehensive health services with financial protection for more than 50 million Mexicans previously excluded from insurance (Frenk, Gomez &Knaul, 2009). Enrollment to this program is free for the poorest 20 percent but a small fee for voluntary enrollment to those above this level of economic status in the informal sector. The programme allows the enrolled poor to access health care free of charge from the Seguro Popular-sponsored health facilities network. Seguro Popular was part of a system of social protection in health that that country had legislated as part of health reforms in 2003. In 2012, after 9 years of implementation, the country reached a major milestone in universal coverage. As of April 2012, 52•6 million Mexicans, previously uninsured, were incorporated into the system of social protection in health and the budgetary allocation for universal coverage was achieved (Knaul at al., 2012).Vietnam is another developing nation that is making a good progress in health insurance coverage. Vietnam's health financing policy puts a strong emphasis on equity in health. Shifting from a tax-based health financing system, Vietnam has been introducing social health insurance (SHI) since 1992 but implementation has been faced with several challenges. The country's health insurance law was promulgated in 2008, with the goal of universal coverage by 2014. The current health insurance implementation in Vietnam is based on the Social Health Insurance law approved in 2008, which became effective from 1 July 2009. About

50.8 million people were covered by social health insurance in 2010, accounting for 60% of the population. As per the health insurance membership regulations, coverage is individual-based leading to low compliance both in the private formal sector and in informal sector. There are 25 membership categories ranging from the higher-income group (for example parts of the formal sector) to the poor who enjoy government subsidized premiums and all the finds are pooled in one national fund (Tien, Phuong, Mathauer& Phuong, 2011).

2.5 Health insurance coverage in Africa

Most African nations have tried to implement the social health insurance schemes which mostly cover the formal sector employees with joint contribution by the employees and the employers. To extend the health insurance coverage to those in the informal sector and the self-employed, the private and community based health insurance schemes have emerged. A study done by Carapinha , et al (2010) on health insurance systems in five Sub-Saharan African countries namely Ghana, Kenya, Nigeria, Tanzania and Uganda found out that most of the health insurance systems in these countries relied on premium contributions from the members although a few of them relied on revenue from sales and interests on investments

Taking Ghana as a case example, health care financing is through the National Health Insurance Scheme (NHIS) which came into existence after the passing of National Health Insurance Act in 2003. The law was passed to provide the legal framework necessary to facilitate the establishment of the National Health Insurance Scheme. Under this law, there is the National Health Insurance Authority which licenses, monitors and regulates the operation of health insurance schemes in Ghana. This law also makes it compulsory for all Ghanaians to join a health insurance scheme in Ghana. There are three categories of health insurance in Ghana under the law: the District-Wide Mutual Health Insurance Scheme, the Private Mutual Health Insurance Scheme and the Private Commercial Health Insurance Scheme (Carapinha et al, 2010).

The District-Wide Mutual Health Insurance Scheme is the most popular and operates in every district in Ghana. It is the public/non-commercial scheme and any resident in Ghana can register under this scheme. The district mutual health insurance scheme also covers people considered to be needy such as the very poor, those without a job and lacking the basic necessities of life to be able to afford insurance premiums. Under this scheme, contributions are payable in line with one's ability to pay.The second category of health insurance comprises the private commercial health insurance schemes operated by approved companies. They do not receive subsidy from the National Health Insurance Fund and they are required to pay a security deposit before they start operations. The third category of health insurance is known as the private mutual health insurance scheme. Under this, any group of people can come together and start making contributions to cater for their health needs, providing for services approved by the governing council of the scheme. Private mutual health insurance schemes are not entitled to subsidy from the National Health Insurance Fund. As of October 2008, the NHIS had insured 12 million people out of a total population of 21 million (61% of the total population) (Carapinha et al., 2010). In Nigeria, health insurance is obtained either through private insurers or the National

Health Insurance Scheme (NHIS). About 5 million people are enrolled in three NHIS Programs, which represents just about 3% of the population. In the Formal Sector Program, employees who pay premiums are covered, in addition to their spouse and up to 4 dependants. Companies that employ more than 10 workers are responsible for enrollment of their employees.

