

**PERCEPTION OF BENEFICIARIES AND NON-BENEFICIARIES ON
COMMUNITY HEALTH FUND AS A SUSTAINABLE FAMILY HEALTH
INSURANCE IN CHUNYA DISTRICT**

AIKA ANDERSON TEMU

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF SOCIAL WORK OF
THE OPEN UNIVERSITY OF TANZANIA**

2019

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania, a Dissertation entitled: ***“Perception of Beneficiaries and Non-Beneficiaries on Community Health Fund as a Sustainable Family Health Insurance in Chunya District”***, in partial fulfilment of the requirements for the Degree of Master of Social Work (MSW) of the Open University of Tanzania.

.....

Dr. Asheri Mwidege
(Supervisor)

.....

Date

COPYRIGHT

No part of this Dissertation may be reproduced, stored in any retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the author or The Open University of Tanzania in that behalf.

DECLARATION

I, **Aika Anderson Temu**, do hereby declare that, the work presented in this dissertation is original. It has never been presented to any other University or institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in particular fulfillment of the requirement for the Degree of Master of Social Work (MSW).

.....

Signature

.....

Date

DEDICATION

This work is dedicated to my husband, Joshua Mwaikenda and my children Ivan, Ian and Ariana who have been patient and gave me love, encouragement and support during the whole period of my academic studies to the accomplishment of this dissertation.

Almighty God bless them.

ACKNOWLEDGEMENT

I humbly thank the Almighty God, my savior, who gave me good health throughout the period of my studies until achievement of my Masters Degree.

I also express my sincere gratitude and appreciation to my esteemed supervisor, Dr Asheri Mwidege for his untiring guidance, encouragement, constructive comments and scholarly criticisms, patience and suggestions during the whole period of my fieldwork to the accomplishment of this dissertation.

I also extend sincere gratitude to my Lecturers Prof Hosea Rwegoshora, Dr. Msindai and Mr., Johanas Buhori for their academic inputs in the whole process of this research to its successful completion.

Moreover, I express my special thanks to my parents Anderson Temu and Anna Wilbard Manjuu who laid down a concrete foundation for my education from primary school, secondary school to university.

Furthermore, I am indebted to my housemaid Violet Peter who tenderly cared for my young kids, Ivan, Ian and Ariana during my absence while doing class work and field data collection during research. May God bless them.

ABSTRACT

The study aimed to investigate perception of beneficiaries and non-beneficiaries on Community Health Fund (CHF) in Chunya District. The study sought to substantiate the premise that retarded and low adoption of CHF insurance in Chunya District is significantly contributed by perception on socio – economic and technical aspects, which are principle causes that affect access to affordable health care services. A non-experimental research design was employed in which stratified simple random and purposive sampling techniques along with Focus group discussions and key informant interview methodologies were used. Structured questionnaires comprising of closed and open-ended questions were administered in data collection to a sample of 67 respondents. In order to draw valid inference Statistical Package for Social Science (SPSS Version 22) computer software was used to analyze data. Key results revealed that 94.6% of the sampled population perceived CHF as an affordable and sustainable health insurance scheme. Out of whom 57% were male beneficiaries and 61.8% female none beneficiaries. The study concluded Health insurance offers protection against the detrimental effects of user fees and a promising avenue towards sustained health-care coverage. Therefore once technical and socio-economic aspects are adequately taken onboard CHF will continued to facilitate affordable health care services and intensify positive perception to both beneficiaries and non-beneficiaries. Key recommendations include the need to improving financing on CHF insurance in the rural community and research on among others impact of CHF on disadvantaged groups.

TABLE OF CONTENTS

CERTIFICATION	ii
COPYRIGHT	iii
DECLARATION.....	iv
DEDICATION.....	v
ACKNOWLEDGEMENT.....	vi
ABSTRACT	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of Health Insurance Schemes in Tanzania	1
1.2 Statement of the Problem.....	3
1.3 The Social Vulnerability Theory and its Application in the Study.....	5
1.4 Community Health Fund and the Social Welfare System	6
1.5 Objectives of the Study.....	7
1.5.1 General Objective	7
1.5.2 Specific Objectives	7
1.6 Research Questions.....	7
1.7 Significance of the Study	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 Introduction.....	9

2.2	Theoretical Literature Review	9
2.3	Definition of Terms and Concepts	12
2.3.1	Formation of Health Insurance Schemes in Low-Income and Middle Income Countries	12
2.3.2	Health Insurance Schemes in Tanzania	13
2.3.3	Community Health Fund	16
2.4	Empirical Literature Review	18
2.5	The Research Gap	22
2.6	Conceptual Framework	22
CHAPTER THREE		25
RESEARCH METHODOLOGY		25
3.1	Description of the Study Area	25
3.2	The Study Population	27
3.3	Research Design	27
3.4	Sample Size and Sampling Techniques	28
3.5	Data Collection Methods	30
3.5.1	Structured Questionnaire	30
3.5.2	Secondary Data (Documentary Reviews)	31
3.5.3	Focus Group Discussion	31
3.5.4	Key Informants	31
3.5.5	Checklists	32
3.6	Data Analysis Methods	32
3.6.1	Dependent and Independent Variables	32
3.6.2	Developing Scales for Assessing Perception	33

3.7	Ethical Considerations	33
CHAPTER FOUR.....		34
RESULTS AND DISCUSSION		34
4.1	Introduction.....	34
4.2	Social Demographic Characteristics of the Respondents	34
4.2.1	Gender of Respondents.....	34
4.2.2	Age of Respondents	36
4.2.3	Marital Status of Respondents	37
4.2.4	Family Size of Respondents	38
4.2.5	Education of the Respondents.....	39
4.2.6	Sources of Income	40
4.3	Perception of Beneficiaries and non-Beneficiaries on the CHF Scheme	41
4.3.1	Awareness of the Community Health Fund.....	41
4.3.2	Source of Information on CHF	42
4.3.3	Membership of CHF	43
4.3.4	Persuasion to Join CHF.....	44
4.3.5	Benefits of Joining CHF	45
4.3.5.1	Identification of Benefits	45
4.3.5.2	Cause of Improved Access to Affordable Health Care Services	45
4.3.5.3	Causes of Accessible and Affordable Health Services.....	50
4.3.6	Renewal Frequency.....	50
4.3	Sustainability of CHF Scheme in Chunya District	51
4.3.1	Respondents' Views Regarding Sustainability of CHF Scheme	51
4.3.1.1	Positive Views to Scheme Sustainability.....	51

4.3.1.2 Challenges to NHF Scheme Sustainability	54
4.3.2 CHF Key Informants' Views on CHF Sustainability	58
4.4 Summary of Findings.....	59
CHAPTER FIVE	61
CONCLUSIONS AND RECOMMENDATIONS.....	61
5.1 Conclusions.....	61
5.2 Recommendations.....	61
5.2.1 Improve the CHF Package.....	61
5.2.2 Eliminate Shortage of Medical Supplies	62
5.2.3 Proximity to Health Facilities	62
5.2.4 Improve Attendance of Patients by Health Workers	62
5.2.5 Stop Soliciting of Tips from Patients.....	62
5.2.6 Educate the Chunya Community on CHF	63
5.2.7 Expand Acceptance of the CHF Card.....	63
5.2.8 Sensitization and Registration of New Beneficiaries	63
5.2.9 Strengthen Coordination and Supervision of CHF	64
REFERENCES.....	65
APPENDICES	69

LIST OF TABLES

Table 3.1: Sample Size of Respondents	29
Table 4.1: Family Size of the Respondents	38
Table 4.2: Main Sources of Income	40
Table 4.3: Source of Information about CHF.....	43
Table 4.4: Medium of Persuasion to Join CHF	44
Table 4.5: Benefits of CHF as Assessed by Beneficiaries	45
Table 4.6: Improved Finance for CHF Insurance Services	46
Table 4.7: Responses to Improved Infrastructure for CHF Insurance Services	47
Table 4.8: Responses to Improved Information System for CHF Insurance Services	48
Table 4.9: Responses to improved Technical Capacity for Skills of Workers to Provide CHF Insurance Services	49
Table 4.10: Mean Response to Causes of Accessibility to Affordable, Health Services	50
Table 4.11: CHF Renewal Frequency	51

LIST OF FIGURES

Figure 2.1: Conceptual Framework	23
Figure 3.1: Map of Mbeya Region showing the Study Area (Chunya District)	26
Figure 4.1: Frequency of Respondents by Gender.....	35
Figure 4.2: Frequency of Respondents by Age Group.....	37
Figure 4.3: Marital Status of Respondents.....	37
Figure 4.4: Education Level of the Respondents	39
Figure 4.5: Awareness of CHF by Beneficiaries and Non-beneficiaries	41
Figure 4.6: CHF Enrollment in Chunya 2005-2017	43

LIST OF ABBREVIATIONS

ADDO	Accredited Drug Dispensing Outlets
AIDS	Acquired Immuno-Deficiency Syndrome
CBHI	Community Based Health Insurance
CHF	Community Health Fund
CHSB	Councils Health Service Board
DCHF-Co	District Community Health Fund Coordinator
DMO	District Medical Officer
DRF	Drug Revolving Fund
GIZ	Gesellschaft für Internationale Zusammenarbeit. (<i>German</i> Corporation for International Cooperation)
HIV	Human Immunodeficiency Virus
MHIS	Micro Insurance Health Schemes
MoHCDGC	Ministry of Health Community Development Gender Elderly and Children
MOHSW	Ministry of Health and Social Welfare
MoLG	Ministry of Local Government
NHIF	National Health Insurance Fund
NSSF	National Social Security Fund
PHI	Private Health Insurance
PO – RALG	Presidents Office Regional Administration and Local Government
SHIB	Social Health Insurance
TIKA	Tiba kwa Kadi
TNCHIF	Tanzania Network of Community Health Funds

TSh	Tanzania Shilling
USA	United States of America
VEO	Village Extension Officer
VSSC	Village Social Service Commission
WHC	Ward Health Council

CHAPTER ONE

INTRODUCTION

1.1 Background of Health Insurance Schemes in Tanzania

The Government of Tanzania has introduced Community Health Fund as one of the mechanisms for accomplishing its obligation to ensure that her residents access quality and affordable health care services. The CHF is a form of prepayment scheme designed for rural people in Tanzania. It based on the concept of risk sharing whereby beneficiaries pay a small contribution on a regular basis to compensate the risk of needing to pay a much larger amount in health care user fees if they fall sick. According to the CHF Act 2001 the objectives are:

- (i) To mobilize financial resources from the community for the provision of health care services to its beneficiaries.
- (ii) To provide quality and affordable health care services through sustainable financial mechanism and
- (iii) To improve health care services management in the communities through decentralization by empowering the communities in making decisions and by contributing on matters affecting their health.

After the Arusha Declaration in 1967 health care services were provided and financed by the Government. The health care services were financed through tax and donor fund. The Government managed to expand health facilities as well as health workers training facilities (MOH, 2003; MOHSW, 2007). Following the world economic crisis in the 1980s, the government and donors insufficiently financed health care services.

The donors became reluctant to provide grants to low income countries, especially those which do not take serious measures to become self-reliant. Consequently, the country's ability to finance health services reduced leading to shortage of drugs, medical supplies, staff and other essential items; and structures deterioration, resulting in inadequate services (MOH, 2003; MOHSW, 2007; Shaw, 2002).

The Community Health Fund (CHF) was introduced in Tanzania as part of the Ministry of Health and Social Welfare attempt to make health care affordable and available to the rural population and the informal sector. CHF was introduced in 1996 targeting about 85% of population in rural area engaged in informal sector to improve their access to health care services. CHF was piloted in Igunga District then roll out to other 9 Districts including Singida Rural District in 1998. In 2001 the CHF Act was passed by the parliament to roll out CHF in all Districts (CHRCs, 2005; Shaw, 2002 and URT, 2001).

Membership of the CHF is voluntary and each household within the district contributes the same amount of fees as agreed by beneficiaries of the community themselves and given a health card (URT, 2001). The card entitles the household to a basic package of curative health services throughout the year. Normally, coverage is for the household head and other household beneficiaries below the age of eighteen years. Households that do not participate in the CHF scheme are required to pay user fees on individual basis at the health facilities at the point of treatment. As part of wider reforms in health care financing, Tanzania introduced user fees in 1993. This followed the failure of the government to provide free health care to all its citizens through tax financing due to the increase in treatment costs, emergence of pandemic

diseases such as HIV/AIDS and the overall poor performance of the economy (Quijada and Comfort, 2002). Over time, other financing mechanisms have been added including the introduction of schemes resembling prepaid insurance such as the National Health Insurance Fund (NHIF), CHF and its urban equivalent, TIKA; and various Micro Health Insurance Schemes (MHIS) such as UMASIDA and VIBINDO.

More recently, the National Social Security Fund (NSSF) has introduced a health care benefit package known as Social Health Insurance Benefit (SHIB). The financing options that have been introduced by the Government are user fees, CHF, drug revolving fund (DRF), national health insurance fund (NHIF) and re-enactment of private for profit health facilities (MOH, 2003; MOHSW, 2007).

1.2 Statement of the Problem

According to Chunya District registers CHF insurance scheme was designed and executed in Tanzania since the year 1996 with intent to enable rural communities to access affordable, quality and sustainable health services, Chunya District started using CHF insurance in 2005 (About a decade later). Technical causes mainly Finance, Infrastructure, Health information system and capacity of health workers as well as socio economic factors are dynamic hence have a strong effect on access to affordable quality and sustainable health services under CHF insurance in the district. The extent of implementation of CHF can be measured by perception of the community on how they manage to meet the expense for health care through CHF and barriers to access of affordable health care services including shortage of medicines, medical supplies and shortage of health personnel are overcome (URT, 2010).

Despite the fact that Chunya District is under CHF insurance scheme whereby each household contributes only TSh. 10,000 - 12,000 per year, which benefits up to six members of the family the perception of households on access to affordable health care services is missing in the context. Moreover the rural community in Chunya District have no regular flow of income therefore cannot be covered by the formal insurance schemes operating in the country so it is anticipated that CHF could ensure access to better health services to the community who are not covered by other health insurance schemes such as NHIF (URT, 2015 and 2016). Msuya *et al*, (2004) found that CHF has reduced out of pocket payments and raised demand for health care services among beneficiaries in Igunga District. Chee *et.al*, (2002) found that, CHF has improved the quality of health care services because CHF money was used to purchase drugs and equipment; and to renovate health facilities. Thornton *et al*., (2010) found that those who received insurance substituted toward services at covered facilities and total out-of-pocket expenditures fell.

