

**DEMOGRAPHIC FACTORS INFLUENCING THE UPTAKE OF COMMUNITY
BASED HEALTH FINANCING SCHEMES IN MATHARE VALLEY, NAIROBI
COUNTY, KENYA.**

BY

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

2013

DECLARATION

This research report is my original work and has not been submitted or presented in any university or any other institution of higher learning for examination.

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

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.....

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DEDICATION

This work is dedicated to my fiancée Margaret, my mum and my three brothers; George, Bernard and Gilbert.

ACKNOWLEDGEMENT

The task of producing this research project would not have been successful without the support, both material or otherwise, of several parties to whom I am greatly indebted.

Great credit goes to my Supervisor Dr. Lillian Otieno. She has been there for me for guidance, consultation and support in enabling me come up with this research project report despite her other immense commitments elsewhere which similarly demanded for her full attention.

I sincerely thank all lecturers and staff of University of Nairobi, Nyeri Extra Mural Center for their availability, support and kindness throughout my Masters Degree course.

Special thanks go to all those who in one way or another participated in the task of producing this research project for their willingness to respond positively to my suggestions, comments and questions. My friends' guidance and encouragement too, is not an exemption for the success of this project report. Kind regards to the Masters of Project Planning and Management classmates, for their continuous academic and psychological support during the research seminars and seeing me through successfully the project writing.

Lastly, I would like to thank my family, for their support and being my source of encouragement throughout my studies. You have been a great inspiration and I will forever be grateful for all that you have done.

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ABBREVIATIONS AND ACRONYMS

CBHF:	Community Based Health Financing
CHF:	Community Health Fund
CORATA:	Christian Organizations Research and Advisory Trust for Africa
DRC:	Democratic Republic of Congo
GOK:	Government of Kenya
HSSF:	Health Sector Services Fund
HMO:	Health Maintenance Organisation
ILO:	International Labour Organisations
IRA:	Insurance Regulatory Authority
JBT:	Jamii Bora Trust
JBHI	Jamii Bora Health Insurance
KCBHFA:	Kenya Community Based Health Financing Association
KFW:	Kreditanstalt fur wiederaufbau
MFI	Microfinance Institution
MOH:	Ministry of Health
MOPHS:	Ministry of Public Health & Sanitation
NCPD:	National Council for Population and Development
NGO:	None Governmental Organization
NHA:	National Health Accounts.
NHIF:	National Hospital Financing Fund
NHIS:	National Health Insurance Scheme
OBA:	Output Based Approach Reproductive Health Voucher
OOP:	Out-of-Pocket
PHRplus:	Partners for Health Reformplus
SAP:	Structural Adjustment Programs
SPSS:	Statistical Package for the Social Sciences
SHI:	Social Health Insurance
TPA:	Third Party Administrator
UCBHFA:	Uganda Community Based Health Financing Association
UNICEF:	United Nations Children's Fund
USAID:	United States Agency for International Development
UTM:	Union Technique de la Mutualité Malienne

WHO: World Health Organization
WTP: Willingness-to-pay

ABSTRACT

Following the shift in policy as a reaction to Structural Adjustment Programs (SAPs) in the 1990s, the government of Kenya introduced user fee in hospitals which was later seen as undesirable as it led to low facility utilization, discrimination against the poor hence resulting to advocacy for its removal. User fees and other out of pocket (OOP) payments have impacted negatively on utilization of health care services in Kenya and the majority of the population cannot afford to pay for health care. Those who pay for care incur high costs that are sometimes catastrophic and adopt coping strategies with negative implications for their socio-economic status, while other simply fails to seek care. Inability to pay the OOP payment expenditure required to access health services is one of the main impediments to access healthcare particularly for the poor and the vulnerable. As a result to this, there emerged increase in Community Based Health Financing (CBHF) schemes initiative as an alternative to health financing. However, the enrollment has ever remained low among the target group. The researcher in this study endeavors to assess the influence of demographic factors on the uptake of community based health financing schemes in the Country. These CBHF schemes in Kenya are registered under the Ministry of Gender and Youth. The objectives of this study are to establish how biological factors, level of education, socio cultural factors and the level of income influences the uptake of CBHF in Mathare valley, Nairobi County. The study reviews relevant literature by various researchers and institutions on biological factors, level of education, socio cultural and level of income and their influence of the uptake of the CBHF. A sample of 372 individuals was randomly selected using a stratified sampling. Questionnaires with both closed and open ended questions were used to collect data from the respondents. Observation and interview methods were also be applied in the process. The study also used both primary and secondary data available for the purposes of acquiring information and for triangulation. In analyzing the data it was refined and cleaned to eliminate any unwanted information, then coded and classified into categories. Findings were then presented in tables and figures and then interpreted. The study revealed that age and gender, education and income level did really to a great extent influence the uptake of CBHF unlike socio cultural factors that influence the uptake to very small extent. The study recommends that there is need for a policy to make the CBHI increase the uptake in order to take advantage of economic of scale, to provide the people with an accessible, affordable, and reliable health insurance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the increasing concerns on promotion of universal health globally has been financing for more than 1.5 billion poor people who live in low and middle income countries (WHO, 2000). A large percentage of the poor lack access to effective, affordable medical care because of weakness in the financing and delivery of health. According to WHO (2000) 150 million people in 44 million households worldwide every year face financial ruin as a direct result of large medical bills. Policymakers have assumed until recently that poor families in developing countries whose survival is vicarious would not pay health insurance premiums, even to forestall the cost of future hospitalization (WHO, 2000). However, the emergence and thriving of community based health financing (CBHF) have proved that the poor, if empowered, can participate in sustainable health schemes. Well organized and sustained small CBHF schemes can develop to strong and acceptable social health insurance system. This is true of the health insurance systems currently operating in Germany, Japan, and Korea. Today's CBHF schemes are operated in a manner similar to the friendly societies which existed in large numbers in the United Kingdom during the 19th century.

The CBHF aims to empower communities to meet their health financing needs through pooling of resources to pay for health care as a group. The schemes share the goal of finding ways for communities to meet their health financing needs through pooled revenue collection and resource allocation decisions made by the community (Bennett and Ngalande, 2004). Schemes employ a variety of financial structures including insurance, prepayment, and credit schemes with premiums ranging from a once per- annum payment during harvest season to a monthly or quarterly fee (Carrin, Waalkens and Criek, 2005). The CBHF schemes can act as a resource to pay for services through a community fund or can be facility-based (Michelle and Ming-ruchu, 2006).

User fees and other OOP payments have impacted negatively on utilisation of health care services in Kenya (Mwabu, 1986). The majority of the population cannot afford to pay for health

care, the poor are less likely to utilize health services when they are ill, and wide disparities in utilization exist between geographical regions and between urban and rural areas (MoH, 2009). Socio-economic and geographic inequities are wider for inpatient care than outpatient care. Those who pay for care incur high costs that are sometimes catastrophic and adopt coping strategies with negative implications for their socio-economic status, while other simply fails to seek care (Chuma, 2007).

Inability to pay the out-of-pocket (OOP) payment expenditure required to access health services has been touted as one of the main impediments to access healthcare particularly for the poor and the vulnerable. OOP payments create financial barriers that prevent millions of people each year from seeking and receiving needed health services (Alexander, Jack, & Melitta, 2002). Household expenditure may account for great proportion total health expenditures due to high user charges in both public and private health facilities.

Today's Social Health Insurance (SHI) systems in Germany, Japan, and Belgium, and tax-based financing scheme in Britain grew out of small-scale community-based on schemes that would meet the definition of CBHF (Carrin, 2008)

In Africa, as deduced from Table 1.1 below, very few schemes covering large populations or even just a high proportion of more limited subgroups exist. Low percentages of enrolment were observed in a study of five CBHFs in East and southern Africa (Musau, 1999). In the four schemes, enrolment percentages varied between 0.3 percent and 6.5 percent of the target population; one scheme was found to be quite small with only 23 members of a target population of 27 cooperative society members. In July 1999, a project was launched, establishing 54 CBHFs in three districts of Rwanda. By the end of the first year of operation, the enrolment rate in the three districts reached 7.9 % (Schneider & Diop, 2001). A study of four of 16 CBHFs in the area of Thies in Senegal indicated that in the year 2000, the average household enrolment percentage in these villages was 68 %, with enrolment rates varying between a minimum of 37.4 % and a maximum of 90.3 % (Jutting 2001).

Table 1.1 Schemes in East and Southern Africa and Democratic Republic of Congo

Scheme	Country	Number of People covered	% of target population covered
Chogoria	Kenya	1,400	0.3%
Kisiizi	Uganda	6,580	6.5%
Ishaka	Uganda	247	Not known
CHF	Tanzania	Approx. 32,000	5%
Atiman	Tanzania	27 families	85%
Mburahati	Tanzania	38,000	0.6%
Masisi	DRC	3,500	Not known
Bwamanda	DRC	80,000	66%
UMASIDA	Tanzania	6,000	< 1%
Kongolo	DRC	976	19.3%
Kasturba Hospital	DRC	19,450	74%

Source: Musau, 1999

According District Development Plan Nairobi North (2008-2012), Mathare is an informal settlement that is home to over 80,000 people confronting a range of challenges. It is one of the largest slums in Nairobi; a city where over half the approximately 3.5 million residents lives in over 180 different slums. Like many informal settlements, Mathare is characterized by unsafe and overcrowded housing, elevated exposure to environmental hazards, high prevalence of communicable diseases, and a lack of access to essential services, such as sanitation, water and electricity. The Residents frequently suffer from tenure insecurity, while widespread poverty and violence further increase their vulnerabilities.

From Table 1.1, it can be observed that the small size of CBHF schemes in Africa suggests that there are factors that impede individuals from enrolling and if CBHF aims to improve access to care for the poor then it is important to understand the reasons why poor households insure and address issues explaining why others remain uninsured. The target population of the CBHF is characterised by varying demographic factors namely gender, age, culture, religion, level of income, level of education, family size, marital status among others. In this study, the researcher

intends to review the influence of such factors of the target population on the uptake of the community based health financing schemes.

1.2 Statement of the Problem

One of the most urgent and vexing challenges faced by many developing countries is how to provide health care for poor people who live in rural areas or work in the informal sector. The burden of disease in these countries stands as a stark barrier to economic growth and therefore must be addressed frontally and centrally in any comprehensive development strategy. It is further argued that illness reduces not only welfare but also increases the risk of impoverishment due to high treatment expenditure in the absence of health Financing. Subsequently, households often resort to leave the illness untreated or resort to the use of low quality care or self-medication

There is a need for the health financing system to be developed within the particular macroeconomic, socio-cultural and political context of each country. It should create balanced incentives with regard to equity, efficiency, sustainability and quality of care. The collaboration between governments and development partners should follow internationally respected principles of the Paris Declaration of 2005 and thus ensure national ownership of the health development polices and processes, maximized use of limited resources and reduced transaction and management costs (Kampala Declaration, 2005).

In Kenya the principal Healthcare financing agents are the households which belong to the community based health financing schemes through out-of-pocket (OOP) payments (45%), followed by MOH, which handles (35%) of the total funds from the sources (National Council for Population and Development, 1999). Given the social, physical and demographical infrastructure, community based health financing schemes become an integral aspect of informal settlements. The socioeconomic status characterized by poverty, poor housing and inaccessibility to basic healthcare underpin the essence of assessing performance of community based health financing schemes. Community based health financing schemes endeavour to remedy poor healthcare status.

Following the shift in policy as a reaction to SAP in the 1990s MOH introduced user fee in hospitals which was later seen as undesirable as it led to low facility utilization, discrimination against the poor hence resulting to advocacy for its removal. As a result to this, there emerged increase in community based health financing schemes initiative with unclear regulating guidelines like the commercial ones. The premium structures not well designed and as to what extent it benefits the members in achievement of primary or universal health care (Croxon, 1999).

It can be noted here that most of the literature on CBHFs has been descriptive and isolated in terms of context. As illustrated in Table 1.1 above, studies have been comparative are not comprehensive in their outlook, viewing CBHFs from the process point of view as production systems. The literature has been keen to point out the coverage of CBHF at different schemes while wearing a blind eye on the characteristic of the target population. Thus, the literature reveals that there is an information gap on how demographic factors of a population influence the uptake of CBHF. In addition, CBHF schemes have not been embraced well by the most Kenyans as a way of solving the health needs. Many people still prefers OOP spending which is a major barrier for accessing healthcare services and drives households into poverty through sale of assets and diversion of meager income into healthcare services. Specifically, OOP expenditure in financing health care conflicts with livelihood strategies especially in the informal settlement in the city.

