DETERMINANTS OF ACCESS TO FREE HEALTH SERVICES BY THE ELDERLY IN IRINGA AND MAKETE DISTRICTS, TANZANIA

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EXTENDED ABSRACT

The Government of Tanzania has exempted the elderly from cost sharing in health service delivery as it is stipulated in the National Ageing Policy and in the National Strategy for Growth and Reduction of Poverty in Tanzania. However, the majority of the elderly do not get the services freely. The main objective of this study was to assess factors influencing access of the elderly to free health services. The study was conducted in Iringa and Makete Districts. A cross-sectional design was adopted in the study. Quantitative data were collected using a structured questionnaire involving 240 elderly. Qualitative data were collected through in-depth interviews, focus group discussions, and key informant interviews. Quantitative data were analysed using IBM Statistical Package for Social Sciences (SPSS) Statistics software by computing descriptive statistics including frequencies, percentages, averages, minimum and maximum values of individual variables. Qualitative data were analysed through content analysis and categorised based on the research objectives. The majority of the elderly had poor health status which was linked to their decreased ability to perform activities for daily living. Their health statuses were significantly influenced by their socio-economic characteristics ($p \leq 0.05$). The health services received by the elderly were of low quality as their expectations on health services were higher than their perceptions of the same. The difference between expectations and perceptions was statistically significant ($p \leq 0.01$). The health statuses of elderly had no significant association with their access to free health services ($p > 0.05$). The most important predictors of access to free health services by the elderly were awareness to free health services and income ($p \leq 0.001$), and age ($p \leq 0.01$). The elderly were inadequately informed about their right

to free health services and hence had negative attitude towards the free health service delivery system. The health workers had negative attitude towards the elderly; hence they were discriminative against the elderly in the latter's efforts to get access to free health services. It is recommended that the government of Tanzania; through the Ministry of Health, Community Development, Gender, Elderly and Children; should evaluate the exemption process and develop appropriate mechanisms, including creation of awareness of the services, to ensure that the elderly receive free health services.

DECLARATION

I, AGNES STEPHEN NZALI, do hereby declare to the Senate of Sokoine University of Agriculture that this thesis is my own original work done within a period of registration and has neither been submitted nor being concurrently submitted in any other institution.

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This thesis is dedicated to God, the Almighty, who made me strong to persevere to the end of my study after the loss of my beloved husband during the period of the study. To my husband, the late Ibrahim Haran Tweve who passed away in the course of my PhD study programme, may the Almighty God rest his soul in peace. It is also dedicated to my mother, Ange'melye Ngole who laid down the foundation of my education.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADL	Activities for Daily Living
EMRO	Eastern Mediterranean Regional Office
FGDs	Focus Group Discussions
GEGA	Global Equity Gauge Alliance
GHA	Global Health Action
HAI	Help Age International
HESLB	Higher Education Students' Loan Board
NGOs	Non-Governmental Organizations
NIMR	National Institute for Medical Research
NSGRP	National Strategy for Growth and Reduction of Poverty
PHDR	Poverty and Human Development Report
SE	Socio-Economic
Servqual	Service quality
SNAL	Sokoine National Agricultural Library
SPSS	Statistical Package for Social Sciences
TASAF	Tanzania Social Action Fund
TZS	Tanzanian Shillings
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNPD	United Nations Population Division
URT	United Republic of Tanzania
USD	United States Dollar
VCs	Village Chairpersons

VEOs	Village Executive Officers
VoP	Views of People
WEOs	Ward Executive Officers
WHO	World Health Organization

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information on the Elderly and their Health Issues

Ageing is a dynamic biological process. World Health Organization (WHO) (2007) and WHO (2008) define old age as the time when a person reaches the age of 60 years and above. Help Age International (HAI) (2012) define ageing as a state of dependence or incapacity thought to begin at the point when a person can no longer work efficiently due to ageing. In Tanzania, the National Ageing Policy (URT, 2003) states that old age starts at 60 years which is the retirement point, especially in formal employment. For those who are not employed in the formal sector, ageing is determined by their advanced age which limits themd from doing active work. However, the definition does not clarify when the onset of old age starts. This is due to the fact that ageing is a process; it does not occur abruptly. Therefore, 60 years may not accurately be a good indicator of old age because other people may still be strong at that age.

In almost all of the regions of the world, the elderly population is growing faster than the total population (United Nations, 2009). Worldwide, the number of persons aged 60 years has been increasing at a high rate. In the 1980s, there were 378 million people aged 60 years and above in the world. Three decades later, the figure doubled to 759 million, and it is projected that by 2050 the rise will be almost threefold to 2 billion (United Nations, 2010). Compared with other regions of the world, the older population of Africa is growing at a rate of 2.27% (United Nations, 2011). Projections suggest that the number of people over the age of 60 years will

increase from 64.5 million in 2015 to 103 million in 2030 to 205 million in 2050 (United Nations, 2009). The growth of the ageing population of Africa is accompanied by an increase in the median age of the population, as well as changes in the dependency ratio, resulting in a decline in the proportion of the population composed of children, and an increase in the population aged 60 years and above.

In East Africa, the number is projected to rise from more than 11 million in 2000 to more than 56 million by 2050. Dramatic changes are also projected in other parts of the continent with, for example, projected increases from 5.7% to 13.2% in Southern Africa and 4.7% to 9.5% in West Africa by 2050. In Tanzania, the elderly constitute 5.5% of the total population (URT, 2007b; HAI, 2012), and this figure is expected to increase to 10% by the year 2050 (WHO, 2009). The reasons for the increase in the number of the elderly include advances in nutrition, and lifestyles as asserted by Nhongo (2004).

The rapid ageing of the world's population presents new challenges to all countries, but with least ability to meet the challenges. This is due to the fact that, with ageing, there is an increase of episodes of ill-health due to the chronic diseases associated with the process. Therefore, due to this point, the elderly tend to require larger share of health resources. Considering this situation of health-related problems with old age, strategic and collective responses to ensure expansion of healthcare for the elderly is required. Mahfouz *et al.* (2004) and Nie *et al.* (2008) assert that, with ageing population, the number of the elderly with chronic conditions like heart disease, cancer, diabetes and arthritis are also increasing. This change requires more inputs from the society for meeting additional demands for health and social

wellbeing of the elderly population. As this population of the elderly is increasing, the need for research on their health issues and socio-economic contexts is also compelling.

1.2 The Situation of Elderly People in Tanzania

In Tanzania, the majority of the elderly live in poverty, uncertainty, and most of them (about 75%) live in rural areas (URT, 2009). In the past, the elderly commanded respect and power; they controlled land and permanent crops and played an important role in conflict resolution (URT, 2007b). These roles are being eroded by changes in family structure, and rural-urban migration of people who should care for the elderly to search for employment. Oganda (2006) argues that the notions that all old people are cared for by their families ignore the fact that increasing numbers of old people can no longer rely on traditional patterns of care and support. However, the elderly today are still the caretakers of people living with HIV and AIDS and more than a half (53%) of orphans (URT, 2007b). Generally, the situation of old people in Tanzania is characterized by poverty, diseases, inadequate care, disabilities, and insecurity (URT, 2003). The United Nations Population Division (UNPD, 2010) reports argue that poverty limits access to social services, increases vulnerability, and that the poor, like most of the elderly, are the most exposed to the risks of hazardous environments, and the least informed about threats to health. According to URT (2009) and HAI (2014), households with only children and the elderly are more likely than the average household to be poor, with a poverty rate of 40.9% compared to 34.0% of the average household.

In view of this, the Government of Tanzania has formulated the Ageing Policy in order to deal with the social well-being of the elderly (URT, 2003). In the policy, one of the objectives is to ensure that the elderly receive free basic health services and that an enabling environment to facilitate the provision of the services is created. The policy also is aimed at ensuring that there is an established mechanism for making follow up in order to ensure good quality of health services to the elderly and improve their health status and social well-being with a focus on responding to their health service needs.

The first phase of the National Strategy for Growth and Reduction of Poverty (NSGRP I) (URT, 2005), in its second cluster, also stipulates that 100% of eligible old people (60 years and above) will be provided with free medical care and attended to by specialized medical personnel by 2010. The strategy also aimed at forming interventions to improve accessibility of free health services by geographical coverage and that all forms of barriers to health care will be eliminated. The second phase of the National Strategy for Growth and Reduction of Poverty (NSGRP II) (URT, 2010) also identified two broad outcomes under cluster II which are: i) to improve the quality of life and social wellbeing for enhancing capabilities, with a particular focus on the vulnerable groups, and ii) to reduce inequities in accessing social services by the elderly along geographical areas, income, age and gender. All these address the concerns of old people as per the Madrid International Plan of Action on the Ageing (MIPAA) (URT, 2003; URT, 2007b) under which the government of Tanzania ratified the formulation and implementation of the National Ageing Policy. However, in the NSGRP II, the cluster implementation strategies are not well clarified on how the government is

determined to achieve its goal of providing free health services to the elderly. It is also stipulated in the cluster strategies that it will ensure that a proportion of eligible elderly people are reached, with minimum social pension increased. This does not even show when, to what extent and the proportion that will be increased. Also, this is questionable because the government of Tanzania has not yet started providing social pension to the elderly.

1.3 The Concept of Free Health Service to the Elderly in Tanzania

The concept of free health services to the elderly in Tanzania is a statutory entitlement which exempts the elderly from paying tor the services in all public health facilities (URT, 2003). It is usually granted to individuals who are under the category specified in the cost sharing operational manual (Mamdani and Bangser, 2004; URT, 2003). In Tanzania, this exemption is based on the individual characteristics of the patient or types of health problems. There are two types of exemption: exempt illnesses and exempt patients. Exempt illnesses include tuberculosis, leprosy, polio, AIDS, cancer, and diabetes. Exempt patients include children less than five years of age, pregnant women, the elderly, and the disabled (URT, 2003). This means that all individuals under the mentioned categories are not required to pay for health services. However, the concept of free health services can mean a zero price to the user, but that does not mean it is totally free and has a zero cost. The reality is that the bills are paid by other people such as companies, industries, institutions and individuals through levy (URT, 2003).

1.4 An Overview of the Status of Research on Free Health Services for the Elderly

Most of studies on free health services have mainly been focusing on other population groups like pregnant women, children under five years, people living with HIV, and the poor in general, neglecting the elderly who are senior citizens (Laterveer *et al.,* 2004; Mella, 2008; Mamdani and Bangser, 2004; Juma and Manongi, 2009). In Tanzania, quite recently, there have been some studies on health services for the elderly, although very few studies have focused on the factors influencing access to free health services by the elderly and the quality of health services they receive (Lupton, 2008; Afrobarometer, 2006; HAI, 2006). Furthermore, the situation of research in the study area is just like in other parts of the country, that is no or few of such studies have been done in Iringa and Makete Districts. In Tanzania, also, little public information is disseminated in hospitals emphasizing the accessibility of the services by the poor, particularly the elderly (HAI, 2012). In view of this, there was a need for conducting this study with special attention to the elderly as they are most of time left out of research activities.

Studies by Burnham (2004) and Yates (2004) assessed the impact of the abolition of user fees on the elderly in Uganda in 2001 and found that the elderly out-patient attendance rates increased to 90% compared to less than 50% in 1999/2000, with a reduction in the incidence of morbidity by 30%. This implies that the removal of user fees on health services has a positive impact on access to health care by the elderly and hence improving their health statuses.

Venstra and Oyier (2006), in their study in South Africa, found that old people face barriers in accessing health care services as health care facilities are limited in rendering services to old people because of a number of reasons, including lack of personnel, poor administration, equipment shortages, poor infrastructure and expanding demands on the services. Poor organisation and inadequate capacity lead to unnecessarily long waiting times at health facilities.

Aron (2008) and Sibanda (2008) argue that health economists have worried that incentives and exemptions on health services lead people to demand care that, at the margin, generates benefits smaller than the incremental cost resulting from those services. Aron (2008) adds that exemption of payment for health services also encourages patients to seek health services which exceed the small share of total cost and that, in extreme cases, a patient who bears no cost for health services has an economic incentive to demand all care however expensive it may be. However, this may only hold in places where the exempted ones at least receive the promised basic services as it is not possible for one to demand for an extreme care while even the basic service is not provided. Therefore, this may rarely occur in areas where the majority of the elderly are not even receiving the basic health services for free.

1.5 Problem Statement

It has become apparent that strategies are needed to guarantee effective service delivery including free health services to the elderly. URT (2003) and URT (2005) show that the commitment is clearly demonstrated by the Tanzania government to mainstream ageing issues into the development agenda of the nation through

recognizing their importance and exempting them from cost sharing in the health service delivery system.

However, although the elderly are supposed to get free health services in Tanzania (URT, 2003; URT, 2005), most of them do not get such services freely. According to the Views of People (VoP) report (URT 2007c) and Poverty and Human Development Report (URT, 2009), 65% of old people have health problems which require regular attention and proper investigation. It is also added in the report that access to free health services by the elderly is a nightmare: only 15% receive free health services; 35% pay for themselves; 27% have costs paid by family members and others do either buy medicines from pharmacies or do not undergo treatment. Also, the quality of health services delivered to the elderly has rarely been studied empirically.

The situation in the study area (Iringa and Makete Districts) does not differ from the above statistics from the national report. Iringa and Makete Districts constitute 4.5% and 6.0% of people aged 60 years and above respectively against the national proportion of 5.5% (URT, 2008; URT, 2012; URT, 2013). The two districts were formerly in one Region (Iringa), but in 2013 Makete District was placed in Njombe Region after Iringa Region was split into Iringa and Njombe Regions. The proportion of the elderly in Iringa District is below the national average proportion of the elderly (5.5%). However, Iringa District constitutes the highest proportion of the elderly in Iringa Region. Iringa Municipality has the lowest proportion (2.5%), and the remaining districts have less that 4% of the elderly. According to URT

(2007a), the elderly in the study area, just like in other regions, face many health problems, including prevalence of malaria, tuberculosis, diabetes and other chronic diseases, but nothing has been stated in the document concerning free health service delivery to the elderly as it is for other vulnerable groups like pregnant women, infants and children under five years. However, the Regional Annual Medical Report (URT, 2009) shows that less than 15% of the elderly aged 60 years and above receive free health services in the region. What underlies the uncertainties are wide discrepancies in understanding the scope, determinants and impacts of unmet health needs of the elderly, and the causes of major deficiencies in free health service provision for them in the study area.

In this study different assumptions were made on what leads to the limited access to free health services by the elderly in the study area. They include: unawareness of the elderly on their right to such services, preference of traditional medicines to modern ones, lack of trust of medical personnel, distance from home to health facilities, and income poverty. Iecovich and Carmel (2009) assert that poverty of the elderly often goes beyond income and includes physical weakness, isolation, powerlessness, and low self-esteem that may often lead to failure in claiming their entitlement. Other assumptions were community and health workers discrimination against the elderly, socio-economic factors, and poor quality of health services they received. All these might consequently lead to the elderly not receiving the deserved free health care services. However, these were just rational reasons; so far there was little documentation on whether any of these reasons held and to what extent those which held did so. This, therefore, marked the knowledge gap for this study. It was

in that context that the study for this thesis was set to assess the exact reasons from the above assumptions and others which were not mentioned in the above list but might be associated with access to free health services by the elderly in the study area.

1.6 Justification of the Study

Effective access to functioning and well-equipped social services is a prerequisite to improving the quality of life and for promoting the well being of all Tanzanians (Afrobarometer, 2006). Ensuring equal access to free health services by the elderly, therefore, relies on making health service providers more aware of, and committed to, solving health problems and obstacles that the elderly face. Not only that, but also dealing with factors that hinder the elderly from accessing health services is important. These include addressing their needs for their health issues, and support their capacity to live healthy lives. This is because successful human societies are characterized by good health of all citizens as evidenced throughout human existence (Freeman, 2006).

This study was, therefore, considered crucial and timely because it is in line with the National Ageing Policy goal which emphasizes on recognising old people as an important resource in which one of the policy objectives is to ensure that the elderly receive free health services and that enabling environment for the provision of the services is created. The policy is also aimed at ensuring that there is an established mechanism for making follow up on the health conditions of the elderly, health personnel receive special training to handle the elderly, and the elderly and the public in general are sensitized on the health problems that are common among the

elderly (URT, 2003). It is also recommended by Poverty and Human Development Report (PHDR) (URT, 2009) that, the routine for Health Management Information Systems needs to be expanded to capture data on the elderly Tanzanians accessing health services so as to assess the application of exemptions policy by health facilities (URT, 2009).

In Tanzania, there has so far been limited research on explaining ageing issues and their impact on the health of the elderly who are among the people that are most overwhelmed by poverty (Afrobarometer, 2006; HAI, 2012; URT, 2007c). Large gaps still exist in the knowledge on the health status of the elderly and the influence of socio-economic and health related variables on the health status of the elderly. This shows that a vacuum exists in the implementation of the Elderly Health Policy (URT 2003), particularly in dealing with health issues of the elderly. Although Tanzania is the second country in Africa to have a National Ageing policy, after Mauritius, many issues stipulated in the policy in relation to the elderly are not yet largely implemented and defined to the elderly as well. For example, the policy stipulates that the elderly should be enabled to participate in formulating policies and strategies for the national development, get free health services, get relevant training related to income generating activities, and that caring for the elderly will be extended through the district councils (URT, 2003). These are just few to mention. In the National Strategy for Poverty Reduction I (URT, 2005), the strategies for the elderly issues are not fully addressed, although the elderly are widely recognised as being a valuable source of information, knowledge and experience. Thus, efforts should be made to consider and improve their health status and quality of life within

the country. In addition, despite the fact that ageing is frequently accompanied by an increase in chronic conditions and disabilities, there has been a paucity of reliable and/or representative data on the health related issues of the Tanzanian elderly (URT, 2007c).

Therefore, an investigation on health services to old age-related ill health is needed as it would provide a useful starting point for health system evaluation. Through this research, empirical information on the issue of free health service delivery to the elderly and other health related issues were determined. This will enable community development planners and policy makers, other stakeholders, including health service providers and scholars, to be informed on the situation of the elderly and their health related problems. The empirical information also will help the actors to undertake more appropriate interventions to improve access to free health services by the elderly and hence improving their health status.

1.7 Research Objectives

1.7.1 Overall objective

The overall objective of the research was to assess factors influencing access of the elderly to free health services in Iringa and Makete Districts.

1.7.2 Specific objectives

The specific objectives of the study were to:

i. Establish the perceived health status of the elderly and its association with their access to free health services,

ii. Examine the quality of health services received by the elderly and its association with their access to free health services,

iii. Determine the influence of socio-economic factors on access to free health services by the elderly, and

iv. Determine the elderly and health service providers' knowledge on and attitude towards free health service delivery to the elderly.

1.7.3 Research hypotheses

This study was guided by the following hypotheses:

i. The health status of the elderly is the same among the elderly with different socio-economic characteristics

ii. There is no significant association between the health status of the elderly and their access to free health services

iii. The perceptions of the elderly on the health services received do not significantly differ from their expectations.

iv. The odds of the elderly getting access to free health services are the same among the elderly with different socio-economic characteristics.

1.8 Theoretical Perspectives of Access to Free Health Services

1.8.1 The concept of health equity theory

According to the Global Equity Gauge Alliance (GEGA) (2003), health equity means efforts to ensure that all people have full and equal access to opportunities that enable them to lead healthy lives and all avoidable health inequities, and health disparities must be eliminated. Latts (2008) defines health equity as a means that everyone should, in practice, and not just in theory, be able to access and use

appropriate health services. The equity theory by Goddard and Smith (2001) asserts that health services should not only be for the dominant population groups. This implies equitable access and use of health services, given that some people such as the elderly will need more health care than others. The theory, outlines the factors that may hinder equity health service delivery as low education, lack of information (awareness), age, sex, low income, price of medicines, and spatial factors such as distance from health facilities, that is the closer the health facility the lower the opportunity cost of time, hence more access to health services. It is also argued by the theory and GEGA (2003) that socio-economic characteristics and discrimination to marginalized groups like the elderly may hinder their rights to access health services. Therefore, unless the negative impact of those factors is addressed, it will be difficult to attain equal access and use of health services equally. This theory underpinned this study as the theoretical factors were adapted to the study.

However, the theory does not describe about the individuals like health care professionals and caregivers and relatives who can help call attention to the well-being of the elderly, help empower the elderly to take more control over their health decisions, bring them to health facilities and hence access free health services. The theory does not show these as one of the factors that may determine the elderly access to free health services. This is a weakness of the theory.

