

**DETERMINANTS OF HUMAN RESOURCE RETENTION FOR  
HEALTHCARE IN TANZANIA'S PUBLIC HEALTH FACILITIES**

**DETERMINANTS OF HUMAN RESOURCE RETENTION FOR  
HEALTHCARE IN TANZANIA'S PUBLIC HEALTH FACILITIES**

**By**

**Hassanal Issaya**

**A Thesis Submitted in Fulfilment of the Requirements for the Award of the  
Degree of Doctor of Philosophy (PhD) of Mzumbe University**

**2017**

## CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University Senate, a thesis entitled “**Determinants of Human Resource Retention for Healthcare in Tanzania’s Public Health facilities**”, in fulfilment of the requirements for the award of the degree of Doctor of Philosophy (PhD) of Mzumbe University.

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Major Supervisor

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Co-Supervisor

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## **DEDICATION**

To my lovely wife, Monica and my children: Morgan, Caroline, Irene and Janeth for their patience and understanding. May God bless you all.

## LIST OF ABBREVIATIONS AND ACRONYMS

<b>AMOs</b>	:	Assistant Medical Officers
<b>BOT</b>	:	Bank of Tanzania
<b>CBOs</b>	:	Community Based Organisation
<b>CHMT</b>	:	Council Health Management Team
<b>COs</b>	:	Clinical Officers Elderly and Children
<b>EQUINET</b>	:	Regional Network for Equity in Health in East and
<b>GCIM</b>	:	Global Commission on International Migration
<b>HLF</b>	:	High – Level Forum
<b>HR</b>	:	Human Resource
<b>HRH</b>	:	Human Resource for Health
<b>ICNs</b>	:	International Council of Nurses
<b>KCMC</b>	:	Kilimanjaro Christian Medical Centre
<b>LGAs</b>	:	Local Government Authorities
<b>MDAS</b>	:	Ministry Department and Agencies
<b>MDGS</b>	:	Millennium Development Goals
<b>MOF</b>	:	Ministry of Finance
<b>MoHCDEC</b>	:	Ministry of Health, Community Development, Gender, Elderly and Children
<b>MOs</b>	:	Medical Officers
<b>NGO's</b>	:	Non Governmental Organisation
<b>NSGPR</b>	:	National Strategy for Growth and Poverty Reduction
<b>Ph.D</b>	:	Doctor of Philosophy
<b>PMO-RALG</b>	:	Prime Minister's Office-Regional Administration and
<b>PO-PSM</b>	:	President's Office, Public Service Management
<b>RHMT</b>	:	Regional Health Management Team
<b>SASE</b>	:	Selected Accelerated Salary Enhancement Scheme
<b>SES</b>	:	Social Economic Status Southern Africa
<b>TPSC</b>	:	Tanzania Public Service College
<b>TRA</b>	:	Tanzania Revenue Authority
<b>UK</b>	:	United Kingdom
<b>URT</b>	:	United Republic of Tanzania
<b>USA</b>	:	United States of America
<b>WHO</b>	:	World Health Organisation

## ABSTRACT

Various strategies for retaining Human Resources for Health (HRH) in public health facilities are growing in the countries of the Global South. For instance, Tanzania is a glaring example of African states which have high incidence of retention crisis for HRH that affect provision of healthcare. While several measures have been undertaken to address the problem, little is known whether the retention indicators established by various Tanzania's health reports are consistent with the factors causing the happening in the demand side of HRH. The current study examined the determinants of human resource retention for healthcare in Tanzania's public health facilities while utilising an adopted Herzberg's theoretical framework. The study adopted an explanatory research design revolving around quantitative sequential qualitative mixed research approaches. It also utilised a sample size of 408 participants in which 384 were sampled through random sampling and snow ball techniques and surveyed through the use of questionnaires to generate quantitative information. Also, the study sampled 24 participants purposively to generate qualitative information for this study through interviews. The study relied on both descriptive and inferential statistics in the analysis of quantitative data as well as content analysis for analysis of qualitative data.