In the Informal Sector Program, the self-employed and individuals living in rural communities enroll themselves. The self-employed must join with at least 500 other members who are occupation based to qualify. Rural dwellers have a similar method of operation but participants need to belong to the same community rather than the same occupational group. The enrollment level in private insurance is quite low with approximately less than 1 million people being privately insured (Joint Learning Network for Universal Health Coverage, 2013).

Since the implementation of National Health Insurance System, about 5 million Nigerians can readily access care through the NHIS. The NHIS benefits package covers virtually all the medical needs of enrollees- from consultation to drugs, consumables and major and minor surgeries. There are however about 46 million Nigerians, or 33% of the population, with no access at all to organized modern health insurance (Joint Learning Network for Universal Health Coverage, 2013).

In Tanzania, around 60% of Health Insurance Programs are privately owned whereby family members' premiums are paid for individually. This means only few people can afford to register with these types of insurance. The majority of its members come from big private companies which are mostly found in urban areas. The social health insurance schemes include the National Health Insurance Fund, Community Health Insurance Schemes (CHF) and Micro-health Insurance Schemes. The National Health Insurance Fund in Tanzania serves only the public service employees including their spouses and four children and legal dependents. It is however a compulsory scheme for public servants. It only covers 4.5% of the population. The other type of public health insurance is the Social Health Insurance Benefit which is under the National Social Security Fund. This was established so as to provide crucial support to the Government's efforts of increasing access to health care services to the poor majority in the country. It is open to membership and provides most of general healthcare services for beneficiaries. Community Health Fund (CHF) was initiated later to mitigate the shortfall of National Health Insurance coverage. It is a decentralized voluntary health insurance scheme that operates at district levels. It usually targets people from the formal and the informal sector as well as the poor. It was a government initiative to try and cover basic health care services and to give access to those excluded by other schemes. The Micro-health Insurance Schemes (MHIS) are voluntary schemes set up and run by cooperatives, churches and local communities.They cover the informal sector or groups of common interest. Benefit package and contributions are set and agreed by the respective members (Humba, 2011).

2.6 The Kenyan Situation

Kenya has also made significant progress towards health insurance coverage as it focuses on UHC. According to Kenya Household Expenditure and Utilization Survey Report 2007, only 10% of Kenyans had health insurance. Coverage was also found to be higher among those living in the urban areas as compared to those in the rural areas. People of higher economic status were also found to participate in health insurance more than those in the lower economic status (Republic of Kenya-Ministry of Health, 2009). The 2008-09 Kenya Demographic and Health Survey also indicated that only 9.8% Kenyans had health insurance (KNBS & ICF Macro, 2010). In 2015, 25% of the population were covered (Mwaura, Barasa, Ramana, Coarasa&Rogo,2015). Health insurance in Kenya has been provided by both private and public systems. The public health insurance in Kenya consists of both mandatory and voluntary schemes (Kimani et al, 2012).

2.7 Private Health Insurance in Kenya

There are three types of private health insurance providers in Kenya (Kimani et al, 2012). The first type of provider is the general insurance firms, which offer healthcare insurance as one of their portfolio of products on top of other insurance services. The second type of providers are those that run medical schemes and are also health care providers operating their own clinics and hospitals where their clients seek care and the third type of providers are those that provide health care through third party facilities, also known as health management organizations, which are widely used for employer based insurance (Kimani et al, 2012).