1.8.2 The concept of service quality (servqual) model

Parasuraman *et al.* (1985) developed a service quality (servqual) model of five dimensions which are Reliability, Responsiveness, Assurance, Empathy, and Tangibles to determine service quality. The servqual model dimensions were

adapted to determine the quality of health services received by the elderly after modifying the elements of the five dimensions in relation to the current study. The elements for the five dimensions are described in Appendix 4. Sabates and Feinstein (2004) found that the quality of health services has always been found to be an important factor for access to health services. On the other hand, it is pointed out by Byoumi (2009) that free services encourage providers to deliver only necessary services leading to poor quality of the services. This discourages the health services consumers from attending health facilities. Therefore, even though exemption to health services exists, the quality of the services may remain poor unless there is regular monitoring on the system (Pastory, 2013). Due to this fact, the elderly might not be willing to go for free health services because the poor quality of the services they receive from the health facilities. Therefore, in this study the quality of free health services received by the elderly and its association with access to free health services by the elderly was determined.

1.9 Conceptual Framework

A conceptual framework is a narrative outline presentation of variables to be studied and hypothetical relationships between and among them. The conceptual framework of this study (Fig. 1) is informed by theoretical and empirical literature. The linkages are established between independent variables (socio-economic variables, quality of health services, respondents' health status, health related variables, and respondents' and health workers' knowledge and attitudes towards free health services to the elderly) and the dependent variable (access to free health services among the elderly). In this study it was hypothesized that the independent variables have influence on access of the elderly to free health services. It was also hypothesized

that socio-economic factors have influence on the health statuses of the elderly. The types of linkages of variables established in the conceptual framework (Fig. 1) are based on the idea that socio-economic characteristic of the elderly may have positive or negative influence on their health statuses. Hypothetically, it was put forth that the elderly with different socio-economic characteristics do not differ in their health statuses and that the health status of the elderly is associated with their access to free health services.

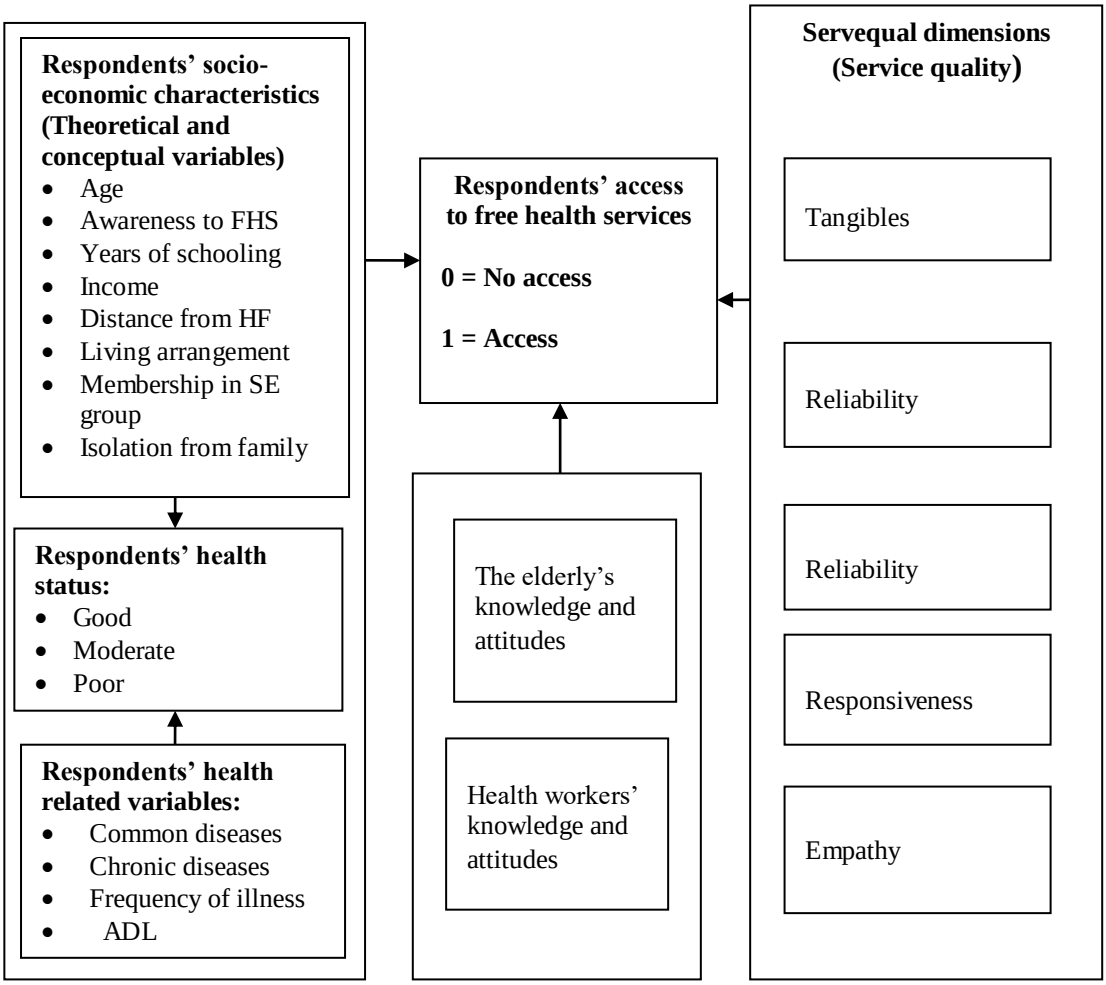

Figure 1: Conceptual framework used for the research showing relationships between and among variables

Source: Adapted from theoretical and empirical literature (Goddard and Smith, 2001; Parasuraman *et al.* (1985; Global Health Action, 2010).

It was also hypothesized that the odds of accessing free health services are the same among the elderly with different socio-economic characteristics in the sense that those with poor socio-economic status could have the same or more or less the same access to free health services as their counterparts with relatively good socio-economic status. The idea of service quality in Fig. 1 is based on the five dimensions of the servequal model as proposed by Parasuraman *et al.* (1985) that the quality of health services the elderly received was associated with their access to free health services in the sense that poor health services delivery to the elderly might not meet their health services demand. This might deny them of their right to have health services they require.

Another idea in the conceptual framework is that the elderly and health workers' knowledge and attitudes towards free health service provision to the elderly may be an impediment or impelling factor for the elderly to access free health services. This idea lies in the fact that if the elderly are not well informed about their right to free health services they will not be able to claim for their right. Also, if they have negative attitude towards the delivery process and the health personnel, they may even not attend the health facilities to seek health services. On the other hand, the health workers may also not have adequate information on the right of the elderly to free health services. This may lead to denial of provision of free health services to the elderly. Negative attitude of health workers towards the elderly also might lead to discrimination against the elderly in the process of health service delivery.

Similarly, Waweru *et al*. (2003), in their study on the elderly health issues, found that health workers' negative attitudes towards the elderly contributed to

discrimination of the elderly in the process of health service delivery. The health workers perceived that the elderly were supposed to live with their illnesses because it is part of old age; thus they denied them of receiving health services.

1.10 Organization of the Thesis

The thesis is organized into six chapters and starts with an introduction in chapter one, which situates the background information of the whole thesis. Then, four publishable manuscripts organized in four chapters (2 to 5) are presented. Manuscript number one is presented in chapter two with a focus on the health status of the elderly and its association with their access to free health services. Chapter three presents manuscript number two that reports about the quality of health services the elderly receive and its association with free access to health services by elderly. Chapter four presents manuscript number three, which deals with the influence of respondents' socio-economic characteristics on their access to free health services. The fourth manuscript is presented in chapter five and focuses on knowledge and attitudes towards free health service delivery to the elderly among the elderly and health workers. Lastly, chapter six, of the thesis presents extended conclusions and recommendations drawn from all the manuscripts.

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CHAPTER TWO

2.0 Health Status of the Elderly and its Association with their Access to Free Health Services in Iringa and Makete Districts, Tanzania

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2.1 Abstract

Ageing is becoming a major challenge for African countries as it decreases health status and increases the demand for health services for the elderly. However, in Tanzania there has been limited research on explaining ageing issues and their impact on the health status of the elderly who are among the people that are most overwhelmed by poverty and chronic ill-health conditions. The purpose of this study was to assess the health status of elderly. A cross-sectional research design was adopted involving a total of 240 elderly people in Iringa and Makete Districts. A questionnaire-based survey and focus group discussions with the elderly were used to collect information. Quantitative data were analysed through SPSS while content analysis was used to analyse qualitative data. A multinomial logistic regression model was used to determine the influence of some socio-economic variables on the

health status of elderly. It was found that 60.8% of the respondents perceived their health status to be poor while less than one-fifth (14.6%) perceived their health status to be good. While distance from health facilities and age had significant negative influence ($p \leq 0.05$) on the health status of the elderly, income and education level influenced their health status positively. Seeking health services from public facilities, living with relatives, and membership in socio-economic groups also increased the likelihood of the elderly reporting their health to be good. Isolation from family members had significant negative influence ($p \leq 0.05$) on the health status of the elderly. However, there was no significant association ($p > 0.05$) between access to free health services by the elderly and their health status. It is concluded that the elderly in the study area live with their health problems unattended; thus there is a need for collective efforts that focus on the socio-economic and health related variables that have negative influence on the health status of the elderly in order to improve the health statuses of the elderly. Due to the influence of some socio-economic variables on the elderly health statuses, it is recommended that the government of Tanzania, communities, families, and other stakeholders should work together focusing on the variables which have negative influence to ensure that the health status of the elderly is improved.

Key words: Elderly, Health status, Socio-economic, Iringa, Makete, Tanzania

2.2 Introduction

Ageing is becoming a major challenge for African countries as it increases the demand for a variety of health services for the elderly (United Nations, 2009b). The World Health Organization (WHO) (2006) reports that quality of life changes over

life span and health becomes one of the major concerns about old age. It also adds that, with reduced ability to generate resources, the elderly lack basic needs which affect their health status. Pastory (2013) states that, due to significant gain in life expectancy in the African region, a growing number of people are now old who face increased risk of chronic diseases, disabilities and premature death. Mwanyangala *et al.* (2010) also remark that from a health perspective, ageing means that the population's health burden is likely to worsen, as the elderly tend to call for a greater proportion of health care than other segments of the population. This calls for the health systems in African countries to make adequate healthcare provisions for the elderly, and respond to the needs of the rapidly ageing population (Waweru *et al.*, 2003). Apart from their frequent illnesses, the elderly in the world are vulnerable to psychological and physical abuse like accusations from witchcraft. For this reason they are at risk of being rejected by families and community members (Help Age International (HAI), (2002).

These social changes are affecting the position of the elderly in the society and leading to a reduction in their social health status in the community. Cacioppo *et al.* (2006) comment that the elderly who experience one or another aspect of social isolation are at a greater risk for all-causes of mortality, increased morbidity, diminished immune function, depression, and cognitive decline. In this situation the elderly also find themselves in difficulties even for seeking health services from health facilities when they fall sick. Attribution of ill health to ageing, low economic status and negative attitude of health workers towards the care of the elderly are some of the factors associated with delay in seeking health care by the elderly that

tends to worsen their health status and increasing mortality (Banerjee *et al.,* 2010). The pattern of perceiving the welfare of the elderly as a responsibility of the family has made the government of Tanzania to do little to provide for their welfare (Mwanyangala *et al.,* 2010).

The International Development Targets and the United Nations' Millennium Development Goals largely ignore the question of how the growing number of the elderly can escape chronic illness, poverty and social disconnection, and how they are included in development planning for the future of communities and nations (Help Age International, 2002). Also, a large body of research (Cornman *et al.,* 2003; Cacioppo and Hawkley, 2003; Maureen 2004; Cacioppo *et al.,* 2006) have described ageing and health issues using developed countries. Contrasting perspectives like demographic characteristics, physical health, cognitive impairment, disability and self-perceived health of the elderly have been used in those studies. In the developing world, studies of ageing population have focused primarily on Asia and Latin America (Frankenberg and Jones, 2004; Case and Paxson, 2005; Park, 2014). In Tanzania, there has been limited research on explaining ageing issues and their impact on the health of the elderly who are among the most overwhelmed by poverty (Mamdan and Bngser, 2004; Afrobarometer, 2006; Juma and Manongi, 2009; Pastory, 2013).

Large gaps still exist in the knowledge on the health status of the elderly and the influence of socio-economic and health related variables on the health status of the elderly. Where one finds a well addressed maternal and child health issues in Tanzania, a vacuum exists in addressing health issues of the elderly as stipulated in

the national ageing policy (URT, 2003). Although Tanzania is the second country in Africa to have a National Ageing policy, after Mauritius, many issues stipulated in the policy in relation to the elderly are not yet largely implemented and defined to the elderly as well. For example, the policy stipulates that the elderly should be enabled to participate in formulating policies and strategies for the national development; get free health services, get relevant training related to their projects and that caring for the elderly will be extended through the district councils (URT, 2003). Even in the National Strategy for Poverty Reduction (URT, 2005), the elderly are not fully considered, although they are widely recognized as being a valuable source of information, knowledge and experience. Thus, efforts should be made to consider and improve their health status and quality of life within the country. In addition, despite the fact that ageing is frequently accompanied by an increase in chronic conditions and disabilities, there has been a paucity of reliable and/or representative data on the health related issues of the Tanzanian elderly. The Purpose of this study was to assess the health status of the elderly. Specifically, the study sought to: (i) determine respondents' self perceived health status, (ii) assess the association between respondents' health status and their access to free health services, (iii) examine respondents' socio-economic variables and their influence on their health status.

Studying the determinants of health status of the elderly is essential; it provides decisive information for planning and evaluating success of health services and interventions for the elderly. It also helps the planners and policy makers in their decisions and improvement of the existing framework on care and support to elderly in Tanzania. The results of this study provide a baseline for examining the

relationship between ageing and health outcomes during demographic transition. The results also help to raise awareness about the predicament of the elderly for support, possible policy interventions, and stimulate further research.

2.3 Methodology

2.3.1 The study area

Data for the study were collected from Makete and Iringa Districts, Tanzania. The two districts were selected because they constitute large proportions of the elderly in Njombe and Iringa Regions respectively compared to other districts in the two regions. The proportion of the elderly in Makete District was 6.0% while that in Iringa District was 4.5% against the national elderly population of 5.5% (URT, 2008; URT, 2013). Makete District is one of 3 districts in the new Njombe Region; the region was established in 2013. Makete District is divided into 17 wards and Iringa District comprises 19 wards (URT, 2008; URT, 2013; URT, 2009).

2.3.2 Research design, sample size and sampling procedure

A cross-sectional study design and a multistage sampling technique were adopted in selecting the respondents. In the first stage the districts were selected purposively due to having relatively big proportions of the elderly. The second stage involved random selection of two wards from each district making a total of four wards. In the third stage, two villages were selected randomly from each ward making a total of eight villages. The villages selected were Nzihi, Kidamali, Kitayawa and Ndiwili from Iringa District; and Ludihani, Ndulamo, Ikonda, and Ihela from Makete District. The last stage involved purposive sampling of respondents. In this case only

the elderly aged 60 years and above were involved in the study. This was based on the Tanzania National Ageing Policy (URT, 2003), and the WHO (2006) which define the elderly as the persons who are 60 years old and above. Thirty (30) elderly were selected randomly from each village to make a total sample of 240 elderly for the study.

The sample size was justified on the fact that "too large a sample implies a waste of resources, and too small a sample diminishes the utility of the results" (Cochran, 1977, cited by Bartlett *et al.* (2001). It was also justified on the basis of arguments by Bailey (1994) that, regardless of the population size, a sample or sub-sample of 30 respondents is the bare minimum for studies in which statistical data analysis is to be done, and that if the population is small, the sample may even be 100% of the population (Bailey, 1994). The sample size of 240 households was big enough; it was much higher than the minimum sample size recommended. It is argued by de Vaus (2002), Kothari (2005) and Kimia (2008) that, regardless of the population size, the minimum sample size is 30 cases (respondents) for a research in which statistical data analysis is to be done

2.4 Data Collection

Primary data were the main source of information whereby quantitative data were collected using a structured questionnaire with both closed and open-ended questions for capturing data on the respondents' socio-economic characteristics and some health indicators like frequency of illness, chronic diseases, and health seeking behaviour. Furthermore, a self health rating scale was also constructed to determine

the respondents' health statuses. On the scale, a series of self-reported measures for functional limitations in performing activities for daily living (ADL) adopted from WHO (2006) and Global Health Action (2010) were used. These were limitations to: (a) bathing, (b) dressing, (c) feeding, (d) use of toilet, and (e) walking.

Focus Group Discussions (FGDs) were conducted using FGD checklist to obtain qualitative information from respondents. In each of the focus groups, the number of discussants was 8 to 10, which was within the range suggested by Bryman (2004), Masadeh (2012) and Fink (2009) that a typical focus group size should have 6 to 10 members. The explanation for this is that with fewer discussants difficult topics may not be discussed effectively, while with more discussants some participants may not give their opinions. FGDs allow participants to express their views, experiences, and feelings, and most of the time honestly (Ulin *et al.*, 2002).

Secondary information for the study was obtained from reports from different sources such as international and national reports such as NSGRP, PHDR, the national ageing policy and published journals.

2.5 Data Analysis

The primary quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) software, whereby data were analysed by computing descriptive statistics. Chi-squared test was used to determine the association between the elderly health status and their socio-economic variables. The dependent variable, perceived health status, was determined through respondents' self reported perceived health

status and was measured using three options, which were good, moderate and poor (Global Health Action, 2010).

For the ability to perform activities for daily living (ADL), each activity had a three-level score whereby, 0 denoted performing the activity with no difficulties, 1 denoted with some difficulties and 2 denoted with difficulties. The individual scores were added to form a scores ranging from 0 (minimum total score) to 15 (maximum total score). The mean, median, minimum, maximum and mean scores were computed. Thereafter, the mean scores were categorized into three categories. Those who scored below the median were categorized as healthy; those who scored at the median were moderately healthy; and those who scored above the median were poorly healthy.

For multivariate analysis, a multinomial logistic regression model was used to determine the influence of socio-economic variables on the respondents' health status. Multinomial logistic regression is the appropriate model for categorical outcomes with more than two categories. It was thus the appropriate model for the current study in which the dependent variable had three possible outcomes measured at the nominal level (Pallant, 2009; Field, 2013). In this model, the odds ratios for each variable were calculated at 95% confidence interval as an estimate of determinants of perceived health, and a p value of 0.05 was considered statistically significant. The formula given below was used for the model:

$$P(y) = \frac{e^{\alpha} + \beta_1 x_1 + \ldots \beta_k x_k}{1 + e^{\alpha} + \beta_1 x_1 + \ldots \beta_k x_k}$$ (Agresti and Finlay, 2009).

Where:

P (y) = respondents' perceived health status

e = the natural log

α = the intercept of the equation

β_1 to β_k = coefficients of the predictor variables

x_1 to x_k = predictor variables entered in the model (Apendix 4)

The socio-economic variables entered in the model were x^1 to x^8, where:

x_1 = Distance from a government health facility (kilometres) to home,

x_2 = Age (years)

x_3 = Monthly income (Tanzania Shillings)

x_4 = Education level (years of schooling)

x_5 = Health seeking behaviour (1= Government health facility, 0 = Others)

x_6 = Living arrangement (1 = living with others, 0 = living alone)

x_7 = Membership in socio-economic group (1= Member, 0= Not a member)

x_8 = Isolation from family members (1= Not isolated, 0= Isolated)

2.6 Results and Discussion

2.6.1 Respondents' health statuses

2.6.1.1 Distribution of respondents by selected health status indicators

During this study the elderly were requested to tell how often they fell sick in six months preceding the study. Nearly a half (46.7%) of the respondents had been very frequently sick in six months prior to the study, followed by 28.7% and 24.6% reported being frequently and rarely sick respectively (Table 1). This gives an implication that most of the respondents had health problems which were left

unattended. The most common three diseases causing morbidity among the elderly were malaria (41.7%), respiratory related diseases such as cold, cough, pneumonia (33.7%) and diarrhoea (24.6%) being the least common. Self-reported chronic morbidity was also assessed with a checklist of 5 sentinel conditions (Eye problem, Limb problems, Asthma, Diabetes, and Heart related problems). For each condition, respondents were asked to report whether they had experienced it in the six months prior to the study. The results show that about three-fifths (60.4%) of the respondents reported to have chronic diseases, with the main chronic disease being eye problems (16.6%), joint pain (16.2%), and asthma (15.8%). However, 39.6% of the respondents had no chronic diseases (Table 1).

The results revealed that frequent illness was a common phenomenon among the elderly in the study area implying that the health status of the majority was poor. These results are consistent with those from focus groups discussions (FGDs) in which the elderly insisted that repeated and prolonged suffering from a certain kind of disease deteriorated their health status.