Although several studies have observed CHF to influence access to affordable health services (Chee *et al*., 2002; Colombo and Tapay, 2004; Finkelstein *et al*., 2012; Gala'rraga, 2009; Garshong Bertha 2009; Holahan, 2010; Mahoney, 2015; Msuya *et al*., 2004; Wagstaff, 2009 and Writter Sophie) there is inadequate information on the situation in Chunya District.

So far there has been no successful theory developed that incorporates perception of beneficiaries and non-beneficiaries of CHF insurance on improved access to affordable health services in Chunya District. It is for this matter that the current study has embarked to investigate the perception of beneficiaries and non-

beneficiaries on CHF insurance scheme in Chunya District. The study sought to substantiate the research premise that retarded and low adoption of CHF insurance scheme in Chunya District is significantly contributed by inadequate perception of socio – economic and technical aspects.

1.3 The Social Vulnerability Theory and its Application in the Study

The word vulnerable means being exposed to harm, physically or emotionally and applies to humans as well as animals. Vulnerable populations include among others, refugees, ethnic minorities, homeless, pregnant women, girls and children, elderly, socioeconomically disadvantaged, prisoners, disabled persons, AIDs victims and the *under- or non-insured persons*. Members of vulnerable populations often have health conditions that are exacerbated by *unnecessarily inadequate health care* as it is the case in many parts of Tanzania's rural community including Chunya.

Vulnerability as an analytical concept emerged as a study of human impacts of natural disasters (e.g., earthquakes, disease epidemics, droughts, floods, tornadoes). However, in a disaster, not every person is affected equally. Thus, social vulnerability captures the degree to which a person's social situation leaves him/her susceptible to suffering (Melissa, 2012). In other words, it is the capacity of individuals or social group to respond, recover from, or adapt to any external stress placed on their livelihood or well-being. According to Kelly and Adger (2000), assessing vulnerability is an important component of any attempt to define the magnitude of the threat and it provides the starting point of determination of effective means of promoting remedial action to limit impacts by supporting coping strategies and facilitating adaption. A

successful assessment of consequences for human well-being clearly requires evaluation of a manner of which society is likely to respond through the deployment of coping strategies and measures which promote recovery and sustainability.

The current study regarding CHF perception and sustainability of the scheme in Chunya is in line with the just discussed theory. It is an attempt to understand the perception of both beneficiaries and non-beneficiaries on CHF as a sustainable family health insurance scheme to low income communities in the district to cope up with rising medical costs. Lack of health insurance cover contributes to social vulnerability among community groups. These are least prepared for disasters such as disease outbreaks because they have no cash for treatment of neither themselves nor their families. Addressing social vulnerability decreases human suffering and reduces post disaster cost to the community vulnerable groups. These groups are often not covered by health insurance schemes. At present there is considerable debate on how best to expand coverage to low-income groups (Qingyue Meng *et al.*, 2010). Strategies to extend coverage of insurance across these groups will help to address inequities.

1.4 Community Health Fund and the Social Welfare System

The Social Welfare System in a particular country provides assistance to their needy citizens as individuals, families or groups. Social Work as a profession is more concerned with assisting individuals, families, groups and communities to enhance their individual and collective well-being through development of their skills coupled their own resources and those of the community to resolve challenges in their immediate environment.

According to the Health Sector Strategic Plan 2009- 2015, the Government of Tanzania made a commitment to universal healthcare via social health insurance. Tanzania's health financing system is dominated by tax and donor-funded health delivery, with a modest proportion of the population enrolled in social, community, or private health insurance. The remaining population, reflecting the still-large proportion of people working in the informal sector or the very poor, is dependent on the public sector. They neither have insurance nor are they served by any other risk-pooling or sustainable mechanism. The Social Welfare System ensures equality of health services to vulnerable groups.

1.5 Objectives of the Study

1.5.1 General Objective

The objective of the present study was to investigate the perception of beneficiaries and non-beneficiaries on CHF as a sustainable health insurance in order to substantiate its role on access to affordable health care services in Chunya District.

1.5.2 Specific Objectives

- (i) To assess the perception of both beneficiaries and non-beneficiaries on affordable health care services in Chunya District.
- (ii) To investigate the sustainability of CHF scheme in Chunya District.

1.6 Research Questions

- (i) What is the perception of both beneficiaries and non-beneficiaries on CHF in Chunya District?
- (ii) Will the CHF scheme be sustainable in Chunya District?

1.7 Significance of the Study

The findings of this study will substantiate whether delayed adoption of CHF insurance scheme is significantly contributed by inadequate perception of socio – economic and technical aspects which are prime causes of access to affordable health care services. The result of these findings will create awareness amongst CHF implementers regarding perception and acceptance of this insurance scheme by the rural community, Challenges facing CHF will be brought to light for action by relevant authorities so that objectives of CHF as outlined on its inception can be attained. Also, results of this work can be used as a source of information to researchers as well as to local governments, NGOs, agencies or donors who aim at up scaling of the insurance scheme to all rural communities in the country.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

To gain understanding on health insurance schemes, CHF included, literature search will be done. In addition to that different studies will be accessed to find out what has been reported concerning the achievements and challenges of CHF on accessibility to health care services and to establish the research gap.

2.2 Theoretical Literature Review

Theoretical literature review will be conducted to become familiar with health insurance schemes. The review will involve implementation of these schemes in both developed and developing countries. Health insurance is a formal arrangement in which insured individuals are protected from the costs of health care services that are covered by the health insurance schemes (Wang, Switlick, Ortiz, Zurita and Connor, 2012). Health insurance scheme is one of the sources of health care financing in many countries worldwide. The introduction of health insurance schemes aimed at ensuring high quality health care services are accessible to all people. This is important in order to attain the WHO as well as the Tanzania's Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) goal of universal health coverage.

There are three types of health insurance schemes operating in different countries, which are social health insurance (SHI), national health insurance (NHI), community-based health insurance (CBHI), and private health insurance (PHI). SHI is a

compulsory scheme while CBHI and PHI are voluntary schemes (Berkhout and Oosting, 2008).

In developed countries health insurance schemes are regarded as a “way of life” because they came into practice since 1300s. During that period the health insurance schemes were voluntary and their beneficiaries were workers of a particular trade, these are regarded as PHIs. In 1883 Germany under Bismark introduced mandatory SHI scheme to achieve universal coverage. The SHI system has been adopted by other developed countries as well (Colombo and Tapay (2004); Saltman, Busse and Figueras(2004); Carrin *et al.*, (2005); Bidgood, (2013). The health insurance schemes in developed countries aimed at ensuring health care services are of high quality, comprehensive and accessible without financial barriers (Baribault and Cloyd, 1999; Weale and Clarke, 2011). In developed countries both SHI and PHI schemes are operating but the majority, 63% to 100%, of the total population in individual countries are covered by SHI. In countries with SHI coverage of less than 100% the difference is rich people who are allowed or required by the law to join PHI (Colombo and Tapay, 2004; Saltman *et al.*, 2004).

The United States of America (USA) is exceptional because PHIs are the only schemes that are operating in that country (Colombo and Tapay, 2004). The examples of health insurance schemes operating in these countries are Landwirtschaftliche Krankenkassen (LKK) which is SHI in Germany and Medicare PHI scheme found in USA (Baribault and Cloyd, 1999; Bidgood, 2013; Colombo and Tapay, 2004). PHI schemes play substitutive, supplementary and complementary roles in the health system. The substitutive role of PHI is the provision of health insurance cover to rich

people who are no longer eligible for SHI. The PHI supplements SHI by covering co-payment and co-insurance; and health services, which are not in the SHI package such as dental, optical and luxurious services. The PHI become complementary when it is bought by an individual who is eligible for and has SHI as an additional cover (Bidgood, 2013; Colombo and Tapay, 2004; Saltmanet *et al.*, 2004).

SHI schemes are mandatory whereby both the employer and employee each contribute a percentage of member monthly salary. The calculation of contribution does not take into consideration the health status of beneficiaries. The legal dependants are also covered by the same contribution. The Government pays premium to the SHI schemes for poorest citizens. The benefits package is comprehensive. The beneficiaries receive health care services from almost all public and private providers who have contract with their SHI schemes. Generally, beneficiaries are free to choose providers and no referral is needed. The beneficiaries can also be allowed to change health insurance schemes (Saltmanet *et al.*, 2004).

PHI schemes are voluntary in which the individual is responsible for paying the premium on monthly basis. Other insurance companies require subscribers to pay the provider for health services received then they will be reimbursed later. The premium is risk-related but reasonable and is paid separately for every family member. The employers are main purchasers of PHI as one of the employees' benefits. The benefits package of PHI is comprehensive similar to that of SHI. Health care services are provided through both public and private providers. The Government regulates PHI design explained above for successful attainment of health insurance schemes goals (Bidgood, 2013; Colombo and Tapay, 2004; Saltmanet *et al.*, 2004).

The challenges on accessibility to health care services facing health insurance scheme beneficiaries in developed countries are higher cost-sharing, some services are not covered (for example, dental care), some covered services are not provided, poor health care services in rural areas, long waiting time for high-tech interventions, providers discriminate clients based on health insurance schemes and inadequate 24-hours health centers (Baribault and Cloyd, 1999).

2.3 Definition of Terms and Concepts

2.3.1 Formation of Health Insurance Schemes in Low-Income and Middle Income Countries

Health insurance schemes were introduced in low-income and middle-income countries in 1980s as another source of health care financing. This was the implementation of Alma-Ata Declaration in 1978 that urged community participation in health care financing through health insurance schemes. The schemes aimed at closing the health financing gap, achieving universal health care coverage and providing financial protection to households (Berkhout and Oosting, 2008; Carrin *et al.*, 2005; Spaanet *et al.*, 2012).

The types of health insurance schemes operating in these countries are SHI, CBHI, and PHI. The number of people covered by these schemes is not significant. For instance, in Africa SHIs cover people who are engaged in formal sector this implies that about 80% of people engaged in informal sector are not covered. In order to address this problem CBHIs have been introduced to cover those people but the performance of these schemes is not good because their coverage is 0.2% only. The

situation is not different for the case of PHIs since less than 10% people are insured by these schemes (Berkhout and Oosting, 2008; Spaanet *et al.*, 2012). These data suggest serious measures are needed before universal coverage can be achieved.

The challenges of health insurance schemes on accessibility to health care services in low-income and middle-income countries include poor health care services, lack of comprehensive benefits package and presence of out-of-pocket payments (Berkhout and Oosting, 2008).

Furthermore, Carrin *et al.*, (2005) analyzed the performance of CBHI schemes in developing countries and came up with the following challenges on accessibility to health care services: poor health care services, lack of comprehensive benefits package, lack of provider choice, strict gate keeping and referral practices; and existence of co-payments. In order to improve accessibility to health care services low-income and middle-income countries have to come up with strategies that can address observed challenges. In addition to that, best practices should be shared because it has been found there are variations in effects produced.

2.3.2 Health Insurance Schemes in Tanzania

In Tanzania health insurance schemes were introduced in 1996 as another source of health care financing. The general objective of these schemes is to fill the health care financing and universal health care coverage gaps in this country (CHRCs, 2005; MOHSW, 2007; Shaw, 2002; URT, 2001). Tanzania falls among the low-middle income countries. Health insurance schemes coverage in Tanzania is still low. This is evidenced by the data that show the coverage of leading schemes in Tanzania whereby

NHIF has insured 7.1% whereas CHF coverage is 7.9% of the people eligible for those funds (Humba, 2011).

Types of health insurance schemes operating in Tanzania are SHI, CBHI, and PHI. NHIF is the only SHI scheme in this country. The CBHI schemes include CHF, VIBINDO and UMASIDA while the PHIs are AAR, MEDEX and Strategis (MOHSW, 2007; Temba and Leonard, 2013).

The NHIF is a compulsory insurance scheme established in 1999 with the following objectives:

- (i) To have a national scheme that covers groups in phases;
- (ii) To have a scheme that will provide local solutions to the problems existing in the health delivery system;
- (iii) To strengthen cost-sharing by providing an opportunity for the formal sector employees to contribute through their contributions to a Fund;
- (iv) To provide free choice of providers to public servants who were formerly restricted to government health facilities;
- (v) To enhance health equity among formal sector employees in the provision of health care services;
- (vi) To institute a permanent and reliable system for the provision of health services to formal sector employees;
- (vii) To improve accessibility and quality of health services by introducing competition among health care providers from Public, Faith-based, Non Government Organizations' and Private Health Providers; and

- (viii) To reduce the financing gap by supplementing the Government budgetary allocation to the health sector by contributions from formal sector employees (Humba, 2011; MOHSW, 2007).

NHIF started its operations with central government employees in 2001. Other groups such as local government employees, public institutions employees, police, prisons, fire brigade and immigration; students, retirees, and spiritual leaders were included later. Contribution rate is 6% of the monthly gross salary whereby both the employer and employee each contribute 3%. NHIF beneficiaries are principal beneficiaries and their respective legal dependents identified by NHIF identity cards issued to them (Humba, 2011; MOHSW, 2007). NHIF benefits package is comprehensive and improved with time, currently it includes the following: consultation fees, outpatient and inpatient services, pharmaceutical services, diagnostics tests, surgical services, dental services, physiotherapy, optical services and some of the orthopedic appliances.

NHIF accredited 80% of all health facilities in the United Republic of Tanzania include public, faith-based organizations (FBOs) and private of all level not leaving aside pharmacies and accredited drug dispensing outlets (ADDOs) which provide the above mentioned services to its beneficiaries (Humba, 2011; MOHSW, 2007). NHIF succeeded to improve access to health care services by improving quality of services through increasing competition among providers and enabling beneficiaries to access services from the best providers. The challenges of NHIF on accessibility to health care services are the presence of few pharmacies and ADDOs; and shortage of drugs, equipment and staff in the rural health facilities (Humba, 2011; MOHSW, 2007).

Private Health Insurance Schemes are voluntary insurance schemes whose beneficiaries are salaried workers on an individual basis or as employees of registered employers. Private insurance companies operating in Tanzania are AAR, MEDEX and Strategies. The private insurances operate mainly in the urban areas and with private health facilities. Their benefit package is risk rated and they operate on the equivalence principle instead of solidarity principle. Beneficiaries are selected taking into consideration the age, sex, and risk exposure of an individual (MOHSW, 2007).

