

**UNIVERSITY OF KWAZULU-NATAL**

**COLLEGE OF HEALTH SCIENCES**

**SCHOOL OF NURSING AND PUBLIC HEALTH**

**EXPLORING PERCEPTIONS OF CLIENTS WITH REGARDS TO NATIONAL  
HEALTH INSURANCE SERVICES IN A SELECTED PUBLIC HOSPITAL IN DAR ES  
SALAAM, TANZANIA**

**A dissertation submitted in partial fulfilment of the requirements for the award of  
Coursework Master's Degree in Nursing (Community Health)**

**Researcher:** Miss Minael Nathanael Omari

**Student number:** 212538587

**Research Supervisor:** Mrs. Nozipho Mthembu

June, 2015

## DECLARATION

I Minael Nathanael Omari declare that this research dissertation titled “Exploring perceptions of clients with regards to National Health Insurance services in a selected public hospital in Dar es Salaam, Tanzania” is my original work. I have not submitted it or any part of it for degree purposes at any other university within or outside Africa. All the citations in the text and resources have been indicated and acknowledged by means of references.

Name of student: Minael Nathanael Omari

Signature:..... Date.....

Name of Supervisor: Mrs. Nozipho Mthembu

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Core supervisor Professor Gugu Mchunu

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## **DEDICATION**

This research dissertation is dedicated to my parents, Lusina Mgonja and Nathanael Mbwambo, and my young sisters and brothers for all their love, support, blessing and continuous prayers for me during my stay in South Africa. You gave me courage and support throughout my studies.

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## ABSTRACT

**Background:** The National Health Insurance (NHI) of Tanzania is commonly known as the National Health Insurance Fund (NHIF). The scheme operates under the supervision of the Ministry of Health and Social Welfare (MOHSW) together with an independent board of the NHIF. It is a mandatory form of healthcare financing primarily for public servants and other categories of employees in the formal sector which covers hospital costs for the principal member and six beneficiaries of any age.

**Purpose:** The purpose of this study was to explore the perceptions of clients with regards to National Health Insurance Services in a selected public hospital in Dar es Salaam, Tanzania.

**Methodology:** Guided by objectivism, this study adopted a positivist paradigm and a quantitative approach. A non-experimental, exploratory-descriptive and cross sectional research design was used and a self-administered structured questionnaire was used for data collection. Ethical clearance was obtained from the University of KwaZulu-Natal Research Ethics Committee and the Humanities and Social Sciences Research Ethics Committee (HSSREC) in South Africa, and from the Kinondoni District Hospital Research Ethics Committee in Tanzania.

**Results:** The results of this study indicated that 64.8% of participants were the principle members of the NHIF and the majority (63.1%) were female. While joining the fund would have been compulsory for the 54.9% of the participants who were civil servants and 15.6% who were traders or business people, the majority (90.1%) of all the participants indicated that they had joined the scheme because it offered financial protection against

illness. The majority of participants acknowledged the benefits of being a member of NHI, with 93.5% agreeing that joining the scheme benefited them and their beneficiaries, 93.4% agreeing that it gave them reassurance that their family would receive care, 89.3% agreeing that it provided easy access to health care, 83.6% agreeing that it would save money from paying hospital bills and 82.8% agreeing that belonging to NHI was better than having to make out-of-pocket payments.

### **Recommendations:**

Despite their positive attitude towards the NHI services, participants admitted that NHI does not permit health care access to all citizens and that, even with the cover of the NHIF, they still needed to save money to pay for hospital care. Therefore, the study recommends the expansion of the NHIF benefits packages up to the Primary Health Care level to avoid user fee for the insured. Similarly, the NHIF management must find another mechanism of funding the Community Health Fund to provide coverage for the poor rural communities who depend only on out-of-pocket payments. Further research is also recommended to explore the perceptions of the majority of Tanzanians who are not covered by the NHIF schemes.

**Keywords:** Community Health Insurance, Health Insurance, National Health Insurance, National Health Insurance benefits, Tanzania health care system, universal health coverage.

## LIST OF ABBREVIATIONS

CHF	Community Health Fund
FSSHIP	Formal Sector Social Health Insurance Program
HSSREC	Humanities and Social Sciences Research Ethics Committee
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare
NDOH	National Department of Health
NHI	National Health Insurance
NHIF	National Health Insurance Fund
OPD	Out Patient Department
PHC	Primary Health Care
PPP	Public Private Partnership
PASW	Predictive Analytics Software
SHI	Social Health Insurance
SPSS	Statistical Package for the Social Sciences
TIKA	Acronym for Swahili expression, Tiba Kwa Kadi (Treatment with card)
UAE	United Arab Emirates

UHC	Universal Health Coverage
UK	United Kingdom
US	United State
USA	United States of America
WHO	World Health Organization

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## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND TO THE STUDY**

#### **1.1 Introduction**

National Health Insurance (NHI) has become a crucial tool for developing countries to decrease the financial barrier to quality health care services and protect middle and lower income communities from the burden of health care expenses (Wagner, Graves, Reiss et al., 2011; Borghi, Maluka, Kuwawenaruwa et al., 2013; Marriott, 2012; Mills, Ally, Goudge et al., 2012a). In Tanzania, NHI is the largest form of health insurance and is mandatory for employees in the formal sector (Marwa, Njau, Kessy et al., 2013; Mills, Ataguba, Akazili et al., 2012b). Since the reform of its health care system, Tanzania has experienced a gradual increase of NHI coverage among civil servants (Borghi et al., 2013).

#### **1.2 Background to the study**

The health care system of Tanzania operates under the management and supervision of the Tanzania Ministry of Health and Social Welfare (MOHSW) (Ooms, Hammonds, Waris et al., 2014a; McIntyre, Garshong, Mtei et al., 2008). It is designed in a pyramidal form which follows the government leadership structure of decentralization to the district level (Hanson, Ronsmans, Penfold et al., 2013; Mills et al., 2012a).

After independence from the British in 1961, government leadership developed a national health care system that was committed to provision of free services at the public health care facilities.

However, rapid growth of the rural population and increased health care costs has led to the current health care delivery system that serves the population from the primary level to more specialized health care facilities (Ooms et al., 2014a; McIntyre et al., 2008).

The Tanzanian health care system consists of three hierarchical forms of the health care services delivery, which are primary, secondary and tertiary levels. Services at the Primary Health Care (PHC) level are normally delivered by village health care workers, dispensaries, health care centres and mobile clinics (Ooms et al., 2014a; Ndossa, 2013). The secondary level is composed of the district public hospitals, designated faith based district hospitals and private hospitals. The tertiary hospitals are mainly National hospitals, regional hospitals and consultant or specialized hospitals that provide similar services to those of the district hospitals, the only difference being that most of the consultant or specialized hospitals are used as teaching hospitals and staffed by highly qualified medical professionals (Baltussen, Norheim and Johri, 2011; MOHSW, 2003).

The focus of the health care delivery system in Tanzania is in line with the World Health Organization's (WHO) goal for universal health coverage (UHC) (WHO, 2010). Universal coverage is one of the health indicators that determines whether poor communities in a state have access to funds for health care services (McIntyre et al., 2008). Through the health sector reform initiative and the need to move towards the goal of UHC, the government of Tanzania and the Ministry of Health and Social Welfare (MOHSW) introduced the Community Health Fund (CHF). Along with the CHF, a cost sharing mechanism was also introduced at public health care facilities in the country for the first time in 1995 (Ooms, Latif, Waris et al., 2014b; Marwa et al., 2013; Mills et al., 2012a).

As part of the Tanzania health care system reform initiative, the National Health Policy of the government and MOHSW made it the responsibility of local government to take care of the poorest individuals, orphans, the disabled, the elderly who are above 60 years old, and the individuals with chronic diseases, such as diabetic, asthma, hypertension and HIV/AIDs (MOHSW, 2003)

The World Health Organization (2010) report emphasizes the establishment of a state UHC system which provides all people with access to necessary, effective and quality health care services that alleviates user financial hardship. This is because every individual has the right to access health care services which attain the highest quality and standards, regardless of that particular individual's financial status (WHO, 2010). This is in line with the global health agenda, which is to strengthen health care systems and improve the level of health care services distribution to achieve universal health coverage (Kutzin, 2012; WHO, 2010).

UHC implies that every nation must have a NHI which is responsible for provision of affordable, accessible and adequate health care services to all residents, particularly the disadvantaged and vulnerable population (WHO, 2010). The NHI acts as a tool for achieving the goal of health for all and provides the best interaction of the Millennium Development Goals (Ooms et al., 2014a).

In developing countries, NHI is a sustainable instrument for reducing the high cost of health care, and minimizing patients' high out-of-pocket payments and the incidence of catastrophic health shocks (WHO, 2010).

The world faces a growing burden of chronic diseases resulting from HIV/AIDS which requires active and unbiased management (WHO, 2010). This has increased the need for different health insurance schemes. The NHI scheme has become the primary and most effective method for financing the middle and low income population with chronic diseases in both developed and developing countries (Heidenreich, Albert, Allen et al., 2013).

In recent years, the success of the NHI scheme for covering the health care costs of the individuals with chronic diseases has been noted in various countries, such as Ghana, Mexico, Rwanda, South Korea, Taiwan and Thailand (Mathauer and Nicolle, 2011; Carrin, Mathauer, Xu et al., 2008).

The general state of poverty and poor supervision of health care services are among the factors that have contributed to health care system reforms and introduction of the NHI in Africa. Excessive dependence on government-provided health care and poor integration of the public private health care delivery system are also among the reasons for the establishment of NHI to promote health care financing for universal health coverage (WHO, 2006).

Although NHI is most recognized form of health care financing that is currently used in most of the developing countries, in sub-Saharan Africa, the health care financing schemes and organization of NHI services differ from one country to another. The most common similarities of NHI in African countries include equal benefit packages shared by all members, inclusion of eligible members, members' obligation to contribute to the funds and that funds are only allocated for health care services at accredited health care

facilities. South Africa and Zimbabwe are still preparing health insurance policies, with South Africa having released a Green Paper to introduce the concept of NHI (Lem and Kuganab, 2009; Mills et al., 2012a).

Tanzania is among the East African countries which are currently utilizing the National Health Insurance Fund (NHIF). The scheme is a mandatory health insurance for formal sector employees and their employers (Marwa et al., 2013). The NHIF functions as a statutory health financing scheme under the United Republic of Tanzania Parliamentary Act No. 8 of 1999 and started its operation in the year 2001 (Borghini et al., 2013; McIntyre et al., 2008; URT, 1999).

The main objective of the NHIF in Tanzania is to facilitate access to health care services for principal members in the formal sector and their beneficiaries, with the employers and employees in the public sector being obliged by law to register and contribute to the fund (MOHSW, 2010). The NHIF members and their beneficiaries are provided with either brown or green identity cards and are allowed access to health care services at all public and accredited private hospitals within the country (MOHSW, 2010; NHIF, 2009)

In their commitment towards achieving UHC, the government and the MOHSW introduced the Community Health Insurance Fund (CHIF) to expand coverage in the country (Mtei, Makawia, Ally et al., 2012). The Tanzanian MOHSW (2010) reported that the CHF had been integrated into the NHIF as one of the strategies to achieve the goal of UHC in low-income communities by minimizing the use of fees for health care services at the PHC level. This system of using CHF cards for treatment in the rural areas is termed in Swahili as “Tiba Kwa Kadi”, which means treatment with cards (Mills et al., 2012b).

In recent years, it has been projected in the literature that the Tanzanian NHIF coverage for poor communities will increase from 12% in 2012 to 30% by the year 2015 as a result of expanding and incorporating the CHF into the NHIF (Borghetti et al., 2013; Carrin et al., 2008; McIntyre et al., 2008).

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### 1.3 Problem statement

The limited coverage of the NHIF has remained a problem of concern in Tanzania. Borghi (2013) and colleagues commented that despite the government's efforts to integrate the CHF into the NHIF, the CHF has achieved a coverage of only 10% of the population (Borghi et al., 2013; Mtei, Mulligan, Palmer et al., 2007). The reason for this failure is the fact that 90% of the population is composed of individuals who are in the informal sector. Boateng and Awunyor-Vitor (2013) reported that even although much has been done to improve the financing of health care in Tanzania, the care that is delivered remains inadequate, especially for the poor and disadvantaged groups.

McIntyre (2010) commented that there has been much debate about the NHIF with regards to how health financing can be reformed in order to achieve universal coverage. Evans, Marten and Etienne (2012) argued that the NHIF and privately based health care have resulted in an increase in the out-of-pocket payment services and have therefore had a negative financial effect in the lower income communities. McIntyre et al. (2008) noted that the out-of-pocket payments fragmented the health services by placing the burden of funding on the clients, which resulted in benefits being distributed according to an individual's ability to pay rather than their need and right for access to health care services, and Tanzania is not exception to this.

The NHIF membership cards in Tanzania are issued in accordance with the financial status of the insured. According to the NHIF (2009) report, senior members of the public service are issued with green cards that guarantee direct access to specialized hospitals without following the referral system, while those holding a brown card, 96% of the total number of NHIF members, require a referral letter to access services at specialized hospitals should the need arise (Kikuli and Ally, 2012; NHIF, 2009)

Carrin and James (2005) commented that the health care services available to the lower and middle income insured are differently financed by the Tanzania NHIF and CHF at the point of service delivery. Moreover Marriott (2012) and other authors noted that ten years after its implementation in the United Republic of Tanzania, a 15% coverage of the NHIF is disappointing at best (Marriott, 2012; Mills et al., 2012a). This study, therefore, wished to explore the perceptions of clients with regards to NHI services in one of the public hospitals in Dar-es-Salaam, Tanzania.

## **1.4 Purpose of the study**

The purpose of the study was to explore the perceptions of clients with regards to National Health Insurance Services in a selected public hospital in Dar-es-Salaam, Tanzania.

## **1.5 Study objectives and research questions**

### **1.5.1 Objectives of the study**

The objectives of the study were:

- i. to explore the clients' understanding of the term NHI;
- ii. to describe clients' reasons for enrolling in NHI services; and
- iii. to identify the perceived benefits of engaging in NHI services.

### **1.5.2 Research Questions**

The following three critical questions were identified in line with the objectives of the study:

- i. What is the clients' understanding of the term National Health Insurance?
- ii. What are their reasons for enrolling in National Health Insurance services?
- iii. What are the benefits of engaging in NHI services?

## **1.6 Rationale and significance of the study**

### **1.6.1 The rationale for the study**

There is scarce information on the perception of clients with regards to the NHIF in the literature, specifically those in Tanzania, as most of the studies that have been done involved the MOHSW, the World Bank, stakeholders, NHIF management or districts officials (Borghì et al., 2013; Borghì, Mtei and Ally, 2012; Mills et al., 2012a; Mtei and Borghì, 2010; Mtei et al., 2012; Kamuzora and Gilson, 2007). Nevertheless, Tanzania in recent years has been facing low and partial coverage of the health services that are financed by the NHIF (Borghì et al., 2012; Marriott, 2012; Mills et al., 2012a).

In revealing the clients' views and through the literature review, this study may come up with ways of extending NHIF to the poor and vulnerable populations and thereby help to alleviate the financial burden they carry in relation to health care. Some researchers have noted that the most alarming aspect of the health care financing system in Tanzania is that the poor and vulnerable groups are not able to benefit from the NHIF because it is designed for employees in the formal sector, and that this results in those living in the poorer communities having to face health care costs that exceed ten percent of their total income (McIntyre et al., 2008).

The public hospital where the study was conducted is in an area that has not been addressed by many researchers and this study will be the first of its nature in the Dar es Salaam Region, Tanzania.

The study is not only needed in order to measure the quality of health care services that is being provided, but also to take into account the satisfaction of the clients (Donabedian, 1966). Therefore, in exploring the perceptions of clients with regards to the NHI service, clients' views may contribute to restructuring of the NHIF to promote full UHC.

### **1.6.2 The significance of the study**

The NHI is an instrument that can be used by state governments in the current health care financing reforms of middle and low income countries which aim at achieving UHC. The health care professionals are the key stakeholders of the health insurance systems whose roles are to sustain UHC and ensure that the NHI does not affect the quality of care they provide to clients at all levels (Chomi, Mujinja, Enemark et al., 2014b).

However, in order for the policy makers to come up with an effective plan of reforming the NHI to promote UHC, it is important to investigate the views of the NHI members who are the recipients of the services that are funded by this scheme. The study therefore explores the perceptions of clients with regards to the NHI services. The significance of the study cannot be overemphasized and can be summarized as follows:

#### **1.6.2.1 In nursing practice:**

The result of this study may influence practice by proposing a NHI that will finance accessible, available and affordable quality health care services for the entire population regardless of their ability to pay for health care costs.

### **1.5.2.1 In nursing research:**

The result of this study will contribute to the existing body of knowledge in research, especially on issues related to universal health coverage, client health care financing agencies in general and specifically NHI services. The finding may also necessitate the need for further research on the matter pertaining to the health care system reforms and UHC.

### **1.6.2.2 In nursing management:**

The findings of this study may inform the policy makers of the strengths and weaknesses of the NHI and the recommendations from the study findings may be useful in restructuring the NHI so that universal coverage may be reached. The study findings may also stimulate policy making that protects the clients by ensuring their right to a health care service that does not cause financial hardship to the users, especially the majority who are living beneath the poverty line.

### **1.6.2.3 In nursing education:**

The results of this study have the potential to inspire nurse educators to review current curricula related to health care system reforms for universal coverage thereby benefitting students with knowledge on proper planning and implementation of the NHI.

## **1.7 Operational Definitions**

### **1.7.1 Client**

A client is someone in need of help, because he/she lacks either the necessary abilities or the capacity to help him/herself and thus need the specialist knowledge and skills from a professional person (McLaughlin, 2009). The term client is used in this study to signify a person who uses NHI as a financing mechanism for seeking health care services from health care professionals or an organization.

### **1.7.2 Community Health Fund**

A Community Health Fund is a voluntary health care financing mechanism whereby members pay a contribution on a regular basis to offset the risk of needing to pay a much larger amount at the health care facility through user fees if they become sick (Kikuli and Ally, 2012). In this study, the term CHF (named Tiba kwa Kadi and abbreviated TIKA in the Swahili language) refers to a voluntary health insurance scheme operating in rural areas and the informal sector and providing members with access to basic health care services. Is commonly used for financing PHC services in Tanzania (Kikuli and Ally, 2012; Mills et al., 2012b).

### **1.7.3 National Health Insurance**

National Health Insurance is a mandatory health funding scheme that covers all or most of the population in the country, whether individuals have contributed to the scheme or not (Mills et al., 2012b). In this study, NHI is used synonymously with NHIF which is the health care financing agency in Tanzania that primarily covers formal sector employees and their beneficiaries (Marwa et al., 2013; Mills et al., 2012b).

### **1.7.4 Perception:**

According to Collin's English Dictionary (1992), perception refers to the act of having knowledge and understanding of something. In this study, clients' perceptions refer to the way they understand using, valuing and experiencing the health care services that are funded by NHI.

### **1.7.5 Universal health coverage**

Universal health coverage is a financing system which is designed to provide all people with access to effective health services (including prevention, promotion, treatment and rehabilitation) of sufficient quality that does not expose the user to financial hardship (Kieny and Evans, 2013; WHO, 2010). In this study UHC is regarded as health insurance that is designed to finance equal health care services to all community members, regardless of their social and financial status.

## 1.8 Conceptual Framework Guiding the Study

The conceptual model by Avedis Donabedian (1966), based on the quality of health outcomes, guided this study. The core concept in this conceptual model is patient satisfaction, which is identified through evaluation of the three divisions of quality care, which are structure, process and outcome (Donabedian, 1966). The health care system reform and imaging of the NHI affect the quality of health outcomes in different perspectives of the quality care divisions. Each of these divisions of Donabedian's model has its own subsidiary areas that need to be looked at and addressed as the important measures for approaching UHC via the implementation of the NHI schemes.