This study therefore aimed at establishing how the demographic factors influences the uptake of community based health financing schemes in order to recommend on policies and strategies of how more Kenyans can be brought on board to access this concept of what appears to be convenient and sustainable health funding solution.

1.3 Purpose of the Study

The purpose of the study was to investigate demographic factors and the uptake of community based health financing schemes in Mathare valley, Nairobi County, Kenya.

1.4 Objective of the Study

The study aimed at achieving the following objectives:-

- (i) To assess how biological factors of an individual influence the uptake of community based health financing.
- (ii) To establish the influence of the level of education on the uptake of community based health financing.
- (iii) To investigate the influence of socio cultural factors on the uptake of community based health financing.
- (iv) To evaluate how level of income influence the uptake of community based health financing.

1.5 Research Questions of the study

The study aimed at answering the following research questions:-

- (i) How do biological factors influence the uptake of community based health financing in Mathare valley?
- (ii) How does level of education influences the uptake of community based health financing in Mathare valley?
- (iii) How do socio cultural factors influence the uptake of community based health financing in Mathare valley?
- (iv) How does the level of income influences the uptake of community based health financing in Mathare valley?

1.6 Significance of the Study

The primordial purpose of this study was to provide the National and County governments with knowledge on the influence of the demographic factors and the uptake of the CBHF in Kenya. The policy makers can use the findings as reference for policy guidelines on management and development of CBHF schemes. The MOH will be able to use the finding of the study to

formulate viable health policy documents that effectively address factors inhibiting the uptake of CBHF among the target population.

The findings of this study will be used by CBHF management team in implementing workable strategies in an effort to ensure more participation and uptake of CBHF among the target group thus achieving the goals and objectives of the scheme. The finding will also enrich existing knowledge and hence will be of interest to both the researchers and academicians who seek to explore and carry out further investigations in this area.

1.7 Limitations of the Study

The area of the study is small considering that Mathare valley is an informal settlement zone covering an area of 0.737 square kilometer. The slum is densely populated as it has 130,000 persons per square kilometer as it lies approximately six kilometers to the northeast of Nairobi's central business district. Movement is expected to be constrained due to insecurity and inaccessibility during the study. The area being an informal settlement lacks official government recorded information as it is viewed as illegal settlement. Further, the target population is largely poor and the level of literacy is low and this might be a hindrance to questionnaire respondent. Provincial administration, security agencies and the local leaders were involved during the data collection stage to address the security challenges. The researcher conducted structured interview to supplement the data collected through questionnaire, this aided in gathering information even from the illiterate respondents.

1.8 Assumptions of the Study

This study assumed that the variables remained constant during the whole period of the study. It also envisages that the target population cooperate and that the respondents not conceal some information that they feel sensitive to reveal for security reasons.

1.9 Definition of Significant Terms

Community Based Health Financing: These are non-profit health insurance scheme for the informal sector, formed on the basis of an ethic of mutual aid and the collective pooling of health risks, in which members participate in its management.

Community participation: This is the process of involving the stakeholders from the community to organization's planning, decision making and implementation for the benefit of the scheme.

Education: This is highest attained level of education for instant primary level or tertiary level.

Employment: This is the source of income like employment and business which the members engage themselves in order to earn a living.

Enrollment: This is the official act or process of entering the community member's membership list of the CBHF.

Fund pooling: This is an accumulation of prepaid healthcare revenues, in health insurance contributions that can be used to benefit the members with an aim of sharing risk across the members, so that unexpected healthcare expenditure does not fall solely on a member of the CBHF.

Health care services: These are the products and services offered by the CBHF schemes

Income: This is the amount of money received by an individual over a period of time either as payment for work, goods, or services, or as profit on capital.

Premiums: A contribution to CBHF schemes as a one off payment

Uptake: This is the adoption and enrollment to CBHF scheme

Utilization This is the accessibility of services to members on time and impact caused by satisfaction.

1.10 Organization of the Study

The study was organized into sections and chapters. The first section was the preliminary which include the declaration, dedication, acknowledgement and the executive summary of the study. In the following section, it was divided into five chapters. Chapter one of the study was the introduction and background of the study. It also included the statement of the problem the significance research objectives and questions the study tried to answer. The limitations of the study are also addressed. Chapter two covers the literature review related to the area of the study while chapter three covers the methodology the study applied to attain the results. In chapter four data analysis, presentations and interpretation were be covered while chapter five covered the summary of findings, discussions, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to demographic factors and the uptake of CBHF. Theoretical literature mainly from text books, journals, magazines, press releases, internet and other literally materials are reviewed in line with the research objectives of the study in order to identify the knowledge gaps. A conceptual framework is also used so as to bring out the relationship between the independent variables and the dependent variable for the study.

2.2 The origin of the concept of CBHF schemes

Most of the CBHF schemes share certain basic features which includes community initiation and operation, voluntary membership, and prepayment membership contribution. Although the schemes have been considered as an innovative financing mechanism for the poor, it is not that new. Today's SHI systems in Germany, Japan, and Belgium, and tax-based financing scheme in Britain grew out of small-scale community-based on schemes that would meet the definition of CBHF (Carrin, 2008) In some Asian countries, such as Thailand and China, CBHF initiatives came about independently in the 1960s, 1970s, and 1980s to help fill gaps in coverage of public financing mechanisms. These schemes provided improved access to services and income protection measures for people in informal sectors in both rural and urban areas.

Germany, Japan Belgium and Britain have reached or almost reached universal coverage in terms of depth (benefit coverage) and/or breadth (population coverage) of the coverage. Rather than being locally initiated by the informal sectors in Asia, or by the associations of industrial workers or employers in Europe, CBHF schemes in Africa are mostly the imported interventions of foreign aid agencies or national governments (Criel, 1999) that are trying to mitigate the effects of increases in user fees for government health care services, collapse of government health care services in certain countries, and the difficulty of expanding formal health insurance to the informal sector. Both foreign aid agencies and national governments hope that CBHF will serve as a mechanism for the transition to universal coverage. However, no one society is same

as the other and the research intend to reveal some the demographic factors in an African establishment.

2.3 Community Based Health Financing in Sub-Saharan Africa

Many Sub-Sahara 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, fee-for-service model that involved active community participation (Musau, 1999).

Launched in Bamako, Mali by UNICEF and a group of African health ministers in 1987, the Bamako Initiative called for greater community involvement in health care at the local level. 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. In some ways, CBHF schemes can be viewed as a means of implementing one of the central tenants of the Bamako Initiative: Local community members should be involved in both the collection and control of revenue for health care (Musau, 1999).

During this same time period, some groups began to experiment with local health financing schemes in large part because of the breakdown in government health services and the need to find alternative ways to finance local health services. These schemes can be divided into three main categories: formal sector (often employment-related) schemes; clan or ethnic-based schemes; and provider community schemes. Note that schemes controlled by groups of rural community residents did not figure prominently in the programs developed until the late 1990s (Atim, 1998).

Despite the different analyses of the origins of community-based health financing, it is clear that from the early 1990s to the present there has been an exponential growth in the number of these organizations in Africa in general and in West Africa in particular (Ndiaye, Soors, and Criel,

2007). In Benin, Burkina Faso and Mali, the estimated number of community health Financing schemes was 24 in 1997, 71 in 2000, 128 in 2003 and 282 in 2006 (Ndiaye et al., 2007).

While the growth rate for these schemes has been impressive, it is important to keep in mind the small proportion of the population that is insured by them. For example, the estimated number of beneficiaries in Benin, Burkina Faso and Mali in 2006 was a little over half a million people out of a combined population of about 36 million in the three countries (Ndiaye et al., 2007).

Over the past two decades, CBHF schemes have emerged in West Africa and other developing countries as a means for low-income individuals to finance the cost of basic health services. Schemes are often organized by grassroots organizations that are intended to embody many, if not all, of the cooperative principles. In some instances, they have formed secondary-level CBHF associations, and have established alliances with public health agencies, private health providers, donors, and/or NGOs to further their goals of improving access to quality health care services for their subscribers (Bennett et al., 2004).

Although there does not appear to be a recent, systematic, cross-national inventory, available data indicate that there may be 1,000 or more CBHF schemes in West Africa. Most schemes in sub-Saharan Africa have relatively few members, with 95% of the schemes having less than 1,000 members (Ndiaye et al., 2007; Waelkens and Criel, 2004). While their small sizes limit the amount of risk-pooling that can be done, small CBHF schemes also have the benefit of having members that know each other and are actively involved in the management of the scheme (Ndiaye et al., 2007). The literature also indicates that three of the West African countries with the largest concentrations of these organizations are Benin, Burkina Faso, and Mali (Ndiaye et al., 2007; Waelkens and Criel, 2004). Each country has different models of CBHF schemes.

Mali was the first West African country with a legislative framework to govern micro health organisations, passed in 1997 (Huber et al., 2002). In Mali, schemes are influenced by the presence of the Union Technique de la Mutualité Malienne (UTM), a technical agency that serves as an interface between the government and the mutual movement in Mali, and that helps community groups establish CBHF schemes that are tailored to local needs (Ndiaye et al., 2007). The UTM gives support to all mutual groups who request technical assistance (Huber et al.,

2002). In 1999, the UTM developed Health Guarantees (GS), its own Financing product available in Bamako and a few regional cities offering four different types of benefit packages to the population: small risks, catastrophic risks, combination of small and catastrophic risks, and private financing (Huber et al., 2002). GS is administered at the central level and has an extensive marketing plan. An internal evaluation carried out in 2000 revealed that UTM succeeded in developing a mutualist movement in Mali, but the GS failed to attract a large number of members despite its high operating and administrative costs. Critics of the UTM also pointed out that premium rates for the GS were not affordable to Mali's large informal sector (Huber et al., 2002).

In Burkina Faso, CBHF schemes were initially led by health care providers, but are increasingly community-run (Ndiaye et al., 2007). In Benin, locally elected leaders have been actively involved in CBHF schemes (Ndiaye et al., 2007).

Critically looking at literature on strategies that are launched in cities of sub Saharan Africa, we realize that few, if any, uptake and growth of these initiatives. Bamako Initiative, for instance, launched by UNICEF called for greater community involvement in health care at the local level. Ndiaye et al., (2007) concentrates on the growth in terms of number of CBHFs in West Africa with little or no concern on their uptake and community. Bennett et al., (2004) examine CBHFs established alliances with public health agencies, private health providers, donors, and/or NGOs to further their goals of improving access to quality health care services for their subscribers.

The CBHF schemes studied were introduced with inadequate management training in the critical aspects of an insurance business such as risk management and marketing. Some of the earlier design problems encountered have been corrected but serious enrollment as management issues still remain to be addressed. External assistance has helped most of them to stay on track but there is need for internal capacity to be built up to deal with issues as they arise.

As CBHF schemes continue to grow in popularity, it will also be important to address the equity dimensions of these schemes. Coverage must be extended to the very poor when possible, and care must be taken to ensure that the establishment of the scheme does not have any adverse impacts on poor nonmembers (Bennett, 2004). The CBHF schemes could develop mechanisms

for external donors to channel funds to target the very poor, and government subsidies and/or philanthropic donations can be used to extend coverage to the very poor. Because of the small size and intimacy of most schemes, scheme members and managers know their communities and would be well-positioned to identify the poorest community members for targeting (Bennett et al., 2004).

To avoid individuals joining the scheme at the time of illness to reduce individual medical costs, some evidence suggests that interested members should be required to go through a waiting period to show that they are truly interested before receiving benefits (Huber et al., 2002).

In order for CBHF schemes to be sustainable, they must be integrated within the larger health system of a given country (Bennett, 2004). However, these schemes should not be viewed as a replacement for government-funded public health care, and more research is needed to optimize this balance (Huber et al., 2002). The role of the government and its development partners must be strategic and coordinated (Kelley, Diop, and Makinen, 2006). The government should not establish and manage CBHF schemes, but should rather assume a stewardship role, enable an environment conducive to CBHF, and develop appropriate legislative frameworks (Huber et al., 2002). Finally, if the CBHF model realize a rise in uptake, strategies to scale-up the model in a systematic fashion must be developed and draw upon the lessons learned from implementation of existing schemes. A research on the demographic factors of the existing schemes will shed some light on the challenges affecting the schemes.