Micro-health insurance schemes (MHISs) are voluntary schemes for people in the informal sector or groups of common interest. UMASIDA and VIBINDO are examples of successful MHISs in Tanzania. MHIS are set up and run by co-operatives, churches or local communities. They have a support network, the Tanzania Network of Community Health Funds (TNCHFs) which helps them in their set-up, operation, organization and management. Benefits package and contributions are set and agreed by the respective beneficiaries (MOHSW, 2007; Temba and Leonard, 2013).

2.3.3 Community Health Fund

CHF is defined as “a voluntary community based financing scheme whereby households pay contributions to finance part of their basic health care services to complement Government health care financing efforts” (URT, 2001).

According to CHRCS (2005) and URT (2001) the objectives of CHF are:

- (i) To mobilize financial resources from the community for provision of health care services to its beneficiaries;

- (ii) To provide quality and affordable health care services through a sustainable financial mechanism;
- (iii) To improve health care services management in the communities through decentralization by empowering the communities in making decisions and by contributing on matters affecting their health.

CHF was introduced in 1996 targeting about 85% of population in rural area engaged in informal sector to improve their access to health care services. CHF was piloted in Igunga District then roll out to other 9 District including Singida Rural District in 1998. In 2001 the CHF Act was passed by the parliament to roll out CHF in all Districts (CHRCs, 2005; Shaw, 2002; URT, 2001).

CHF is a District based scheme, its beneficiaries are households that pay agreed annual contribution and issued CHF card to access basic curative and preventive health care services from identified health facility for one year. CHF scheme put in place exemptions and waivers system to ensure the poorest community beneficiaries who cannot afford to pay premium access health care services. The community beneficiaries who are neither poor nor CHF beneficiaries are required to pay user fees to access health care services at the health care facility whenever they get sick (CHRCs, 2005; Sendoro, 2007; Shaw, 2002; URT, 2001).

According to CHRCs (2005), Shaw (2002) and URT (2001) CHF management and administration is accomplished at four different levels namely: national, District, ward and village. At the national level is through the Ministry of Health (MOH) and the

Ministry of Regional Administration and Local Government (PO - RALG). At the District, ward and village level responsible organs are Council Health Service Board (CHSB), Ward Health Committee (WHC) and Village Social Services Committee (VSSC) respectively. CHF Act has stipulated the functions of each organ to ensure successful achievement of schemes' objectives. The legal sources of fund for CHF are beneficiaries' contributions, user fees, grants from government or donors; and any other sources, which are legally acceptable. CHF money is used for health matters that have been approved by the Board (URT, 2001).

According to Micahel E. Porter (2010) health value should always be defined around the customer, and in a well-functioning health care system, the creation of value for patients should determine the rewards for all other actors in the system. Since value depends on results, not inputs, value in health care is measured by the outcomes achieved, not the volume of services delivered, and shifting focus from volume to value is a central challenge. Nor is value measured by the process of care used; process measurement and improvement are important tactics but are no substitutes for measuring outcomes and costs.

Since value is defined as outcomes relative to costs, it encompasses efficiency. Cost reduction without regard to the outcomes achieved is dangerous and self-defeating, leading to false "savings" and potentially limiting effective care.

2.4 Empirical Literature Review

Previous studies carried out to determine the effects and challenges of CHF on accessibility to health care services were reviewed aiming at establishing their

findings as well as research gap. Chee *et al.* (2002) conducted study on assessment of CHF in Hanang District. The findings show CHF has succeeded to mobilize resources through beneficiaries' contributions; and user fees, which form major part of collections. CHF money collected was used to purchase drugs and equipment; and to renovate health facilities as a result the quality of services was improved.

However, a lot of money was used to construct District hospital and many health facilities had large unused balances. Non-beneficiaries of CHF involved in this research said they haven't joined the scheme because nongovernmental health facilities, which provide quality services are not accredited. Another finding was low community participation since most of WHCs were not active and meetings with beneficiaries were not held.

Therefore, CHF was managed by health facilities in-charges and District Medical Officer (DMO). The implementation of exemption policy was found to be poor in doing so poor community beneficiaries were denied access to health care services. Furthermore, the study reported poor CHF management and information system leading to insufficient supervision and inconsistent records. Lastly, findings show enrolment of beneficiaries was low this is one of the reasons for low contribution collections.

Msuya *et al.*, (2004) observed that CHF has raised demand for health care services among beneficiaries in Igunga District. Beneficiaries have been seeking medical attention when needed because they are insured. Another finding was beneficiaries are financially protected because CHF covers the costs of health care services, which are

included in the benefits package. However, CHF beneficiaries have been experiencing out of- pocket payments for covered health care services, which are not found in the accredited health facilities as well as transportation costs. Moreover, income has been found to determine CHF beneficiary membership since an individual is required to pay for premium and extra costs that might arise. This has affected poorest participation in the scheme.

Mtei and Mulligan (2007) reported low CHF enrolment which is contributed by low income, low user fees, high premium, and poor knowledge on CHF, lack of comprehensive benefits package, poor quality of health services, poor health providers' attitude and broad exemption policy. Concerning reaching the poor, it was found that they can't afford paying for premium; and the exemption policy is poorly implemented. Consequently, majority of poor people are not benefited by CHF. Also, according to this study management and accountability were poor due to weakness in knowledge and low community involvement. Furthermore, in respect to provision and use of services there were increase in access and some improvement in quality of services. However, lack of comprehensive benefits package, inadequate medical supplies and equipment at health facilities, inadequate skilled and motivated health providers and low freedom of choice of providers were observed; these jeopardize the quality of services provided to CHF beneficiaries. Sustainability of CHF was found to be threatened by low enrolment and high dropout rate. The two reasons affect contribution collection, which is among the main sources of income for CHF.

Kamuzora and Gilson (2007) carried out research on factors influencing implementation of CHF in Tanzania. The study found enrolment was low due to

inability to pay beneficiaries membership contributions, low quality of care, lack of trust in scheme managers and failure to see rationale to ensure. The factors contributing to low quality of care identified by respondents were shortage of drugs and essential medical supplies; inappropriate diagnosis due to lack of diagnostic equipment; staff related problems (unresponsiveness to patients' problems, maltreatment and bad language; absenteeism, staff shortage and corruption); lack of comprehensive services coupled with exclusion of referral system; and lack of choice of health facility of preference. Another finding was to some extent District managers have influence on the way policy is implemented. The managers have been found to contribute to poor implementation of exemption policy; and they are poorly responding to financial issues.

As far as this study is concerned, from the empirical literature it has been found that CHF has produced some effects on access increase, improvement of availability of medical supplies and equipment at health facilities; and financial protection. The challenges identified by these studies included lack of comprehensive benefits package, inadequate medical supplies and equipment at health facilities, inadequate skilled and motivated health providers, lack of local health facilities, existence of out-of-pocket expenditure and lack of choice of providers.

A study by Sommers (2014) on health reforms observed that there was a great expansion on health insurance coverage in the United States with little change in the source of coverage for those who were insured before the major provisions of the law took effect. Furthermore, the law expanded coverage using all parts of the health insurance system, including employer-sponsored insurance, Medicaid, and the newly

created Marketplaces. While these data have limitations, especially due to the low response rate, they provide an early look at how it has affected insurance enrolment.

2.5 The Research Gap

The overall issue addressed in this study is whether perception of beneficiaries and non-beneficiaries on variability of technical and socio-economic variables has an effect on access to affordable and sustainable health services under CHF insurance scheme. So far there has been no successful theory developed that incorporates beneficiaries and non-beneficiaries of CHF insurance for improved access to affordable quality health services in Chunya District. In irrigated fields of Mbeya region. The research problem is whether the retarded and low adoption of CHF in Chunya District is significantly contributed by inadequate perception of socio – economic and technical aspects.

No studies in Chunya District have been conducted so far to investigate the perception of beneficiaries and non-beneficiaries as well as the sustainability of the scheme. Therefore, this study was an attempt to find out the current situation based on the fact the scheme was introduced in Chunya in 2005.

2.6 Conceptual Framework

According to Nkechi *et al.*, (2016) Perception has come up a prominent determinant of the utilization of health services. Utilization of health service is only partially a reflection of effective availability, as patients may choose not to use services, even if they are available”. The decision to use available health services depends on people’s perception of the services and affordability. People’s perceptions and judgment are

often conditioned by assessing factors leading to their level of satisfaction with the health service, as well as their assessment of the attitude of health worker.

This conceptual framework best explains the progression of the studied phenomenon. Kombo and Tromp (2006), defines a conceptual framework as an abstract indication of basic concepts and constructs that are expected to interact on actual settings and experiences that form a foundation of a good research study. This study had two variables, namely independent and dependent variables.

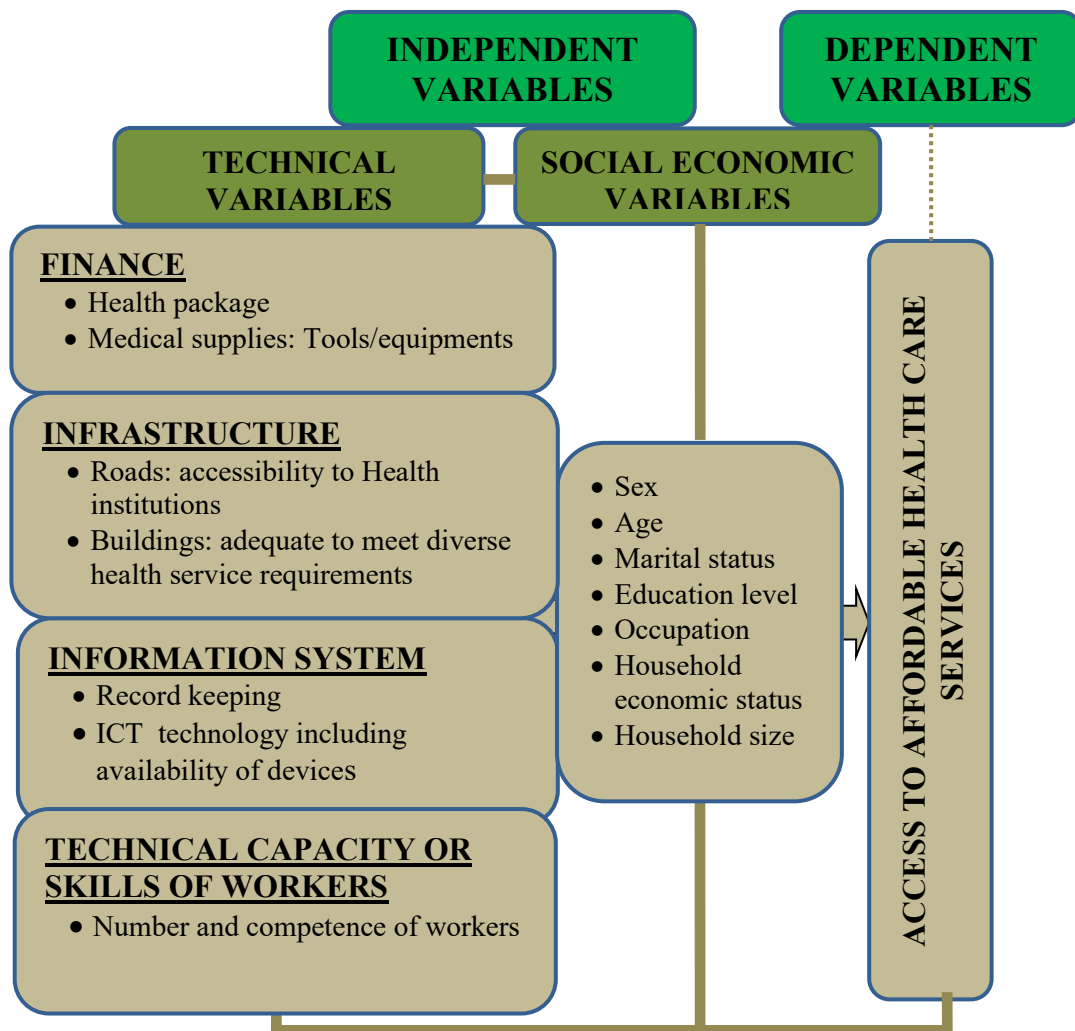


Figure 2.1: Conceptual Framework

The conceptual framework, which was used in this study, was based on a brief description of literature review that intended to explain how technical and social economic aspects as independent variables have effects on affordable health care services to the rural community which is considered as a dependent variable for the current study on Perception of Beneficiaries and Non-Beneficiaries on CHF as a Sustainable Family Health Insurance. The extent of affordable health care services (dependent variable) is anticipated to change in response to perception of the independent variables.

In order to draw valid conclusion the research idea has been divided into two parts which are the causative factors namely the technical and socio economic variables (independent variables). The technical variables are finance, infrastructure, information system and technical capacity of health workers. Socio economic variables are sex, age, marital status, education; occupation, house hold economic activities and house hold size. The second part of this framework has been denoted by supposed consequences of affordable health services upon different technical and social economic variables (the effect).

The fundamental impression of health insurance is risk sharing and burden bearing as is for CHF whereby a successful CHF insurance could be perceived as one that will enable the rural community to acquire affordable health care services. Perception as one of the important aspects of humans who are among the broad intelligent systems, through which the magnitude of individuals to perceive things is distinguished, has been used to distinguish views of beneficiaries and non beneficiaries of CHF as shown in Figure 2.1.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Description of the Study Area

This study was conducted in Chunya District Council Mbeya Region in Tanzania (Fig. 3.1) Chunya District is located in the North - Western part of Mbeya Region. The District is among the seven Districts of Mbeya region and it lies between 7° and 9° Latitudes South of the Equator, and between 32° and 34° Longitudes East of Greenwich. The District is bordered by Singida and Tabora regions to the North; Iringa region and Mbarali Districts to the East; Mbozi and Mbeya Districts to the South; Rukwa region and LakeRukwa to the West. The District has a total area of 29,219 km² of which 28,114 km² is land and 1,705 km² is covered with water including rivers Songwe, Lupa, and Zira and part of Lake Rukwa which constitute the inland water bodies.

The population of Chunya District Council is 156,789 with 31,975, households (Chunya Jan-Mar Quarterly Report 2017). Administratively, the District is divided into two divisions, 20 wards and 43 registered villages. The District has one FBO hospital, one government hospital, two government health facilities and 24 dispensaries.