Health care system reforms in this linear conceptual model are viewed as actions taken within the designed structure to improve the health or well-being of individual clients and the community at large (Donabedian, 1966; Donabedian, 1980; Donabedian, 1988). The process of examining health care services and evaluating the quality of care under the NHI can therefore be drawn from the three domains of Donabedian's model, which are structure, process and outcome (Donabedian, 1966) (See Figure 1.1).

According to Donabedian (1988) and colleagues, the state government needs to distinguish between the structure of the health care financing agent, the services (process) given under the NHI and the clients perceived benefits (outcome). Consequently, all three of these elements can be evaluated to determine the effectiveness and the quality of care that is given to the community through the NHI financing mechanism (Campbell, Roland and Buetow, 2000; Donabedian, 1988).

### **1.8.1 Structure**

Structure refers to the organizational factors that define the health care system under which individual, family and community care is provided (Donabedian, 1980). The physical characteristics of the structure represent the resources and materials that are used for provision of the services, which include the NHIF, public and private hospitals, and equipment (Campbell et al., 2000; Donabedian, 1988). They also include formal systems management tools, such as the NHIF policy of funding six beneficiaries, taxation and government revenue, through which the health care is financed and delivered (Nuckols, Escarce and Asch, 2013).

Another domain of the structure relates to the characteristics of the clients, which include their understanding of health care financing sources, such as NHIF, and how the system has been prepared to finance their care. These are all important components of reforming the health care system to provide finance for UHC. This is because a feature of the state health care financing system is to provide an opportunity for all citizens to access care without financial hardship (Campbell et al., 2000).

Tanzania needs to have a taxation funded NHI that focuses on insurers as well as the health care providers to ensure quality of care to all Tanzanians regardless of their social economic status

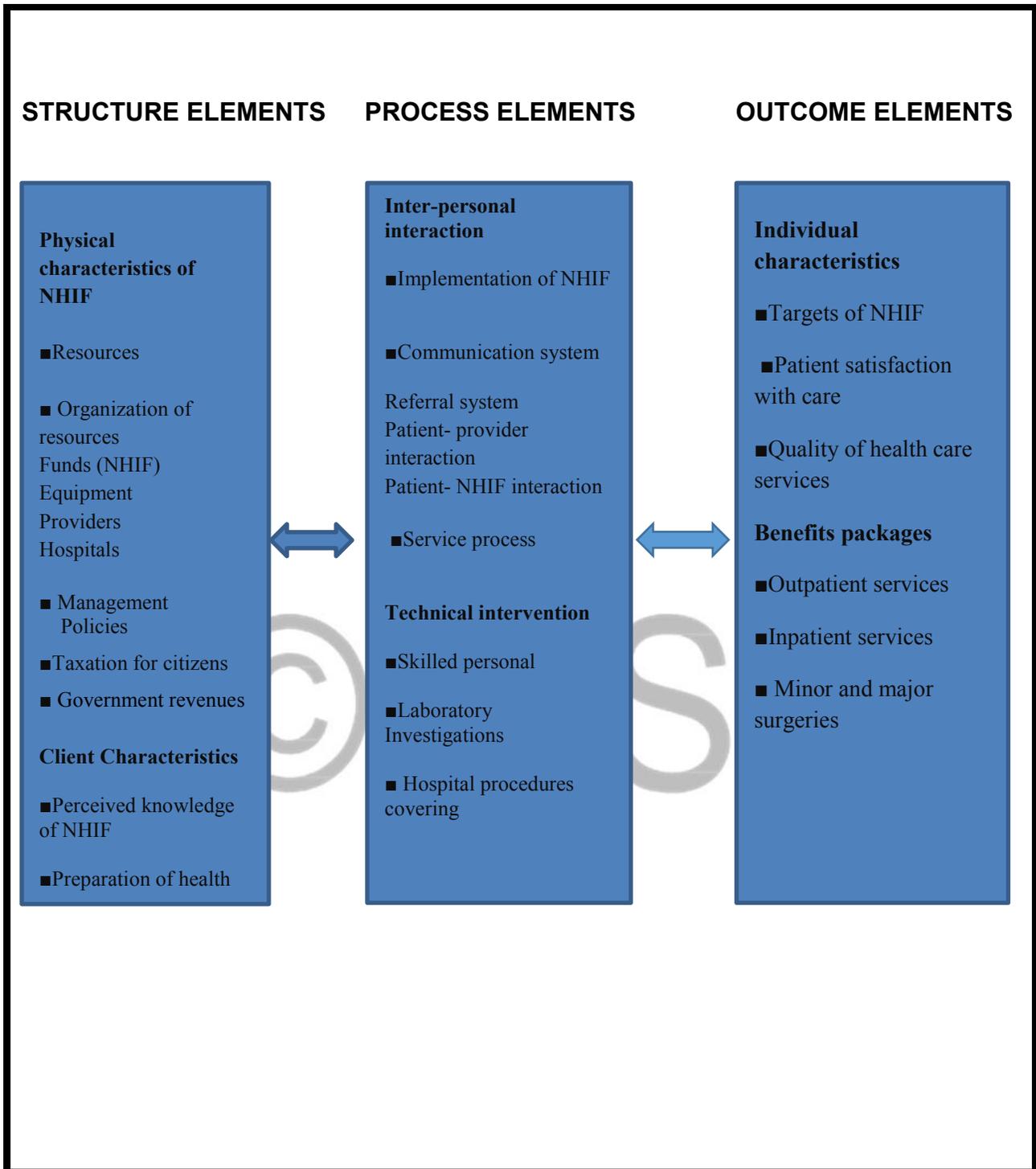


Figure 1.1: Conceptual Framework [Adapted from Donabedian (1966)].

### **1.8.1.1 Sources of funds for NHI**

As is already being done in Taiwan and Ghana, funds for NHI need to be generated through taxation and government revenue rather than depending on employees and their employers in the formal sector. This will extend UHC to the informal sector and the vulnerable populations, especially in rural areas where the majority are not currently insured. Haazen (2012) argued that special attention is required to ensure health cover for the poor because they can neither afford the cost of services nor prepaid health insurance and therefore need to be provided with free NHIF cards so that they may be assured of access to care should the need arise.

The structure of the Tanzania NHI favours the provision of health cover to employees in the formal sector, who fall in the middle to low income brackets, while the more vulnerable population has not been provided for (Mtei and Borghi, 2010). Furthermore, there is even inequality within the insured group, as certain privileges apply to members holding a green card as opposed to those holding a brown card. This affects the quality of care received by brown card holders, who are in the low income bracket, particularly in cases of emergency when expensive treatment and investigations, such as a CT scan, may be delayed due to the necessity of referral letters from the NHIF management. Such delays in emergency treatment and care could result in loss of life, which could have been prevented.

According to Donabedian (1966), the health care structure consists of four elements which include; *financing systems; hospital buildings; health care providers, and the equipment*. While the Tanzanian health care financing structure does comply with the WHO (2010) objective of promoting health for all through universal health coverage, the NHIF covers only one consultation per one hospital visit for an individual client. This system does not guarantee quality care as the referral process from the primary doctor to a specialist results in fragmented care to those individuals who need urgent specialized consultation, as supported by Donabedian (1966).

The quality of health care in a state will only be meaningful if that care is received by the entire community, depending on the social distribution of levels of equality in the community (Donabedian, 1988). The whole idea of introducing the NHIF in Tanzania was to put in place a financing mechanism that can promote access and availability of quality care to all citizens, particularly those who are unable to pay for their health care costs (NHIF, 2010). In order for this financing mechanism to be successful, the MOHSW needs to pay attention to the structure and management of the NHIF and CHF to ensure UHC without affecting the quality of the health services.

### **1.8.1.2 Resource availability**

The Tanzania government has made an effort to expand public *hospital buildings* by engaging Public-Private Partnerships (PPP) in health care delivery through the use of NHIF at selected private and faith-based hospitals. This is an important step made by the government to overcome over-crowdedness of patients in the public hospitals and ensure quality care services (Galland, Guillebert and Letourmy, 2013).

Furthermore, the PPP system makes it possible for NHIF members and their beneficiaries in rural areas to access medical care at designated district faith-based hospitals that have adequate medical *equipment* (Baltussen et al., 2011).

### **1.8.2 Process**

The process is the actual delivering and receiving of the health care services, which allows an interaction among the health care practitioners and the clients or patients. It includes the patients' activities in seeking and carrying out the care (Donabedian, 1988). The key processes of the health care services that are financed by the NHIF may be identified as *interpersonal interaction among patient and service providers* and *technical interventions* (Blumenthal, 1996; Donabedian, 1988, 1992; Irvine, 1990; Tarlov et al., 1989). Laboratory investigations, tests and any form of communication between the client, health care providers and the NHIF management are all the sub components of the process of care (Nuckols et al., 2013).

The interpersonal process in Tanzania is adversely affected by the financial status of the insured and the poor referral system which does not allow brown card holders immediate access to specialized care should the need arise (Kikuli and Ally, 2012). The reason for this delay is that the funds are allocated per day and are insufficient to cover the transfer of a patient from one specialist to another or from one hospital to a more specialized hospital.

The fact that the unemployed population are excluded from the NHIF leads to the conclusion that poor communities are receiving little or no benefit from the fund (Munga and Gideon, 2009). Therefore, one can acknowledge that the quality of health care in Tanzania is directly affected by the health care system reforms that led to the current biased implementation of the NHIF services. Although the Tanzania MOHSW is doing its best to introduce CHF in every region, the NHIF's primary aim of financing UHC has been challenged by the characteristics of the insured clients.

### **1.8.3 Outcomes**

Outcomes are consequences of care on the health status of patients and populations in general. Both the structure and the process may influence the outcome, indirectly or directly. For instance, under the NHIF, a patient may die from a brain tumour (outcome), either because the patient was a brown card holder and needed a referral letter (structure) or because the CT scan was delayed by the hospital keeping the patient on a long waiting list (process).

The outcome elements are observed by evaluating the health status of patients after they have received the care services. This evaluation needs to be done by the NHIF management and clients. The NHIF services outcome evaluation involves the structure and process of care as these directly or indirectly affect the outcome of the services provided to the clients (Donabedian, 1966; Donabedian, 1988; Donabedian, Wheeler and Wyszewianski, 1982).

The outcomes of NHIF are the *benefits package* that allow the insured to access *outpatient and inpatient services* at the public and selected private hospitals and cover certain *major and minor surgeries* (Borghi et al., 2012). Patient satisfaction is another component of the care that needs to be assessed in order to understand the effectiveness of NHIF services. However, equity and UHC are not properly addressed by the insurance which is supposed to finance services to all citizens because it is a national property. The policy makers need to reassess the insurance service delivery system to ensure the availability, accessibility and affordability of quality care to all Tanzanians.

Donabedian (1988) argued that reassessment of the health insurance structure, process and outcome will ensure quality. This is because a good structure of the NHIF increases the likelihood of a good process of service delivery, which in turn increases the likelihood of a good outcome (Donabedian, 1988).

However, the NHIF benefits package is only available to the small population of those who can contribute funds to the insurance, which is in complete contrast to the WHO (2010) report that proposes a financing system for UHC. This calls for the urgent restructuring of the Tanzania health care financing system to meet every individual's right to quality health care services.

Donabedian (1988) argued that in the perfect scenario, health insurance ensures access to high quality health care services with little or no cost, particularly in the poorer communities. In practice, however, the low coverage of the NHIF in Tanzania has a detrimental effect on those living in the poor communities as they cannot afford the out-of-pocket payments they are required to make, which precludes them from accessing

health care services. Kiwara (2007) argued that the majority of the uninsured Tanzanians continue to bear the financial burden of health care. The NHIF is a service that is based on ability to pay rather than the right for quality care. Therefore, the effectiveness, equity and efficiency of the health care under the NHIF needs critical assessment to whether there is a balance between the allocated funds and the quality of care provided to individual clients.

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## 1.9 Overview of dissertation chapters

**Chapter 1:** This is an introductory chapter that introduces the whole research study. It gives background information to the study, covers the problem statement, research objectives and research questions, rationale and significance for the study, operational definitions and the conceptual framework guiding this study.

**Chapter 2:** This chapter presents a discussion of the reviewed literature that related to the study and sections are organized by themes and sub-themes. These include the concept of NHI, reasons for choosing and enrolling in NHI services, barriers and challenges of the NHI scheme, NHI in other countries, NHI in African countries and South African NHI.

**Chapter 3:** This chapter outlines the research methodology used in this study, which includes the research approach, design, research setting, targeted population, sampling and sample technique, data collection instrument, validity and reliability issues, and data collection process and procedure. It also highlights data analysis and management, ethical considerations and data dissemination.

**Chapter 4:** This chapter presents the discussion on the research findings covering sample realization, demographic data, definition of the term NHI, reasons for enrolling to the NHI services and benefits of being a member of the NHI services.

**Chapter 5:** This chapter presents the interpretation of findings in relation to existing literature or previous studies. It also outlines the limitations, recommendation and conclusion to the study, which ends the dissertation.

## 1.10 Conclusion

This first chapter gave the introduction and background to the study. It outlined the problem statement and purpose of the study, which was to explore the perceptions of clients with regards to NHI services in one of the public hospitals in Dar es Salaam, Tanzania. The chapter also listed three objectives for the study simultaneously with the three study questions and defined five operational words that are used in the study. The chapter further discussed Avedis Donabedian (1966) health care system evaluation conceptual model, which was used to guide the study.

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## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of empirical literature related to the topic. The purpose of a literature review is to determine what is already known about the study, identify information that may be compared to the new findings and identify the gaps, consistencies and inconsistencies in the literature (Polit and Beck, 2004). According to Babbie and Mouton (2002), a review of the literature identifies important work related to the research topic and a research method that could be relevant to the research project, as well as building on the platform of existing knowledge and ideas. The review will focus on studies on health care financing in Tanzania, the concept of National Health Insurance (NHI), benefits and reasons for clients enrolment in NHI and NHI in Africa and other countries.

During the literature search, multiple electronic databases were searched using keywords such as Community Health Insurance, Health Insurance, National Health Insurance, National Health Insurance benefits, Tanzania health care system and Universal Health Coverage. The databases included Academic Search Complete via EBSCOhost, Education Source via EBSCOhost, and ERIC via EBSCOhost. Other databases consulted were Health Source: Nursing/Academic Edition via EBSCOhost, MEDLINE via EBSCOhost and Google Scholar. This resulted in a number of previous studies being accessed.

Lastly, but not least, the researcher undertook manual searches of the Howard collage main library shelves for books and back issues of journals likely to carry articles of relevant published nursing researches in the ten years prior to this study, which is from 2005 to 2014. The Tanzania NHIF web site was also visited for further readings and updates were obtained from the annual NHIF Bulletin at <http://www.nhif.or.tz/>

## **2.2 Health care financing in Tanzania**

In Tanzania, the health care system is primarily financed by the government along with exception fees and donor support (Borghi et al., 2013). Kikuli and Ally (2012) conducted a review of public expenditure which addressed the source of funds for financing the health care services at the district level in Tanzania. It was elaborated that the Tanzanian health care system is financed by five different sources of funds which include block grants, donor and non-donor, funds from local government sources and various insurance schemes. However, the researchers noted that the whole financing process is very cumbersome, which tends to delay the release of the health services funds. For instance, in 2011, the government spent budget for the health care services funds was only 75% of the allocated funds (Kikuli and Ally, 2012).

Mtei and Borghi (2010) explored the process of general taxation, out-of-pocket payments and contributions to the NHIF and CHF prepayment schemes in Tanzania. These researchers commented that the NHIF is a mandatory scheme for all public servants, but is also available to other eligible formal sector employees and employers who are willing to contribute into the scheme. The study further reported that the Tanzania NHIF is funded by a 6% payroll contribution. This is split evenly between the employer and employee and

provides cover for the principle member, their spouse and four beneficiaries of any age. CHF membership, on the other hand, is voluntarily and is limited to the informal sector and rural population (Mtei and Borghi, 2010)

A schematic review of equity in financing of health care systems of Tanzania, Ghana and South Africa was conducted by Mills et al. (2012b). In this review, it was reported that the Tanzania National Social Security Fund has also introduced a Social Health Insurance benefit package which is voluntary insurance for employees in the private formal sector (Mills et al., 2012b). Although the United Republic of Tanzania is still using an exemption mechanism to cover health care costs for the elderly population, there are inconsistency in how elders are identified as being eligible for the free health care services (Maluka, 2013; Mtei and Mulligan, 2007).

### **2.3 Concept of National Health Insurance**

The NHI exists as a part of health care system reforms. Almualm, Alkaff, Aljunid et al. (2013) recruited 260 patients to examine the factors influencing support for NHI among patients attending specialist clinics in Malaysia. In this study, the researchers noted that the NHI scheme was perceived by participants as a cost sharing mechanism between the state government and the citizens and as one of the best options to achieve the WHO objective for UHC. Agyepong and Adjei (2008) conducted a study in Ghana to evaluate the public social policy development and implementation and are of the view that NHI is a means of replacing out-of-pocket payment at the point of service delivery.

Jehu-Appiah, Aryeetey, Agyepong et al. (2012) conducted a qualitative study which involved the stratified sampling of 7211 females and 6654 males to identify and compare the perceptions of NHI members and non-members with regards to the NHI services in Ghana. The authors defined NHI as a government method of funding health care services among eligible members. The findings revealed that 38% of the sample regarded NHI as free health care provided by the government through the use of the special cards. The findings also revealed, however, that 69% of the respondents in this study were employed in the formal sectors whereby the employers contributed funds for their health insurance.

Another study by Amporfu (2013), in Ghana, investigated the NHI scheme with respect to its premium and implications for UHC. The researcher stated that NHI is the mandatory health financing system that covers the costs of quality services for all state citizens regardless of their ability to contribute funds to the insurance. Other researchers in Ghana also acknowledged that the NHI services replace user fees and provide financial health protection, covering formal and informal employees in all sectors of economy (Nguyen, Rajkotia and Hong, 2011; Yawson, Biritwum and Nimo, 2012). However, experience shows that instituting NHI by itself is not adequate to fully remove out-of-pocket payment for health care services (Nguyen et al., 2011).

#### **2.4 Reasons for choosing and enrolling in the NHI services**

Chomi et al. (2014b) explored health care seeking behaviour and hospital utilization in a multiple health insurance in Tanzania. They reported that the NHIF is the scheme of choice for access to health care services as it reduces financial barriers to services utilization for the middle and lower income communities.

Furthermore, the study noted that the principal members from middle and low income communities had enrolled in the NHIF services to secure funds for hospital care. The work of Jehu-Appiah and colleagues also noted that the reasons for client enrolment to NHI services were mostly related to the extended benefits package of the scheme and clients' desire for financial protection against illnesses (Jehu-Appiah et al., 2012).

The study by Boateng and Awunyor-Vitor (2013) evaluated the perceptions of policy makers and factors influencing policy renewal at the regional level in Ghana. They reported that one of the main reasons for enrolling with the NHI services was to secure financial health protection. In this quantitative study, the respondents admitted that they had joined the NHI to avoid having to borrow money for hospital fees should the need arise. However, the process of collecting and accessing new NHI membership cards or renewing them was reported to be complicated in most cases (Boateng and Awunyor-Vitor, 2013).

## **2.5 Benefits of National Health Insurance scheme**

Borghini et al. (2013) assessed the financial flow, adequacy, reform communication and acceptability of the CHF in Tanzania. They used a stratified sample of 100 CHF beneficiaries and 12 participants from five groups of representatives from MOHSW, former national CHF coordinators, members of parliament, NHIF staff and health services donors. The study commented that the NHI benefits include inpatient and outpatient care at all public hospitals and accredited private and faith-based facilities and pharmacies. However, the researchers argued that the NHI benefit package is hospital based and excludes PHC services.