2.4 CBHF Schemes in Southern, Central and Eastern Africa

In response to the structural adjustment programs engineered by the IMF and the World Bank (Huber, 1993), approximately 14 out of the 15 African countries surveyed by Gilson and Russell (1995) introduced user fees (or user charges), which are paid at the time of use to the provider who retains them partially or totally. These fees can be mere nominal amounts intended primarily to deter unnecessary service use by householders, or they can be more extensive, up to complete cost recovery. Thus, user fees have come to be seen as an important alternative to tax-based financing for government health services in Africa. In this regard, the goal was to introduce sector changes and use other incentive methods to ensure efficient delivery of health

services by health care providers. This has the intended goal of protecting society's most vulnerable. For example, in its goal to achieve equity, the Kenyan government introduced a policy directive that exempted the poor (Wang'ombe *et al.*, 2002). The second model is the Bamako Initiative – widely used in Tanzania through a community financing program. The aim is to “revitalize the public sector health care delivery system by strengthening district management teams and capturing some of the resources the people themselves are spending on health” (Panos Report, 1994). This particular approach recognizes the importance of community involvement and health service decentralisation. As clearly documented user fees are highly regressive. It is more of a problem for the group supposed to benefit from the service since it has a negative income effect on the poor. As Criel (1998, p. 40) noted: “User fees create particular problems for farmers for whom income is highly seasonal.” In both Tanzania and Uganda, user fees have been associated with a decline in hospital and clinic use. Only private and mission sectors are currently charging in Uganda, which reduces the prima facie case for social health insurance (SHI) to protect against financial risk and catastrophic costs.

An alternative proposed in several African countries has been the implementation of a nationwide SHI scheme. While several African countries have explored the scheme's modalities, only Kenya has experience in implementing it. In 1967, Kenya passed its original legislation for the establishment of a government-operated health financing scheme – the system of National Hospital Financing Fund (NHIF), to cover hospital services. Under this system, NHIF operates as a traditional Financing, which serves as a third-party payer to certified institutions on a fee-for-service basis for inpatient drugs and medical services given to persons insured by NHIF. While NHIF has successfully pooled risks for a significant portion of middle and upper-middle income Kenyans, it has not been able to expand its coverage to include more Kenyans. The scheme also suffers from poor management and rampant corruption. It is estimated that less than 70 percent of expected revenue is received by NHIF. According to Wang'ombe *et al* (2002), this and other financing schemes cover roughly 20 percent of the population. Furthermore, only 3 percent of Kenyan households use financing to pay for medical care. Patients also reported that they were generally dissatisfied with the services provided under this scheme.

In 1999, the Rwandan Ministry of Health instituted a CBHF pilot test in three districts. In order to collect lessons for policy development, the Ministry collaborated with the Partnerships for

Health Reform project (PHR) to conduct an impact evaluation with baseline surveys and follow-up surveys after one year of implementation. These studies investigated the impact of the CBHF schemes on members' utilization of services and service delivery.

Recent Tanzania experience provides some insight into what is required to design a workable SHI in the East African setting. Tanzania began planning for SHI in the mid-1990s with assistance from the World Bank as part of the development of a new health system reform project. The Tanzanian bill that established National Health Financing for civil servants was mandatory and designed to cover employees, spouses and children as legal dependents (Bituro, 1999). Preliminary assessment of the use of health financing among teachers has concluded that while the idea is a sound one, its implementation has been thwarted. For example, it has been documented that some health care providers are unaware of both this particular program and the existing payment models (Hiza and Masanja, 1997). Some users complained about the quality of services provided, and some were generally frustrated at the abuses in the system.

The Partners for Health Reform *plus* Project (PHR *plus*), in conjunction with the Uganda Community Based Health Financing Association (UCBHFA), conducted an assessment of CBHF schemes in Uganda. The purpose of the assessment was to identify good practices/models and key obstacles to sustainability in terms of governance and management, financial management and viability, risk management, marketing and membership incentives, community buy-in, and impact on quality of life of members. The assessment revealed that scheme membership improved overall quality of life for scheme members; however, community participation and management practices should be strengthened to improve scheme viability and sustainability.

Within the schemes, some community groups have been forced to withdraw membership due to strict member requirements. There is a high level of recognition of the benefits the schemes have provided to members, to their communities, and, in some cases, to the hosting facilities. These health schemes are not without financial concerns. In fact, scheme managers across the country mentioned finances as their major concern in scheme management and sustainability. While some schemes are positively contributing to facilities that own them, others have become a financial burden on the hospital. Most of the CBHF schemes have been touted as a means to ease

the burden of bad debts on hospitals (Yasin, *et al.*, 2002). In the facilities where the health scheme was running at a deficit, it was not clear from this assessment whether the burden of bad debts on these facilities has increased or decreased as a result of the health scheme.

A closer look at CBHF schemes in Africa, we note that they are initiated by private non-for-profit healthcare providers, for instance church related organization in Senegal, Kenya and Ghana or DRC non-governmental. At national level several African countries have developed legal frameworks for CBHF implementation (Ghana & Senegal) even making membership mandatory (Rwanda and Tanzania). Noteworthy for maturation of CBHF movement is the evolution of the discussion themes at bi-annual meeting of members of the concentration, whereas in 2000 the central focus was still on the design of CBHF the attention progressively shifted in the years after to a discussion on managerial tools for improved uptake growth, and to the study of means to structure the relationship of CBHF with other actors in the system (especially the health care providers) and of strategies to smoothen the integration of CBHF in local systems. The CBHF' movement not only have acquired important managerial skills, but also increasingly displays a systematic vision on health care delivery.

2.5 Sustainability and the future of CBHF movements

The majority of the schemes has come into existence in the nineties, therefore it is justified to call CBHF an “emerging movement” - especially as numerous new schemes have been planned or already reached the take-off phase since 1998 (Debaig, 1999). The CBHF are more common in West Africa than in Central or East Africa. In some countries, these new schemes are mainly an urban phenomenon – such as in Côte d’Ivoire and in Tanzania – whereas in other states, they are predominantly covering people in rural areas; examples are Uganda, Ghana and Benin. In Senegal, community-based health Financing has a long tradition especially in the Thiès region and currently over 15 schemes in urban and rural areas are operating (Tine, 2000). In the Democratic Republic of Congo health financing schemes mainly came up in the second half of the eighties. (Criel, 1998b). The reason for this relatively early departure was the virtual stop of government funding for health care in the mid-eighties and the resulting need to rely on other sources of finance.

Similarly, the Abota scheme in Guinea-Bissau was initiated already in 1980 in the face of the breakdown of government funding for health care. In contrast to this, all CBHF schemes that currently exist in Ghana, Benin, Mali and Kenya were founded in the nineties. In Ghana and Kenya they originated from the search of mission hospitals for new sources of finance in a time of reduced government subsidies and declining external support, after the practice of levying user fees had proved dissatisfactory for well-known reasons (Creese and Bennett, 1997). Some of the schemes are confined to a local cooperative of craftsmen or traders; therefore they are often very small and may cover less than 100 beneficiaries (Kiwara, 1997). Other CBHFs are extended over the whole country and many communities and include up to 1 million or even more beneficiaries (Bennett et al. 1998). The number of beneficiaries can change rapidly and neither reveals the financial balance of the CBHF, nor does it say much about the scheme's sustainability. Indeed, a few schemes had to be terminated after some years (Criel, 1998b, Bennett et al. 1998), whilst others have been in operation for decades.

2.6 Demographic Factors affecting the uptake of CBHFs

2.6.1 Biological Factors and Level of Education and uptake of CBHFs

It is apparent that CBHF are viewed by many as a promising new tool for health system improvement for rural populations in low-income countries, particularly in sub-Saharan Africa (Creese and Bennett, 1997). It is a means of providing financing coverage for rural communities unlikely to benefit immediately from either a social or private health financing scheme (Asenso-Okyere et al., 1997). Hence, the schemes have the advantage of dissociating the time of payment from the time of use of services, which is clearly better adapted than user fees to the seasonal fluctuations of revenue and expenditure flows of the households .

According to economic theory the maximum amount of money an individual is willing to pay for a commodity or service is an indicator of the utility or satisfaction to her of that commodity. This help in circumventing the absence of actual markets by presenting consumers with hypothetical markets in which they have the opportunity to buy the good or service. A number of studies of willing – to – pay (WTP) for health benefits to others have been undertaken. Viscusi et al. (1987) compared WTP to reduce pesticide risks to oneself and to one's children. Agee and Crocker (1996) estimated parental WTP to reduce the risk of neurological impairment in their children.

Liu et al. (2000) asked a sample of 700 mothers in Taiwan how much they were willing to pay for preventive medicine to protect themselves and their children from suffering a cold. Finally, Onwujekwe et al. (2002) asked 1519 household heads in south-east Nigeria open-ended questions to elicit WTP for insecticide-treated nets for indigent members of the community.

In the present study household heads in northwest Burkina Faso are asked about their WTP for health financing for themselves and for their entire household. Although two studies have previously asked household heads about their WTP for health financing for the whole household, neither study compared the WTP of the household head for financing for themselves with their WTP for financing for the entire household and the influence of age and gender on uptake of community based health Financing scheme (Asenso-Okyere et al. 1997; Mathiyazhagan 1998). Such a comparison is important because it can provide information relevant to the choice of whether the enrolment unit should be individual or household, and to setting the premium and whether biological factors do have any influence.

According to a study by Dong and Cairns (2004) on differential willingness of household heads to pay community-based health financing premium for themselves and other household members, age of household head had a negative coefficient and significantly influenced individual WTP and WTP per capita. Male gender and years of schooling had the expected positive associations. Male gender significantly influenced WTP per capita, and education significantly influenced both individual WTP and WTP per capita. Single marital state had a positive association and significantly influenced WTP per capita. Residing in Nouna town, religion and episodes of disease did not have a statistically significant impact

In addition, household income and expenditure in the past 6 months both had a positive impact on WTP, but it was only statistically significant in the case of individual WTP. The size of the household had a significantly negative impact on both individual WTP and WTP per capita. Greater distance to the health facility had the expected negative association, reducing individual WTP and WTP per capita, although it was only statistically significant in the latter case. The starting bid had the expected positive impact on individual WTP and WTP per capita. The impact was particularly marked in the case of individual WTP (Dong , Kouyate, Cairnsand Sauerborn, 2004)

Also suggested is that medical expenditure is significantly associated with both higher individual WTP and higher WTP per capita, and age is significantly associated with both lower individual WTP and lower WTP per capita. Medical expenditure can be taken as an indicator of economic status like income and total expenditure. These findings imply that the poor and the aged are vulnerable groups that need to be taken into consideration when determining the arrangements for CBI. This study aimed at investigating influence of factors such as age, education level and gender on uptake of CBHF.

2.6.2 Socio Cultural Factors and the uptake of CBHFs

The prevailing concepts of illness and risk are relevant to the decision of households whether to purchase health financing or not. If people see illness as a somewhat random event that can hit anyone, they are surely more willing to purchase Financing than if they perceive it as punishment for misbehavior by magic powers. Cultural habits in dealing with the risk of illness can influence the demand for Financing: for example, in rural Benin, people were used to put money aside for unpredictable events like marriages and funerals, but they believed that saving money for eventual health care costs meant “wishing oneself the disease”. Fortunately, this attitude changed after a CBHF had come into existence (Garba and Cyr, 1998).

If solidarity is strong, people will not worry so much if the benefits of the premiums they paid will accrue to themselves or other community members. For example, members of the Bwamanda scheme in Zaire expressed the opinion that if they would not need health care themselves, at least they had done something good for the community by contributing to the financing fund (Criel, 1998b). The degree of solidarity and mutual trust is probably higher in homogeneous, close-knit communities than in scattered and diverse populations comprising people of different ethnic origin, religion and culture (Creese and Bennett, 1997).