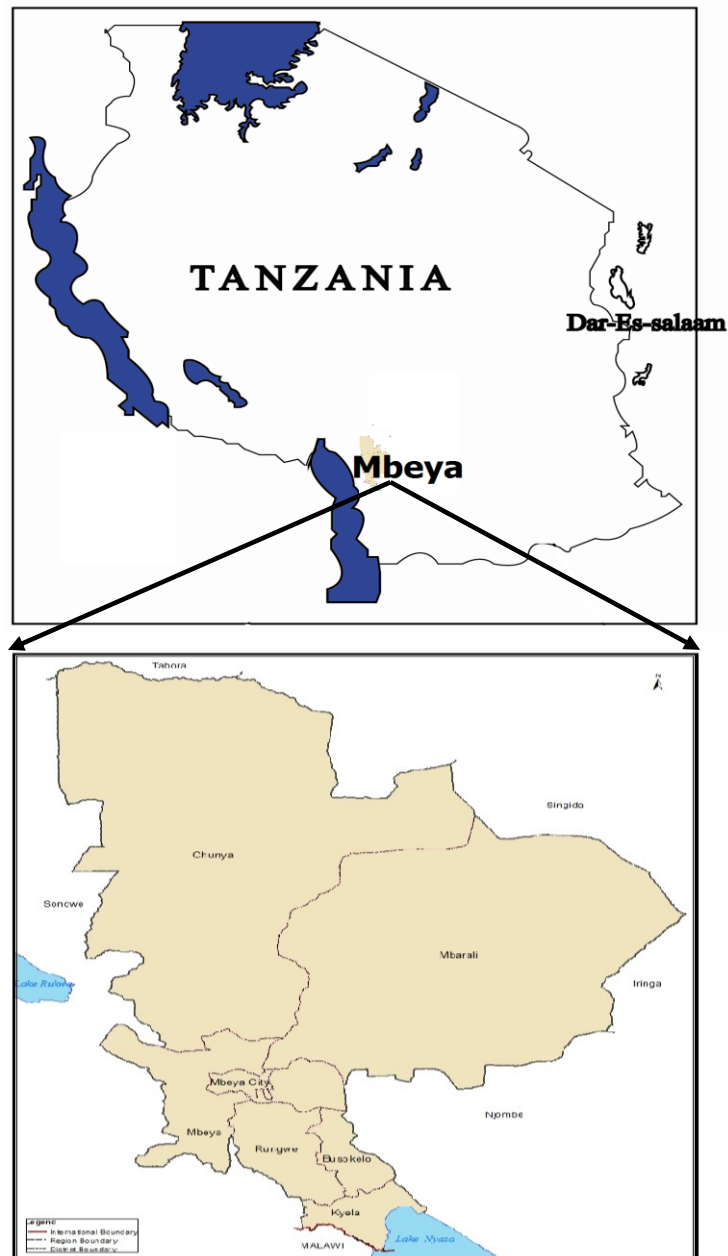


Figure 3.1: Map of Mbeya Region showing the Study Area (Chunya District)

Chunya District Council was chosen to be the study area because of the following three reasons: Firstly, Chunya District Council is one of the Districts in Tanzania where CHF is operating. CHF operations in this District commenced since 2005. Secondly, Chunya District Council was among the Districts in the region with high CHF enrolment rate which indicates that the community adopted it as an alternative

health scheme. Thirdly no study has been conducted to determine the perception of the community on CHF as an alternative and sustainable health scheme in Chunya District Council. The study was conducted in three villages namely, Sangambi, Mtanilana Mapogoro. These villages were purposively selected from three wards: Sangambi, Mtanila and Chokaa.

3.2 The Study Population

The study population included various stakeholders of CHF in Chunya District Council who were CHF managers at the District and village levels as well as community beneficiaries. The CHF managers included selected beneficiaries of CHSB, WHCs and village government comprising the DMO, District CHF Coordinator (DCHF-Co), facility in-charge and village executive officers (VEOs). On the other hand, the community beneficiaries comprised of both beneficiaries and non-beneficiaries of the CHF scheme. The decision to select the above mentioned groups was guided by the expectation that those were the right people to provide the information required by this particular research.

3.3 Research Design

Research design used in this study was a case study. A research design provides detailed plan of work, data to be collected and a statistical analysis tool appropriate for that particular design (Kothari 2004). Experimental designs can be informal such (as-before-and after-without control; after-only with control and before-and after- with control). Formal designs include completely randomized design, randomized block design and complex designs such as Latin squares and lattice designs. This study used a case design often used to narrow down a very broad field of research into one or a

few easily researchable examples. Both quantitative and qualitative research methods were used. Qualitative and quantitative data collected were compared in order to draw credible conclusions. The data was collected using questionnaires, documentary review and interviews guided by a checklist.

3.4 Sample Size and Sampling Techniques

This study employed simple random and stratified sampling techniques in which sample sizes of 67 respondents were interviewed. The respondents were distributed as follows (Table 3.1): CHF managers involved in qualitative part of this study composed of 1 GIZ Coordinator, 1 DCHF-Co, 1 Pharmacist and 3 VEOs. Other respondents were 45 CHF beneficiaries and 15 non-CHF beneficiaries (all purposively selected) who participated in the quantitative data collection part.

The investigator held a focused discussion with the CHF Key informant in Chunya, namely the GIZ Coordinator, the Pharmacist and the CHF Coordinator. Stratified sampling technique was used to select wards which were involved in this study. The wards were of two categories. The first category consisted of wards with relatively high enrolment and the second category consisted of wards with relatively low enrolment.

Those categories enabled the researcher to get a representative study sample. Two wards were selected from each category by using simple random sampling (lottery method). Purposeful sampling was used to select villages which were involved in the study. One village with relatively high enrolment was chosen from each ward.

Table 3.1: Sample Size of Respondents

Sn	Category of Respondents	Number of respondents	Mode of selection
1	CHF Administrators		
	- GIZ Coordinator	1	
	- CHF Coordinator	1	Stratified selection
	- Pharmacist	1	
	- VEOs	3	
2	Community Beneficiaries		
	- CHF Beneficiaries	46	Stratified selection
	- CHF Non – Beneficiaries	15	of respondents and villages
Total		67	

Simple random sampling was used to select CHF beneficiaries to be involved in the study. The list of CHF beneficiaries was obtained from the health facility then from that list subjects were chosen randomly by using the lottery method. The CHF beneficiaries being the beneficiaries of the scheme were in a better position to narrate their experience on effects and challenges of CHF on accessibility to health care services, and their experience has a great effect on scheme performance.

Convenience sampling was used to select non-CHF beneficiaries to be included in this study. Individuals (respondents) who were found in the village during data collection participated in the study. Five respondents were selected from each village to get a total of 15 participants. The non-beneficiaries were involved in the study to establish reasons for not participating in CHF and to corroborate (confirm) findings from

beneficiaries. Purposeful sampling was used to select the CHF managers involved in the study. The CHF managers included DMO, DCHF-Co, facility in-charge and VEOs. These officers are highly cognizant of CHF performance. The information and data from both CHF managers and community beneficiaries were compared in order to draw credible conclusions.

3.5 Data Collection Methods

A number of collection methods were employed during the course of the study. These are briefly elaborated.

3.5.1 Structured Questionnaire

This is a document that consists of a set of standardized questions with a fixed format for gathering information from respondents. In the current study, structured questionnaires were used as a data collection tool for gathering quantitative as well as qualitative data from the respondents. This type of questionnaire uses closed-ended questions, which bind respondents to provide intended data. The interview guide was used to collect qualitative data from CHF administrator.

The open ended questions enabled the researcher to tap the experiences of CHF administrator on the effects and challenges of CHF on accessibility to health care services and efforts made to overcome the challenges encountered. The questionnaires and interview guide were formulated in English then translated into Kiswahili for ease of gathering data from the respondents. Pre-testing of questionnaires and interview guide was done to ensure their completeness and correctness and to ascertain that the information and data being sought was captured. The interview was conducted in

three villages in three wards. To ensure high respondent turn up, they were notified a week earlier and then a day before specifying where to meet and time. Questionnaires were filled by the researcher assisted by pre-trained enumerators on a face-to-face basis.

3.5.2 Secondary Data (Documentary Reviews)

Involves review of information that have been collected by other researchers and have undergone analysis through appropriate statistical tools published or unpublished. This information is available in reports, working documents, books, papers (kept in offices or library) and from online Google data bases as listed in the bibliography. The researcher visited, consulted and retrieved various pertinent data from various reports and publication in Mbeya and in Chunya offices.

3.5.3 Focus Group Discussion

Focus group discussion is a quick assessment that aims at getting information pertaining to the objectives of the study from a purposively selected set of participants who gather to discuss key issues or themes listed or identified by the researcher. Focus group is a semi-structured data gathering method.

3.5.4 Key Informants

These are people who through their social or professional positions have more specialist knowledge related to the study than ordinary people in the area. Their expertise and knowledge is valuable throughout the research period, in particular, at the initiation of the study. Key informants of the CHF scheme and in the village community were consulted in the process of data collection in this study.

3.5.5 Checklists

A checklist is a short (one to two pages) of key points that guides the researcher so as to ensure that important issues in his/her study are not overlooked. It helps the researcher to verify, check; ensure consistency and completeness of data collection. The researcher takes notes, and may even take photos, audio, video or audio recordings where appropriate. In this study a checklist was used when interviewing key informants in the community and CHF implementers in their office.

3.6 Data Analysis Methods

Data analysis methods used included, means, percentages, frequency tables and bar charts. Content analysis was used to analyze qualitative data collected. The method involved organizing, reading, describing, classifying and interpreting data.

3.6.1 Dependent and Independent Variables

Dependent variable in this study was accessibility to health care services. Independent variables in this study were divided into two categories. The first category consisted of variables that had positive relationship with the dependent variable. Comprehensive benefits package, adequate medical supplies and equipment at health facilities, affordable health care services, and adequate skilled and motivated health providers, presence of local health facilities and freedom of choice of providers increased accessibility to health care services.

The second category included variables that had negative relationship with the dependent variable. Lack of comprehensive benefits package, inadequate medical

supplies and equipment at health facilities, existence of out-of-pocket expenditure, inadequate skilled and motivated health providers, and absence of local health facilities and lack of choice of providers' decreased accessibility to health care services.

3.6.2 Developing Scales for Assessing Perception

The respondents were asked questions to ascertain their perceptions towards access to affordable and sustainable CHF insurance; the dependent variable, in the study that required the following responses, of which each were coded using the scales in parenthesis i.e. Likert-style format (Trochim, 2006); strongly agree (1); agree (2); undecided(3); disagree(4) or strongly disagree(5). Statements with highest and lowest scores were taken as statements that were accepted or rejected outright by respondents, to compose the scale that was actually used for determination of the perceptions. Responses were grouped into 3 categories namely: Positive, neutral (undecided) and negative. Statements with intermediate scores were left out since they connoted chances of not being decided.

3.7 Ethical Considerations

Research clearance from the Open University of Tanzania was sought. Also, the permission to conduct research in Chunya District Council was requested from all appropriate authorities starting with District Executive Director (DED). Before consenting to participate in the study, respondents were informed about the purpose, duration, and potential benefits of the study and the community in general. To ensure confidentiality the researcher assured the respondents that their identity will not be linked to their responses during data processing and reporting.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of how socio-economic and technical variables affect access to affordable and sustainable health care services to the rural community. It encompasses results on social demographical characteristics of beneficiary and non-beneficiary respondents, and their perception on CHF scheme and its sustainability.

4.2 Social Demographic Characteristics of the Respondents

Respondents' socio-demographic characteristics presented include gender, age, marital status, education level, family size and occupation (source of income). This information was necessary to provide a broad background of the sample population including their categories that were interviewed.

4.2.1 Gender of Respondents

Gender consideration was taken into account when selecting the respondents. Results in Figure 4.1 show that out of 67 respondents 57% are male beneficiaries and 61.8% are female none beneficiaries of CHF. The results elucidate that for beneficiaries of CHF scheme the number of male respondents is more than that of female respondents. On the contrary for non-beneficiaries of CHF scheme the number of female beneficiaries is more than that of male beneficiaries. These results suggest that there are chances that the high number of female non-beneficiaries is due to the concern that mothers have over taking care of the family especially children and dependants hence they see the difficulty in accessing affordable health care services. This is supported

by (Sendoro, 2007; URT, 2001) who argued that the prime purpose of CHF is to put in place exemptions and waivers system to ensure the poorest community beneficiaries who cannot afford to pay premium access health care services. Moreover according to URT (2001) the annual payment in Chunya District is TSh. 10,000 – 20,000 per year, which covers costs for acquiring health services for a family of up to six members.

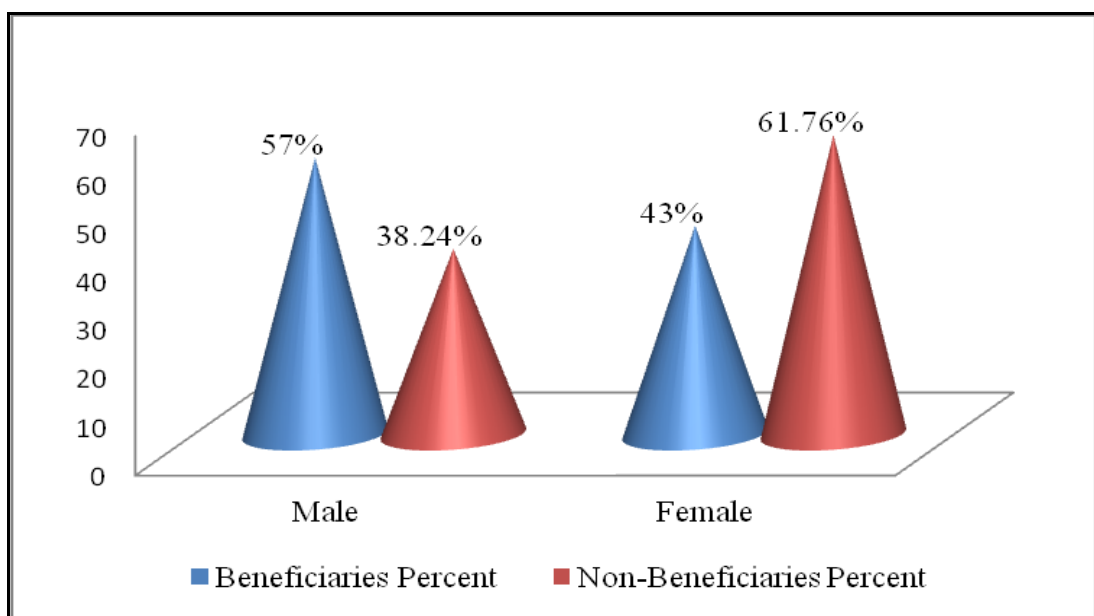


Figure 4.1: Frequency of Respondents by Gender

On the contrary the findings (Figure 4.1) suggest that the higher number of male beneficiary respondents can be attributed to their higher turn up and often greater aggressiveness over females as always observed in meetings and other social gatherings during question or discussion plenary.

