

**FACTORS INFLUENCING SUSTAINABILITY OF REMITANCES TO
NATIONAL HOSPITAL INSURANCE FUND BY WORKERS IN
INFORMAL SECTOR IN BOMET CENTRAL DIVISION, BOMET
COUNTY, KENYA.))**

BY

KIPYEGON WESLEY LANGAT

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF
ARTS IN PROJECT PLANNING AND MANAGEMENT OF UNIVERSITY OF
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DECLARATION

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

Signature 

Date 27/11/2012

KIPYEGON WESLEY LANGAT

L50/62350/2011

This research project report has been submitted for examination with my approval as the University supervisor.

Signature 

Date: 27/11/2012

JOSEPH O AWINO

LECTURER,

DEPARTMENT OF EXTRA MURAL STUDIES

UNIVERSITY OF NAIROBI

DEDICATION

I dedicate this research work to my wife Jennifer Langat for her encouragement, great love and hope. Also to my children Wycliff, Laurine and Brian who bring Joy and prospects.

I most sincerely thank my mother Mrs. Emily Chesimet for her unending prayers and financial support.

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LIST OF ABBREVIATIONS AND ACRONYMS

CBHI :	Community Based Health Insurance
CDC:	Centre for Disease Control
EU:	European Union
ICU:	Intensive Care Unit
ILO:	International Labour Organization
MOH:	Ministry of Health
N.H.I.F:	National Hospital Insurance Fund
SPSS :	Statistical Package for Social Sciences
U/C:	User Charges
UK:	United Kingdom
UNDESA:	United Nations Department of Economic and Social Affairs
UNICEF:	United Nations Children's Fund
UNSEA:	United Nations Social and Economic Affairs
USA :	United States of America
WHO:	World Health Organization

ABSTRACT

This research study does address issues that informal workers face when contributing to NHIF funds. NHIF is Kenya's largest financier of health services. It was a statutory social insurance fund whose responsibility was to provide health insurance coverage for its members and their dependants. The purpose of the study was to establish factors contributing to sustainability of informal workers remittance towards NHIF. The study was guided by the following objectives; To investigate how Background factors; Socio-cultural factors; sensitization levels; and health insurance legislation factors influence the sustainability of informal workers remittance to NHIF in Bomet Central Division. The sample size is 132 respondents from the informal workers within Bomet Central Division. Stratified random sampling was used to select respondents from the divisional diverse surroundings. A descriptive research survey design was adopted and questionnaires were used to collect both quantitative and qualitative data to answer the research questions. Data collected for the study was reviewed and cleaned at collection point and every evening prior to entry into an MS Access data base in order to minimize errors of omission and commission. Statistical package for social sciences (SPSS) version 12.0.1 was used to analyze the data in order to give descriptive statistics and presented in tables in the form of frequencies and percentages on how the various variables influenced the sustainability of informal workers contribution to NHIF, report and recommendations was done. The study recommends NHIF to contract community based organizations to recruit and collect contributions on behalf of NHIF. A multi prolonged awareness creation strategy would go a long way to ensure a well informed community with respect to health insurance. Further research is suggested on challenges facing the implementation of the legislation to increase the NHIF contribution rate, the impact of computer based information system in the management of NHIF operations and the management of funds contributed by the informal sector.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The informal sector is better understood to be private in nature and not public, in terms of economic activities. It refers to small businesses characterized by little capital and non formal management structures. The understanding shows its economic viability, and according to Webster and Fiddler (1996), the sector consists of the self employed persons.

The informal sector covers a wide range of labour market activities that combine two groups of different nature. On the one hand, the informal sector is formed by the coping behaviour of individuals and families in economic environments where earning opportunities are scarce. On the other hand, the informal sector is a product of the rational behaviour of entrepreneurs that desire to escape state regulations. The informal sector plays an important yet often controversial role. According to the World Bank (1994), this sector helps alleviate poverty, but in many cases informal sector jobs are low-paid and the job security is poor. The size of the informal labour market varies from the estimated 46% in the high-income countries to over 50% in the low-income countries like Kenya. Its size and role in the economy increases during economic downturns and periods of economic adjustment and transition (Ravallion, 2007).

Public policy has for a long time been in constant conflict with the informal sector. Local authorities including Bomet County that are the official custodians of the environment under which they operate see them as a nuisance forcing them to exist in a subordinate relationship with the state (Coughlin, P and Ikiara, G. 1996; King, 1997).

Health insurance, like other forms of insurances, is a form of collectivism by means of which people collectively pool their risk, in this case the risk of incurring medical expenses.

The collectivity is usually publicly owned or else is organized on a non-profit basis for the

members of the pool, though in some countries health insurance pools may also be managed for profit companies. It is sometimes used more broadly to include insurance covering disability or long term nursing or custodial care needs (Arhin, 1996).

The United States health care system relies heavily on private health insurance, which is the primary source of coverage for most Americans, According to CDC; approximately 58% of Americans have private health insurance. Other public programs include military health benefits and the Veterans Health Administration and benefits provided through the Indian Health Service. Some states have additional programs for low income individuals. A study had found that 62% of persons declaring bankruptcy in 2007 had unpaid medical expenses (Himmelstein, 2007).

At the time of ill health, households in Africa do not have recourse to mechanisms that will protect the financial resources required for basic consumption needs such as transportation, education, and food not produced by the household. As most functional health insurance schemes in Africa are associated with formal sector employment requiring regular contributions compatible with formal sector earning the majority of individuals are not insured. Vogel and others conclude that the formal sector schemes effectively cover only members of the relatively small upper and middle classes (Vogel, 1990; Abel-Smith & Rawal, 1994).

Kenya adopted its own insurance for health in 1966 when the national hospital insurance fund was created through an act of parliament to provide a contributory health scheme to Kenyan residents. Since then, various changes have taken place in an effort to improving the delivery on its core mandate. In 1998, there was the National Hospital Insurance Fund Act, 1998 No.9 which was asserted on 31st December 1998. This was an Act of parliament to establish a National Hospital Insurance Fund to provide for contributions to and the payment of benefits

out of the fund; plus establishing the National Hospital Insurance Fund Management Board (Edna, 2010).

The policies of NHIF allow for formal sector, informal sector and non employed citizens to be contributors and beneficiaries to the insurance fund. For employed people the highest contribution has since been proposed to Kshs. 2000 per month, while the lowest Kshs.500 per month. Voluntary contributions have been proposed to be Kshs. 500 per month for other categories of contributors (GOK 2010). Sustainability of contributors depends entirely on how the end benefits reach them. In some cases the contributors have decried the type of treatment and services they receive especially the high costs of medical services they are subjected to by the approved medical centers for NHIF contributors. This has created disquiet among the citizens and discouraged many from continuous contribution (Carrin and James, 2005).

Bomet County has been struggling on the part towards recovery from the devastating effects of the 2007/2008 post election violence that saw many livelihood projects and activities reduced to nothing. As the recovery process continues, one hopes that wise moods including premise insurance cover and health insurance are embraced. Health insurance through the national statutory mechanisms is a cheaper option. It was desirable that this study establishes factors that may influence informal sector workers to sustain their contributions towards National Hospital Insurance Fund.

1.2 Statement of the Problem

Health care provision has been one of the key priorities of the Kenyan government. Despite advocacy by various governmental and non-governmental organizations explaining health care as a fundamental right, its provision remains a milestone yet to be achieved. In 1966, the National Hospital Insurance Fund was mandated to collect money from members of the

informal sector to make health care accessible to the most vulnerable members of the society with unstable and unpredictable income. However, active recruitment of informal sector members was initiated in 1998 when HIV/AIDS pandemic became a matter of national concern and was reported by the National Aids Control Council to be a major health risk and declared by the government as a national disaster. The NHIF initiated advocacy and recruitment measures that saw many in the informal sector recruited.

According to the Bomet Central Divisional NHIF office remittance annual revenue reports at the end of the financial year 2007/2008, there were 4800 informal sector workers contributors, at the end of the financial year 2008/2009 there were 3500 informal sector contributors and at the end of the financial year 2009/2010, there were 1500 informal sector workers contributors. The significant drop in contribution is a matter of concern, there was need to look at factors influencing the sustainability of informal workers remittance towards NHIF.

According to the Kenya Bureau of statistics of Kenya, the poverty index of the entire Divisional surrounding is estimated at 33% which is much higher than the national poverty index of 29%. This means that poverty levels in Bomet Central Division are much higher than most parts of the country thus raising question on the ability of the Area residents to finance health care services. This therefore elevates the NHIF scheme as a favorable and cheaper option to members of the informal sector. The inconsistency and sustainability of contributions is therefore a matter of concern that was to be addressed by the study.

Government health facilities that provide free or affordable services are very few. There are other notable health facilities that provide elaborate health care namely New Silibwet Hospital, and Kapkoros Hospital. However, there are numerous well equipped private hospitals that thrive on elaborate health schemes and insurances supported by the formal workers. This raises question on the fate of numerous members of the informal workers and

their families who overstretch the ability of public hospitals to serve a population of 683,858 the entire Bomet Central Division .

1.3 Purpose of the Study.

The purpose of this study was to establish the extent to which various factors influence sustainability of the informal workers remittance towards National Hospital Insurance Fund (NHIF) in Bomet Central Division .

1.4 Objectives of the Study

The study was guided by the following objectives:-

1. To determine the extent to which demographic characteristics influence the sustainability of the informal workers remittance to NHIF in Bomet Central Division.
2. To examine how socio-economic factors influence the sustainability of the informal workers remittance to NHIF in Bomet Central Division.
3. To examine the level at which sensitization on the NHIF scheme influences the sustainability of the informal workers remittance to NHIF in Bomet Central Division.
4. To establish how health insurance legislation influences the sustainability of the informal workers remittance to NHIF in Bomet Central Division.

1.5 Research Questions

The study did sought to answer the following research questions:-

1. To what extent does Background information influence the sustainability of the informal workers contribution to NHIF in Bomet Central Division?
2. How do socio-cultural factors influence the sustainability of the informal workers remittance to NHIF in Bomet Central Division?
3. What level at which sensitization on the NHIF schemes influences the sustainability of the informal workers remittance to NHIF in Bomet Central Division?
4. How does health insurance legislation influence the sustainability of the informal

workers remittance to NHIF in Bomet Central Division?

1.6 Significance of the Study

The study was hoped to be beneficial to a number of stakeholders. It is important to assess the performance of the informal sector and advise on the health financing structures that support the informal sector to contribute towards health financing. The study is hoped to identify and document opportunities that are aimed at improving customer or client loyalty. In turn, this is hoped to assist the fund to retain, gain market share and/or increase revenue if positive reaction is quickly taken with respect to changes in the health service market. The study also was to establish the current customer satisfaction levels and identify areas that require attention. Based on the findings a way forward was proposed to propel the fund towards improving on the current satisfaction index. The end product is a document for reference by various workers including researchers. The study was therefore worthwhile.

1.7 Basic Assumptions of the Study

The study was carried out with several assumptions which included; that the informal sector are contributing to NHIF sustainably; that the informal sector have difficulties in sustainably contributing to NHIF; that the informal sector workers shall respond and the researcher would be able to collect data without interference.

1.8 Limitations of the Study

The following limitations was anticipated; Many of the informal sector contributors may not be conversant with the details of NHIF and so their rights as contributors. This may hinder detailed information from the respondents. Also, some of the informal sector contributors who do not maintain regular contributions as required may be shy to provide certain information regarding their loyalty to the fund for fear of victimization. The nature of the informal sector organization does not easily enable sampling of respondents due to their non

permanent business premises. The researcher strategized to overcome the first limitation by requesting the knowledgeable informal sector NHIF contributors to sensitize the ignorant ones on NHIF matters more so the benefits, to enable them answer the questions appropriately.