Existing, “traditional” institutions of risk-sharing and mutual help can on the one hand facilitate CBHF implementation, because health financing may be built upon these groups, as has been one with the Engozi 13 societies in Uganda by the Kisiizi Hospital Health Society (Musau, 1999). On the other hand, the different logic of traditional networks sometimes induces misperceptions of financing and disappointment, because people have expectations based on

their experience with traditional institutions that are not fulfilled by CBHF, e.g. that the money paid into the common fund accumulates over time and that the benefits will correspond to the contributions made (Batusa, 1999). A lot of community sensitisation may be necessary in this respect. In any case, initiators and managers of health financing schemes should pay more attention to consumer satisfaction and to people's preferences and perceptions, because these are crucial factors for successful implementation of CBHF.

2.6.3 Level of Income and the Uptake of CBHFs

If no payment is charged for the use of health care, no incentive for joining a financing scheme exists, except if consumers can take the chance to press for quality improvement or expansion of services if they bring up additional resources. If user fees are very low, probably not many people are willing to contribute to health financing. CBHF schemes were frequently initiated because fees were so high that a large portion of the population could not afford them and utilisation rates declined (Creese and Bennett, 1997). Demand for health financing is a crucial factor if the benefits expected from CBHF are to be realised. The demand of households for health financing depends not only on the quality of care offered by the health care provider, on the premium and benefit package, but also on socio-economic and cultural characteristics of households and communities.

Widespread absolute poverty among potential members can be a serious obstacle to the implementation of financing. If people are struggling for survival every day, they are less willing to pay financing premiums in advance in order to use services at a later point in time. A positive impact of health financing on equity and access must be doubted if a large proportion of the population cannot even afford CBHF membership. Social exclusion may persist even if barriers to access are reduced for part of the population, and exemption mechanisms for the poorest or sliding scales for premiums that might be a remedy are not easy to implement (Musau, 1999). After or before the introduction of health financing, rising incomes that may be brought about by development projects can be necessary to attract members and realise the potential benefits of CBHF. For instance, a "buyout local economy" has been cited as one of the factors contributing to the success of the Bwamanda scheme in Zaire that reached a coverage rate of about 60% of

the target population and achieved recovery of about 80% of the hospital’s running costs (Criel 1998b; Creese and Bennett, 1997).

2.7 Other healthcare Financing Structure in Kenya

The healthcare financing system in Kenya has developed over the years to include a variety of financing mechanisms in what is now a mixed healthcare financing system. In summary, the other main components of this system are discussed in the Table 2.1 below.

Table 2.1 Other Financing Structure in Kenya

Financing system	Description of the Financing Structure
General tax financing	This consists mainly of ‘free’ healthcare services in public health facilities. The mechanism was later modified by the introduction of cost recovery in the form of cost sharing in 1989 as part of the structural adjustments programs within the public sector.
NHIF	The scheme was established in 1966 and was among the earliest attempts at using risk pooling to finance healthcare in both public and private facilities. It was initially designed for formal sector workers and was restricted to financing inpatient care through a fixed bed rebate. It has undergone several changes over the years to include more benefits, target informal sector households and, recently, to introduce out-patient care. In its healthcare financing role NHIF collects revenue, pools funds and purchases care on behalf of its members. It is also responsible for determining the premium rates and benefits packages. NHIF is regulated by the NHIF Act No. 9 of 1998.

Private health Insurance	<p>Private health insurance developed over the years becoming more visible in the early eighties with the introduction of Health Maintenance Organisations (HMOs) and growth in health insurance portfolios of insurance companies. The emergence and growth of private insurance mirrors and rides on the expansion and growth of private health provision through private facilities. These developments were a direct consequence of the deteriorating public health facilities from the eighties that led to more people seeking care in faith based and private health facilities. A market for private health financing grew as a consequence. Currently private health insurance is provided through insurance companies and Medical Insurance Providers (MIPs, formerly HMOs). Insurance companies and MIPs are regulated by the Insurance Regulatory Authority (IRA) based on the Insurance Act Cap 487.</p>
Employer Self-Funded Schemes;	<p>Large employers, particularly in the parastatal, agricultural and financial sectors, provide health benefits to their employees and in many case their dependants through in-house medical schemes. The schemes are funded by the employer through annual budgets and are either managed in-house or through a third party administrator (TPA). A number of employers run their own healthcare facilities for both out-patient and in-patient care. Such employer self-funded schemes though contributing to healthcare financing are seen as part of employee benefits and there is no specific documentation and regulation as such.</p>
OOP	<p>According to National Health Accounts (NHA), OOP has been very high in Kenya although the trends show a reduction from 44.8% in 2002/2003 to 29.1% in 2005/2006 of the total healthcare expenditure OOP spending is major barrier for accessing healthcare services and drives households into poverty through sale of assets and diversion of meager income into healthcare services. However it also reflects a good opportunity to develop risk pooling mechanisms that provide better access to healthcare and reduce the vulnerability of households to uncertain financial shocks arising from healthcare expenditure.</p>

Donors & Non-governmental Organisations (NGOs):	Various donors and NGOs have traditionally contributed significantly to healthcare financing and provision. In the last ten years the proportion of healthcare expenditure contribution by donors in healthcare financing has more than doubled raising concerns on the sustainability of the health system (NHA, 2005/6). Some of the major current donor commitments to the health sector include PEPFAR (\$607 million, most of it for HIV/AIDS), Global fund for Aids TB and Malaria (\$378 million) and World Bank (over \$ 100 million).
Health Sector Services Fund (HSSF)	The scheme was launched 2010 under Ministry of Public Health & Sanitation (MOPHS) and it is a form of supply side financing to lower level health facilities. It is aimed at improving service availability and quality particularly for low income earners and the poor who are served by this level of facilities. HSSF is governed by gazette notice 401 of 2007 which was amended in 2009. HSSF is funded mainly by World bank, DANIDA, GoK among others
Output Based Approach Reproductive Health Voucher (OBA)	This is a form of demand side financing that targets the poor who in most cases except family planning services have to meet a specific criteria. The patients buy the health vouchers at token price and the voucher is redeemed within a specific service provider network for specified health services. The current vouchers cover maternal health, family planning and gender based violence. The OBA program is managed by NCPD under ministry of planning, administered by a private firm and funded largely by donors, key among them KfW and to a small extent by GoK. The first phase in four districts run from 2005 to 2008 (6.58 million Euro) and the second phase started in 2008 and to 2011 (10 million Euro).

According to Kenya National Health Accounts (2009/2010), the public sector, private sector (including OOP spending) and development partners contributed 29%, 39% and 31% respectively of the total health expenditure. The total public expenditure for health was low at 5.2% of total government expenditure for 2005/6 and 6.9% in 2009/10) compared to the 15%

agreed on under the Abuja Declaration in 2000. WHO recommends a per capita spending on health of \$ 41 in real dollar terms for the minimum essential health package but in Kenya the per capita spending stood at \$ 27 in 2006 (NHA 2009/10).

The funds mobilised for healthcare financing are managed through various financing agents. According to the 2009/10 NHA, the financing agents that managed the funds include:

- Public Sector - 42.7% including 3.7% by NHIF.
- Private Sector - 36.5% including 4.1% by employers and 5.4% by private insurers.
- Development partners: There was a dramatic increase in the proportion of funds managed by development partners rising from 7.4% in 2002 to 25.8% in 2010. There is an opportunity to channel some of these funds into a more sustainable and broad-based risk pooling mechanism.

The distribution of insurance funds between NHIF and private insurance was 40.6% for NHIF and 59.4% for private insurance as per the 2009/10 NHA. Only about 9.1% of the Total Health Expenditure was in any formal risk pool in 2010/11. 2015 estimates of the distribution showed the following: NHIF – 36%, Private insurers 42%, MIPs – 14%, international insurance 7% and CBHF –1%. The population coverage of the private insurance is small, at about 700,000 lives, compared to NHIF’s 6.6 million lives by 2015 estimates.

It can be observed that OOP spending tends to be the largest source of financing followed by government and then minimal private risk pooling (insurance). This is the trend in middle income countries where the proportion of OOP falls significantly while public pooling becomes the largest financing mechanism. Private risk pooling also grows but remains in third position. In high income countries, OOP becomes the least source of funds while public pooling remains the largest source of healthcare financing but with a larger contribution of private risk pooling. It is possible Kenya may witness a similar trend as the healthcare financing system evolves and develops.

2.8 CBHF Structure in Kenya

Several community based financing schemes have emerged over time to meet the healthcare financing needs of low income earners who have traditionally been largely left out of private insurance and NHIF. The CBHF ~~schemes vary~~ schemes vary greatly in type and scope and range from small funds run by community welfare groups to large NGO based schemes. CBHF have formed an umbrella association known as Kenya Community Based Health Financing Association (KCBHFA) whose CBHF organisations are registered under the Ministry of Gender and Youth. The nine organizations are Western Region Community Services, Christian Organizations Research and Advisory Trust for Africa (CORAT Africa), Tropical Institute of Community Health, Christian Health Association of Kenya, International Centre for Development and Research, Eldoret Christian Community Services, Inter-Diocesan Christian Community Services, Jamii Bora Trust (JBT), and Support for Tropical Initiatives in Poverty Alleviation.

JBT is a Microfinance institute founded by Ingrid Munro with fifty beggars in Nairobi in 1999, Jamii Bora, which means ‘good families’ in Kiswahili has grown into one of the largest microfinance institution (MFI) in Kenya, with 277,092 members and 90 branch offices all over Kenya. Its largest member base is Kibera and Mathare valley slums.

Small loans, even as little as Ksh. 100, are given as start capital for small businesses such as vegetable stalls, tailoring businesses, mechanical businesses, medical clinics and so on. However, it is important to point out that JBT carries out the central idea that loans are not charity and has to be paid back. Even if some business projects have relied on initial funding, it has been just for ‘start-up’ costs, not a means to sustain the business in the long run. As such, JBT relies, as banks do, on the fact that loans will be paid off, with interest.

About a year after the start of JBT, a tendency of falling back on their repayments became more common. When JBT started to look into the problem it became apparent that clients defaulted on their repayments were usually because the member itself or a family member had fallen sick and the money was therefore spent on hospital bills instead of repaying the loan. Most of them did not have any savings to take off to pay the bills, nor any insurance as no insurance company

would offer an affordable policy to them. This raised a concern of management of these people from a poverty level, as they could not run their businesses. Instead, JBT decided to do it themselves, and offered to all its members two benefits; Health and Life Benefits that is affordable to all their members.

2.8.1 Health Benefits to the Jamii Bora Trust Members.

In 2001, JBT started the health insurance program, commonly referred to as Jamii Bora Health Insurance (JBHI), for its members whose goal is to improve its members' access to quality health care. The membership has grown from 50 to over 13,000. The annual health insurance premium is KSh. 1,200 per member. The insurance covers the principle member and upto four children who are less than 18 years. The member can buy insurance for their spouses and/or pay an extra premium for any additional children beyond the four covered under the scheme. A member can either pay the full annual premium at one time or make weekly payments of KSh. 30 for 50 weeks, throughout the year. JBHI is the insurer and it has contracts with over 70 hospitals all over Kenya to provide inpatient services. All JBHI partner hospitals are either public or faith-based. JBHI covers only inpatient treatment costs and it has no co-payments, exclusions, nor cost restrictions. All members of JBT are eligible to join the health insurance on voluntary basis. However, it is compulsory for all members of JBT who have loans to pay health insurance. Any member may voluntarily choose to continue their membership even after they have finished their loan repayments. The Health Benefit covers all inpatient treatment including maternity and HIV/AIDS, and has no upper limit in costs. JBTI is covering the costs and has never raised donor money on health insurance.

In the event of illness, the member or their appointee presents themselves to their JBT branch office to get a letter that authorizes the partner hospital to provide inpatient health care services for the member. Members must only access health care services at partner hospitals. All monthly claims are sent to JBHI headquarter at the end of each month where the process of claim verification is done before payments are made. All hospital claims are settled within three months after receiving the invoices.

2.8.2 Life Benefits of the Jamii Bora's scheme

Jamii Bora's Life Benefit is another unique benefit for being a member of Jamii Bora. Members with loans pay 1 percent of the loan amount for this benefit. In case of a member's death or permanent disability, Jamii Bora will pay the outstanding loan balance in full and the next of kin will receive the member's savings plus an equivalent amount from Jamii Bora. Thus the family will remain with twice the member's savings and will have no responsibility for the loan. Contribution to the Life Benefit is mandatory for a member with a loan.