Apart from this, Frodi *et al.*, reviewed adult female and male aggression against the commonly held hypotheses that men are almost always more physically aggressive than women and that women display more indirect or displaced aggression were not supported. Their studies revealed when aggression is perceived as justified or pro-

social and when factors that are related to sex differences, which include sex of the instigator and/or victim of aggression, empathy with the victim, guilt, and aggression anxiety are controlled, women may act as aggressively as men. Therefore it is plausible that the low number of female beneficiaries might be due to not compromising with the above mentioned factors with regards to CHF insurance. Hence the results suggest that more women should be sensitized on the need and benefits associated with CHF insurance particularly to the disadvantaged groups.

4.2.2 Age of Respondents

Results on age distribution show that 8% of respondents are below 20 years, while 54% are between 21 and 30 years of age. Those above 50 years of age accounted for 13% (Figure 4.2). These results depict that the highest number of respondents are between the age of 20 -30 years followed by those who are more than 40 years old (greater or equal to 41 years). The results show the later age category comprises 20% respondents of which the age of 41 – 50 years is 7% and the age greater than 50 years is 13%.

The higher number of middle aged respondents compared to the other groups is perhaps due to the fact that this is the age that strives more to learn and acquire knowledge and skills of life. The elderly tend to be complacent. Moreover the study suggests that the majority category (20 – 30 years) is the most active age for development. This is supported by Tylee *et al.*, (2007) who argued that for developmental as well as epidemiological reasons, young people need youth-friendly models of primary care.

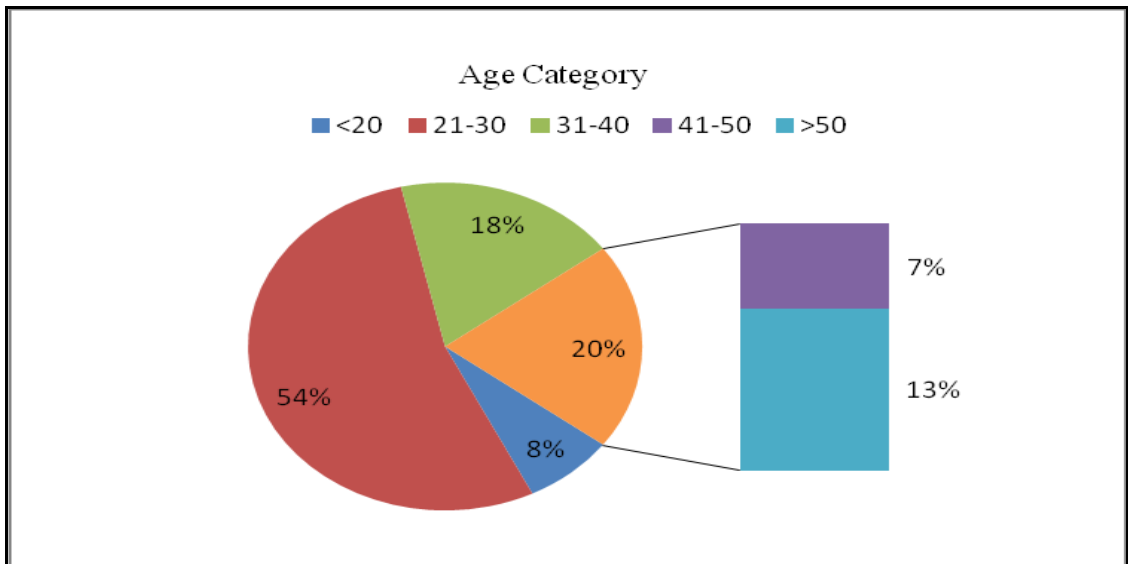


Figure 4.2: Frequency of Respondents by Age Group

4.2.3 Marital Status of Respondents

Findings in Figure 4.3 show that 53.7% of the respondents are married, while 42% are single. There was only one divorcee (1.5%). The results also show that 2.9% of the respondents were Widows. This may be due to the fact that most of the married couples have families who need a CHF insurance identity most of the time.

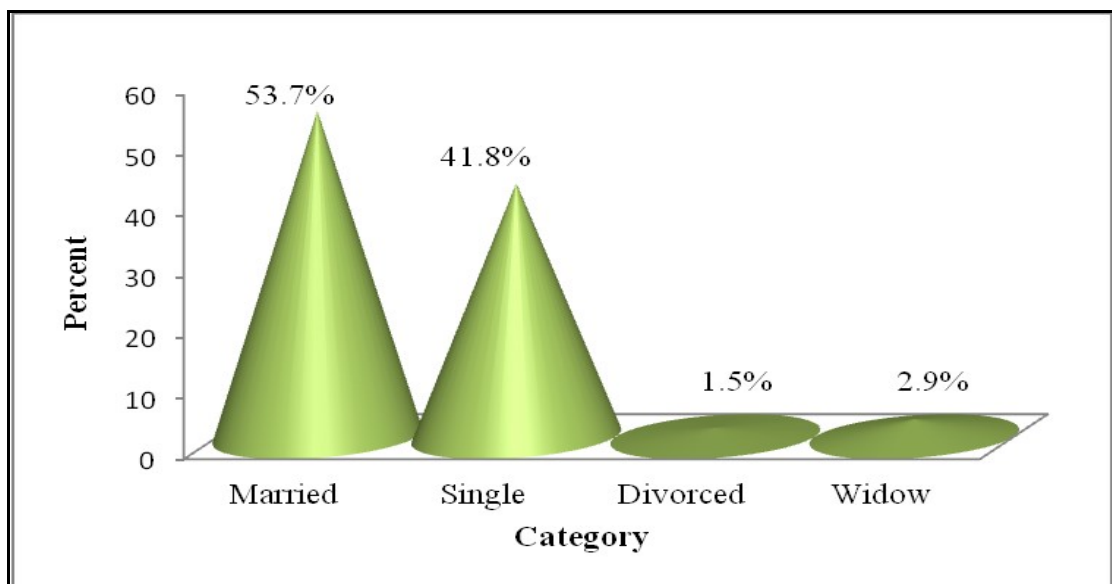


Figure 4.3: Marital Status of Respondents

4.2.4 Family Size of Respondents

Table 4.1 presents information on family size of respondents categorized into children and dependants. The results show that the respondents had or did not have children and or dependants. When looking at children in the family results show that the largest size of children (38.8%) in the family is 1 – 2 years old, while the smallest size (14.9%) is that with more than 4 years of age. However the results also show that families who have no children are 29.85%.

Seemingly for families with dependants at the house hold, results in Table 4.1 show that high number of dependants is at the age of 1-2 and more than 4 years old. In both cases the results show 29% of the respondents observe to have these age categories as dependants in their households. On the contrary 27% of the respondents have no dependants. Dependency is very common among African families. In this study, 43 of the respondents had dependants from one to more than 4. Twenty six of the respondents (male/female) had no children (unmarried). The variation depends on duration of marriage, family planning, traditions and those with more than one wife

Table 4.1: Family Size of the Respondents

Category	Children				Total	Dependants				Total
	0	1-2	3-4	>4		0	1-2	3-4	>4	
Age										
Frequency	20	26	11	10	67	16	17	9	17	59
Percent	29.85	38.80	16.42	14.93	100	27.12	28.81	15.25	28.81	100

From the results on children and dependants there are high chances that most of the populations have less than six children/dependants or both. These results suggest that

there are chances that all members of the households/families in Chunya District can be covered by CHF insurance. URT (2001) proclaimed that CHF insurance coverage is for a family of up to six people.

4.2.5 Education of the Respondents

Figure 4.4 presents information that the education level of a large part of beneficiaries and non-beneficiaries is primary education. The results show 63.6% and 64.7% of the CHF beneficiaries and non-beneficiaries studied up to primary education level. Respondents with secondary level education are 21.2% for beneficiaries and 20.6 for non beneficiaries.

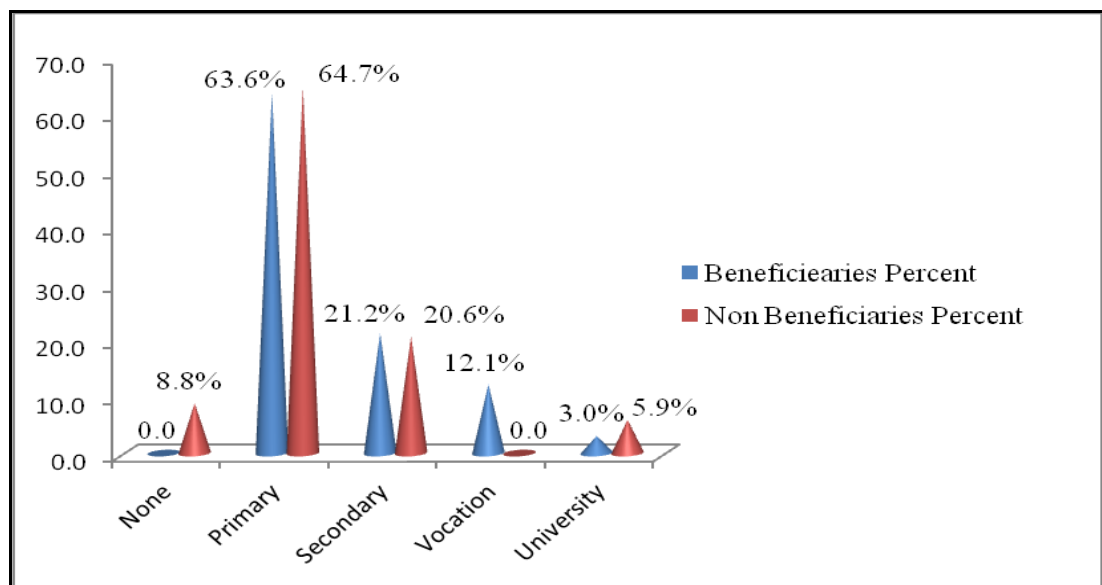


Figure 4.4: Education Level of the Respondents

When looking at those with education beyond secondary level (vocational, university) for beneficiaries results show that all completed at least primary school while for none beneficiaries vocation training was not part of their learning. This distribution of levels of education in the sample reflects the reality in Tanzania whereby those with

primary level education are mostly the majority in many studies as observed by among others Chee (2002), Kamuzora (2007) and Mtei (2007) in their studies on issues pertaining to community health in Tanzania.

4.2.6 Sources of Income

Research findings show that the main source of income of the respondents is field crop farming (38.8%), livestock keeping (16.4%) and petty trading (14.9%). Food vending (*Mama-Lishe*) is reported by 8.9% of the respondents. Other sources of income include carpentry, masonry, drivers, and sale of Vodacom, Airtel, Tigo vouchers and casual labor. Formal employment is reported by 8.9% of the respondents (Table 4.2). Field crop farming; namely maize, beans and finger millet together with livestock keeping account for 53.4% of the source of income of the respondents. This finding is consistent with the known main occupation and source of income of many Tanzanians.

Table 4.2: Main Sources of Income

Economic Activity	Frequency	Percent
Field crops and vegetable farming	26	38.8
Livestock (Cattle, Goats, Poultry)	11	16.4
Food Vending	6	8.9
Petty Traders	10	14.9
Employed	6	8.9
Others	8	11.9
Total	67	100

According to the National Census of the year 2012 and Mbeya region demographic data the rural community (Farmers and Livestock keepers) account for about 80% of the population. It is plausible that given this huge population residing in the rural areas, CHF insurance might be the most prominent health care insurance facility in Chunya District. Thus positive perception of CHF insurance scheme could facilitate access to more affordable health services in Chunya District.

4.3 Perception of Beneficiaries and non-Beneficiaries on the CHF Scheme

4.3.1 Awareness of the Community Health Fund

Figure 4.5 shows 70.1% of the beneficiaries and 76.5% of non-beneficiaries are aware of the CHF. These results elucidate that majority of the population are aware of CHF. According to these results it is likely that sensitization and awareness campaigns administered since the year 2005 have provided information on CHF.

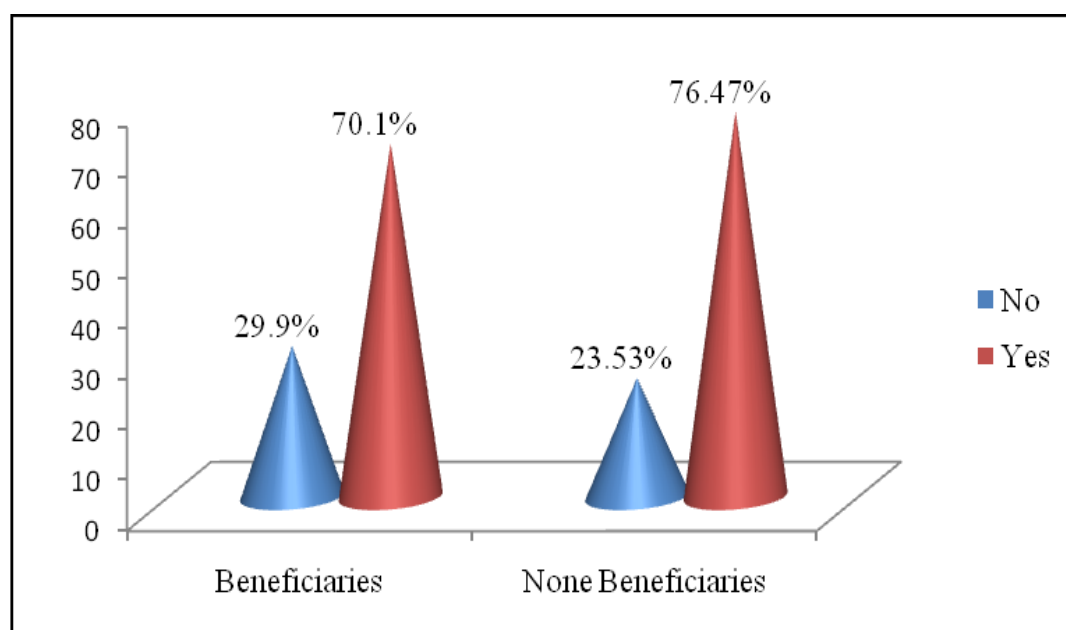


Figure 4.5: Awareness of CHF by Beneficiaries and Non-beneficiaries

The issue is how efficient the information has been delivered to the targeted population and the magnitude of barriers to effective implementation of CHF insurance in the communities. This is supported by Kamuzora and Gilson (2007) who found enrolment was low due to among other factors inability to pay beneficiaries membership contributions, low quality of care, lack of trust in scheme managers and failure to see rationale to ensure.