2.8 Public Health Insurance in Kenya

There are two main providers of public health insurance services in Kenya. These are the National Health Insurance Fund (NHIF) and community-based health Insurance (CBHI) organizations. Membership to NHIF is mandatory for those working in the formal sector, both in the public and private sector, and voluntary for those working in the informal sector. Contributions to NHIF range from between Kshs 500 to Kshs 2000 per month, and a flat rate of Kshs500 per month for those under voluntary membership. Further amendments to these rates are however on progress due to changes in the economic situation in the country (Mathauer, Schmidt &Wenyaa, 2008). In 2014, NHIF had an estimated 4.5 million primary contributors, 98% being from the formal sector and 16% from the informal sector. CBHI is relatively new in Kenya since it was established in 1999 and has only 410, 997 beneficiaries which is about 1% of the population Kenya (Community Based Health Financing Association, 2008).

2.9 The platform for health insurance in Kenya

As the health care advances due to technology and better treatment options are coming up, it is highly likely that the cost of healthcare will rise. Private health insurance has however been predominantly accessible to the middle and higher income Kenyans. Affiliation to NHIF is through households comprising of one spouse, all children below 18 years and dependent relatives. NHIF has made considerable progress in trying to integrate people in the rural areas and those working in the informal sector. The scheme has expanded its service to cover both inpatient and outpatient services, and preventive health services which are very critical.

There is however so much focus on health insurance by various organizations in Kenya including micro-finance organizations and mobile money transfer which are offering payment platforms to those in the informal sector. These organizations can also be used to strengthen Community-Based Health Insurance in Kenya. For example, microfinance organizations bring people from the same geographical locations together and can therefore be good avenues to promote CBHI (Kenya Healthcare Federation & Task Force Healthcare, 2016).

2.10 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 in our case Korogocho, 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) states 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 Korogocho with low incomes than among insured individuals.

Different variables such as income among Korogocho 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 Korogocho 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 Korogocho 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 3
RESEARCH METHODOLOGY

3.1 Introduction

This section gives a general description of methodologies that were used in this research conducted among Korogocho informal settlement residents.It also gives a description of the sampling procedure and techniques, data collection methods that were used and data processing and analysis.

3.2 Sampling Procedure and Techniques

This chapter focuses on the research methodology that was used in this study to answer the research questions. Random selection and sampling of 50 Households in Korogocho was carried out. This study applied a stratified random sampling technique to ensure representation of all households.

3.3 Research Design

Descriptive survey design was used to explore factors influencing uptake of health insurance among Korogocho residents. Mugenda and Mugenda (1999) described descriptive survey as the process of collecting data with an aim of testing hypothesis or answering questions concerning the current status of the subject under study. This study employed descriptive survey research design as it was best suited for the study since it allowed the researcher to generate both numerical and descriptive data that was used in measuring the relationship between variables as well as determining their influence on academic performance.

3.4 Research Instruments

Data was collected using self-administered questionnaires. Questionnaires were used because it saves time and all the respondents were literate and therefore could answer to them comfortably. Closed ended questions and a few open ended questions were administered to the sample chosen for the study so as to be used in collection of primary data. According to Bryman and Bell (2003) closed ended questions have an advantage over open ended questions since they are easy to process answers, enhance comparability of answers and make them easier to show relationship between the variables. However, the questionnaire also enabled the researcher to use open-ended questions to the minimum thus permitting a greater in-depth response from the respondents. These particular responses enabled the researcher to get greater insight into the feelings, decisions and thinking of the respondents. The researcher also carried out a pilot test for the questionnaires to assist the researcher to get some ideas on the quality of the questionnaire, the clarity, the length of the questionnaire and to ensure that the items in the instrument are stated clearly and are not ambiguous (Mugenda and Mugenda, 1999).

3.5 Data Collection Procedure

The researcher Korogocho slums and created a rapport prior to the collecting of data. Appropriate permission from village administrator and area chief was sought in order to carry out the survey. Data was collected using self-administered questionnaires. The questionnaire was appropriate because it saved on time and the targeted respondents were literate It also ensured uniformity in the way questions were asked. Equally respondents feel free to answer sensitive questions if they are not required to disclose their identity (Mulusa, 1988 as cited by Mugambi, 2006).