In line with the above research, Blanchet, Fink and Osei-Akoto (2012) used the data collected as part of a women's health study to evaluate the effect of the NHI on health care utilization in Ghana. It was argued that the NHI provides hospital cover for outpatient services, investigations, minor and major surgeries, dental treatment, medical and surgical specialists and hospitalization fees. Benefits are further extended to patients' reproductive and child health care services, normal delivery, caesarean sections and all prescribed drugs. This is supported by Dalinjong and Laar (2012), who reported that the NHI in Ghana covers 95% of the health care costs of its members.

The NHI benefits packages are also extended to the mental health care services in some countries, although in Tanzania, the NHIF does not provide cover for patients who have attempted suicide (McLaughlin, 2009). This is contrary to a study that investigated the mental health insurance benefit package in the United States (US) where it was reported that most of the population in the US has mental health cover as one of the NHI benefits. However, the findings also revealed that the US NHI provides inadequate service delivery and covers only thirty inpatient days and twenty outpatient clinic visits per individual mentally ill patient (Maxfield, Achman, Buck et al., 2007).

## **2.6 Barriers and challenges to the National Health Insurance scheme**

Paim et al. (2011) investigated the history, advantages and challenges of the health system in Brazil. The researchers noted that low financial status of individuals is a critical barrier for engaging to NHI services.

In exploring the factors influencing implementation of CHF in Tanzania, Ooms (2014b) and colleagues noted unemployment and inability to contribute the monthly fee to the NHIF are among the challenges that prevent UHC for poor communities (Ooms et al., 2014b). Furthermore, in most cases, middle and lower income NHIF members encounter poor quality care, lack of freedom to use the health care facility of their choice and a poor referral system (Schoen, Osborn, Squires et al. (2010).

The study by Munga and Gideon (2009) used mixed methods to explore and describe the coping strategies used by men and women in the informal sector in their daily attempts to access health care services. It was revealed that most of the citizens in the informal sector in Tanzania do not agree with the idea of pre-payment for health care costs. CHF is perceived as having a very high annual premium and eligible populations are hesitant to contribute to something they might not need. The authors concluded, however, that the poor CHF coverage among the poor populations in the rural areas was due to the lack of suitable health insurance (Munga and Gideon, 2009).

Kamuzora and Gilson (2007) used a sample of four CHF stakeholders from the central MoHSW and World Bank to explore their experiences of implementing CHF schemes at district level in Tanzania. In this qualitative study, the researchers argued that the financing mechanisms of the NHIF and CHF are a barrier to UHC as local community members do not have the means to pay annual contribution fees to insurance schemes. On the other hand, the investigators noted that lack of trust in CHF management and failure to see the rationale of health insurance are among the important barriers that prevent poor communities from joining the CHF (Kamuzora and Gilson, 2007).

A qualitative case study by Agyei-Baffour, Oppong and Boateng (2013) also noted lack of confidence in NHI in developing countries. Other researchers reported lack of money for contributions to the fund and the poor quality of health care services as potential barriers that are preventing poor communities from joining their respective health insurances. Furthermore, inequality and unstandardized services and treatment between private and public health care facilities are problems that dominated NHI schemes in African countries (Jehu-Appiah et al., 2012; Yu, Chang, Lin et al., 2009). Moreover Chomi (2014a) and colleagues noted limited risk sharing and cross-subsidization across multiple health insurances in Tanzania (Chomi et al., 2014a).

In a quantitative study in Ghana, Boateng and Awunyor-Vitor (2013) recruited a random sample of 300 respondents to assess their attitudes towards NHI policy and the factors that influence renewal of an expired policy. Findings of this study revealed that the high cost of premiums and low morale of the low and the middle income populations were barriers for not enrolling to the NHI. The researches further elaborated that there is a knowledge deficit on the benefits of the NHI package among individuals in the informal sector and rural communities. Similarly, in Kenya, it was found that lack of knowledge of the NHI and its enrolment options and procedures among the informal sector, who do not perceive themselves as a targeted group for the NHI services, are among the factors that prevent UHC (Mathauer, Schmidt and Wenyaa, 2008)

Likewise, in developed countries, there have been several problems that are related to use of the NHI services among the insured. Schoen (2010) and fellow researchers surveyed the health care financing systems of eleven developed countries. They reported that NHI schemes provide partial health services to the insured as members encounter a

user fee at PHC level, limited benefits for outpatient, dental care and home nursing care and cost sharing for expensive drugs, specifically in the Netherlands and US. Furthermore, in the US, there is lack of uniformity of covered drugs; complex charges and lack of transparency in what should be covered by the NHI; the charges of care providers; and the amount the insured is expected to contribute as part of the cost sharing (Schoen et al., 2010).

## **2.7 National Health Insurance in other countries**

NHI schemes have been a successful health financing agency in most countries. Kreng and Yang (2011) commented that Taiwan NHI is the global model of a health care financing system which operates in both public and private health care facilities. The researchers highlighted that the Taiwan NHI started to operate under the Taiwan Department of Health in 1995 and is currently financing health care costs to all Taiwanese people, regardless of their contribution to the health fund. Clients are also given the incentive of considerably reduced medical costs by making extra payments and limiting their visits to the outpatient department (Kreng and Yang, 2011).

Fang, Shia and Ma (2012) conducted a survey that involved 2,424 households to provide an up-to-date description of important aspects of the NHI in Taiwan. The study commented that Taiwan has the most successful NHI in the world. Known as Universal National Health Insurance, this NHI has been successful in reducing the financial barrier for access to health care in its rural and urban areas (Fang et al., 2012). Yue-Chune, Yu-Tung, Yi-Wen et al. (2010) noted that the introduction of the NHI contributed to a significant reduction in deaths among vulnerable populations in Taiwan. Wang and fellow

researchers commented that Taiwan's NHI is a mandatory, single-payer scheme that provides comprehensive benefits for inpatient and outpatient care with benefits extended to dental care, traditional Chinese medicine, physical rehabilitation, home care nursing and comprehensive PHC. Moreover, since 2009, Taiwan's NHI has managed to achieve UHC by reaching 99% of the entire population (Wang, Wang, Juang et al., 2014).

Literature revealed that in the United Kingdom, the factors contributing to health care reform included a growing reliance on the private health care services, greater competition and measures to encourage individual consumers to be responsible for their own health (Harley, Willis, Gabe et al., 2011). Since the reform, the UK health care system has been financed by Medicare and the National Health Service with considerably more public (88%) than private health expenditure (Schoen et al., 2010). Harley et al. (2011) argued that the UK insurance policies are focusing mostly on acute hospital care and elective surgical procedures. It was also noted that the NHS covers fewer treatments. Although its members, especially the older groups, are demanding extra benefits packages, the government has done little to strengthening the insurance (Harley et al., 2011).

In the United States of America (USA), Herson and Snyder (2011) reported that the 2009 Health Care Initiative was founded to provide health insurance for an estimated 46 million people who did not have it.

However, Schoen (2010) and core researchers noted mixed private insurances in USA (Schoen et al., 2010). Cha and colleague stated that the USA farmers and ranchers pay high premiums to purchase health insurance due to the higher risks of injuries in their

working environment. Similarly, in Germany and France, the farmer population is covered by occupational health insurance programs (Cha, Kong, Moon et al., 2009).

Crowley and Tape (2013) argued that the US has health insurance marketplaces with the same key features as its health care system. This helps all uninsured citizens to obtain health coverage as part of the implementation of the US Patient Protection and Affordable Care Act. The Crowley and Tape report further commented that the health insurance marketplaces are voluntary schemes, although people can use premium tax credits and cost-sharing assistance specifically for qualified health plans. Moreover, the US Congressional Budget Office projected that, by the year 2023, twenty four million of the US population will be in the marketplace-based health care insurance.

NHI had a long history in Europe before its introduction to African countries. Van de Ven and Schut (2008) reported that the Netherlands was the first country to reform its health care system through the introduction of the world's first NHI in 1904. The NHI, working in conjunction with private insurance, started their operation under the same management of routine health care services by introducing a flat-rate contribution to insurers in 2006. According to Van Weel, Schers and Timmermans (2012), the Netherlands NHI has a benefit package for comprehensive PHC and family physician care.

However, Turquet (2012) noted that while the private-sector insurance management methods in Netherland were adopted to reduce the public sector's share of expenditure, it resulted in shifts in costs across the insured population, fragmentation of the health care services and inequalities in health care services utilization (Turquet, 2012).

In Latin America, a cross sectional study was conducted by Garcia-Subirats, Vargas, Mogollón-Pérez et al. (2014) to analyze inequities in access to continuum of care in municipalities of Brazil and Colombia. The sample of 2,163 individuals in Colombia and 2,167 in Brazil was obtained from those who had been experiencing health problems for at least three months prior to the time of the study. The researchers commented that Latin America, Colombia and Brazil are the countries mostly affected by inequalities in access to health care services; and that their insurance schemes tend to favour high socioeconomic individuals (Garcia-Subirats, Vargas, Mogollón-Pérez et al., 2014). Prieto Avila (2013) also noted that the poor populations in Columbia are served by their own mandatory health insurance named Unsatisfied Basic Needs, which is limited to services at the PHC level.

Hamidi, Shaban, Mahate et al. (2014) explored inherent policy issues in private health care schemes in United Arab Emirates (UAE). They noted that within the seven UAE, the Emirate of Abu Dhabi was the first to introduce a compulsory NHI for all residents of the Emirate in 2007. Hamidi and fellow authors further argued that the funds for the Abu Dhabi NHI are sourced from individuals, employers or sponsors and government subsidies. Moreover, the success of NHI in Abu Dhabi was its flexibility when the Health Authority of Abu Dhabi established the Thiqa program, which is mandatory UHC for UAE nationals.

## **2.8 National health insurance in African countries**

Many African countries have reformed their health care systems by implementing national insurance schemes. Wang and Chang (2010) reported that, in Africa, there are various forms of the health care financing agencies that include the NHI and CHF.

Kenya has the oldest NHI in Africa, which was introduced in 1965 as the National Hospital Insurance Fund. In 2004, the Kenyan government introduced the National Social Health Insurance Fund (NSHIF) as a strategy to promote UHC (Abuya, Maina and Chuma, 2015; Lagomarsino, Garabrant, Adyas et al., 2012). However, according to Lem and Kuganab (2009), low coverage among informal sector communities has remained a major problem of concern. The report by Janisch (2010) and colleagues on Vouchers for Health in Nairobi also noted that limited and unequal access to basic quality care resulted in a high mortality rate among poor populations (Janisch et al., 2010).

Mulupi, Kirigia and Chuma (2013) surveyed a sample of 594 households in a qualitative study that explored the feasibility of NHI in Kenya. The researchers noted that NHI coverage in Kenya was very low, with only 10% of the total population being covered with little effort to reach the informal sector workers. These researchers also noted that the benefits package for the Kenyan NHI members was low as the quality of health care services in the accredited hospitals was poor. Kenya was included in another study that examined the structure of NHI in nine Asian and African countries. This study also revealed the poor quality of the health care services as a major challenge of NHI (Lagomarsino et al., 2012).

In line with the findings above, Kimani et al. (2009) conducted a study to investigate the factors associated with participation in the NHIF in two of the slum areas in Nairobi, Kenya (Kimani, Ettarh, Kyobutungi et al., 2012). These authors found that a high proportion of poor residents in the slum areas were without any form of health insurance and there was scarce evidence of the existence of any CHF programs (Kimani, Ettarh, Kyobutungi et al., 2012).

On the other hand, Dixon, Tenkorang and Luginaah (2013) reported that Ghana has made good progress in the implementation of the NHI program and can be taken as a role model for the African countries that are looking towards implementing NHI services. According to Agyepong and Adjei (2008), the process of developing the Ghana NHIS started as a strategy to replace out-of-pocket fees in 2001. In the year 2003, the Ghana NHIS Act 650 was passed and started its operational services in 2004. In 2010, the Ghana National Health Insurance Authority claimed the coverage to have reached 66% (15.5 citizens) from a total of 145 surveyed District Mutual Health Insurance Schemes (NHIA, 2010).

However, Yawson et al. (2012) mentioned health care provider integrity as among the negative factors which influence the NHI services at municipality level in Ghana. They noted that insured clients were more likely to be offered additional medication to their treatment compared to uninsured clients. A report by Lagomarsino et al. (2012) also noted a lower rate of poor communities enrolment to NHI in Ghana. On the other hand, a study that explored the Ghana NHI coverage to poor women of child bearing age revealed that women who are married, educated or Christian are more likely to be insured than other women (Akazili, Welaga, Bawah et al., 2014).

Reforms to the Nigerian health care system took place in 1999, and the NHI started its official operation under the Nigerian Federal Ministry of Health in 2005 (Metiboba (2011)). The Nigerian NHI consists of the Formal Sector Social Health Insurance Program (FSSHIP) and two informal sector programs. Odeyemi and Nixon (2013) stated that the FSSHIP is a mandatory scheme which is funded by percentage contributions from employers and employees to cover public employees and the organized private sector in Nigeria. Onwujekwe, Hanson, Ichoku et al. (2014) noted the failure of the FSSHIP to provide financial health care protection for the majority of Nigerians as evidenced by the high out-of-pocket payments, which accounted for about 98% of the total health care costs.

Recently, the Ministry of Health in Rwanda commended Rwanda for being among the sub-Saharan African countries that have taken the NHI to great lengths in terms of scope and coverage as in the year 2010, about 91% of the Rwandan population were already covered by the NHI (MHR, 2010). However, Mathauer and Nicolle (2011) noted that while the low income communities accounted for approximately 65% of the total health care expenditures, their small contributions placed more pressure on the other contributors, thus necessitating more expenditures per individual client for cost sharing.

## **2.9 National Health Insurance in South Africa**

South Africa has the youngest NHI in Africa. Bateman (2013) reported that in recent years, the National Department of Health (NDOH) released the NHI white paper which invited comments from all South African natives.

Matsoso and Fryatt (2013) noted a low rate of comments from the entire population, which is estimated at 100 submissions since the launch of the NHI Green Paper in August, 2011.

As documented in the NHI Green Paper, the 'South Africa NHI is intended to improve access to quality healthcare services for the whole population and provide financial risk protection against health-related catastrophic expenditures' (NDOH, 2011b). However, the term affordability of services under the NHI is not clearly discussed in the Green Paper (McLeod, 2012).

The NDOH intention of introducing NHI in South Africa is to bring about a positive health care system reform that will improve service delivery in both public and private sectors (Grobler, 2013). Under this reform, patients will be viewed as beneficiaries or users of the health care services (Rowe and Moodley, 2013). According to Shipley (2010), the South African NHI will be funded by general taxes, contributions from formal sector employees, contributions from other existing medical insurance schemes and user fees for additional benefits and private care. A survey conducted by MacIntyre (2009) and colleagues noted that South Africans were ready for changes to move toward UHC through the use of NHI services.

In the context of KwaZulu-Natal, which is the most populous province of South Africa, formalization of the NHI is received as a strategy that may assist to reduce financial burden to the KZN health facilities for inpatient trauma care (Hardcastle, Samuels and Muckart, 2013). Various studies have commended the South Africa health care system reform and integration of the NHI services insofar as it has taken the NDOH's role of achieving equity in health care service delivery (Rowe and Moodley, 2013; Ataguba and Akazilli, 2010).

## **2.10 Conclusion**

This second chapter of the study presented a discussion on the reviewed literature that relates to NHI. The literature search was done by using key words that were selected by the researcher and none of the literature selected is more than ten years from the time of writing the research proposal. The topics in this chapter were presented under the following sub-headings; health care financing in Tanzania, the concept of NHI, reasons for choosing and enrolling in the NHI services and NHI in other countries, NHI in African countries and NHI in South Africa.

The next chapter will discuss the methodology that was used to address the objectives of interest in this study

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research paradigm, research approach and design, research setting, population, sampling procedures and sample size that were used in this study. It also covers the instrument for data collection, data collection procedure, reliability and validity of the instrument for data collection, data analysis, ethical considerations, and data handling and management. Burns and Grove (2005) state that methodology is a systematic and logical way in which data is gathered and synthesized. The research methodology section indicates how the researcher has gone about answering the research questions (Babbie and Mouton (2002).

#### **3.2 Research Paradigm and approach**

Guided by objectivism, this study adopted a positivist paradigm and a quantitative approach. Objectivism, according to Crotty (1998), is the epistemological view that things exist as meaningful entities independent of consciousness and experience, that they hold truth and meaning residing in them as objects. Objectivism allows for things to talk for themselves with no interference from the researcher (Crotty, 1998)

### **3.2.1 Positivist Paradigm**

A research paradigm is a basic orientation to theory and research, a fundamental model or scheme that organizes the researcher's views of something. (Babbie and Mouton, 2002). A paradigm shapes how one perceives the world and reflects the beliefs the researcher holds in answering the question of interest in the study and the way the research is designed, how data is collected and analysed, and how the results are presented (Babbie and Mouton, 2002).

A positivist paradigm was adopted in this study because it is associated with a quantitative research approach (Polit and Beck, 2004). Positivists believe that phenomena are not haphazard or random events, but rather have causes (Polit, Hungler and Beck, 2001). As stated in Polit and Beck (2008), the positivists' paradigm assumes that there is a fixed, orderly reality that can be objectively studied.

### **3.2.2 Quantitative approach**

A quantitative approach was adopted in this study because of its systematic and logical nature (Polit and Beck, 2004). It is a formal, objective, rigorous, systematic process for generating information about the world, and the phenomenon of interest can be precisely measured and quantified in a rigorous and controlled manner, as stated in Polit and Beck (2008) and (Burns and Grove, 2005).

According to Crotty (1998), quantitative research done in the positivist spirit employs four elements; objectivism, positivism, survey research and statistical analysis, all of which were observed in this particular study. These four elements are theoretical assumptions

underpinning the epistemology of choice in this research and they serve as a framework to guide the research methodology that was adopted. A quantitative approach was therefore appropriate in this study that intended to explore the perceptions of clients about NHI services without any interference from the researcher and for objectivity.

### **3.3 Research Design**

Research design is set of logical steps that are taken by the researcher to answer the research question (Burns and Grove, 2001). According to these authors, it forms the recipe of the study and determines the methods used to collect and analyze data and to interpret results. They state that an exploratory descriptive design facilitates the exploration and description of phenomena in real life situations, thus making it relevant to this study. It allows the researcher to describe what already exists, thereby providing a basis for further research in the future.

According to Babbie and Mouton (2002), the outcome of a descriptive study is a detailed picture of the participants' views or engagement in specific behaviours stated in percentages or numerical terms, and the frequency with which a specific characteristic or variable occurs in a sample.

A non-experimental, exploratory-descriptive and cross sectional research design was found to be useful in this study in that it explores the dimensions of phenomena which have not been explored in a particular context or where very little is known about it (Crotty, 1998; Polit and Beck, 2008).

This study was exploratory in the sense that it intended to explore the clients perceptions with regards to NHI services in a selected public hospital of interest. The study was first of its nature in the Dar es Salaam region in Tanzania and in the setting where it was conducted.

### **3.4 Research Setting**

The study was conducted at a selected public hospital in Dar es Salaam, Tanzania. Dar es Salaam is one of the 30 administrative regions of Tanzania, which is situated in the eastern costal area of the Indian Ocean (see Figure 3.1). The region is the commercial capital and is made up of three districts, namely Kinondoni, Ilala, and Temeke. In every district there is the public district hospital which serves patients and clients through the NHIF and user fee. Therefore, this study was conducted at the outpatient clinics in one of the selected hospital that was convenient to the researcher. This hospital has a separate Out Patient Department (OPD) unit which deals with registration of clients who use the NHIF services.

**Key**

- International boundary
- Major city
- ★ Study setting



**Figure 3.1: Map of Tanzania showing the Dar es Salaam Region**

Source: Courtesy of the CIA World Fact Book (Dillow, 2014)

### **3.5 Target Population**

Polit and Beck (2008) define population as an entire set of individuals having some common characteristics. According to Burns and Grove (2001), the population of study is all the subjects or elements that can take part in the research study if they meet the set criteria. The population informs the entire group of individuals or objects that the researcher is interested in studying.