Based on extensive survey of literature, it is evident that the main strengths of community financing schemes are the extent of outreach penetration achieved through community participation, the contribution of financial protection against illness, and the increase in access to health care by low-income rural and informal sector workers. The schemes main weaknesses are the low volume of revenues that can be mobilized from poor communities, the frequent exclusion of the very poorest from participation in such schemes without some form of subsidy and isolation from the comprehensive benefits that are often available through more formal health financing mechanisms and provider networks. The researcher ~~hopeed~~hoped that a study on demographic factors of the target community unleashed vital information that helped address the low uptake in the CBHF schemes.

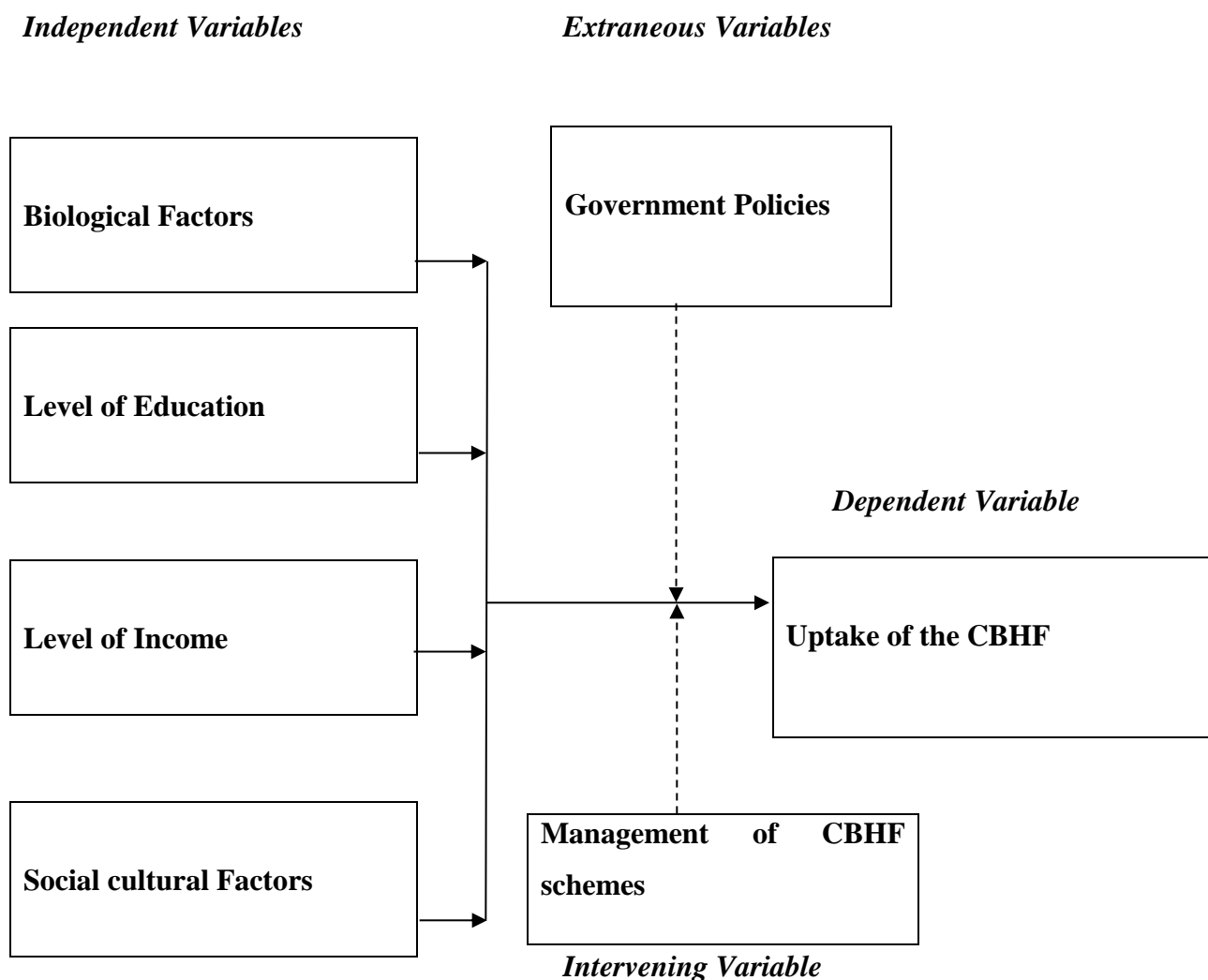


Figure 1: Conceptual Framework

2.9 Conceptual Framework

The diagrammatic presentation explains the relationship between the independent, dependent and intervening variables. In this study an attempt was made to find out how capacity biological factors, level of income, socio cultural factors and level of education influences uptake of the Community Based Health Financing. Management is looked at as an intervening variable. This is because powers and influence of management may play a significant role towards the uptake

of the CBHF. Government policies also influence uptake of the Community Based Health Financing but not directly.

2.10 Summary of ~~Literature~~of Literature Review

In this chapter, the researcher traced the origin of CBHF Schemes in the developed world and their spread and establishment in the Sub Saharan Africa, Southern, Central and Eastern Africa laying more emphasis in Kenya. The researcher highlighted the sustainability of the schemes and covered literature on the various independent variables in uptake of CBHF and also reviewed literature on healthcare financing structure that have developed in our country. The researcher as well explained the relationship between the independent, intervening and dependent variables using the conceptual framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives an outline of how the study was carried out. It covers the type of research design, sample and sampling procedure method, target population, accessible population and sample size. Further data collection procedure and analysis, research instruments the study adopted. It has also focused on validity and reliability of instruments and ethical issues.

3.2 Research Design

In the study the researcher used descriptive survey research design. This is a method of collecting information by interviewing or administering a questionnaire to a sample of individual. It can be used when collecting information about people's attitudes, opinions and habits (Orodho and Kombo, 2002). The design was preferred because was able to; ensure proper construction of questions for soliciting the required information; ensure identification of the individuals surveyed; identify the means by which the survey was conducted; and summarizing the data in a way that provided descriptive information.

This study used both qualitative and quantitative methods of data collection. The two were used to ensure that as much data was captured regarding the study and also as a way of triangulating the information gathered. Descriptive design allows the researcher to describe record, analyze and report conditions that exist in a certain situation (Kothari, 2003). In addition Orodho (2003) also is in favor of descriptive design as he recommends that it would assist in gathering information, summarize, present and interpret it for the purpose of clarification. The researcher preferred this as it assisted in collecting the data from different parts of the slum and it also allowed for generation of both numerical and descriptive data that was used in measuring correlation between variables. Descriptive survey enabled the researcher to generate statistical information about how the demographic factors influences the uptake of CBHF in Mathare valley, Nairobi County

3.3 Target Population

The study targeted 277,092 members of JBT out of which 32,132 are enrolled in the JHBI. The Kibera and Mathare valley branches have approximately 15,901 and 12,246 members respectively. Of these, the members insured with JHBI are 2,455 (15.4%) in Kibera and 2,117 (17.3%) in Mathare valley.

3.4 Sample and Sampling Procedures

The study applied both probabilistic and non-probabilistic procedures of sampling. According to Cohen (2005) the following formulae is applied to get the population size.

$$n = \frac{X^2 * N * P * (1 - P)}{(ME^2 * (N - 1) + (X^2 * P) * (1 - P))}$$

Where ;

n = Sample Size

X^2 = Chi –Square for the Specified Confidence Level at 5 Degree of Freedom

N=Population Size

P= Population Proportion

ME = desired margin of error (expressed as a proportion)

Hence for; $X^2 = 95\%$ (Level of Confidence); N=12,246; P= 50%; ME = 0.05 (+/- 5%)

$$n = \frac{0.95^2 * 12,246 * 0.5 * (1 - 0.5)}{(0.05^2 * (12,246 - 1) + (0.95^2 * 0.5) * (1 - 0.5))}$$

n = 372 Members

The study then adopted stratified sampling method. The technique is very commonly preferred because stratification produces a gain in precision in the estimates of characteristics of the whole

population (Cochran, 1977). Stratified sampling also ensures inclusion into the sample items which otherwise could be omitted entirely by other sampling methods because of their small numbers in the population are included (Borg & Call, 1989; Mugenda and Mugenda, 1999). The reason for the choice of this method was because the target population is divided into thirteen villages which formed the strata. Stratified sampling technique was preferred because it produces a gain in precision in the estimates of characteristics of the whole population.

For each stratum, the study followed the method of proportional allocation under which the sizes of the samples from the different strata were kept proportional to the sizes of the strata. Proportional allocation was considered most efficient and an optimal design because the population is assumed to be homogenous. Hence, there was no difference in within-stratum variances, and the purpose of sampling happens to be to estimate the population value of some characteristic. The researcher then randomly identified respondents in the stratum. In this case this method ensured that all the villages and individuals in the slum would be included in the sampling procedure and hence stood equal chance of inclusion in the study

Table 3.1 Sample frame

No.	Strata	Population	% of Population	Sample Size	
				Insured	Non insured
1.	3A Village	4,059	5.05%	10	10
2.	3B Village	7,433	9.26%	17	17
3.	3C Village	5,316	6.62%	12	12
4.	4A Village	18,776	23.38%	44	44
5.	4B Village	5,681	7.07%	13	13
6.	Gitathuru Village	3,737	4.65%	8	8
7.	Kiamutisya Village	5,825	7.25%	14	14
8.	KosovoVillage	8,085	10.07%	18	18

9.	Kwa Kariuki Village	5,290	6.59%	13	13
10.	Mabatini Village	1,160	1.44%	3	3
11.	Mashimoni village	4,478	5.58%	10	10
12.	No. 10 Village	2,594	3.23%	6	6
13.	Village 2 Village	7,875	9.81%	18	18
Total Population		80,309	100.00%	372	

Source The population Census, 2009

3.5 Method of Data collection

This study used questionnaires for the purposes of getting information from the sampled members. Observation and focus group discussions were used to gather information from management of JBHI. This involved methods of data collection like focus group discussions, observations and interviews. The interview questions varied from one situation to another. In other words, although the researcher entered the project with a specific set of questions, follow-up questions are developed as needed (Wimmer and Dominick, 2003). Such questions assists the researcher to probe further or explain to the interviewee for better understanding and enable the interviewee give the desired feedback. The study also used both the primary and the secondary data available. The primary data collected using questionnaires and observations while the secondary data was retrieved from the written reports, JBHI database and records at Mathare dispensary.

A questionnaire with both open and closed ended questions was be used to collect the primary data. Open ended questions were used to gather in depth information in the FGD conducted using the management team.

Questionnaires with guiding instructions for the purposes of understanding the questions were distributed to the identified population by the researcher and the research assistants. The questions were also phrased in a simple and clear language easily understood by the respondents. The respondents who received the questionnaires included managers and members of JBT, employees of JBT, health workers at Mathare dispensary and chiefs. The respondents were advised to constantly seek for clarification to the researcher or the research assistants whenever something was not clear to them. In the case of the FGD the researcher agreed with the respondent the appropriate time such an activity would take place so that the required quorum was raised. Observation took place throughout the study process. The observations assisted in triangulation of the information. The date for collecting the filled up questionnaire was agreed upon the point of delivery and follow up made by phone during the process.

3.6 Research Instruments

In this study structured or closed ended questionnaires were used and they assisted in guiding the respondents in answering the questions. This type of questionnaire was easy to administer as it gives the respondents alternatives in responses, Mugenda and Mugenda, (1999). To allow the respondents more space to respond on certain issues the study also used unstructured or open ended questions in the questionnaires in order to collect more relevant data which was expected to provide more information. The interview schedules were also used to assist in gathering more information that could otherwise be missed out.

3.7 The Pilot Study

In order to improve validity the researcher ensured that the research instruments in this case questionnaires and the interview schedules are accurate by making the necessary adjustments

after conducting a pilot study and ensuring the questions got the required responses. The pilot study was undertaken in Kibera slum which has a similar JBHI scheme but it's not covered in this study. This assisted the researcher to test both the research instruments and the ability of the research assistants to administer the instruments. Members of JBHI scheme were sampled and interviewed which and this helped the researcher to identify gaps in the instruments. A total of 30 respondents were included in the pilot study.