4.3.2 Source of Information on CHF

Results in Table 4.3 show the major sources of information regarding CHF is when attending treatment at dispensary/clinics/hospitals 36.36% of beneficiaries and 28.6% of none beneficiaries obtain information on CHF. This is followed by attending village meetings which is observed by 29.55% of beneficiaries and 28.57% of none beneficiaries and seminars which is observed by 22.73% of beneficiaries. According to the results the least source of information about CHF is from Village executive officers, which are observed by 2.27% of beneficiaries. These results suggest that it is plausible health institutions are the major source of information of CHF insurance scheme.

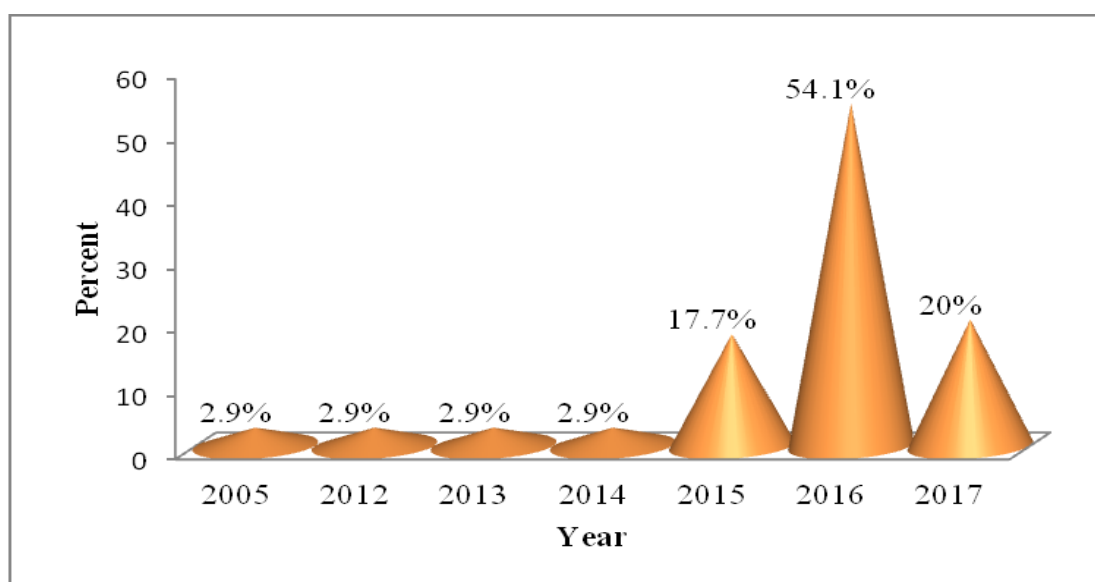
Moreover the results above show that village leaders do not play an adequate role in providing information on CHF. Similarly a study by Kamuzora and Gilson (2007) observed that among the factors influencing the CHF include lack of trust towards ward leaders who were accused for corruption and lack of transparency due to among others lack of supervision from a higher level, lack of information, transparency and failure to respond to requests from communities and committees.

Table 4.3: Source of Information about CHF

Source of Information	Beneficiaries		None Beneficiaries	
	Frequency	Percent	Frequency	Percent
Dispensary, Clinic, Hospital	16	36.36	6	28.57
Village meetings	13	29.55	4	19.05
Seminars	10	22.73	3	14.29
CHF workers	1	10.87	1	4.76
Radio/TV	1	2.27	2	9.52
Places of Worship	1	2.27	2	9.52
Neighbours/ friends	1	2.27	2	9.52
Village Executive Officer	1	2.27	1	4.76
Total	44	100.00	21	100.00

4.3.3 Membership of CHF

Figure 4.6 shows enrollment of CHF membership whereby there is an increase of enrolment among the years from the year 2015 to 2016. The results show highest enrollment rate is 54.1%, which is revealed in 2016 followed by 20% in the year 2017 and 17.7% in the year 2015.

**Figure 4.6: CHF Enrollment in Chunya 2005-2017**

The results show a decline in enrollment from year 2016 to 2017. The main reason for their abstaining is limitation of the CHF card that cannot be accepted at all health facilities within and outside the district as well as treatment of all diseases even if it is to raise the user fee. As regards to when they joined CHF enrollment is observed since 2005, but most joined around 2015-2017 when they realized the benefits of the insurance (Figure 4.6).

4.3.4 Persuasion to Join CHF

Table 4.4 gives results on observations of medium used for persuasion of respondents to join CHF. From the results major medium used is Seminar/Village meeting, which accounts for 38.8% and Village leaders which reports 27.8% of the observations. According to the results 11.1% of the persuasion is brought about by CHF workers. Only two respondents claimed to join CHF at their own will. The best agents for sensitizing the community to join CHF appear to be the village and ten cell leaders as individuals, village meetings and internal seminars whereby the community freely participates in discussions, questions and answers without fear across gender.

Table 4.4: Medium of Persuasion to Join CHF

Medium	Frequency	Percent
Seminars/ village meetings	8	38.8
VEO/Ten Cell Leader	10	27.8
Doctors, Nurses,	7	19.4
CHF workers	4	11.1
Friends	1	2.8
Self motivated	2	2.6
Total	32	100

4.3.5 Benefits of Joining CHF

4.3.5.1 Identification of Benefits

Table 4.5 demonstrates response from beneficiaries of CHF on benefits obtained from CHF. The results show 31 out of 33 beneficiaries benefit from CHF. Thus the results elucidate 95% of the respondents perceive CHF to be beneficial to the community. Moreover from the results 64.52% of the beneficiaries benefit from receiving medical treatment at all times and without much bother as well as cheaper and simplified treatment of family members. A small percent (3.23%) show that they benefit from receiving only cheaper and simplified treatment of family beneficiaries. The results show medical treatment without bother and at all times rate 16.13% in each observation with a total of 10 respondents at a sum of 32.26% of the observations. From the results there are high chances that the investigated population agrees that they do benefit from CHF insurance.

Table 4.5: Benefits of CHF as Assessed by Beneficiaries

Benefits	Frequency	Percent
Medical treatment without much bother	5	16.13
Medical treatment at all times after the annual contribution	5	16.13
Treatment of family beneficiaries cheaper and simplified	1	3.23
All benefits listed apply	20	64.52
Total	31	100.00

4.3.5.2 Cause of Improved Access to Affordable Health Care Services

Finance for CHF insurance services

Results in Table 4.6 show response to perception on finance in improving availability of affordable CHF insurance services. From the results all 46 beneficiaries of CHF

accept that finance for CHF services improves access to health services mainly through improved health supplies including health package, tools and equipments.

From the results it is plausible that fund is expected to continue being a major contributor to meeting financial need for continued medical supplies. This is supported by WHO (2003) that sustainability of health insurance schemes is supported by among others finance and administration. Moreover Mushi (2007) argue that running the CHF is more expensive than user fees.

Table 4.6: Improved Finance for CHF Insurance Services

Response	Frequency	Percent
Improved health package		
Positive	46	100.00
Undecided	0	0.00
Negative	0	0.00
Total	46	100.00
Improved medical supplies		
Positive	46	100.00
Undecided	0	0.00
Negative	0	0.00
Total	46	100

Improved Infrastructure

Results in Table 4.7 show that through CHF insurance scheme infrastructure improvement is perceived as 89.96% for roads and 93.48% for hospitals/health centers or dispensaries. On the contrary 6.52% and 2.19 deny that roads/health centers or dispensaries and hospital have improved respectively. These results proclaim there are

high chances that improved roads and health structures contribute to positive perception of CHF insurance fund for access to affordable health care services. This is supported by URT (2015) and (2016) In 2012 Mbeya region ranked second, next to Dares salaam in having a large number of health facilities (Hospitals, Health Centers and Dispensaries). Furthermore, according to Msuya *et al.*, (2004) the distance to the health facility determines the decision to enroll. What discourage people to enroll was when the facility was too far as well as the associated cost of transport and food. The health care services were financed through tax and donor fund. The Government managed to expand health facilities as well as health workers training facilities (MOH, 2003; MOHSW, 2007).

Table 4.7: Responses to Improved Infrastructure for CHF Insurance Services

Response	Frequency	Percent
Improved roads		
Positive	40	86.96
Undecided	3	6.52
Negative	3	6.52
Total	46	100
Improved hospital/Health		
Positive	43	93.48
Undecided	2	4.35
Negative	1	2.17
Total	46	100.00

Information system

Table 4.8 shows 97.8% of the respondents accept that there is an improvement of record keeping followed by 91.3% who show improvement of ICT. On the contrary

2.17% deny improvement of record keeping and 6.52% deny improvement ICT. These results suggest there is an improvement of both record keeping and ICT. Basing on this result it is plausible that the perception of respondents on information system at the health institutions to have improved as a result of the onset of CHF insurance scheme. URT (2010) noted that the national ICT backbone provides opportunities to develop various e-services to full proliferation in the country. The services include e-education, e-health, telemedicine, e-government and e-commerce and other services yet to be conceived which are now being used in the country.

Table 4.8: Responses to Improved Information System for CHF Insurance Services

Response	Frequency	Percent
Improved record keeping		
Positive	45	97.83
Undecided	0	0.00
Negative	1	2.17
Total	46	100.00
Improved ICT		
Positive	42	91.30
Undecided	1	2.17
Negative	3	6.52
Total	46	100.00

Apart from this Health-Net system of local telecommunications sites enable healthcare information on the Internet. Medical workers can connect to the network through local telephone nodes to access services such as physician collaborations, medical databases, consultation and referral scheduling, epidemic alerts, medical libraries,

email and shared research reporting databases. Thus there are chances that perception of the community of improved ICT for affordable health services is positive.

Technical capacity

Table 4.9 shows perception on number and competence of workers whereby 93.48% of respondents are positive that number and competence of workers for provision of services has improved. On the other hand negative responses are 12.3%. During the field survey discussion with key informants revealed that despite the Government facilitation on improving infrastructure and staffing levels the competence of health workers and number of sessions they attend is questionable.

This is supported by Nkechi *et al.*, (2016) who argued that it is necessary to create a more responsive atmosphere in the health facilities, with culturally-sensitive and friendly health workers, and provision of affordable drug to improve the perceptions of the primary health care system, for it to succeed in providing health services for all.

Table 4.9: Responses to improved Technical Capacity for Skills of Workers to Provide CHF Insurance Services

Response	Frequency	Percent
Number and competent of workers		
Positive	43	93.48
Undecided	2	4.10
Negative	1	12.30
Total	46	100.00

4.2.5.3 Causes of Accessible and Affordable Health Services

Table 4.10 shows comparison of the means of results obtained in 4.6 – 4.9 whereby the results indicate that on average 94.6% of the respondents have a positive perception on CHF scheme. On the other hand 3.8% are negative. These results suggest that majority of the beneficiaries of CHF insurance scheme perceive that they benefit from the scheme through improved finance for supplies of medical packages, tools and equipment, improvement of infrastructures, information system and technical capacity of workers in provision of health services to among others beneficiaries of CHF.

Table 4.10: Mean Response to Causes of Accessibility to Affordable, Health Services

Response	Positive (%)	Negative (%)
Finance	100	0
Infrastructure	90.21	4.34
Information system	94.6	4.34
Technical capacity	93.48	6.52
Mean	94.57	3.8

4.2.6 Renewal Frequency

The respondents were asked to provide information regarding CHF renewal frequency after expiry in the first year. Results in Table 4.11 show that over 33% have renewed once, 21% twice and 5% three times. This data shows that the community in general supports CHF scheme. Irrespective of the frequency of renewal, 56.4% renewed the user card after paying willingly the user fee after realizing the usefulness of the insurance, in particular, treatment when sick at a time when one is financially incapable.

Table 4.11: CHF Renewal Frequency

Status	Frequency	Percent
Just Joined	17	43.6
One renewal	13	33.3
Two renewals	7	21.9
Three renewals	2	5.1
Total	39	100.0

4.3 Sustainability of CHF Scheme in Chunya District

The second objective of this study was to investigate sustainability of the CHF scheme in Chunya District. To achieve this objective, the researcher had to capture views, comments and suggestions from beneficiaries, non-beneficiaries as well as key CHF managers (key informants). The questionnaire (filled by each respondent), checklist and direct focused interviews were means of collection of this information.

4.3.1 Respondents' Views Regarding Sustainability of CHF Scheme

4.3.1.1 Positive Views to Scheme Sustainability

The respondents came up with own views that support CHF scheme could be a sustainable health insurance option among the rural population. One of the positive attributes they mentioned was affordable user-fee whereby payment of TSh 10,000 only per family of six enables them to receive medical care for the whole year. This amount of money was felt affordable by most households, except for the poorest of the poor. The respondents even expressed their willingness to raise the current user contribution of TSh 10,000. However, the treatment package concurrently should be improved to cover treatment of more diseases.

Another feature of the scheme that will contribute to sustainability of CHF is that the user fee is set up in a participatory manner whereby a consensus is reached among them on the amount of contribution. This ensures that the amount agreed upon can easily be paid by the community without causing undue financial stress.

Results from the interview with the CHF implementers in Chunya regarding their perception on sustainability were different from those of CHF beneficiaries but both groups' perceptions aimed at improving CHF scheme so that it becomes sustainable. Strengthening coordination and supervision is one area that requires improvement coupled with recruitment of fulltime trained staff specifically to run the scheme. This change will improve performance significantly. Currently CHF is coordinated and supervised by staffs that have other job assignments, thus overburdening them and reducing efficiency.