This study targeted the NHIF clients at the Out Patient Department (OPD) in the selected public hospital because they were easily accessible to the researcher to discuss the nature of their insurance scheme during the long waiting period before entering the doctors' rooms. Secondly, all public and identified private hospitals in Tanzania have a special OPD unit which deals with the registration of the NHIF insured clients only, which made it easy for the researcher to identify them and request their participation in the study. The total population of clients who use the NHIF services in Dar es Salaam region was 373,226 members (NHIF, 2010).

### 3.6 Sample and Sampling Technique

According to Burns and Grove (2005), a sample is a portion of the population that is selected for a particular investigation to represent the entire targeted population of the study. Sampling, on the other hand, is the process of selecting a portion of the population to represent the entire population (Polit and Beck, 2004). The purpose of selecting a sample is to obtain descriptions that would accurately represent the characteristics of the total population (Polit and Beck, 2004).

In this particular study, according to the hospital records, the total number of NHIF members attending the selected hospital range from 800 to 1200 per year (unpublished). The researcher considered interviewing 30% of this population, as advised by the statistician, which made the sample size between 240 to 360 participants. However, because of the limited number of NHIF members that would attend the hospital during the time frame of the study, the researcher used convenience sampling to select a sample of 150 clients in total.

According to Polit and Beck, (2004), convenience sampling is the process that entails using the most conveniently available people as study participants. On the other hand Schmidt and Brown (2012) stated that the convenience sampling method is performed by selecting all participants who are available or accessible during the data collection period. Therefore, the sample size was the same as the target population, thus making the total size of 150 ( $n= 150$ ) clients.

### **3.6.1 Inclusion criteria**

Inclusion sampling criteria are those characteristics that a subject must possess to be a part of a study population (Burns and Grove, 2009). The study included all principle NHIF members and their beneficiaries who:

- were accessible during the data collection process;
- were available and willing to participate in the study;
- were attending outpatient clinics during the course of the study; and
- who had been using NHIF to access health care services for at least one year prior to the time of study.

### **3.6.2 Exclusion criteria**

Burns and Grove (2009) state that exclusion sampling criteria are those characteristics that cause a person to be excluded from the study population. Various exclusion criteria were applied for the purpose of this study. These included:

- children under 18 years of age;
- mentally disabled clients;
- eligible NHIF members who were not present during data collection process; and
- NHIF members who were mentally fit and aged 18 years and above, but not willing to participate in the study.

### 3.7 Data Collection Tool/instrument

The data collection instrument that was used to collect data in this study was a questionnaire. A questionnaire was considered the most appropriate data collection instrument for this research as it was quantitative in nature and adopted a positivist paradigm. Kumar (2005) stated that a questionnaire is made up of the list of questions that are studied and decoded by the respondents. Most of the items in the instrument were adapted from the data collection instruments of Boateng and Awunyor-Vitor (2013) and Jehu-Appiah and colleagues (2012), whose studies evaluated the policy holders' perceptions and factors influencing policy renewal and household perceptions and their implications for enrolment in the NHI scheme respectively (Boateng and Awunyor-Vitor, 2013; Jehu-Appiah et al., 2012). The tools were adapted to suit the objectives of this study. The above studies focused mainly on policy makers and household perception with regard to NHI schemes whereas this present study was looking at individual client's perceptions with regards to use of NHI services at hospital settings. As both instruments were already available in the public domain, it was not necessary to seek permission to use them.

The questionnaire contained 22 items, which were grouped according to the study objectives. Seven (7) items covered demographic data, while five (5) items focused on participants' understanding of the term NHI. Another five (5) items looked at the participants' reasons for choosing and enrolling to the NHI and the last five (5) items focused on the benefits of engaging in the NHI service. Apart from the demographic items in the first section of the questionnaire (Section A), all other items were in Likert scale, ranging from strongly disagree, disagree, strongly agree, agree and do not know.

According to Polit and Beck (2008), a Likert scale is the most widely used scale which consists of several declarative items that express a viewpoint on a study topic. In this scale, the respondents are asked to indicate the degree to which they agree or disagree with the opinion expressed by the statement (See Annexure 1a.).

The study used a Swahili version of the self-structured questionnaire to collect data from the clients in order to explore their perception with regards to the NHI services. This is because Swahili is the national language of Tanzania and would therefore be understandable to the participants, many of whom could not speak English. According to Polit and Beck (2008), a self-administered questionnaire requires respondents to read the questions on a written form and give their answers in writing. The rationale for using a self-structured questionnaire in this study is that the researcher is able to obtain similar answers from the respondents through systematized questions, as stated in Polit and Beck, (2003).

### **3.7.1 Reliability and Validity of the Research Instrument**

According to Polit and Beck (2008), an ideal measuring instrument is the one that results in relevant, accurate, unbiased, sensitive, uni-dimensional and efficient measurement. Babbie and Mouton (2002) state that validity and reliability are major criteria for assessing the instruments' quality and adequacy.

#### **3.7.1.1 Reliability**

Polit and Beck (2008) describe reliability as the degree of consistency or accuracy with which an instrument measures an attribute. It refers to the likelihood that a given

measurement or procedure will yield the same description of a given phenomenon if that measurement or procedure is repeated. A reliable item is one that consistently conveys the same meaning every time it is read by respondents and is interpreted in the same way. In quantitative research, a study cannot be considered valid unless it is reliable (Babbie and Mouton, 2002).

In this particular study, test re-test reliability was conducted. The data collection instrument was administered twice over a period of 14 days to a group of eight NHIF clients in their visits to the outpatient clinic at the selected public hospital in Dar es-Salaam, Tanzania. The findings from both rounds were analyzed and compared. The result was found to be 72, which is reliable. According to Polit and Beck (2004), the instrument is reliable if the tests results are above 70.

One of the instruments that was adapted for the study had been used in Ghana to identify, rank and compare perceptions of insured and uninsured households on quality of care, service delivery adequacy and staff attitudes (Jehu-Appiah et al., 2012). In this study, the instrument was tested for reliability and the computed Cronbach's alpha ( $\alpha$ ) for each of the subscales and alpha coefficients was fairly acceptable (Jehu-Appiah et al., 2012). Spiliotopoulou (2009) stated that Cronbach's alpha is the most widely applied index used for judging internal consistency reliability of the research instrument. In this study, the Cronbach's alpha statistical analysis indicated that the instrument was fairly valid and reliable to measure the clients' perceptions with regards to NHI services. Analysis of the items yielded the following results; reasons for enrolling to NHIF ( $\alpha=0.706$ ) and understanding of the term NHIF ( $\alpha 0.704$ ) On benefits of the NHIF, the result was ( $\alpha=0.612$ ) and this may be due to the fact that there was low number of questions in this

section, as stated by Tavakol and Dennick (2011). However, items were equally distributed in each section.

### **1.5.2.2 Validity**

Polit and Beck (2003) and Burns and Grove (2001) define validity as the degree to which an instrument measures what it is supposed to measure. In this study, the researcher used content related validity evidence as a means of ensuring that the instrument measured what it was intended to measure as well as responding to the research objectives (Burns and Grove, 2009). During the process of presenting the project proposal, the researcher subjected the instrument to the scrutiny of experts in nursing research methods. These experts pointed out some areas that needed further attention and the researcher attended to them with the assistance of her supervisor.

The researcher also matched the items in the research instrument against the research objectives and conceptual framework to establish if they were in alignment. This was achieved prior to data collection with the help of the research supervisor. A research coordinator in the municipality where this study was conducted was requested to review the Swahili version of the questionnaire in order to enhance the content validity of the tool, as stated in Polit and Beck (2004).

The content validity was also ensured by measuring the objectives of this study against the framework and items of instrument (See table below).

**Table 3.1: Summary of content validity: Objectives and measurements**

<b>Study objectives</b>	<b>Conceptual framework</b>	<b>Item for measurement</b>
To explore the clients' understanding of the term NHI	STRUCTURE ELEMENTS	Self-administered structured questionnaire on demographic information  Section A: item numbers 1-5 and; clients understanding of the NHI services  Section B: item numbers 1a-1e
To describe the reasons for enrolling and in NHI services.	PROCESS ELEMENTS and  OUTCOME ELEMENTS	Self-administered structured questionnaire on perceptions regarding use of NHIF services  Section B: item numbers 2a-2e
To identify the perceived benefits of engaging in NHI services	OUTCOMES ELEMENTS	Self-administered structured questionnaire on benefits of NHIF services  Section B: item numbers 3a-3e

### 3.8 Data Collection Process

The data collection process commenced after ethical clearance had been obtained from the University of KwaZulu-Natal Research Ethics Committee and from the Humanities and Social Sciences Research Ethics Committee in South Africa. Ethical approval was also obtained from the Kinondoni Municipality Research Ethics Committee in Tanzania (See Annexes 5 and 6). Permission to use the hospital as primary source for data collection was granted by the hospital authority and the Nurse Manager of the NHIF unit. After securing the permission from these key peoples, the researcher approached the NHIF clients who were waiting for their turn to see the doctor at the outpatient clinic an hour before the doctors were due to finish their ward rounds. This waiting period was a convenient time for the clients to participate in the study without interfering with their treatment and the schedule of the outpatient clinics. The researcher approached the group of seated clients at the NHIF waiting area and requested them individually to participate in the study by completing the Swahili version of the questionnaire.

The researcher introduced herself, explained the purpose of the study and responded to the potential participants' questions regarding the study in order to establish rapport. The researcher explained that participation was voluntarily and that they were not forced to participate. The researcher gave the participants verbal information on the aim of research study and the Swahili informed consent form (Annexure 1b) for them to read and sign. The informed consent form was written in Swahili and was attached to the questionnaire.

The researcher spent five minutes explaining to the respondents on how to complete the questionnaire because spoiled questionnaires are a waste and it is unethical to dispose of questionnaires with errors which could have been avoided by the researcher. The researcher then assured the participants that confidentiality would be maintained throughout the study and during the process of disseminating the findings from this study. The information letter to the participants included the names and the telephone numbers of the researcher, hospital administrator and supervisor in case of need. The information letter included the name of the university endorsing the research.

After attending to all the logistic and ethical issues, the researcher personally handled the questionnaires to the clients in their waiting area one hour before the arrival of the doctors. Participants were requested to post the completed questionnaires in a box that had been provided for this purpose. The researcher collected the box within the clients' waiting time on the same day. At the end of the data collection process, the researcher thanked the participants and the hospital authorities and promised to return to submit the final report.

### **3.9 Data Collection procedure**

In this study, data were collected through the use of structured questionnaires. The NHIF waiting registration unit was the base for collecting data with the permission from the unit nurse manager and data were collected during the hour that patients were waiting for the doctors to finish their ward rounds. The researcher explained the purpose of the study to potential participants and personally distributed the questionnaire to them. An informed consent sheet was attached to the questionnaire outlining the purpose of the study and the rights of the participants.

The researcher gave the participants clear and concise instructions for completing the questionnaire and those who requested assistance with the completion of the questionnaire were assisted accordingly.

A special box was used to collect the completed questionnaires and the researcher waited for the participants to complete the forms to ensure that those who had questions or who required assistance were attended to. The researcher collected the completed questionnaire on the same day before the clinic resumed to avoid disturbance to clients and wastage of time for health care services.

### **3.10 Data Analysis plan**

Data in this study were analyzed using quantitative data analysis methods (statistically). Predictive Analytics Software (PASW) Version 21.0. was used to organize the data. Pallant (2010) states that, PASW is an enormously powerful data analysis package that can handle very complex statistical procedures. Descriptive statistics that describe one variable at a time were used, such as the mean, median and mode. Standard deviation was also established (Polit and Beck, 2008). Descriptive statistics were therefore used to describe and summarize the socio-demographics, level of education and perceptions of participants by using percentages. Contingency tables, graphs and charts were used to explore items of interest in this study.

### **3.11 Data management**

Data that were captured electronically from the questionnaires will be saved in a computer that has a special login code known only to the researcher. The completed questionnaires will be kept in a box in a safe and lockable cupboard in the university. Data that were on paper (questionnaires) will be shredded after a period of five years and data stored on the computer will be erased from both the program file and recycle bin after submission of the research study.

### **3.12 Ethical Considerations**

The researcher's proposal was submitted to the School of Nursing Research Committee via the research supervisor and ethical issues were adequately addressed. The proposal was sent to the University of KwaZulu-Natal Research Ethics Committee for ethical clearance. Ethical clearance was also secured from the Humanities and Social Sciences Research Ethics Committee (HSSREC) before obtaining ethical clearance from the Kinondoni District Hospital Research Ethics Committee in Tanzania. Approvals from the Kinondoni District Hospital Research Ethics Committee, Tanzania, together with the ethical clearance letter from the UKZN were submitted to the HSSREC and full approval for conducting the study was secured. Thereafter, the ethical clearance from the Kinondoni district was sent to the selected public hospital administrator as part of securing permission to use the hospital as a research setting and to have access to the NHIF clients attending the outpatient clinics.

The researcher ensured that permission to conduct the study and to have access to participants was granted first by hospital manager and then by the NHIF unit manager at the selected hospital. The researcher explained the purpose of the study to the gate keepers, both verbally and in writing.

All respondents were treated with dignity to reduce anxiety and discomfort. The participants were provided with a written and verbal explanation of the purpose of the study, the nature and the procedure of the study and their expected roles as participants of this study. The informed consent forms were signed by the participants to ensure that their participation was voluntary. The study upheld the following principles:

### **3.12.1 Beneficence**

Beneficence is the fundamental ethical principle that seeks to prevent harm and exploitation of study participants and to maximize their benefits (Polit and Beck, 2004). Beneficence was promoted in this study as there were no physical or social risks. There were no direct benefits in participating in the study; however, recommendations made from the study, if used, may help to improve NHI services for universal health coverage. Beneficence was also promoted as information provided cannot be used against the participants as the questionnaires were assigned special numbers for the sake of data analysis and no names were used in study.

### **3.12.2 Justice**

The principle of justice holds that the human subject should be treated fairly while participating in a research study (Burns and Grove, 2009). It also includes participants' right to fair treatment and their right to privacy (Polit & Beck, 2004). The principles of autonomy and fairness were upheld in that those who wished to withdraw from the study were allowed to do so at any stage of the data collection. Participants were assured that they would not be coerced to continue and that they would not be disadvantaged in any way by the researcher or the outcomes of the study. The participants were also assured that their responses would be only used for research purposes.

### **3.12.3 Respect for human dignity**

This principle includes the right to self-determination and freedom to participate or not in the research study (Burns and Grove, 2009). In order to ensure respect for human dignity, the participants were provided with a written explanation of the purpose of the study, the nature and the procedure of the study and their expected roles as participants of this study. Written informed consent that affirmed voluntary participation was also requested from the individual participants.

### **3.12.4 Confidentiality**

Confidentiality was observed in that the respondents who participated in this study were given written assurance of confidentiality which was coupled with the anonymity principle. Neither the name of the health care institution or that of the respondent appeared anywhere on the questionnaires and the signed consent forms were separated from the completed data collection instruments to ensure that there was no link between the two. Numbers were assigned to each questionnaire in place of names.

### **3.13 Dissemination of the findings**

Dissemination of the finding from this study will be made to different policy makers and stakeholders. A hard copy will be submitted to the School of Nursing and Public Health at the University of KwaZulu-Natal for partial fulfilment of a Master of Nursing (Community Health). Soft copies will be submitted to the library of the University of KwaZulu-Natal, while another hard copies will be sent to the management of the NHIF, and the municipality and public hospital where this study was conducted.

The names of the participants and the hospital that was used as the setting in this study will remain confidential.

The findings will be also published by the researcher and the supervisor in accredited journals of nursing and/or community health and/or Public Health Nursing, such as the Journal of Community Health Nursing.

### **3.14 Conclusion**

This chapter outlined the research methodology that was followed in this study. It highlighted the positivist research paradigm, quantitative research approach and exploratory descriptive study design that were used. It also described the research setting, which was a public hospital in Dar es Salaam, Tanzania. The study population consisted of all NHI members attending the NHI designated outpatient clinics. Sampling procedures were also highlighted (n=150). The research instrument was discussed, as well as validity and reliability. The chapter also discussed the data collection process and procedures, which included the data analysis plan, data management, ethical considerations and dissemination of the findings.

The next chapter will present interpreted and analysed data from the study.



## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS**

#### **4.1 Introduction**

This chapter presents the analysis and interpretation of the findings of the research. The purpose of this study was to explore the perceptions of clients with regards to National Health Insurance Services in a selected public hospital in Dar es Salaam, Tanzania. A questionnaire that had been adapted from two previous related studies was used to collect data. Swahili was the medium of communication that was used during the data collection process PASW, Version 21.0 was the program that was used to organize and analyze the raw quantitative data.

Descriptive statistics were used to describe one variable at a time. As stated by Bickel and Lehmann (2012) descriptive statistics allow the researcher to measure the distribution of the population values, which in this study, was all NHI members. Voluntary consent was used to obtain a convenient sample size and participants were randomly selected. The mean, unvaried standard deviation, contingency tables and graphs were used, and frequencies of two or more variables were cross tabulated.

#### **4.2 Sample Realisation**

A total of about 240 to 360 NHI members were determined to be eligible for the study sample in the selected public hospital in Dar es Salaam, Tanzania. The study considered a sample size of 150 clients attending different clinics in the outpatient department to be adequate representation.

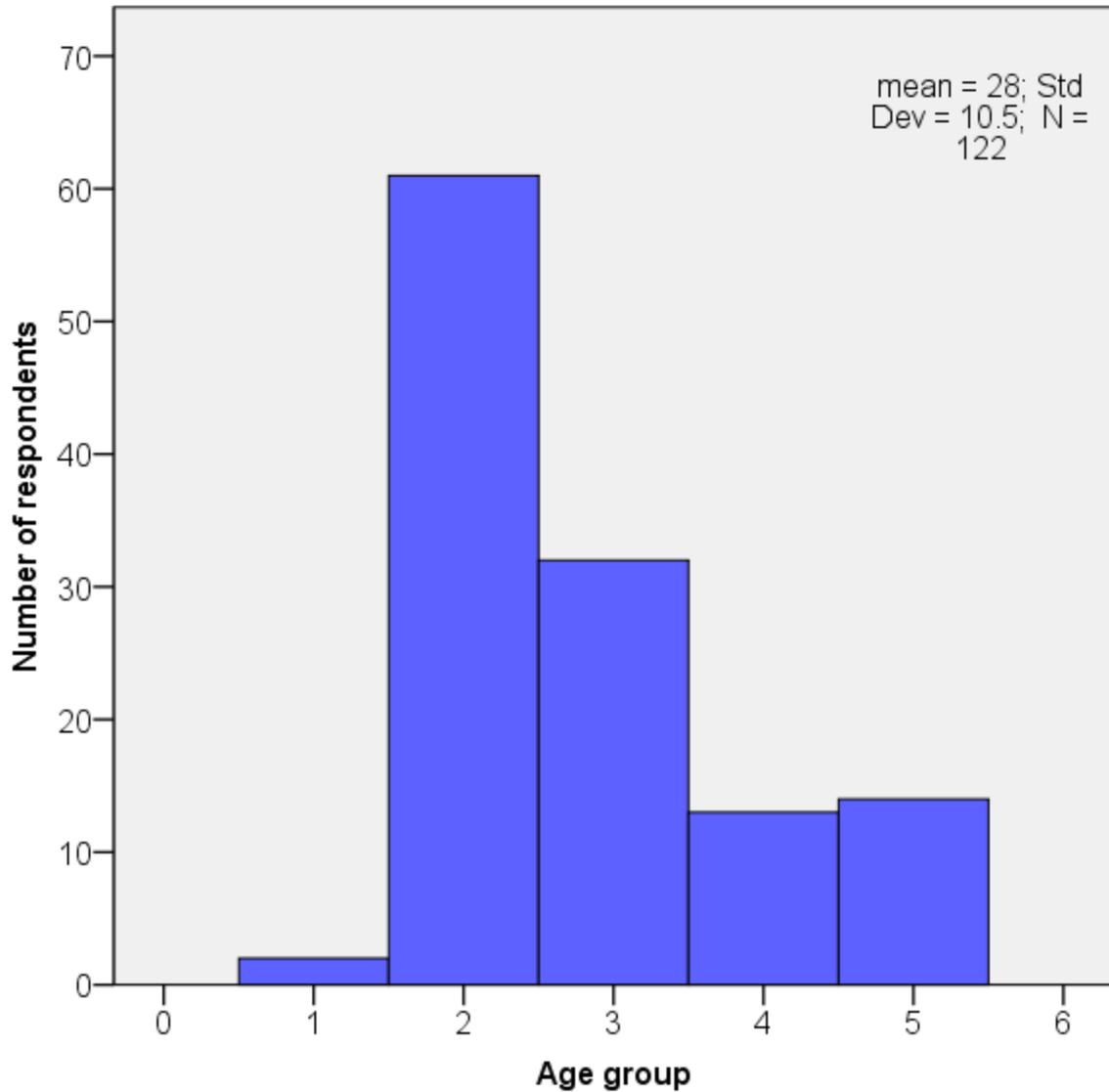
Sample rationalization resulted into one hundred twenty two (122), thus constituting the sample size for this study. This means that 122 questionnaires were returned and response rate was 81% of the estimated sample size, which is good. Polit and Beck (2008) state that a response rate greater than 65% is sufficient for most study purposes.