3.8 Validity of the Instruments

To validate the data to be collected, the researcher used other methods like comparing this data with existing information in relevant offices or studies. This was done through crosschecking the information gathered with the already existing data in relevant institutions and also through observation ensuring there was consistency.

3.9 Reliability of the Instruments

In testing reliability piloting of the instruments were necessary. The instruments were tested using the split half method before the study would continue. In the case that the instruments were found to be resulting in inconsistencies then necessary adjustments were be done to ensure that they measured up to the required standards. This was done through simplifying further the language, reframing the questions and also restructuring the questionnaires. Guiding instructions were also rephrased as was necessary to ensure that the instruments give reliable information and what was desired in the study.

3.10 Data Analysis

In the data analysis descriptive statistics was applied. The purpose of descriptive statistics was to enable the researcher to meaningfully describe a distribution of scores or measurements using a few indices or statistics (Mugenda, 1999). After the data was collected and before the analysis is done, the data was first refined to eliminate any undesired or unwanted information that could have made analysis difficult. This was through organizing and editing the data to remove any

repetitions, inconsistencies, errors and anything not well understood as was presented by the respondents. This was followed by coding the data to establish how possible answers would be treated by assigning to them numerical values. The resultant data was then stored in both soft and hard copies for reference during the analysis process.

Qualitative data generated from questions was organized into themes and categories as the study would reveal. This helped in the identification of any information that was found relevant to the research objectives and research questions. This data was further tabulated and classified as per the characteristics observed and then analyzed in its own class using the frequency tables. According to Orodho (2003) the simplest way to present data is in frequency or percentage tables, which summarizes data about a single variable. The data was then presented in frequency and percentage tables using Statistical Package for Social Scientists (SPSS) and Microsoft Excel (M-Excel) for analysis and presentation.

3.11 Ethical Issues in the Research[U1]

The researcher, before the study commences sort authority from all the relevant authorities for conformity and to ensure that the study would not be discontinued in the process. To start with, the researcher sort authority from the University of Nairobi to be allowed to commence on the study and the given authority would assist in seeking the consequent permissions. Permission to commence the study was sought from the JBT which is the institution in charge of the CBHF scheme in the study area. The researcher further sort authority from NCKK Community Health Project Mathare Clinic which is the JBHI accredited hospital in Mathare valley. The researcher also sort consent from the chiefs and members through talking and explaining to them the purpose of the study. Confidentiality was guaranteed and the researcher ensured that participants are not deceived with false promises in order for them to participate. The researcher ensured that all respondents participated on their own volition.

3.12 Operational Definition of Variables

The variables were to be operationalised by looking at their behavioural dimensions, indicators or properties denoted by the concept. This rendered the variables measurable.

Table 3.2 Operationalization of Variables

Research Objectives	Variables	Indicators	Measuring Scale	Tool of analysis	Data Analysis
To assess how biological factors of an individual relates to the uptake of the community based health financing	Biological	-Age of the member -Gender of the member -Present of health disability -Presence of hereditary health condition	Nominal Ordinal	Mean Mode Median	Descriptive statistics Frequency Mean
To establish the relationship between the level of education of a person and the uptake of the community based health financing.	Level of Education	-Primary School level qualifications -Low-level post-secondary education -Tertiary certificates and diplomas -Bachelors and postgraduate qualifications - Possession of other skills or talent -Technical training	Nominal Ordinal	Mean Mode Median	Descriptive statistics Frequency Mean
To investigate the effect of socio cultural factors on the uptake of the community based health financing.	Socio Cultural	-Size of the household of the member. -No. of dependants supported by the member. -Gender of the member -No. of years lived in Mathare valley. -Marital status of the member. -Memberships to other community groups in Mathare valley.	Nominal Ordinal	Mean Mode Median	Descriptive statistics Frequency Mean

To evaluate the extent to which level of income of a person affects the uptake of the community based health financing	Level of Income	-Employment status -Source of livelihood of the members. -Amount of house hold income. -Amount of house hold expenditure. -Financial support from the community. -Financial investment with JBT -Loans acquired with JBT. -Residential status of the member	Nominal Ordinal	Mean Mode Median	Descriptive statistics Frequency Mean
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3.13 Summary of ~~the Research~~ the Research Methodology

The methodology aspect of any study is very critical. To ensure that the study was successful, the research assistant was taken through training and also participated in the pilot study. This made them familiarize themselves with the research process. The researcher also ensured that the study was actually done by monitoring the whole process. Confidentiality of the information gained in the course of the study was safeguarded. It was also the responsibility of the researcher to ensure that as many questionnaires were filled and returned for the success of the study.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter analyses the data that was collected and offers the interpretation of the results from the findings collected from the sampled respondents. The purpose of the study was to make an assessment of how demographic factors affected the uptake of community based health financing schemes in Mathare Valley, Nairobi County.

4.2 Response Rate

A total of 372 questionnaires were distributed to the selected respondents in Mathare Valley which were all filled and returned. This was 100% response rate. This was an acceptable rate and was attributed to the fact that the questionnaires were administered mostly during the weekend and were physically dropped to the respondents and collected at an agreed date. The response rate was as follows;

Table 4.1: Response Rate

Strata	Targeted Sample Size		Response Rate	% Response Rate
	Insured	Non Insured		
3A Village	10	10	20	100
3B Village	17	17	34	100
3C Village	12	12	24	100
4A Village	44	44	88	100
4B Village	13	13	26	100
Gitathuru Village	8	8	16	100
Kiamutisya Village	14	14	28	100
KosovoVillage	18	18	36	100
Kwa KariukiVillage	13	13	26	100
MabatiniVillage	3	3	6	100
Mashimoni Village	10	10	20	100
No. 10 Village	6	6	12	100
Village 2 Village	18	18	36	100
Total	372		372	100

N=372

This therefore indicates that the response rate was 100% which was the envisaged rate and very critical in the study. This was important as it was expected to give desired results.

4.3 Data Analysis

Descriptive statistics were used to analyse and present the data. The questions presented in the questionnaire were discussed after which the related data was analysed and interpreted. The findings have been captured in tables where frequencies and respective percentages have been calculated. A variety of bar charts have been used to enhance the presentation.

4.4 Biological Factors

The respondents' biological demographic information is analyzed as here below as they were drawn from various categories.

4.4.1 Age Group and Insurance Status of Respondents

It was important to establish the age group and the insurance status of respondents who were interviewed in this study and the results are as shown in Table 4.2

Table 4.2: Age Group and Insurance Status of the Respondents

Age Group	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
18 -35 years	33.8	46.7	40.2
36 - 50 years	40.0	40.0	40.0
Over 50 years	26.2	28.0	19.8

The results in Table 4.2 above shows that more youth are not insured compared those in other age groups. Out of all the respondents between the ages of 18 -35 years, 33.8% of them were

insured while 46.7% were not insured. The respondents aged 36-50 years, 40% were insured and the rest were not insured. These findings are also presented in Figure 2 below.

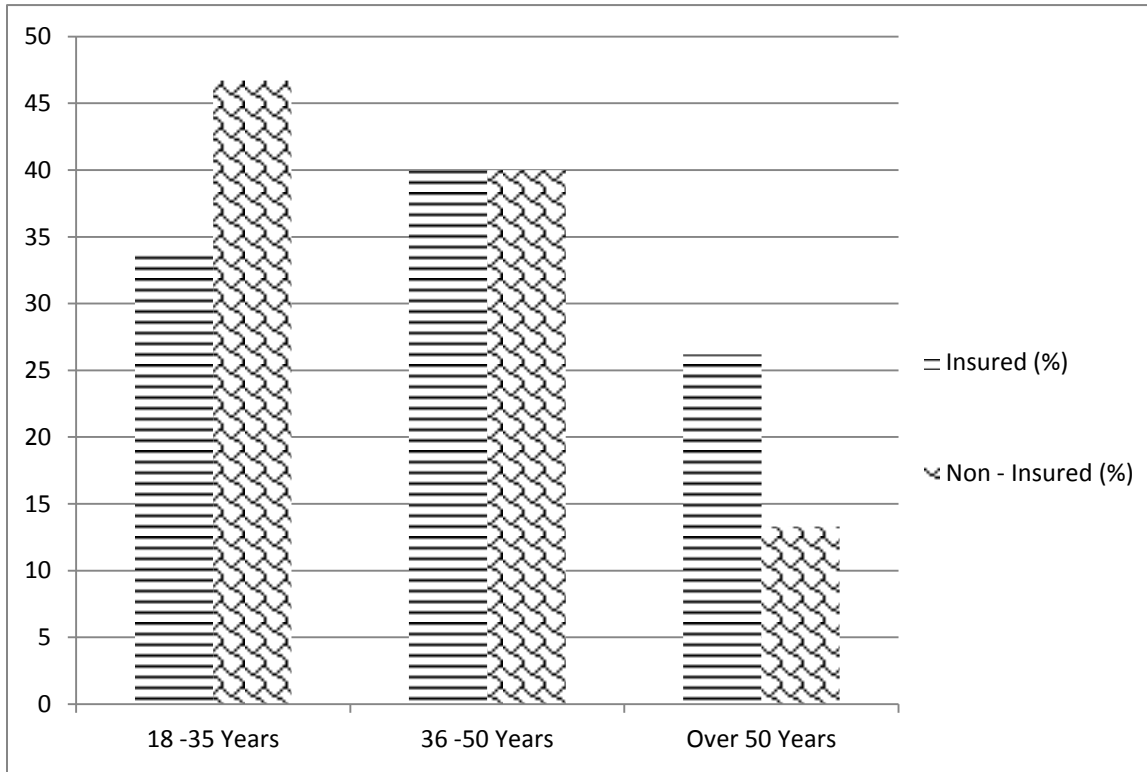


Figure 2: Age Group and Insurance Status of the Respondents

4.4.2 Gender Composition and insurance Status of the Respondents

It was important to establish the insurance Status and the gender of the respondents who were interviewed in this study and the results are as shown in Table 4.3

Table 4.3: Gender Composition and Insurance Status of the Respondents

Gender	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
Male	38.1	33.3	35.7
Female	61.9	66.7	64.3

The results in Table 4.3 above show that there were more insured women in comparison to insured men. Out of all the insured respondents, 38.1 % of them were male while 61.9% were female. Further, out of all non-insured respondents, 66.7% were female and the rest males. This is more so because more women than men form and join organisation in Kenya, Department of Gender and Social Development Nairobi.

4.5 Socio Cultural Factors

4.5.1 Marital status and Insurance Status of the Respondents

The research looked in to the relationship between marital status and insurance status of the respondents as shown in Table 4.4.

Table 4.4: Marital status and insurance Status of the Respondents

Marital status	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
Married	73.8	64.3	69.0
Unmarried	26.2	35.7	31.0

The result revealed that the proportion of the insured was higher among the married (73.8%) than the unmarried (26.2%). Previous studies suggested that marital status had a statistically significant positive effect on health insurance ownership. Married persons are more likely to have insurance cover than those who are single, separated or divorced..

4.5.2 Number of Children and Insurance Status of the Respondents

The study looked at number of children vis-à-vis the uptake of the insurance. Table 4.5 below shows that the reasons for joining JBHI among the insured respondents differed in-line with the number of children the respondent had.

Table 4.5 Number of Children and Insurance Status of the Respondents

Number of Children	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
0 – 2 Children	38.6	40.5	39.5
3– 5 Children	50.0	49.5	49.8
6 and above	11.4	10.0	10.7

Majority, 65% of the insured respondents who had two or less children said that they joined JBHI because of the hard economy they are experiencing compared to 61% of respondents who had more than five children who said that they joined JBHI so that they could avoid out-of-pocket payments whenever a family member is admitted. The same findings are presented in Figure 3 below.