These results are also comparable with those of some other studies; for example, results by Karl *et al.* (2003); Maureen (2004) and Pastory (2013) show that the majority of the elderly reported to have frequent illnesses. Also a study by Park (2014) and Jakobsson *et al.* (2007) revealed that most of the elderly were often ill. This is an important observation which denotes that the health status of the elderly is a multidimensional issue which can be measured by various indicators and in different ways. This may also suggest that some respondents were unable to receive

healthcare services due to low income and living far from health facilities, a situation which might lead to disease severity resulting to poor health.

Table 1: Distribution of Respondents by selected Health status indicator (n = 240)

Health related variable	n	%
Frequency of falling sick		
Very often	112	46.7
Often	69	28.7
Rarely	59	24.6
Total	**240**	**100**
Common diseases		
Malaria	100	41.7
Respiratory related diseases (cold, cough, pneumonia)	81	33.7
Diarrhoea	59	24.6
Total	**240**	**100**
Chronic diseases		
None	95	39.6
Eye problems	40	16.7
Arthritis (joint pain and paralysis)	39	16.2
Asthma	38	15.8
Diabetes	19	7.9
Heart related diseases	9	3.8
Total	**240**	**100.0**

However, during FGDs the discussants in different groups expressed that the existence of those difficulties might have bad effects on their health status. For example, one of the elderly commented that, *"...mobility is a major determinant of health and functional dependency"* Another old lady added that, *"...no mobility, no food, if you cannot move you will die of hunger"*. This implies that difficulty in walking means failure to do the activities for daily living (ADL) and hence uncertain life sustenance.

2.6.1.2 Respondents' self rated ability to perform activities for daily living

The results show that the elderly faced difficulties in performing activities for daily living (ADL) at different levels. It was revealed that the leading difficult activity was walking (46.7%) followed by use of toilet (44.2%), dressing (40.4%), eating (37.1%), and the least was bathing (14.6%) (Fig. 1). Similar findings have been reported by Jakobsson *et al.* (2007) and Boateng (2013) where they found that the most limiting condition in daily living among the elderly was mobility. They also add that the elderly who had mobility limiting conditions perceived themselves unhealthy.

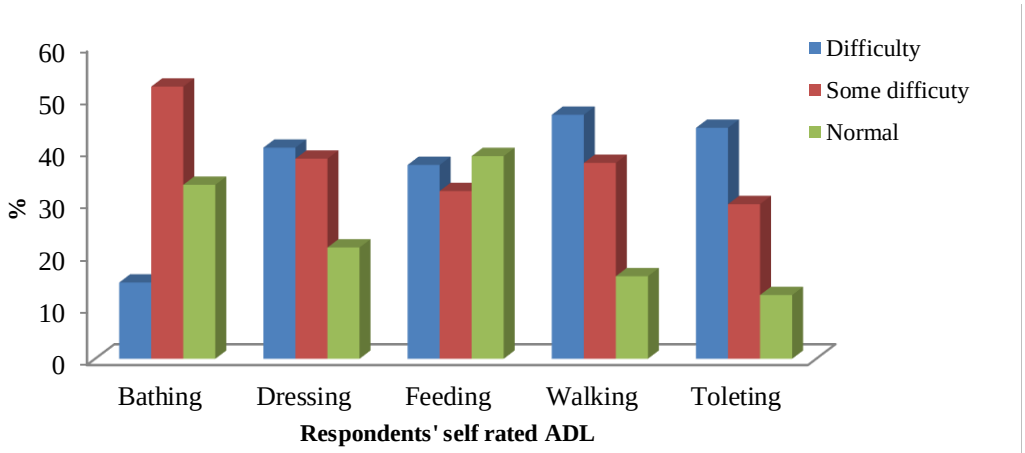

Figure 1: Respondents' Self rated ADL performance (n=240)

Graf (2008) asserts that measuring activities of daily living identifies a person's baseline functional status, including the components of mobility. It also can provide baseline information on a patient's response to treatment of acute illness. In the focus group the elderly also remarked that they were perceived as useless by the society because of their health conditions. ... *"...many people in our society do not value old persons",* was a unanimous response from almost all the focus groups.

They attributed the lack of recognition to their poor health status and the declined social norms. Moreover, the elderly commented that the lacked recognition from the local government leaders as they blamed them for not recognising their presence and their needs.

2.6.1.3 Respondents' self perceived general health statuses

Respondents self reported health was assessed by requesting them to report the way they perceive their general current health status. Responses were good, moderate, or poor health. Almost a half (49.6%) of the respondents reported their general health status to be moderate, followed by those who perceived it to be poor (34.6%), very few (15.8%) perceived their health good (Fig. 2). Such results of self perceived health status may reflect aspects of health issues such as disease prevalence, disease severity, and undiagnosed diseases that could be captured by using more objective measures of health status. Self perceived good health status is an indicator of lower risk of frequent illness and mortality while moderate or poor self perceived health status may be a good predictor of subsequent illness and early death.

The results are nearly similar to those of Waweru *et al.* (2003) in their study in Kenya with more than three-fifths (63.2%) of the elderly interviewed reporting their health to be poor, of whom 92.5% reported to have been sick in three months prior to the study. Boateng (2013) in her study on self-perceived health status among older people in Ghana found that 57.8% of the elderly reported their health to be poorest. The similarity of these results might be due to the locations of the study areas as all are located in the sub-Saharan region where the elderly are more prone to unattended health related problems compared to their counterparts in developed

countries (Help Age International, 2002; Global Health Action, 2010). Although some researchers, Hambleton *et al.* (2005) suggest that people's judgment about their health is too subjective, others (Help Age International, 2002; United Nations, 2009b; Global Health Action, 2010) note that self reported health status is now among the most common measures used in public health surveys. Global Health Action (2013) and Graf (2008) add that self-perceived health status represents respondents' physical, emotional, and social aspects of health. It has been found to be a good predictor of future health-care use and as a good indication of the burden of diseases in communities. Therefore, it can be used by healthcare systems as a baseline in monitoring of morbidity and mortality rates in communities.

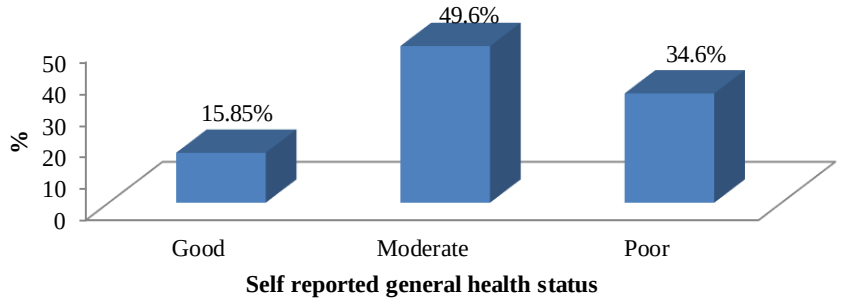

Figure 2: Respondents' perceived general health status (n=240)

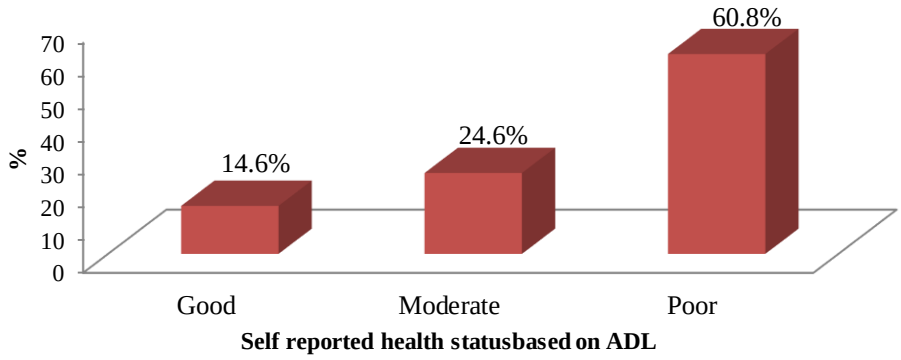

Figure 3: Respondents' self reported health status based on ADL (n=240)

The results from the self perceived health status by general rating (Fig. 2) were different from those obtained using the elderly ability to perform their activities for daily living (ADL) scale (Figure 3). The total scores for ADL ranged from 1 to 10. Thereafter the mean scores were calculated and they ranged from 0.2 to 2.0, with a median of 1.2. Therefore, respondents who scored above the median were categorised as poor healthy, those who scored at the median were of moderate healthy, and those who scored below the median were of good health.

The results show that 60.8% of the respondents scored above the median (1.3 – 2.0), therefore they had poor health, 24.6% scored at the median (1.2), therefore had moderate health, and 14.6% scored below the median (0.2 – 1.1), therefore had good health (Fig. 3). The latter shows a greater magnitude of the respondents who had poor health compared to the results obtained from the respondents' self reported general health status (Fig. 2). This inconsistency might be due to the fact that self reported general health status generalises the multiple dimensions of health (physical disability and morbidity dimension). Another reason might be due to respondents' low knowledge about the own health conditions, which might had affected their subjective reports of their general health statuses, leading to such variations. Less contact with the health care services might lead to ignorance of their general health.

On the other hand it can be explained that ADL scores might capture levels of health status better than self reported general health status because every indicator in ADLs is individually rated. This enables a respondent to state the level of limitation his/her ability in performing certain tasks which are important in daily living. In this case, bathing, dressing, feeding, use of toilet, and walking. Therefore the ADLs results

(Fig. 3) were considered more reliable than the former (Fig. 2) and hence formed a basis for reporting health status of the respondents in the study area. However, there was no significant association between respondents' perceived health statuses and access to free health services ($p > 0.05$). This means that health status access of the elderly did not matter whether the elderly had free health services or otherwise.

2.6.2 Respondents' socio-economic characteristics

2.6.2.1 Respondents' distance from a functional health facility

The findings showed that more than a half (55.0%) of the respondents lived within 1 to 5 km away from a functional health facility, which is the recommended distance from the nearest health facility in Tanzania (URT, 2005). This implies that the government of Tanzania has made efforts to place health facilities closer to people, although still a large (32.1%) proportion of the elderly in the study area lived beyond the recommended distance (5km). Sabates and Feinstein (2004), in their study on the effect of spatial allocation of hospitals and health centres, found that long distances from health facilities reduce access to health services and hence exacerbate health status of individuals. During focus group discussions, some of the elderly also revealed that they failed to travel to the health facilities and seek health services due to long distances they had to walk and lack of financial resources for transport. Similarly, Nemet and Bailey (2000), in their study on health issues among the elderly, reported that the elderly who lived in rural areas within long distance from health services reported to have less access to health services that might have worsened their disease conditions and hence poor health.

2.6.2.2 Age of respondents

The respondents' ages ranged between 60 and 98 years with a mean age of 73.0 years and a standard deviation of 9.22. More than a quarter (27.9%) of the respondents were between 70 and 75 years of age followed by those aged 76 to 80 years (Table 2). Jacobson *et al.* (2007) also found that an increase in age reduces physical capabilities, which undermines health and so calls for an increase in demand for access to health services. This implies that, as the elderly become older, they become more seekers of health services. The situation also might be explained that the more one becomes older he/she may be treated for free due to inability to pay for the services. Contrary to these results, Chiu (2003) in his study on inequalities of access to health screening for the elderly, found that among the variables shown to have a consistent negative effect on access to health services was age. He found that the more one becomes older the less one accesses health services due to neglect and discrimination by family members.

2.6.2.3 Respondents' level of education

The study revealed that slightly more than a half (57.5%) of the respondents did not attend any formal education, while less than one fifth (6.7%) attended secondary schools and/or colleges. This implies that formal educational attainment in the study area was very low. Education is an important in health issues as one is likely to be more knowledgeable on means of disease prevention, treatment, and live in a clean environment. It was also found by Jacobsson *et al.* (2007) in their study of the quality of life of the elderly that education had positive contribution to the health status of the elderly.

Table 2: Distribution of Respondents' Socio-economic Characteristics (n = 240)

Variable	n	%
Distance from HF		
Less than 1km	25	**10.4**
1 to 5km	132	55.0
6 to 10km	77	32.1
More than 10km	6	2.5
Total	**240**	**100**
Age		
60 – 64	44	18.3
65 – 69	42	17.5
70 – 75	67	27.9
76 – 80	46	19.2
81 and above	41	17.1
Education level		
Never gone to school	138	57.5
Adult education	53	22.1
Primary education	33	13.7
Secondary education and above	16	6.7
Total	**240**	**100**
Income (TZS)		
Below 20,000	79	32.9
20,000 to 40,000	105	43.8
41,000 to 60,000	39	16.2
61,000 and above	17	7.1
Total	**24 0**	**100**
Main sources of income		
Self (IGA/Employed)	160	66.7
Pension schemes	27	11.2
Remittances	43	17.9
Charity/gifts	10	4.2
Total	**240**	**100**
Health seeking behaviour		
Government HF	165	68.8
Private HF/bought	13	5.4
Traditional herbalist	21	8.8
Spiritual prayers	20	8.3
Self treatment with herbs	21	8.8
Total	**240**	**100**
Living arrangement		
Living alone	32	13.3
Living with g/child. Only	80	33.3
L/partner only	23	9.6
L/ with partner & relatives	105	43.8
Total	**240**	**100**
Membership in socio-economic group(s)		
Member	76	31.7
Not a member	164	68.3
Total	**240**	**100**
Isolation by family members		
Isolated	126	52.5
Not isolated	114	47.5
Total	**240**	**100**

TZS = Tanzania shilling; USD 1 = TZS 1852.05 in March 2015, Source: Bank of Tanzania (BOT)

The results might also suggest that higher education level might give more opportunities for formal contract employment which might lead to higher and income security that might enable the highly educated elderly to easily seek health services and pay for the services.

2.6.2.4 Respondents' monthly income and their sources

The results show that the respondents' monthly income ranged from TZS 3000 to TZS 200 000 with a mean monthly income of TZS 28 538 and a standard deviation of TZS 22 019.36. More than two-fifths (43.8%) of the respondents earned income between TZS 20 000 to 40 000 per month. Very few (7.1%) of them earned the highest income (Table 2). More than three- quarters (77.9%) of the respondents earned their income from own sources. During focus group discussions it was revealed that the main self-sources of income were agriculture, timber selling, handcrafts, selling medicinal herbs, and others earned from pension schemes.

Moreover, some reported to earn income from contract employments such as security guards and casual labourers. Other income sources included remittances and gifts or charity as seen in Table 1. It was revealed during focus group discussions that the money from these sources came from their children, relatives, and good Samaritans (neighbours and church members). The results imply that the elderly in the study area were actively working to generate income for sustaining their living. This is due to the fact that most of them had lost their children due to HIV/AIDS as it was reported during focus group discussions. The elderly also added that whether they liked it or not they had to work to earn some income because some of them had their grand children to take care. These results conform to results of some other

studies (Banerjee *et al.,* 2010; Kumar and Kumar, 2012) which also revealed that the majority of the elderly had their own sources of income from different activities they were doing. These differences might be due to variations in locations of the study areas; the former studies were conducted in Europe while the latter were conducted in India in which the economic status might be more or less similar to the research areas for the current study. Karl *et al.* (2003), in their study on of self rated health among the Latino elderly, found that poor health perception was high among the financially underprivileged elderly in rural areas.

2.6.2.5 Respondents' health service seeking behaviour

Majority (68.8%) of the respondents usually sought health services from government health facilities when they felt a need (Table 2). Others sought health services from traditional herbalists (8.8%), some treated themselves with herbs (8.8%), other went to spiritual prayers (8.3%) and the rest went to private health facilities (5.4%). These results suggest that the respondents were able to seek health services in different health facilities when they fell sick. During FGDs almost all the respondents in different group discussions reported to start with self-medication and if there was no improvements they had to go to go different places which they mentioned above. The main reasons given for this behaviour were financial constraints and frustration in the health facilities. One of the elderly commented that ...*"...we are discriminated against and disregarded in favour of the younger persons; we feel pushed to our graves"*..., implying that the elderly were unable to easily pay the health services costs in the study area.

2.6.2.6 Respondents' living arrangements

About forty four per cent (43.8%) of the elderly were living with their partners and other relatives, while one-third (33.3%) lived with grand children (Table 2. During FGDs it was revealed that most of the relatives whom the elderly lived with were either too young or too sick to support them, and therefore most of the relatives became dependent on the elderly. This is due the fact that the two districts are among those that have been badly hit by HIV/AIDS in Tanzania (URT, 2008), which has increased the burden to the elderly to care for the sick and young children.

2.6.2.7 Respondents' membership in socio-economic groups

Less than two-fifths (31.7%) of the respondents belonged to socio-economic groups such as church groups, peer groups and income revolving fund groups, while majority (68.3%) of them did not belong to any socio-economic group. Lack of resources was the main reason revealed in FDGs for the elderly not joining any socio-economic groups. The elderly commented that most of the groups required the group members to contribute some money for either revolving fund or helping one another in case of critical problems such as illness, death of close relatives or church members. Contrary to the results, Waweru *et al.* (2003) found that in Kenya, the majority of the poor elderly joined socio-economic groups. This difference might be due to variation in location and differences in socio-economic statuses of the respondents. More than a half (52.5%) of the respondents felt isolated from family members. During FGDs, one of the elderly commented that *"....we have children, relatives and neighbours, but when we become sick it is as if dying is our right..."* Another one added that, *"... most of the people in our communities do not value us. ...one time I wanted to join a social group which constituted the youth; they abused*

me by saying that I go to my fellow elderly because I did not have money..." Social isolation has been linked to worse health across all age groups, but risks posed by social isolation may be particularly severe for the elderly (Cacioppo and Hawkley 2003; Tomaka *et al.,* 2006). This is because the elderly are likely to face stressful life, health problems, and disabilities in the course of transition (Mulvaney *et al.*, 2007). In this study, isolation was determined by lack of social relationships, low levels of participation in social activities, low level of interaction with family members (loneliness), and lack of social support as it was defined by respondents' during focus group discussions.

2.6.2.8 Respondents' isolation from family

It was found that nearly a quarter (22.5%) of the respondents claimed isolated by family members, of whom 61.9% were women. This implies that the African family structure has changed in such a way that fewer younger people are willing to take care of the elderly. This has led to an alarming number of the elderly being isolated and abandoned with no support to enable them to have access to health services. Kaseke (2003) points out that in many cases the elderly are more susceptible to all forms of abuse, assaults and murders at the hands of those from whom they should expect support and protection, including sons.

During interviews with health workers they also added that they did not prefer to attend the elderly people, because the elderly people were considered time consuming and disturbing as most of the time they demanded for free health services while the health workers could not provide them. In all focus group discussions the elderly also revealed that when they fall sick they are left with no support from

younger family members and other relatives. *"....we are just left to die as if we did not bear children..."* one lady commented in FGD in Makete. Therefore, in the elderly were unable to visit health facilities due to lack of financial support. HAI (2002) adds that adequate policies and legal frameworks that can protect the rights of the elderly are missing in the majority of African countries which has left the elderly with discrimination and isolation.

2.6.3 The influence of socio-economic factors on the elderly health status

Multinomial logistic regression was used to test the hypothesis that the health status of the elderly with different socio-economic characteristics is the same. The β-coefficients (positive or negative) measured the directions of the predictor variables' impacts; the Wald statistics measured the magnitudes of their impacts; the p-values tested the significance of their impacts, and the odds ratios (EXP (B) values) predicted how much a predictor variable had chances on changing the respondents' responses on their health statuses relative to the other variables (Table 3). The model is appropriate when the outcome is a categorical variable with more than two categories and the predictors are of any type: nominal, ordinal, and / or interval/ratio (Agresti and Finlay, 2009; Bayaga, 2010). In this case the three categories of the outcome were good health, moderate health and poor health. The overall model fit containing all the socio-economic predictors was statistically significant ($p < 0.001$), indicating that the model was able to predict self perceived health status as good, moderate and poor. The Nagelkerke R^2 was 0.630, implying that the independent variables entered in the model explained 63% of variance in the respondents' health status (Pallant, 2010; Schwab, 2007).

A positive ß-coefficient of a variable implies that the variable increased the respondents' likelihood to perceive his/her health moderate or good against poor, while a negative ß-coefficient implies the opposite. The odds (β) values and odds ratios (Exp (B) values) indicate that all the socio-economic predictors had influence on the respondents' self perceived health statuses (Table 3). Distance and age had negative coefficients (β), -14.917 and -0.003 respectively, implying that the predictors had negative influence on respondents' health statuses. The odds ratios indicate that an increase in distance by one unit (km) reduced the odds ratio of a respondent perceiving moderate rather than poor health status by 12 while age reduced it by one km.

Also a respondent was 8 times less likely to perceive his/her health good rather than poor when the distance from a health facility increases by 1 km. In other words, the risk of respondents who lived far from a functional facility perceiving poor health status was higher than those who lived near to such a facility. The results also show that as the age increased by a year, a respondent was one time less likely to perceive his/her health status moderate or poor rather than good, meaning that as the respondents grew older, they were more likely to perceive their health status poor. The World Health Organisation (2006) confirms that chronic diseases are more prevalent among older population.