3.6 Data Analysis & Presentation

The questionnaires were cross examined to ascertain their accuracy, completeness and uniformity. Data was first cleaned by ensuring completeness of information at the point of collection. It was coded and organized into different categories. Data was analyzed using descriptive and inferential statistics in order to answer the research questions and objectives. This helped to draw inferences over factors that influence the dependent variable. The results from the data analysis were interpreted; inferences made and presented using and frequency distribution tables.

3.7 Ethical Considerations

Informed consent was obtained from all those participating in the study. Those not willing to participate in the study were under no obligation to do so. Respondents' names were not indicated anywhere in the data collection tools for confidentiality and information gathered was only used for the purposes of this study. The necessary research authorities were consulted and permission granted. As stated earlier a copy of the findings will be availed through the Email at request to the respondents.

CHAPTER 4
RESEARCH FINDING AND DISCUSSION

4.1 Introduction

This chapter deals with the analysis of data, their presentation and interpretation as collected from Korogocho Slums residents aged between 25 and 60 Years. Data are presented in tables and analyzed as was collected from the sampled households. The analysis aimed at addressing the Purpose of the study, which was on factors influencing uptake of health insurance among the area dwellers.

4.2 The Questionnaire Return Rate

A total of 50 questionnaires were administered to 50 residents of Korogocho aged between 25-60 years. There was 80% return rate which was realized. This was very adequate for the study since according to Mugenda and Mugenda (1999) a 50% response rate is adequate, 60% good and above 70% is rated very well.

Variable	**How it is measured**
Health Insurance Uptake	It is the dependent variable. It is a discrete variable where individuals can choose either to uptake health insurance, represented by1 or not to uptake, represented by 0. Insurance here includes NHIF, private medical insurance, employer insurance scheme and CBHIS.
Income	The proxy used for income is the total household expenditure for the last one month.
Awareness	The proxy for level of awareness is measured in terms of ownership of mass media devices

	such as radio or television or mobile phone. 1 is used for those who own radio, television or mobile phone and 0 otherwise

The study sought to establish the factors that determine uptake of health insurance in Korogocho. The variables used in this study included access of health insurance, income and level of awareness

4.2 Demographics of Respondents

4.2. 1 Gender of Respondent

Table 4.2.1: Gender of Respondent Frequency

GENDER	MALE	FEMALE
	25	15
FREQUENCY	50%	30%

Table 4.2.1 : Ager of Respondent Frequency

AGE	FREQUENCY
40-59	25
30-39	10
25-29	5
TOTAL	40

Table 4.2.2: Income levels

Responses	**Extent Frequency**	**% Percentages**
20,000-40,000	8	20%
10,000-20,000	20	50%
5,000-10,000	12	30%
TOTALS	40	**100%**

RESULTS OF SURVEY

Table 4.5: Uptake of health insurance

Responses	**Extent Frequency**	**Percentages**
Enrolled	10	25%
Not Enrolled	30	75%
TOTALS	40	100%

Table 4.6: Extent of the Awareness

Responses	**Extent Frequency**	**% Percentages**
Knowledge of existent insurance scheme	32	80%
Knowledge of existent insurance scheme	8	20%
TOTALS	**40**	**100%**

4.7 Discussion

From the findings a 80% indicated that the respondents they were aware of health insurance schemes but only 25 % were enrolled to a scheme. The highest earning bracket had greater uptake of insure than the lower bracket of less than 5,000 earning per month which had 0 uptake

4.8 summary

The proportion of Nairobi residents without any type of insurance was considerably high. Economic factors dominated possible reasons for uptake/ non-uptake of health insurance. Policies are needed to be put in place to ensure health insurance is not only accessible but also affordable.The findings showed that income level was a significant factor in the uptake of health insurance. Insurance uptake increases as the level of income increases. This was consistent with previous studies; Adebayo et al (2015) and Ndung'u(2015). This can be explained by the fact that as income increases the level of affordability also increases prompting individuals to uptake the insurance.