### **4.3 Demographic Characteristics of Respondents**

The social demographic information of respondents include age, gender, marital status, level of education, NHIF membership status, occupation and period of being enrolled as a member of the HIF.

#### **4.3.1 Age**

The findings showed that the age of respondents ranged between 20 to 61 years, with a range of 41 years. The mean age was 28 and standard deviation (Std. Dev.) was 10.5. Half of the sample were aged between 22-30 years (n=61; 50%) compared to those aged between 31-40 years (n=32; 26.2%), 51 years and above (n=14; 11.5%) and 41-50 year (n=13; 10.7%). The smallest group were aged 20 years and younger (n=2; 1.6%). The mean age was 28.10 and the standard deviation was 10.5 (See Figure 4.1 below).



**Figure 4.1: Age of respondents**

### **4.3.2 Gender of respondents**

The largest portion of the study sample size was represented by female respondents (n=77; 63.1%) in comparison to males (n=45; 36.9%), as shown below in Table 4.1 below.

### **4.3.3 Marital Status**

The study findings indicated that more than half of the respondents were married (n=74; 60.7%), followed by those who were single (n=46; 37.7%) and those who were divorced (n=2; 1.6%) (See Table 4.1).

### **4.3.4 Level of education**

The individual level of education and type of employment were considered determinants of understanding and enrolment to the NHIF in Tanzania. The results in Table 4.1 below indicate that 33.6% (n=40) of the respondents had college education, 27.9% (n=34) had university education, while 24.6% (n=30) had secondary education and 8.2% (n=10) had some secondary education. Only 3.3% (n=4) had primary education and 2.4% (n=3) had some primary school education.

### **4.3.5 NHI membership status**

About two thirds (n=79; 64.8%) of the respondents were principle members of the NHIF, while one third (n=43; 35.2%) were made up of beneficiaries, as presented in Table 4.1.

### **4.3.6 Occupation**

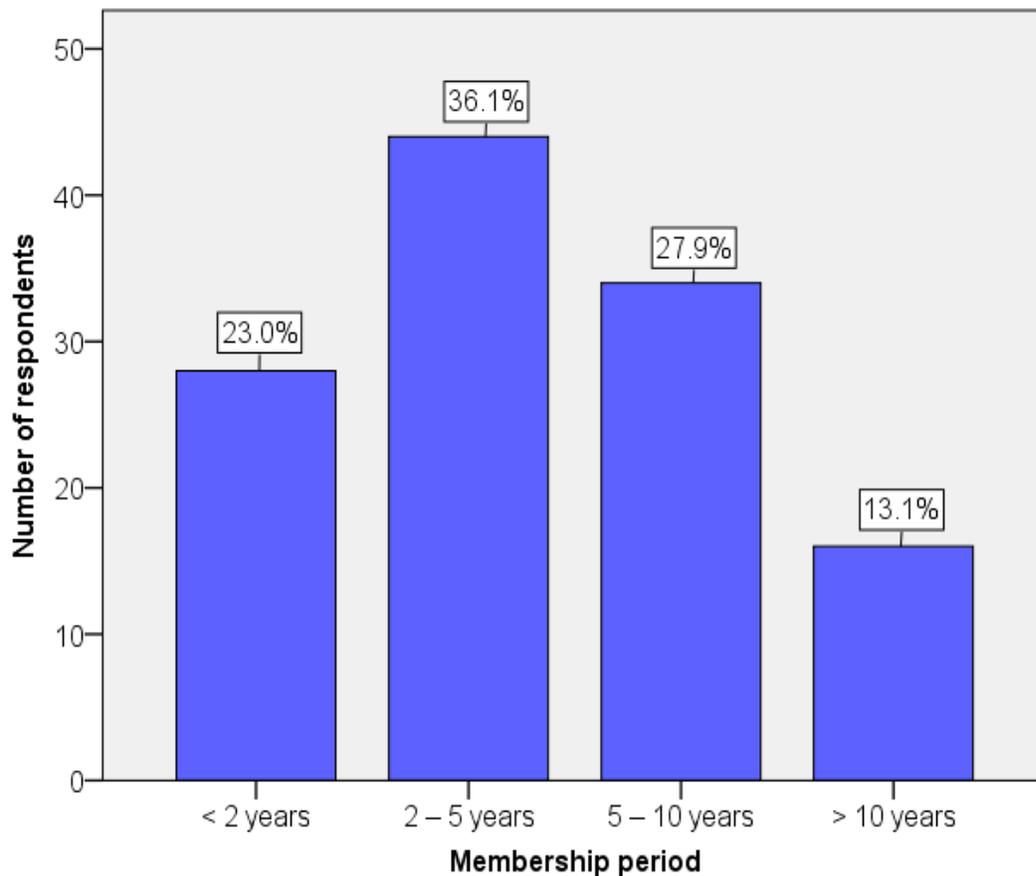
Table 4.1 also shows that most of the NHI members had formal employment. The majority (n=67; 54.9%) of respondents who participated in the study were civil/public servants. Traders and businessman made up 15.6% (n=19) and 4.1% (n=5) were farmers. A small percentage (13.1%; n=16) had other forms of employment and 12.3% (n=15) were unemployed.

**Table 4.1: Continuation of socio-demographic characteristics**

<b>Socio-demographic variable</b>	<b>Attributes</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Female	77	63.1
	Male	45	36.9
	Total	122	100
<b>Marital status</b>	Married	74	60.7
	Single	46	37.7
	Divorced	2	1.6
	Total	122	100
<b>Level of education</b>	College education	40	33.6
	University education	34	27.9
	Secondary education	30	24.6
	Some secondary education	10	8.2
	Primary education	4	3.3
	Some primary education	3	2.4
	Total	122	100
<b>NHI membership status</b>	Principle	79	64.8
	Beneficiary	43	35.2
	Total	122	100
<b>Occupation</b>	Civil/public servants	67	54.9
	Traders/businessman	19	15.6
	Others	16	13.1
	Unemployed	15	12.3
	Farmers	5	4.1
	Total	122	100

### 4.3.7 Period of being enrolled as a member of NHI

Respondents (n=122) were asked to indicate the length of time they had been enrolled as a member of the NHI. Their responses show that 36.0% (n=44) had been members of the NHI for a period of 2-5 years, 27.9% (n=34) had been members for between 5-10 years, 23.0% (n=28) had been members for less than 2 years, while the rest (n=16; 13.1%) had been members for more than 10 years. The mean period of being enrolled as a member of the NHI was 2.31 with standard deviation of 0.971. Figure 4.2 elaborates more.



**Figure 4.2: Respondents period of being enrolled as a member of NHI**

#### **4.4 Respondents' understanding of the term NHI**

The majority of the respondents were in agreement with the statement that NHI is a prepayment for health care, with 32.8% (n=40) agreeing and 30.3%(n=37) strongly agreeing with the statement. Of the rest, 14.8% (n=18) strongly disagreed, 13.1% (n=16) disagreed and 9.0% (n=11) indicated that they did not know. The highest mean score was 3.06, which indicates that more than half (n=77; 63.1%) of the respondents either strongly agreed or agreed with that statement. Generally, this reflects that NHI is defined by its members as a form of prepayment for health services.

The majority of respondents in this study (n=53; 43.3%) either disagreed or strongly disagreed with the statement that NHI is like regular insurance, compared to 37.8% (n=46) who agreed and strongly agreed and 18.9% (n=23) who indicated that they did not know. The mean score of 3.04 indicated that participants perceive the NHI is an extraordinary insurance, a fact that should be given special attention by the state government.

Just over half of the participants disagreed with the statement that NHI is a means of paying tax to government, with 29.6% (n=36) disagreeing and 21.3% (n=26) strongly disagreeing with the statement. Of the rest, 18.0% (n=22) agreed, 13.1% (n=16; strongly agreed and 18.0% (n=22) indicated that they did not know. The mean was 2.77. The majority of the respondents disagreed with the statement that NHI refers to free health delivery by government with 37.7% (n=46) disagreeing and 28.7% (n=35) strongly disagreeing. Of the rest, 18.9% (n=23) strongly agreed, 9.0% (n=11) agreed and (n=7; 5.7%) did not know. The mean score was 2.25

Table 4.2 below shows that just over half of the NHIF clients agreed that NHI is an access to health care for all citizens with 27% (n=33) agreeing and 23.8% (n=29) strongly agreeing to this statement. Of the rest, 26.2% (n=32) disagreed, 15.6% (n=19) strongly disagreed and 7.4% (n=9) indicated that they did not know. The respondents' mean score on this definition was 2.84. However, the overall mean score of 2.89 for all the NHI definitions indicated that the respondents had different knowledge and understanding of the term NHI.

**Table 4.2: Understanding of the term NHI**

<b>SCORES: SD= Strongly disagree, D= Disagree, SA= Strongly agree, and DN= Do not know</b>	<b>SD</b>	<b>D</b>	<b>SA</b>	<b>A</b>	<b>DN</b>	<b>Mean</b>
<b>Percentage (%)</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	
<b>Frequency (n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	
Prepayment for health care	14.8 (18)	13.1 (16)	30.3 (37)	32.8 (40)	9.0 (11)	3.06
Like regular insurance	13.0 (16)	30.3 (37)	14.8 (18)	23.0 (28)	18.9 (23)	3.04
NHI is a form of government tax	21.3 (26)	29.6 (36)	18.0 (22)	13.1 (16)	18.0 (22)	2.77
Free health delivery by government	28.7 (35)	37.7 (46)	18.9 (23)	9.0 (11)	5.7 (7)	2.25
Access to health care for all citizens	15.6 (19)	26.2 (32)	23.8 (29)	27.0 (33)	7.4 (9)	2.83
<b>Overall understanding of the term NHI</b>						<b>2.89</b>

#### 4.5 Reasons for enrolling with the NHI services

The findings showed that participants rated financial protection against illnesses as one of the main reasons for enrolling to the NHI services as most of the participants (90.1%; n=110) agreed with the statement, with 49.1% (n=60) agreeing and 41.0% (n=50) strongly agreeing. Only 6.6% (n=8) disagreed, 0.8% (n=1) strongly disagreed and 2.5% (n=3) indicated that they did not know. The mean score was 3.38.

The NHI clients rated NHI services being better than out-of-pocket payments as the second most important reason for enrolling with NHI. Most of the participants (82.8%; n=101) agreed with the statement, with 29.5% (n=36) strongly agreeing and 53.3% (n=65) agreeing. Only 13.1% (n=16) disagreed, 3.3% (n=4) strongly disagreed and 0.8% (n=1) indicated that they did not know. The mean was 3.11.

Statistical results in Table 4.3 show that the participants rated the third most important reason for enrolling with the NHI was that it provided health cover for their family. Most of the participants (81.1%; n=99) agreed that this was a reason for enrolling with the NHIF, with 45.9% (n=56) agreeing and 35.2% (n=43) strongly agreeing with this statement. Only 11.5% (n=14) disagreed and 7.4% (n=9) strongly disagreed. The mean of 3.90 indicated that the respondents had joined the NHIF in order to secure and cover health care costs for themselves and their beneficiaries.

Just over half of participants agreed that a reason for joining the NIF was because the government had asked them to join, with 32.0% (n=39) strongly agreeing and 26.2% (n=32) agreeing with the statement as opposed to 27.9% (n=34) who disagreed and 13.9% (n=17) who strongly disagreed, with a mean score of 2.76.

However, the participants did not rate a relative asking them to join as an important reason for joining the NIF as the majority (90.2%; n=110) disagreed with this statement, with 46.8% (n=57) disagreeing and 43.4% (n=53) strongly disagreeing. Only 4.9% (n=6) agreed and 4.9% (n=6) strongly agreed. The mean score of 1.71 indicates that the majority of the NHI members had not been influenced by their relatives to join the scheme.

**Table 4.3: Reasons for enrolling with the NHI services**

<b>SCORES: SD= Strongly disagree, D= Disagree, SA= Strongly agree and DN= Do not know</b>	<b>SD</b>	<b>D</b>	<b>SA</b>	<b>A</b>	<b>DN</b>	<b>Mean</b>
<b>Percentage (%)</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	
<b>Frequency (n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	
Financial protection against illness	0.8 (1)	6.6 (8)	41.0 (50)	49.2 (60)	2.5 (3)	3.38
Better than out-of-pocket payment	3.3 (4)	13.1 (16)	29.5 (36)	53.3 (65)	0.8 (1)	3.11
Provides health cover for my family	7.4 (9)	11.5 (14)	35.2 (43)	45.9 (56)	-	3.90
Government asked me to join	13.9 (17)	27.9 (34)	32.0 (39)	26.2 (32)	-	2.76
A relative advised me to join	43.4 (53)	46.8 (57)	4.9 (6)	4.9 (6)	-	1.71
<b>Overall mean score of reasons for enrolling to the NHI services</b>						<b>2.97</b>

#### **4.5 Perceived benefits for engaging in NHI services**

The participants were given five possible benefits of being a member of the NHI services and were asked to rate them on the Likert scale provided, which ranged from strongly disagree to strongly agree. Table 4.4 below shows that most of participants (93.5%; n=114) agreed that joining the scheme benefits them and their beneficiaries, with 50% (n=61) agreeing and 43.5% (n=53) strongly agreeing. Only 4.9% (n=6) disagreed and 1.6% (n=2) strongly disagreed. The mean score was 3.35.

The participants responded similarly to the statement that being a member of the NHI provides reassurance that their family will receive care. Again, most of the participants (93.4%; n=114) agreed, with 48.4% (n=59) strongly agreeing and 45% (n=55) agreeing. Of the rest, 3.3% (n=4) disagreed, 2.5% (n=3) strongly disagreed and 0.8% (n=1) indicated that they did not know. The mean score was 3.42, which indicated that NHI ensures financial protection for health care services among principle members and their beneficiaries.

Likewise, the mean score was 3.42 for participants' responses that being a member of NHI gives them easy access to health care. The majority (89.3%; 109) agreed with this statement, with 51.6% (n=63) strongly agreeing and 37.7% (n=46) agreeing. Only 8.3% (n=10) disagreed, 3.3% (n=2) strongly disagreed and 0.8% (n=1) did not know.

Again, most of the participants felt that belonging to NHI was beneficial as it saved them from paying hospital bills as the majority (83.6%; n=102) agreed with this statement, 41.0% (n=50) strongly agreeing and 42.6% (n=52) agreeing. Of the rest, 13.1% (n=16) disagreed and 3.3% (n=4) strongly disagree. The mean was 3.21.

Although less participants rated not needing to save money to pay for hospital care as a benefit of being a member of NHI, a majority of 72.1% (n=88) agreed that it was a benefit, with 37.7% (n=46) strongly agreeing) and 34.4% (n=42) agreeing compared to 18.9% (n=230 who disagreed and 9% (n=11) who strongly disagreed. The mean was 3.01.

The overall mean of 3.28 indicated that the NHI members were aware of the benefits of enrolling with health insurance.

**Table 4. 4: Benefits for engaging in NHI services**

<b>SCORES: SD= Strongly disagree, D= Disagree, SA= Strongly agree and DN= Do not know</b>	<b>SD</b>	<b>D</b>	<b>SA</b>	<b>A</b>	<b>DN</b>	<b>Mean</b>
<b>Percentage (%)</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	
<b>Frequency (n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	<b>(n)</b>	
Joining the scheme benefits me and my beneficiaries	1.6 (2)	4.9 (6)	43.5 (53)	50.0 (61)	-	3.35
Reassurance that my family will receive care	2.5 (3)	3.3 (4)	48.4 (59)	45.0 (55)	0.8 (1)	3.42
Easy access to health care	1.6 (2)	8.3 (10)	51.6 (63)	37.7 (46)	0.8 (1)	3.42
Will save money from paying hospital bills	3.3 (4)	13.1 (16)	41.0 (50)	42.6 (52)	-	3.21
Will not need to save money to pay for hospital care	9.0 (11)	18.9 (23)	37.7 (46)	34.4 (42)	-	3.01
<b>Overall mean score</b>						<b>3.28</b>

## 4.6 Conclusion

This chapter analyses, presented and interpreted the information on the social demographic characteristics of the NHI clients, respondents' understanding of the term NHI, their reasons for enrolling with the NHI services and their perceptions of the benefits of enrolling with the NHI.

With respect to social demographic characteristics, the information obtained from the analysis indicated that 63.1% of the respondents were female. The majority (76.2%; n=93) were aged between 22 and 40 years. The majority (61.5%; n=70) were well educated, with 33.6% (n=40) and 27.9% (n=30) having been to college and university respectively. Furthermore, the majority (60.5%; n=86) were employed, with 54.9% (n=67) being public servants and 15.6% (n=19) being traders/businessmen. About 64.8% of all the respondents were principle members of the NHI.

The results further showed that 90.2% of the participants agreed and strongly agreed that NHI provides financial protection against illness, 82.8% agreed and strongly agreed that the NHI services are better than out-of-pocket payments and 81.1% agreed and strongly agreed that NHI services provided health cover for their family. Just over half of the participants (58.2%) agreed and strongly agreed that the government had encouraged them to join NHI, but most (90.2%) disagreed and strongly disagreed that they had joined on the advice of a relative.

The following is the last chapter which summarizes the research findings by reviewing the supporting literatures and conceptual framework that were used to guide the study. The chapter also discusses the limitations to the study, gives recommendations and draws the conclusions reached by the study that explored the perceptions of clients with regards to National Health Insurance Services in a selected public hospital in Dar es Salaam, Tanzania.

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## CHAPTER FIVE

### DISCUSSION OF THE STUDY FINDINGS, RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

#### 5.1 Introduction

This chapter presents the discussion of the study findings with the support of previous studies on the study topic and the conceptual framework that was used to guide this study. It gives recommendations from the researcher and concludes the research dissertation. The purpose of the study was to explore the perceptions of clients with regards to National Health Insurance services in Tanzania. The study objectives were to explore the clients' understanding of the NHI, to describe their reasons for enrolling with NHI services and to identify the perceived benefits of engaging in NHI services.

The study was non-experimental, quantitative, exploratory, and descriptive and cross sectional in nature. The instrument used for data collection in this study was a self-administered questionnaire with 22 items requesting certain demographic data, patients' understanding of NHI, their reasons for enrolment and their perceptions of NHI benefits. The probability convenient sampling technique was used to obtain a sample size of 150 NHI clients who were attending different clinics at the outpatient department of the selected public hospital during the course of the study. Participants were randomly selected and 122 completed and returned the questionnaire.