Moreover, other studies (Cacioppo and Hawkley 2003; Tomaka *et al.*, 2006) confirm that illness in old age is greater and basically arises from ageing and the cumulative degenerative process. Boateng (2013) also supports that age seems to be

a significant explanatory variable, suggesting that health deteriorates as one gets older. Education level and income had positive β-coefficients (3.4 and 1 respectively) indicating a positive influence on respondents' self perceived health status. As a respondent spent one more year on schooling he/she was ten times more likely to perceive his /her health moderate rather than poor health.

Table 3: Multinomial logistic regression results on the influence of SE variables on the elderly's health status (n = 240)

Perceived Health status using ADL	Socio-economic Variable	B	S.E	Wald	df	Sig.	Odds Ratios
	Intercept	**4.024**	**1.455**	**7.645**	**1**	**0.006**	
	Distance from health facility	-14.917	1.013	16.669	1	0.000	12.141
	Age	-0.003	0.016	1.861	1	0. 031	1.003
	Years of schooling	3.419	1.354	6.378	1	0.012	10.535
Moderate health	Income	1.003	0.120	2.822	1	0.003	1.000
	Health care seeking behaviour						
	Health service from public	1.133	0.602	3.545	1	0.050	3.322
Vs	Health service from others	-1.741	1.097	2.521	1	0.112	5.704
	Living arrangement						
	Living alone	-1.437	0.954	2.265	1	0.132	0.238
Poor health	Living with spouse and others	0.729	0.604	1.457	1	0.022	0.482
	Membership in SE groups						
	Member of SE group	2.509	0.792	4.042	1	0.002	4.081
	Non member of SE group	-0.180	0.477	6.127	1	0.013	3.255
	Isolation from family members						
	Not isolated	0.945	0.566	2.669	1	0.041	1. 844
	Isolated	-1.873	0.744	4.237	1	0.023	2.233
	Intercept	**11.318**	**3.240**	**29.333**	**1**	**0.000**	
	Distance from health facility	-11.504	0.092	5.463	1	0.003	8.031
	Age	-0.019	0.021	1.778	1	0.038	1.019
	Years of schooling	9.384	0.756	7.119	1	0.000	2.620
	Income	1.330	0.001	1.322	1	0.013	0.941
	Health care seeking behaviour						
Good health	Health service from public	1.398	0.703	3.957	1	0.047	2.247
	Health service from others	-1.087	0.909	1.429	1	0.232	0.337
	Living arrangement						
Vs	Living alone	-2.703	1.045	6.695	1	0.010	1.067
	Living with spouse and others	1.813	0.739	6.023	1	0.014	3.163
	Membership in SE groups						
Poor health	Member of SE group	1.760	.867	5.116	1	0.042	5.811
	Non member of SE group	-1.463	.635	4.297	1	0.021	4.317
	Isolation from family members						
	Not isolated	1.878	0.851	4.869	1	0.011	2.584
	Isolated	-2.575	0.897	8.237	1	0.004	3.882

Similarly, an increase in the same variable increased the odds ratios of a respondent perceiving his/her health good rather than poor by two times more. This may be explained on the basis that, highly educated elderly were likely to have more knowledge on means of preventing and treatment of diseases. The findings from FDGs further revealed that educational attainment was associated with higher incomes and knowledge of diseases which enabled the more educated respondents to easily access healthcare services because they had more money. For example, during FGDs the elderly commented that *"....we even do not know how to read, how can we argue with the nurses; they just talk, talk ... but our fellows who are educated can argue with them because they also have money which they get from pension and contract work."* Others added that "*...we are really suffering, and our ignorance makes us suffer more"*

Doumita and Nasser (2010), in their study on quality of life and wellbeing of the elderly, found that education was inversely related to the incidence of disease among the elderly. A study by Karl *et al.* (2003) also indicates that lower educational attainment is linked to poor health.

Increase in income by one unit (TZS) increased the likelihood of a respondent to perceive his/her health to be good. This implies that income is related to access to health services, meaning that respondents with higher income were capable of paying for health services in case of illness and being able to travel to a health facility for health services. As a result, they remain relatively healthier. This is because getting treatment timely reduces the severity of illness and hence reduction in the odds and odds ratios of poor health. Other studies (United Nations 2009a;

Hambleton *et al.*, 2010; Boateng, 2013; Jakobsson *et al.*, 2007) also conform to these results as they found that income was a significant predictor of health status whereby respondents with lower income were less likely to consult physicians than those with higher income hence poor health.

The β values and the odds ratios also show that the elderly who sought healthcare from public health facilities were three times and two times more likely to perceive their health moderate rather than poor and good rather than poor respectively (Table 3). The results might be due to the fact that in public health facilities the health care services are usually cheaper than in private ones. This was also revealed in FDGs whereby discussants pointed out that although the majority of them had to pay for the services, the costs were lower in public health facilities than in private ones. The implication of this is that the lower the cost for health services the more possibilities of accessing the services and hence the more one is likely to perceive good health.

Living arrangement also had an influence on the respondents' perceived health status. The elderly who lived alone were one time less likely to perceive their health good rather than poor, while those who lived with their relatives were three times more likely to perceive their good rather than poor. This suggests that the elderly who lived alone were more vulnerable to ill health and other hardships. Other studies (Waweru *et al.*, 2003; Banerjee, *et al.*, 2010) also show that the elderly living alone are more likely than those living with a partner or in a multigenerational household to be lonely and depressed which affects their health status negatively and worsens the condition of illnesses. In FGDs some elderly who lived alone stated that

they were frustrated and tired of living alone as they had not spoken to their close relatives like children for more than week prior to the discussion date. Others commented that *"... life has become a routine revolving around cooking, eating and washing, which affect our emotional health... we are tired of living alone"*. One of the added that *"...I have not spoken to neither my children nor my close relatives... they do not want to see me because I have no money, if I had money they would come to visit me"*.

Membership in socio-economic groups also influenced the way respondents perceived their health status. The respondents who were members of socio-economic groups were 4 times and about 6 times more likely to perceive their health moderate and good rather than poor respectively. Those who were non-members of socio-economic groups were three and four times less likely to perceive their health moderate and good versus poor respectively. During FDGs the respondents revealed that they joined socio-economic groups to generate income, facilitate interactions, and for spiritual well being, which are important for social health. They also added that the group members supported them in case of hardship or in need of money when they fell sick. Contrary to findings in a study carried out in South Africa, the elderly were not accepted in socio-economic groups because they were perceived to be not useful (Global Health Action, 2010).

Isolation from family members had negative influence on respondents' health statuses. Respondents who were not isolated by family members were two times more likely to perceive their health to be moderate or good rather than poor. Those who were isolated were two times and four times less likely to perceive their health

status moderate and good versus poor respectively. This has an implication that respondents' social connection to family members was more important for their health outcomes. This is because lack of that may result in loneliness and lack of social support and hence poor health outcomes. During FDGs the elderly pointed out that some of them were isolated by their family members, a situation which made them feel lonely, worried, and depressed "*...when you are isolated you do not have any one to open up your needs, your worries, and your problems...",* said a 75 years woman*..."*, also *"...you have no one to talk to, you feel like dying...",* added another elderly (80 years). Similarly, Cacioppo *et al.* (2006) found that social isolation among the aged people had strong negative impact on their health status.

2.7 Conclusions and Recommendations

In view of the majority of the elderly having poor health status, the study concludes that the elderly in the study area lack adequate healthcare services, something which exposes them to higher risks of subsequent illness and early death, adding a burden of diseases in the study areas. It is recommended that the government of Tanzania, through the Ministry of Health and Social Welfare and other stakeholders, should ensure that the elderly are provided with adequate health services. This should be based on the National Ageing Policy and the National Strategy for Growth and Reduction of Poverty which stipulate that the elderly would be provided with adequate health services for free.

Socio-economic factors such as longer distance from health facilities, low income, and old age expose the elderly to higher risks of morbidity. It is recommended that the government of Tanzania; through the Ministry of Health, Community

Development, Gender, Elderly and Children; should ensure that the elderly receive health services at short distances such as within 1 to 5 km from where the elderly live. The use of mobile health services to the elderly, as it is done for maternal and child health services in some places, it is also recommended in order to bring health services closer to the elderly. Furthermore, the government of Tanzania should immediately establish a pension scheme for the elderly to facilitate them with subsistence income so that they can afford paying for transport to hospitals whenever they are required to do so. Variables like healthcare seeking behaviour and living arrangement had influence on the health status of the elderly. It is recommended that local government authorities, NGOs and other stakeholders should collectively make efforts to sensitize family members in order to reduce discrimination against the elderly by family members and other relatives. The authorities also should establish elderly and orphanage centres to make sure that the elderly receive all the necessary care required to reducing the burden of the elderly to care for the orphan grandchildren in the study area.

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CHAPTER THREE

3.0 Quality of Health Services Received by the Elderly and its Association with their Access to FHS in Iringa and Makete Districts, Tanzania

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3.1 Abstract

Health, being a crucial subject not only for healthy living but also for better livelihood, should have its quality measured objectively so that attention of policy makers, health providers, and other stakeholders can be drawn to benefit health service users. The study was conducted in Iringa and Makete districts with the purpose of determining the quality of health services the elderly receive in the study area. Specifically, the study sought to: (i) determine relative importance of service quality dimensions as viewed by respondents, (ii) determine the respondents' perceptions and expectations of health service quality (iii) Establish the health quality association with the elderly access to free health services. A cross-sectional research design was used for the study. Purposive and simple random sampling techniques were used to select 240 elderly from Iringa and Makete Districts,

Tanzania. Among the five dimensions (tangible, reliability, responsiveness, assurance, and empathy) that were used to measure health service quality, tangibles dimension was the most important dimension that affected respondents' perceptions. The maximum (-1.46) and minimum (-0.56) service quality gaps were for reliability and empathy, and tangibles respectively. The difference between the expectations and perceptions of the respondents was statistically significant in all of the five dimensions with p-values ranging from 0.000 to 0.002. It is concluded that all the servequal dimensions adapted were viewed important in measuring health service quality. The Ministry of Health and Social Welfare and other stakeholders should pay attention to the dimensions during health service provision to the elderly. The services quality expected by respondents was not met and it was significantly associated ($p \leq 0.05$) with the respondents' access to free health services. Also, there were significant gaps in all dimensions implying poor quality of health service. Therefore, health service providers should improve their health service provision practices to meet the respondents' expectations and hence improve the health service quality.

Key word: Elderly, Health, Quality, Service, Perception, Expectation

3.2 Introduction

Human health has been a prime factor in sustainable development of the society, irrespective of the developmental status of the society or the country. The health care system of any country has an important role to play for sustainable health management. On the other hand health service quality has become an important phenomenon in order to meet the health care users' expectations. Parasuraman *et al.*

(1985) define service quality as the degree and direction of discrepancy between consumers' perceptions and expectations in terms of different but relatively important dimensions of the service quality, which can affect their future behaviour. Sharma and Gadenne (2001) and West (2001) define service quality as the demands of customers whereby customers' perceptions and expectations are the main elements of quality. Hence, responding to the customers' expectations has an important role in improving the quality of services and increasing the satisfaction of consumers. This study adapted the definition of services quality as defined by Parasuraman *et al.* (1990). Therefore, the operational definition of service quality is the degree of discrepancy between the perceptions and expectations of the elderly on the health services they received. This is based on different but relatively important dimensions of the health service quality that can affect their health seeking behaviour.

Determining and meeting consumers' service expectations is a key to make them satisfied. It requires surveys and researches as key vehicles for understanding customer expectations and perceptions of services. Health, being a crucial subject not only for healthy living but also for better livelihood, should have its quality measured objectively so that attention of policy makers, health providers, and other stakeholders can be drawn to benefit from health service users (Tazreen, 2012). However, it is asserted by Farid (2008) that measuring service quality has always been a challenge for service providers because of the intangible and most notably the inseparable and heterogeneous nature of service. Douglas and Connor (2003) add that health service quality is a difficult concept to quantify. However, in the pursuit

of strategies to improve the quality of service and to achieve consumer satisfaction and loyalty, the measurement of health service quality is essential. In the health sector the importance of health services and their relation with human life, quality assurance and quality promotion have increasingly caught the attention of patients having increasing expectations from hospitals and other health providing organizations (Sadigh, 2003).

Ladhari (2009) asserts that measuring of health service quality will work towards developing a measurable scale that can be used to evaluate consumer expectations and perceptions from healthcare service providers and thus be used as a valuable tool to identify and raise the level of services in areas that need to be addressed. A number of issues including human resource imbalances and financial constraints significantly affect the ability of health systems to deliver the expected services to consumers (NIMR, 2006).

According to Douglas and Connor (2003) and Saravanan and Rao (2007), service quality is an important area for practitioners because the needs for survival and growth in an increasing competitive service are main critical factors in provision of better services and achieving consumer satisfaction. Researchers have proven that providing good service quality to consumers enhances organization image, positive word-of-mouth recommendation and above all guarantees survival and continuity of the service (Negi, 2009; Ladhari, 2009).

Various models have been developed to measure service quality either by attitude-based measures or disconfirmation models. According to Shahin (2005), it is very important to measure service quality because it allows for comparisons, identifies quality related problems, and helps in developing clear standards for service delivery. Numerous researchers have stressed the importance of improving the level of healthcare service quality in the health sector (Vukmir, 2006; Berkowitz, 2006). This is because examining health service users' views, health services providers can assess overall quality of service and also identify the key dimensions on which to focus quality improvement efforts (Lim and Tang, 2000). Therefore, healthcare service quality has to be addressed in a comprehensive model that incorporates all dimensions of value to patients.

Table 1: Description of the five Servqual Dimensions used in the study

Dimensions	Dimensional elements
Tangibles	Adequacy of equipment (TAN1), appearance of service rooms (TAN2) and neatness of health personnel (TAN3)
Reliability	Ability to perform the promised service (REL1) ,dependability of health personnel (REL2) and keeping the elderly informed on health service issues (REL3)
Responsiveness	Readiness to provide prompt services (RES1), willingness assist the elderly (RES2), and responding to the elderly health needs (RES3),
Assurance	Ability of health personnel to inspire confidence to the elderly (ASS1), the elderly feeling safe (ASS2) and consistence of health personnel in provision of health services (ASS3)
Empathy	Health personnel attention to the elderly (EMP1), health personnel caring of the elderly (EMP2) and understanding the elderly health demand (EMP3)

Source: Adapted from Parasuraman *et al*. (1991)

Parasuraman *et al*. (1991) undertook a series of research which gave birth to the service quality model (servequal model). Initially, the model was based on 10 dimensions of service quality, but later it was reduced to five dimensions, encompassing: tangibles, reliability, responsiveness, empathy, and assurance (Table 1).

The model measures customers' expectation and customers' perception of a service provided by an organization. To assess service quality, the gap for each dimensional element is calculated based on the respondents' perception and expectation scores. The positive gap score means that customers' expectations are met or exceeded their perceptions, while the negative score means the opposite. The use of servqual dimension seems to be most effective in financial services, health care and education sector (Parasuraman *et al*., 1985; Dursun and Cerci, 2004).

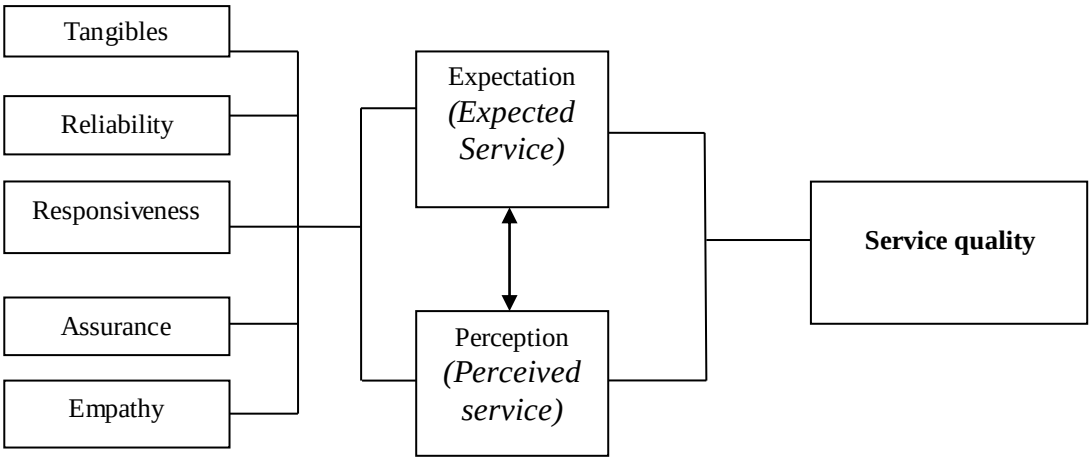

Figure 1: Conceptual Framework of servqual Model

Source: Modified from Kumar *et al.* (2009) and Parasuraman *et al*. (1985

In Tanzania, like in other countries, the overall healthcare demand appears to increase significantly with increasing age (Munga, 2004; URT, 2003). This calls for

the importance that the elderly are provided with health services to improve not only their living health but also their socio-economic wellbeing (Mwanyangala *et al*., 2010). Although many empirical studies have been done for evaluating the quality of health services in developed and some developing countries (Farid, 2008; Sadigh, 2003; EMRO, 2008 Lim and Tang, 2000), limited empirical researches in this area have been carried out in Tanzania particularly for the elderly. Few or no attempt has been made to measure the quality of health service by empirically investigating the expectations and perceptions of health services the elderly receive.

This study results serve policy makers and health service providers identify the service quality gaps in provision of health services to the elderly in the study area. The main objective of this study was to determine the quality of health services the elderly receive in the study area. Specifically, the study sought to: (i) determine the relative importance of service quality dimensions as viewed by respondents, (ii) determine the elderly's perceptions and expectations of health service based on the servqual model dimensions and (iii) determine the quality gap of health services the elderly receive. It was hypothesised that the difference between the elderly perceptions and expectations on health services received would be zero.

3.3 Methodology

3.3.1 The Study Area

The study was conducted in Iringa and Makete districts, Tanzania. The two districts were selected due to the larger proportions of the elderly they have, which were 4.5% and 6.0% Iringa and Makete in respectively (URT, 2008; URT, 2013). Iringa district borders with Mpwapwa District (Dodoma Region) to the North, Kilolo

District in the East, Mufindi District to the South, Chunya District (Mbeya Region) to the west and Manyoni District to the North West. It lies between latitudes 7°.0 and 8°.30 south of the Equator and between longitudes 34° and 37° to the east of Greenwich. The status of health services in any district can easily be visualised through health infrastructures, availability and commitments of health practitioners, implementation of preventive and curative measures and availability of medicines. In terms of health infrastructure Iringa District has managed to raise its ratio of facilities per ward from 1.9 in 2008 to 3.1 in 2012 while the pressure of villages on facilities was reduced from 2.6 villages per facility in 2008 to 1.6 in 2012 (URT, 2013). The district has a hospital, 8 health centres and 68 dispensaries. However, the district still has shortages of health centres and dispensaries which cause unnecessary loss of peoples' lives through disease that could be prevented.

Makete District is one of 3 districts in the newly established Njombe Region. The district lies adjacent to the North shores of Lake Nyasa, separated by a steep escarpment, and it stretches slowly into the lower and flatter lands of Njombe District on the Eastern side. The district is bordered by Njombe District to the East, Mbarali District to the North, Ludewa, Lake Nyasa to the South, and Rungwe District to the West. It is located between 1 500m and 3 000ma.s.l. In Makete district the HIV/AIDS pandemic, among others, has shown negative impact to morbidity and mortality in general since the orphaned and widowed rates recorded the highest in the region, 4.6% and 6.2% respectively. The health situation of the people in the district is also observed on other proxy heath indictors such as Infant Mortality, Children Under Five years Mortality, HIV/AIDS prevalence, Doctor/population

(11 800 people per doctor), and hospital bed/population (245 patients per bed) (URT, 2008).

3.3.2 Research Design, sample size and sampling procedure

The study adopted a cross-sectional study design. A multistage sampling procedure was adopted in the selection of the respondents. The two districts were selected purposively followed by a random selection of two wards in each district (Nzihi and Kitayawa wards in Iringa District) and Iwawa and Tandala wards in Makete District. Eight villages (two villages in each ward) were randomly selected. Lastly, 30 elderly aged 60 years and above were purposively selected from each village making a total sample of 240 respondents. de Vaus (2002) and Kothari (2005) argue that, regardless of the population size, the minimum sub-sample size of 30 cases (respondents) is the acceptable minimum sample for studies in which statistical data analysis is to be done. Therefore, the 240 sample was big enough for statistical analysis.