Local Governments should contribute funds budget from their internal sources to provide matching funds to reduce dependency on donors. Donors support for a specified period of time and then leave, affecting sustainability of CHF. If funds are limited, beneficiaries may not get the full package at health facilities.

The current TSh.10,000 matching fund contributed by the beneficiaries and topped up by the government or donor is perceived unrealistic for treatment of six beneficiaries of a family for a whole year. Implementers gave an example of a real case where a patient was treated at a cost of TSh 200,000 a day. If he/she is admitted for 10 days, the cost would be TSh 2,000,000. One option to match the contribution with reality is to limit the treatment package, for instance, to eliminate admission and deal with

outpatients only. The second option is to raise the user fee to reflect treatment costs. Raising the user fee is possible and more realistic because it is within the mandate of the councilors. Even the CHF beneficiaries interviewed expressed their readiness to increase the user fee on condition that the treatment package is improved and all the challenges they listed are eliminated. Short of that, sustainability of the scheme, according to the implementers, is in question.

To sensitize the community during efforts to get new beneficiaries should be strategic. CHF as an insurance scheme, it is important to get new beneficiaries when people are in good health rather than when on hospital bed already admitted. That is one of the principles of insurance. “We do not insure vehicles when already in accident, nor do we insure a house against fire risk when it is already burning”.

The implementers, just as the respondents share the view that the CHF card should be used across the districts at least within the same region as well as in referral and regional hospitals. This need is underscored by the fact that people travel for various activities (economic or social) across districts and even across regions in the country. The CHF insurance should cover them when they fall sick, rather than wait until back home.

The perception here is that CHF is more needed when away from home than when around with their families where they can support each other in case of emergencies. After more than 20 years of operation in pilot districts in the country, the challenges and experiences gained should now guide the government to make the CHF insurance compulsory for all its citizens rather than optional as it is now.

4.3.1.2 Challenges to NHF Scheme Sustainability

The respondents pointed out challenges of the CHF scheme (based on their experience) that should be addressed to open the roadway to sustainability. These included availability of medicines and drugs at all times to eliminate out of pocket expenses to buy from private pharmacies. Most card holders have no cash money to pay for the drugs from private pharmacies, thus putting their life at risk.

Another challenge raised by the respondents is that the distance between their homes and some accredited health facilities is far. They suggested that health facilities should, if possible, be located within a walking distance to eliminate incurring out of pocket expenses as bus fares to access health services.

Health workers do not attend the sick promptly. The respondents complained that they sometimes find the health workers (nurses) engaged in other activities, absent or simply chatting. And some of them solicit payment if you are a CHF card holder. This was reported and supported by other respondents in the interview.

Respondents complained that the CHF package covers treatment of only a limited number of diseases. Costly treatments such as surgery, cancer, diabetes, heart and kidney problems are not included in the package. CHF is often misunderstood by the Chunya rural residents. According to the respondents, some community members have negative perception of the CHF scheme because they are not fully informed. Results in Table 4.4 present the respondents' case. CHF staff contribution to educate and sensitize the community to join the scheme is at 11% level only.

Respondents also were not happy with the CHF card because it is not accepted in all health facilities such as regional and referral hospitals. And worse, a patient cannot even be treated in health facilities across districts even in the same region as per the CHF Act.

In spite of all those challenges raised, membership continued to rise since 2005, and from the point of view of the interviewees, the scheme will be sustainable if all the challenges are addressed by the government. All respondents who are beneficiaries reported that they actively take part in convincing their friends and neighbors to join CHF. One resident of Ifuma village in Chunya claimed to have convinced with success over 600 people to join CHF.

Many of the challenges reported by the Chunya CHF beneficiaries concur with those mentioned by other beneficiaries elsewhere in the country as reported by (Kamuzora and Gilson, 2007, Mtei and Mulligan 2007; Msuya *et.al*, 2004). For instance when looking at the major causes the following are sampled observations:

Financing and Infrastructure

Inadequate health facilities forces the community beneficiaries to walk long distances to get treatment, otherwise because they are sick, they are forced to board a bus at cost. Yet CHF does not provide transport. According to MOHSW (2007), a patient is not supposed to walk for more than five kilometers in search of treatment. These out of pocket expenses (bus fares, food, water) hit those with low cash liquidity most, a common syndrome in most rural areas. To some extent, inadequate accredited health facilities in the villages discourage new CHF members.

Many of the health facilities, though inadequate, were reported by respondents to experience shortage of drugs and medicines. This again necessitates the sick or their relatives to incur out of pocket expenses to buy them in private pharmacy shops. Inadequate supply of drugs, medicines is caused by shortage or in availability of funds. The matching funds known as *Tele Kwa Tele* contributed 100% by the central government through NHIF is used to beef up funds for purchase of medicines, essential drugs, laboratory equipment and reagents. The CHF member contributes TSh10,000 and the government tops up with TSh 10,000. Untimely and erratic disbursement has escalated shortage of medicines and drugs in health facilities. This has led to unsatisfactory attendance of the beneficiaries when they fall sick. As a result, CHF beneficiaries continue to pay for service without any guarantee of refund.

Capacity of workers

Poor attendance of patients by health worker and soliciting a bribe was reported by the respondents in the questionnaire and during the open discussion. The complaint is that health workers do not attend the sick promptly. They may be around, but in a meeting, or chatting or absent from duty due to various reasons official or non-official. Regarding a small bribe or tips solicited by nurses before treatment, this study could not establish the truth about the vice, but it was reported by three of the respondents. Authorities need to investigate these assertions and stop the vices through administrative or disciplinary measures as outlined by government staff regulations.

One of the main limitations pointed out by respondents is that a card holder cannot use it beyond health facilities in the district. For instance, it cannot be used in regional and

referral hospitals. This challenge emanates from the design of CHF from the beginning: that it was intended to cover only basic curative and preventive health care services available at dispensaries and health facilities (CHRCs, 2005). This limits the fund to have a comprehensive package that would protect its beneficiaries from expensive treatments such as surgery, artificial limbs, treatment of cancer and the like.

CHF is often misunderstood by some of the community because of lack of education leading to some people create a negative perception of the fund for no good reasons. These are some examples from the respondents: CHF is not that useful because some people do not fall sick often, so it is a waste of money to join the scheme. They forget that naturally, all humans must fall sick, if not today, tomorrow, and often without notice!. However, they have dependents that may fall sick when the family is broke. CHF will be the immediate option for treatment if one is a member. Some respondents accuse CHF workers that they tend to give priority to the elder group (>50years) during treatment, an action they perceive as a bias or favor. It is however known that elderly citizens throughout the country have a special privilege to be attended first, not only during medical treatment in hospitals or health facilities but even in most social, economic or political events like voting or paying bills. Education is needed to wipe out misleading mindsets among the community.

The data from this study showed that while despite people being aware of the presence of CHF, they were not fully literate on its operations and health benefits they would get if they join the scheme. The best teachers for this knowledge would be the CHF implementers; however, the data in Table 4.3 shows that CHF workers account for

only 15% of the source of information about the scheme, while in Table 4.4, CHF contribution to sensitizing the community to join the scheme was at 11% only.

In spite of this challenge, when the respondents were asked if they have ever convinced other beneficiaries of their community to join CHF, all replied YES. It was very impressive to hear from one respondent (Ifuma village, ex-secondary school, government employed), who recorded in the questionnaire to have sensitized with success over 600 people to join CHF in his locality. Beneficiaries of this caliber can effectively be used in CHF sensitizing or awareness seminars in the villages and in-house visits.

4.3.2 CHF Key Informants' Views on CHF Sustainability

The investigator held a focused discussion with key informants namely the CHF implementers in Chunya (coordinators, pharmacists). The key informants came up with six concerns regarding sustainability of the scheme. Firstly, sustainability of CHF is questionable because starting at the local Government level and down the hierarchy, coordination and supervision of the scheme is weak. Secondly, CHF Coordinators have their own job description pertaining to their terms of employment.

CHF coordination is an extra duty assignment to them and off their job description. This leads to poor performance of the implementers and consequently, low efficiency. Thirdly, local governments do not have sufficient budget from their internal sources to run the CHF Scheme. They depend on external donors mainly GIZ and HIMSO. Fourthly, the Tele Kwa Tele funding from the central government through NHIF though still on, it is not timely disbursed. Fifthly, registering new CHF beneficiaries at

the health facilities when admitted or already sick is improper. The best approach is to promote the scheme to the community in the villages who then decide to take up membership when they are healthy, not sick. Sixthly, the annual contribution by the card holders is meager compared to reality. Therefore given the small contribution, the implementers feel there should be a cut-off point of support to treatment of CHF beneficiaries. For instance, CHF should be limited to out-patients only. No admission of patients because it is too costly and certainly out of proportion with their TSh.10,000 contribution. The concerns and challenges brought up by the key informants are valid, and can only be tackled through restructuring of the CHF Act to ensure sustainability of the scheme in Chunya and elsewhere in the country.

4.4 Summary of Findings

This study sought to establish the perception of beneficiaries and non beneficiaries on CHF as a sustainable family health insurance scheme in Chunya District. Specifically the study aimed to assess the perceptions on CHF scheme and investigate its sustainability in Chunya District. In order to draw valid inference the study research case was to examine the influence of Technical and Demographic/Socio economic variables (Independent variables) on access to affordable health care services under CHF insurance scheme (dependent variable). The study deduced that successful and sustainable CHF insurance scheme is perceived by the community as one that facilitates effective and sustained access to affordable health care services.

From the findings demographic and socio economic variables indicate that age of most respondents was 20 – 30 years and above 40 years of who most studied up to

primary education level. The main occupation and source of income of the community is field crop farming and livestock keeping this is consistent with many Tanzanians in rural areas (agriculture). Male respondent beneficiaries of CHF scheme are more female respondents. On the contrary for non beneficiaries of CHF scheme the number of female beneficiaries is more than that of male beneficiaries. Findings suggest that the higher number of male respondents can be attributed to their higher turn up and often greater aggressiveness over females as always observed in meetings and other social gatherings during question or discussion plenary. Moreover most of respondents are married with children/dependants aged 1 – 2 years. This may be due to the fact that most of the married couples have families who need a CHF insurance identity most of the time.

An assessment on individuals perceptions has shown that despite the delayed implementation of CHF in Chunya District (introduced in the country in 1996 Chunya community joined in 2015) a large number of the beneficiaries of CHF are positive to implementation and sustainability of CHF scheme. The findings reveal that this is mainly through facilitation of improved finance for procurement and supplies of medical packages, tools and equipment, improvement of infrastructures for provision of quality services, information system and technical capacity of workers in provision of efficient health services which are in line with CHF objectives. Moreover it is evident that CHF insurance is expected to continue being a major contributor to meeting both technical and socio-economic needs for access to affordable health services in the district.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The overall issue addressed in this study is whether perception of beneficiaries and non-beneficiaries on access to affordable and sustainable health services is positive. From the study, it has been observed that the community perceive instituting CHF insurance fund has facilitated both technical and socio economic aspects to influence affordable health services. Therefore it is concluded that health insurance offers protection against the detrimental effects of user fees and a promising avenue towards sustained health-care coverage in Chunya District. Therefore with continued support on improving technical and socio-economic aspects CHF will sustain access to affordable health care services and intensify positive perception to both beneficiaries and non-beneficiaries.

5.2 Recommendations

Key recommendations include improving finance, infrastructure, information and technology, and capacity of workers for efficient access to affordable health services. Other specific recommendations include:

5.2.1 Improve the CHF Package

The CHF package is not sufficiently comprehensive to deal with major diseases and surgeries. This emanates from the design of CHF, which was intended for curative and preventive health. For sustainability of this insurance scheme, beneficiaries strongly feel that the package be improved even if it involves increased user fees.

5.2.2 Eliminate Shortage of Medical Supplies

These include drugs, medicines, laboratory equipment and reagents for various analyses. If these supplies are available at health facilities and at all times, they will not have to incur out of pocket expenses to buy them from pharmacies or go to private hospitals.

5.2.3 Proximity to Health Facilities

Health facilities should be accessible to within 5km as spelt out in the design of CHF. Walking long distances, or using buses or any other form of paid transport, is a burden to the rural poor because of scarcity of money. If accredited government facilities are far, it is possible to reduce the distance by accrediting non-government or private facilities available in their respective areas.

5.2.4 Improve Attendance of Patients by Health Workers

Unresponsiveness to patients' problems has been cited not only in Chunya but elsewhere in the country. Talking, chatting by phone, absence from duty for flimsy reasons, bad language, maltreatment, lack of confidentiality are all attributes of being unresponsive to patients' problems. The CHF managers and implementers should take note of this concern and expedite disciplinary measures as per government's staff regulations.

5.2.5 Stop Soliciting of Tips from Patients

Three respondents in the interview reported a case whereby nurses and nursing assistants requested for a small amount of money before treatment. The investigator cannot confirm the magnitude of this vice in Chunya District. A tip or solicit of money

however small, it is still called corruption. The CHF manager should therefore investigate this allegation and take disciplinary action against those found guilty. This behavior is unbecoming and certainly demoralizes the sick and may have a negative impact on sustainability of the scheme.

5.2.6 Educate the Chunya Community on CHF

CHF implementers should take a lead in educating the community to wipe out misinformation regarding the scheme supported by various stakeholders such as village governments, community based organizations, non-government organizations, local religious entities and others. Mindsets such as CHF is for the aged, do not fall sick often, joining CHF is a waste of money if one does not fall sick, bias toward the elderly during treatment can easily be erased through community sensitization and education regarding basics of health insurance and its advantages.

5.2.7 Expand Acceptance of the CHF Card

CHF card be accepted in regional and referral hospitals. This recommendation as mentioned earlier requires a change in the design of the CHF and certainly an increase in user fee. The MoHCDGC should take this challenge and workout modalities of using the card in regional and referral hospitals countrywide.

5.2.8 Sensitization and Registration of New Beneficiaries

This activity should be done in the field (villages) when community beneficiaries are active and in good health rather than when sick and in bed in the health facilities. Sensitization can also be through places of worship, village and ward meetings,

primary and secondary schools in the area, TV/Radio if available and printed media, including simple leaflets in Kiswahili.

5.2.9 Strengthen Coordination and Supervision of CHF

This recommendation calls for recruiting full time staff specifically to implement the scheme at all levels. The staff to be employed must be professional in the respective field (planning, medical, nursing, insurance, administration, accounts). This will eliminate engagement of staff that already has other job assignments. Finally there is a need to undertake further research on among others the impact of CHF insurance Fund on Old Age beneficiaries in Tanzania.