The study also found out that education level, health status, and marital status were significant factors in health insurance uptake. Uptake of health insurance increases as the level of education increases. Education brings about awareness and enlightenment of individuals on important issues like health. This prompts the educated individuals to undertake health insurance as they understand more on the importance of good health.

The married were found to be less likely to uptake health insurance. This can be explained by the sample size whereby about 66% of the individuals were unmarried. Also, married women are more likely to own private insurance which has a small coverage as compared to public insurance (NHIF), (Bernstein et al 2008).

Health insurance awareness was measured by ownership of mass media devices such as radio, television and mobile phones. Those who owned these gadgets were found to be more likely to uptake health insurance and the findings were consistent with Kimani et al(2014) study. Ownership of mass media devices is more likely to increase the level of awareness of the existence of the various health insurance schemes and also learn the essentiality of being under an insurance scheme.

CHAPTER 5
DISCUSSION AND CONCLUSIONS

5.1 Introduction

The general objective of this study was to establish the determinants of health insurance uptake using control function analysis. This is essential as the productivity of a country is determined by the health status of the individuals among other factors. It will also contribute to the attainment of healthy lives for all individuals as outlined in the sustainable development goals and Kenya's Vision 2030.

Only about 10.05% of the individuals owned health insurance. This is so worrying given the uncertainty associated with health. Around 89.95% of the individuals were not covered implying that they would easily suffer from out of pocket payments in the event catastrophic diseases strike them. The study found out that the coefficients on income, education, marital status, poor health and level of awareness were statistically significant. Health insurance is so crucial to the country and the study, therefore, recommends that it should be made compulsory that individuals own at least one insurance cover. There is a need for subsidization of the health insurance premiums especially to the poor and the aged so as to make the cover affordable to all individuals in the country. There is aneed for education emphasis to everyone in the society as the attainment of education enlightens people on the importance of having good health and also the reason as to why health insurance cover is essential. The level of awareness was found to positively influence health insurance uptake. There is a need to sensitize the public through barazas and open-air meetings on the existence of the health insurance covers and their importance.

As the government makes a move to subsidize the poor and aged individuals on the NHIF cover, this might have a positive impact to the poor and aged as they are seen to be less likely to uptake health insurance. Civic education through mass media will also have a

5.2 Recommendations

The following recommendations were put forward based on the study findings discussed above.

a) As part of efforts towards universal healthcare access, government should intensify efforts to raise the uptake of health insurance to ease the burden of healthcare costs and improve healthcare access especially to the poor. This would require the government to give priority to healthcare especially due to the rising burden of non-communicable diseases.

b) Some of the factors that hinder people's uptake of health insurance such as employment status should be addressed by coming up with a subsidized policy that will accommodate people of different status.
c) The government needs to adopt technology and innovativeness in improving service provision in public health insurance schemes so that they would be insurance schemes of choice for majority citizens.
d) Health insurance providers should make an effort of improving their services to make sure they meet the needs of their clients hence improve the satisfaction.

5.3 Suggestions for further research

Further research can be done on the influence of health risk on uptake of health insurance among those working in the informal sector. This is important due to the fact that where there is no legal obligation to enroll in health insurance, health risks arising from nature of employment can be a determining positive impact on health insurance. The government should also be aware that the level of education,

5.4 Limitations of the study

The study did not, however, establish how the form of employment and price of the insurance influences the uptake of health insurance. This was due to lack of data on these variables. Also the study was carried out in Nairobi only and therefore data gathered may not represent the larger Kenyan population.

REFERENCES

Adebayo, E. F., Uthman, O. A., Wiysonge, C. S., Stern, E. A., Lamont, K. T., &Ataguba, J. E. (2015).A Systematic Review of Factors That Affect Uptake of Community-Based Health Insurance in Low-Income and Middle-Income Countries.BMC Health Services Research, 15(1), 543.)

Bernstein A.B, Cohen R.A, Brett K.M, Bush M.(2008), Marital Status is associated with Health Insurance Coverage for Working-age Women at all Income Levels,2007.NCHS Data Brief,no 11.Hyattsville, MD: National Centre for Health Statistics.

Fenny, A. P., Kusi, A., Arhinful, D. K., & Asante, F. A. (2016). Factors Contributing to Low Uptake and Renewal of Health Insurance: A Qualitative Study in Ghana. Global Health Research and Policy, 1(1), 18.

Government of Kenya, Health Systems 2020 Project. March 2009. Kenya National Health Accounts 2005/2006. Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc.

Gujarati Damodar N.,(2014). Econometrics by Example. Palgrave Macmillan.

Kenyan Healthcare Sector,(2016); Opportunities for the Dutch Life Sciences & Health Sector, Netherlands Enterprise Agency

Kimani, J. K., Ettarh, R., Warren, C., & Bellows, B. (2014). Determinants of Health Insurance Ownership Among Women in Kenya: Evidence From The 2008– 09 Kenya Demographic and Health Survey.International Journal for Equity in Health,13(1), 27.

Marquis, M. S., &Holmer, M. R. (1996).Alternative Models of Choice Under Uncertainty and Demand for Health Insurance.The Review of Economics and Statistics, 421-427.

Mathauer, I., Schmidt, J. O., & Wenyaa, M. (2008).Extending Social Health Insurance to the Informal Sector in Kenya.An Assessment of Factors Affecting Demand.The International Journal Of Health Planning and Management,23(1), 51-68.

Mitullah, W. (2003). Urban Slums Reports: The Case of Nairobi, Kenya. Understanding Slums: Case Studies for the Global Report on Human Settlements 2003.

Mwaura et al(2015).The Path to Universal Health Coverage in Kenya: Repositioning the Role of National Hospital Insurance Fund. International Finance Corporation

Mwaura, J. W., &Pongpanich, S. (2012). Access to Health Care: The Role of a Community-Based Health Insurance InKenya.Pan African Medical Journal, 12(1).

Ndung'u, T. T.(2015). Factors Influencing Uptake Of National Health Insurance In The Informal Sector: A Case Of Ithanga Division In Murang'a County, Kenya (Unpublished Research Paper, University of Nairobi).

Ndungu, T. W. (2013).Factors Affecting Profitability of Private Health Insurance In Kenya: A Case Of Heritage Insurance Company Kenya (Unpublished Research Paper, University of Nairobi).

Orodho J.A(2009).Elements of Education and social science Research methods. Second Edition..Kaneja Publishers, Maseno, Kenya

Pritchett,L., &Summers,L.H.(1996).Wealthier is healthier. Journal of Human Resources,841-868.

APPENDIX I
APPENDIX I INTRODUCTION COVER LETTER

To: Respondent

18th August, 2019

RE: Research Questionnaire

I am a student at Management University of Africa carrying out a survey on the factors influencing uptake of health insurance among Korogocho Dwellers. I am kindly requesting you to complete the attached questionnaire so as to enable me accomplish the study. Please, note that all the information given shall be treated purely and used for academic purposes and shall be treated as confidential.

Thank you for taking your time to complete the questionnaire and for your time and cooperation.

Yours sincerely,

Grace Kagiri

APPENDIX II

QUESTIONNAIRE

1Are you aware of any health insurance scheme in Kenya

YES ( ) NO ( )

2. On a scale of 1-5 how significant is your income level when it comes to choosing a health insurance scheme?

1( ) 2 ( ) 3 ( ) 4( ) 5( )

Do you know the benefits of a health insurance?

On a scale of 1-5, 5 being absolutely yes and 1 Absolutely No.

Absolutely Yes ( ) Somehow ( ) No ( ) Absolutely No ( )

Thank you