3.3.3 Data Collection

Data were collected quantitatively using a structured questionnaire. The questionnaire was divided into two parts of questions. The first part aimed at seeking opinion of the elderly on the relative importance of the service quality dimensional statements in health service provision. Respondents were required to rank the importance of each servequal dimension in measuring service quality whereby 3 denoted most important, 2 denoted important and 1 denoted least important. The second part of the questionnaire comprised a seven-point scale with five service quality dimensions with 15 dimensional statements adapted from servqual model

that was developed by Parasuraman *et al.* (1985) (Table1). This part was aimed at finding the respondents' level of expectations and perceptions of the quality of health services received.

3.3.4 Data Analysis

Data were analyzed using SPSS descriptive statistical analysis whereby frequencies, percentages, and means were generated to determine the relative importance of the quality dimensions as viewed by respondents. To assess service quality, the gap for each statement from the servqual dimension was calculated based on the respondents' perceptions and expectations scores. The positive gap score meant that respondents' expectations were met or exceeded their perceptions, while the negative score meant the opposite. The services quality gap was calculated using servqual equation: Service Quality (SQ) = Perception (P) - Expectation (E). Inferential analysis was done using Wilcoxon signed-rank test in order to compare respondents' perception and expectation scores of the servqual dimensions based on respondents' mean scores on health service quality.

3.4 Results and Discussion

3.4.1 Respondents' scores on the importance of servqual dimensional elements

The results indicate that the respondents viewed all the five servqual dimensions important, although the scores on the importance varied among the dimensions (Table 2). Of all the fifteen dimensional elements, the respondents ranked adequacy of health service equipment (related to tangibles) the most important, followed by feeling safe during service provision (related to assurance) and willingness of health

workers to assist the elderly (related to empathy (Table 2). The mean dimensional importance scores were established on the basis of the five servqual dimensions.

Results based on the mean scores show that the tangible dimension was rated the most important servqual dimension followed by reliability and empathy (Table 3). The results imply that the servequal dimensions adapted in this study can be applied in the context of health services in measuring the health services provided to the elderly. Also, this implies that to the elderly the availability of adequate equipments for health services in health facilities is the most important factor.

Table 2: Respondents' scores on the importance of servqual dimensional (n = 240)

SERVQUAL Dimension	**Dimensional element**	**Relative importance**					
		Most important		Important		Least important	
		n	%	n	%	n	%
Tangibles	Adequacy of equipment (TAN1),	210	87.5	30	12.5	0	0.0
	Appearance of service rooms (TAN2)	122	50.8	81	33.8	37	15.4
	Neatness of health personnel (TAN3)	123	51.2	104	43.3	13	5.4
Reliability	Ability to provide the promised service (REL1)	141	58.8	87	36.2	12	5.0
	Dependability of health personnel(REL2)	152	63.3	57	23.8	31	12.9
	Keeping the elderly informed on health service issues(REL3)	141	58.8	68	28.3	31	12.9
Responsiveness	Readiness to provide prompt services (RES1),	129	53.8	103	42.9	8	3.3
	Willingness assist the elderly (RES1),	171	71.2	64	26.7	5	2.1
	Responding to the elderly health needs (RES3),	125	52.1	111	46.2	4	1.7
Assurance	Ability of health personnel to inspire confidence to the elderly (ASS1),	137	57.1	92	38.3	11	4.6
	The elderly feeling safe(ASS2)	181	75.4	58	24.2	1	0.4
	Consistency of health personnel in provision of health services (ASS3)	77	32.1	158	65.8	5	2.1
Empathy	Health personnel attention to the elderly (EMP1),	132	55.0	103	42.9	5	2.1
	Health personnel Caring of the elderly (EMP2)	175	72.9	62	25.8	3	1.2
	Understanding the elderly health demand (EMP3)	123	51.2	86	35.8	31	12.9

NB: Results are based on multiple responses

Table 3: Respondents' mean score on the importance of servqual dimensions (n = 240)

Dimension	Relative importance					
	Very important		Important		Less important	
	n	%	n	%	n	%
Tangibles	152	63.3	72	30.0	16	6.4
Reliability	145	60.3	71	29.4	24	10.3
Responsiveness	142	59.0	93	38.6	5	2.4
Assurance	132	54.9	103	42.8	5	2.3
Empathy	143	59.6	84	35.0	13	5.4

Another important aspect to the elderly was the care provided by health workers implying that the elderly need care when they visit the health facilities. This might be due to their old age which requires special care in different needs so as to meet their demand.

Similar results were reported by Narang (2011); Sharma, *et al.* (2011) and Suki and Lian (2011) in India; Alheshim *et al.* (2011) in Kuwait. The implication of this is that the elderly view that the five dimensions are important in judging whether the health services they receive are good or poor. This also can be explained that if the health services through the dimensions used are not met, the elderly can change their health seeking behaviour.

3.4.2 Respondents' perceptions and expectations on health services

The respondents' expectations and perceptions were both measured using the 7-point scale whereby the higher numbers indicate higher level of expectation or perception. In general, the respondents' expectation exceeded the perceived level of health service. It was found that the respondents' overall expectation on a scale of 1 to 7 was 4.44. This is high and implies that the elderly expect a lot from the health service providers. The respondents' overall perception on the scale was 3.24

implying that the health services they received was generally of low quality relative to their expectation. Looking at the individual dimensions, the results show that the scores of expectation for the 15 items in the five servqual dimensions were higher than that of perception. The scores ranged from 4.34 for the item of adequacy of health equipment, to 4.52 for the item of health personnel caring for the elderly with their mean scores ranging from 4.38 (for tangibles) to 4.49 (for empathy) (Table 5). This implies that the elderly are sensitive to how the health workers are caring and in providing good and quality health services to them.

Table 4: Respondents' perception and expectation scores (n=240)

Dimension	Perception	Expectation	Gap
Tangibles			
Tan 1- Eqipment	3.08	4.34	-1.26
Tan 2- Neatness	4.13	4.40	-0.27
Tan 3- Rooms	4.26	4.40	-0.14
Reliability			
Rel 1-Serv.as promised	3.19	4.42	-1.23
Rel 2-Dependability	3.10	4.42	-1.32
Rel 3-Kept informed	2.99	4.43	-1.44
Responsiveness			
Res 1- Readiness	3.14	4.45	-1.31
Res 2-Assistance	3.11	4.45	-1.34
Res 3-Resp. to needs	3.13	4.46	-1.33
Assurance			
Ass 1 – Confidence	3.19	4.47	-1.43
Ass 2 – Feeling safe	3.15	4.47	-1.52
Ass3 – Consistence	3.01	4.49	-1.43
Empathy			
Emp 1 – Attention	3.08	4.50	-1.43
Emp 2 – Caring	3.00	4.52	-1.52
Emp 3 – Understanding	3.05	4.47	-4.43

Scores of perception ranged from 3.05 for the item of health personnel understanding the elderly health needs to 4.26 for the item of health service room appearance (Table 4) with their mean scores ranging from 3.04 for empathy to 3.82

for tangibles (Table 5). This might be explained that the quality of health services perceived by the elderly did not match with their expectation. However, the results indicate that tangible the most satisfactory; it had the highest score of all the other dimensions of health quality.

Table 5: Respondents' perception and expectation mean scores (n=240)

Dimension	Perception (mean)	Expectation (mean)	Gap (mean)	z	P
Tangible	3.82	4.38	-0.56	-9.08	0.002
Reliability	3.09	4.42	-1.46	-13.19	0.000
Responsiveness	3.13	4.45	-1.33	-13.09	0.000
Assurance	3.12	4.48	-1.36	-12.99	0.000
Empathy	3.04	4.49	-1.46	-13.36	0.000
Overall average gap score for all five dimensions =			**-1.20**		

Similar results were realized from different studies. For example, de Jager and Plooy (2011) in South Africa; Sadigh (2003) and Shahin (2005) in Iran, using the same dimension had similar results where the elderly's expectations were higher than their expectations implying that the health services they received did not meet the quality they expected to perceive. This gives an implication that in most cases the elderly expectations might be higher due to an increased demand for health services as it is also pointed out by Farid (2008) and Zarei *et al. (*2012).

3.4.3 Health service quality gaps based on the five servqual dimensions

In this study service quality gaps emerged from differences between respondents' perceptions and expectations. Parasuraman *et al*. (1990) assert that as perceptions exceed expectations, service quality increases; and as perceptions decrease relative to expectations, service quality decreases. In this study, results show that all the five dimensions had negative service quality gaps (Table 5 and Figure 2) implying that

respondents' perceptions of service quality offered by health facilities did not meet their expectations.

The findings are consistent with those of some other studies, for example Mohamed and Mohamed (2012); Zarei *et al.,* (2012); Yesilada and Direktor (2010); Suki and Lian (2011). On the other hand, the results are different from those of some other studies in Malaysia and South Africa in which the elderly patients' perceptions were higher than their expectation (Jenaabadi *et al*., 2011; de Jager and du Plooy, 2011) implying that the elderly patients' expectations were met and therefore they were satisfied with the health services they received. This discrepancy could be a result of differences in development levels between the study area for this study and those of Malaysia and South Africa, as the quality of services are more apparent in more developed countries (Munga, 2004; Mwanyagala *et al.,* 2010; de Jager and du Plooy, 2011).

The maximum (-1.46) service quality gap was for reliability and empathy, and the minimum (-0.56) gap was for tangibles. This implies that the most important issues were related to empathy (health personnel attention to the elderly, caring for the elderly and understanding the elderly's demands for health services). Therefore, due to inefficiency in providing those services, respondents' perception was affected as it did not match with their expectations. This might be due to poor performance of health facilities in place. The findings are contrary to those of some other studies, for example studies by Janaabadi *et al.* (2011; Dewi *et al.* (2011); Szyca *et al.* (2012). The studies found that tangible was the most important dimension, with the aspects of personnel appearance, cleanness, and environment cleanness, affecting the

patients' perceptions while up to date medical equipment increased patients' satisfaction.

The differences in the results might be due to the fact that the elderly in the study area might put more concerns on being well cared for, listened to, paid high attention to, and understood about their health problems before being treated, which might not be the same for the elderly in the other areas. The implication of this is that respondents in the study area were more satisfied with tangible than empathy issues than the other dimensions.

The reliability dimension was also an important factor that affected respondents' perception. This is due to the fact that building trust to the elderly is one of the most important factors that increase reliability between health workers and elderly patients. This means providing patients with appropriate information to make them informed helps them make decision about their healthcare. Janaabadi *et al.* (2011) and Mohamed and Mohamed (2015) assert that usually elderly patients have stress about their illnesses; providing them with the right information on time can reduce their stresses and decrease the gap in the reliability dimension. In this study this service was not met implying that the elderly did not trust the health workers.

Responsiveness was another dimension which scored equally to reliability (-1.46). This includes: readiness to provide prompt services, willingness to assist the elderly, and responding to the elderly health needs. This indicates that for the elderly to be satisfied with health services provided, it requires promptness in provision of health services, assistance, and high attention for their health needs. The results are similar

to those of some other studies, for example by Dewi *et al.* (2011); Peer and Mpinganjira (2012); in which longer than the estimated waiting time by patients resulted in negative quality gap implying that patients were not satisfied on this aspect.

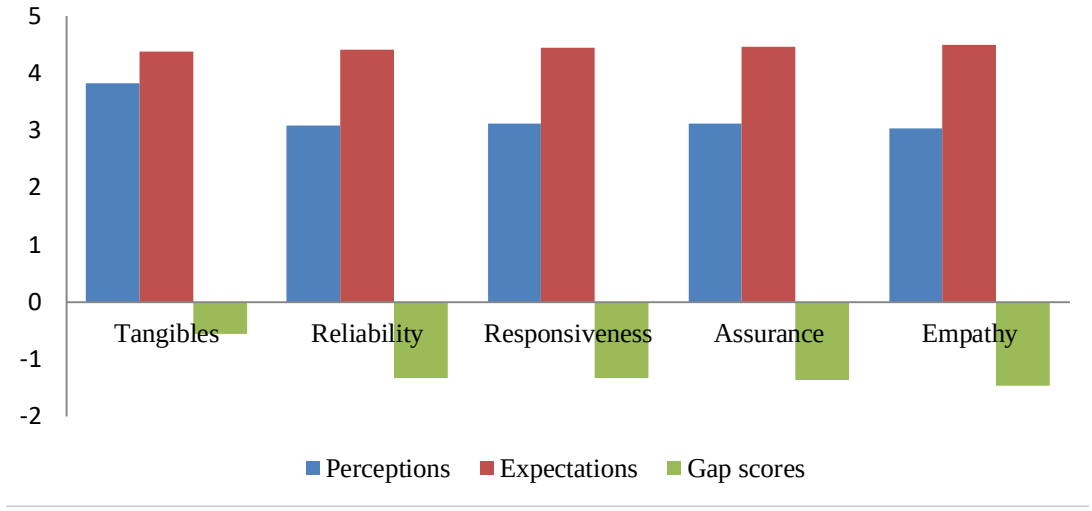

Figure 2: Health service quality gaps based on the five servqual dimensions

Similarly, inadequate provision of assistance resulted in low perception of respondents. The second highest (-1.36) gap existed in the assurance dimension which includes: ability of health personnel to inspire confidence to the elderly making the elderly feel safe, and consistency of health personnel in provision of health services. This means that a substantial level of trust in the health personnel and their abilities were necessary to make the respondents comfortable during health service provision. Parasuraman *et al.* (1990) assert that assurance replaces competence, courtesy, credibility, and security in the original ten dimensions for evaluating service quality. Wilcoxon sign rank test showed that the difference between the expectation and perception of the respondents was statistically significant in all of dimensions with p values ranging from 0.000 to 0.002.

Their relative z-scores were -9.08, -13.19, -13.09, -12.99, and -13.36 for tangibles, reliability, responsiveness, assurance, and empathy respectively (Table 5).

The association between health service quality and access to free health services by the elderly was statistically significant at the 0.1% level of significance. The results suggest that the performance of the health facilities in providing health services to the elderly in the study area was poor inefficient and thus contributed to the elderly not receiving free health services. It was found also by Vukmir (2006); Saravanan and Rao (2007); Sharma *et al.* (2011) and(Yesilada and Direktor (2010) that the majority of the elderly become reluctant to attend health care services due to various aspects such as low attention, lack of care by health workers, and long waiting time. All these may affect their perception on health services.

3.5 Conclusion and Recommendations

It is concluded that all the adapted servequal dimensions were important to the elderly in measuring health service quality with adequacy of equipment being the most important. Therefore, it is recommended that the dimensions should be considered by the Ministry of Health, Community Development, Gender, Elderly and Children and other stakeholders dealing with health provision in measuring health service quality as they might help in monitoring and evaluation of health provision systems.

Respondents had higher expectations on service quality than what they received, which implies that the services quality they expected was not met and thus there was a room for improvement. Accordingly, it is recommended that health service

providers should maintain a strong focus on respondents' expectations by improving health service provision practices that would match or exceed respondents' expectations.

There was a significant difference between the ideal situation (expectations) and the current situation (perceptions). Due to the existence of negative gaps in all the servequal dimensions on the quality of health services respondents' received, it implies that the health services the elderly received in the study area were of poor quality.. Therefore, it is concluded that there is less efficiency in health service provision to the elderly in the study area. Based on the conclusion, it is recommended that the government of Tanzania through the Ministry of Health, Community Development, Gender, Elderly and Children should pay attention to all the dimensions in order to meet the respondents' expectations. This can be achieved through ensuring that there are adequate health workers, health service equipments, medications as well as providing special rooms for provision of health services to the elderly. The government should also make sure that health workers promptly provide health services to the elderly as it is required.

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CHAPTER FOUR

4.0 Socio-economic Determinants of Access to Free Health Services by the Elderly in Iringa and Makete Districts, Tanzania

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4.1 Abstract

In Tanzania, the elderly aged 60 years and above are entitled to free health services, but only 15% of them receive such services for free. The influence of socio-economic factors on access of the elderly to free health services is generally not empirically reported. The purpose of this paper was to assess the influence of socio-economic determinants of the access to free health services by the elderly. Specifically, the paper sought to: (i) examine the socio-economic characteristics of respondents and their association with access to free health services by the elderly; (ii) determine the proportions of the elderly with access to free health services, and (iii) determine the major socio-economic predictors of the access to free health services by elderly. The study was conducted in Makete and Iringa Districts, Tanzania. Multistage sampling was used to select 240 elderly people. The study was

a cross-sectional one and was mainly conducted through structured interviews using a questionnaire, focus group discussions and key informant interviews. Qualitative data analysis was done through content analysis. Binary logistic regression was used to predict the determinants of the access of the elderly to free health services. The results revealed that awareness (ß = 1.64, Wald = 14.73, p < 0.001, Odd ratios = 5.156) demonstrated the highest significant increase in the likelihood of the elderly accessing free health services. Likewise, Income (ß = 2.567, Wald = 11.322, P<0.01, Odds ratios = 1.768), and age (ß = 0.502, Wald = 9.132, p < 0.01, Odds ratios = 1.652) also had positive influence on the likelihood of the elderly accessing free health services. Distance from health facilities (ß = -0.488, Wald = 3.133, p < 0.047, Odds ratios = 2.614), and isolation from family members (ß = -0.724, Wald = 4.119, p < 0.042, Odds ratios = 0.485) significantly decreased the likelihood of the elderly accessing free health services. This implies that the elderly access to free health services is influenced by various socio-economic factors. The Ministry of Health and Social Welfare should consider those predictors when planning to improve the provision of free health services to the elderly focusing on the factors with high significance levels.

Keywords: The elderly, free health services, access, socio-economic

4.2 Introduction

The elderly population in Africa is increasing rapidly due to advances in increased life expectancy. It is estimated that there will be 2 billion people aged 60 years and above by the year 2050, and 80% of them will be residing in developing countries (United Nations, 2003). In East Africa, for instance, the number of people aged over

60 increased from more than 11 million in 2000 and is projected to rise to more than 56 million by 2050 (HAI, 2002). The current aggregate growth rate of the elderly population in developing countries is more than double of that in developed countries, and double of that of the total world population (UNFPA and HAI 2012). The assumption that AIDS will reduce life expectancies, and therefore the population of the elderly in Africa will not increase, is a misleading notion (Nhongo, 2004). In view of this, countries have to be concerned with ageing related issues regarding policy interventions appropriate for the elderly in the development agenda, especially those related to their health care (Heydari, Khani and Shahhosseini, 2012). It is, therefore, necessary to ensure that the elderly, who are amongst the most vulnerable groups in the population, are not increasingly left behind in the development process.

The elderly exhibit limited regenerative abilities and are more prone to disease and other health complications related to the ageing process. They experience a greater level of morbidity and therefore are relatively frequent users of health services (Nie *et al.,* 2008). Therefore, it is important that the elderly are entitled to fair share of the health and health services available. However, providing appropriate health services to the elderly is emerging as one of the major challenges in many African countries. In most cases the elderly face difficulties in accessing medical care and remain with unmet health needs (Agbogidi and Azodo, 2010).

The situation of the elderly in Tanzania is characterized by poverty, diseases, inadequate care, disabilities, and insecurity (URT, 2003). UNDP (2004) also reports that poverty limits access to services, increases vulnerability and that the poor are

the most exposed to health problems but the least informed about threats and care of those problems. The government of Tanzania has recognized the importance of the elderly trough mainstreaming ageing issues into the development agenda of the nation by exempting them from cost sharing in health service delivery system (URT, 2003; URT, 2005). However, despite this exemption, access to free health services by the elderly is very low, only 15% receive free health services, 35% pay for themselves, 27% have costs paid by family members, and others do either buy medicines from pharmacies or do not undergo treatment at all (URT, 2003; URT, 2005). Inadequate health facilities, medications, health personnel and financial constraints to provide pension to the elderly were among the factors that were found to affect the access of the elderly to free health services Tanzania (URT, 2007).

However, other studies report that socio-economic factors might also have influence on access to health services. For instance, Feinstein and Hammond (2004), in their study on contribution of adult learning to health and social capital, found that more adults who were educated were more likely to access health services than those who were not educated. Husbands and Chau (2008), in their study on health equity profile, also found that various socio-economic factors such as education, age, marital status, isolation from family, lack of information, and spatial factors like distance from health facilities had influence on access to health services.

Goddard and Smith (2001), in their health equity theory, also stipulate that various factors have been found to hinder equity health service delivery including socio-economic factors. Empirical information on whether socio-economic factors can determine access of the elderly to free health services in the study area are largely

missing. Therefore, the focus of this study was to assess whether and how those factors influence access of the elderly to free health services in the study area. The main objective of this study was to assess access of the elderly to free health services. Specifically, the study sought to: (i) Determine the proportions of the elderly with access to free health services, (ii) Examine the socio-economic characteristics of the respondents, and (iii) Determine the influence of socio-economic characteristics on the access to free health services by elderly. In this study, it was hypothesised that the odds of the elderly to get access to free health services were the same among the elderly with different socio-economic characteristics.