Overall, the study found that retention of Human Resource for Health (HRH) is not determined by a single factor but by a multi-dimensional of factors. Among others include demographic and socio-economic factors which offers mixed results to the extent to which HRH are retained in Tanzania's health systems. This implies that despite implementation of various HRH retention strategies in health facilities, there is a mismatch between retention indicators established by various Tanzania's health performance reports and the determinants of HRH retention from the demand side of health workforce. This is due to failure of meeting context specific demands in line with the demographic and socio-economic factors of HRH within the context of rural-urban set ups. Further, it was revealed that salary and other extrinsic motivations provided by the government were inadequate to warrant retention of HRH. However, when multiple regressions were conducted, the results indicate that working environment and recognition are the most statistical significant related positively to retention of HRH. Seemingly, this is partly contributed by the fact that individual employees respond to different contexts differently. On contrary, more than a half of surveyed HRH had negative perceptions on the retention strategies used by the government to retain them in the public health facilities. Based on these findings, the study concludes that the implementation of government policies and public intervention related to HRH retention should be based on both job and context related motivators, as well as reflecting local settings. The study also recommends for the government to device policies that reflects the demand and supply needs of working infrastructure in the public hospitals to attract more and retain HRH.

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## **CHAPTER ONE**

### **THE PROBLEM AND ITS SETTING**

#### **1.1 Introduction**

Various strategies for retaining Human Resources for Health (HRH) in public health facilities are growing in the countries of the Global South. For instance, Tanzania is a glaring example of African states which have high incidence of retention crisis for HRH that has been a recurring decimal in the provision of healthcare. While explanations for measures undertaken to address the problem of HRH retention have for a long time relied on the established government policies and public initiatives as a supply side to ameliorate the situation, little is known from the demand side of the health sector, that is HRH. The study raises issues for the observation: Are the retention indicators of HRH established by various Tanzania's health performance reports consistent with the factors causing the happening in the demand side? The study analysed that research gap using Tanzania's public health facilities and an adapted Herzberg's theory. Further, this introductory chapter is organised into background to the problem, problem statement, objectives of the study, significance and limitations of the study, as well as the organisation of the thesis.

#### **1.2 Background to the Problem**

The historical continuum of the retention of human resources for health (HRH) has been a recurring matter occupied the discussions of policy makers, bureaucrats, civil societies as well as researchers from the global level, regional (sub-Saharan Africa), as well as in the Tanzanian society since the post-colonial era of the country's political history. Essentially, human resources are not only the backbone of any healthcare system but also a critical factor for comprehensive health service delivery. In this case, the size, skills and commitment of a country's health workforce play a vital role in determining the type of health system in place. On contrary, researches show that employees' retention quite often affects various organisations. In Tanzania, for example, shortages of health personnel and poor health worker performance have become the most pressing problems of her health systems.

Conceptually, employee retention is a contested term. According to Bidisha and Mukulesh (2013), employee retention is concerned with keeping or encouraging employees to remain in an organisation for a maximum period of time. Likewise, McKeown (2005) conceives employee retentions as keeping right people in the right job and it is more about how organisations treat people. It is further described by Chaminde (2007) as a voluntary move by the organisation to create environment which engage employees for long term stay. For the purpose of this study, employee retention refers to the establishment of various strategies reflecting the needs of both HRH and healthcare systems for retaining HRH to deliver high quality health care.

Literally, the gaps relating to employee retention in public health industry is not only unique to Tanzania. Various studies and reports have brought out the broader picture of how the failure to retain HRH happens, its implications as well as what has been done to reduce such gaps from the global level, regional (sub-Saharan Africa) before coming to the national level in Tanzania. Global statistics indicate that crisis of the Human Resource for health has reached a state of emergency due to inadequate retention of HRH (Makodi, 2014; WHO, 2006).