REFERENCES

- Berkhout, E., and Oostingh, H. (2008). *Health Insurance in Low-Income Countries: Where is the Evidence That It Works?* London: Oxfam International.
- Bidgood, E. (2013). Healthcare Systems: Germany. Civitas. Retrieved on 7th October 2018 from: www.Civitas.Org.Uk/Nhs/Download/Germany.
- Carrin G., Waelkens M., and Criel, B. (2005). Community-Based Health Insurance in Developing Countries: A Study of its Contribution to the Performance of Health Financing Systems. *Tropical Medicine and International Health*, 10(8), 799–811.
- Chee G., Smith K., and Kapinga, A. (2002). *Assessment of Community Health Fund in Hanang District, Tanzania. The Partners for Health Reform Project*. Bethesda, MD: Abt Associates Inc.
- Colombo, F., and Tapay, N. (2004). Private Health Insurance in OECD Countries: The Benefits and Costs for Individuals and Health Systems (OECD Health Working Papers No. 15). Paris, France.
- Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, P. J., Heidi, A., and Baicker, K., (2012). The Oregon Health Insurance Experiment: Evidence from the first year. *The Quarterly Journal of Economics*, 127(3), P1057 – 1106.
- Frodi Ann, Macaulay Jacqueline and Thome Pauline R. (1997). Are women always less aggressive than men? *A review of the experimental literature. Psychological Bulletin*, 84(4), 634-660. <http://dx.doi.org/10.1037/0033-2909.84.4.634>.

- Holahan, John. (2010). The 2007 – 09 Recession and health insurance coverage. *Health Affairs Journal*, 30(1), <https://doi.org/10.1377/hlthaff.2010.1003>.
- Humba, E. (2011). Pioneering Social Health Insurance in Tanzania: The Case of The National Health Insurance Fund. Paper Presented At The Meeting. In: A Time of Crisis. Portland: Portland State University. Retrieved on 18th December 2018 from: [www. Policyconsensus.Org/Publications/Reports/Docs/Healthcare](http://www.Policyconsensus.Org/Publications/Reports/Docs/Healthcare).
- Kamuzora, P., and Gilson, L. (2007). Factors influencing implementation of Community Health Fund in Tanzania. *Health Policy and Planning Journal*, 22, 95-102.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques 2nd Edition*. New Delhi: New Age International (P) Ltd
- Micahel, E. P. (2010). *Perspective, what is value in health care?* The new England *Journal of Medicine*. N. Engl J Med 2010; 363:2477 – 2481 DOI; 10.1056/NEJMp1011024
- MOH, (2003). *National Health Policy*. Dar es Salaam: Government Printer.
- MOHSW, (2007). *Health Sector Reforms and District Health System*. Dar es Salaam. Government Printer.
- Msuya, J. M., Jütting, J. P., and Asfaw, A. (2004). Impacts of Community Health Insurance Schemes on Health Care Provision in Rural Tanzania (ZEF – Discussion Papers on Development Policy No. 82). Bonn University, Germany.
- Mtei, G., and Mulligan, J. (2007). Community Health Funds in Tanzania: A Literature National Health Insurance Fund, Annual Performance Report for the Financial Year 2012/2013. Dar es Salaam: CHF Directorate.

- Mushi, D. P. (2007). 'Financing public health care: insurance, user fees, or taxes? welfare comparisons in Tanzania', REPOA research report, Dar es Salaam, Tanzania.
- Neale, M. (2015). Bankruptcy as implicit health insurance. *American Economic Review Journal*. 105(2), 710 – 46.
- Nkechi G. Onyeneho, Uche, V., Amazigo, Ngozi, A., Njepuome, Obioma C. Nwaorgu and Joseph C. Okeibunor (2016). Perception and utilization of public health services in Southeast Nigeria: Implication for health care in communities with different degrees of urbanization International. *Journal for Equity in Health* 15(12), 135-152. DOI 10.1186/s12939-016-0294-z
- Omar, Gala'rraga, Sandra, G., Sosa-Rubi, Aarón, Salinas-Rodriguez, Sergio Sesma-Vázquez (2009). Health insurance for poor: impact on catastrophic and out of pocket health expenditures in Mexico. *European Journal for Health Economics. Eur J Health Econ.* 11, 437 – 447. DOI 10.1007/s10198 – 009-0180-3.
- Sommers, B. D., Musco, T., Finegold, K., Gunja, M. Z., Burke, A., McDowell, A. M. (2014). Health reform and changes in health insurance coverage in 2014. *N Engl J Med.* 371(9), 867 – 74.
- Tornton R., Hatt E.L., Field M.E., Islam M., Diaz S.F., and Gonzalez A.M., (2010). Social security health insurance for the informal sector in Nicaragua: a randomized evaluation. *Health Economics Journal*. 19(S1), 35-51.
- Trochim, M. K. W. (2006). Social research methods. Retrieved on 4th July 2018 from: www.socialresearchmethods.net.

- Tylee Andre, Dagmar M. Haller, Tanya Graham, Rachel Churchill, Lena A. Sanci (2007). *Youth-friendly primary-care services: how are we doing and what more needs to be done?* Science Direct, The Lancet [369, 9572](#), 5–11 May 2007, [https://doi.org/10.1016/S0140-6736\(07\)60371-7](https://doi.org/10.1016/S0140-6736(07)60371-7), Pages 1565-1573.
- URT, (2001). *United Republic of Tanzania, The Community Health Fund act, 2001, Clecky of the National Asembly*. Dar es Salaam: Government Printer.
- URT, (2010). The United Republic of Tanzania, Ministry of Finance and Economic Affairs, A study on the application of ICT in improving livelihood of the poor and in supporting growth in general
- Wagstaff Adam (2009). Estimating health insurance impacts under unobserved heterogeneity : the case of vietnams health care fund for the poor. *Health Economics Journal*. 19 2. <https://doi.org/10.1002/hec.1466>
- World Health Organization (2003), ‘Community based Health Insurance Schemes in Developing Countries: facts, problems, and perspectives’, Discussion paper number 1-2003, Department of Health System Financing, Expenditure and Resource Allocation, (FER) Cluster ‘Evidence and Information for Policy’ (EIP), Geneva.
- Writte, S. and Garshong, B. (2009). Something old or something new? Social health insurance in Ghana. *BMB international Health and Human Rights Journal*, article number, 20(3), 78-90.

APPENDICES

Appendix I: List of Respondents

Na.	Name	Gender	Age 1-5 yrs	Marital Status	Village
1	Alex Luanja	M	2	Married	Makongolosi
2	Atupakisye Kibinga	F	2	Married	Makongolosi
3	Bernard Herman	M	5	Married	Makongolosi
4	Edda Mwaigunga	F	3	Married	Makongolosi
5	Edwin Zenobi	M	2	Married	Makongolosi
6	Eva Haruna	F	2	Single	Makongolosi
7	Jenifa Sani	F	2	Divorcee	Makongolosi
8	Mussa Paskali	M	3	Married	Makongolosi
9	Obedi Ezekieli	F	2	Single	Makongolosi
10	Rebeka Ilomi	F	3	Single	Makongolosi
11	Roda Mchanga	F	5	Widow	Makongolosi
12	Stella Kidson	F	2	Single	Makongolosi
13	Adamu Mwambike	M	3	Married	Lupa
14	Adriano Gama	M	3	Married	Lupa
15	Agnes Bonifas	F	3	Single	Lupa
16	Bahati Charles	M	5	Married	Lupa
17	Bahati Christofa	M	2	Married	Lupa
18	Benedicto Sanga	M	5	Married	Lupa
19	Blandina Joel	F	1	Single	Lupa
20	Christina Simoni	F	2	Single	Lupa
21	Daudi Leonard	M	2	Single	Lupa
22	Ernest Christofa	M	2	Single	Lupa
23	Godfrey Chakupewa	M	2	Single	Lupa
24	Juma Michael	M	3	Single	Lupa
25	Wema Jackson	F	2	Single	Lupa
26	Adili Sadi	M	2	Married	Ifuma
27	Anastazia Emmanuel	F	3	Single	Ifuma
28	Emmanuel Kifwewe	M	2	Single	Ifuma
29	Faraja Njezya	F	2	Single	Ifuma
30	Geoffrey Shega	F	2	Single	Ifuma
31	Geofrey Osca	M	1	Single	Ifuma
32	Issa Suleiman	M	2	Married	Ifuma
33	Jumapili Isaveli	M	2	Married	Ifuma
34	Lamck Patson	M	1	Single	Ifuma
35	Maganga Shadrack	M	2	Married	Ifuma
36	Majaliwa Rashid	M	2	Single	Ifuma
37	Maria Simoni	F	2	Single	Ifuma
38	Mariam Kibona	F	3	Married	Ifuma
39	Peter Frank	M	2	Single	Ifuma

40	Rafa Mkoma	M	2	Single	Ifuma
41	Salum Arian	F	3	Married	Ifuma
42	Saulo Swedi	M	2	Single	Ifuma
43	Senyere Natusi	M	3	Married	Ifuma
44	Shabani Charles	M	2	Married	Ifuma
45	Vaileti Shabani	F	3	Married	Ifuma
46	Wilex Aron	M	3	Single	Ifuma
47	Yoseph Lation	M	3	Married	Ifuma
48	Glory Kavishe	F	2	Single	Chunya
49	Neema Joseph	F	5	Married	Chunya
50	Samweli Mwaigugu	M	3	Married	Chunya
51	Bahati Mwampashi	M	4	Married	Majengo
52	Mwasiti Juma	F	3	Married	Majengo
53	Zefania Siriwa	M	3	Married	Majengo
54	Catherine Ngole	F	3	Married	Mazimbo
55	Matrida Sawa	F	3	Widow	Mazimbo
56	Telesfori Kione	M	3	Married	Mazimbo
57	Fadhili Tamson	M	3	Married	Mamba
58	Gabriel Simkoko	M	3	Married	Mamba
59	Mashaka Sizya	M	1	Single	Mamba
60	Jane Ramadhani	F	5	Married	Matundasi
61	Jesca Katyega	F	1	Single	Sinjilili
62	Joel Mwamaji	M	3	Married	Lualaje
63	Klesta Kallinga	F	1	Single	Lualaje
64	Masudi Paulo	M	2	Married	Kasasa
65	Ntegwa Mwashamba	F	5	Married	Kapalala
66	Sara Izak	F	3	Married	Kalangali
67	Siyana Elias	M	5	Married	Mkola

Key Age categories:

1: < 20 years 2: 21-30 years 3: 31-40 years 4: 41-50 years 5: >50 years

Appendix 2: Questionnaire on CHF Perception and Sustainability Study in Chunya

Questionnaire No.....

PART A: PERSONAL INFORMATION

1. Name of respondent.....Place of domicile.....

2. Sex: Male/Female

3. Age of the respondent

(a) Below 20 yrs (b) 21 yrs - 30 yrs (c) 31 yrs- 40 yrs (d) 41 yrs- 50 yrs (e)

51 yrs and above

4. Education level of the respondent.

a) Primary: None.... Std I... IIIII.....IV.....V.....VI.....VII

b) Secondary Form 1....II....III.....IV.....V.....VI.....

c) Vocational Training..... (State course studied)

d) University (State course studied)

5. Marital Status of the respondent

a) Married b) Single c) Divorced d) Widow

6. Number of children (whether married or single): none, 1, 2, 3, 4, 5, 6, 7

7. Number of dependents: none, 1, 2, 3, 4, 5,

8. What are the main income generating activities you perform?

- a) Field crop production b) Horticulture –vegetable growing c) Livestock husbandry (cattle, goats, sheep, chicken, ducks) d) beekeeping e) Petty trading f) food vending-mama/baba lishe g) local brewing h)tailoring i) lumbering j) carpentry k) masonry l) plumbing m) small shops n) employed o) other-name it).....

9. Average household income per month (shillings)

a) Below 100,000 b) TSh. 100,000 - 300,000 c) Above TSh. 300,000

10. Do you get any monthly remittances from children?

a) None b) Meager c) Substantial

PART B: Questions to address specific objective 1:

1. Have you ever heard of Community Health Fund?

a) No b) Yes

2. If Yes, what was the source of information?

a) friend b) neighbor c) village meeting d) place of worship e) radio f) TV g) printed media (e.g., newspapers) h) clinic day i) while on treatment in hospital/ health center/ dispensary j) while attending a seminar k) CHF workers awareness visits in your area l) other (state).....

3. Have you ever joined/registered with the CHF

a) Yes b) No

4. If Yes, when did you join the CHF?

5. State the year/month

6. Who persuaded you to join?

7. Was joining the community health insurance of any benefit to you and family?

a) Yes b) No c) Little d) Not at All

8. If the answer is Yes, what were the benefits?

- a. Received medical treatment without bother
- b. Received medical treatment at all times even when I had no money
- c. Medical treatment to me and my household members has been simplified

d. All the benefits listed above apply

9. Circle one number basing on whether you strongly agree (SA), agree (A), Undecided (UD), disagree (DA), or strongly disagree (SD) on role played by CHF insurance under the following statements.

Items	SA	A	UD	DA	SD
i. Finance for CHF insurance is improved					
• Improved health package					
• Improved medical supplies					
ii. Infrastructure for CHF insurance is improved					
• Improved roads/access to Health services					
• Improved Health service buildings					
iii. Information system Improved					
• Improved record keeping					
• Improved ICT					
iv. Technical capacity/skills of workers Improved					
• Number of competent workers					

10. If you are happy (or somehow happy) with CHF insurance, how many times have you renewed?

a) Just joined b) once c) twice d) three times

11. If no, what are in your view, challenges of this type of insurance?

- a) Medical treatment not availed smoothly
- b) Even if you see the doctor, no medicines
- c) Some diseases or ailments are not treated by CHF insurance
- d) Availability of medicines is not satisfactory
- e) Few treatment centers
- f) Poor service by CHF providers
- g) All responses above apply

12. Have you ever convinced other village community members to join CHF?

a. Yes.....b) No..... How many.....

13. What does the community you live say or comment on CHF?.

a. Helpful to the community and households as health insurance

b. CHF is of no assistance to the community

14. For those who are not yet members of the CHF, what are their main complaints?

a.

b.

c.

d.

15. What are your views on the sustainability of CHF in Chunya if all challenges put

forward are addressed

.....