## **5.2 Discussion of the study findings**

The discussion of the study findings are presented in the same order as the questionnaire: respondents' social demographic characteristics, respondents' understanding of the term NHI, their reasons for enrolling with NHI and their perceptions of the benefits of being a member of NHI.

### **5.2.1 Social-demographic characteristics**

In this study, the social-demographic characteristics of an individual are the factors that might have an influence on the client's enrolment with the NHI services. These characteristics are closely related to the structure, process and outcome of the NHI services and mark the foundation of the structure in which the NHI is financing health care services to its members. Therefore, social demographic characteristics were used to build the structure of the NHI and support the three components of the conceptual framework that was used in this study. They are also important in assessing the outcome of the health care services under the NHI, which is the third objective of the study.

In this study, the researcher intended to explore and describe the perception of clients with regards to NHI services, which relates to the components of quality care in the health care system. In the model of quality care, Donabedian (1966) outlined that the approach to health care system assessment for quality health care is best classified under the three components, which are structure, process, and outcome.

Donabedian (1966) also acknowledged the importance of establishing a relationship with individual client's personal particulars before addressing the three components of the quality health care.

The study found that the minimum age of the respondents was 20 years old, while the maximum was 61 years old. However, the majority of respondents were aged between 22 and 40 years (76.2%; n=93), with 50% of them being younger than 30 years old. This result is similar to the study that was conducted by Boateng and Awunyor-Vitor (2013) in the Volta region of Ghana whereby the majority of the household respondents were below the age of 34 years old. In another NHI study at household level in Ghana, the average age of the NHI members from the data analysis was 25 years old (Jehu-Appiah et al., 2012).

The implication of the effect of age in research participation in Tanzania is that the young population is socially well informed and eager to give their views to policy makers through the research findings. Furthermore, the formal sector is attracting young employees. This is supported by the study that assessed the level of NHI uptake in the Lagos state in Nigeria in which the researchers discussed that young people are active and part of the working class in each community (Campbell, Latifat, Collins et al., 2014).

The above views are challenged by Canadian researchers, however, who argued that young adults between the ages of 19 and 25 face significant problems in assessing health care services due to either lack of accessibility or fear of unknown problems.

These authors found that those who attend colleges and universities are the exception as they may access health care services through the use of their mandatory health insurance schemes (Nunes, Syed, De Jong et al., 2014).

The research sample was composed of predominantly female NHIF members (63.7%), which reflects that the female population in Tanzania does utilize health care services and are more likely to report chronic diseases than males (Danforth, Kruk, Rockers et al., 2009). This is also congruent with the analysis of the study by Boateng and Awunyor-Vitor (2013) in which gender was used as a social characteristic that determined the decision to be enrolled in the NHI schemes, whereby female members were found more active in renewing their NHI cards. The study by Kimani et al. (2012) also found that more women in Kenya are insured by the National Hospital Insurance than men. The majority of participants (60.7%) were married.

The study also found that the majority of the participants (61.5%; n=70) were well educated, with 33.6% (n=40) and 27.9% (n=30) having been to college and university respectively and 24.6% (n=30) having completed secondary education. This result is supported by the study by Chomi et al. (2014a) in Tanzania, who found that 63% of heads of household who are members of the NHIF are educated up to secondary or above secondary school and are able to seek health care services on the same day that they fall ill. It is also supported by other studies that were conducted on NHI services in different areas in Ghana, where it was also revealed that the majority of NHI members were from educated communities (Blanchet et al., 2012; Jehu-Appiah et al., 2012; Dalinjong and Laar, 2012).

Another study in Ghana reported that people with religious affiliations and above primary school education are more likely to be enrolled with the NHI (Jehu-Appiah, Aryeetey, Spaan et al., 2011)

The study revealed that 64.8% of the participants attending the different outpatient clinics in the selected public hospital were the principal members of the NHIF, which implies that it was their insurance scheme of choice.

Literature on health insurance in Tanzania concurs that the NHIF is the largest health insurance, covering all civil servants with comprehensive health care services (Borghi et al., 2013; Macha, Harris, Garshong et al., 2012; Mills et al., 2012a; NHIF, 2010). However, the CHF study by Kamuzora and Gilson (2007) argues that the majority of poor Tanzanians are not covered by any of the NHI schemes since they are unable to contribute the insurance funds. This is also in line with (WHO, 2010) report which advocates that the NHI of any state should aim at universal coverage of the entire population regardless of the individual's financial status.

The current study found that only a small percentage of the participants (12.3%; n=15) were unemployed, also supporting the argument that the poor are not well represented. Several authors have pointed out that the NHIF coverage is only 10 - 15% of the total population (Borghi et al., 2012; Macha et al., 2012; Marriott, 2012).

This is also supported by the finding that the majority (60.5%; n=86) were employed, with 54.9% (n=67) being public servants and 15.6% (n=19) being traders/businessmen. A further 13.1% (n=16) and 4.1% (n=5) indicated that they had other employment or were farmers respectively.

In Tanzania all public servants are obliged to contribute to the NHIF soon after being employed by the government (Kuwawenaruwa, Macha and Borghi, 2012; Mtei and Borghi, 2010; Mtei et al., 2012; Mtei et al., 2007).

These results are similar to those of the Kenya health situational analysis that was conducted by Wamai (2009), which found that the majority of public health care facilities users were members of the Kenya National hospital Insurance.

The findings revealed that 36% of the sample consisted of participants who had been NHIF members for two consecutive years. This is in line with the age of the sample whereby the majority of the respondents were young. However, these results are not representative of the entire population, as the NHIF has been a mandatory health insurance for the formal public sectors employees for almost fourteen years (Marriott, 2012; Mills et al., 2012a).

### **5.2.2 Respondents' understanding of the term NHI**

While the study by Mulupi et al. (2013) argued that employees in the formal sector in Tanzania have some general knowledge of NHI because it is a mandatory insurance to them, the researcher was interested to know whether the NHIF clients understood how the fund worked. The findings in this study showed that 63.1% of the respondents agreed and strongly agreed with the statement that NHI is a prepayment for health care service delivery. This is consistent with the report of Nigerian researchers who defined NHI as a social health care security system that facilitates fair financing of the health care costs through the various payment methods prior to falling ill (Ujunwa, Onwujekwe and Chinawa, 2014).

However, in contradiction with the previous definition, the study found that the participants were unsure regarding the statement that the NHI is like regular insurance as 43.3% of the respondents disagreed or strongly disagreed, 37.8% agreed or strongly agreed and 18.9% indicated that they did not know. In their study of NHI households, (Jehu-Appiah et al., 2012) found that majority of insured respondents (99.1%) did not agree that NHI was comparable with other forms of insurance. There were also mixed responses from the participants with regard to whether NHI is a form of government tax, with 50.9% of the respondents disagreeing or strongly disagreeing with the statement, 31.1% agreeing or strongly agreeing and 18% who did not know.

According to Mtei (2012) and fellow researchers, cited in Bilger (2008), the financing of the health care system in Tanzania is based on a progressive structure of income tax, which focuses mainly on formal sector tax payers (Mtei et al., 2012; Bilger, 2008). This is in line with the study by Yu, Whyntes and Sach (2011) that assessed the impact of tax on the NHI in Malaysia, who also found that the NHI is financed by direct and indirect taxes.

Furthermore, 66.4% of the respondents disagreed or strongly disagreed with the notion that NHI is free health care delivery from the government, while 27.9% agreed and strongly agreed and 5.7% did not know. This confusion can be attributed to the campaigns of some politicians who place much emphasis and attention on delivery of a free health care service (Jehu-Appiah et al. (2012). Furthermore, according to Mills et al. (2012b), there was a time when independent health care services were free in public hospitals in Tanzania, until the government introduced a user fee in the late 1980s.

The above results should not be ignored by the stakeholders, as discussed in several previous studies, as NHI is perceived by the public formal sectors employees as mandatory insurance that cannot be avoided (Marwa et al., 2013; NHIF, 2009). In this current study, the majority of the respondents were principle members who were employed in the public formal sector.

Surprisingly, 50.8% agreed or strongly agreed with the notion that NHI provides access to health care for all citizens, compared to 41.8% who disagreed or strongly disagreed and 7.4% reported that they did not know. This is not the case in Tanzania, where the majority of the population cannot afford to pay for health insurance and therefore have no cover. Yu et al. (2011) argued that NHI must permit equitable health care services to citizens regardless of their financial status, and that the higher and middle income population have a duty to subsidize the costs of the poor communities. The WHO (2010) report on UHC also advised that the main goal of a state NHI is to ensure delivery of health care to all citizens on the basis of equity and equality.

The reality of the situation in Tanzania is that the NHIF covers only the formal sector employees and even although CHFs have been integrated into the NHIF to extend cover to those living and working in the informal sector, the total coverage is small and 90% of the population in the United Republic of Tanzania remain without cover (Borghi et al., 2013; Borghi et al., 2012; Carrin et al., 2008; NHIF, 2010) .

#### **4.6.1 Reasons for enrolling with the NHI services**

This study indicated that 90.1% of the respondents agreed or strongly agreed that financial protection against illnesses was a reason for enrolling with the NHI services, compared to only 7.4% who disagreed or strongly disagreed and 2.5% who did not know. These results are similar to other African studies. A study conducted in Nigeria reported that, 74.4% of the respondents agreed or strongly agreed with the view that NHI is the best option for health care financing (Campbell et al., 2014); a study conducted in Ghana highlighted that the majority of respondents valued the NHI for its financial protection against illnesses (Boateng and Awunyor-Vitor, 2013; Jehu-Appiah et al., 2011); and in Kenya, 93.0% of the insured household respondents appraised the implementation of a compulsory NHI scheme for citizens (Maluka, 2013).

The majority of the respondents (82.8%) agreed or strongly agreed that NHI services are better than out-of-pocket payments, as opposed to some 16.4% who strongly disagreed and 0.8% who did not know. However, these results are not representative of Tanzania as a whole, as this only reflects the opinion of a small minority as the poorest Tanzanians who cannot afford the membership fees have to pay out of their pockets or rely on a CHF which gives them limited access to public healthcare facilities, thus compromising the quality of health care they receive (Mtei et al., 2012).

In terms of the statement that NHI provides health cover for my family, it was found that 81.1% of the respondents agreed or strongly agreed as compared to 18.9% who disagreed and strongly disagreed with this statement.

This result is supported by some researchers who argue that many middle income communities would not be able to access necessary, but expensive health care services without health insurance as they would not be able to afford the costs (Kusi, Enemark, Hansen et al., 2015).

Studies demonstrated that most of the state governments across the world have incorporated NHI services in their health care systems with the view to cover their population health care costs and provide universal comprehensive and equitable services (Ekman, Liem, Duc et al., 2008; Grobler, 2013; Paim, Travassos, Almeida et al., 2011). In this particular study, some 58.2% of the respondents agreed and strongly agreed that they had enrolled with the NHI because it was a government requirement, while 41.8% of them strongly disagreed and disagreed with this reason.

The findings in this study indicated that 90.2% of the respondents disagreed and strongly disagreed that they had enrolled with the NHI on the advice of a relative, with as few as 9.8% agreeing or strongly agreeing. This is supported by the study by Jehu-Appiah et al. (2012), where only 2.7% of the household respondents admitted to joining the NHI as the result of influence from their relatives (Jehu-Appiah et al., 2012). These authors also noted that neighbors and relatives had little influence in encouraging previously insured members to renew their NHI.

### **5.2.3 Perceived benefits for engaging in NHI services**

The respondents responded positively to the list of proposed benefits, indicating that they were aware of the benefits of belonging to the NHI.

Almost all of the respondents (93.5%) agreed or strongly agreed that joining the scheme benefits themselves and their beneficiaries, in contrast to the few (6.5%) who did not perceive this as a benefit. These results concur with those of (Mulupi et al., 2013) where subjects narrated that the NHI services made members feel at ease when their beneficiaries were in hospital and that it also helped other community members.

A similar majority (93.4%) agreed and strongly agreed that belonging to the NHI gave them reassurance that their family would receive care. Only 5.8 disagreed or strongly disagreed that this was a benefit and 0.8% did not know.

About 89.3% agreed and strongly agreed that easy access to health care services is a third benefit for enrolling with the NHI. This is in contrast to 9.9% who disagreed or strongly disagreed and 0.8% who did not know. These results are supported by the recent study done in Kenya by Abuya et al. (2015), which generalized that NHI is designed to cover outpatient and inpatient health care costs.

The majority of the study respondents (83.6%) also agreed or strongly agreed that enrolling with the NHI saves having to paying hospital bills, with just 16.4% disagreeing and strongly disagreeing. This is consistent with findings of a study that was conducted to analyze the financial burden of household in Korea, where it was recommended that there is a need for the state NHI to rationalize the benefit packages by addressing special charges through the expansion of the coverage (Xu, Jeong, Saksena et al., 2010).

Although still the majority, fewer of the respondents (72.1%) agreed or strongly agreed that one of the benefits of enrolling the NHI services is that they will not need to save money to pay for hospital care, while the remaining 27.9% disagreed or strongly

disagreed that this was a benefit. However, these results contradict with the Schoen et al. (2010) survey that examined the NHI schemes related experiences in eleven developed countries. The researchers discussed that in Norway, Switzerland and Sweden, NHI clients need to save money for cost sharing in most of their health care services, while New Zealand has included cost sharing at the PHC level. Similarly in Tanzania, the NHIF benefits packages are limited to secondary and tertiary levels of the service, hence the clients' need to save money for PHC care (Mills et al., 2012b).

#### **5.2.4 Challenges to implementation of NHI schemes**

Although this was not one of the objectives for the study, the literature search for the study outlined some of the challenges that are related to the routine implementation of NHI schemes. Most of the studies that were done in different countries have reported the most common challenges that are related to the NHI services. These include inability of the poor communities to contribute to the insurance funds, poor quality of health care services, partial benefits packages and out-of-pocket payments, particularly for the poor population (Ooms et al., 2014b; Ooms et al., 2014a; Paim et al., 2011; Schoen et al., 2010; Munga and Gideon, 2009; Kamuzora and Gilson, 2007).

### **5.3 Recommendation**

In relation to the study findings and the reviewed literatures across the world, the recommendations have been categorized as follows:

#### **5.3.1 Recommendations to policy makers and the NHIF management in Tanzania**

In their move towards UHC, the South African government is in the early stages of developing a NHI policy proposal that outlines how vulnerable and poor populations will be funded without having to contribute funds (NDOH, 2011a).

It is recommended that the policy makers and NHIF management in Tanzania formulate a similar model that can include the poor communities without subjecting them to financial burden.

The emphasis should be on strengthening the mechanism of raising funds rather than depending on the formal sector employees' contributions only.

The MOHSW needs to consider the option of extending the NHIF as a voluntary health insurance for informal sector employees who may wish to opt for it.

It is also recommended that NHIF management changes its policy of applying different membership cards and have only one card. This will promote a stronger sense of equity in the health care services.

#### **5.3.2 Recommendations to Community Health Nursing Practice**

NHIF benefit packages need to be extended to the PHC level to avoid cost sharing for the insured members and their beneficiaries at this level. Similarly, CHF and TIKA

services need to extend members' coverage to secondary and tertiary levels of the health care system, rather than being limited to services at the PHC level. Taiwan, the world model for NHI, is currently implementing this system (Yue-Chune et al., 2010).

Benefit packages need to be expanded to include all drugs and investigations, regardless of the expense, at both government and identified private hospitals. The policy makers also have a role to play in assisting to rationalize the benefits package.

Prompt and high quality health care services should be available to all members. Therefore, the current situation of having to wait for NHIF referral letters and being put on long waiting lists for expensive investigations needs to be addressed.

There is an evidence that, internationally, most of the health care system reforms have been gradually achieving universal coverage (Carrin et al., 2008). The NHIF management should therefore take cognizance of other models and frequently revise their strategic plan to overcome the challenges of the NHIF services

### **5.3.3 Recommendations to nursing research**

It is a critical concern that the NHIF is assessed in terms of the quality of the health care provided from the perspective of the client. Therefore, further research is recommended to understand the nature and quality of the health care services that are funded by the NHIF schemes and the level of individual client satisfaction. There is also a need to explore perceptions of the NHI services among the majority of Tanzanians, who are not covered by any of the NHIF schemes.

#### **5.4 Implication of the study**

This study was done in the discipline of Nursing for the partial fulfilment of a Master degree in Community Health. It provides information on the perceptions of clients with regards to the NHI services in Tanzania. The study identifies the challenges and areas that need attention from policy makers for future reform of the health care system. The study therefore serves as a foundation to ensuring universal health coverage to all Tanzanians, including the poor communities.

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### **5.5 Limitations of the study**

The study had several limitations, which included:

Data collection involved NHIF members and their beneficiaries only. Non-members and service providers were not considered by the study. Information from these two groups could have come up with cues in relation to out-of-pocket payments and other practical components of the NHIF benefit packages.

Secondly, the study used a quantitative approach to explore the clients' perceptions with regards to NHI services. A qualitative approach could have added more clarity from the lived experiences of the clients who use the health care services that are financed by the NHI.



## 5.6 Conclusion

The NHIF of Tanzania is well accepted by its principle and beneficiaries members.

The insurance is perceived as one of the beneficial medical aids which provide health cover for the majority citizens who are working in the formal sectors together with their beneficiaries. The study revealed that the respondents have joined the scheme to ensure the availability and accessibility of the pre-paid health care services to their families and significant others.

However, Tanzania NHIF should provide full health cover for its members from primary to secondary level of the health care services while including the entire population regardless of their occupational status. Furthermore the informal sector has significant contribution to the national economy, therefore the study suggests that this sector may be directly linked to the NHIF services even though it was originally developed for the formal sectors employees.

Lastly the study conclude that the Tanzania NHIF needs to expand the health care services coverage to include services at the Primary level of the health care system. Therefore there is a need for the United Republic of Tanzania government through the MOHSW to find another mechanism of finding the NHI rather than depending on monthly contributions of the members. Extra funds of the NHI may assist in provision of the free NHIF card to the vulnerable population and maintains equity in assessing health care services. This can be achieved through tax collection and increasing the government funds to cover the health care costs of the vulnerable groups and poor rural communities who cannot afford to contribute to any of the NHIF schemes

## REFERENCES

- Abuya, T., Maina, T. & Chuma, J. (2015). Historical account of the national health insurance formulation in Kenya: Experiences from the Past Decade. *BioMed Health Services Research*, 15(1), 56- 62.
- Agyei-Baffour, P., Opong, R. & Boateng, D. (2013). Knowledge, perceptions and expectations of capitation payment system in a health insurance setting: a repeated survey of clients and health providers in Kumasi, Ghana. *BioMed Central Public Health*, 13(1), 1220.
- Agyepong, I. A. & Adjei, S. (2008). Public Social Policy Development And Implementation: a case study of the Ghana National Health Insurance Scheme. *Health Policy And Planning*, 23(2), 150-160.
- Akazili, J., Welaga, P., Bawah, A., Achana, F. S., Oduro, A., Awoonor-Williams, J. K., Williams, J. E., Aikins, M. & Phillips, J. F. (2014). Is Ghana's pro-poor health insurance scheme really for the poor? Evidence from Northern Ghana. *BioMed Central Health Services Research*, 14(1), 357-374.
- Almuallm, Y., Alkaff, S. E., Aljunid, S. & Alsagoff, S. S. (2013). Factors Influencing Support for National Health Insurance Among Patients Attending Specialist Clinics in Malaysia. *Global Journal Of Health Science*, 5(5), 1-10.

Amporfu, E. (2013). Equity of the premium of the Ghanaian national health insurance scheme and the implications for achieving universal coverage. *International Journal For Equity In Health*, 12(1), 4-12.

Ataguba, J. E. & Akazilli, J. (2010). Health care financing in South Africa: moving towards universal coverage. *Continuing Medical Education*, 28(2), 74 - 78.

Babbie, E. & Mouton, J. (2002). *The Practice of Social Research*. Cape Town: Oxford University Press, Southern Africa.