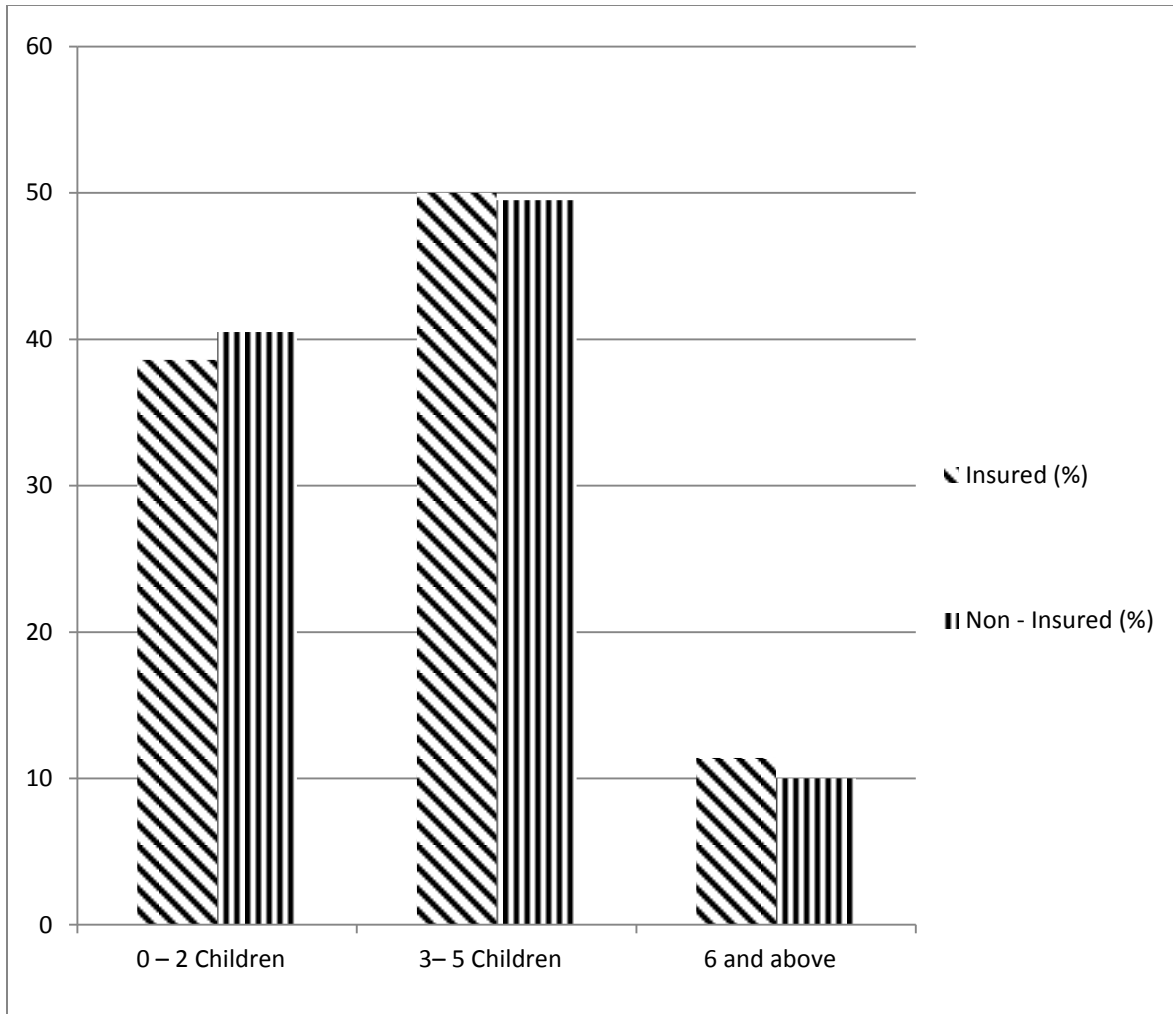


Figure 3: Number of Children and Insurance Status of the Respondents

4.5.3 Religion and Insurance Status of the Respondents

The study sought to determine the religion of the respondents and their insurance status. The results show that 117 or 62.8% of the insured respondents were Protestants and had been insured while 41 or 21.9 % were Catholics. Only 28 or 14.8 % of the respondents were from the Islam religion group. Likewise 100 or 53.8% of the non-insured respondent were Protestants while the percentages for non-insured respondent who were also Catholics and Islam religion group were 32.9% and 13.3% respectively.

Table 4.6 Religion and Insurance Status of the Respondents

Religion	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
Protestant	62.8	53.8	58.6
Catholic	21.9	32.9	27.4
Islam	14.8	13.3	14.0

4.6 Income level and insurance Status of the Respondents

The study on extending social health insurance to the informal sector in Kenya found that in the slums, informal savings groups were common and slum dwellers made monthly contributions, which were then shared on a revolving basis to each member of the group to help them cater for various needs, including funeral and health care costs. This information was confirmed by the research in the following Table 4.6 where 66.7 % of the insured respondents were from lowest and low income level. On the other side, 33.3% of the insured respondents were from moderate and low high level as shown in the Table 4.7 below.

Table 4.7 Income Level and Insurance Status of the Respondents

Income level	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
Lowest	32.4	46.7	39.5
Low	34.3	30.0	32.1
Moderate	20.0	18.1	19.0
High	13.3	5.20	9.30

It is evidence on the association between household income status and JBHI enrolment indicates that individuals from the lower and lowest income level are more likely to be enrolled compared with those from the moderate and high Income level. The findings are also presented in figure 4 below.

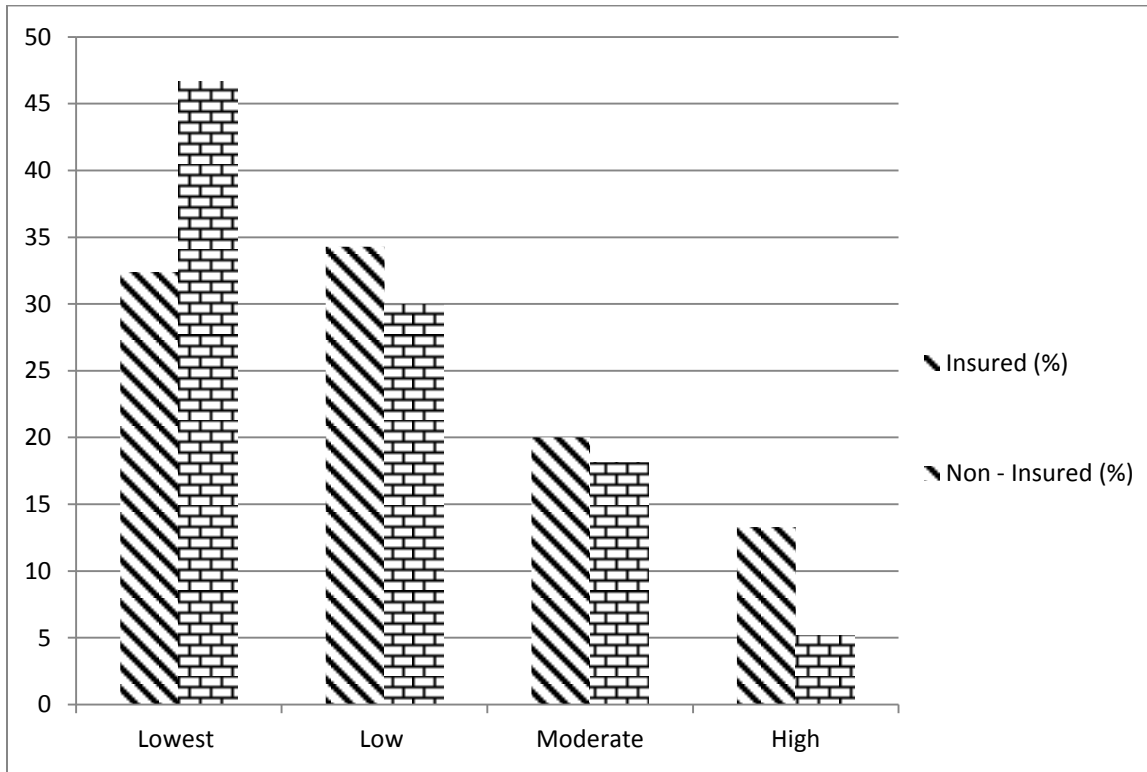


Figure 3: Level of income and Insurance Status of the Respondents

4.7 Education Level and Insurance Status of the Respondents

Participation in the JBHI program was significantly higher among respondents (56.0%) who have secondary school and higher education level. Those who primary school education and were insured constituted of 33.8%. There was significant low (9.50%) enrolment of the insurance among the Respondents who had no formal education level. A summary is presented in Table 4.8 below.

Table 4.8 Education Level and Insurance Status of the Respondents

Education level	Respondents		
	Insured (%)	Non-Insured (%)	Total (%)
No Formal Education	9.50	5.20	7.40
Primary School Level	33.8	39.5	36.7
Secondary School and Higher	56.0	55.2	56.0

The research portrayed that those with secondary school education level and above were more likely to use the JBHI benefit than those with less education. The findings are presented in Figure 4.4 below.

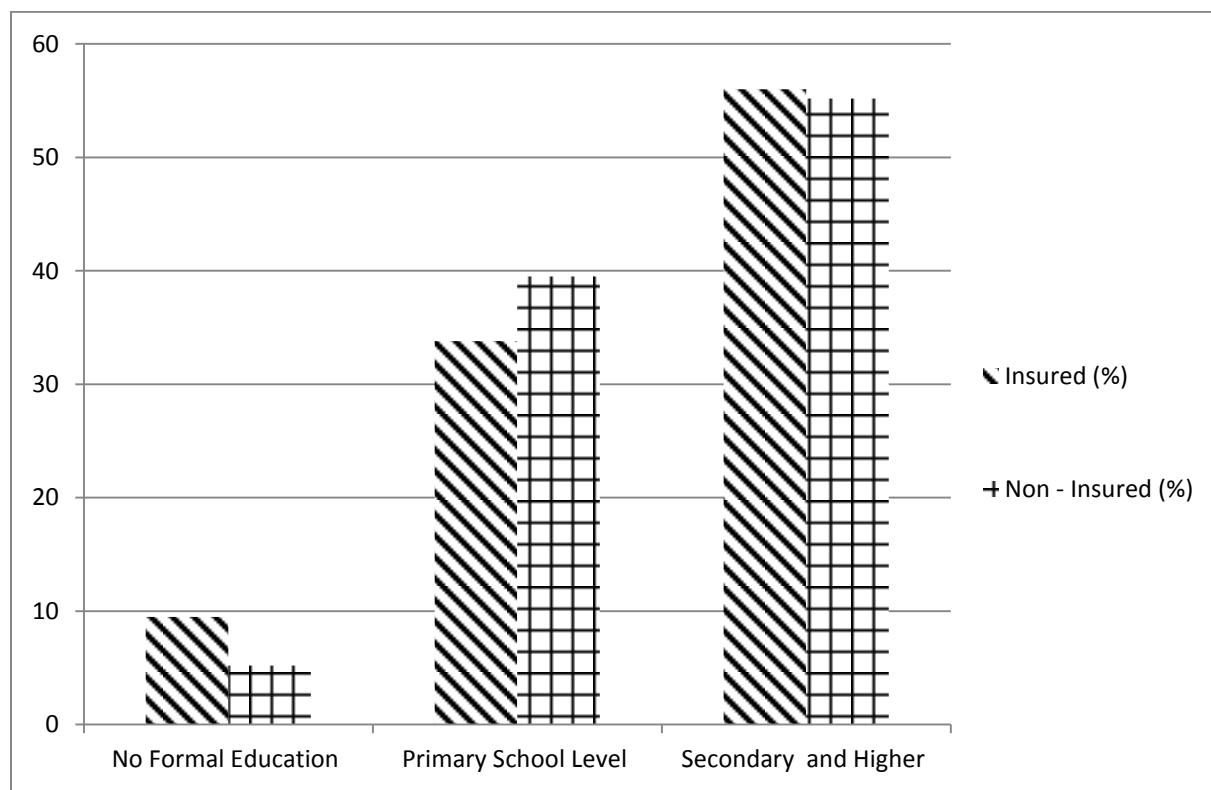


Figure 4 Education Level and Insurance Status of the Respondents

4.8 Summary of Data Analysis, Presentation and Interpretation

In this chapter, data collected from the respondent through questionnaires and interviews has been analyzed, presented and interpreted. The focus was on the variables of the study which included level of income, level of education, biological factors and socio cultural factors. The analysis data has been presented using frequency tables and bar charts.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of major findings, conclusions, recommendations and suggestions on areas of further research.