1.9 Delimitation of the Study

The study was delimited to informal workers who are only within Bomet Central Division. It is mandatory for the formal workers to remit towards the NHIF scheme and their contributions are regularly received through the employers unlike the informal sector which lack a framework to control contributions. The high population density of the urban part of Bomet County provides the market for the informal sector to thrive.

1.10 Definition of Significant Terms Used in the Study

Informal workers Sustainability remittance - Money given regularly pooled together with other people for purposes of securing health services by people who do operate and work in small size business for a livelihood "Juakali"

Demographic information: Issues relating to age, gender, family size, marital status.

Socio- cultural factors: Financial, belief, and cultures position of a society that is participating in the country's unregulated business activities "informal sector"

Sensitization: The process of making the public aware of an important matter like the health insurance.

Health Insurance: An agreement made with a company to be paid regular money so that the company meets the costs of health services provided.

National Hospital Insurance Fund : A government of Kenya entity established by an Act of Parliament in 1966 to mobilize funds from the public through subsidized contributions in order to receive health services in return.

Health Care Providers: Those facilities like hospitals that provide health services to the sick patients from the public.

1.11 Organization of the Study

The study was organized into five chapters; chapter one basically gives the introduction and describes the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, basic assumptions of the study, limitations of the study, delimitations of the study, definition of significant terms as used in the study and organization of the study. Chapter two provided a review of literature related to the study thematically as per the research objectives, the theoretical frame work, the conceptual framework as well as the summary of literature reviewed. Chapter three focuses on the research methodology discussed under the following sub-headings; research design, target population, sample size, sample selection, research instruments, pilot testing of instruments, validity of research instruments, reliability of research instruments, data collection procedures, data analysis techniques and ethical issues in research. Chapter four goes the data analysis, presentation, interpretation and discussion, while chapter five provides for the summary of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature related to the study based on the following thematic areas: demographical factors and informal workers remittance to health insurance; socio-cultural factors on sustainability of informal workers remittance to health insurance; sensitization on health insurance and informal workers remittance to health insurance ;and legislation on informal workers remittance to health insurance. It also reviews theoretical framework and conceptual framework that guides the study.

2.2 Demographical Factors and Informal workers remittance to Health Insurance

The health care system can be broken down into functional components: revenue collection; fund pooling; the purchasing; and provision of health care. Functions can be integrated and separated in various combinations, even within the same country. In some cases, the functions are integrated within a single organizational entity; in others, one entity may collect and pool the funds while other bodies purchase and provide services. Resources are then allocated between these different entities (Kutzin, 2001).

Traditionally, most insured people in Germany were assigned to a sickness fund based on place of residence and/or occupation. This led to greatly ranging contribution rates because the income and risk profiles of different occupations vary. White collar workers had a choice of fund on joining or when changing jobs. Only voluntary members, those with an income above a certain threshold, had the right to choose among several funds and to change funds. To ensure that all sickness funds started from an equal position when competition was introduced, a scheme for risk-structure compensation was introduced in two steps (1994 and 1995). In the second stage, retired insurers were included. Previously, funds had shared the

actual expenses of retired people. The aim of the scheme for risk-structure compensation was to reduce differences in contribution rates resulting from different income levels and expenditure because of the age and sex composition of members. The compensatory mechanism requires all sickness funds to provide or receive compensation for the differences both in their contributory incomes and in their average (standardized) expenditure (Busse, 2001).

In Senegal 85% of people in the poorest income quintile believe they cannot afford health care requirements, whereas concerning the availability of services, they believe they could not get health care and this seems to be a secondary problem. Other socio-economic indicators also influence the use of health services. Use of health services by other persons varies among these three countries. When all other indicators are the same, the senior population in South Africa is more likely to use health services than other age groups. The opposite situation is found in Kenya, while in Senegal there is no significant difference in the use of health services either by the senior or non-senior population (Drechler and Jutting, 2005).

The literature above broadly outlines the health insurance fund programmes with emphasis on age, sex, family size, educational level and contributors' behaviour, but does not distinctively indicate the circumstances that could hinder voluntary contributors like those from informal sector targeted by the current study, from sustaining their membership with health insurance schemes. The first objective that this study intended to achieve was to determine the extent to which demographic factors influenced informal sector's contribution to National Hospital Insurance Fund in Bomet Municipality of Kenya. The available literature left a big gap in this area that this study intended to fill.

2.3 Socio-cultural factors on sustainability of Informal workers remittance to Health Insurance

A health system includes all activities whose primary purpose is to promote, restore or maintain individual's physical, mental and social well being. There are different aspects to a scheme which require performances. One aspect is effectiveness and efficiency in management, while the other is site maintenance of community scheme. Health care financing schemes are facing increasing pressure to provide objective evidence of the quality and efficiency of their organizations. Health scheme managers and medical professionals who traditionally have concentrated on the quality of care are forced to review their overall management practices for cost effectiveness (Laursen, 2003).

According to a report done by GTZ (2005) in Kenya on the impact of disease to worker's productivity, it has been discussed by many scholars that, when income is barely enough to survive on, there is no money to spare for transport to hospital or to pay for treatment, at the same time, illness like HIV/AIDS may result in incapacity to work and hence loss of income.

Where there is no insurance protection, serious illnesses often leave entire families indebted and impoverished. They are forced to sell their meager possessions and ultimately the very basis of their livelihoods in order to meet the costs of medical treatment. Thus the poor population in developing countries is caught up in a vicious cycle the "illness poverty trap"

Many African countries began the post-colonial period with the intention of providing free or heavily subsidized health care to their citizens. Difficult economic times in the 1970s and 1980s resulted in the abandonment of this universal health goal by virtually all Sub-Saharan African countries. In the late 1980s, African health ministries guided in part by UNICEF, the World Health Organization and the World Bank shifted their health care strategies to a subsidized free for service model that involved active community participation (Musau, 1999). The imposition of user fees at public health facilities across many health systems in

Sub-Saharan Africa in the 1980s resulted in diminished levels of access to health care services. Local community members should be involved in both the collection and control of revenue for health care (Musau, 1999).

In Africa, these institutions have taken the form of local initiatives of rather small size that are community-based with voluntary membership. They have either been initiated by health facilities, NGOs, local communities or cooperatives and can be owned and run by any of these organizations. Considering the benefits for public health, welfare and revenue generation expected to go hand in hand with the development of viable insurance schemes; possible dynamic interactions between demand and supply in the health care system are outlined as they could take place after health insurance is offered to rural people in a low-income country. For demand, if some people want to test the new financing option and demand health insurance, that is, they decide to pay the premium and become members for a year (Atim, 1998; Criel, 1998).

A certain proportion of the insured will fall ill during that time and need care at the hospital or health post. Financial barriers to access are removed from them by the insurance in spite of possibly lacking cash income at the time of illness and of user fees being relatively high with respect to their income; they can readily get treatment at the health facility. As a consequence, they do not have to search for credit or sell assets, and they recover more quickly from their illness because there are no delays in seeking care. Consumption will be more stable and probably even higher, which consequently would have beneficial effects for the health of all household members (Atim, 1998).

In a study conducted by Cheryl (2007) in Ahmedabad India on slums upgrading, it was revealed that the municipal councils collected most of their revenue from the informal sector who were the majority of the population in the city. The population of the informal sector had grown because of the closure of a majority of the textile mills in the mid 1980s within the city

which were the major drivers of the city's economic growth and a source of employment. It is surmised that a large number of these textile workers were subsequently absorbed into the informal sector, in the absence of any effective government schemes to train or rehabilitate them. The informal sector workers in Ahmedabad include daily wage laborers, construction workers, rag pickers, readymade garment workers, street vendors, domestic workers and agricultural workers on the out skirts of the city (Cheryl, 2007).

In Kenya, the impact of social protection on outpatient services is not statistically significant as the main insurance, the NHIF, has not started implementing outpatient services, though the fund has a positive effect at a statistically significant level (Castro-Leal, 2000). According to a report by World Bank (1994) health status of poor people is fundamentally worse than that of people belonging to higher social classes. All over the world, such disparities can be traced back largely to differences in income. This study looked at various socio-economic factors that influence sustainability of informal sector workers contributions to health insurance schemes.

2.4 Sensitization on Health Insurance and Informal workers remittance to Health Insurance

Explanations for the existence and growth of small-scale industry in Africa have multiplied since the International Labor Office 'discovered' informal activities in the early 1970s (ILO, 1972). Early research tended to treat small enterprises as a phenomenon entirely different from the rest of industry. Small enterprise has been viewed as mainly a survival mechanism for the poor that had little, if any, impact on industrial development (Mc Comick and Perderson, 1996). This perception and other views have made the informal sector not scheduled for regulations and at times left out of national development issues. Important awareness on issues of development, socio-cultural and economical issues have not been reaching the sector as required.

In a community participation study conducted by Jakab, (2001), findings reveal that creating a sense of ownership and awareness is important to control for moral hazard and for the acceptance and institutional stability of the scheme in general. To achieve this, regular community level meetings and workshops, where the members of the community could express their views on the design of the scheme contributions are helpful. Community participation in the design of the scheme can also facilitate health education and sensitization of members in order to promote health behavior and the use of preventive services, as the members share a common interest in keeping the costs of health care low.

According to a report WHO (2000) to ascertain the awareness level of health insurance in low income countries, it was found that 75% of low income earners preferred frequent but low payment of premiums WHO (2000). Given the high latent demand from people for health care services of good quality and the extreme under- utilization of health services in several countries, it has been hoped that social health insurance may improve the access to health care of acceptable quality. Whereas alternative focus of health care financing and cost-recovery strategies like user fees have been heavily criticized, the option of insurance seems to be a promising alternative as it is a possibility to pool risk transferring, unforeseeable health care costs to fixed premiums (Griffin, 1992). Especially in the environment of rural and remote areas unit transaction cost of contracts are too high leading often to a state and market failure (Jutting, 2000). As a consequence in low-income countries the majority of the population remains uncovered against the risk of illness (World Bank, 1994).

In order to provide equitable access to health care delivery in Nigeria, the Federal Government of Nigeria introduced National Health Insurance Scheme (NHIS). Okaro, Ohagwu & Njoku (2010) conducted a study to assess the knowledge and attitude towards the scheme among the population in South East Nigeria. The study revealed that there was high level of awareness of the existence of NHIS in Nigeria among the population. Seminars in

hospitals and the media were noted to be the major source of information about NHIS at 45.9%. Knowledge about various aspects of the scheme was not encouraging. The population however showed a positive attitude towards the scheme. With the proposed National Social Health Insurance Fund (NSHIF), membership will ultimately be compulsory for all. The policies are being considered to ensure that not only high-risk individuals enroll into the scheme. The health financing system including community health insurances, cannot be looked at in a vacuum but needs to be connected to the broader goals of the health system (Bennett, 2004).

2.5 Legislation and Informal workers remittance to Health Insurance

Universal health care systems vary according to the extent of government involvement in providing care and health insurance. In some countries such as the UK, Spain and Italy the government has a high degree of involvement in the commissioning or delivery of health care services and access is based on residence rights not on the purchase of insurance. Others have a much more pluralistic delivery system based on obligatory health with contributory insurance rates related to salaries or income, and usually funded by employers and beneficiaries jointly. These insurance based systems tend to reimburse private or public medical providers often at heavily regulated rates, through mutual or publicly owned medical insurers (Tara, 2010).