Baltussen, R., Norheim, O. F. & Johri, M. (2011). Fairness in service choice: an important yet underdeveloped path to universal coverage. *Tropical Medicine & International Health*. 16(7), 838-839.

Bateman, C. (2013). South Africa continuing medical education. *Continuing Medical Education*, 31(6), 235-236.

Bickel, P. & Lehmann, E. L. (2012). *Descriptive statistics for nonparametric models Iv. Spread*. Selected works Of El Lehmann, Springer.

Bilger, M. (2008). Progressivity, horizontal inequality and reranking caused by health system financing: A decomposition analysis for Switzerland. *Journal of Health Economics*, 27(6), 1582-1593.

Blanchet, N., Fink, G. & Osei-Akoto, I. (2012). The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana Medical Journal*, 46(2), 76-84.

Boateng, D. & Awunyor-Vitor, D. (2013). Health insurance in Ghana: Evaluation of policy holders' perceptions and factors influencing policy renewal in the Volta Region. *International Journal for Equity in Health*, 12, 1-10.

Borghi, J., Maluka, S., Kuwawenaruwa, A., Makawia, S., Tantau, J., Mtei, G., Ally, M. & Macha, J. (2013). Promoting universal financial protection: A case study of new management of Community Health Insurance in Tanzania. *Health Research Policy and Systems*, 11(1), 21-33.

Borghi, J., Mtei, G. & Ally, M. (2012). Modelling The Implications Of moving towards universal coverage in Tanzania. *Health Policy and Planning*, 27(Suppl 1), I88-I100.

Burns, N. & Grove, S. K. (2001). *The Practice of Nursing Research: Conduct, Critique and Utilization*. Saunders: Philadelphia, Pennsylvania, USA.

Burns, N. & Grove, S. K. (2005). *The Practise of Nursing Research: Conduct Critique and Utilization*. Saint Louis, Mosby Elsevier/Saunders.

Burns, N. & Grove, S. K. (2009). *The Practice Of Nursing Research: Appraisal, Synthesis, and Generation of Evidence*. Saunder, Elsevier.

- Campbell, P. C., Latifat, T. T., Collins, N. F. & Olatunbosun, A. T. (2014). National Health Insurance Scheme: How Receptive Are The Private Healthcare Practitioners In A Local Government Area Of Lagos State. *Nigerian Medical Journal*, 55(6), 512-516.
- Campbell, S. M., Roland, M. O. & Buetow, S. A. (2000). Defining quality of care. *Social Science & Medicine*, 51(11), 1611-1625.
- Carrin, G. & James, C. (2005). Social health insurance: key factors affecting the transition towards universal coverage. *International Social Security Review*, 58(1), 45-64.
- Carrin, G., Mathauer, I., Xu, K. & Evans, D. B. (2008). Universal coverage of health services: tailoring its implementation. *Bulletin of the World Health Organization*, 86(11), 857-863.
- Cha, E. S., Kong, K. A., Moon, E. K. & Lee, W. J. (2009). Prevalence and changes in diseases among South Korean farmers: 1998 to 2005. *Biomed Central Public Health*, 9(1), 268.
- Chomi, E. N., Mujinja, P. G., Enemark, U., Hansen, K. & Kiwara, A. D. (2014a). Risk distribution across multiple health insurance funds in rural Tanzania. *The pan African Medical Journal*, 18.

Chomi, E. N., Mujinja, P. G. M., Enemark, U., Hansen, K. & Kiwara, A. D. (2014b). Health care seeking behaviour and utilisation in a multiple health insurance system: Does insurance affiliation matter? *international Journal for Equity in Health*, 13, 25-25.

Crotty, M. (1998). *The Foundation Of Social Research: Meaning and Perceptive in the Research Process*. London, Sage Publications.

Crowley, R. A. & Tape, T. G. (2013). Health Policy Basics: Health Insurance Marketplaces. *Annals of Internal Medicine*, 159(11), 784-786.

Dalinjong, P. A. & Laar, A. S. (2012). The national health insurance scheme: perceptions and experiences of health care providers and clients in two districts of Ghana. *Health Economics Review*, 2(1), 1-13.

Danforth, E., Kruk, M., Rockers, P., Mbaruku, G. & Galea, S. (2009). Household decision-making about delivery in health facilities: evidence from Tanzania. *Journal of Health, Population and Nutrition*, 27(5), 696.

Collins English Dictionary (1992). *Glasgow*. Harper Collins Publishers.

Dillow, C. (2014). Projects on the map: Tanzania. *Project Management Network*, 28(9), 42-49.

Dixon, J., Tenkorang, E. Y. & Luginaah, I. (2013). Ghana's National Health Insurance Scheme: a national level investigation of members' perceptions of service provision. *Biomed Central International Health & Human Rights*, 13(1), 35-44.

Donabedian, A. (1966). Evaluating the Quality of Medical Care. *The Milbank Memorial Fund Quarterly* 44(3), 166-206.

Donabedian, A. (1980). *The Definition of Quality and Approaches to Its Assessment*. Ann Arbor, Mich, Health Administration Press.

Donabedian, A. (1988). The Quality of care: How can it be assessed? *Journal of the American Medical Association*, 260(12), 1743-1748.

Donabedian, A., Wheeler, J. R. & Wyszewianski, L. (1982). Quality, cost, and health: an integrative model. *Medical Care* 20(10), 975-992.

Ekman, B., Liem, N. T., Duc, H. A. & Axelson, H. (2008). Health insurance reform in Vietnam: a review of recent developments and future challenges. *Health Policy and Planning*, 23(4), 252-263.

Evans, D. B., Marten, R. & Etienne, C. (2012). Universal health coverage is a development issue. *The Lancet*, 380(9845), 864-865.

Fang, K., Shia, B.-C. & Ma, S. (2012). Health icoverage, medical Expenditure And coping strategy: evidence from Taiwan. *Biomed Central Health Services Research*, 12(1), 442.

Galland, B., Guillebert, J. & Letourmy, A. (2013). A Public/private partnership experiment in the area of social health protection in Tanzania. Field actions science reports. *The Journal of Field Actions*, (Special Issue 8).

Garcia-Subirats, I., Vargas, I., Mogollón-Pérez, A. S., De Paepe, P., Da Silva, M. R., Unger, J. P., Borrell, C. & Vázquez, M. L. (2014). Inequities in access to health care in different health systems: A study in municipalities of central Colombia and North-Eastern Brazil. *International Journal for Equity in Health*, 13(1), 1-28.

Grobler, G. (2013). The South African Society oPsychiatrists is speaking up for good reasons. *South African Journal of Psychiatry*.

Haazen, D. (2012). *Making Health Financing Work For Poor People in Tanzania*. World Bank Publications.

Hamidi, S., Shaban, S., Mahate, A. A. & Younis, M. Z. (2014). Health Insurance Reform and the Development of Health Insurance Plans: The Case of the Emirate of Abu Dhabi, United Arab Emirate. *Journal of Health Care Finance*, 40(3), 19.

Hanson, C., Ronsmans, C., Penfold, S., Maokola, W., Manzi, F., Jaribu, J., Mbaruku, G., Mshinda, H., Tanner, M. & Schellenberg, J. (2013). Health system support for childbirth care in Southern Tanzania: results from a health facility census. *BioMed Central Research Notes*, 6(1), 1-23.

Hardcastle, T., Samuels, C. & Muckart, D. (2013). An Assessment of the Hospital Disease Burden and The Facilities for the In-hospital care of Trauma in Kwazulu-Natal, South Africa. *World Journal of Surgery*, 37(7), 1550-1561.

Harley, K., Willis, K., Gabe, J., Short, S. D., Collyer, F., Natalier, K. & Calnan, M. (2011). Constructing health consumers: Private health insurance discourses in Australia and the United Kingdom. *Health Sociology Review*, 20(3), 306-320.

Heidenreich, P. A., Albert, N. M., Allen, L. A., Bluemke, D. A., Butler, J., Fonarow, G. C., Ikonomidis, J. S., Khavjou, O., Konstam, M. A. & Maddox, T. M. (2013). Forecasting the Impact of Heart Failure in the United States: A Policy Statement From the American Heart Association. *Circulation: Heart Failure*, 6(3), 606-619.

Janisch, C. P., Albrecht, M., Wolfschuetz, A., Kundu, F. & Klein, S. (2010). Vouchers for health: A demand side output-based aid approach to reproductive health services in Kenya. *Global Public Health*, 5(6), 578-594.

Jehu-Appiah, C., Aryeetey, G., Agyepong, I., Spaan, E. & Baltussen, R. (2012). Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana. *Health Policy and Planning*, 27(3), 222-233.

Jehu-Appiah, C., Aryeetey, G., Spaan, E., De Hoop, T., Agyepong, I. & Baltussen, R. (2011). Equity aspects of the National Health Insurance Scheme in Ghana: who is enrolling, who is not and why? *Social Science & Medicine*, 72(2), 157-165.

Kamuzora, P. & Gilson, L. (2007). Factors influencing implementation of the Community Health Fund in Tanzania. *Health Policy and Planning*, 22(2), 95-102.

Kieny, M.-P. & Evans, D. B. (2013). Universal Health Coverage. The *Eastern Mediterranean Health Journal*, 19(5) 305-306.

Kikuli, R. & Ally, M. (2012). *Health Sector Public Expenditure Review 2010/11*. Dar es Salaam, Tanzania.

Kimani, J. K., Ettarh, R., Kyobutungi, C., Mberu, B. & Muindi, K. (2012). Determinants for participation in a public health insurance program among residents of urban slums in Nairobi, Kenya: results from a cross-sectional survey. *Biomed Central Health Services Research*, 12(1), 66.

Kiwara, A. D. (2007). Group premiums in micro health insurance experiences from Tanzania. *East African Journal of Public Health*, 4(1), 28-32.

Kreng, V. B. & Yang, C.-T. (2011). The equality of resource allocation in health care under the National Health Insurance System in Taiwan. *Health Policy*, 100(2), 203-210.

Kumar, H. (2005). *Research Methodology. A Step-By-Step Guide for Beginners*. London, Sage Publication.

Kusi, A., Enemark, U., Hansen, K. S. & Asante, F. A. (2015). Refusal to enrol in Ghana's National Health Insurance Scheme: is affordability the problem? *International Journal for Equity In Health*, 14(1), 31-54.

Kutzin, J. (2012). Anything goes on the path to universal health coverage? No. *Bulletin of the World Health Organization*, 90(11), 867-868.

Kuwawenaruwa, A., Macha, J. & Borghi, J. (2012). Willingness to pay for voluntary health insurance in Tanzania. *East African Medical Journal*, 88(2), 54-64.

Lagomarsino, G., Garabrant, A., Adyas, A., Muga, R. & Otoo, N. (2012). Moving Towards Universal Health Coverage: Health Insurance Reforms In Nine Developing Countries In Africa And Asia. *The Lancet*, 380(9845), 933-943.

Lem, R. & Kuganab, B. (2009). A content analysis of the Ghana national health insurance scheme. *Health Policy Development*, 7(1), 23-34.

Macha, J., Harris, B., Garshong, B., Ataguba, J. E., Akazili, J., Kuwawenaruwa, A. & Borghi, J. (2012). Factors influencing the burden of health care financing and the distribution of Health care benefits in Ghana, Tanzania and South Africa. *Health Policy and Planning*, 27(Suppl 1), I46-I54.

Maluka, S. O. (2013). Why are pro-poor exemption policies in Tanzania better implemented in some districts than in others? *International Journal for Equity in Health*, 12(1), 80-88.

Marriott, A. (2012). *Does Health Insurance Work in Tanzania?* Oxfam's, Africa Health Tanzania.

Marwa, B., Njau, B., Kessy, J. & Mushi, D. (2013). Feasibility Of Introducing Compulsory Community Health Fund In Low Resource Countries: Views From The Communities In Liwale District Of Tanzania. *Biomed Central Health Services Research*, 13(1), 1-7.

Mathauer, I. & Nicolle, E. (2011). A global overview of health insurance administrative costs: what are the reasons for variations found? *Health Policy*, 102(2), 235-246.

Mathauer, I., Schmidt, J. O. & Wenyaa, M. (2008). Extending social health insurance to the informal sector in Kenya. An assessment of factors affecting demand. *The International Journal of Health Planning and Management*, 23(1), 51-68.

Matsoso, M. P. & Fryatt, R. (2013). National Health Insurance: the first 18 months. *South African Medical Journal*, 103(3), 154-155.

Maxfield, M., Achman, L., Buck, J. A. & Teich, J. L. (2007). National estimates of mental health insurance benefits. *The Journal of Behavioral Health Services & Research*, 34(1), 83-95.

Mcintyre, D. (2010). *Private Sector Involvement In Funding And Providing Health Services In South Africa: Implications For Equity And Access To Health Care*, Regional Network For Equity In Health In East And Southern Africa (Equinet).

Mcintyre, D., Garshong, B., Mtei, G., Meheus, F., Thiede, M., Akazili, J., Ally, M., Aikins, M., Mulligan, J.-A. & Goudge, J. (2008). Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. *Bulletin of The World Health Organization*, 86(11), 871-876.

Mcintyre, D., Goudge, J., Harris, B., Nxumalo, N. & Nkos, M. (2009). Prerequisites for national health insurance in South Africa: Results of a national household Survey. *South African Medical Journal*, 99(10), 725-729.

Mclaughlin, H. (2009). What's in a name: 'client', 'patient', 'customer', 'consumer', 'expert by experience', 'service user'—what's next? *British Journal of Social Work*, 39(6), 1101-1117.

Mcleod, H. (2012). The role of risk adjustment in the equitable financing of National Health Insurance in South Africa. *Development Southern Africa*, 29(5), 636-656.

Metiboba, S. (2011). Nigeria's National Health Insurance Scheme: The need for beneficiary participation. *Research Journal of International Studies*, 22, 51-56.

Ministry of Health Rwanda (2010). *Economic Development and Poverty Reduction Strategy, Implementation Report*. Kigali: Ministry Of Health, Rwanda.

Mills, A., Ally, M., Goudge, J., Gyapong, J. & Mtei, G. (2012a). Progress towards universal coverage: the health systems of Ghana, South Africa and Tanzania. *Health Policy and Planning*, 27(Suppl 1), I4-I12.

Mills, A., Ataguba, J. E., Akazili, J., Borghi, J., Garshong, B., Makawia, S., Mtei, G., Harris, B., Macha, J. & Meheus, F. (2012b). Equity in financing and use of health care in

Ghana, South Africa, and Tanzania: implications for paths to universal coverage. *The Lancet*, 380(9837), 126-133.

Ministry of Health and Social welfare (2003). *National Health Policy*, United Republic of Tanzania. Ministry Of Health and Social Welfare.

Ministry of Health and Social welfare (2010). *Annual Health Sector Review*. Tanzania Ministry Of Health and Social Welfare.

Mtei, G. & Borghi, J. (2010). An assessment of health care financing progressivity in tanzania. *Report On Shield Work Package, 2*.

Mtei, G., Makawia, S., Ally, M., Kuwawenaruwa, A., Meheus, F. & Borghi, J. (2012). Who pays and who benefits from health care? An assessment of equity in health care financing and benefit distribution in Tanzania. *Health Policy and Planning*, 27(Suppl 1), I23-I34.

Mtei, G., Mulligan, J.-A., Palmer, N., Kamuzora, P., Ally, M. & Mills, A. An Assessment Of The Health Financing System In Tanzania: Implications For Equity And Social Health Insurance: Report On Shield Work Package 1. Ihea 2007 6th World Congress: Explorations In Health Economics Paper, 2007.

Mtei, G. & Mulligan, J. (2007). *Community Health Funds In Tanzania: A Literature Review*. Ifakara Health Research And Development Centre, Ifakara.

Mulupi, S., Kirigia, D. & Chuma, J. (2013). Community perceptions of health insurance and their preferred design features: implications for the design of universal health coverage reforms in Kenya. *Biomed Central Health Services Research*, 13(1), 1-22.

Munga, M. A. & Gideon, G. M. (2009). Assessment of the experiences and coping strategies of people working in the informal sector in their quest to access health care services: the case of Dar es Salaam, Tanzania. *Bioscience Trends*, 3(1), 3-16.

National Department of Health (2011a). *Green Paper On National Health Insurance In South Africa*. South Africa National Department of Health, Pretoria.

National Department of Health (2011b). *National Health Insurance In South Africa. Policy (Green) Paper*. South Africa, Pretoria.

Ndossa, A. (2013). *Health Care System in Tanzania*. Sumy State University

Nguyen, H. T. H., Rajkotia, Y. & Hong, W. (2011). The Financial Protection Effect Of Ghana National Health Insurance Scheme: evidence from a study in two rural districts. *International Journal for Equity in Health*, 10(1), 1-12.

National Health Insurance Authority (2010). *2009 Annual Report*. Accra, Ghana.

National Health Insurance Fund (2009). *Actuarial And Statistical Bulletin As Of 30th June 2008*. Tanzania, Dar Es Salaam.

National Health Insurance Authority (2010). *Actuarial and Statistical Bulletin as of 30th June 2009*. Tanzania, Dar Es Salaam M/S Print Limited.

Nuckols, T. K., Escarce, J. J. & Asch, S. M. (2013). The effects of quality of care on costs: a conceptual framework. *Milbank Quarterly*, 91(2), 316-353.

Nunes, M., Syed, T., De Jong, M., Provencher, M. D., Ferrari, J., Walker, J. R., Stewart, D. W., Swinson, R. P. & Furer, P. (2014). A National Survey of Student Extended Health Insurance Programs in Postsecondary Institutions in Canada: Limited Support for Students With Mental Health Problems. *Canadian Psychology*, 55(2), 101-109.

Odeyemi, I. A. O. & Nixon, J. (2013). Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a review-based comparative analysis. *International Journal for Equity in Health*, 12(1), 9-26.

Onwujekwe, O., Hanson, K., Ichoku, H. & Uzochukwu, B. (2014). Financing incidence analysis of household out-of-pocket spending for healthcare: getting more health for

money in Nigeria? *The International Journal of Health Planning and Management*, 29(2), E174-E185.

Ooms, G., Hammonds, R., Waris, A., Criel, B., Van Damme, W. & Whiteside, A. (2014a). Beyond health aid: would an international equalization scheme for universal health coverage serve the international collective interest? *Globalization and Health*, 10, 41-56.

Ooms, G., Latif, L. A., Waris, A., Brolan, C. E., Hammonds, R., Friedman, E. A., Mulumba, M. & Forman, L. (2014b). Is universal health coverage the practical expression of the right to health care? *Biomed Central International Health and Human Rights*, 14, 3-10.

Paim, J., Travassos, C., Almeida, C., Bahia, L. & Macinko, J. (2011). The Brazilian health system: history, advances, and challenges. *The Lancet*, 377(9779), 1778-1797.

Pallant, J. (2010). *Spss Survival Manual. A Step By Step Guide To Data Analysis Using The Spss Program*. England, Mc Grave Hill.

Polit, D. F. & Beck, C. T. (2003). *Nursing Research: Principles And Methods*. Philadelphia, Lippincott.

Polit, D. F. & Beck, C. T. (2004). *Nursing Research. Principles And Methods*. Philadelphia, Lippincott Williams And Wilkins.

Polit, D. F. & Beck, C. T. (2008). *Nursing Research: Generating And Assessing Evidence For Nursing Practice.*, Philadelphia. Lippincott Williams &Wilkins.

Polit, D. F., Hungler, B. P. & Beck, C. T. (2001). *Essentials Of Nursing Research: Methods, Appraisal And Utilization.*, Philadelphia: Lippincott.

Prieto Avila, C. (2013). Model of Colombian Social Security in Health. *World Medical Journal*, 59(4), 143-147.

Rowe, K. & Moodley, K. (2013). Patients as consumers of health care in South Africa: the ethical and legal implications. *Biomed Central Medical Ethics*, 14(1), 15-24

Schmidt, N. A. & Brown, J. M. (2012). *Evidence-Based Practice for Nurses: Appraisal and Application of Reseach.* United State Of America.