4.3 Methodology

4.3.1 The study area

The study was conducted in Makete and Iringa Districts, Tanzania. The two districts were selected for the study because they had larger proportions of the elderly in Njombe and Iringa regions respectively. The numbers of the elderly in the two districts were 6.0%t and 4.5% respectively against the regional (4.0%) and the national (5.5%) averages of the elderly (URT, 2008; URT, 2013).

4.3.2 Research Design, sample size and sampling procedure

A cross-sectional research design, whereby data were collected only once, was adopted. A multistage sampling procedure was adopted in the selection of the respondents. In the first stage two wards were randomly selected from each district in which Nzihi and Kitayawa wards were selected in Iringa District, and Iwawa and Tandala wards were selected in Makete District. In the second stage 8 villages (two

villages from each ward) were randomly selected. These were Nzihi and Kidamali from Nzihi Ward, Ndilwili and Kitayawa from Kitayawa Ward, Ludihani and Ndulamo from Iwawa Ward, and Ikonda and Ihela from Tandala Ward. In the final stage, 30 elderly aged 60 years and above were selected purposively from each village by the help of Village Executive Officers (VEOs) making a total sample of 240 respondents. de Vaus (2002); Kothari (2005) and Kimia (2008) point out that, regardless of the population size, the minimum sub-sample size of 30 cases (respondents) is the acceptable minimum sample for studies in which statistical data analysis is to be done. Therefore, the 240-sample was big enough for statistical analyses of the data obtain in this study.

4.3.3 Data collection

Quantitative data were collected using a structured questionnaire which included both closed and open-ended questions. Qualitative data were collected through Focus Group Discussions (FGDs) using an FGD guide. Four FGDs (One in each ward) were conducted with the aim of getting detailed information on views of the elderly towards free health services delivery. Eight to ten discussants were involved in each FGD as recommended by Bryman (2004), Kimia (2008) and Fink (2009). They also add that FGDs allow participants to express their views, experiences, and feelings, and most of the time honestly which, is also pointed out by Ulin *et al*, (2002). Semi-structured interviews were used to collect data from key informants (the health workers) at village, ward and district levels in order to get an in-depth exploration of their views on access of the elderly to free health services and the influence of socio-economic factors on access to free health services by the elderly.

4.3.4 Data analysis

Analysis of qualitative data was done using content analysis in which the data were analysed through being organised into themes with respect to the objectives. Quantitative data were analysed through Statistical Package for Social Sciences (SPSS) whereby frequencies, means, percentages and cross-tabulations were performed. Binary logistic regression, as explained by Powers and Xie (2000), Agresti (2002) and Agrest and Finlay (2009) was used to test the hypothesis that the odds of the elderly getting access to free health services were the same among the elderly with different socio-economic factors ($p \leq 0.05$). The model is ideal for variables in which the dependent variable is dichotomous. In this study, no access to free health services was assigned 0 while access to free health services was assigned one (1). The model was specified as follows:

$$\text{Log}\,[Pi/1\text{-}Pi] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_7 X_7$$

Where:

Log [Pi/1-Pi] = Natural logarithm of the odds for accessing free health services or not accessing them

$\beta 0$ = Constant

β_1 to β_7 = Logistic regression coefficients of the predictor variables

X_1 = Age of respondent (years)

X_2 = Education level of respondent (years of schooling)

X_3= Marital status of respondent (1= married, 0 = otherwise)

X_4 = Respondent's isolation from family (1 = isolated, 0 = not isolated)

X_5 = Respondent's awareness of free health services 1= (aware, 0 = not aware)

X_6 = Distance from respondents' home to health facility (kilometres)

X_7 = Respondent's family size (number of family members)

X_8 = Respondents' monthly income (TZS)

The variables entered in the model were adapted from the health equity theory and conceptual review (theoretical and conceptual variable) as it is shown in the conceptual framework (Fig. 1)

4.4 Results and Discussion

4.4.1 The proportions of the elderly with access to free health services

Access to health care has to be viewed as a primary concern, particularly among the elderly. The results indicated that 22.5% of the respondents had access to free health services. These results give an implication that there was a slight improvement in the study area compared to the national report in the views of the people on the Growth and Reduction of Income Poverty, Quality of life and Social wellbeing. In the report it was found that only 15% of the elderly received free health services in the country (URT, 2007). Similarly, it was found in the study by HAI (2002), that there is a mounting evidence of considerable health inequalities within the older population, in comparison to the working age population in most African countries due to poverty, despair and community disconnection to the elderly.

4.4.2 Respondents' socio-economic characteristics

4.4.2.1 Age of respondents

The respondents' ages ranged between 60 and 98 years with a mean age of 73.0 years and a standard deviation of 9.22. More than a quarter (27.9%) of the respondents were between 70 and 75 years of age followed by those aged 76 to 80 years (Table 2). There was significant association ($p \leq 0.05$) between age and access

to free health services by elderly. Change in age structure among the elderly is associated with access to health services as Jackson (2001) found that an increase in age reduces physical capabilities, which undermines health and so calls for an increase in demand for access to health services. This implies that, as the elderly become older, they become more seekers of health services. The situation also might be explained that the more one becomes older he/she may be treated for free due to inability to pay for the services. Contrary to these results, Chiu (2003) in his study on inequalities of access to health screening for the elderly, found that among the variables shown to have a consistent negative effect on access to health services was age. He found that the more one becomes older the less one accesses health services due to neglect and discrimination by family members.

4.4.2.2 Respondents' awareness of free health services

The findings revealed that the majority (60.0% of the had heard about their right to free health services, which was also significantly associated with their access to free health service at 1% level of significance. The rest (40.0%) had never heard about it. In focus group discussions it was revealed that most of those who had heard about it, had got the information from their friends, which implies that they received information about their right to free health services from unofficial and unreliable sources. Effective communication on health issues is particularly important with the elderly, as poor communication may have more negative consequences of their rights to be denied. During focus group discussions the elderly pointed out that they expected to be informed by the health care workers and their village leaders, but it was not the case. Generally, it was found that the elderly were inadequately

informed on their right to free health which was a great disincentive to demand for free health services.

Other studies also found that even though the elderly desire more information from health providers but they get less information when compared to younger patients, and this affects their seeking behaviour on health services and eventually lack the services (Abdulraheem, 2007; Iecovich and Carmel, 2009; Gonnerman *et al*., 2008; URT, 2009).

4.4.2.3 Distance from health facility

The findings (Table 2) show that the majority (55.0%) lived within 1 to 5 km away from a functional health facility. There was statistical significant association between distance from health facility and respondents access to free health services at 0.01% level of significant. In Tanzania, the recommended distance to the nearest health facility is 5 kilometres (URT, 2005). The implication of the findings is that the government has made efforts to place health facilities near to people, although it has not achieved much as still a substantial number (34.6%) of the elderly alone lived at a distance of more than 5km. from the health facilities. This might be the reason as to why many elderly did not access free health services as they might not be able to go the facilities to seek for the services.

Sabates and Feinstein (2004), in their study on the effect of demographic variables on the elderly up-take of health services, found that spatial allocation of hospitals and health centres also affects the demand and access to health services. This means the closer the health facility to a particular neighbourhood, the lower the cost of

transport and the opportunity cost of time, hence a greater demand for and easier access to health services. Nemet and Bailey (2000), in their study on health issues among the elderly, also found that among the factors influencing access to health services is spatial factors such as location of health services and availability of transportation. They revealed that the elderly living in rural areas within reasonable distances accessed health services more frequently than those who lived longer distances (Rohrer *et al.*, 2000). In focus group discussions, some of the elderly also pointed out that health facilities were far from where they resided and that due to lack of financial resources for transport sometimes they failed to travel to the health facilities and seek for health services. Therefore, in this way long distance hindered their access to free health services.

4.4.2.4 Respondents' education level

The results also revealed that two-thirds (66.7%) of the respondents had never attained any formal education in the two districts. The rest had either primary or secondary education. There was no significant association ($p>0.05$) between education level and access to free health services. Education is important in raising awareness of the importance of undertaking regular health check-ups and accessing health services (Hammond, 2002). Education also improves the ways in which individuals analyse information regarding health issues and communication with health practitioners. Sligo and Jameson (2000) add that education improves accessibility to health services and provides an incentive for individuals to know and demand for their rights to receive health care. The implication of these results is that the respondents did not know much about their rights to free health services due to

their low level of education and hence inadequate information leading to low motivation to claim for their entitlement on free health services.

4.4.2.5 Respondents' family sizes

The family sizes of the respondents ranged between 1 and 14 with a mean of 4.5 persons (Table 2). The findings show that 52.9% of the elderly lived in families with one to four persons. It was expected that as the elderly with more people around in the family would receive more support. However, this was not the case in the study area. It was revealed during focus group discussions that the majority of the elderly were taking care of their grandchildren, most of whom were orphans. Therefore, this was a burden for the elderly in such a way that they had difficulties in having access to free health services as they were unable to travel to health facilities due to financial constraints.

During FGDs, one the elderly said: *"... for sure some of the elderly died because they had no money to hire even a bicycle to go to hospital and no one cared about it. I have five grand children to take care of, sometimes I even do not know what to feed them, where can I get money to pay for transport to hospital?... it is really a big problem"*. Others added that "... *the elderly living with relatives around have an advantage to as their relatives can take them to hospital when they are sick"* Unfortunately this was the opposite to many of the elderly because the relatives around them were young and orphans of whom the elderly had to take care instead.

The results are contrary to findings by Nemet and Bailey (2000), who found that elderly with more members in the family had more support in accessing health

services. This difference in the results might be due to death of adult children, primarily due to HIV/AIDS, left children single or double orphans. One older woman argued: "… *all my three sons have passed away, so I must resume my responsibility and care for the grandchildren"*. This is due to the fact that the study area had high prevalence of HIV and AIDS, leaving the elderly with the burden of taking care of orphans. Another old woman commented: *"my son died from HIV/AIDS and had four children; the children fall under my care as a grandmother"*.

4.4.2.6 Respondents' monthly income and their sources

The results show that the respondents' monthly income ranged from TZS 3000 to TZS 200 000 with a mean monthly income of TZS 28 538 and a standard deviation of TZS 22 019.36. More than two-fifths (43.8%) of the respondents earned income between TZS 20 000 to 40 000 per month. Very few (7.1%) of them earned the highest income (Table 2). More than three- quarters (77.9%) of the respondents earned their income from own sources. During focus group discussions it was revealed that the main self-sources of income were agriculture, timber selling, handcrafts, selling medicinal herbs, and others earned from pension schemes.

Moreover, some reported to earn income from contract employments such as security guards and casual labourers. Other income sources included remittances and gifts or charity as seen in Table 1. It was revealed during focus group discussions that the money from these sources came from their children, relatives, and good Samaritans (neighbours and church members). The results imply that the elderly in the study area were actively working to generate income for sustaining their living. This is due to the fact that most of them had lost their children due to HIV/AIDS as

it was reported during focus group discussions. The elderly also added that whether they liked it or not they had to work to earn some income because some of them had their grand children to take care. These results conform to results of some other studies (Banerjee *et al.*, 2010; Kumar and Kumar, 2012) which also revealed that the majority of the elderly had their own sources of income from different activities they were doing. These differences might be due to variations in locations of the study areas; the former studies were conducted in Europe while the latter were conducted in India in which the economic status might be more or less similar to the research areas for the current study. Karl *et al.* (2003), in their study on of self rated health among the Latino elderly, found that poor health perception was high among the financially underprivileged elderly in rural areas.

4.4.2.7 Respondents' isolation from a family

It was found that nearly a quarter (22.5%) of the respondents were isolated by family members, of whom 61.9% were women. This implies that the African family structure has changed in such a way that fewer younger people are willing to take care of the elderly. This has led to an alarming number of the elderly being isolated and abandoned with no support to enable them to have access to health services. Kaseke (2003) points out that in many cases the elderly are more susceptible to all forms of abuse, assaults and murders at the hands of those from whom they should expect support and protection, including sons.

During interviews with health workers they also added that they did not prefer to attend the elderly people, because the elderly people were considered time consuming and disturbing as most of the time they demanded for free health services

while the health workers could not provide them. In all focus group discussions the elderly also revealed that when they fall sick they are left with no support from younger family members and other relatives. *"....we are just left to die as if we did not bear children..."* one lady commented in FGD in Makete. Therefore, in the elderly were unable to visit health facilities due to lack of financial support. HAI (2002) adds that adequate policies and legal frameworks that can protect the rights of the elderly are missing in the majority of African countries which has left the elderly with discrimination and isolation.

4.4.2.8 Respondents' marital statuses

The results on marital status (Table 2) showed that majority of the (51.7%) of the elderly in the two districts were married and nearly a half (46.2%) were widowed. The majority (71%) of the married respondents were men. This is due to the fact that men usually tend to remarry after divorce or loss of spouse even at older ages while it is rarely common to women aged 60 years and above. However, marital status also had no significant association ($p>0.05$) with access to free health services. Sligo and Jackson (2001) found that experiencing changes in marital status (being widowed or separated) had some adverse effect on access to health services; those who lived alone had less access to health services due to lack of support from spouse compared to those who lived with spouses.

Table 2: Respondents' Socio-economic Characteristics of (n= 240)

Variable	N	%	Chi-square	p-value
Age				
60 – 64	44	18.3	9.06	0.054
65 – 69	42	17.5		
70 – 75	67	27.9		
76 – 80	46	19.2		
81 and above	41	17.1		
Total	**240**	**100**		
Education level			5.06	0.17
Never went to school	160	66.7		
Adult education	49	20.4		
Primary education and above	31	12.9		
Total	**240**	**100**		
Marital status			1.67	0.19
Married	124	51.7		
Widowed	111	46.2		
Divorces/separated	5	2.1		
Total	**240**	**100**		
Isolation			0.60	0.44
Isolated	126	22.5		
Not isolated	114	47.5		
Total	**240**	**100**		
Awareness of free health services			9.22	0.004
Aware	144	60.0		
Not aware	96	40.0		
Total	**240**	**100**		
Distance from health facility			20.34	0.000
Less than 1km	25	10.4		
1 km to 5 km	132	55.0		
6 km to 10km	77	32.1		
More than 10 km	6	2.5		
Total	**240**	**100**		
Family size			4.69	0.96
1 to 4	127	52.9		
5 to 9	101	42.1		
More than 9	12	5.0		
Total	**240**	**100**		

4.4.3 The influence of SE factors on access to free health services by the elderly

Using binary logistic regression, the influence of socio-economic (SE) factors on the likelihood of the elderly accessing free health services was determined. The model contained 8 socio-economic variables (age, marital status, education level, family

size, awareness of free health services, distance from a health facility, isolation from family, and income) (Table 3). The overall model fit containing all the predictors was statistically significant ($p \leq 0.001$), indicating that the model was able to predict between respondents who reported and those who did not report a problem of accessing free health services. The Nagelkerke R^2 was 0.563, indicating that the independent variables entered in the model explained 56.3% of variance in the dependent variable.

Table 3: Results from logistic regression model predicting the SE variables (n= 240)

Variable entered in the model	β	S.E.	Wald	p-value	Odds ratio
Age	0.502	0.150	9.132	0.001	1.652
Awareness	3.640	0.427	14.729	0.000	5.156
Distance	-0.488	0.276	3.133	0.047	2.614
Education level	0.116	0.263	0.194	0.659	1.123
Family size	-0.054	0.292	0.034	0.853	0.947
Income	2.567	0.241	11.322	0.001	1.768
Isolation	-0.724	0.357	4.119	0.042	0.485
Marital status	0.428	0.519	0.679	0.410	1.534
Constant	-5.298	1.552	11.644	0.001	0.005

Furthermore, the model correctly classified 80% of cases. The Omnibus test of the coefficients of the model was significant at the 0.001 level ($p \leq 0.001$), meaning that the data entered in the model adequately fitted the model, and at least one of the predictors was significantly related to the response variable (Garson, 2008). The value of the Hosmer and Lemeshow chi-square obtained was 7.899, and it was not significant ($p > 0.05$), implying that the model's estimates fitted the data at an acceptable level (Garson, 2008) because a finding of non-significance for Hosmer and Lemeshow chi-square means that the model adequately fits the data (Agresti and Finlay, 2009).

The results in logistic regression (Table 3) show that five of the socio-economic variables entered in the model were statistically significant at different levels of significance. The results show that, out of 8 variables, respondents' awareness of free health services had the highest significant contribution to their likelihood of accessing free health services at 0.01% level of significance. This was followed by age and income which were significant at 0.1%. Isolation from family and distance from health facilities were significant at 0.5% level of significance. Although the rest variables (Education level, marital status, and family size) had some influence), their influence was not significant at 0.5% level of significance. In the regression model variables with positive ß-coefficients indicates that such independent variable has a positive influence on the dependent variable. In this case such a variable increases respondents' likelihood to access as opposed to free health services, which is opposed by negative ß-coefficients.

Wald coefficient is a measure of the distinctive contribution of each independent variable in the perspective of the other independent variables and holding constant other independent variables. Wald coefficients corresponding with individual independent variables assist to realize the relative importance of each independent variable with an indication that the bigger the Wald coefficient of an independent variable the higher the contribution of the variable to the occurrence of the dependent variable (Agresti 2002; Garson, 2008), in this case, access to free health services. The odds ratio (Exp (B)) for a given independent variable represents the factor by which the odds change in the independent variable (the number of times various predictor variables have chances relative to one another regarding access to free health services).

The results revealed that the respondents' awareness of free health services (ß = 3.640, Wald = 14.729, $p \leq 0.001$, Odds ratios = 5.156) demonstrated highest significant increase in the likelihood of the elderly accessing free health services. Likewise, Income (ß = 2.567, Wald = 11.322, $p \leq 0.01$, Odds ratios = 1.768), and age (ß = 0.502, Wald = 9.132, $p \leq 0.01$, Odds ratios = 1.652) increased the likelihood of the elderly accessing free health services. On the other hand, distance from health facilities (ß = -0.488, Wald = 3.133, $p \leq 0.047$, Odds ratios = 2.614), and isolation from family members (ß = -0.724, Wald = 4.119, $P \leq 0.042$, Odds ratios = 0.485) decreased the likelihood of the elderly accessing free health services. The results shows an indication that respondents' who were aware of free health services were 5 times more accessing free health services than those who were not aware. Similarly increase in their income, and their age increased their likelihood of accessing free health services by1.8 and 1.7 respectively. Distance from health facilities reduced the likelihood of elderly to accessing free health services by 2.6 times less, and the elderly who were isolated by their family members were 0.5 times less likely to access free health services compared to those who were not isolated.

These results (Table 4) imply that awareness of free health services and income were the most important factors that contributed to access to free health services by the elderly, compared to other variables and that lack of information on their right to free health services and inadequate income hindered them from accessing the services. Similarly, Husbands and Chau (2008), in their study on health equity profile, also found that various socio-economic factors such as education, age,

isolation, lack of information, and distance from health facilities had influence on access to health services among the elderly patients. Goddard and Smith (2001), in their health equity theory, also stipulate that various factors have been found to hinder equity health service delivery including socio-economic factors. The results are in line with the health equity theory (Goddard and Smith, 2001) because the factors which were adapted from the theory were also found to influence access to free health services by the elderly. This implies that the variables adapted from the health equity theory can be applied in different similar studies with similar, respondents, study areas, and methodology.

4.5 Conclusion and Recommendations

Despite slight improvement in access of the elderly to free health services, it is concluded that the government, through the Ministry of Health, Community Development, Gender, Elderly and Children has not done much in implementing the strategy of free health service provision to the elderly in the study area as it is stipulated in the National Ageing Policy (2003) and in the National Strategy for Growth and Reduction of Poverty (URT, 2005). Therefore, it is recommended that the government of Tanzania; through the Ministry of Health, Community Development, Gender, Elderly and Children; should make more efforts to establishing mobile free health services to the elderly. This will ensure that there is a significant improvement from the existing situation and that a larger number of the elderly get access to free health services as stipulated in the above mentioned documents.

It is also concluded that awareness of the elderly of their rights to free health services is the most important determinant in enabling them to access free health services. Also the Ministry of Health and Social Welfare through local governments and other stake holders dealing with the elderly health issues should give priority to raising awareness of the elderly on their rights to free health services as this has greater effect on their access to free health services. The government of Tanzania, through local leaders and other stakeholders dealing with health issues for the elderly also should give priority to raising awareness of the elderly on their rights to free health services as this has greater effect on their access to free health services. This can be achieved through the use of local leaders who can easily convey the information about the right of the elderly to free health services through meetings.

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CHAPTER FIVE

5.0 The Elderly and Health Workers' Knowledge and Attitude towards Free Health Service Delivery to the Elderly in Tanzania

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5.1 Abstract

In Tanzania, the elderly (aged 60 years and above) are entitled to free health services, and it was aimed that, by 2010, 100% of the elderly would be provided with free health services in the country. However, only 15% received the services freely in 2007. The purpose of this study was to determine the elderly and health service providers' knowledge of, and attitude towards, free health service delivery to the elderly with the specific objectives to: i) determine awareness of the elderly about free health service delivery, ii) determine the attitude of the elderly towards free health service delivery and iii) determine the health workers' attitudes towards free health service provision to the elderly. The study area was Iringa and Makete Districts. A questionnaire-based survey, focus group discussions and key informants

interviews were used to collect data. The majority (69.2%) of the respondents were not aware of their right to free health services. Also, most (61.3%) of the respondents had negative attitudes towards free health service delivery. This means that the government of Tanzania did not ensure that the elderly were well informed of their rights to free health services. The health workers also had negative attitude towards free health services to the elderly due to unavailability of specific budget for the elderly. It is concluded that the elderly were not well informed of their right to free health services. The government of Tanzania should officially inform the elderly on their right to free health services, through reliable sources of information such as mass media, health workers, village leaders and religious leaders. The government also should set aside a specific budget for the elderly to enable health workers provide free health services to them. Health workers should be trained on how to attend the elderly in order to minimize age discrimination during health service delivery process.

Keywords: the elderly, free health services, knowledge, attitude.

5.2 Introduction

Ageing is a multidimensional change involving physical, psychological, social, health, well-being and experience of later life (Help Age International, 2012). Some demographers define that the elderly are the people aged 60 years and above (Mahfouz, 2004; Nie *et al.*, 2008). They also point out that ageing is an inevitable phenomenon. The Tanzania National Ageing Policy (URT, 2003) states that old age starts at the age of 60 years at the retirement point in formal employment. In this chapter the elderly person is defined as the one with 60 years and above.

With ageing population, the numbers of the elderly with chronic conditions like heart disease, cancer, trauma and dementias are also increasing (Nie *et al.* (2008). The change requires more inputs from the society for meeting additional demands for health and social wellbeing of the elderly population.

William snd Manaszewiez (2002) also assert that the study of human ageing is peculiar due to the problems attached to this phase including prolonged illnesses, retirement and those associated with day to day interactions. Pastory (2013) and Bayliss *et al.* (2008) suggest that susceptibility to diseases should not take away the elderly the right of the elderly to receive quality medical care and eventually get cured due to people's perception that it is part of their ageing process. However, several studies suggest that health disorders in advanced age are under-diagnosed and the development of diagnostic and therapeutic skills for those treating old people has largely been neglected (Billings, 2006; Bowling, 2007). It is therefore suggested that good quality care service and healthy relationships with elderly are necessary.

In Tanzania, it has become apparent that strategies are needed to guarantee effective service delivery including free health services to the elderly. The commitment is clearly demonstrated by the government of Tanzania which has, accordingly, mainstreamed ageing issues into the development agenda of the nation by formulating a policy to exempt the elderly from cost sharing in health service delivery systems (URT, 2003; URT, 2005). The first phase National Strategy for Growth and Reduction of Poverty (NSGRP I), in its second cluster, stipulated that

100% of eligible old people (60 years and above) would be provided with free medical care and attended to by specialized medical personnel by 2010 (URT, 2005).

Although the elderly are supposed to get free health services in Tanzania (URT, 2003; URT, 2005), most of them do not get such services freely. The View of People (VoP) Report (URT, 2007) and Poverty and Human Development Report (URT, 2009) have indicated that 65% of old people have health problems which require regular attention, but access to free health services by the elderly is a nightmare since only 15% receive free health services, 35% pay for themselves, 27% have costs paid by family members, and others do either buy medicines from pharmacies or do not undergo treatment.

In view of the low access to free health services by the elderly in Tanzania, it is important to examine the knowledge of and attitudes of both the elderly and the health service providers towards free health services delivery to the elderly. This helps to find out whether negative attitudes and lack of knowledge were among the factors that lead to such little access to free health services by the elderly.

The purpose of this study was to: determine the elderly and health service providers' knowledge on, and attitude towards, free health service delivery to the elderly. Specifically the study sought to; i) determine awareness of the elderly about free health service delivery, ii) determine the elderly attitudes towards free health service delivery process and iii) determine health workers knowledge and attitudes on the elderly rights to receive free health services.

Therefore, through this study, empirical information on knowledge of and the attitudes of both the elderly and health service providers towards, free health service delivery to the elderly are reported. This is to help development planners and policy makers on the situation of the elderly and their health related problems so that more appropriate interventions may be undertaken to improve the situation and find ways to resolve the challenges. Within this con text, the results also might impact on the formulation and implementation of social policies affecting the elderly

5.3 Methodology

5.3.1 The Study Area

The study was conducted in Makete and Iringa Districts, Tanzania. The two districts were selected for the study due to the main reason that Makete and Iringa Districts had larger proportions of the elderly in Iringa Region and Njombe Region (6.0% in Makete and 4.5% in Iringa). In Tanzania the elderly constitute 5.5% while in Iringa region they constitute 4% (URT, 2008; URT, 2013). The main economic activities in Iringa District are agriculture and livestock keeping while in Makete District people are mainly involved in agriculture and timber production. Both districts are among the most hit districts by HIV/AIDS in the country (URT, 2007)

5.3.2 Research design, sample size and sampling procedure

The study employed a cross-sectional study design, and a multistage procedure was adopted in selection of the respondents. In the first stage two wards were selected randomly from each district in which Nzihi and Kitayawa wards were selected in Iringa District and Iwawa and Tandala wards were selected in Makete District.

In the second stage 8 villages, that is two villages from each ward, were randomly selected. They were Nzihi and Kidamali from Nzihi ward, Ndilwili and Kitayawa from Kitayawa ward, Ludihani and Ndulamo from Iwawa ward, and Ikonda and Ihela from Tandala ward. In the third and final stage, 30 elderly aged 60 years and above were selected randomly from each village using the village population list obtained from village leaders making a total sample of 240 respondents. It is suggested by Bailey (1998) and Bryman (2004) that, regardless of the population size, the minimum sub-sample size of 30 cases (respondents) is acceptable sample for studies in which statistical data analysis is to be done. The sample of 240 people sample was enough descriptive and inferential analysis. Based on their professions, two health workers from public health facilities from each ward and two District Medical Officers (DMOs) were purposively selected as key informants.

5.4 Data Collection

Quantitative data were collected using a structured questionnaire which included both closed and open-ended questions to assess the knowledge of the elderly on free health services delivery to the elderly. The questionnaire also included a five-point Likert scale with four statements having positive connotations and four other statements with negative connotations to determine the attitude of the elderly towards free health service delivery to the elderly. The scale was rated with 1 to 5 points, where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. Qualitative data from the elderly were collected through Focus Group Discussions (FGDs) using FGD guide. The use of focus group discussions increased the chances of the participants expressing their perceptions, experiences,

feelings fully and honestly (Ulin *et al.*, 2002; deVaus, 2002). Four FGDs (One FGD in each ward) were held with a view of getting detailed information on their knowledge of, and attitude towards free health services delivery to the elderly. Eight to ten elderly discussants were involved in each FGD. Moreover, key informant interviews were used to collect data from key informants in order to get an in-depth exploration of their knowledge and attitudes towards, free health service delivery to the elderly, policy issues, and challenges related to health issues on the elderly.

5.5 Data Analysis

Analysis of qualitative data was done by using content analysis in which the data were broken down into smallest meaningful units of information and organised into themes with respect to the objectives of the study. Quantitative data analysis was based mainly on descriptive statistics including frequencies, means, percentages and cross-tabulations.

5.6 Results and Discussions

5.6.1 The elderly awareness of free health services

The results revealed that the majority (60%) of the elderly had at least heard that they were supposed to receive free health services from public health facilities (Table 1). However, the main sources of information for those who had heard about it (n=144) were friends (38.9%) and mass media like radios and televisions (34.7%). Other sources of information were health workers and village leaders. Nearly all (97.5%) of the elderly had never heard about the National Ageing Policy. This is contrary to Pálsdòttir's findings (2003) in his study in Iceland where it was found that the elderly were well informed about their rights to health services.

During focus group discussion the elderly added that they could not claim for their rights because they did not know to whom they may do so. They added that their village leaders did not inform them as well. They said: *"....we cannot claim for our right because we do not know where to start, and our leaders do not tell us about it"* also: "...*I had a stroke and was made to wait for some days because I had no money to pay"* Another one added: *"...when my wife asked about free health services nobody cared until I paid for the treatment"*

Table1. Elderly knowledge on free health services (n = 240)

Awareness of free health services	**n**	**%**
Aware	144	60.0
Not aware	96	40.0
Total	**240**	**100.0**
Source of information (n =144)		
Friends/neighbours	56	38.9
Mass media	50	34.7
Health workers	37	25.7
Village leaders	1	0.6
Total	**144**	**100.0**
Awareness of National Ageing Policy		
Aware	6	2.5
Not aware	234	97.5
Total	**240**	**100.0**

These statements imply that not only were the elderly not informed about their right to free health services, but also when they asked about it the health workers were reluctant to inform them of the same.

5.6.2 Need for more information on free health service delivery

Due to lack of information about their right to receive free health services, the majority (92.1%) of the elderly said that they needed more information about their right to free health services. During focus group discussions most elderly said they needed to be officially informed by either their local leaders or by the health workers instead of just hearing from people around them and mass media. A woman (86 years) explained that: *"... I just hear from people on the street and from radios, but if we ask our local government leaders and the health workers they tell us that they do not know that the elderly are supposed to have free health services; who will tell us the truth?"*

The statement above gives an implication of how the elderly are neglected and have no one to inform them officially on their right to receive free health services. As a result, they are denied access to the service freely. It was also revealed that the responsible organs did not prepare the elderly in receiving free health services. Due to this it is obvious that the elderly did not access free health services because they were not well informed. Similarly, Iecovich and Carmel (2009) found that negative attitudes of health workers towards the elderly resulted into differences in accessibility and availability of medical personnel and health services among elderly people and other age groups in Israel.

5.6.3 Attitudes of the elderly towards access to free health service

A forty-point Likert scale was used to measure the elderly attitudes towards access to free health services, four of them having positive connotations and four having

negative connotations on which the elderly were required to indicate whether they strongly disagreed, disagreed, were uncertain, agreed or strongly agreed. Thereafter, the points scored were added up to determine the overall attitude.

5.6.3.1 The procedures for free health services to the elderly are not clear

Nearly three-quarters (72.5%) of the elderly agreed that there was no clear mechanism for provision of free health services to the elderly to provide free health services, followed by 17.1% who strongly agreed to the statement. This indicates that the elderly did not know the mechanism of free health service delivery, and so they did not know how they could access this right of receiving free health services. It is also argued in Poverty and Human Development Report (URT, 2009) that poor health systems is one of the factors that may hinder access to health services and that they have to be studied in order to assess the application of health exemption policies.

5.6.3.2 Being adequately informed about free health services

About three quarters (75.8%) of the respondents agreed that they were not adequately informed of their right to receive free health services and 20% strongly agreed with the statement. This indicates that a significant number of the elderly were not adequately informed about their right to free health services. Agbogidi and Azodo (2010), in their study on the utilization of health services by the elderly in Edo state Nigeria, found that 70.5% of the elderly said that the exemption mechanism on health services to the elderly was not clear. This might be due to irresponsible health workers who should inform the elderly about the exemption process when they visit the health facilities.

5.6.3.3 There is freedom to ask the health workers about free health services

Almost three-quarters (72.2%) of the respondents were not in favour of the statement that there was freedom to ask the health workers about the right of the elderly to receive free health services and 17.2% strongly disagreed with the statement. This reveals that most elderly people were afraid of seeking information from the health workers as only very few (3.3%) of them said they were free to do so. This might be due to ageism which can exist among health workers. It is asserted by Pastory (2013) and Vink *et al.* (2008) that ageism occurs in various social contexts in varying degrees, such as in mass media, employment, working places, hospitals and recreational services which take various forms.

Table 2: attitudes of the elderly towards free health services (n = 240)

Attitudinal statement	Responses (%)				
	SD	D	U	A	SA
There is no clear mechanism for free health services	0.4	5.8	4.2	72.5	17.1
I am not adequately informed about free health services	0.0	2.5	1.7	75.8	20.0
There is freedom to ask the health workers about free health services to the elderly	17.2	72.2	1.2	3.3	0.0
Health workers listen carefully to the elderly health issues	0.0	54.6	8.8	35.8	0.8
Health workers are harsh when I demand for free health services	0.8	18.8	2.5	77.9	0.0
I have the right to demand for free health services	1.2	55.0	18.8	25.0	0.0
There is good arrangement for the for the elderly to receive free health services	2.9	78.8	3.3	15.0	0.0
Better to opt for traditional or healers than to a government health facility	14.5	75.4	3.8	6.2	0.0

KEY: *SD= Strongly Disagree, D= Disagree, U= Uncertain, A= Agree, SA= Strongly Agree*

However, ageism occurring in the health sector is severely affecting elderly people because they are the most users of health services compared to other age groups. It is also argued that wrong perceptions are the sources of negativity towards attending

elderly patients. This is because medical professionals consider the care for elderly people as undesirable, unpleasant, less motivating and not paying (Help Age International, 2012; Smith *et al.*, 2008).

5.6.3.4 Health workers listen carefully to the elderly health issues

The results show that more than a half (54.6%) of the respondents perceived that health workers did not listen to them carefully as they disagreed with the statement that health workers listen to the elderly carefully. This gives an implication that the elderly were neglected by health workers in the process of seeking information on free health services. Similarly, it was found by Waweru *et al.* (2003) in Kenya that health workers neglected the elderly because they perceived that the elderly were expected to live with their illnesses without any complaints, and that old age and illnesses are considered to be compatible. However, this susceptibility should not rule out health workers' perceptions leaving elderly people unattended.

5.6.3.5 Health workers are harsh to the elderly

The study results revealed that more than three quarters (77.9%) of the elderly agreed that they were treated harshly by health workers. The results imply that the health workers did not care about the elderly a situation that might discourage the elderly to demand for their right to free health services. This also indicates that health care workers may hold negative attitudes towards the elderly in the structural context of work and be restrictive to the elderly that can deny their rights. Some research supports this by suggesting that health workers negative attitudes can be negatively influenced by the under resourced care environments experienced when working with older people (Iwasaki and Jones, 2008; McLafferty, 2007).

5.6.3.6 I have the right to demand for free health services

A big number (55.0%) of the elderly did not agree with the attitudinal statement that they have the right to demand for their right to free health services while only few (25.0%) agreed with the statement. This gives an implication that the elderly were not informed about free health service provision in the study area. Nhongo (2004) and Mahfouz *et al.* (2004) point out that the negative attitude of health personnel is so negative that older people prefer to die rather than go to the nearest clinics. This might be explained that deep rooted age discrimination within the health delivery sector is caused by the negative attitude of health workers. This might range from the denial of medication, information, isolation, abandonment, and neglect.

5.6.3.7 There is good arrangement for the elderly to receive free health services

It was also found that more than a half (78.8%) of the elderly disagreed with the attitudinal statement. The results show that the government of Tanzania was not well prepared for provision of free health services to the elderly. This is due to the fact, the national ageing policy was formulated in 2003, about 12 years ago, and still majority of the elderly do not even know that there is such a policy existing in the country. Also the elderly who were supposed to receive the services, majority of them are not aware, indicating that there is a long way to go in order to achieve the policy goals. It can also be explained that the existing procedure of providing free health services to the elderly has some shortcomings; hence the majority of the elderly are left out as a result of their inability to access the services.

5.6.3.8 Better to opt for traditional or healers than to a government health facility

Almost three-quarters of the elderly (75.4%) were not ready to opt for other means of treatment like traditional medicines and spiritual healing. This indicates that the elderly did not trust other kinds of treatment. It was revealed in FGD that when they opted for other kinds of treatment like traditional herbalist or spiritual healers, they were not diagnosed for their diseases and therefore they might not know the diseases they were suffering from. However, they pointed out that sometimes they had to go for traditional treatment when the treatment at the hospital did not work and that they went for traditional medicine as a second option. A very old man (96 years) said that *"... one needs a combination of western and traditional medicine to be completely cured...in the hospital they only give pain medication... therefore, I went to the traditional healer to be fully healed... I had tuberculosis and was given tablets at the hospital to treat the infection, but a hump started growing on my back and was told by a health worker to go to a traditional healer to have the hump cured"* He added.

It was also described that sometimes when they went to hospital they had to wait for long time and for this reason they had to look for herbalists as an alternative. The elderly believed that seeing a herbalist was only temporary and that when complications arise they should go to the hospital. This implies that the elderly recognized that the hospital is the best option and emphasized that going to the hospital should be the first option, then to traditional medicine if treatment at the hospital didn't work.

5.6.4 Overall attitudes towards free health Service delivery to the elderly

Based on the attitudinal statements used to determine the attitudes of the elderly towards free health service delivery, the findings revealed that the minimum and maximum overall attitude points scored were 22.0 and 40.0 respectively, with an average of 31.2 points. Out of the maximum of 40.0 points, all the points up to 23 indicated unfavourable attitudes; neutral attitude was represented by 24 points and favourable attitude was represented by 25 to 40 points. The results revealed that almost three-fifths (61.3%) of the elderly had unfavourable attitude towards free health service delivery to the elderly; 25.4% had favourable attitude towards free health service delivery and the rest (13.3%) were uncertain. The implication of these overall attitudes is that the elderly were not satisfied with the provision of free health services as the process was discriminative. Similarly, Mamdai (2004) and Pastory (2013) found that the Tanzanian elderly face difficulties in accessing health services due to discrimination in the health service settings.

Table 3: Elderly over all attitudes towards free health services (n = 240)

Points Scored	**n**	**%**
8 – 23 (Unfavourable)	147	61.3
24 (Uncertain)	32	13.3
25 -40 (Favourable)	61	25.4
Total	**240**	**100.0**

During FGDs with the elderly, pointed out that: "…*whenever an elderly person was admitted, the health workers would warn each other that there is trouble on that patient" "...I was once admitted but the nurses turned away from me; they were saying:"you are not sick, you are just old".* One of the male discussants added.

Others also added that they often heard health workers at the district hospital discussing on how much of a waste of precious drugs, old people are. He also said that he had been sent away by health workers at the district hospital twice by telling him that he was not sick but just old. Most of them also were doubtful about the treatment given to them believing that, sometimes, they might be injected with water instead of drugs so that the drugs could be used on younger deserving patients.

In fact they don't want to see us coming to hospital because they don't want to be bothered with old people as we need more attention". (One old female commented). "...*we bore a lot of staff, and we are a bit too slow and take a bit longer to understand things"* also*"...the way the hospital staff treat us like stupid old person sometimes makes us lose the heart"* (others added).

5.6.5 Health workers' knowledge and attitudes towards free health services to the elderly

During interviews with health workers at ward level, the workers said that they knew that the elderly were supposed to receive free health services, but had never seen the National Ageing Policy, although they had heard about it. Furthermore, they responded that they were unable to provide the services due to the fact that there was no specific budget for free a health services to the elderly in their health facilities. They also added that they were unable to make follow up on the budget for the elderly because their responsibility was to submit reports on how the services were delivered and nothing else. The health workers also said that the elderly are stubborn when they visit the health facilities due to the fact that most of them did not understand when they were informed about their health issues.

Almost all the health workers said that they would prefer working with younger people because the elderly were 'difficult' and one of them confidently said *..."the elderly are a big headache and a waste of scarce resources that should be used by younger people who are still growing ... we prefer to attend other people, but not the elderly because the elderly are stubborn and slow in understanding issues"* (One of the health workers commented). Another health worker said; "*...elderly people were considered time consuming and disturbing as most of the time they asked about free health services while we do not have money for them"..."... elderly people have low level of understanding, inability to express themselves, and distrust to health providers..."* (She added). On the other hand, the District Medical Officers (DMOs) said that there was no official information from the Ministry of Health, Community Development, Gender, Elderly and Children to enable them officially inform the elderly on their rights to free health services, and therefore it was not their role to do so.

This is indicates that the low access to free health services by the elderly was largely contributed by the health workers' perceptions and negative attitude towards the elderly. It is also commented by McLafferty (2007) and Benson and Forman (2002) that ageist attitudes may lead to discrimination that leads to mistreatment of older people in different settings including health sectors. Moreover, this is to say, unlike other age groups, elderly people may not be referred to specialists because of wrong perception and negative attitude held by health services providers on matters pertaining to old age illnesses and the ageing process. Therefore, it is important to understand factors that influence how the elderly are perceived in order to develop social interventions that may protect and improve the treatment of the elderly.