Global statistics indicate that: In USA, organizations spend 200 billion in replacing lost workforce annually (Samwel, 2008, Makodi, 2014; WHO, 2006). Also, in Asia the turnover rate is 14 to 16 % per year. It is further observed that in UK, the turnover rate is estimated to reach 29% in 2020 (Sellgreen 2007). In Africa, it is estimated that 23,000 health care staff emigrate from Africa annually (Pang, Lansang and Haines 2002). There are more African health care professionals in USA than in Africa (Kauzya, 2009; Chipunza, 2009). Likewise, UNECA report indicates that there are 127,000 highly qualified African health care professional who left the continent between 1960 and 1989. This trend has contributed to shortage of 2.4 million HRH in Africa despite having 25% of global diseases burden (WHO 2006). While less developed countries such as Malawi, Lesotho, Zambia and Ghana are the hosts of various diseases that plague part of the world, they had inadequate and small ratio of doctors and nurses per population (Richard, 2003).

Experience drawn from the human resources situation of Tanzania's health sector is recognised as a crisis (Sikika, 2010). The persistence of the crisis has been attributed to an increasing demand for health services combined with insufficient supply of health workers (*ibid.*). Within the attrition profile, Tanzania had HRH shortage of 56% in 2014 (Global Health Delivery, 2016:5). Further, Global Health Action (2016:6) estimates that 1.6% of clinically active doctors leave the country each year based on the above reasons. It is also estimated that by 2025, 41% of all medical school graduates between 2016 and 2025 will be lost to clinical practice in Tanzania for those reasons (Global Health Action *ibid.*)

Surprisingly, in many less developed countries including Tanzania, hospital beds are full of overflowing, and HRH are unable to keep with endless flow of patients near death (Jacinta 2015). Inadequacy of personnel with relevant skills is a threat to the success of programmes intended for scaling up health services for reaching the Sustainable Development Goals (SDGs). Among the MDGs for health which transitioned to SDGs include reduction of child mortality; improvement of maternal health; as well as combat HIV/AIDS, Malaria and other diseases.

Seemingly, the trend of retaining human resources for health (HRH) in healthcare facilities have for a long time relied on initiatives of the supply side. Available literature by Mkapa HIV/AIDS Foundation (2015); Mujinja and Kida (2014); Samuel and Makodo, (2014); and Sikika, (2010 and 2013) highlight several factors from the supply side that contribute to this gap. Among others include the lack of comprehensive data on actual number of health workers in Tanzania, lack of conducive working environment, poor remuneration, lack of a good and flexible working infrastructure, as well as lack of attractive retention schemes. Moreover, the increased Tanzania's population from the growth rate of 2.7% annually, and wide spread of diseases have led to an increasing work load at the country's health facilities. More so is the fact that, the overstretching of the HRH in public hospitals is exacerbated by inadequate motivation and retention of HRH (URT, 2009).

Further, there are various reports that allude to factors influencing retention of human resources for public health facilities from the supply side. Among others include: The 2003 Tanzania's National Health Policy; The 2013 Human Resources for Health Country Profile; as well as the 2014 Human Resources for Health and social Welfare Strategic Plan 2014-2019 which gave rise to various policy interventions for retention of HRH. This study agrees with those established initiatives at both policy and public intervention levels.

However, at the philosophical lens it realises the limitations of those state focused interventions for retention of HRH in Tanzania ignores demand side of the HRH. This was the research gap filled by the study. Within the demand lens of the problem of HRH retention in Tanzania, Sikika (2013) in the tracking study of medical doctors shows that a relative high number of health facilities in Tanzania face multiple critical challenges in retaining HRH. Among the factors contributing to inadequate of HRH in public health facilities include: uneven distribution of HRH between urban and rural areas, low productivity, poor working conditions as well as ineffective financial and non-financial incentives.

Among the determinants of the retention of HRH examined from the demand side of the HRH include the contribution of the demographic factors (age, sex, education and marital status) on HRH retention in Tanzania public health facilities; the effects of salary and other extrinsic motivations provided by the government on retention of HRH; as well as perceived factors by HRH in health worker satisfaction used by the government in the public health institutions. These strategies are more articulated in Herzberg (1964) two-factor theory clustered into two categories: factor to do with the job itself, as well as factors to do with the job context. Literally, the factor to do with the job itself is referred by Herzberg as intrinsic factors while factors to do with the job context are termed as extrinsic factors. Among the intrinsic factors include: Achievement, recognition, work itself, responsibility, advancement as well as growth. Extrinsic factors, on the other hand include: Supervision, company policy,

relationship with fellow workers, salary provided, person life, status as well as job security.

At the policy level, the government of Tanzania has established and reviewed various policies and initiatives to ensure among others retention of its HRH staff in public facilities. Of recent is the comprehensive health reform programme which started in 1994-to 2017 with a view to improving health care services for the population. The reforms were intended to address the core problems of the sector and aim to among others to improve efficiency and coordination in allocating scarce resources including HRH. Furthermore, the government has subscribed to various international agreements such as the WHO Health Workforce Decade (2006-2015) which put high priorities for countries to develop effective workforce strategies which stresses on the importance of HRH retention through observing three core elements by: improving recruitment, helping the existing workforce perform better and slowing down the rate of turnover of HRH.

Furthermore, the government has also subscribed to the Kampala Declaration (2008) that calls for high commitment of government and development partners on new code of practice to stop international recruitment of health personnel without prior agreement with countries of origin, however the level of compliance in Tanzania is very minimum thus continues to affect the crises of HRH in the health sector. Apart from these international efforts, Tanzania has developed various policies such as; Human Resource Policy Guideline 2005, the Health sector strategic plan 2003-2008/2008-2015, as well as the primary health development programme 2007-2017. All those interventions aimed to enhance HRH retention by creating conducive working environments in the public health sector in order to motivate and retain health sector workforce.

Other initiatives that aimed to sustain its HRH retention includes, among others, raising and reviewing of salaries and other compensation benefits. For example, in 2002 the Government adopted the selected accelerated salary enhancement (SASE) scheme for the Tanzanian public service as a special payment package for staff

working in hospitals. This scheme aimed to attract and retain well qualified technical personnel and professionals in the public service by providing salary top-up to address low motivation. In addition, there are special programmes such as the Mkapa Foundation in some few selected hospitals which offers special benefits as motivation and incentives to health workers including free housing, air time and transportation (Sikika, 2013). Moreover, the government has improved the health workers extra work pay, on-call allowance to both, specialist and medical doctors, risk allowance, housing allowance as well as increased opportunities for self-development (Kauzya, 2009), (URT 2015). Against that background, this study examines the determinants of HRH retention in Tanzania's public health facilities. Could Herzberg two factor theory provide insights on HRH retention taking Tanzania's public health facilities as the unit of analysis?

### **1.2.1 Statement of the problem**

Interest on “ retention of Human Resources for Health (HRH)” in Tanzania's public health facilities has over the last two decades dominated the discussions of policy makers, researchers, academics, civil societies as well as bureaucrats. This is because every HRH represents a large public investments of resources, time and energy. Failure to retain HRH in health systems, for any reason leads to a number of costs that the government incures to select, induct and educate.

Since 2006, the Tanzania's government through the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEC) has made deliberate efforts to induct, educate as well as retain HRH in her public health facilities in order to increase health care production. This also follows a general observation from the health workers shortage due to expansion of health systems structures, increased trend of Tanzania's HRH switching from either public to private health facilities or migration to other countries for various reasons. Despite various established government initiatives, the retention of Human Resources for Health (HRH) in Tanzania's public hospitals remains a recurring decimal (Aloisia *et al.*, 2016; Nathanael *et al.*, 2014; the World Bank, 2012; Sikika, 2010; as well as MoH, 2009).