Schoen, C., Osborn, R., Squires, D., Doty, M. M., Pierson, R. & Applebaum, S. (2010). How health insurance design affects access to care and costs, by income, in eleven countries. *Health Affairs*, 29(12), 2323-2334.

Spiliotopoulou, G. (2009). Reliability reconsidered: Cronbach's alpha and paediatric assessment in occupational therapy. *Australian Occupational Therapy Journal*, 56(3), 150-155.

Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal Of Medical Education*, 2, 53.

Turquet, P. (2012). Health Insurance System financing reforms in the Netherlands, Germany and France: Repercussions for coverage and redistribution? *International Social Security Review*, 65(1), 29-51.

Ujunwa, F. A., Onwujekwe, O. & Chinawa, J. M. (2014). Health services utilization and costs of the insured and uninsured under the formal sector social health insurance scheme in Enugu metropolis South East Nigeria. *Nigerian Journal of Clinical Practice*, 17(3), 331-335.

United Republic of Tanzania (1999). *The National Health Insurance Fund Act*. Dar es Salaam, Government Printer.

Van De Ven, W. P. & Schut, F. T. (2008). Universal Mandatory Health Insurance in the Netherlands: A model For the United States? *Health Affairs*, 27(3), 771-781.

Van Weel, C., Schers, H. & Timmermans, A. (2012). Health care in the Netherlands. *The Journal of the American Board of Family Medicine*, 25(Suppl 1), S12-S17.

Wagner, A. K., Graves, A. J., Reiss, S. K., Lecates, R., Zhang, F. & Ross-Degnan, D. (2011). Access to care and medicines, burden of health care expenditures, and risk protection: results from the World Health Survey. *Health Policy*, 100(2), 151-158.

Wamai, R. (2009). The Kenya health system: analysis of the situation and enduring challenges. *Japan Medical Association Journal*, 52(2), 134-140.

Wang, J.-H. & Chang, H.-H. (2010). Examining the types and payments of the disabilities of the insurants in the national farmers' health insurance program in Taiwan. *BioMed Central Public Health*, 10(1), 646-654.

Wang, J.-Y., Wang, C.-Y., Juang, S.-Y., Huang, K.-Y., Chou, P., Chen, C.-W. & Lee, C.-C. (2014). Low socioeconomic status increases short-term mortality of acute myocardial infarction despite universal health coverage. *International Journal Of Cardiology*, 172(1), 82-87.

World Health Organization (2006). *The World Health Report. Working Together for Health*. Geneva: World Health Organisation.

World Health Organization (2010). *The World Health Report. Health Systems Financing: The Path to Universal Coverage*. Geneva: World Health Organisation.

Xu, K., Jeong, H.-S., Saksena, P., Shin, J.-W., Mathauer, I. & Evans, D. (2010). Financial risk protection of National Health Insurance in the Republic of Korea: 1995–2007. *World Health Report*.

Yawson, A. E., Biritwum, R. B. & Nimo, P. K. (2012). Effects of consumer and provider moral hazard at a municipal hospital out-patient department on Ghana's National Health Insurance. *Ghana Medical Journal*, 46(4), 200-210.

Yu, C. P., Whynes, D. K. & Sach, T. H. (2011). Reform towards National Health Insurance in Malaysia: the equity implications. *Health Policy*, 100(2), 256-263.

Yu, S.-T., Chang, H.-Y., Lin, M.-C. & Lin, Y.-H. (2009). Agreement between self-reported and health insurance claims on utilization of health care: a population study. *Journal of Clinical Epidemiology*, 62(12), 1316-1322.

Yue-Chune, L., Yu-Tung, H., Yi-Wen, T., Shih-Ming, H., Kuo, K. N., Mckee, M. & Nolte, E. (2010). The impact of universal National Health Insurance on population health: the experience of Taiwan. *BioMed Central Health Services Research*, 10(1), 225-232.

## ANNEXURE 1a: HEALTH INSURANCE FUND CLIENT QUESTIONNAIRE

### SECTION A:

**INSTRUCTIONS:** Please answer the following questions by making a cross (×) or filling in the appropriate box.

1. DEMOGRAPHIC INFORMATION
----------------------------

1.1 What is your age?

1.2 What is your gender?

1.	Male	
2.	Female	

1.3 What is your marital status?

1	Single	
2.	Married	
3.	Divorced	

1.4 What is your level of education?

1	Never schooled	
2.	Some primary education	
3.	Primary education	
4.	Some secondary education	
5.	Secondary education	
6.	College education	
7.	University education	

1.5 What is your National health insurance membership status?

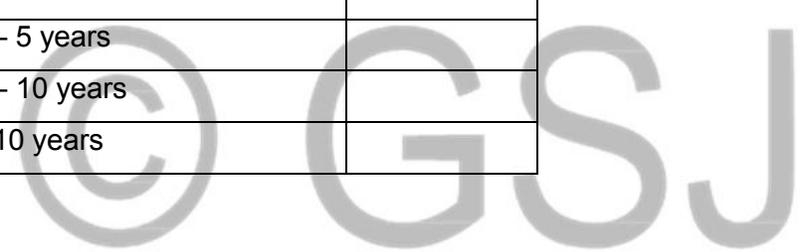
1.	Principle member	
2.	Beneficiary	

1.6 What is your occupation?

1.	Unemployed	
2.	Farmer	
3.	Civil/public servant	
4.	Trader/ businessman	
5.	Others	

1.7 How long have you been enrolled as a member of the National Health Insurance Fund

1.	< 2 years	
2.	2 – 5 years	
3.	5 – 10 years	
4.	> 10 years	



**SECTION B: Please answer the following questions by making a cross (x) in the appropriate box.**

**INSTRUCTIONS:**

**1. UNDERSTANDING OF THE NATIONAL HEALTH INSURANCE SERVICES  
WHAT IS YOUR UNDERSTANDING OF THE TERM NATIONAL HEALTH INSURANCE?**

**INSTRUCTIONS: Please mark your response by making a cross (x) in the appropriate box in each question.**

<b>Understanding of the term NHIF</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Don't know</b>	<b>Strongly Agree</b>
(a) Prepayment for health care					
(b) Like regular insurance					
(c) Paying tax to government					
(d) Free health delivery by government					
(e) Access to health care for all citizens					

**8. RECEPTIONS REGARDING USE OF THE NATIONAL HEALTH INSURANCE SERVICES**  
**WHAT WOULD YOUR REASON BE FOR ENGAGING IN NHI SERVICES?**

**INSTRUCTIONS:** Please mark your response with an X in the appropriate box in each question.

<b>Reasons for enrolling with the NHI services</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't know</b>
(a) Financial protection against illness					
(b) Better than out-of-pocket payment					
(c) Government asked me to join					
(d) A relative asked me to join					
(e) Health cover for my family					

**9. WHAT WOULD YOU PERCEIVE AS BENEFICIAL FOR ENGAGING IN NHI SERVICES?**

**INSTRUCTIONS:** Please mark your response with an X in the appropriate box in each question.

<b>Benefits of the NHI</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) Will save money from paying hospital bills				
(b) Will not need to save money to pay for hospital care				
(c) Joining the scheme benefits me and my beneficiaries				
(d) Reassurance that my family will receive care				
(e) Easy access to health care				

## ANNEXURE 1b: SWAHILI QUESTIONNAIRE

### DODOSO KWA AJILI YA WATEJA WA MFUKO WA TAIFA WA BIMA YA AFYA

#### SEHEMU A:

TAARIFA ZA BINAFSI
--------------------

**MAELEKEZO:** Jibu maswali yote kwa kuweka alama ya mkasi (×) sehemu husika au kwa kutoa maelezo kwenye chumba kilicho achwa wazi.

1.1 Una umri gani?

1.2 Jinsia yako?

1.	Mme	
2.	Mke	

1.3 Je umeoa au kuolewa?

1.	Sijao/sijaolewa	
2.	Nimeoa/nimeolewa	
3.	Mtalaka/mtalakiwa	

1.4 Kiwango cha elimu yako?

1.	Sikusoma	
2.	Nilipata elimu ya msingi kidogo	
3.	Nilimaliza elimu ya msingi	
4.	Nilipata elimu ya secondary kidogo	
5.	Nilihitimu elimu ya secondary	
6.	Nilihitimu mafunzo ya Chuo	
7.	Nilihitimu elimu ya Chuo kikuu	

1.5 Je wewe ni mwanachama wa aina gani wa Mfuko wa Taifa wa Bima ya Afya?

1.	Mchangiaji	
2.	Mtegemezi	

1.6 Je unafanya kazi gani?

1.	Sifanyi kazi	
2.	Mkulima	
3.	Muajiriwa wa serikali	
4.	Mfanyabiashara	
5.	Kazi nyingineyo (itaje)	

1.7 Ni tangu lini ulianza kupata matibabu kwa kutumia Bima ya Afya?

1.	Chini ya miaka 2	
2.	Ni kati ya miaka 2 – 5	
3.	Miaka 5 – 10	
4.	Zaidi ya miaka 10	

**SEHEMU B:**

**1. UNAELEWA NINI KUHUSU MFUKO WA TAIFA WA BIMA YA AFYA?**

**MAELEKEZO:** Jibu maswali yote kwa kuweka alama ya mkasi (×) sehemu husika

<b>Uelewa wa maneno Mfuko wa Taifa wa Bima ya Afya</b>	<b>Nakataa kabisa</b>	<b>Nakataa</b>	<b>Nakubali kabisa</b>	<b>Nakubali</b>	<b>Sijui</b>
(a) Malipo kabla ya huduma za afya kutolewa					
(b) Kama bima za kawaida					
(c) Malipo ya kodi kwa serikali					
(d) Huduma za afya zinazotolewa na serikali bila malipo					
(e) Fursa ya huduma ya afya kwa wananchi wote					

**2. ULIKUWA NA SABABU GANI ZA KUJIUNGA NA MFUKO WA TAIFA WA BIMA YA AFYA?**

**MAELEKEZO: Jibu maswali yote kwa kuweka alama ya mkasi (x) sehemu husika**

<b>Sababu za kujiunga na mfuko wa Taifa wa Bima ya afya</b>	<b>Nakataa kabisa</b>	<b>Nakataa</b>	<b>Nakubali kabisa</b>	<b>Nakubali</b>	<b>Sijui</b>
(a) Uhakika wa kupata matibabu wakati huna fedha za kulipia gharama					
(b) Ni salama Zaidi kuliko kutoa fedha mifukoni					
(c) Serikali iliniomba nijiunge na mfuko					
(d) Jirani yangu aliniomba nijiunge na mfuko					
(e) Upatikanaji wa huduma ya afya kwa familia yangu.					

**3. JE KWA MTAZAMO WAKO NI ZIPI FAIDA ZA KUJIUNGA NA MFUKO WA TAIFA WABIMA YA AFYA?**

**MAELEKEZO: Jibu maswali yote kwa kuweka alama ya mkasi (x) sehemu husika**

<b>Faida za kujiunga na Mfuko wa Taifa wa Bima ya Afya</b>	<b>Nakataa kabisa</b>	<b>Nakataa</b>	<b>Nakubali kabisa</b>	<b>Nakubali</b>	<b>Sijui</b>
(a) Itaokoa gharama za matibabu hospitalini					
(b) Sitahitaji kuweka akiba kwa ajili ya gharama za matibabu					
(c) Kujiunga na Bima ya Afya kuna faida kwangu na kwa wategemezi wangu pia					
(d) Uhakika ya kwamba familia yangu itapata huduma za afya					
(e) Inarahisisha upatikanaji wa huduma za afya					

## ANNEXURE 2a: INFORMED CONSENT FORM

**Researcher:** Minael Nathanel Omari

**Student Number:** 212538587

**Cell Number:** +2719409653

**E-mail:** 212538587@stu.ukzn.ac.za

**Title:** Exploring Perceptions of Clients with Regards to National Health Insurance Services in a Selected Public Hospitals in Dar Es Salaam, Tanzania.

### DECLARATION

I.....  
..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Signature of Participant: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of researcher: \_\_\_\_\_

Date: \_\_\_\_\_

## ANNEXURE 2b SWAHILI INFORMED CONSENT FORM

### FOMU YA TAMKO LA KUKUBALI KUSHIRIKI

**Mtafiti mkuu:** Minael Nathanael Omari

**Nambari ya Mwanafunzi:** 212538587

**Nambari ya simu ya kiganjani:** +2719409653

**Barua pepe:** 212538587@stu.ukzn.ac.za

**Maada ya utafiti:** Uelewa wa wateja kuhusu huduma zinazotolewa na Mfuko wa Taifa wa Bima ya Afya katika mojawapo ya hospitali za Uma mkoani Dar Es Salaam, nchini Tanzania.

#### TAMKO

Mimi.....

..... (Jina Kamili) nimelisoma andiko hili na nimeelewa ninachohitajika kukifanya, na ninadhibitisha kuwa mshiriki katika utafiti huu.

Nimeelezwa na ninafahamu fika ya kwamba, ninao uhuru wa kushiriki au kutokushiriki katika utafiti huu iwapo mimi binafsi nitahitaji kufanya hivyo.

Sahihi ya mshiriki: \_\_\_\_\_ Tarehe: \_\_\_\_\_

Sahihi ya mtafiti: \_\_\_\_\_ Tarehe: \_\_\_\_\_

### ANNEXURE 3: INFORMATION SHEET

Date: 16<sup>th</sup> October, 2014

Name of researcher student: Minael Nathanael Omari

Contact number: 0719409653

E-mail: [212538587@stu.ukzn.ac.za](mailto:212538587@stu.ukzn.ac.za)

Name of supervisor: Mrs. Nozipho Mthembu

Contact number: +27312604152510

Senior Administrative Officer;

Humanities and Social Sciences Research Ethics Committee: Prem Mohun

Contact number: +277312604557

Name of department: School of Nursing and Public Health

Name of institution: University of KwaZulu-Natal

Dear Participant,

I am completing a research project as part of the requirements for the Master's (Community Health Nursing) Degree through the Collage of Health Sciences, School of Nursing and Public Health.

**Purpose of the research:** is to explore the perceptions of clients with regards to National Health Insurance Services in a selected Public hospitals in Dar-Es-Salaam, Tanzania.

Please note that your identity and information will be treated with the utmost confidentiality.

Please feel free to ask any questions you may have so that you are clear about what is expected of you. Please note that:

- you are free to *not* participate
- you are free to withdraw at any stage without repercussions
- your name will not be used nor will you be identified with any comment made when the data is published
- there will be no risks attached to your participation.

**Advantage to you as a respondent:** The findings of the study will be made available on completion.

Thank you

#### **ANNEXURE 4: LETTER REQUESTING PERMISSION FROM UKZN**

Minael Nathanael Omari,  
College of Health Sciences,  
Howard school of nursing and Public  
Health,  
Durban 4041  
20/08/2014.

The Ethical Committee  
College of Health Sciences,  
Howard school of nursing and Public Health,  
Durban 4041

Dear Sir/Madam,

#### **RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY**

Above heading is concerned.

I request for permission to conduct a research study at one of the selected Public hospital in Dar Es Salaam Region, Tanzania. I am a full time Master's in Nursing (Community Health) student at the University of KwaZulu-Natal, School of Nursing and Public Health.

**The title of my study is:** Exploring Perceptions of Clients with Regards to National Health Insurance Services in a Selected Public Hospital in Dar Es Salaam, Tanzania.

I would like to commence data collection process by November, 2013. This will be done at convenient times. The target population for my study is all National Health Insurance Fund clients attending outpatient clinics in one of the selected Public hospital at Dar Es Salaam, Tanzania.

Data collection process will be confidential, anonymous, informed consent and also freedom of choice.

I hope my request will be considered.

Yours faithfully,

---

Minael N. Omari

Student number: 212538587 Cell No: +2719409653

E-mail: [212538587@stu.ukzn.ac.za](mailto:212538587@stu.ukzn.ac.za)

## **ANNEXURE 5: LETTER REQUESTING PERMISSION FROM TANZANIA**

University of KwaZulu-Natal  
College of Health Sciences,  
Howard School of Nursing and Public Health,  
Durban 4041,  
27/11/2014.

Chief Medical officer in charge,  
Kinondoni Municipality,  
P.O.Box 31902,  
Dar- Es- Salaam,  
Tanzania.

Dear Sir/Madam,

### **RE: REQUEST TO CONDUCT A RESEARCH STUDY**

I hereby request permission to conduct a research study at one of the public hospitals in Dar es Salaam region. I am a Tanzanian student studying Master's in Community Health Nursing at the University of KwaZulu-Natal, School of Nursing and Public Health at Howard College. I would like to commence data collection process by November 2014. This will be done at convenient times during clients waiting period. The target population is all adult members of National Health Insurance Fund who are attending outpatient clinics in one of the public hospitals in Kinondoni Municipality, Dar Es Salaam, Tanzania.

Data collection process will behold confidentiality, anonymity, informed consent and freedom of choice.

I have obtained provisional approval from the UKZN and Humanities and Social Science Research Ethics Committee in South Africa.

Attached are English questioner and letter of provisional approval.

Hoping that my request will meet your favorable considerations.

Yours faithfully,

---

Minael N. Omari

Cell No: +27719409653

E-mail: [minalnathan@yahoo.com](mailto:minaelnathan@yahoo.com)

## ANNEXURE 6: ETHICAL APPROVAL FROM TANZANIA

### KINONDONI MUNICIPAL COUNCIL

ALL CORRESPONDENCES TO BE ADDRESSED TO THE MUNICIPAL DIRECTOR

Tel : 2170173  
Fax: 2172606



MUNICIPAL MEDICAL OFFICER OF  
HEALTH,  
KINONDONI MUNICIPAL COUNCIL  
S. L. P. 61665,  
DAR ES SALAAM.

In reply please quote:

Ref. No. PF/K/14 Vol.VI/

Date: 21/12/2014

Health Facility I/C,  
Mwananyama la Hospital  
Kinondoni Municipal.

REF: RESEARCH PERMIT

Refer to the above heading.

DMO office is pleased to inform your health facility that Mingel N. Omani which is /from a master student from University of Kwazulu-Natal Has been given a permit to perform the research work in your facility stating from 21/12/2014 to 15/12/2014 the research is Titled Exploring perceptions of clients with regards to National Health Insurance services in ~~our~~ Mwananyama la Hospital.

Kindly receive & provide the necessary assistance in order to enable the student/organization to fulfill the activities comfortably.

Best wishes,

Aleswa Zebedayo

Research Coordinator,  
Kinondoni Municipal Council  
Kny: MGANGA MKUU WA MANISPAA  
HALMASHAURI YA MANISPAA YA KINONDONI

NB: Please share research report with MMOH Office at the end of your study

## ANNEXURE 7: ETHICAL APPROVAL FROM SOUTH AFRICA



8 December 2014

Ms Minsi Nathanael Omari 212538587  
School of Nursing and Public Health  
Howard College Campus

Dear Ms Omari

Protocol reference number: HSS/1493/014M

Project title: Exploring perceptions of clients with regards to National Health Insurance services in one of the selected public hospital in Dar Es Salaam, Tanzania

### Full Approval – Expedited Application

In response to your application received on 6 November 2014, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....  
Dr Shenika Singh (Chair)  
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Ms Nazipo Mthembu  
Cc Academic Leader Research: Professor M Mars  
Cc School Administrator: Ms Caroline Dhanraj

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Humanities & Social Sciences Research Ethics Committee

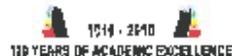
Dr Shenika Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag 26400, Durban 4000

Telephone: +27 (0) 31 260 8697/8852/4007 Facsimile: +27 (0) 31 200 4608 Email: [amsa@ukzn.ac.za](mailto:amsa@ukzn.ac.za) / [hrm@ukzn.ac.za](mailto:hrm@ukzn.ac.za) / [marketing@ukzn.ac.za](mailto:marketing@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville