Factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es salaam

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FACTORS AFFECTING NHIF MEDICAL EQUIPMENT LOANS UPTAKE AMONG ACCREDITED HEALTH FACILITIES IN DAR ES SALAAM.

By

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A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health of

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CERTIFICATION

The undersigned certifies that has read and hereby recommends for acceptance of dissertation Entitled ‘factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es salaam, Tanzania’ in partial Fulfillment of the requirements for the degree of Masters of Public health of Muhimbili University of Health and Allied Sciences.

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Prof Phare GM Mujinja BA (Hons), CIH, MA (Econ), MPH, PhD

(Supervisor)

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Date

DECLARATION AND COPYRIGHT

I, **Eliud Sylvester Kilimba,** hereby declare that this **dissertation** is my original work, and that it has not been presented nor will it be presented to any other University for a similar or any other degree award.

Signature…….. Date……

ACKNOWLEDGMENT

Writing of this dissertation report has been one of the most challenging tasks I have ever had to face. Many people have contributed to its completion, and it may not be possible to mention all who in one way or another assisted me to make this report to the present form. To all of you, I say thank you so much. However, first and foremost, I would like to express my sincere and special gratitude to my supervisor, Prof Phare G M Mujinja for his tireless support and encouragement. His constructive criticisms have constantly been a source of increased motivation in search for knowledge and research skills.

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DEDICATION

I dedicate this dissertation to my Parents Mr & Mrs Sylvester Kilimba, my lovely wife, Kasoga Phopola and my lovely children Sarah, and Sharon for their coolness, tolerance, and encouragement during my study at Muhimbili University of Health and Allied Sciences.

ABSTRACT:

Background: This study examined National Health Insurance Fund (NHIF) in Tanzania as a tool of financing health care system to improve quality and increase accessibility of health services. There is low uptake and utilization of those financing loans (medical equipment loans) from the Health care facilities accredited by the Fund. The study was conducted in Dar es Salaam, to explore factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es Salaam.

Methodology: An exploratory Cross section design was employed and samples of 16 health facilities not taken NHIF loans and 8 health facilities taken NHIF loans were selected using purposive sampling. Qualitative approaches were used in a study phenomenon. Data was collected using key informant interview guides; thematic analysis approach utilized to analyze the data collected.

Results: The results show that majority of health facility owners were not aware of the availability of the NHIF medical equipment loan that could encourages them to apply. However, few of them had being informed about NHIF loans but they had low knowledge on loan requirement; terms, conditions and procedures, this was attributed by low sensitization conducted by NHIF offices.

The study also found that NHIF medical equipment loan uptakes being low was attributed by difficulties in procedures set by NHIF and other organs as Bank of Tanzania (BOT) and Social Security Regulatory Authority (SSRA) policy changes on recovery periods, grace period after loan, loans interest, time taken to access loans, infrastructure and shortage of the qualified medical personnel's. Therefore, efforts on NHIF MEL program sensitization is needed to rise up knowledge on terms and conditions of the program.

Conclusions: Customer Awareness on NHIF medical equipment loans is very low, most of the health facility owners were too risk averse on taking loans which is hindrance to the entrepreneurship and So many challenges mentioned by both the facility owners and NHIF loans officer that hinder implementation of the program

Recommendations: Awareness and more advocacy on medical equipment loan should be made especially on terms and conditions and procedure of the NHIF loan. NHIF should

establish a better tools of advocating its products and strengths its marketing and customer care department, operational research should be done on how best to operate the loans facilities to improve the number of beneficiaries

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LIST OF ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
SSRA	Social Security Regulatory Authority.
CHF	community health fund
FBO	Faith based organization
HIV	Human Immunodeficiency Virus
IMF	International Monetary Fund
MEL	Medical Equipment and Loans
MOHCDGEC	Ministry of Health Community Development, Gender, Elderly and Children
MPH	Masters of Public Health
MUHAS	Muhimbili University of Health and Allied Sciences
NGO	Non-Governmental organization
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Services
OOP	Out of Pocket
PHC	Primary Health Care
PHI	Private Health Insurance
SAP	Structural Adjustment Program
SHI	Social Health Insurance
SWAP	Sector Wide Approach
THE	Total health Expenditure
UHC	Universal Health Coverage.
URT	United Republic of Tanzania
BOT	Bank of Tanzania
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction

Quality of health care is determined by effective and efficient health care financing system that an organization has. However, the world is facing challenges in financing and providing health care. Documentary evidence revealed billions of poor people especially those who live in low and middle income countries lack access to effective and affordable health interventions largely because of the weaknesses in financing and health care delivery (World Bank; 1997), The World Health Organization (WHO, 2000) health financing policy emphasizes that the health system financing strategy is a key determinant to population health and well-being. This is particularly true in the poorest countries where the level of health spending is still insufficient to ensure equitable and universal access to needed health services and interventions (WHO, 2003).

Tanzania, like many countries in sub-Saharan Africa, share similar conditions, public health care budget whole aiming at improving access to health services, especially for the poor (Quijada& Comfort (2002). A number of developing countries have introduced Social Health Insurance (SHI) in response to the call by World Health Organization to move towards universal coverage (WHO, 2010). SHI are mostly in the form of contributions by employees and employers in the formal sector while those in the informal sector contribute either to private or community based health insurance. According to a study by Smith et al., (2010) different regions of the world have different levels of uptake of health insurance. In the United States of America, Private Health Insurance (PHI) is the major source of health financing and accounts for approximately 35% of total health expenditure, public expenditure accounts for 44.9% while Out of pocket (OOP) is at 13.5%.

There is a tax based system in the United Kingdom which provides universal health care through the country's National Health Service which covers 86% of overall health expenditure, while PHI accounts for 2.9% and OPP accounts for 11.1% (Boyle, 2011).A study by Kirigia (2005) in South Africa showed that approximately 30% of respondents

had at least one person enrolled in a health insurance scheme while Carrin (2004) concluded in his study that Rwanda had achieved 90% health care coverage through implementation of Community Based Health Insurance scheme. Health care services in Tanzania are provided through the public and private sector, with the central government through the Ministry of Health and Social Development, Gender, Elderly and Children being the largest provider.

In Tanzania Districts and Regional Hospitals people have to pay to access health care. However due to shortage of drugs and medical supplies in public facilities, sometimes they buy their own from Private medical shops. Patients are willing to pay for medications in health facilities, for those who cannot afford this become a burden and there may go without medication (WHO 2010; Mtei & Mulligan, 2007; MASCOT, 2012). In Tanzania, after independence and before 1990, health services were fully funded by the government through taxation, and provided without charge at all levels of health facilities. The Arusha Declaration of 1967 outlined the principles of Ujamaa which declared social service to be one of the basic human needs. It marked the start of a series of health sector reforms with the intention of increasing universal access to social services to the poor and those living in marginalized rural areas (Hyden, 1980). Followed by the Government banning private-for-profit medical practice in 1977 and taking on the task of providing health services free of charge (Kolstad&Lindkvist 2013). However, the strain of providing free health care for all became evident in the face of rising health care costs and a struggling economy due to implementation of Structural Adjustment Program (SAP) of 1980s (IMF &World Bank, 2000). In early 1990s, the government adopted health sector reforms that changed the financing system from free services to mixed financing mechanisms including cost sharing policies. The cost sharing program for health services in the form of user charges was introduced with the Health Sector Reform Plan in 1993 (MoHSW, 2003).

Literature shows that there has been an improved health budget over the years: Total Health Expenditure (THE) has improved as indicated in the National Health Accounts 2015 report (MoHSW, 2016). However, donors have been the main financier of health care despite the decrease in their share of health expenditure in the country overall, the Government allocation to health spending has remained almost constant. Far away from

reaching the Abuja declaration target of 15% of total government expenditure. The increase in donor funding is attributed to the commencement of financing for HIV and AIDS by the Global Fund in the commencement of health financing through Sector wide Approach (SWAP) from early 2000 (Mcintyre. 2008). NHIF was established by the Act of Parliament No. 8 of 1999 and began its operations in June 2001. The scheme was initially intended to cover public servants but recently there have been provisions which allow private membership. The public formal sector employees pay a mandatory contribution of 3% of their monthly salary and the government as an employer matches the same. This scheme covers the principal member, spouse and up to four below 18 years' legal dependents. There has been a steady increase in coverage (NHIF, 2013). For quality of services to members NHIF started offering financial assistance to accredited health facilities stated from 2007/2008 in order to improve quality of health care deliveries, through terms and conditions fulfillments.

Since introduction of the NHIF loan credits, shows very low uptake from the facilities compared with other countries with similar practice like NHIF, leading to raise the need of that study to find out factors affecting NHIF medical equipment loans uptakes among accredited health facilities in Dar es Salaam.

1.2 Financing mechanisms from NHIF

NHIF as an institution of health financing in Tanzania also finances health facilities especially for those accredited by NHIF in order to improve quality of health care delivery to members and Tanzanians at large.

The Medical Equipment and Loans (MEL) program is the deliberate efforts by the (NHIF) to improve provision of health services in the country. The (MEL) program aims at extending soft loans to accredited health facilities so that the facilities can purchase medical equipment that would help the health facilities offer better services to NHIF members. The programs also is aims at assisting accredited health facilities to undertake necessary rehabilitation to update, remodel, partitioning, refurbishing or renovating the aging/dilapidated hospital buildings. The loan program started officially in financial year 2007/08.

1.3 Statement of the problem

Unpublished document by NHIF in Tanzania shows that little is known by heath facilities about NHIF as one of the major financing agent and provides soft loans for medical equipment for improving provision quality of health services in Tanzania. Since 2007/2008 NHIF stated giving credits of soft loans to accredited health facilities. Dar es Salaam with greatest number of NHIF accredited health facilities only 23 (6.1%) (NHIF performance report (2017) health facilities had ever applied and utilized the medical equipment loans. Facilities not being willing in taking loans could be attributed to inability of the facilities to pay back loans, the interest settlements durations set by the Fund, the return (recovery) period of five years being too short, no grace period given before deductions are made from the claims, fears on what would happen if the facility fail on repayment, the term and conditions for the facility to access loans, perceptions from the facility owners on real time to access the loans, demanding of cash from the creditors.

Studies have shown that loans giving interventions in Asian Countries reveal that uptake of loans for medical equipment have increasing annually Dai Dong (2008) in Nepal shows a non-experimental evaluation reveals that there had been an increase on coverage for facilities benefited from medical equipment loans and facility uptake loans after a massive campaigns to facilities about loans issues, educations about loans, and using political leaders for sensitizations (WIEGO, 2013, Chuma & Okungu 2011; Amenya, 2007)

Although of loans giving interventions by NHIF in Tanzania has lasted for about ten years no systematic studies have being conducted to assess or find out reasons that affect the implementations of the interventions specifically among the accredited health facilities that are not taking or accessing the facility loans. Many studies have examined the determinants of demand for health insurance loans to health facilities as with most of them focusing on the socio-economic determinants (Propper, et al (2000; Liu &Chen et al (2009) an attempt to identify the determinants of the low uptakes in National health insurances services (NHIS) medical loans in Ghana, recently identified income, self-rated health status and the perceived quality of health care services to positively influence the demand for the NHIS to offer loans to health facilities (Nketiah- Amponsah et al (2015)

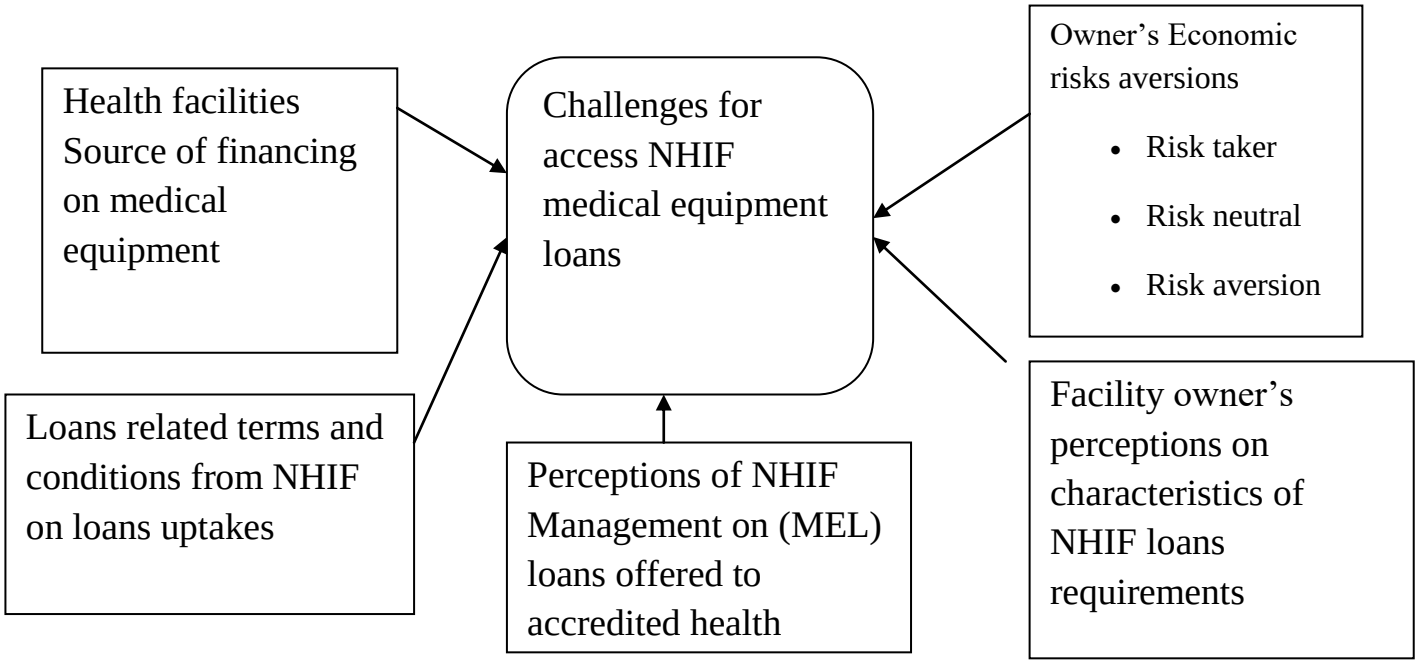
This study therefore intends to explore challenges for not taking NHIF medical equipment loans among accredited health facilities. This is important for NHIF to understand the causes the potential customer's views on the characteristics of the loan facility and modalities that would be favorable to the clients to improve loan taking.

1.4: Rationale of the Study

Information obtained from the study will be significant in advising the NHIF policy makers, and Health facility owners on MEL that introduced by NHIF to improve its implementation parallel with improving the quality of health care deliveries from the accredited health facilities that financed by NHIF as the compliments of effort of Government on attaining Universal Health coverage (UHC).

Results obtained will clear out perceptions of the facility owners onto access of medical equipment loans, and then flourish uptake of medical equipment loans significantly.
The study expected to contribute on improving NHIF member's satisfaction.

1.5: Conceptual frame work



The above figure is a conceptual framework explaining the relationship factors that affects NHIF loans uptake from the accredited health facilities.

Furthermore, the components of quality of healthcare's services given to NHIF members be influenced and improved after medical equipment loans uptakes to be well acknowledged and all the challenges well addressed between NHIF and all other potential stake holders. studied include skilled health workers, economic risk aversions, loans related terms and conditions from NHIF and perceptions on loans uptakes, other financial sources on medical equipment from facilities, the health facility owner's perceptions on characteristics of loans requirement from NHIF. In this context, the figure shows to which extent does quality of healthcare services will be improved to Members after the equipment loans uptakes from NHIF

1.6: Research question

What are the risk taking behavior, loans related conditions, contextual associated challenges that affects NHIF medical equipment loans uptake among NHIF accredited health facilities in Dar es Salaam

1.6:1 Sub questions

1. What are the economic risks taking behavior perceived by accredited health facilities on NHIF medical equipment loans
2. What are the sources of financing on medical equipment among accredited health facilities
3. What are loans related terms and conditions for NHIF (MEL) loans to accredited Health facilities?
4. What are NHIF Management perceptions towards (MEL) loans offered to accredited health facilities
5. What are the facility owner's perceptions on the characteristics on loans requirement from NHIF?

1.7 General objective

To identify the risk taking behavior, loans related conditions, and contextual associated challenges that affect NHIF medical equipment loans uptake among NHIF accredited health facilities in Dar es Salaam.

1.8 Specific objectives

1. To identify the economic risks taking behaviors perceived by accredited health facilities on NHIF medical equipment loans?
2. To identify the sources of financing in medical equipment among accredited health facilities.
3. To determine the effects of loans related terms and conditions for NHIF (MEL) loans to accredited health facilities.
4. To explore NHIF Management perceptions towards (MEL) loans offered to accredited health facilities?
5. To explore the facility owner's perceptions on the characteristics on loans requirement.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section reviews literature on factors positively and or negatively affecting medical equipment loans uptake among health facilities in different countries. We also review different health facilities financing on loans that are aimed at improving quality of services.

2.1 Health care financing and quality of care

Health care financing is among the key components of a functional health system. According to WHO (2000) health care financing involves three aspects, namely revenue collection, risk pooling, and purchasing. In recent years, there has been a growing demand for access to high-quality and affordable health care among population. The Tanzania Government is committed to respond to a process of developing health financing strategy (MOH2015). Proper health care financing ensures the population, not only to have access to all health care, but also use the health services when they need them and in good quality. (Mujinja and Kida 2015) This quality of health care could be archived from health care facilities that have the most needed for diagnostic and treatments. This is likely to attract clients to seek care from these facilities.

A well-functioning health financing system also determines whether the health care services exist (Carrin & Chris, et al (2005). Out of this recognition, in 2005 member States of the World Health Organization (WHO) committed to develop their health financing systems so that all people have access to services and do not suffer financial hardship paying for these services. Achieving this goal is in effect a move towards universal health coverage (WHO, 2010). And, the Universal Coverage goes not only patients suffering from of costs but also accessing good quality of care provided by the health facilities, Public and private. In order for these facilities to provide goods care, they need capital investment in diagnostic and treatment equipment.

2.2 The Economic risks taking behavior in loans related

Health facility entrepreneurs find it difficult to flourish and provide good quality care and other services at large. The Wood and Klein (1998) Ghana report health institution providing financial services to low income earners. These financial services include savings, loans, insurance transfer and payment for health services to enhance growth of small scale enterprises. Also Graham et al (1990) UK reports that there is provision of financial services to the low-income earners who do not earn or obtain their services from the formal financial institutions because of their business saving levels and credit needs being very small. These financing approaches aim at improving the quality of care by those facilities and access to health care among consumers.

Dumba et al (1997) also in Ghana show financial economic development approach intended to benefit the low income health facilities by providing financial assistance that are not obtained from other formal financial institutions.

Further to loans extended to low health facilities, some of the health care givers institutions provide payment services and insurance in addition to financial assistance. Most of the small scale health facilities and decides on taking loans for their standards of care provided to their customers however, these facilities considered issues related to economic risks. These risks consideration include loan recovery, grace period before payment, loan interest Dumba et al (1997).

Robinson (1994) report defines a loan as an extension of credit to another person (client) which may be long term (more than a year) or a short term (less than a year), this implies that taking a loans has risk based on the financing of the loans and duration of repayment.

Breath et al (1999) UK stated that before a deal in signed a loan application is to be completed. This provides risk protections by enabling the lending health care givers to follow up the repayment when the borrowers fail to honors the agreements on risk and the recovery time from accessing loans to time of recovering those loans. Length of time to approve loans, as the time taken from applications to the loan disbursement or receipt, is an important variable to be taken by borrowers since it has risk implications. Borrowers have to think and take risk of borrowing and leaders have to think also take risk of leading both of them. Then risks involve losing money, in case the borrowers fail to generate funds and

when the leader cannot recover the capital lent and its interest. These is an adhock evidence that in Tanzania, Health facilities hesitate to take loans due to being risk averse, which also results from huge cost of capital (loans)

. This interest charged on loans, differs from one loan given to another. However, caution should be taken against stringent steps that may be taken by the loan given to clients because harsh measures may cause them to shift to competitors or not taking loans at all (Van Horn and others et al (1995) UK show that there are measured used to determine loan Recovery and repayment rate.

Loans have been studied as one of the factors influencing sustainability of health services provision Kimando, Kihoro Njogu et al (2012) Kenya studied factors influencing sustainability of the health facility in Murang'a Municipality, Kenya. The study findings indicated that the greatest challenge of loan taking was non-repayment of loans borrowed as shown by 88.9 per cent of the study respondents. It was found out that credit rationing is a tool employed by many facilities as a way of hedging the effects of default by borrowers. In this respect, it is advisable that Facilities demand for some form of collateral before giving loans due to worry on losing the facility by the time fails to pay back loans. This implies that risk attached to borrowing and leading affects both borrowing and leading and hence the ability of health facilities to improve and expand their health care provisions.

2.3. Presence of alternatives sources for financing Health facilities

Donations are some of the alternative financing mechanisms which Faith Based Organizations (FBO) has employed in the recent past. These have ranged from financial to heath care equipment donation. None have been one of those donations, which FBOs and public financial donations. Facilities have benefit without having repaid back and or with minimum and affordable thing. Donation have based on the principles of the of the donors (WCC 1994), and authority of the recipient (sarec et al 2007). Donations of the equipment has also based on the quality of the equipment done by the donation agent. If the quality of an item is improper in the donor's assessment, it is also unacceptable as a donation (WCC 1994). Most of the medium health facilities equipment are not easily affordable by low level health facilities, and hence the pay back of such loans may also be deemed not easily paid back, in this case donations would probably be the most preference sources by these

health facilities. However, for the loans to be preferred then it has to be meeting with the requirement of the borrowers CMAI et al (1989) have indicates that equipment such as Magnetic Resonance Imaging (MRI) and Computerized Tomography (CT scan) have helped many facilities to improve quality of health care provided by the facilities they cause further improved the stability of the facility borrowed

Principles of Good (CMC of the World Council of Churches, 1994); and donation underlying, which form the core of Good Donation Practice, are advocated. Health care equipment donations should benefit the recipient to the maximum extent possible. Donated equipment should be given with due respect for the wishes and authority of the recipient, (Sarec, et al (2007) UK. There should be no double standard in quality. If the quality of an item is improper in the donor agents, it is also unacceptable as a donation. Most of the equipment for health care facilities makes most and not all the institution to take loans as it is the source of equipment leading to low uptakes of facility loan. This loan should be effective communication between the supporters and the recipient. CMAI et al (1989) India said on short terms and long terms borrowing of the medical equipment have shown the best practise and have improved quality of health care delivery.

2.4 Terms and conditions and procedures for equipment loans

Terms, conditions and procedures for accessing medical equipment loans should be adhered to as per the leader's requirement. The terms and conditions differ between among leading institution standards. These terms and conditions also differ and are applicable to the specific goods and equipment. (www.dh.gov.uk on 2008)

Contracts for supply of goods should provide for full encouragement on access delivery and inspection of the loaned and contracted goods and equipment. For contracted good, the leading institution may require to surprise and installation of the equipment before the payment is done. Furthermore, the borrowing institution is also given the condition for operating the equipment. In major contracts for equipment and plant, provision is made for suitable advances and, in contracts of long duration. (Mhra et al (2014) Contracts for equipment provides an time for mobilization payment for the contracted equipment and other materials. The amount is to be paid as per Contractor's obligations under contract. This implies that the health facilities that are given the loan as equipment are supposed to

be prepared to accept the conditions and obligations specified by the contractor/ tender. Conditions that include advanced payment may be attractive to small health facilities, which have low operation capital.

Furthermore, tending institutions have guidelines on how the payment should be scheduled. If the payment has to be effected in short intervals (short duration) it may also be a hindrance to some of the health facilities and contribute to not been able to take up the loans (Medical Device Directive 1993).

In Ghana, the borrowers (health facilities) bid for the equipment on competitive basis. The borrowers specify the internationally accepted standards for the equipment and or materials or workman ship required (EN ISO 17664: 2004.) Where such international standards are unavailable or are inappropriate, national standards may be specified. These kind of requirement, although are straight, may reduce the risk aversion of the borrowers. Borrowers are to some extent guaranteed of the quality of the services from the equipment borrowed, and or of the materials that are provided by the tender.

Such information that is described in these Guidelines is to provide all eligible prospective bidders with timely and adequate notification of a Borrower's requirements and an equal opportunity to bid for the required goods and works. Type and size of contracts. The bidding documents shall clearly state the type of contract to be entered into and contain the proposed contract provisions appropriate therefor. The most common types of contracts provide for payments on the basis of a lump sum, unit prices, reimbursable cost plus fees, or combinations thereof. Reimbursable cost contracts are acceptable to the facility only in exceptional circumstances such as conditions of high risk or where costs cannot be determined in advance with sufficient accuracy. Such contracts shall include appropriate incentives to limit costs. The size and scope of institutional contracts will depend on the magnitude, nature, and location of the project. For projects requiring a variety of goods and works, separate contracts generally are awarded for the supply and/or installation of different items of equipment and plant and for the works. (MHRA, et al (2006). For a project requiring similar but separate items of equipment or works, bids may be invited under alternative contract options that would attract the interest of both small and large firms, which could be allowed, at their option, to bid for individual contracts (slices) or for a group of similar contracts (package). All bids and combinations of bids shall be received

by the same deadline and opened and evaluated simultaneously so as to determine the bid or combination of bids offering the lowest evaluated cost to the Borrower. Contract under which the design and engineering, the supply and installation of equipment, and the construction of a complete facility or works are provided under one contract. Alternatively, the Borrower may remain responsible for the design and engineering, and invite bids for a single responsibility contract for the supply and installation of all goods and works required for the project component. Design and build, and management contracting contracts are also acceptable where appropriate.

2.5 Borrowers Perceptions on loans

There is significant relationship between cultural perceptions of small and medium business owners and willingness to apply for credit facilities in financial institutions, tending institution are supposed to make efforts to change customers' (health facilities), cultural perceptions towards loans. They should also offer the health facilities knowledge and awareness on the usefulness of the equipment loans on improving the entrepreneurial mind and quality of services that they intrinsically providing different loans exists in Tanzania as well as in other countries however many of the facilities owners are not (McKechnie, et al (1992). Such information of awareness would provide more education on of small and medium enterprises business owners and impact onto ability to secure loans. Government agencies should provide or support training programs for health sector entrepreneurs through funding. (Ennew, Wright & Thwaites et al (1993) such programmers would encourage small scale entrepreneurs to be willing to see loans as it done by the business. Small scale health sector may be less dissatisfied (Harinarayana et al (2017) UK in his study on 'Promotion of small scale Entrepreneurship' are more ignorance of opportunities, lack of motivation to seek risk, display shyness and are less willing to seek credit facilities from institution, (Jaensson, et al (1997) small scale entrepreneurs should be encouraged to apply for loans through various incentives from institution.

Researcher suggests that tending institution should develop materials specially designed to assist small and medium business owners to apply for health facility loans. The leader employ officers dedicated to developing relationships and assisting small and medium business owners to apply and access institutional loans. Furthermore, it is argued that

institution that explain in details the processes of applying for loans are more likely to win institution to for the credit facilities should engage researchers to provide them with information that would clear them understanding and reduce hesitation on applying for loans.

Such information would contribute to changing small health facility owners culture and perceptions on applying loans from tending agents**.**

2.6 Health insurance contribution access to improved quality health care.

The health sector in some developing countries have improved over the last two decades due to health insurances and provisions of the loans to improve quality of care (Iranian 2014) in Irans approximately 90% of the population has formal health insurance up coverage. Up to 90% of the rural population and almost the entire urban population have adequate access to Primary health care (PHC) Services. As a result, child and maternal mortality rates have fallen significantly, and life expectancy at birth has risen remarkably (Iranian 2014). The evaluation in of the studies (Laing, et al 1995). As the demand for healthcare services is increasing, most healthcare organizations find themselves overwhelmed with large volumes of patients. The situation significantly encourages application equipment loans for equipment like Ultra sound machines, X-rays machines and other equitable ones which technologically improve the quality of health care with such robust market, many health providers to improve the quality of care and attract more patients to their health facilities healthcare services is severely limited by lack of resources.

There is once total evidenced in Tanzania have that health facilities that have removed loans in attracted more patient.

2.7 Barriers attributed in quality of Health care services in Developing countries

Studies have that shown demand- and supply-side barriers affect access to health services, especially for the poor. (McKenzie, et al (1992) SA While interventions have been put forward to address these barriers, their individual effectiveness may be optimized when applied in combination with others, since none appears to concurrently address all dimensions or aspects of access barriers. (Leonard L. Berry et al (1983) the analytical

framework can be used as a template to identify interventions, or a combination thereof, that can tackle specific. Access barriers, or to analyses why interventions do not achieve the desired result of increasing access. The framework may be adjusted to incorporate contextual factors that we did not capture or to consider only those interventions for which there is a strong evidence base.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section explains the research methodology that was used in responding to the research questions/objectives. The section started by presenting the research design and then proceeds to describe the settings where the research was carried out. After those description methods that was applied in collection of data and analysis was presented. Interviews guide was written in English, because the Participants expected would understand the language.

3.1 Study design

A cross sectional exploratory study was carried using qualitative data collection techniques to implement the study in Dar es Salaam.

3.2 Study area

The study was conducted in Dar es Salaam because it was convenient and many of health facilities not applied for NHIF loans were found. A Purposively selected sample of facilities from the Dispensary level was involved in the study. These facilities include Publics, Private and Faith Based Facilities (FBO)

3.3 Study population

The study population was included two major players involved in the NHIF medical equipment loans issues namely the NHIF accredited health facilities and the NHIF management as the Health financing agent, in health facilities The Facility owners were interviewed while at NHIF the loan officers and managements were interviewed.

3.4 Sample size and Sampling procedures

16 health facilities not taken NHIF loans and 8 health facilities taken NHIF loans were selected to participate in the study. The exact number of health facilities involved in the study depending on the saturation point of the information provided by the respondents. A list of NHIF accredited facilities located in Dar es Salaam obtained from NHIF Head office. Therefore, a list of non –NHIF loan taken facilities and NHIF loan taken Facilities was developed and used for sampling process, furthermore the list was arranged by levels Dispensary, Health Centre, and Hospitals from Public, Private and FBOs. From each group at least 1-2 facilities were conveniently selected to participate in the study.

3.5 Data collection Instruments (Tools) and Data collected.

A semi-structured Key Informant interview guide consisting 19 questions for non-loans taker and 11 loans taken questions were utilized for data collection in the study. The interview guide was developed by the principal researcher to investigate the health facility owner’s perceptions of the NHIF loans given, terms and conditions attached to the loans Facility. The questions focus on the sources of financing present in the market, awareness of the terms and conditions available, risk taking and expectations behavior, kinds of regulations, supervision involved to those taking and not taking NHIF loans, the extent of adherence, problems related to adherence, clarity and complexity of guidelines, barriers to

those terms and conditions. Interviewees were further asked to share with the research team any relevant documents and also asked to suggest opinions on how to handle the situation.

3.6 Recruitment of Research Assistant

One research assistant experienced in qualitative data collection techniques was recruited to assist in data collection. Training was done on the objectives of the research and how to conduct good interviews probing techniques and handling of respondents.

3.7 Pre-test of the Interview guide

Pre-testing was conducted before the actual data collection done. Two Health facilities loans taken and two non-loans taken identified and their owners interviewed in Coast region, Kibaha district. The Interview guide was pre tested in order to know how long the interview would take to complete interviewing process. Furthermore, the importance of pre testing done to minimize information errors, either from the instruments or interviewers, and the instruments will be adjusted accordingly after pre testing.

3.8 Data collection procedures

Health facilities initially identified and later visited and asked to participate in the study. During the visit the research team was introduced to the Facility management, the team introduced to the facility owner to be interviewed in a private room. All key informants were

approached and explained on the objectives of the study and invited to a face to face interview. The consent form and the interview guide, approved by the Muhimbili University of Health and Allies Science Institutional Review Board (ethics), was used to ask respondents to participate in the study.

All interviews conducted on time and lasted for about 45 minutes. At the beginning of each interview, interviewees asked to sign the consent form, which also include details about their rights as participants in this research and their approval for tape recording the interviews. All interviews tape recorded. Along with tape recording, the interviewers were to take field notes to facilitate data analysis and provide a backup for important findings in case certain data elements were missing during the taping of interviews.

Both the Principal Investigator and the Research Assistants conducted face to face, interviews to the health facility owners after asking for the consent for participation into the study, and when agreed, then, they were interviewed. This process of interviewing continued until the "saturation" point reached; i.e., until no new information altered the results was obtained

3.9 Quality control

Before data collection, a research assistant was recruited and trained for one day, on data collection. This improved accuracy and precision of the data that collected. Furthermore, the pre-testing of data collection tool was also improved the quality of the information collected. The pre-testing exercise was also serving as means of training the research assistant for data collection. All necessary correction was done before starting the actual data collection. All activities regarding data collection were under the monitoring and supervision of the principal investigator. Either, research team was conducting a meeting every evening after data collection to review the collected data.

3.10 Data management and analysis

Thematic analysis was utilized in analyzing the data collected from the key informant interviews. In performing the thematic analysis, themes were emerged from the interviews was narrated and detected as being recurring issues and patterns from the data rather than from predetermined codes (Ritchie, 2002). The data from primary sources, such as field notes, transcripts, and audio tapes notes, were coded and analyzed manually.

The Researcher read each transcript from all sources thoroughly. The first step of readings of the scripts was done to gain an initial general insight of the texts and relate them to the research objectives. In the second step, each of the questions of the interview script used as a broad theme and the responses were classified under each theme. The statement that was not fit under any of the research questions was regarded as miscellaneous, and therefore was not used for the analysis.

The transcribed relevant data were further transcribed by categories based on the study objectives. Themes were generated from reading literature and the study questions and

objectives. More themes and sub themes were generated as the process goes on. Themes from each study objectives were respectively coded into main themes. These themes were used to describe the findings and list of key points were developed as a result of categorizing and sorting data. Explanations of the data collected were determined by objectives of the study.

The data was revisited several times to verify, test or confirm the themes and patterns that were identified. After the primary coding of all transcripts, analysis sheets were independently re-coded into comprehensive broad themes and sub-themes by the principal researcher. The final analysis sheet was initiated by information collected from the facilities and NHIF management and the review of secondary data.

3:11 Ethical issues and Clearance

Ethical clearance was obtained from Senate Research and Publication Committee of Muhimbili University of Health and Allied Sciences (MUHAS). Approval to carry out the study was obtained from Director General (NHIF) and the selected health facilities Managements. Written informed consent was obtained from all eligible voluntary interviewees for both recording discussions and photographing. Interviews were conducted in safe locations and free from interference. In order to secure confidentiality names was not recorded anywhere during the study period.

CHAPTER FOUR

THIS SECTION PRESENTS RESEARCH RESULTS.

Research objectives were the focus of this study.

These are economic risks taking behavior perceived by accredited health facilities on NHIF medical equipment loans, alternatives sources of financing on medical equipment among accredited health facilities, loans related terms and conditions for NHIF (MEL) loans to accredited Health facilities, facility owner's perceptions on the characteristics on loans requirement from NHIF and NHIF Management perceptions towards (MEL) loans offered to accredited health facilities.

4.0 characteristics of the respondents

A total of sixteen (16) health facility owners who had not taken NHIF loans and eight (8) who had taken NHIF loans were initially identified. Public health facilities, Three (3) had not taken NHIF loans and two (2) taken NHIF loans, Private health facilities, thirteen (13) health facilities not taken NHIF loans, and six (6) taken NHIF loans where interviewed, five public health facilities in charges both taken and non-taken were interviewed whereas nineteen (19) private facilities owner interviewed. In private sector facilities include for profit facilities (10) and three (3) non for profit facilities (FBO). Health facilities where dispensaries, health centers and hospitals, all private and public facilities where identified from four Municipal Councils in Dar es Salaam.

4.1. The economic risks taking behavior perceived on NHIF (MEL)

Four sub themes were generated from the economic risk behavior perceived by health facilities as the main theme, these subthemes are awareness of the agents that giving up loans, awareness with perceived of not taking loans, other contributing factors for not taking loans. Responded where asked if they have any information about medical loans from any loans agent: available in Dar es Salaam.

i) Awareness of loans agents

Health Facility Owners Respondents were first asked if they were aware of any agents that gives loans to health facilities for quality improvement of medical services Majority of respondents reported to be aware of credit agents available in Dar Salaam, but only few could mention NHIF as one of those agents. Almost all respondents could mention more than two Agents for credit were health facilities could access medical equipment loans for improving quality of health care deliveries to facilities. However only four (4) Health facilities out of sixteen (16) mentioned NHIF as source of credit Agent for Loans. Majority of health facility owners were not informed NHIF as medical equipment loans agent.

Majority mentioned BANKS, SACCOS, FAIDIKA, APTHA, and other micro financing without mentioned about NHIF.

For those who mention NHIF as sources of credit reported that they knew it through NHIF channels

One of the facility owners reported that

"I got that information about NHIF loans through NHIF officials as i visited NHIF offices" [R3 health facility owner respondents]

ii) Awareness of loans but not taking NHIF MEL (risk aversion behavior)

For those few Health facility owners who being aware of existence of NHIF loans were further probed on about NHIF loans, including why they don't apply for loans despite of their awareness they had not taking loans.

Most of the reasons given were related to risk aversion behavior these facility owner's respondents were not sure they can repay back loans, had low capital ownership, perceived facilities as small for qualifying for loans, short operational periods to warrants taking loans

For those who reported that can't repay back felt a risk of losing their facilities in case they cannot pay back loans.

One of Facility owner had this to say

"*I cannot take loans because i may lose my facility in case if I may not pay back loan "[R7 health facility owner respondents]*

For those who confirmed that their capital was small having that to have something else to do but thinking they will be rejected from loans.

One the faith based facility reported that

"*My capital is still very small they may not have accepted to be given a loan when the time competing come up" [R3 health facility owner respondents]*

For those facility owners' respondents who reported that they have short operation periods and they cannot be considered on loans since the stability of the facility is lacking the experiences.

One the private Dispensary owner claimed that
"*I may not be being considered to be given the loans since I had in health facility operation for less than two years so I may stack on repayment of loans" [R8 health facility owner respondents]*
Some of facility respondents mostly faith based facility owners said NHIF is the Government institution gives loans to only government facilities.

One of the private facility owner respondents complained that

"NHIF is the Government institution for loans so they couldn't grant loans to me as the private facility" [R10 health facility owner respondents]

The Private health sectors facilities had that concerns to NHIF as the agent for reimbursement of facilities after medical bills from health facilities. Some are in thoughtfully with the sustainability of giving loans for the longer period.

One the private Facility owner lamented that.

"*I doughty for NHIF doing the reimbursing of facility bills if can sustain with that loans giving for longer period". [R11 health facility owner respondents]*

iii. Other Contributing factors for not taking NHIF loans

Health Facility owners Respondents who had taken and benefited from NHIF loans at different intervals and levels were further asked if they have any other reasons that contributed to them not to take loans either for second time or as top up loans for their health facilities for quality improvement of medical services delivery as the primary aim of NHIF management initiations that program Mostly of the health facility owners respondents reported numerous of factors that contributing as Time taken in receiving the loan, Loan Interest, Amount Loaned/Time to repay and loans recovery period.

For those facility owners' respondents who reported to have bad experiences with the time taken from the time they applied the loans to the time they accessed that loans.

One the private Dispensary owner claimed that

"*I'm not much interested to apply for another loans as the first loans took about more than six months to access the loans I have applied" [R4 health facility owner respondents]*

Some of them who had private health facility owners' respondents who reported to have a loans with NHIF and complaining about the interest rate calculation being too high that they cannot thick to take another loans or expanding their loans with NHIF.

One reported that

"I can't afford to apply another loans due to the setting of the interest as that changing from time to time making my flow of repayment being disturbed" [R5 health facility owner respondents]

Some of those facility owners' respondents

Loans recovery period being too short taking in consideration they have other obligation to finance and operation which need those finances

One the facility owner had this to say

"I cannot manage to take another loans since the recovery period of that particular period of 60 months being too short to fulfill the challenges of up and down from the running cost of the facility" [R1 health facility owner respondents

4.2. Availability of alternative sources for financing for loans

Some of Faith based Health Facility Owners Respondents who had not taken NHIF loans were further asked if they have any other means of financing that somehow hinder them from applying loans from NHIF for medical equipment. mostly of the health facility owner's respondents reported number of factors as, existence of good Samaritans helps, dependence of daily collection fees and anybody who wishes to support the work of God is highly welcomed.

For those facility owners' respondents who reported to have good Samaritans helpers that bring medical equipment time to time helped a bit to run the facility but those were not sponsors so any is highly appreciated to support those facilities.

One of them confirmed that

"Although I don't borrow from NHIF or elsewhere I do have good Samaritans who from time to time bring in medical equipment to help us" [R11 health facility owner respondents]

For those facility owners' respondents who reported they depend on daily collection used to buy medical equipment time to time.

One of them had that to say

"Our facility doesn't have any specific means of getting medical equipment as most of the time we use our daily cash collection to buy facility stuffs including medical equipment." [R12 health facility owner respondents]

4.3 Awareness of terms, conditions and Procedures for NHIF loans

A. Health facilities not taken NHIF loans

Majority of Health Facility Owners Respondents had not taken NHIF loans and very few facility owners who had taken loans were further asked if they were aware with the

available terms, conditions and Procedures for applying medical equipment loan from NHIF. Those facility owners could mention some of the terms, conditions and procedures but also they had concerns regarding those terms, conditions and Procedures for loans as they mention on applications procedures for loans, time of repayment of loans and amount to be loaned to the facility.

A government health center owners' respondents who reported that they are aware with the mode of applying the loans to NHIF but the procedures is very tedious, has to pass through District Medical Officer (DMO) and then one has to fill NHIF loan application forms. Those loans procedures discourage some facilities to apply for the loans

One of the Government health center facility owners had this say

"*By writing the letter to Director General through DMO followed by filling NHIF Loan Application Those are many steps along with time for one to full fill before attaining the intended goal" [R14 health facility owner respondents]*

For those health facility owners' respondents who reported that they are aware with the mode of re payment of the loans which requires them to pay by deduction from the claims submitted to NHIF only. They further argued that NHIF could also accept that the debtors can also pay using other means rather than depending just on deductions

One of the faith based facility owner could mention that

"I would be much impressed if others sources of income could be considered on paying back loans so that shortens periods of recovery" .[R15 health facility owner respondents]

For those health facility owners' respondents who reported that they are aware with guidelines of the amount of the money to be loaned and its distribution as said were as the total amount loaned shall be 40% average monthly claims payment including the interest amount charged but shall not exceed 60%. Majority of respondents from the facility owners raised a concern as they further complained that they should not take the entire claimed amount

One of government facility owner could claimed that

"*if those percentages would be revisited and another formula of less than 40% if possible to 20% could encourage me to ask for loans from NHIF" [R6 health facility owner respondents]*

B. Health facilities that had taken NHIF loans

Majority of Health Facility Owners Respondents who had taken NHIF loans, some of them were further probed to narrate about the NHIF loans program and the benefits gained after taking those loans. Those facility owners could mention some of the benefits obtained from NHIF loans despite the availability of challenges faced to access them, among the benefits mentioned were, reduced waiting time Radiology results, reduced number of patients referred to other facilities for lab tests, increased daily collection fees and time for queuing.

For those health facility owners' respondents who reported the time for waiting the Ultra sound result has reduced significantly since they are not sending patients to other facilities for tests but done at their facility.

Mnazi Mmoja hospital Facility in charge had this to say.

"*Since we have taken the ultra sound machine from NHIF as loan from we are giving our patients results on the same day because we doing at our hospital" [R6b health facility owner respondents]*

Health facility owners' respondents who reported the significant increase of the daily collection of the user fees as the number of patients visiting their facilities was because most of lab test done at the facility.

Ukonga Magereza health center in charge admitted on that as

"Our facility daily collections from user fees were doubled and the number of patients visiting the center was increased because of the full blood picture machine for laboratory tests brought from NHIF. as loan" [R3b health facility owner respondents]

Some Health facility owners' respondents who reported the significantly decrease of the number of patients referred unnecessary to other hospitals due to lack of some laboratory tests and imaging at our hospital were not available.

One of the private hospital owners had that to say:

"Our facility had reduced the number of patients who we used to refer them to other hospital for lab test and radiological images but since those machines brought no need to refer" [R4b health facility owner respondents]

4.4 Perceived challenges encountered by NHIF management on MEL

NHIF loans officer interviewed on factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es Salaam

Many of the associated factors were narrated by NHIF loans officer as the factors for the low uptakes of the NHIF loans the Officer further explored about and then he described on, poor infrastructures and spaces for placing the equipment, Loan repayment mechanisms**,** loans policy, time taken to receive loans, amount of money to loaned, loans recovery periods, NHIF loan interest, the NHIF loans officer narrated that:

i. Time taken in receiving NHIF loan

NHIF loans officer respondents has said that according to NHIF medical equipment guideline the Management Information Committee (MIC) shall receive applications deliberately and give its decisions within the shortest period from the date of receiving the application. If MIC refuses the application, it should be notified to the applicant in writing...

NHIF loans admitted that

"First of all these are the procedures for providing medical equipment loan, when client apply, they submit their application and then the department submits them to the procurement committee, from there the whole process will start together with signing of the contract and inspection of the equipment. It also depends on the availability of

committee members because according to the procedures available we are supposed to meet once quarterly" [R17 NHIF loans officer respondents].

ii. Poor infrastructures and shortage of skilled staffs.

NHIF loans officer explains that proper infrastructures and skilled personnel is a need for a facility to be given equipment.

On infrastructures and skilled personnel NHIF loans officer had said that:

"*There is a shortage of qualified staff in many health facilities, there is also poor infrastructure, and many facilities have no enough space for laboratories or radiological spaces where atomic energy as a regulatory authority could grant certificates. Facility must get the requirements so that it can benefit with NHIF loan"[R17 NHIF loans officer respondents]*

Lack of qualified staff and poor infrastructure. This is one of the reasons why some facilities failed to surrender their loan applications to NHIF

iii. Loan repayment

NHIF loans officer responded that according to NHIF guidelines the total amount loaned shall be 40% average monthly claims payment including the interest amount charged but shall not exceed 60%. And time to repay it should be within 24 up to 60 months, to examine the that challenges NHIF loan Officer responded by given the experience from the ones who had already received the loan and submitted concerns,

Then he said as report from the one of the provider

"In business their loss and profit in cash collection that amount you will be deducted has to be smaller than that stated in regulation in order to encourage facilities to apply the loan" [R17 NHIF loans officer respondents]

Iv Policy issues

NHIF loans officer also responded on loans Policy, and said for Governments and other institutions. Policy decisions are frequently reflected in resource allocations. With NHIF loans officer admitted one of the challenges found was policy issues.

He reported that

"*However nowadays there are challenges on policy issues that, NHIF is not a pure organization for loan provision. NHIF is special for health service financing. That's why the government has seen that we are shifting from the main objective of health service financing to equipment loan financing and provide new guideline for loan provision. Although the truth is we are not shifting but the objective is to improve health services delivery through provision of medical equipment loan in order that NHIF members or any citizen can receive basic service" [R17 NHIF loans officer respondents]*

This implies that loans policy issue is a challenge that NHIF is a health financing insurance therefore there is no need of providing loan. Further probing to NHIF loans officer explained that

"Another current challenge which the NHIF management is working on to find the solution is: since 2016 January we were given a guideline from the ministry of finance that the Government has its own strategies to achieve as they want social security scheme as the part of government to plan according to the national strategic plan so we were given a guideline that any investment made by the Fund should be approved by the ministry of finance to make sure that we are in line with national strategic plan. Therefore, since January 2016 we haven't provided any new loan to our clients because still there isn't any approval from the ministry" [R17 NHIF loans officer respondents].

Vi Loan Interest

NHIF loans officer respondents said Loan on Interest and further explains that NHIF loans have been expensive due to the regulations made by Bank of Tanzania (BOT) and Social Security Regulatory Authority (SSRA) to all Social Security Schemes. Initially the interest rate was 10% but has risen to 15-18%. The present of the interest with the regulations from BOT and SSRA is also among the reasons for low uptake of loans.

The NHIF loans offers have that to explain

"currently BOT together with SSRA Social Security Regulatory Authority have prepared the procedures of investment to these Social Security Schemes. One of these procedures is that: the interest rate which they earn after investment should be the market interest. now according to this procedure it makes our loan to be expensive. In the beginning the interest rate of our loan was ten percent but after this changes the

interest rate is fifteen to eighteen percent so the loan is now expensive for the borrower to afford". [R17 NHIF loans officer respondents].

4.5 Perceptions of facility owner's on NHIF loans

Majority health facility owner's respondents were interviewed had not taken loans however, some of them with information on NHIF loans were further asked what did they have in mind as perceived on NHIF loans, mostly of the facility owner's respondents reported numerous of perceived perceptions on availability and accessibility of loans, quality of the equipment.

For those health facility owners' respondents reported they are aware with the NHIF loans but they are not sure of the constant availability and accessibility of those loans.

One the private health facility owner had this to say

"*Aim not sure that loan is easily accessible and available or not because we didn't ever apply for to check if is easily accessible and available" [R15 NHIF loans officer respondents]*.

For those health facility owners' respondents who reported that they are aware with the NHIF loans but they are not sure of the quality of the equipment for that loan.

One of the owners of the Dispensary facility owner had this to say

"If i had to process one of the equipment loan whereby my facility had to borrow ultra sound machine. That machine had been working substandard is there compensation and who will bear the cost between the parties." [R13 NHIF loans officer respondents].

CHAPTER FIVE

DICUSSION OF THE FINDINGS

This study aimed to explores Factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es Salaam.

The discussion will be focused on

5.1 Awareness of accredited health facilities on availability of MEL program from NHIF.

This study found that most of the health facility owners were not aware of the NHIF medical equipment loan program launched since 2007/2008. Despite the big number of health facilities being in mutual agreement with NHIF for more than five (5) years yet interviews with health facility owners had no clear understanding about NHIF loans existence.

This had been reported by Kimburu (2015) Tanzania, where he found that majority of health facility owners were not aware of NHIF function and the products offered by NHIF apart from claims reimbursements, reasons could be NHIF has not done enough publicity on the existence of those loans, some of them got information after they visited NHIF offices and not through the visits done by NHIF staffs to their facilities. Despite the major sources of information's was NHIF advocacy, Radio, magazine/newspapers, and leaflets there were less effort invested to advocate on medical equipment loans so much effort will be needed to achieve the intended goals on loans

5.2. Economic risks taking behavior perceived on NHIF MEL

The study found that few Health facility owners being aware of the existence of NHIF loans but not applying them and most of the reasons were related to risk aversion behaviors being not sure on the repayment back loans, felt the risk of losing their facilities in case of failing to pay back loans, absent of the grace periods before stating repayments.

This had been reported by health intuitions of Kenya as of the study done by Kamau el al (2016), where he found that majority of health facility agents were taken up by the loan

agents after failed to return back loans taken for microfinances businesses due to failure to perform as it was intended, then after that most of the facilities could take loans.

Some of the factors for low uptake of loans found to be the small capitals of facilities to run the business, it was reported that they could be rejected their applications in accessing the loans for possibilities to fails to return the loan back, this discourages most of the facilities to apply for loans.

Some facilities reported to have few years on giving medical services then think that due to few years on operation could not be considered on loans, as their stability of the facility being lacking of the experiences. Then those health facilities were discouraged in applying the medical equipment loans from NHIF.

That had reported by Osec-okot-akoto et al 2012 (Nigeria) where found a tendencies of losing capital on loans due to inexperience on running the microfinances business of Medical laboratory service.

5.3 Process of alternatives sources for financing health facilities.

The study shows some health facilities especially faith based Organizations have the information on NHIF loans but not taking them because of present of organization that supporting them on equipment with zero interest.

That had reported by CMAI et al India (1989), where found that USAID and PEPFAR - funded Health Projects, which had no interest that compared to NHIF loans which has the interest rate then discourages those facilities from accessing the loans from NHIF. Also some of the facilities especially the faith based facilities had the information about NHIF loans but not taking them because of the good Samaritans helps, those helps comes time to time with no immense terms and conditions for accessing them.

Also those few facilities with information about NHIF MEL but reported no reasons to take loans from NHIF the evaluation needed on. The study done by Maphole et al (2017) Mzumbe where she said about evaluating the effectiveness of **N**HIF loans to accredited facilities in Kinondoni Dar es Salaam and other medical equipment, other facilities depend

on daily collection of user fees to run their facilities and utilizing them from purchasing medical equipment and other hospital expenses without a need to apply for loan for medical equipment those used to buy time to time, as reported by **(Maphole et al (2017**) Mzumbe Tanzania where also found alternatives means for purchasing medical stuffs apart from Loans.

5.4 perceived challenges encountered by NHIF management medical on equipment loan program

The study shows that NHIF demands good infrastructures for the potential customers to access MEL, as most the health facilities especially the Government facilities with very poor in infrastructures. This regulation hinders them from accessing medical equipment as per requirement from NHIF. As reported in Payne et al. (1995) Ghana where he found that factors from other countries with poor environmental structures and poor status of buildings hinders them from accessing loans. Also study shows that time taken from applying the loans to receiving NHIF loans being too long and contributes to factors for low uptakes. According to NHIF medical equipment guideline the Management Information Committee (MIC) has to receive applications deliberately and give its decisions. This much time taken could hinder most of middle and low income health facilities to applying the loans, the time taken from application of the loans to the time of access loans contributed to the low uptakes of the medical equipment. As procedures and time the study done by Airlink et al (2014) Ghana reported on poor accessing loan.

Also NHIF demands good and skilled medical staffs at the facility to run the equipment and proper maintenance after installations and follows standard machines, most of the facilities shows not in position to fulfill the operating NHIF requirement and that hinders most of facilities to access medical equipment loans.

The study shows that loans Interest from NHIF loans found to be higher as per regulations set by Bank of Tanzania *(*National Strategic Plan 2016) (BOT) and Social Security Regulatory Authority (SSRA) to all Social Security Schemes, Initially the interest rate was 10% but it has risen up to 15-18%. The existing interest per regulations from BOT and Social Security Regulation Authority (SSRA) discourages some health facility owners not

to apply NHIF loans due to that higher interest rate as compared to that of Banks. Leading to the reasons of low uptakes of NHIF loans as NHIF loans were aimed to improve the access and quality of medical services deliveries.

Also the study shows that changes of Loans Policy being the contributing factor for low uptakes of NHIF loans and that unstable loans (policy since 2016) given as a guideline from the ministry of finance that the government has its own the national strategy to achieve social security scheme standards. This implies that loans policy issues as a challenge and disturbing the access of loan.

5.5 Perception of facility owner's loan on NHIF medical equipment loans

This study shows that majority of health facility owners don't take NHIF loans, and those few who take loans put in doughty of the constant availability and accessibility of loans, most of the facilities worries about the availability and accessibility of the NHIF loans as the they know the core function of NHIF is the claims reimbursement after treatment of members, this drives the facilities not to apply of the loans from NHIF

Also majority of the facility owners not sure about quality of the equipment given as loans from NHIF since dealers are the once who decide on equipment, than the facility themselves. Also facilities that were aware with the NHIF loans but they are not sure of the quality of the equipment for those loans. So more over they need the equipment loans but not sure of the quality of the equipment since they are not given cash to buy on their own but dealers are doing for them. That implies that facilities also has to be given other modalities of being given cash so that they can buy medical equipment of their own type then later on to repay back the loans, as the study by (Manota 2012) Uganda he reported in modalities of applying ,payment and maintenance of equipment borrowed from the development Banks.

5.6 Study limitations

i. Some of the facility owners could not be very open to express their sources of incomes on the establishment of their facilities

ii. Time to access those facility owners to respond on their issues related to their facilities was not available in most of the convenient time.

iii. Some facility owners especially on Government facilities not have the authority to address all the facility matters as the owner since they are reals facility owners.

iv. The results cannot be generalized to all the health facilities because the sample was small.

5.7 Areas for future research

Two areas have been identified for future research from this study;

1. The operational research on NHIF loans for facilities that need cash money loans and those facilities that need equipment and to compare and contrast the benefits on each.
2. Evaluating the effectiveness of NHIF medical equipment loan program to accredited health facilities

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Summary

In Tanzania, health facilities face shortages in the supply of basic investigation equipment, and diagnostic technology, situation has contributed to serious erosion on the provision of quality primary health care services in the country. In an effort to lessen the situation, in 2007/2008, the National Health Insurance Fund (NHIF) initiated the Medical Equipment Loan program aiming at extending loans to accredited health facilities. This study evaluated the Factors affecting NHIF medical equipment loans uptake among accredited health facilities in Dar es Salaam. The study focused on examining awareness of accredited health facilities on the availability and procedure of medical equipment loan from NHIF, Examine accessibility of medical equipment loan by accredited health facilities. The study also focused on The Economic risks taking behavior perceived by accredited health facilities on NHIF medical equipment loans, sources of financing on medical equipment among accredited health facilities, loans related terms and conditions for NHIF (MEL) loans to accredited Health facilities, facility owner's perceptions on the characteristics on loans requirement from NHIF and NHIF Management perceptions towards (MEL) loans offered to accredited health facilities

6.2 conclusions

1 Customer Awareness on NHIF medical equipment loans is very low
2 Most of the health facility owners were too risk averse on taking loans which is hindrance to the entrepreneurship
3 So many challenges mentioned by both the facility owners and NHIF loans officer that hinder implementation of the program

6.2.1 Recommendation

1. Awareness and more advocacy on medical equipment loan should be made especially on terms and conditions and procedure of the NHIF loan,
2. NHIF should establish a better tools of advocating its products and strengths its marketing and customer care department
3. operational research should be done on how best to operate the loans facilities to improve the number of beneficiaries

REFERENCES

1. Adam J & Kamuzora F. (2008). Research methods for business and social studies, Mzumbe: Mzumbe Book Project. Bowling, A. (2014). Research methods in health: investigating health and health services. London: McGraw-Hill Education. Bultman, J., Kanywanyi, J. L., Maarifa, H., & Mtei, G. (2012). Tanzania Health Insurance Regulatory Framework Review. Ministry of Health and Social Welfare and the Social Security Regulatory Authority of Tanzania: Dar es Salaam. Carrin, G., & James, C. (2005). Social health insurance: key factors affecting the transition towards universal coverage.
2. International Social Security Review, 58(1),. Caxton, G. (2002). How private insurance works: A premier. Institution for Health Care Research and Policy, Georgetown University. Creswell, J. W. (2014). Research design, 4th ed. Los Angeles: Sage.
3. Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research.
4. DeNavas-Walt, C. (2010). Income, poverty, and health insurance coverage in the United States (2005). DIANE Publishing. Hornby, A. S., & Wehmeier, S. (1995). Oxford Advanced Learner's Dictionary (Vol. 1430). Oxford: Oxford University Press. Hougaard, C.
5. Bowman, N. Mahori, N. & Hennie, B. (2012). Tanzania Access to Insurance Diagnostic Document
6. Health insurance dynamics. South Africa: Centre. Hyden, G. (1980). Beyond Ujamaa in Tanzania: Underdevelopment and an uncaptured peasantry, Berkeley and Los Angeles., University of California Press. IMF and World Bank. (2000). Structural Adjustment Program (SAP) alert on lending to Tanzania.
7. Jones, A. P., Bentham, G., Harrison, B. D. W., Jarvis, D., Badminton, R. M., & Wareham, N. J. (1998). Accessibility and health service utilization for asthma in Norfolk, England. Journal of Public Health, 20(3), 312-317. Kolstad, J. R. & Lindkvist, I. (2013). Pro-social preferences and self-selection into the public health sector: evidence from an economic experiment. Health Policy Plan, 28, 320-7. 2014. MASCOT. (2012). Study implemented in the framework of the FP7-

MASCOT. Mcintyre, D. (2008). Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. Bulletin of the World Health Organization, Ministry of Health. (2003). National Health Policy. MoHSW. (2011). Health Sector Public Expenditure Review 2009/10. Mtei, G. & Mulligan, J. A. (2007). Community Health Funds in Tanzania: (2010). Research techniques for the health sciences. Benjamin-Cummings Publishing Company. NHIF. (2010). the current status of NHIF & CHF and prospects for the coming 5 years. Quijada, C. and Comfort A. (2002). "Maternal Health Financing Profile: Tanzania." Partners for Health Reform plus (PHRplus) (WP 003). (NHIF performance report (2017)

8. Varkervisser CM. (2002). Design and Conduct Health System Research Projects (HSR). Varkevisser, C. M., Pathmanathan, I., & Brownlee, A. T. (1993). Designing and conducting health systems research projects (Vol. 2). IDRC. Available at: Victora, C. G., Hanson, K., Bryce, J., & Vaughan, J. P. (2004). Achieving universal coverage with health interventions. The Lancet, WHO. (2000). Health Systems: Improving performance. Geneva. World Bank. (1993). World development report, investing in health. New York: Oxford University World Bank. (1997). Sector strategy for HNP. Washington (DC). WHO. (2008). Health financing policy.
9. Beng'i Issa. 2014. "Establishing AIDS Trust Fund: Tanzanian Experience." In International AIDS Conference 2014, Satellite Session July 23, 2014, Melbourne, Australia. Borghi, J., S. Maluka, A. Kuwawenaruwa, S. Makawia, J. Tantau, et al. 2013. "Promoting Universal Financial Protection: A Case Study of New Management of Community Health Insurance in Tanzania." Health Research Policy and Systems 11(21). Bultman, J. and A. Mushy. 2014. Options for Health Insurance Market Structuring: Final Report. Dar es Salaam: Providing for Health (P4H), German Development Cooperation (GIZ), and Ministry of Health and Social Welfare. Department for International Development, UK (DFID). 2013. Operational Plan 2011–2015, DFID Tanzania (Updated June 2013). East Kilbride: DFID. Development Partners Group-Health (DPGH). 2013. Health Sector Rapid Budget Analysis (RBA) for Annual Review FY 2013/14. Dar es Salaam: DPGH and Ministry of Health and Social Welfare RBA and PER Working Group.

10. IHI. 2012. Health Insurance Cover is increasing among the Tanzanian Population but Wealthier Groups Are More Likely to Benefit. Dar es Salaam: Ifakara Health Institute (IHI
11. Acharya, V., Hasan, I., & Saunders, A., 2006, Should Banks be Diversified? Evidence from Individual Bank Loan Portofolio. Journal of Business, the University of Chicago. Anthony, Robert N. Govindarajan, Vijay. 2009, Management Control System. Jakarta: Salemba Empat. Baele, L., Jonghe, O.D., 2007, Does the Stock Market Value Bank Diversification? Journal of Banking and Finance. Baltagi, 1995, Panel Data Methods. Prepared for the Handbook of Applied Economic Statistics. Department of Economics Texas A&M University. Bank Indonesia, Perbankan. Bank Sentra Republik Indonesia. http://www.bi.go.id/id/peraturan/Default.aspx Barrel, R., Davis, E.P., Fic, T., & Karim, D., 2011, Is There a Link from Bank Size to Risk Taking. National Institute of Economic and Sosial Research Discussion Paper.
12. Abrie W, Doussy E (2006) Tax Compliance Obstacles Experienced by Small and Medium Scale Enterprises in South Africa, Meditari Accountancy Research 14: 1-13
13. Lai ML, Arifin MZ (2011) Small Business Enterprises and Taxation: A Case Study of Corporate Clients of a Tax Firm, Academy of Accounting and Financial Services Journal
14. Onugu BAN (2005) Small and Medium Enterprises (SMEs) in Nigeria: Problems and Prospects. St Clements University.
15. Osunde C, Agboola GM (2012) Microfinance and Entrepreneurial Development in Nigeria, Journal of Research and Development. Federal University of Technology 10: 405–410.
16. WIEGO. (2013). Women in Informal Employment Globalizing and Organizing
17. Winer, B., Brown, D., and Michels, K., 1991. Statistical Principles in Experimental Design, Third Edition. McGraw-Hill, New York.
18. Kirigia, J.M., Preker, A., Carrin, G., Mwikisa, C., Diarra-Nama, A.J.(2006). An overview of health financing patterns and the way forward in the WHO African region. The East Africa Med J. 3(8):S1–S27. [Pub Med]

19. Kirigia.M.,Sambo,l.g.,Nganda,B.,Mwabu,G.M.,Chatora,R.,&Mwase,T.(2005).Dete rmina nts of Health Insurance among South African women.
20. (Pedoman Akuntansi Perbankan Indonesia, 2008), Bank Indonesia, 2016
21. (Xu et al. 2003), (Makinen et al. 2000; Wagstaff 2002).
22. Berg, B.L. (2001). Qualitative Research Methods for the Social Sciences. Boston: Allyn and Bacon.
23. Bradley, J. (1993). Methodological issues and practices in qualitative research. Library Quarterly, 63(4), 431-449.
24. Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine.
25. Hsieh, H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. Qualitative Health Research, Miles, M., & Huberman, A.M. (1994). Qualitative Data Analysis. Thousand Oaks, CA: Sage Publications.
26. Patton, M.Q. (2002). Qualitative Research and Evaluation Methods. Thousand Oaks, CA: Sage.
27. Berg, B.L. (2001). Qualitative Research Methods for the Social Sciences. Boston: Allyn and Bacon.
28. Bradley, J. (1993). Methodological issues and practices in qualitative research. Library Quarterly, 63(4), 431-449.
29. Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine.
30. Hsieh, H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. Qualitative Health Research, 15(9), 1277-1288. Available on: http://qhr.sagepub.com/content/15/9/1277.short?rss,1&ssource,mfc (2016)
31. Miles, M., & Huberman, A.M. (1994). Qualitative Data Analysis. Thousand Oaks, CA: Sage Publications.
32. Patton, M.Q. (2002). Qualitative Research and Evaluation Methods. Thousand Oaks, CA: Sage.

APPENDICES

Appendix I: Consent Form

Consent to participate in a study titled;

Factors affecting NHIF medical equipment loans uptake among accredited health facilities Dar es Salaam.

Greetings! My name is *Eliud S. Kilimba* from Muhimbili University of Health and Allied Sciences (MUHAS). I am involved in the above mentioned study to your facility.

Participation

If you agree to join into this study, you will be required to answer, explain and fill all the questions in the interview guide, which will be provided to you.

Confidentiality

All information that I shall collect from you, will be treated confidentially and will not be used for any other purpose other than this study.

Risks

We do not expect any harm will happen to you because of joining in this study.

Rights to Withdraw and Alternatives

Taking part in this study is completely your choice. If you choose not to participate in the study or if you decide to stop participating in the study you will continue to be treated normally. You can stop participating in this study at any time, even if you have already given your consent and if for any reason you would wish to come back into the study after withdrawal, i will be ready to accept you to continue with the study. Refusal to participate or withdrawal from the study will not involve penalty or loss of any benefits to which you are otherwise entitled from me.

Whom to Contact

If you have any questions relating to this study, you should contact the following:

DR. Eliud S Kilimba (Investigator)

Student,

Muhimbili University of Health and Allied Sciences,

P.O. Box 65013, Dar es salaam,

Mobile phone: 0755- 472079/0712140185

Email:ekilimba00@gmail.com

OR

Prof. Phare G .M Mujinja (study supervisor)

…….

School of Public Health and Social Sciences (MUHAS)

PO BOX 65000

DAR ES SALAAM

Mobile Phone: 0754-271171, 0622 271 171

Chairman of MUHAS Senate Research and Publication Committee.

P.O. Box 65001

DAR ES SALAAM.

Do you agree to participate? Write the word 'yes' if you agree_____

I, _____ have read the contents in this form.

My questions have been answered. I agree to participate in this study.

Signature of participant _____

Signature of investigator _____

Date of signed consent_____

Appendix ii (interview guide)

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCIES (MUHAS).

FACTORS AFFECTING NHIF MEDICAL EQUIPMENT LOANS UPTAKE AMONG ACCREDITED HEALTH FACILITIES IN DAR ES SALAAM.

INDEPTH- INTERVIEW GUIDE (non loans taken facilities)

A. Questionnaire number……

B. Date of interview …….

C. Name of facility……

SECTION A: FACILITY CHARACTERISTICS

1. Do you have any information for loans in health facilities for quality of health deliveries in Dar es Salaam if yes explains

   ……..

   ……..

2. What are those loans offered tells about and what information do you have about loans that your facility can access

   …….

   ……..

3. Do you have any information that NHIF grants medical equipment loans?

   If yes explain ……

   ……

   ……

4. Where did you get that information on NHIF loans (MEL)

   ……

   When did you get that information?

   ……..

   To whom deliver that information to you

   …….

5. If you have the information about NHIF loans, did you informed on its advantages and it's important? If yes explain

   ……

   ……

6. If you're fully informed about NHIF loans, why you didn't apply and utilizes them?

6(a) financial ability……

……...

…….....

6 (b) fear to lose your facility capital stability

……

…….

6 (c) Fear to access loans from Government institutions

……

6 (d) Experience from other institutions offering similar loans

……..

……

7. What are the factors prevailing at your facility not to take NHIF loans?

   ……

   ……..

8. Is your facility have any other loans from other agents that makes you not to take NHIF loans? explains

   …….

   ……

9. Do you think NHIF loans will increase your facility operational expenses Ruther than profits gains? If yes explains

   ……

10 Where did you get the Capital to establish your Health Facility?

……

11. How do you run your facility in terms of Capital matters (running capital?)

……

12. Types Ownership of the facility

…….

12 (a) IF it is shared facility ownership what is the portions of sharing in ownership in both parties

…….

……

12 (b) what is the supremacy in decision making between the available shared parties

……

……..

12 (c) is the Facility supported by Donor Funded Programs? if yes who are they?

……

……

12 (d) IF yes there is donors what did they donate

…….

12 (e) Position of Donors on facility decision making (managerial issues)

10(f) Presence of sharing of donors is the reasons for your facility not to access NHIF LOANS? If yes explain

……

……

12 (g) Are there terms and conditions from donors that makes your facility not to access NHIF loans.

……

12 (h) how many loans have you ever take for your facility since establishment explain

……

13 Do know the terms and conditions from NHIF before Loans access?

If yes mention them

……

……

14Among the mentioned terms and condition for NHIF loans which ones makes you not to apply that loans.……

……

15 What is your views regarding NHIF loans to accredited facilities give comments

……

…….

16. For the facility to access loans what is your comments to NHIF and facilities as well NHIF

……

……

For Facilities……

…….

FOR NHIF OFFICIALS

17. What is your assessment done to why there is low uptake of MEL to facilities?

……

……..

18. What do you think is the Facilities owner perceptions on NHIF MEL?

……

……

19. What are other improvements and renovation is in your plans regarding MEL

…….

……

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCIES (MUHAS).

FACTORS AFFECTING NHIF MEDICAL EQUIPMENT LOANS UPTAKE AMONG ACCREDITED HEALTH FACILITIES IN DAR ES SALAAM.

INDEPTH- INTERVIEW GUIDE (loans taken facilities)

A. Questionnaire number……

B. Date of interview …….

C. Name of facility……

SECTION A: FACILITY CHARACTERISTICS

1. Why did you applied for the MEFI from NHIF

   ……

   …….

2. How did you being informed about NHIF (MEFI)?

   ……

   ……..

3. What is the status Health care deliveries to patients after NHIF (MEFI) loans to your facility……?

……

4. What are the financial gains to your facility after NHIF (MEFI) loans?

5. What is your comments to those accredited facilities not taking NHIF MEL……

   ……

6. Are planning to apply NHIF MEL for the second time?

7. If yes/no then
   why?.....
   .....
8. What is your comments on terms and conditions for MEL from
   NHIF……?
   …….
9. What is your general comments on NHIF
   MEL……?
   ……
10. What are your general comments to NHIF accredited Facilities on MEL?
……
……
11. What is your opinions to NHIF Management regarding intended goals from MEL……
……