5.2 Summary and Discussions of Findings

The study was aimed at making an assessment of how demographic factors affect the uptake of community based health financing schemes in Mathare Valley, Nairobi County. It was guided by the following objectives; assessing how biological factors of an individual influence the uptake of CBHF, establishing the level of education influence the uptake of CBHF, investigating the effect of socio cultural factors on the uptake of CBHF and evaluating how level of income influence the uptake of CBHF Mathare Valley, Nairobi County.

5.1.1 Biological Factors

The data disclosed that more youth are not insured compared those in other age groups. Out of all the respondents between the ages of 18 -35 years, 33.8% of them were insured while 46.7% were not insured. Also, out of all the respondents aged 36-50 years, 40% were insured and the rest were not insured. The study also reveals that the percentage of those over 50 years of age had less insured members (26.2%) as compared to non-insured members who were 28.0% .It can also be observed that more women than men were insured. This could be attributed to the fact that more women than men form and join organisation in Nairobi. More women than men took the insurance at 66.7% and 33.3% respectively. This concurred with study by the Department of Gender and Social Development which found that more women than men form and join organisation in Kenya.

5.1.2 Level of Education

The take up of JBHI was higher among those with secondary education level or higher. This finding is in tandem with findings from Ekman (2004) who found out that education levels are related with take up of health insurance programs in the developing world. Many low-income clients are unfamiliar with the concept of insurance program. The findings however disagree with Merlis (2002) who found out that awareness by the government is more correlated to take up of health insurance policies compared to level of education of the urban poor. The results that show that most of urban poor use either the public and/or faith based hospitals for inpatient care, was supported by previous studies that found that the main reasons for this choice, was the type of services offered, the perceived quality of care and overall accessibility Xu Ke (2006). The finding that the insured spend more days in hospital than the non-insured is supported by previous which found similar findings.

5.1.3 Socio Cultural Factors

The study found evidence that the number of children that a respondent had increased the likelihood of enrolling into JBHI. Respondents with six or more children were more likely to join JBHI to avoid out-of-pocket payments associated with medical expenses. These results show that enrollment in JBHI was associated with perceived financial risk of accessing health care and number of children that a member had. The result revealed that the proportion of the insured was higher among the married (73.8%) than the unmarried (26.2%).

The finding is consistent with the result obtained by Harmon and Nolan (2001) who found that married couples may have a higher demand for health insurance due to the need to protect their children, higher combined income and being more averse to the risk of catastrophic health expenditures than those who are single, separated or divorced. A possible explanation for this finding is that when individuals get divorced, widowed or separated, they may become financially vulnerable hence impacting their ability to make payments to the JBHI program

5.1.4 Level of Income

The data disclosed that individuals in the low and lowest income groups are more likely to be enrolled in JBHI in comparison to others, is supported by previous studies, suggesting that inclusion of the poorest was dependent on the design and implementation features of the scheme JBHI collects weekly premiums throughout the year, which makes payment of premiums affordable even for the very poorest households. The finding that respondents' perceptions of the quality of care provided by the contracted health care providers also influence the decision to enroll is similar to findings from previous studies Bennett (1998). This could be attributed to the fact that married couples may have a higher demand for health insurance due to the need to protect their children, higher combined income and being more averse to the risk of catastrophic health expenditures than those who are single, separated or divorced. A possible explanation for this finding is that when individuals get divorced, widowed or separated, they may become financially vulnerable hence impacting their ability to make payments to the JBHI program. It was noted that some respondents with no formal education stated that they would not pay for the insurance because it meant wishing oneself the diseases.

5.3 Conclusion of the Study

The data revealed that each demographic factor affects the uptake of community based health financing to a great extent. Moreover, age and gender, income level and education level affected the uptake of the community based health financing to a great extent. In other words, the factors had influence to some extent. On the other hand, socio cultural factors had a minimal effect on the uptake of the community based health financing.

Up take of the JBHI benefits was higher than most CBHI studies have shown and this could be attributed to the fact JBHI has no per capita financial capping and does not require any co-payments to access health care. Overall, JBHI favoured the members in the lower income quintiles who were more likely to use health care services covered by the JBHI scheme. Insured members reported higher use of hospitalization care than the non-insured. This confirmed that prepayment schemes and the pooling of risk could reduce financial barriers to health care among the urban poor.

5.4 Recommendations

On the basis of this study, the following recommendations were made;

1. Since the majority of youth respondents have the lowest enrollment in the CBHI, the study recommends review of the in insurance package to make the CBHI more attractive and suitable to the youth generation.
2. Since the 74% of the respondents said that service delivery at Jamii Bora Health Insurance can be improved if JBHI approved more hospital in which a member can attended, the study recommends that JBHI .expands their 90 approved hospitals national network so that their services can be more accessible to the Community.
3. There is a need for community sanitisation in order to initiate change of cultural believes and misconception that inhibit enrollment of member into the CBHI. Diseases and illness should be seen as somewhat a random event that can hit anyone and hence they should be prepared by insuring themselves.

5.5 Suggested Areas for Further Research

Improvement of community based health financing gives the poor a sense of hope in their health financing. Hence more study can be done to explore more opportunities in the following areas:

1. Look in the design of innovative health insurance schemes; for example, within farmers' cooperative societies , savings and credit societies, agricultural estates, women/men developmental groups so as the health insurance services can reach more Kenyans.
2. It is also important to investigate whether the expansion of private health insurance under the current health care delivery system would yield significant public sector cost savings, and improved targeting of subsidies for the poor and preventive services.

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APPENDICES

Appendix 1: Letter of Introduction

The Managing Director,
Jamii Bora Trust,
P. O. Box 13721-00100,
Nairobi.

Dear Sir/ Madam.

RE: AUTHORITY TO CONDUCT ACADEMIC RESEARCH

I am a student of University of Nairobi pursuing a Masters Degree in Project Planning and Management. I am undertaking an academic study on the demographic factors and the uptake of community based health financing schemes in Mathare valley, Nairobi County.

In view of this, your Jamii Bora Health Insurance branch in Mathare valley has been identified to participate in providing the necessary information as regards this study. The study in particular was addressing issues of biological factors, economic factors, social cultural, and education levels of your members and their influence on the uptake of the community based health financing.

I therefore kindly request to fill this questionnaire as accurate as is possible to ensure the study achieves its intended objective. The information that you will give is confidential and will be used only for the purpose of my academic research.

Thanking you in anticipation,

Yours faithfully,

Kinyua M. Muchemi

L50/72101/2011

Appendix 2: Questionnaire

Questionnaire for Jamii Bora Trust Members

Information to the Respondent

I am Michael Muchemi Kinyua, a student of University of Nairobi pursuing a Masters Degree in Project Planning and Management undertaking an academic study on the Demographic Factors and the Uptake of Community Based Health Financing Schemes in Mathare Valley, Nairobi County. You have been identified to participate in providing the necessary information as regards this study. I therefore kindly request to fill this questionnaire as accurate as is possible to ensure the study achieves its intended objective. The information that you will give is confidential and will be used only for the purpose of my academic research.

Michael Muchemi
Registration Number: L50/72101/2011

Instructions

Please answer all the questions below by putting a tick [✓] where appropriate or filling in the blank spaces provided.

Section A: Demographic Information

1. Gender.

Male [] Female []

2. Age.

- a. Under 30 years []
- b. 31 – 35 years []
- c. 36 - 40 years []
- d. 41 - 45 years []
- e. 46 -50 years []
- f. Over 50 years. []

3. How long have you lived in Mathare Valley?

- a. Under 1 year []
- b. 1-2 years []
- c. 2 - 5 years []
- d. 5- 10 years []
- e. 10- 20 years []
- f. Over 20 years []

4. What is the tenancy of the house you live in?

I own the house [] I'm a tenant []

5. What is your current marital status?

- a. Single []
- b. Living with another []
- c. Married []
- d. Widowed []
- e. Divorced []
- f. Separated []

6. At what age did you start a family?

- a. Under 18 years []
- b. 19 -24 years []
- c. 25 - 29 years []
- d. 30 -34 years. []
- e. Above 35 years. []

7. Which religious faith do you proclaim?

- a. Catholic []
- b. Muslim []
- c. Protestant []
- d. Seventh Day Adventist []
- e. Traditionalist []

- f. Hindu
- g. None
- h. Other specify _____

8. Monthly household income and expenditure

(i). What is your monthly household income from employment?

- a. Less than Ksh. 2,500
- b. Ksh. 2,501 – Ksh. 10,000
- c. Ksh.10,001 – Ksh. 20,000
- d. Ksh. 20,001 – Ksh. 30,000
- e. Ksh. 30,001 – Ksh. 40,000
- f. Ksh. 40,001 – Ksh. 50,000
- g. Ksh.50,001 and more

(ii). What is your monthly household income from other source of income?

- a. Less than Ksh. 5,000
- b. Ksh. 5,001 – Ksh. 10,000
- c. Ksh.10,001 – Ksh. 20,000
- d. Ksh. 20,001 – Ksh. 30,000
- e. Ksh. 30,001 – Ksh. 40,000
- f. Ksh. 40,001 – Ksh. 50,000
- g. Ksh.50,001 and more

9. What is your monthly household expenditure?

- a. Less than Ksh. 3,000
- b. Ksh. 3,001 – Ksh. 5,000
- c. Ksh. 5,001 – Ksh. 7,000
- d. Ksh. 7,001 – Ksh. 10,000
- e. Ksh. 10,001 – Ksh. 20,000

- f. Ksh. 20,001 – Ksh. 30,000 []
- g. Ksh. 30,001 – Ksh. 40,000 []
- h. Ksh. 40,001 – Ksh. 50,000 []
- i. Ksh.50,001 and more []

Section B: Socio Cultural Factors

10. Who is the head of the household?

Male [] Female []

11. How many children do you have?

- a. 1-2 children []
- b. 2-4 children []
- c. 5-6 children []
- d. 6-8 children []
- e. Above 9 children []

Section C: Level of Education

12. What is the highest level of education you have achieved?

- a. Have never attended school []
- b. Primary school level []
- c. Secondary school level []
- d. Diploma []
- e. Bachelors []
- f. Post graduate []

Section D: Socio-economic Factors

13. What is your employment status?

- a. Full time employed []
- b. Part time employed []
- c. Self-employed []
- d. Housewife/husband []

- e. Retired []
- f. Unemployed []

If you answered [f] to question above, what is your source of livelihood?

14. Other sources of income.

(i). Does this household have any other sources of income?

Yes [] No []

(ii). If yes, what is the other source of income?

- a. Rental of house []
- b. Small scale business []
- c. Casual employment []
- d. Other, specify _____

Section E: Household source of Health care

(i). Where do you seek for treatment during illness?

- a. Herbal healer []
- b. National hospital []
- c. Dispensary []
- d. Private clinic []
- e. Mission hospital []
- f. Drug shop/pharmacy []
- g. Other Government Unit (specify)_____
- h. Other (specify the name)_____

Section F: Jamii Bora Health Insurance

(i). Are you aware of Jamii Bora Health Insurance? Yes [] No []

(ii). If yes, have enrolled with Jamii Bora Health Insurance?

Yes [] No []

a) If yes, when did you enroll with Jamii Bora Health Insurance?

i. Immediately when I opened an account with Jamii Bora Trust []

ii. When I took a loan with Jamii Bora Trust []

b) If No, how do finance the health of your household?

i. Out of pocket expenditure (OOP)

ii. National Hospital Financing Fund (NHIF)

iii. Jamii Bora Health Insurance (JBHI)

iv. Private health Insurance

v. Employer Self-Funded Schemes;

vi. Health Sector Services Fund (HSSF)

vii. Output Based Approach Reproductive Health Voucher (OBA)

viii. Other, specify _____

(iii). If No in (ii) above, why do you prefer your mode of health financing to Jamii Bora Health Insurance?

Explain _____

(iv). Have any member of your family been admitted in hospital in the previous 12 months?

Yes [] No []

(v). If yes in (iv) above, for how long was the person admitted in the hospital?

State the duration of admission _____ (months)

(vi). In your opinion, how would you rate the services offered by Jamii bora health insurance?

- a) Excellent []
- b) Very Good []
- c) Good []
- d) Fair []
- e) Poor []

(vii). What area(s) would you like to the Jamii bora health Insurance to improve?
Specify_____

THANK YOU FOR PARTICIPATING IN THE STUDY