5.7 Conclusions and Recommendations

Despite most of the elderly being aware of their right to receiving free health services, it is concluded that a good number of them did not receive free health services, and were unable to claim for the services. The elderly also received information on their right from unreliable sources. It is recommended that the government of Tanzania should officially inform the elderly on their rights through reliable sources of information such as mass media, health workers, village leaders and religious leaders. This should include creating awareness to the elderly on their right to free health services. The government of Tanzania should also enact a governing law to the ageing policy for the elderly to be legally able to claim for their rights to free health services

It is concluded that high negative attitude of the elderly towards free health was largely contributed by age discrimination by the health workers, through the perception that the elderly are stubborn when trying to seek information on their rights. This also was another reason for the elderly being afraid to claim for their right to free health services. There should be a mechanism whereby the elderly have specific trained health personnel for the elderly to be served and inquire information concerning their health service as it is stipulated in the first phase of the National Strategy for Growth and Reduction of Poverty.

Health workers are very discriminative and restrictive to the elderly in the process of health service delivery which also prevents the elderly from accessing free health services. It is recommended that the government of Tanzania should also train health workers on how to attend the elderly people in order to minimize age discrimination

during provision of healthcare services. The government of Tanzania should set aside a specific budget for the elderly so as to enable health workers provide free health services to them in all government health facilities.

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CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

This chapter presents conclusions drawn from the research findings on the basis of their implications given. The recommendations derived from the conclusions are also presented specifying appropriate strategies to be undertaken at different levels by not only the Ministry of Health, Community Development, Gender, Elderly and Children, but also by other stakeholders dealing with health issues of the elderly in order to improve the provision of free health services to the elderly in the study area.

6.1 Conclusions

6.1.1 Health status of the elderly

The first specific objective of this study was to establish the health status of the elderly. Based on the research findings, it is concluded that:

i. The majority of the elderly have frequent illnesses and hence the majority of them perceived their health status to be poor. The situation might expose them to high risks leading to subsequent deaths. This also adds a burden of diseases, particularly in the study areas and in Tanzania at large.

ii. Some socio-economic factors such as long distance from health facilities influenced the health status of elderly negatively. The negative influence of some socio-economic factors such as long distance from health facilities on the health status of the elderly implies that the elderly, particularly those who lived at long distances from health facilities, were unable to seek health services.

iii. The health statuses of the elderly have no significant association with their access to free health services, meaning that health statuses of the elderly do not determine their access to free health services

6.1.2 Quality of health services received by the elderly

The second specific objective was to determine the quality of health services received by the elderly. The conclusions drawn from the results are:

i. The elderly viewed all the service quality dimensions adapted in the study important in measuring health service quality important, implying they can be used by health service providers in measuring health service delivery systems.

ii. The elderly had higher expectations on the health services than what they received. When expectations exceed perceptions, it implies that the services rendered are of low quality. Therefore, the elderly were not satisfied with the health services they received, which indicates that the health services facilities performed inefficiently in providing health services to the elderly.

iii. Health service quality is significantly associated with access to free health services by the elderly, implying that poor quality of health services is one of the hindrances to access to free health services by the elderly.

6.1.3 The influence of SE factors on the elderly access to free health services

The results on the influence of socio-economic (SE) factors on access of the elderly to free health services are discussed in chapter four. From the findings it is concluded that:

i. Despite the improvement, on the elderly access to free health services in the study area, the government, through the Ministry of Health, Community Development, Gender, Elderly and Children has not done much in implementing the strategy of free health service provision to the elderly.

ii. Awareness of the elderly about their right to free health services is the most important determinant in enabling them to access free health services while isolation from family members is an important factor that hinders access of the elderly to free health services in the study area.

6.1.4 Knowledge on and attitude towards free health service delivery to the elderly

Based on the results in chapter four, the study concludes that:

i. Although the majority of the elderly had heard about their rights to access free health services, they were not officially informed on their right to such services; the majority of them had heard of the services from their friends. This means that they got information from unreliable sources, which did not enable them to legally claim for their rights. Also, the Ministry of Health, Community Development, Gender, Elderly and Children did not clearly

inform its staff on the health issues of the elderly stipulated in the policy and did not set aside a specific budget for the elderly.

ii. The majority of the elderly had unfavourable (negative) attitude towards free health service delivery, which implies that they were not satisfied with the implementation of the National Ageing Policy and the National Strategy for Growth and Reduction of Poverty. This implies that they might not go for free health services.

iii. The health workers had negative attitude towards the elderly, which led to discriminative and restrictive behaviour against the elderly in the process of health services delivery. The health workers also perceived that the elderly were stubborn when trying to seek information on their rights. This also was another reason for the elderly being afraid of claiming for their right to free health services. Also the Ministry of Health, Community Development, Gender, Elderly and Children did not set aside a specific budget for free health service provision to the elderly.

6.2 Recommendations

6.2.1 Improving health status of the elderly

Based on the conclusions drawn about the elderly health status, it is recommended that:

i. The government of Tanzania, through the Ministry of Health, Community Development, Gender, Elderly and Children and other stakeholders, should develop appropriate strategies to ensure that all the elderly are provided with

adequate health services for free; for example, the government should make sure that health facilities have adequate equipments for diagnostic tests, medicines, and skilled health workers and rooms for provision of health services to the elderly.

ii. The government of Tanzania; through the Ministry of Health, Community Development, Gender, Elderly and Children as well as and local governments; should ensure that the elderly receive free health services at short distances (5 km or less) from where they live. This can be achieved through establishment of mobile/outreach health facilities as it is done for maternal and child health services in some areas, so that the elderly do not have to walk long distances to get health services.

iii. Furthermore, establishment of pension schemes for the elderly is necessary to facilitate them with subsistence income as it is done for Tanzania Social Action Fund (TASAF) to poor households so as to enable them get transport fare to the health facilities.

iv. Local government authorities, religious leaders and NGOs should collectively make efforts to sensitize family members and community members on the care of the elderly in order to ensure that their health statuses are improved in Tanzania, particularly in Makete and Iringa Districts where the research was conducted.

6.2.2 Improving the health service quality

i. Because the elderly viewed that the servequal dimensions used to measure the quality of health services were important, it is recommended that the dimensions used in this study should be considered by the Ministry of Health, Community Development, Gender, Elderly and Children and other stakeholders in monitoring and evaluation on health service provision to the elderly.

ii. Furthermore, it is recommended that health service providers should maintain a strong focus on respondents' expectations by improving health service provision practices that would match or exceed respondents' expectations. Also it is recommended that more attention should be paid to the servequal dimensions with higher gaps in order to meet the respondents' expectations.

iii. Due to the respondents' higher expectations on health service quality than what they received, it is recommended that health service providers should maintain a strong focus on respondents' expectations by improving health service provision practices that would match or exceed respondents' expectations paying more attention to reliability and empathy due to their larger quality gap scores.

6.2.3 Addressing access of the elderly to free health services

The availability of quality health services to the elderly and their access to free health services hinge around the organizing and mobilizing of elderly and their communities to stimulate an engaging demand for quality health services. Therefore, it is recommended that:

i. The health service providers and health facility officials should be sensitized to positively respond to the health rights of the elderly.

ii. The government of Tanzania, through the Ministry of Health, Community Development, Gender, Elderly and Children and the local government are urged to ensure availability of enough budgets to enable sustainable provision free health services to elderly.

iii. The government of Tanzania, through local leaders and other stakeholders dealing with health issues for the elderly, should also give priority to raising awareness of the elderly on their rights to free health services as this has great influence on their access to such health services.

6.2.4 Knowledge and attitudes

In view of the conclusion that the elderly received information about free health services from unreliable sources, it is recommended that:

i. The Ministry of Health, Community Development, Gender, Elderly and Children; through the local governments; should officially inform the elderly on their rights to free health services and sensitize them about the National Ageing Policy.

ii. The Ministry of Health, Community Development, Gender, Elderly and Children should adequately inform health workers about the elderly related health issues as stipulated in the National Ageing Policy. It should also sensitize health workers on how to attend the elderly in order to minimize, if not eradicate, age discrimination during health service delivery.

iii. The government of Tanzania should enact a governing law to the National Ageing Policy for the elderly to be able to legally claim for their rights to free health services. Public education also is important to ensure that myths, misconceptions and negative attitude towards the elderly are addressed and changed. This should be done by conducting interventions in hospitals, working places and the entire community.

iv. The media should be encouraged to have coverage on topical issues such as old age, ageing process and the effects the elderly people face as a result of societal negative attitude towards them (the elderly).

6.3 Areas for Further Research

i. It was found from the study that, the majority of the elderly did not receive free health services in the study area. It is suggested that similar studies should be done in other areas of the country in order to have comparative information for the whole country. This will help the actors to set priorities for implementation based on the empirical information.

ii. It was revealed that health workers have negative attitude towards the elderly in the health delivery process. Therefore, it is suggested that there is a need for further research on the perception and attitude towards the elderly at the national level, for example policy makers, government officials at the ministerial level in order to reveal why the national ageing policy goal of providing free health services to the elderly is not largely achieved in the study area.

iii. It was found in this study that the majority of the elderly have a role of taking care of their sick children and grand children who have been infected by HIV. Therefore, it is suggested that further research should be conducted to assess the knowledge of the elderly on HIV prevention and testing. This is because ignorance in the same may worsen the health status of the elderly.

iv. It is also suggested that the effect of ageism among the elderly should be researched on in order to understand other effects apart from those related to health issues. This is due to the fact that ageism may lead to other effects more than the health effects that may lead to problems such as discrimination against the elderly.

APPENDICES

Appendix 1: Questionnaire for assessing access to free health services by the elderly in Iringa and Makete Districts, Tanzania

Researchers' introduction

Dear respondents,

I am ***Agnes Nzali*** a PhD student from Sokoine University of Agriculture, Institute of Development Studies.

I am conducting a study on **Access to free health services by the elderly in Iringa and Makete Disricts.** Therefore, I request for your kind cooperation in responding to this questionnaire for the completion of this study, and your honesty answers to questions that will be asked are important for the results of this study to reveal the situation on the access to free health services by the elderly. I would like to assure you that confidentiality will be maintained throughout the study (No any identification such as participant's name will appear in this study). For more information please contact me through the following contacts:

Email address: aggy.nzali@gmail.com

Mobile: +225 (0) 755 816 788

Section A: Questionnaire identification

S/No	Item	
1.	Date of interview	
2.	Questionnaire No	
3.	Name of interviewer	
4.	Village Name	
5.	Ward	
6.	District	

Section B: Respondents' general characteristics

Please provide response (s) for each question. For questions with multiple answers put cycle the response number of your choice (s) from the list of choices given and for other questions fill your response in the space provided.

1. Sex

l. Male 2. Female

2. How old are you? (Years) ……

3. What is your marital status?

1. Married
2. Single
3. Divorced/separated
4. Widowed

4. Are you the head of the family?

1. Yes 2. No

5. How is your living arrangement?

1. Living alone
2. Living with partner only
3. Living with partner and others (G/children or other relatives)
4. Living with other people only (G/children or other relatives)

6. How many are you in the family? .....(Number)

7. How do you feel in your residence?

1. Lonely 2. Comfortable 3. Uncomfortable

8. Give reasons for your response (Multiple responses)

……

……

……

……

9. What is your highest level of education?

1. Never went to school
2. Adult education
3. Primary education
4. Secondary education
5. College/ University education
6. Others (specify) ……

10. What is your current main source of income? …….

1. Agricultural activities
2. Remittance
4. Old age pension
5. Employment by contract/casual labour

6. Others (specify) ……

11. How much do you earn per month …… (Tsh)

12. Are you able to save money?

1. Yes 2. No

13. If yes, how much do you save per year? ……..

14. How much in average do you spend on health services ……..(Tsh)

Section C: The elderly's self perceived health status and health seeking behaviour

15. How do you generally perceive your health status?

1. Good 2. Moderate 3. Poor

16. Do you have difficulties in performing any of the following activities of daily living?

Activity	**Response**		
Bathing	0	1	2
Dressing	0	1	2
Feeding	0	1	2
Walking	0	1	2
Toileting	0	1	2

0 = Normal 1 = Some difficulty 3 = Difficulty

17. How often have you been ill in the past six months?

1. Very frequently 2. Frequently 3. Rarely

18. What was the most common disease you have been suffering from in the past six months?

1. Malaria 2. Diarrhoea 3. Respiratory related diseases

19. What chronic disease(s) are you suffering from?

1. None
2. Limbs (Legs and/or arms)
3. Heart related diseases
4. Asthma
5. Diabetes
6. Eye related problems
7. Others (specify)

20. When you fall sick, where do you usually go for treatment?

1. Government hospital/ dispensary/health centre
2. Private hospital/ dispensary/health centre/pharmacy

3. Traditional healers
4. Spiritual healers
5. Don't go anywhere
6. Others (specify)……

21. How far is a government health facility from your residence?

1. Less than 1km
2. 1km to 5km
3. 6km to 10km
4. More than 10km
5. Others (specify)……

22. What are the means of transport to the health facility when you are sick or in need of health services?

1. On foot
2. By bicycle
3. By Motorcycle
4. By car
5. Others (specify)…….
6. When you go to any government health facility, do you usually get free health services?

   1. Yes 2. No

Section D: The elderly perception and expectation on the quality of health service delivery

23. In this scale, please assign any number from 1 - 7 **(Lowest-Highest),** to indicate your perception of the quality of the health services you generally receive.

	Service quality dimension	**Your perception**						
	Tangibles							
1	Adequacy of service equipment	1	2	3	4	5	6	7
2	Health workers' neatness and professional appearance	1	2	3	4	5	6	7
3	Appearance of service rooms	1	2	3	4	5	6	7
	Reliability							
1	Providing services to the elderly as promised	1	2	3	4	5	6	7
2	Dependability on service provision	1	2	3	4	5	6	7
3	Keeping old patients informed	1	2	3	4	5	6	7

	Responsiveness							
1	Readiness of medical personnel to promptly provide health services	1	2	3	4	5	6	7
2	Willingness of medical personnel to assist the elderly	1	2	3	4	5	6	7
3	Readiness of medical personnel to respond to the elderly health needs	1	2	3	4	5	6	7
	Assurance							
1	Health workers' confidence	1	2	3	4	5	6	7
2	Making elderly patients feel safe during health service delivery	1	2	3	4	5	6	7
3	Consistency of healthy workers on healthy service delivery	1	2	3	4	5	6	7
	Empathy							
1	Health workers' attention to the elderly patients	1	2	3	4	5	6	7
2	Health workers caring of elderly patients	1	2	3	4	5	6	7
3	Health workers' understanding on the needs of elderly patients	1	2	3	4	5	6	7

KEY: ***1=Very low perception, 2: Low perception, 3: Uncertain, 4: High perception, 5: Very high perception***

24. In this scale, please assign any number from 1 - 7 **(Lowest-Highest),** to indicate your expectations of the quality of the health services.

	Service quality dimensions	**Your Expectations**						
	Tangibles							
1	Adequacy of service equipment	1	2	3	4	5	6	7
2	Health workers' neatness and professional appearance	1	2	3	4	5	6	7
3	Appearance of service rooms	1	2	3	4	5	6	7
	Reliability							
1	Providing services to the elderly as promised	1	2	3	4	5	6	7
2	Dependability on service provision	1	2	3	4	5	6	7
3	Keeping old patients informed	1	2	3	4	5	6	7
	Responsiveness							
1	Readiness of medical personnel to promptly provide health services	1	2	3	4	5	6	7
2	Willingness of medical personnel to assist the elderly	1	2	3	4	5	6	7

3	Readiness of medical personnel to respond to the elderly health needs	1	2	3	4	5	6	7
	Assurance							
1	Health workers' confidence	1	2	3	4	5	6	7
2	Making elderly patients feel safe during health service delivery	1	2	3	4	5	6	7
3	Consistency of healthy workers on healthy service delivery	1	2	3	4	5	6	7
	Empathy							
1	Health workers' attention to the elderly patients	1	2	3	4	5	6	7
2	Health workers caring of elderly patients	1	2	3	4	5	6	7
3	Health workers' understanding on the needs of elderly patients	1	2	3	4	5	6	7

KEY: ***1=Very low expectation, 2= Low expectation, 3= Uncertain, 4= High expectation, 5= Very high expectation***

Section E: The elderly knowledge on free health services

25. Are you aware that the elderly are supposed to get free health services?

1. Yes 2. No

26. If yes, in 16 above, where did you get the information about free health service exemption?

1. Community leaders
2. Health workers at the health facility
3. Friends/ neighbours
4. Mass media
5. Others (Specify)……..

27. If yes in 16, at what age are the elderly eligible for free health services?.....(Number)

28. Do you generally have adequate information about free health service exemption to the elderly?

1. Yes 2. No

29. If the answer above is no, would you like to have more information about free health service to the elderly?

1. Yes 2. No

30. If yes, what kind of information would you like to receive?

1. Eligibility 2. Delivery process 3. Requirements 4. All of the three

31. Are you aware of the National Ageing Policy in Tanzania?

1. Yes 2. No

32. In your opinion are the elderly well informed about their right to free health services in your village?

1. Yes 2. No 3. Don't know

33. Explain your response above (Multiple responses)

……

……

34. On your opinion, are the health facilities prepared to provide free health services to the elderly?

1. Yes 2. No 3. Don't know

35. Explain your response above (Multiple responses)

…….....

……

……

36. Are there specific doctors or other health professionals you usually go to when you are sick or in need of health services?

1. Yes 2. No

37. When you go for treatment, is there specific place (room) for health service provision to the elderly alone? 1. Yes 2. No

38. Are you generally satisfied with the way the health services and care are offered?

1. Yes 2. No

39. How comfortable are you in discussing your illness with the health worker?

1. Very Comfortable
2. Comfortable
3. Not Comfortable at all

Section F: The elderly attitudes towards free health services delivery process

40. In the following table you are required to indicate your response on each statement by circling the number in the box of your choice.

	Statement to measure	*Strongly Disagree*	*Disagree*	*Uncertain*	*Agree*	*Strongly Agree*
1	There is no clear mechanism for free health services to the elderly	1	2	3	4	5
2	I am not adequately informed about free health services	1	2	3	4	5
3	There is freedom to ask the health workers about free health services to the elderly	1	2	3	4	5
4	Health workers listen carefully to the elderly health issues	1	2	3	4	5
5	Health workers are harsh when I demand for free health services	1	2	3	4	5
6	I have the right to demand for free health services	1	2	3	4	5
7	There is good arrangement for the for the elderly to receive free health services	1	2	3	4	5
8	Better to opt for traditional or healers than to a government health facility	1	2	3	4	5

Section G: Respondents' social information

41. Can you participate in social networks (groups) in your area?

1. Yes 2. No

42. If no give reasons (Multiple responses)

……

……

……

43. Can you appear in community without shame?

1. Yes 2. No

44. Give reason fro your response (Multiple responses)

……

……

……

45. Do you feel accepted by the society?

1. Yes 2. No

46. What kind of treatment, do the elderly usually receive from the community?

1. Love, kindness 2. Isolation and rejection

47. If love and kindness give reason

1. Strong traditional ties
2. Socio-cultural interactions
3. Religiosity
4. Others ……(specify)

48. If isolation and rejection why?

1. Broken traditional ties
2. Bad beliefs
3. Selfishness

49. Aare you a member of any socio-economic group in your place

1. Yes 2. No

50. If yes in what group are you?

1. Religious group
2. Income generating group
3. Peer group 4. Others……(specify)

THANK YOU FOR YOUR COOPERATION

Appendix 2: Checklist for Focus Group Discussions by the Elderly for Research on: Access to free Health services By the Elderly in Iringa and Makete Districts

1. Whether the health services exemption process is clearly known to the elderly
2. Whether they have freedom to demand for their right to free health services
3. Whether the health workers are ready to inform adequately when they ask for free health services
4. Whether they feel they would better to opt for traditional treatment rather than going to a government health facility
5. Awareness on the existence of the national ageing policy and other related official information on the elderly exemption from health services
6. Their perception of free health services
7. General perception of the of free health services provision process
8. General relationship between medical personnel and the elderly during health service delivery

Appendix 3: Interview guide for health workers in government health facilities for Research on: Access to free Health services by the Elderly in Iringa and Makete Districts

1. Knowledge on the National ageing policy and the right of the elderly to free health services
2. Existing mechanism for free health services to the elderly in the health facilities
3. General views on free health services delivery to the elderly
4. Factors influencing access to free health services by the elderly
5. Constraints faced by health service providers
6. Are there staff trained specifically for free health service provision to the elderly
7. Whether they are specific health personnel and specific rooms for attending the elderly
8. Whether the elderly are well informed on their rights at health facilities

Appendix 4: A map showing the study area