According to Michael (2006), Health Insurance is heavily regulated at the state level; some states require insurance plans to cover certain types of health care providers or to provide certain types of health benefits. Many of these regulatory initiatives particularly in the area of health insurance under writing are designed to achieve specific policy goals, such as controlling escalating health care costs or expanding the availability of health coverage, particularly for high- risk individuals. Achieving these goals invariably requires trade-offs, but policy makers rarely make this trade-offs explicit.

South African mutual health insurance (medical schemes) has existed for over 100 years and has been regulated under a specific Act since 1967. Up until 1989, health insurers were required by law to community rate their premiums, and was not allowed to exclude high-risk enrollees from cover. In 1989 these regulations were removed effectively allowing health insurers to risk-rate the cover which they provided, and exclude the medically uninsurable (Kimani, Muthaka & Manda, 2004).

The National Hospital Insurance Fund (NHIF) was established by an Act of parliament in 1966 as a department in the Ministry of Health, which oversaw its operations but responsible to the government treasury for fiscal matters. The fund was set up to provide for a National contributory hospital insurance scheme for all residents in Kenya. The Act establishing NHIF provided for the enrolment to NHIF by all Kenyans between the ages of 18 and 65 and regulates employers to deduct premiums from wages and salaries. The level of contribution is graduated according to income ranging from Kshs.30 to Kshs.320 per month. Contributions and membership are compulsory for all salaried employees earning a gross salary of Kshs.1,000 a month and above. The fund covers up to 180 inpatient hospital days per member and his/her beneficiaries per year. Besides being self-financing and self-administering, the fund monitors its own collections and distributes benefits to providers. The NHIF Act also provides for the fund to give loans from its reserves to hospitals for service improvement (KIPRA, 2004).

To improve on the delivery of services, the government amended the NHIF Act in 1998 to make the fund a state corporation. The NHIF Act of 1998 transformed NHIF from a government department to an autonomous parastatal. The apex of NHIF is no longer the ministry but a board of Directors. The fund was given the task of enabling as many Kenyans as possible to have access to quality and affordable health care against a background of rising medical costs and a dwindling share of resources. According to the amended NHIF Act, the

beneficiaries are both inpatients and outpatients (section 22 of NHIF Act, 1998), but outpatient services are not yet strongly operational. NHIF management board pays benefit to declared hospitals for expenses incurred at those hospitals by any contributor; his/her named spouse, child or other named dependents.

Until recently, NHIF was highly centralized in Nairobi where all claims were processed. Health facilities in the rest of the country were required to make monthly trips to Nairobi to pursue claims. The fund has so far opened 28 branches across all provinces and in both rural and urban areas. It has also introduced simplified procedures for processing claims and established a member's database. The procedure of processing claims has also been computerized. This has made it easier for the members and about 400 accredited health providers to make claims at a relatively lower cost (Republic of Kenya, 1999). Legislation protects the contributor, controls contribution rates in regard to income levels and guarantees protection of the contribution funds. This study looked at the influence of health insurance legislation on sustainability of informal sector's contributions to NHIF.

2.6 Theoretical Frame Work

This study is inclined to a theory of consumer behavior by Clifford (2008). It proposes that consumer goodwill can best be understood as a limited, but potentially renewable resource. Like a renewable natural resource, consumer goodwill can be over-exploited. For example, a review of the rise and rapid fall of a telemarketing industry in the USA provides evidence that over- exploitation of consumer goodwill is precisely what happened. It is argued that direct marketing practices ought to be managed in accordance with principle of sustainability. If they are not, the consequences may be sudden and near permanent declines in consumer responsiveness. The above theory is relevant to this study in that informal sector workers are consumers of the health services provided by the health centers designated by NHIF as per the principles of the NHIF ACT 1998. Membership of these contributors is based on goodwill

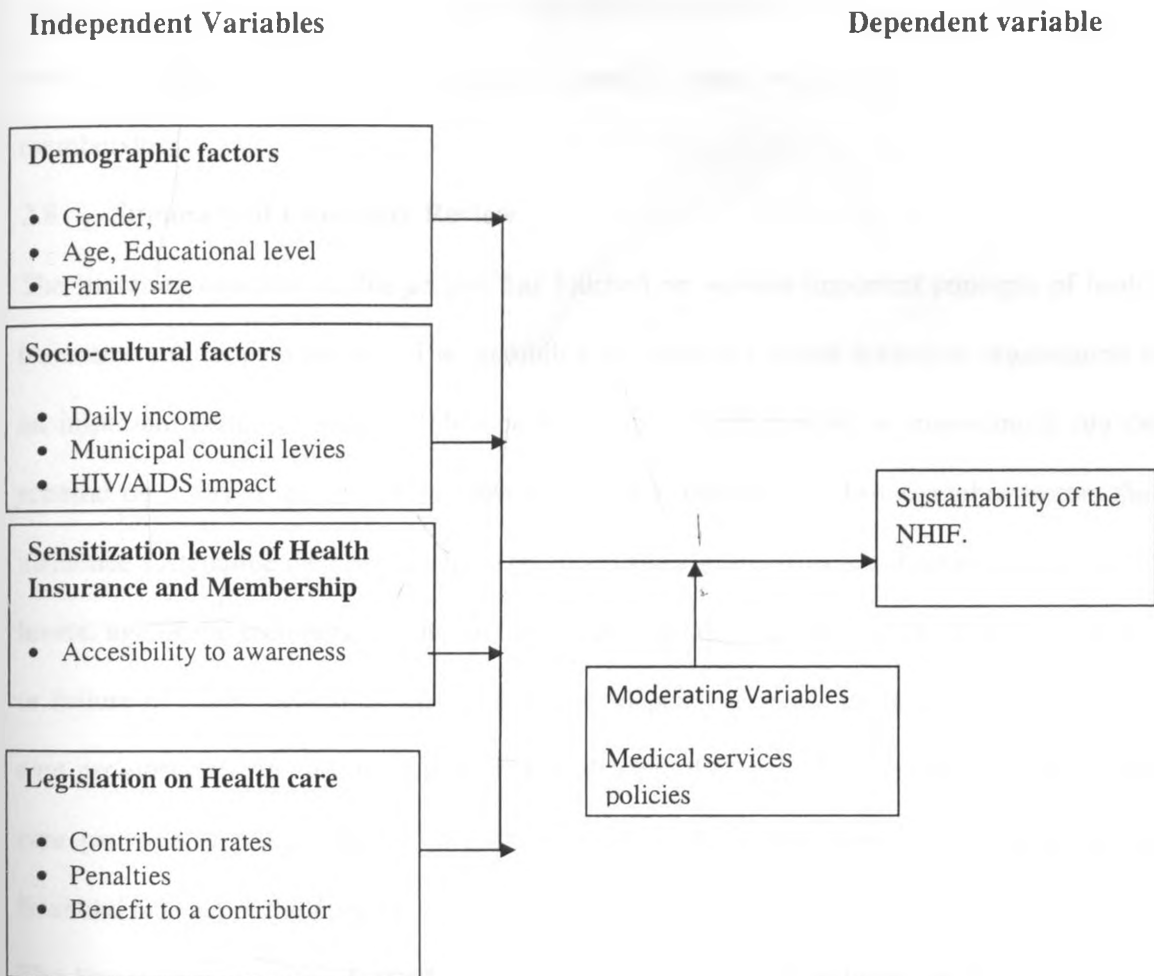
and is limited to their levels of convenience. If the consumer goodwill is utilized appropriately and in return their health needs are met, their behavior in respect of contributions will be positive and they will sustain membership. However, if the situation is the reverse, they may decline to sustain their contributions.

In Clifford's findings, we emphasize that marketing practices ought to be managed in accordance with principles of sustainability. He is not elaborating clearly the specific principles of sustainability that directly influence consumer behavior. The current study was specifically identified the factors that influence consumer behavior in relation to sustainability. The study intends to bring new knowledge in respect of what may make the contributors (consumers) to maintain their membership. The gap existing in Clifford's (2008) literature includes why consumers loyalty may be swayed.

2.7 Conceptual Framework

This section described the conceptual framework that guides the study.

Figure 2.1: Conceptual Framework Showing Relationships between the Variables in the Study.



The schematic diagram above reflects the concept of factors influencing the suitability of informal workers remittance towards the National Hospital Insurance Fund. The factors which have been conceptualized as independent variables include: background factors where education level, age, gender, and family size. For example a family with grown up children may not see the sense of sustaining their contribution towards NHIF but a family with young

children will consider sustaining their membership to NHIF to avert child mortality. Young people may not see the sense of sustaining their membership towards NHIF but old age dictates that there has to be a safety net against illness as a result of the frequency of illness in old age, hence the elderly people will see the sense of sustaining their contributions towards NHIF. Socio-cultural factors which focus on financial status of the contributor is also important. Contributor's financial status may hinder one from continued membership because one may feel that illness is an occasional need so may not see the sense of sustaining membership.

2.8 Summary of Literature Review

The literature captured in this section has touched on various important concepts of health insurance and its membership. The credibility of managing health insurance organization is an important factor as Musau (1999) puts it, management capacity is important to run the scheme on a day to day basis and make necessary adjustments. Demographic factors that influence sustainable membership have been covered specifically considering the educational levels, age of the members, gender and in terms of grade, their income bracket. The success or failure of health insurance scheme is largely dependent on the existence of viable health care providers e.g. the hospitals that offer services to the insured. Decisions taken by health care providers have an impact on mobilizing demand for the schemes as well as on the financial balance of the scheme.

The literature has captured details on how legislation lays out policies on the existence of health insurance schemes and its membership. In other parts of the world, like the USA, the uninsured people are the greatest beneficiaries of the health bills.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter of research report included; research design, target population, sample size and sample selection, research instruments, pilot study, reliability and validity of instruments, data collection procedure, data analysis techniques and ethical considerations.

3.2 Research Design

The study did adopt descriptive survey design to collect information. Descriptive survey is a method of collecting information by interviewing or administering questionnaires to a sample from the population (Orodho, 2003). This design can also be used when collecting information about people's attitudes, opinions, habits or any variety of social issues. The design shows how variables interplay. According to Kothari (2009), descriptive surveys are concerned with describing, recording, analyzing and interpreting conditions that either exist or existed. Descriptive survey was chosen as the best design for this study because it is an excellent vehicle for measurement of characteristics of large populations. Descriptive design was appropriate for this study because it enabled collection and analysis of both qualitative and quantitative data.

3.3 Target Population

The research was carried out in Bomet Central Division, Bomet County. This study targeted 200 informal workers within the Division. According to Tromp and Kombo (2006) a population is a group of individuals, objects or items from which samples are taken for measurement. It refers to an entire group of persons or elements that have at least one thing in common, for instance all those who were available at the time of sampling or data collection formed accessible population from where the sample size was selected.

3.4 Sample Size and Sample Selection

This section described the sample size and sample selection.

3.4.1 Sample Size

A sample is a smaller group obtained from the whole population. It is a sub group carefully selected so as to be representative of the whole population with the relevant characteristics (Mugenda & Mugenda, 2003). According to Krejcie and Morgan (1970) a sample size of 132 is appropriate for a target population of 200.

3.4.2 Sample Selection

Sampling is a process of selecting subjects of cases in order to draw conclusions about an entire population (Orodho, 2005). It is that part of statistical practice concerned with the selection of individual observations intended to yield some knowledge about a population of interest and is useful in research because one learns some information about a group by studying a few of its members thus saving time and money. Stratified sampling is applied in arriving at the sample. Stratified sampling identifies sub groups in the population and their proportions and selects from each sub group to form a sample. The researcher used the proportionate method of selecting samples from each stratum. The researcher collected data purposively whereas selected areas are concentrated with respondents. According to Oso and Onen (2010) purposive sampling is where the researcher consciously decides who to include in the sample.

Table 3.1 Informal Sector Types

Sectors	Target Population of sections	Sample Size
Hotels	25	17
Jua Kali	35	23
Shop owners	35	23
Cyber cafes	5	3
Chemists	15	10
Dry cleaners	5	3
Wholesalers	15	10
Retailers	25	17
Tea farmers	40	26
Total	200	132

3.5 Research Instruments

The research tool that was used for collecting data was questionnaires. A questionnaire is a research instrument that is used to gather data over a large sample and diverse regions. It upholds confidentiality, saves time, and has no interviewer bias (Tromp and Kombo, 2006). The questionnaire had both open ended and closed ended questions. The questionnaire is organized in sections intended to extract specific information from the respondents on the phenomenon. The first section sought to obtain information related to background characteristics of the respondents, second section sought to address questions related to socio cultural factors, section three addressed questions related to sensitization level factors and section four contained questions related to health insurance legislation. Data collected targeted their opinions and attitudes towards sustaining membership at NHIF.

3.5.1 Pilot Testing

According to Mugenda and Mugenda (2003), a pre-test sample of a tenth of the total sample with homogeneous characteristics is appropriate for the pilot study. For this study, 13 respondents which is equivalent to 10% of the sample size from the informal workers were

interviewed in during pilot testing. The process was commenced via researcher's identification and training of five enumerators. As part of training, the researcher guided the enumerators to understand the context of questions in the questionnaires. The questions were precise and concise to enhance validity of the instrument. The researcher knew the validity of the instrument by studying the responses to the questions to determine whether the respondents got the same meaning out of the questions. Thirteen respondents was selected to be included in the pilot study.

Test-retest technique was used for the study. The instruments was administered to 36 respondents and after two weeks the same instruments were re-administered to the same respondents without prior notification. Pearson's Product Moment Correlation Co-efficient was used to correlate the results of the first and the second test. Using SPSS® a Co-efficient of 0.89 was generated which assures the researcher that the instruments which were intended to be used for data collection were reliable.

3.5.2 Validity of the Research Instruments

Validity is the extent to which an instrument captures what it purports to measure. It is the accuracy and meaningfulness of inferences which are based on the research results. It is the degree to which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda & Mugenda, 2003). Validity deals with how accurately the instrument represents the variables of the study. If a method is valid then the differences in the results between individuals or groups or organizations can be taken as representing true differences in the characteristics under study (ibid).

Content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study (Mugenda & Mugenda, 2003).

These experts looked at every question in the questionnaire and did their own analysis to

ascertain if they contained the content of the area under study and made appropriate recommendations which were taken in to improve the instruments.

3.5.3 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability in research is influenced by random error (Mugenda & Mugenda, 2003). This definition implies one method for assessing reliability the test-retest method, where the research is exactly replicated. A comparison of the two applications indicates the reliability, or lack of it. The formula used to determine co-efficient of reliability is as follows:

$$r = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

Where r is the Pearson product moment correlation coefficient

x is the deviation of x scores from the mean for each item of the questionnaire filled during the first administration

y is the deviation of y scores from the mean for each item of the questionnaire filled during the second administration.

Correlation coefficient obtained is referred to as "the coefficient of reliability or stability. If the correlation coefficient ranges from 0.6 to 0.8 then the two sets of scores are related (Dalen, 1979). To establish reliability, a Test-Retest was undertaken.

3.6 Data Collection Procedures

In order to collect data from the target respondents, the researcher needed an introductory letter from the University and a permit from the National Council of Science and Technology. The permit was presented to the District Medical Officer, Municipal Medical Officer and the Divisional Officer who granted permission to conduct research in the Division. Due to the expansive coverage area the researcher recruited five research assistants

who assist in data collection. The researcher trained five research assistants on how to administer the instruments. The researcher purposively collected data in areas where respondents will be concentrated within the Division. To ensure high response rate the researcher clarified every question and explained the purpose of the study to the respondents before data collection and assure the participants of confidentiality regarding information they provide. Before data entry, the questionnaire was checked for completeness and data cleaning was done to enhance data quality.

3.7 Data Analysis Techniques

Data was analyzed using descriptive research method such as frequencies and percentage counts and presented using frequencies and percentage distribution tables. Statistical Package for social sciences(spss) aids in analyzing quantitative data. Number of respondents who responded to a particular option was recorded in one column and percentage calculated and recorded in another column.

3.8 Ethical Considerations

A permit and research authorization letter was obtained from the National Council for Science and Technology in the Ministry of Higher Education, Science and Technology and thereafter the District Commissioner of District was notified of the research before the study was undertaken. Permission to interview consenting participants is sort from the leaders/representatives of the participating sector workers. An information sheet seeking respondents' permission to be part of the study was given to all respondents (Refer Appendix I for Letter of Transmittal). A copy of the permit approving the study was attached to the research instrument and letter of transmittal as a confirmation that the study was legitimately being undertaken. For confidentiality purposes, the respondents' names were not required. Codes were assigned to every copy of the questionnaire.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents findings of the study, which have been discussed under thematic sub sections in line with the study objectives. The thematic areas were: Demographic characteristics, socio economic factors, sensitization levels and health insurance legislation factors.

4.2 Questionnaire Return rate

A total of 132 questionnaires were administered to the respondents, only 130 questionnaires were returned for analysis which formed 98.48% return rate. According to Amin (2005), a questionnaire return rate or response rate of 60% is considered appropriate for research. This therefore meant that the questionnaire return rate of 99.72% was appropriate for the study. The questionnaire return rate was high because the researcher used assisted questionnaires whereas the risk of non return was eliminated because as soon as a questionnaire was filled out, it was recovered Table 4.1 summarizes how each site contributed to the study data.

Table 4.1 Questionnaire Return rate

	Administered	Returned	Percentage
	132	130	98.48
Total	132	130	100

4.3 Demographic Characteristics of respondents and sustainability of NHIF

Contribution

This section sought to present the influence of demographic characteristics on the sustainability of remittance to NHIF in Bomet Central Division. The demographic characteristics that were investigated were gender, age, level of education, and family size. NHIF contribution was used as the indicator for sustainability of NHIF contribution. Out of the 130 respondents, the researcher sought to find out the contributors to NHIF. This was important as NHIF contribution was used as the indicator for sustainability of NHIF contributions. Hence a question was posed to find out who the contributors were.

Table 4.2 shows the contributors to NHIF scheme.

Table 4.2: Contributors to the NHIF Scheme among the informal sector Workers in Bomet Central Division.

Respondents	Frequency	Percentage
Contributor (s)	22	16.92
Non Contributors	108	83.08
Total	130	100.00

Out of the 130 respondents who participated in this study, 22 (16.92%) were contributors to NHIF, with 108 (83.08%) being non-contributors to NHIF. This showed that the majority of the informal sector workers are not contributors to NHIF. The findings of the study are in line with findings of a study conducted by Behrman & Knowles (1999) on poverty levels among the population in South East Asia which showed that take up of voluntary health insurance among 70% of the poor is typically low.

For those who are contributors a question was posed to find out the duration they had taken under the scheme. Establishing the duration they had taken under the scheme was crucial because the study needed to know their consistency in contributions to NHIF. The results are shown in table 4.3.

Table 4.3: Duration of remittance by NHIF Members in Bomet Central Division

Duration (Years)	Frequency	Percentage
1-5	16	72.72
6-10	3	13.64
11-15	2	9.09
Above 21	1	4.55
Total	22	100.00

Out of the 22 contributors to NHIF, 16 (72.72%) had contributed to NHIF for a period between one and five years, 3 (13.64%) had contributed for a period of up to ten years, 2 (9.09%) had made contributions of up to fifteen years and 1 (4.55%) had been contributing to NHIF for a period of over twenty one years. The indication is that workers in the division do not sustain contributions towards NHIF for many years.

4.3.1 Gender of Respondents and sustainability of NHIF remittance

The study sought to establish the gender of the respondents given that gender is the social construct of roles and the study needed to establish whether gender differences influence one’s consistent contributions to NHIF. In this regard, the respondents were asked to state their gender and the responses were cross tabulated against NHIF contributions as shown in table 4.4.

Table 4.4: Gender * NHIF membership Cross tabulation

	NHIF Contribution				Total
	Contributor	%	Non Contributor	%	
Gender Female	13	59	45	42	58
Male	9	41	63	58	72
Total	22	100	108	100	130

Out of the 130 respondents who participated in the study, 13 (59%) and 9(41%) were females and males respectively who were contributors to NHIF. Out of the 108(100%), non contributors to NHIF, 45 (42%) and 63 (58%) were females and males respectively. This showed that there were more female than male contributors to NHIF, hence being female increased the chances of one sustaining their contributions to NHIF. Due to these findings the researcher wanted to establish whether the sustainability remittance to NHIF was significantly influenced by gender.

4.3.2: Age of Respondents on sustainability of NHIF remittance

Age of the respondents was sought since different age groups have varying health needs and the study wished to investigate which age group have sustainable remittance to NHIF. In view of this, respondents were asked to state their age. The cross tabulation of age against contribution to NHIF is shown in table 4.6.

Table 4.6: Age * NHIF membership Cross tabulation

		NHIF Contribution				Total
		Contributor	%	Non Contributor	%	
Age category	18 – 25	2	9.09	20	18.52	22
	26 – 35	3	13.63	27	25.00	30
	36 – 45	4	18.18	35	32.40	39
	46 – 55	6	27.28	19	17.60	25
	Over 56	7	31.82	7	6.48	14
Total		22	100	108	100	130

Out of the 130 respondents who participated in the study, 2(9.09%) of the contributors and 20(18.52%) of the non contributors fell between 18 – 25 years age bracket, 3 (13.63%) of the contributors and 27(25%) of the non contributors fell between 26 – 35 years age bracket, 4(18.18%) of the contributors and 35 (32.40%) of the non contributors fell between 36 – 45

years age bracket, 6(27.28%) of the contributors and 19 (17.60%) of the non contributors fell between 46 – 55years age bracket and 7(31.82%) of the contributors and 7(6.48%) of the non contributors were over 56 years of age.

4.3.3 Influence of educational level on remittance to NHIF

Educational level of respondents was sought since one’s educational level determines how well one can mitigate issues especially issues to do with health. The respondents were therefore asked to state their highest level of education achieved and the responses were cross tabulated against contribution to NHIF as shown in Table 4.8.

Table 4.8: Education * NHIF membership Cross tabulation.

		NHIF Contribution				Total
		Contributor	%	Non Contributor	%	
Highest education level	Below primary	1	4.55	9	8.3	10
	Primary	3	13.64	69	63.88	72
	Secondary	5	22.73	24	22.21	29
	College	9	40.90	5	4.61	14
	University	4	18.18	1	1.00	5
Total		22	100	108	100	130

Out of the 130 respondents who participated in the study, 1(4.55%) of the NHIF contributors and 9(8.3%) of the NHIF non contributors had levels of education below primary, 3(13.64%) of the NHIF contributors and 69 (63.88%) of the non NHIF contributors had attained primary school level of education, 5(22.73%) of the NHIF contributors and 24(22.21%) of the non NHIF contributors had attained secondary school level education, 9(40.90%) of the NHIF contributors and 5(4.61%) of the non NHIF contributors had attained

college level of education and 4(18.18%) of NHIF contributors and 1(1%) of the non NHIF contributors had attained university level of education.

Table 4.10: Opinion of Respondents on Influence of Education on Contribution towards NHIF

Response	Frequency	Percentage
Strongly agree	19	14.61
Agree	29	22.31
No comment	0	0.00
Disagree	72	55.39
Strongly Disagree	10	7.69
Total	130	100.00

Out of the 130 respondents who participated in the study 19(14.61%) strongly agreed while 29(22.31%) agreed that education influences one's consistent contributions to NHIF, none of the respondents had the response of no comment, 72(55.39%) disagreed while 10(7.69%) strongly disagreed that education influences one's consistent contributions to NHIF. From these respondents' opinions it can be deduced that a majority 82(63.07%) had the view that one's educational level did not influence consistent contributions to NHIF, while a minority 48(36.92%) held the opinion that one's educational level influences consistent contributions to NHIF.

4.3.4 Influence of family sizes on NHIF remittance

The study sought to investigate the respondents' family sizes. This was necessary because the family size determines a family's disposable income. The researcher then asked the respondents to state their family sizes and a cross tabulation between family size and respondents' contribution to NHIF was done to establish if there was a relationship between

family size and contribution to NHIF. Respondents belonged to families of different sizes as indicated in Table 4.11.

Table 4.11: Family Sizes of Respondents

Household sizes	Frequency	Percentage
0-4	30	23.07
5-9	46	35.39
10-14	29	22.31
15 and above	25	19.23
TOTAL	130	100.00

Out of the 130 respondents who participated in the study, 30 (23.07%) had family sizes of between 0 – 4 people, 46 (35.39%) had family sizes that fell between the category of 5– 9 people, 29(22.31%) had family sizes that fell between the category of 10-14 members, 25(19.23%) had families that had over 15 people. A majority 46(35.39%) of families had a population of between 5 - 9 people.

The study sought to establish if there was a relationship between family size and contribution to NHIF. The study therefore did a cross tabulation between family size and NHIF contributions as presented in Table 4.12.

Table 4.12: Family * member Cross tabulation
Count

		NHIF Contribution				Total
		Contributor	%	Non Contributor	%	
Family size	0-4	11	50.00	25	23.15	36
	5-9	7	31.82	45	41.67	52
	10-14	2	9.09	14	12.96	16
	15 and above	2	9.09	24	22.22	26
Total		22	100	108	100	130

Out of the 130 respondents who participated in the study, 11(50%) of the NHIF remittance and 25(23.15%) of the non NHIF remittance had family sizes of between 0 – 4 members, 7(31.82%) of the NHIF remittance and 45(41.67%) of the non NHIF remittance had family sizes of between 5-9 members, 2(9.09%) of the NHIF remittance and 14(12.96%) of the non NHIF remittance had family sizes of between 10 – 14 members and 2(9.09%) of the NHIF remittance and 24(22.22%) of the non NHIF remittance had family sizes of above 15 members.

A majority 18 (81.81%) of the NHIF remittance had family sizes of below 9 members while a minority 4(18.18%) of the NHIF remittance had family sizes of above 10 members. Qualitative data revealed that indeed large family sizes drained the family's income following their high expenditures on basic commodities. This was considered as an impediment to suitable remittance to NHIF. Following the findings, the researcher wanted to establish whether the sustainability of workers remittance to NHIF was significantly influenced by family size.

4.3.5 Socio-Economic Factors and Sustainability of informal sector workers NHIF remittance

This section sought to present the influence of socio economic factors on the suitability of workers remittance to NHIF in the Division. The socio economic factors that were investigated were monthly income levels of the informal sector participants within Bomet Central Division. Levies and HIV and Aids economic impact.

4.4.1 Income and remittance to NHIF

The income level of respondents was sought to determine their economic power in relation to sustainability of their remittance to NHIF. In this regard, respondents were asked to state their monthly income levels as shown in Table 4.14

Table 4.14: Income of informal sector Workers in the division in Kenya Shillings

Income	Frequency	Percentage
Below 500	0	0.00
501 - 2,000	41	31.54
2,001- 4,000	38	29.23
4,001- 6,000	17	13.08
Above 6,000	34	26.15
Total	130	100.00

Out of the 130 respondents who participated in the study, none earned below Ksh.500 per month, 41(31.54%) fell in the Ksh. 501-2000 income bracket, 38(29.23%) fell in the Ksh.2000-4000 income bracket, 17(13.08%) fell in the Ksh. 4000-6000 income bracket and 34(26.15%) earned above Ksh. 6,000 per month. The study findings revealed that a majority 41(31.54%) of the respondents earned between Ksh. 500-2000 a month. This means that they earn Ksh. 67 a day.

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The study further sought to establish whether there is a relationship between income levels and suitability of workers to NHIF. In view of this, the researcher did a cross tabulation of income and NHIF contribution. Table 4.15 presents the results of the cross tabulation between income levels and NHIF contribution.

Table 4.15: Income * member Cross tabulation
Count

		NHIF Contribution				Total
		Contributor	%	Non Contributor	%	
Income	501-2000	1	4.55	36	33.33	37
	2,001-4,000	2	9.09	38	35.19	40
	4,001-6,000	7	31.81	10	9.26	17
	Above 6,000	12	54.55	24	22.22	36
Total		22	100	108	100	130

Source: Survey Data

Out of the 130 respondents who participated in the study 1(4.55%) of the NHIF contributors and 36(33.33%) of the non NHIF remittance fell in Ksh. 500-2000 income bracket, 2 (9.09%) of the NHIF remittance and 38(35.19%) of the non NHIF contributors fell in the Ksh. 2000-4000 income bracket, 7(31.81%) of the NHIF remittance and 10 (9.26%) of the non NHIF contributors fell in the Ksh. 4000-6000 income bracket and 12(54.55%) of the NHIF contributors and 24(22.22%) of the non NHIF contributors earned above Ksh.6,000 per month. The study findings revealed that out of the 130 respondents, the majority 19(6.36%) of the NHIF contributors earned an income above Ksh. 4,000 while the majority 74(68.52%) of the non NHIF contributors earned an income less than Ksh. 4000. Due to these findings the researcher wanted to establish whether the sustainability of the workers remittance to NHIF was significantly influenced by one's level of income.

Table 4.17: Opinion of Respondents on Relationship between Income and Contributions to NHIF

Response	Frequency	Percentage
Strongly Agree	87	66.92
Agree	25	19.23
No comment	1	0.77
Disagree	10	7.70
Strongly Disagree	7	5.38
Total	130	100.00

Out of the 130 respondents who participated in the study, 87(66.92%) strongly agreed that there was a relationship between income level and contributions to NHIF, 25(19.23%) agreed that there was a relationship between income and NHIF remittance, 1(0.77%) had no comment on there being a relationship between income and NHIF remittance, 10(7.70%) disagreed that there was a relationship between income and NHIF remittance and 7 (5.38%) strongly disagreed that there was a relationship between income levels and NHIF remittance.

The study findings revealed that a majority 112(86.15%) of the respondents strongly agreed that income levels impacted on the sustainability consistent remittance to NHIF. This means that the low income earners are unable to remit their NHIF contributions.

This means that low income earners get preoccupied with provision of other basic needs like food and clothing, shelter, school fees and forget about health care. This argument was held by Nyong'o (2011); Kisumu rural Member of Parliament in a parliamentary session on 11th May, 2011 who said that "The poor use their money to buy food but not health."

4.4.2 Interference of municipal council levies on NHIF contributions

The study sought to find out whether Municipal council levies were an impediment to the consistent remittance to NHIF. This was necessary to the study because the Municipal Council levies are mandatory to the workers participants whereas the daily charges are pegged on the type and quantity of goods that a trader has. In this regard, respondents were asked to state whether Municipal Council levies interfered with their ability to sustain contributions to NHIF. Table 4.18 shows their opinions.

Table 4.18: Opinion of Respondents on Municipal Council Levies Interference with NHIF remittance

Response	Frequency	Percentage
Strongly Agree	75	57.69
Agree	48	36.92
No comment	0	0.00
Disagree	3	2.31
Strongly Disagree	4	3.08
Total	130	100.00

With regard to the opinion of respondents on Municipal Council levies' interference with consistent contributions to NHIF, out of the 130 respondents who participated in the study,

75(57.69%) strongly agreed while 48(36.92%) agreed that Municipal Council levies interfered with their ability to contribute sustainably to NHIF, none had the response of no comment, 3(2.31%) disagreed while 4(3.08%) strongly disagreed that Municipal Council levies interfered with their ability to remit suitability to NHIF. A majority 123(94.62%) of the respondents agreed that Municipal Council levies interfered with consistent remittance to NHIF. This revealed that if it were not for the daily Municipal Council levies, the respondents would remit their contributions to NHIF because the levies drain their financial savings. The study findings are in line with the findings of a study conducted by Cheryl (2007) in Amedabad India on slums up grading, which found out that the municipal councils collected most of their revenue from the workers population who were the majority of the population.

The study sought to investigate the views of the respondents on the use of alternative/herbal medicine. This was important because currently the use of alternative medicine is wide spread in the society and it is considered to cause few side effects to the patients. A question was posed on whether the use of alternative medicine interfered with consistent remittance to NHIF. Table 4.19 shows the results.

Table 4.19: Views on Herbal or alternative medicine interference with NHIF consistent remittance

Response	Frequency	Percentage
Strongly Agree	38	29.23
Agree	20	15.40
No comment	17	13.07
Disagree	17	13.07
Strongly disagree	38	29.23
Total	130	100.00

Out of the 130 respondents who participated in the study, 38(29.23%) strongly agreed while 20(15.40%) agreed that herbal/alternative medicine interferes with consistent contributions to NHIF, 17(13.07%) had no response, 17(13.07%) disagreed while 38(29.23%) strongly disagreed that herbal/alternative medicine interferes with consistent contributions to NHIF. A majority 58 (44.62%) of respondents agreed that herbal/alternative medicine interferes with consistent remittance to NHIF. This is attributed to the fact that some herbal remedies cure most of the medical conditions that humans suffer from so people see no need of resorting to scientific medication offered in hospitals.

Opinion was also sought from the respondents who are NHIF contributors to establish their preferred frequency of remittance to NHIF. This was necessary because the study needed to know the respondents' capability to sustainable remittance to NHIF without over stretching their budgets. A question was therefore posed in this regard. Table 4.20 shows the results.

Table 4.20: Frequency of contributions preferred by informal sector workers in Bomet Central Division.

Frequency of contribution	Frequency	Percentage
Monthly	11	50
Quarterly	5	22.73
Half yearly	4	18.18
Annually	2	9.09
Total	22	100.00

Out of the 22 respondents who were contributors to NHIF,11(50%) preferred making NHIF remittance on a monthly basis,5(22.73%) had the preference of contributing quarterly, 4(18.18%) preferred contributing to NHIF half yearly and 2(9.09%) preferred contributing to NHIF annually. A majority 11(50%) of the respondents preferred making monthly remittance, while a minority 2(9.09%) preferred making annual contributions. It was deduced that a majority of the population were comfortable with making low but sustainable

remittance to NHIF. From their explanation, the respondents who preferred to pay monthly reported that Kshs 160 paid on a monthly basis would not interfere with their provision of family needs. The respondents who preferred half yearly contributions reported that at the beginning of the year they were engaged with educational needs and towards the middle of the year they would have less needs so would manage to raise the NHIF remittance. Categories of respondents who preferred yearly contributions were those with stable and high income and they reported that they preferred paying once and focusing on other issues. The respondents revealed that lack of an effective method to collect contributions from them was one of the reasons as to why they defaulted making payment. This necessitates the contracting of community based organizations to collect funds on behalf of NHIF.

4.4.3 HIV/AIDS and remittance to NHIF

The study sought to investigate the impact of HIV/AIDS on the consistent contributions to NHIF. This was necessary because HIV/AIDS if not well managed it incapacitates victims and could deprive one of a livelihood. In view of this, the respondents were asked to state if HIV/AIDS interfered with their capability to suitable remittance to NHIF. Qualitative data revealed that when one is ill, remittance towards NHIF are interfered with. To them HIV/AIDS incapacitates and many deaths caused by it cause a state of high orphan hood.

4.5.1 Access to Awareness and NHIF remittance

As indicated in the definition of terms, sensitization is the process of making the public aware of healthcare issues. The study sought to establish awareness levels of the respondents on NHIF because lack of knowledge or information may interfere with the way one makes a decision. Little or no knowledge about NHIF may lead to one not maintaining their contributions to NHIF because it would be deemed as an uncertain investment in that they would not know the benefits and regulations governing membership. In this regard, the

respondents were asked to state if they were aware of NHIF and its benefits. Table 4.21 shows the cross tabulation of contributors' awareness on NHIF and remittance to NHIF.

Table 4.21: Awareness * NHIF membership Cross tabulation

		NHIF Contribution				Total
		Contributor	%	Non Contributor	%	
Awareness	Aware	22	100	19	17.60	41
	Not aware	0	0	89	82.40	89
Total		22	100	108	100	130

Out of the 130 respondents who participated in the study, 22 (100%) of the NHIF remitters and 19(17.60%) of the non NHIF contributors were aware of NHIF, none of the contributors and 89 (82.40%) of the non NHIF contributors were not aware of NHIF. This study finding showed that knowledge of NHIF increased the chances one sustainably to remit to NHIF. Due to these findings, the researcher wanted to establish whether the sustainability of workers contribution to NHIF was significantly influenced by awareness levels.

The researcher sought to know the mode of sensitization through which the respondents got awareness on NHIF. This was necessary because the study needed to establish the most common mode of sensitization on NHIF to the respondents. In view of this, the respondents were asked to state which mode of sensitization they got to know NHIF through. Table 4.23 shows the sensitization mode through which respondents became aware of NHIF.

Table 4.2.3: Sensitization Mode through which Respondents Became Aware of NHIF

Response	Frequency	Percentage
Electronic media	22	55.00
Print media	6	15.00
Friends/relatives	10	25.00
Seminars	2	5.00
Total	40	100.00

Out of 40 respondents who were sensitized on NHIF 22 (55%) got sensitized through electronic media, 6 (15%) got sensitized through print media, 10 (25%) got sensitized thorough friends / relative and 2 (5%) got sensitized through seminars. The study findings showed that a majority 22 (55%) of the respondents got sensitized on NHIF through the electronic media while a minority 2 (5%) of the respondents got sensitized on NHIF through seminars. The findings of the study are in concurrence with a study conducted by Okaro, Ohagwu & Njoku (2010) to assess the knowledge and attitude towards the National Health Insurance scheme (NHIS) in South East Nigeria. The study revealed that there was high level of awareness on the existence of NHIS in Nigeria as a result of sensitization through seminars in hospitals and the media.

The study sought to establish whether NHIF officials had sensitized the public on the NHIF program. This was important as it could reveal whether NHIF officials were meeting their sensitization of the public target. In view of this the respondents were asked to give their opinion on whether the NHIF officials had sensitized the public adequately. Respondents had reactions as shown in table 4.24.

Table 4.2.4: NHIF Officials Have Sensitized the Public on NHIF Products

Response	Frequency	Percentage
Strongly Agree	7	17.50
Agree	8	20.00
No comment	0	0
Disagree	15	37.50
Strongly disagree	10	25.00
Total	40	100.00

With regard to NHIF officials' sensitization of the public on NHIF, out of the 130 respondents who participated in the study, 40 were aware of NHIF. Out of the 40 respondents who were aware of NHIF, 7(17.50%) strongly agreed while 8 (20%) agreed that NHIF

officials had adequately sensitized the public on NHIF, none of the respondents gave the response of no comment, 15 (37.50%) disagreed while 10(25%) strongly disagreed that NHIF officials had adequately sensitized the public on NHIF products. A majority 25(62.50%) of the respondents who were aware of NHIF disagreed that NHIF officials had adequately sensitized the public on NHIF. A minority 15(37.50%) of the respondents who were aware of NHIF agreed that NHIF officials had adequately sensitized the public on NHIF.

4.6 Health Insurance Legislations and NHIF remittance.

This section sought to present the influence of health insurance legislation on the sustainability to remittance to NHIF in Bomet Central Division. The health insurance legislation factors that were investigated were the monthly NHIF remittance rate, penalty on late payment and NHIF benefits to contributors.

4.6.1 The monthly NHIF remittance Rate and sustainability of remittance

The study sought to establish the views of the respondents on the NHIF remittance rate. This was in order to find out the capability of the respondents to contribute consistently to NHIF. The NHIF act gives the board in consultation with the minister powers to regulate the contributions payable to the funds without stipulating any bench marks to be followed in the contribution adjustment process. The respondents were asked to give their opinion on the NHIF remittance rate and their responses are illustrated in table 4.25.

Table 4.25: Opinion of Respondents on the current amount of NHIF remittance of Ksh. 160 per month

Response	Frequency	Percentage
Very low	0	0.00
Low	2	1.54
Average	19	14.62
High	37	28.46
Very high	72	55.38
Total	130	100.00

Out of the 130 respondents who participated in the study, none of them held the opinion that the NHIF monthly remittance rate was very low, 2(1.54%) were of the opinion that the NHIF remittance rate of Ksh. 160 was low, 19 (14.62%) indicated that the NHIF contribution rate of Ksh. 160 per month was average, 37(28.46%) held the opinion that the NHIF contribution rate was high and 72(55.38%) indicated that the NHIF contribution rate of Ksh. 160 was very high. A majority 109(83.85%) of the respondents were of the opinion that the NHIF contribution rate of Ksh. 160 per month was high while a minority 2 (1.54%) of the respondents viewed that NHIF contribution rate of Ksh. 160 is low. This revealed that the informal sector prioritized food, clothing, school fees and education in lieu of health care. Given the low and uncertain income in the workers' health care is not given precedence.

The study findings revealed that the NHIF contribution rate is viewed to be high by the majority of the contributors participants given that the majority earn between Ksh. 500-2000 a month, yet they have other basic needs to cater for. The study findings are in line with findings of a study conducted by Kyomugisha, et al. (2009) in Kampala to find out reasons behind lack of access to health care by the poor despite long existence of Community Based Health Insurance Schemes (CHI) in Uganda , which found that when the poor pay the same insurance premiums with no regard for age, gender and social status, these schemes and their practices are inequitable and contravene the notion of vertical equity in health care financing and provision. This is because the poor have greater health needs but less money to pay for them than the rich do. Those who can pay more should do so; in other words, the rich should pay higher premiums than the poor. Sufferers of chronic ailments such as diabetics and high blood pressure all have different health needs and so should get appropriate different care.

4.6.2 High Penalty imposed on late contribution to NHIF and sustainability of contribution to NHIF.

The study sought to investigate the respondents' views on the penalty imposed on late remittance payment to NHIF. This was in order to establish whether the penalty affected their consistent contributions to NHIF given its high rate. The NHIF act has stipulated a penalty for defaulting payment as stipulated in part III, section 18, subsection 1. It states that subject to the provisions of the act if a member fails to pay contributions in due time, a penalty equal to five times the amount of the contribution shall be payable by the member for each of the months paid late, and any such penalty shall be recoverable as a sum due to the fund, and when recovered shall be paid into the fund. The respondents were asked to give their views on the penalty imposed on late remittance to NHIF. The findings are summarized in table 4.26.

Table 4.26: Views on penalty imposition to late NHIF remittance

Response	Frequency	Percentage
Strongly agree	16	12.31
Agree	4	3.07
No comment	0	0
Disagree	92	70.78
Strongly disagree	18	13.84
Total	130	100

Source: Survey data

With regard to the attitude towards the penalty imposition on late payment to NHIF, out of the 130 respondents who participated in the study, 16(12.31%) strongly agreed while 4(3.07%) agreed that imposition of penalty on late contribution payment to NHIF should be upheld, none of the respondents had the response of no comment, 92 (70.78%) disagreed while 18(13.84%) strongly disagreed with the imposition of penalty on late contribution payment to NHIF.

A majority 110 (84.62%) of the respondents disagreed with NHIF penalty imposed on late payment. A minority 20(15.38%) of the respondents agreed that penalty should be imposed on late payment of remittance to the fund. This showed that the penalty was deemed to be very high and that there was a likelihood of people forgetting to pay the contributions by the due date for payment. Besides, one could lack money to pay to NHIF within the stipulated deadline for payment.

From the study findings, the penalty rate imposed on late remittance to NHIF is quite high and this discourages the majority of members from sustainable contributions to NHIF. The study findings are in line with a study conducted by Sakala (2011) on people's views about NHIF's benefits in Nandi, which revealed that the punitive penalty discouraged 80% of workers from continued membership.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains summary of findings, conclusion, recommendations, contributions to knowledge and suggestions for further research in the area of health insurance.

5.2 Summary of Findings

The study sought to find out factors influencing sustainability of workers remittance to NHIF in Bomet Central Division. The study revealed that a majority 108 (83.08%) of the workers were not contributors to NHIF. It was also noted that a minority 6(27.28%) of participants who were contributors to NHIF had contributed to the fund for a period of more than five years. The study found that gender is a contributor to the sustainability of contributions to the fund with all respondents 130(100%) concurring with the fact that women contribute religiously to any fund/ scheme that is geared towards assisting the family. It was noted that younger workers without family responsibility did not see sense of contributions to the fund. The study revealed that a majority 13(59%) of the more educated respondents were remitters to NHIF while a majority 78(72.22%) of the less educated people were non contributors to NHIF. It was also noted that large family sizes hinder consistent remittance to NHIF.

On the socio-economic front, it was found that most workers 41(31.54%) earned between k.shs 500 to k.shs 2,000 and a majority of respondents 87(66.92%) drew direct relationship between levels of income and ability to consistently contribute to NHIF. About 123(94.62%) were in agreement that Bomet Municipal Council levies were an impediment to the contributions of NHIF. They said that the levies overload and don't give space to address NHIF contributions. NHIF scheme was seen as a less preferred choice to solve medical

problems with a majority preferring alternative herbal medicine. The study revealed that a majority 11(50%) of NHIF remitters preferred paying monthly contributions to NHIF. HIV/AIDS was also found to incapacitate contributors by being very ill and by overburdening with heavy responsibility of dealing with and taking care of orphans.

Electronic media (radio and television) were found to be responsible for sensitizing majority 22(55%) of the sensitized respondents. Friends and relatives 10(25%) were also found to be a push towards public sensitization where as print media and seminars were only responsible for the sensitization of 6(15%) and 2(5%) respondents respectively. NHIF officials are viewed by majority 25(62.5%) of sensitized respondents as doing very little to sensitize the public on various NHIF products.

On health insurance legislation, the majority of the respondents 109(83.84%) were of the opinion that the contribution rate of kshs. 160 per month was very high with 19(14.62%) reporting that the rate was average. The majority of respondents 110(84.62%) said that the punitive penalty discouraged them from continued contribution. With regard to the benefits of NHIF membership, 16(72.73%) of the NHIF contributors said that suitable membership to NHIF was beneficial compared to their remittance.

5.3 Conclusion

The study found that a majority of the workers participants are not contributors to NHIF. The few workers participants who were contributors to NHIF had contributed to NHIF for a period of less than five years. The study revealed that women are better contributors to health insurance than men. Women contribute consistently to insurance schemes than men who mainly default. Age also influences contributions to health insurance schemes. Young workers who are healthy see no sense to contribute to health insurance. Large family sizes hinder the workers remittance to NHIF because they are left with little disposable income for health care.

Low income among the most workers hinders consistent contributions to NHIF. Due to high cost of living, workers cannot satisfactorily meet their basic needs including provision of health care. HIV/AIDS incapacitates infected workers thus making it very difficult for them to continue with their remittance and also creates a high magnitude problem of orphanhood. Most workers who are taking care of orphans have another burden thus leading to inability on their side to remit continuously to the NHIF scheme.

Electronic media and grapevine are the main media that workers have come to know of NHIF. Seminars and advertisements on print media only reach the educated workers. NHIF officials do very little to reach the workers and that is the reason why majority of the workers are simply aware of its existence but know very little about its products.

Some legislation that regulates the working of NHIF has not encouraged workers to contribute sustainably to NHIF, remittance rate of kshs. 160 per month to one who earns kshs 167 per day is not little money. The punitive penalty imposed on late payment to NHIF also bars the workers from continued membership. Though there are legislations in relation to benefits that attract continued membership of workers to NHIF. The benefits of NHIF are immense compared to the contribution rate.

5.4 Recommendations

This section gives recommendations from the researcher and respondents on how to encourage workers to join the NHIF scheme and continue in a sustainable and predictable manner with their contributions so that it would benefit all contributors and make the scheme sustainable.

5.4.1 Harnessing Informal Sector Demographic Characteristics to Boost Membership and remittance

The NHIF management should initiate programmes targeting every age group of the workforce. Different health insurance packages should be designed to entice different age groups among the workers. Since women contribute more consistently than men, NHIF inspectors should ensure that all women they come by should be sensitized and convinced to register to the scheme.

Since a great percentage of workers in the sector do not have secondary school education, as a corporate social responsibility, NHIF should initiate craft courses and alongside artisan curriculum, a comprehensive study on NHIF programmes and benefits should be done and taught to make the workers completely internalize the knowledge of the scheme and its benefits.

NHIF inspectors who target families should identify household heads as entry points to family insurance cover. Husbands, single men and women, divorcees, widows and widowers who have taken up the role of being the family head/household heads should provide the entry point upon which the family planning sensitization programmes should be instituted to help young men and women have families of small and manageable sizes to avoid overstressing family resources.

5.4.2 Addressing Informal Sector Socio-Economic Challenges to Enhance sustainability of NHIF remittance

NHIF should partner with medium financial institutions like Kenya Women's Finance Trust, Faulu Kenya and CIC to mobilize and sensitize the workers on financial management. The medium financial institutions could lend annual NHIF premiums to their members and deduct small amounts daily for recovery. Revolving funds among workers should be modeled

to accommodate weekly contributions of Kshs. 40 to NHIF. As funds revolve, members should be sensitized on the benefits of contributing Kshs. 40 towards NHIF. NHIF should identify community based organizations for recruitment of workers and enforcement of consistent contributions to NHIF. This is practicable as the CBOs are based on the grass root levels hence they know the villagers and can sensitize them on the products of NHIF and make follow up on their remittance.

5.4.3 Improving Sensitization Programmes to Reach all Workers

According to the findings, electronic media (mainly the radio and television) is accessible to most workers. NHIF should organize regular sensitization programmes in all vernacular, national and other popular radio channels. Sensitization programmes should be modeled to take care of tastes of different age groups. Plays, comedies, documentaries and general advertisement should be used to target as many potential members as possible from the informal sector. NHIF should invest massively in these programmes since they reach almost everybody within the country. Awareness seminars should be organized to target a particular section of the informal sector from an identified area. As many workers as possible should be encouraged to participate in these seminars to improve their knowledge on NHIF products.

5.4.4 Enactment of Legislations Encouraging Membership and Consistent Contributions to NHIF

To finance their contributions to NHIF, a legislation should be enacted mandating financial institutions to offer loans and factor in health insurance during repayment. Banks and financial institutions should be allowed to include into their ledger fees contributions to NHIF for those workers who do not have any health insurance. Loans and other banking

products should be designed to include health insurance as extra benefit to attract more informal sector workers.

To compel parents to insure their families with NHIF, parents should produce NHIF cards before enrolling their children to schools both at primary and secondary levels. A parent who wishes to enroll his/her child to school should buy premiums from NHIF equivalent to a specified total remittance enough to insure that child and other members of the family. When the child enrolls for class eight exams or form four exams, NHIF should provide a document showing proof that parents have been contributing duly to NHIF. The penalty rate should be reduced to encourage the informal sector to continue with membership after defaulting.

5.5 Contribution to New knowledge

This study has contributed a lot to the body of knowledge. It has looked at various factors influencing sustainability of remittance to NHIF. The study explained reasons behind poor contributions of workers to NHIF and made appropriate recommendations. Table 5.1 shows how the study has contributed to the body of knowledge in view of objectives.

Table 5.1: Contribution of the Study to Body of Knowledge

Objectives	Contributions
To determine the extent to which demographic characteristics influence sustainability of workers remittance to NHIF.	The study showed that age, education, gender and family size influenced remittance to NHIF
To examine how socio-economic factors influence the sustainability of workers remittance to NHIF.	The study showed that the level of income had an influence on the ability of workers to contribute to health insurance consistently.
To examine the level at which	The study showed that sensitization of the

Sensitization on the NHIF programme influences sustainability of workers remittance to NHIF.

To establish the extent to which health insurance legislation influences the sustainability of the workers contributions to NHIF.

workers on the NHIF programme influenced consistent remittance to NHIF.

The study revealed that the NHIF monthly contribution rate of Kshs160, the benefits of NHIF and the penalty imposed on remittance to NHIF influenced the informal sector's consistent remittance to NHIF.

5.6 Recommendations for Further Research

The following topics were suggested for further study:

- a) Impact of computer base Information System in the Management of NHIF operations.
- b) Need for accountability: study into the management of funds contributed by the informal sector.
- c) Challenges facing the implementation of increment of NHIF contribution rates to offer out patient services.

REFERENCES

- Abasiokeng, E.M. (1981). Familism and Hospital Admission in Rural Nigerian: A Case Study
Soc, Sci and Med. 15 B No. 1 pp. 45-47.
- Abel-Smith, B., Rawal, P. (1994). Employer's willingness to pay the case for compulsory
health insurance in Tanzania. Health policy and planning 409-418.
- All American Life Insurance Company (2010).(n.d)
- Andersen, H.A., and Schwarze, J. (1998). GKV 97: Statutory Health Insurance 1997: Is there
movement in the landscape. An empirical analysis of decisions to change sickness
funds. In Arbeit and Sozialpolitik,52 (9/10):1-23.
- Arhin, D.C. (1996). Health Insurance Demand in Ghana: Contingent Valuation. Conference
Paper presented at the International Health Economics Association (IHEA)
Conference, Vancouver, Canada.
- Atim, C. (1998). Contribution of Mutual Health Organizations to Financing. Delivery and
Access to Health Care: Synthesis of Research in Nine West and Central African
Countries. Technical Report No.18 Partnership for Health Reform Project, About
Associates Inc. Bethesda MD.
- Barlett, J.E., Kotrlik, J.W., & Higgins, C.C. (2001) Organization Research: Determining
Appropriate Sample Size. In Information, Learning and Performance Journal, Volume
19, NO 1, Spring 2001.
- Behrman, J., & Knowles, J. (1999). The Demand for Health Insurance in Vietnam. Mimeo.
- Bethune, X., et al. (1989). Health Policy and Planning. The Influence of an Abrupt Price
Increase on Health Services Utilization: Evidence from Zaire.
- Biheri, M.D. (2010). Cost of Health Insurance: What Determines Your Cost and What the
Average American Pays. Retrieved May, 25, 2011 at <http://www.About.com>

- Booth, D., et al. (1995). *Coping with Cost Recovery*. Report to the Swedish International Development Authority, Development Studies Unit, Dept of Anthropology. Stockholm; Stockholm University,
- Busse, R. (2001). Risk Structure Compensation in Germany's statutory health insurance. *European Journal of Public Health* 11(2) 174-177.(n.d)
- Carrin, G., & James, C. (2005). *Key Performance Indicators for the Implementation of Social Health Insurance*. *Applied Health Economics and Health Policy* forth coming.
- Castro-Leal, F., et al. (2000). Do the poor benefit? Public spending on health in Africa.
- Clifford, G.H. (2008). "Sustainable tele Marketing? A new theory of consumer behavior." *Direct marketing: An International journal* Vol. 2 issue: 2; pp 111- 124.
- Collins, D.L, & Leibbrandt, M.(2007). *The Financial Impact of HIV/AIDS on Poor Households in South Africa*, *AIDS* 21: Supplement 7.
- Conn, C.P., Walford, V. (1998). *An Introduction to Health Insurance for Low Income Countries*. Health Systems Resource Centre. Department for International Development, London.
- Coughlin, P., & Ikiara, G. (Ed.). (1996). *Kenya's Industrialization Dilemma*. Nairobi. Heinemann Kenya.
- Creese, A. Benneth, S. (1997). *Rural Risk Sharing Strategies*. In: Schieber G. (ed). *Innovations in Health Care Financing, Proceedings of a World Bank Conference, March 10-11. 1997, Washington D.C.*
- Criel, B. (1998b). *District-based Health Insurance in Sub-Saharan Africa. Part 1: Case-studies*. *Studies in Health Services Organizations and Policy* 10. Antwerp.
- Cutler, D., & Lleras, M. A. (2006). "Education and Health, Evaluating Theories and Evidence". National Bureau of Economic Research, Working Paper 12352. June.

- Dalen, D.B. (1979). *Understanding Educational Research. An introduction.* New York MC Grohill, Inc.
- Drechler, D., & Jutting, J. (2005). Private health insurance in low and middle –income countries Scope limitation and policy responses. Paper presented at the Wharton impact conference on Voluntary Health Insurance in developing countries. March, 2005.
- Edna, A. (2010). How Best to Reform Kenya’s Health Insurance System; The Standard Newspaper 28th October, 2010 Nairobi, Kenya.
- Elo, T.I., & Samuel, H.P. (1996). “Educational Differentials Immortality: United States 1975 – 1985”. *Social Services and Medicine* 42 PP 47 – 57.
- ESCR, (2008). *Economic Social and Cultural Rights: Questions and Answers.* Amnesty International. Retrieved June 6, 2008 at [http://:www.amnestyinternational.org](http://www.amnestyinternational.org).
- Fuch,V.R.(1996).*Individual and Social Responsibility :Child Care, Education, Medical Care and Long Term Care in America.* Chicago; University of Chicago.
- Gay, L.R. (1976). *Educational Research competencies for Analysis and Application.* Ohio: Charles E. Merrill.
- Griffin, C. (1992). *Health Care in Asia: A Comparative Study of Cost and Financing.* World Bank Regional and Sectoral Studies Washington D.C.
- GTZ. (2005).*Social Health Insurance: A contribution to the international development policy on universal system of social protection.* Eschborn, Germany; GTZ
- Health Resources. (2010). (n.d)
- Himmelstein, D.E. (2007). *Medical Bankruptcy in the United States; Results of a National Study / New bankruptcy study.* *American Journal of Medicine* May 2009.
- HM Treasury. (2007). "Budget 2007" Complete Report 1757pdf (PDF) p. 21 Reviewed in 2007 Retrieved in 2011.

- Hinton, P.R. (1995). *Statistics Explained. A guide for Social Science Students*. London: Routledge.
- ILO. (1972). *International Labour Organization: Employment Incomes and Equality. A Strategy for Increasing Productive Employment in Kenya*. Geneva: International Labour Office.
- Kimani, D. N., Mutheka, D. I.& Manda, D.(2004) . *Health Financing through Health Insurance in Kenya*. Social Sector Division Kenya Institute for Public Policy Research and Analysis. *A shift to a National Social Health Insurance Fund*.
- King, K. (1997). *The African Artisan Education and Development in an Informal Economy, 1970 -1995* Nairobi East African Educational Publishers.
- KIPRA. (2004). *Health care Financing Through health insurance in Kenya* .Kenya Institute for Public Policy Research and Analysis. *The shift to a National normal social Health Insurance Fund*.
- Kothari, C.R. (2004). *Research Methodology Methods and Techniques 2nd* (ed) Delhi, India: New Age International (P) Ltd.
- Kutzin, J. (2001). *A Descriptive Framework for Country Level Analysis of Health Care Financing Arrangements*, *Health Policy* 56(3):171-204.
- Kyomugisha,E.L., Buregyeya,E., Ekirapa, E., Mugisha,J.F.&Bezayo,W.(2009).*Strategies for sustainable and equity of prepayment health schemes in Uganda*. In *Journal of African Science*, 2009, October; 9(S2):S59-S65. Kampala; Makerere University.
- Laursen, M., Gertsen, F.& Johansen, J. (2003). "Applying Lean Thinking In Hospitals- Exploring Implementation Difficulties." Paper Presented at Warwick
- Lillrank, P. (2003). "Patient in Process," *The Finnish Medical Journal* (in finish), Helsinki, The Finish Medical Association, Manh pp 309-11.
- Lleras, M.A. (2001). "The Relationship between Education and Adults Mortality in the US". Working Paper, Centre for Health and Well Being, Princeton University. May.

- Mark & Stanton, M.A. (2004). *Employer-Sponsored Health Insurance: Trends in Cost and Access*. Washington; Agency for Health Research and Quality.
- Medearis, A & Hishow, O.N., (2010). *Narrowing the Sustainability Gap of EU and US Health Care Spending*. Working Paper FG1, 2010/05, August 2010. SWP Berlin
- Mou, J., Cheng, J., Zang, D. & Griffiths, S. (2009). *Health Care Utilization among Shenzhen Migrant Workers: does being insured make a difference*. Retrieved April, 10, 2011 at <http://www.creativecommons.org>
- Mugenda, O. M. & Mugenda, A.G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi; African Centre for Technology Studies (ACTs) Press.
- Muller, J. & Schneider, W. (1999). *Trends in membership herds contribution rates, type of insurers and risk adjustment transfers during the period of insurers competition-empirical findings in the third year of fund choice 53(3/4):20-39*. (Arbeit Und Sozialpolitik).
- Musau, S. (1999). *Community Based Health Insurance. Experiences and Lessons Learned from East Africa* Technical report No. 34 Partnerships for Health Reform Project, Abt Associates Inco. Bethesda MD.
- NHIF News (2011). (n.d).
- NHIF Business Development and Research. (2009). *History of NHIF in Kenya*. In NHIF Historical Journal. Nairobi; BO&R.
- Nyonator, F. & Kutzin, J. (1999). *Health for some? The effects of user fees in the Volta region of Ghana*. *Health Policy and Planning* 14 (4) 329-341.
- Orodho, A.J. (2003). *Essential of Education and Social Sciences Research Methods*. Nairobi: Masola publishers.
- Oso, Y.W. & Onen, D. (2008). *A General Guide to Writing Research Proposal and Report. A Handbook for Beginning Researchers*. East African Institute of Higher Education Studies and Department, Makerere University Kampala Uganda.
- Raman, S.J. (Ed.). (1991). *The Urban informal sector in the Developing countries Employment, poverty and Environment*. Geneva ILO.

- Rasmussen, L. (1992). *The Local Entrepreneurial Milieu: Enterprise Networks in small Zimbabwean Towns*, Copenhagen: centre for Development Research, Roskilde University.
- Ravallion, M., Shaohua, C., & Changraula, P. (2007). "New Evidence on the Urbanization of Global Poverty". Policy Research Paper No. 4199, World Bank, Washington DC.
- Sakala, H. (2011). Marketing NHIF in Nandi. In NHIF News Issue No 27. Nairobi; NHIF Publications.
- University of Colombia. (2010). *Study Of Life Expectancy and Provision of Health Care*. USA; University of Colombia
- UNSEA. (2007). *Participatory Governance and Citizen Engagement in Policy Development, Service Delivery and Budgeting*. United Nations Social and Economic Affairs.
- Vogel, R.J. (1990). *Health insurance in Sub-Saharan Africa: a survey and analysis*. Africa Technical Department of the World Bank. Washington, DC.
- Wagstaff, A., Van Doorslaer, E., Van der Burg, H., et al (1999). Equity in the Finance of Health Care. Some further international comparisons; *Journal of Health Economics*, 18 (3):263-90.
- WHO. (2000). *Measuring Performance*. World Health Report 2000-Health Systems: Geneva.
- WHO. (2004). *Statistical Information System: Core Health Indicators: Germany*; WHO.
- World Bank. (1994). *Better Health in Africa. Experience and Lessons Learned*. Washington D.C.
- Cherly, Y. (2007). *Housing Microfinance: Designing a product for the rural poor*, Institute for financial management and research, centre for microfinance working paper series No. 19.
- Ziemek, S., & Jutting, J. (2000). *Mutual Insurance Schemes and Social Protection. An Overview*. Mutual Insurance Schemes and Social Protection: An Overview ILO-STEP Research group on Civil Society and Social Economy. Paper 2 International Labour Organization: Geneva

Appendix I: LETTER OF TRANSMITTAL

**KIPYEGON WESLEY LANGAT,
UNIVERSITY OF NAIROBI,
BOMET CENTRE.**

8TH OCTOBER 2012

TO

PARTICIPANT CODE [] [] []

Dear Sir/Madam

REF: RESPONDENT'S PERMISSION TO BE PART OF THE STUDY

I refer to the above stated matter and I submit a questionnaire in support of a research work entitled "Factors influencing sustainability of remittances to National Hospital Insurance Fund by workers in informal sector in Bomet Central Division, Bomet County." To be done as a requirement for the award of the degree of Master of Arts in project Planning and Management of University of Nairobi.

Your participation in answering simple questions in the easy questionnaires shall be appreciated and kindly note that any information thereto shall be held with high confidentiality.

Thanking you in advance.

Yours faithfully,

KIPYEGON WESLEY LANGAT

Appendix II: Questionnaire for Informal sector Workers

Participant code: [] [] []

Please answer the following questions either by ticking an appropriate box or by providing an appropriate answer where no box is provided. The questionnaire has a likert scale whose measurement scale is as follows: 5= Strongly Agree; 4= Agree; 3 = No comment; 2= Disagree and 1 = Strongly Disagree

SECTION A: BACKGROUND CHARACTERISTICS

1. Gender of Respondent

Male Female

2. Age of participant

18 – 25 Years 26 – 35 Years
 36 – 45 Years 46 – 50 Years
 Above – 56 Years

3. What is your highest level of education?

Below primary Primary
 Secondary College
 University

4. Please indicate your level of agreement to the following statement:

Education has an influence on the consistent contributions towards NHIF.

The measurement scale is 5 = Strongly Agree; 4= Agree; 3 = No comment; 2 = Disagree; 1 =

Strongly Disagree

Strongly Agree Agree
 No comment Disagree

Strongly Disagree

5. How many members belong to your Family?

2 – 4

5 – 9

10 – 14

Above 15

6. In your own view, do you think a big family size affects regular contributions to NHIF?

7. a) Are you an NHIF contributor?

Yes

NO

b) If yes in question (7) above, for how long?

1-5 years

16-20 years

6-10 years

Above 21years

11-15 years

SECTION B: SOCIO – CULTURAL FACTORS

8. State type of Business you are engaged in

Transport

Dress and garment making

Hair dressing

Wood and furniture making

Metal / Blacksmiths

Motor vehicle

Mechanics

General Groceries

Any other (Specify) _____

9. State your level of income (in Ksh.)

Below 500

501-2000

2,001-4000

4001-6000

Above – 6,000

10. Applying to the key provided, please indicate your extent of agreement or disagreement to the following aspects on the influence of socio-economic factors on sustainability of informal sector's contribution to NHIF. Tick in the appropriate box.

5 = Strongly Agree; 4= Agree; 3 = No comment; 2 = Disagree; 1 = Strongly Disagree

	5	4	3	2	1
There is a relationship between income and consistent contribution to NHIF					
Municipal council levies on informal sector business affect one's ability to contribute consistently to NHIF					
Alternative or herbal medicine has made the informal sector workers see no need for NHIF contribution					

11. If you are a member of NHIF, which frequency of contribution payment to NHIF do you prefer?

- Monthly Quarterly
 Half Yearly Yearly

Explain your answer. -----

12. How has HIV /AIDS affected your ability to contribute consistently to NHIF?

SECTION C: LEVEL OF SENSITIZATION

13. Do you know NHIF?

- Yes No

14. How did you know about NHIF

- Electronic Media Print Media
 Friends Seminars
 Any other (specify)

15. Please indicate your level of agreement/disagreement to the following statement:
NHIF officials have adequately sensitized the public on NHIF products.

5 = Strongly Agree; 4 = Agree; 3 = No comment; 2 = Disagree; 1 = Strongly Disagree

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Strongly Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> No comment | <input type="checkbox"/> Disagree |
| <input type="checkbox"/> Strongly Disagree | |

SECTION D: HEALTH INSURANCE LEGISLATION FACTORS

16. How do you rate the contribution rate of Kshs. 160 per month towards NHIF?

- | | |
|------------------------------------|-------------------------------|
| <input type="checkbox"/> Very low | <input type="checkbox"/> Low |
| <input type="checkbox"/> Average | <input type="checkbox"/> High |
| <input type="checkbox"/> Very high | |

17. Please indicate your level of agreement/disagreement to the following statement:
Penalty imposition on late payment to NHIF which is five times the standard contribution should be upheld by NHIF.

5 = Strongly Agree; 4 = Agree; 3 = No comment; 2 = Disagree; 1 = Strongly Disagree

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Strongly Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> No comment | <input type="checkbox"/> Disagree |
| <input type="checkbox"/> Strongly Disagree | |

18. Have you ever benefited from NHIF?

Yes No

b) If yes in question 3 above, what was your experience of the comprehensive cover offered by NHIF?-----

Appendix III: Table for Determining Sample Size from a given population

Population size	Sample size
10	10
20	19
30	28
40	35
50	44
60	52
70	59
80	66
90	73
100	80
150	108
200	132
250	162
300	169
400	196
1500	306
2000	302
3000	341
4000	351
5000	357
6000	361
7000	364
10000	370
20000	377
50000	381
100000	384

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Source: R.V. Krejcie and D. Morgan (1990), determining sample size for research activities Educational and psychological measurement.



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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

When replying, please quote

NCST/RRT/12/1/SS-016/149/2

19th July 2012

Our Ref:

Date:

Kipyegon Wesley Langat
P.O. Box 179
Bomet

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on **“Factor influencing sustainability of remittance to National Hospital Insurance fund by workers in informal sector**, I am pleased to inform you that you have been authorized to undertake research in **Bomet Central, Division, Bomet County, Kenya** for a period ending *November*

You are advised to report to the **District Commissioner & the District Education Officer, Bomet County, Kenya** before embarking on the research project.

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

P.N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
Bomet Central, Division Bomet.

The District Education Officer
Bomet Central, Division Bomet