For example, the performance report of the Ministry of Health and Social Welfare (2013) indicates that in less than 15 years, the proportion of health workers to a total population has fallen by 75%. It is estimated that about 300 medical doctors and nurses leave the public sector annually. These statistics suggest that the Tanzania government has failed to motivate and keep the existing health care staff in the public health facilities. While explanations for measures undertaken to address the problem of HRH retention have for a long time relied on the established government policies and public initiatives as a supply side to ameliorate the situation, little is known from the demand side of the health sector, that is, the human resources for health (HRH). This was the knowledge gap that this study strived to fill at. It is from such observations that this study intended to uncover: why do we have persistent HRH retention problems despite having retention strategies established by the government in place? Consequently, the study examined the determinants of HRH retention in Tanzania's public health facilities using an adapted Herzberg's two-factor theory.

### **1.3 Research Objectives**

The study examined the determinants of human resource retention for healthcare in Tanzania's public health facilities utilising an adapted Herzberg's theoretical framework.

#### **1.3.1 Specific Objectives**

The study was guided by three specific objectives namely to:

- i. Identify the extent to which both, the demographic factors (age, gender, and marital status) and socio-economic status contribute on HRH retention in Tanzania's public health facilities
- ii. Assess the contribution of perceived intrinsic factors in health worker satisfaction on HRH retention in Tanzania's public health facilities
- iii. Examine the extent to which the level of salary and other extrinsic motivations provided by the Government of Tanzania (GoT) constrain retention of HRH in Tanzania's public health facilities

## **1.4 Research Questions**

The study was guided by the following research questions:

- i. To what extent do both, the demographic factors (age, gender, and marital status) and socio-economic status contribute on HRH retention in Tanzania's public health facilities?
- ii. How do perceived intrinsic factors in health worker satisfaction contribute on HRH retention in Tanzania's public health facilities?
- iii. To what extent do both the level of salary and other extrinsic motivations provided by the Government of Tanzania (GoT) constrain retention of HRH in Tanzania's public health facilities?

## **1.5 Significance of the study**

This study has both theoretical and practical significance, which have been classified thusly: contribution to the body of knowledge; informing policy and guidelines on HRH retention; as well as informing the Tanzania's public health facilities on the demand needs of HRH retention.

### **1.5.1 Contribution to the Body of Knowledge**

The study contributes the body of knowledge in the following ways. Whilst various strategies of retaining HRH in public health institutions across countries and regions have been contributed significantly by various studies while focusing on the supply side informed by states interventions, little has been known from the demand side. Because of such observations, this study has broadened our understanding and contributed to the body of knowledge on the determinants of human resource retention for healthcare from the demand side lens in Tanzania's public health institutions. As such, it has explored and contributed to one of the most topical development issue of today, namely HRH retention in public health institutions. Evidently, this research issue is shown in the 2002 Tanzania's National Health Policy; the 2013 Human Resources for Health Country Profile; as well as the 2014

Human Resources for Health and social Welfare Strategic Plan 2014-2019 which gave rise to various policy interventions for retention of HRH.

### **1.5.2 Contribution to policy making**

This study provides information to policy makers and planners such as the Ministry responsible for Health on proper strategies to bridge retention gaps for HRH in Tanzania's public health facilities. Essentially, the study has provided information that guide the government towards devising HRH retention policy, strategies as well as practices. An understanding of clear factors that contribute to the gaps in retention of HRH in public health institutions will assist policy makers and health managers to design policy interventions that are research based evidence thus striving towards meeting the Tanzania's development vision by 2025, 2000 Millennium Development Goals (MDGs) as well as the 2015 Sustainable Development Goals (SDGs).

### **1.5.3 Contribution to public health facilities**

The findings from this study also act as a yardstick against which the devolved government ministries, agencies and departments as employers can gauge themselves on their provision of conducive working environment that enhance employees job satisfaction and hence retention.

Thus, this research provides extensive approach to understanding the driving forces that affect retention of human resource for health in public health facilities. Through this endeavour the study provides a basis for developing effective and sustainable HRH retention strategies in the public health facilities and the country at large that can contribute to retention hence progress towards universal health care services.

## **1.6 The Limitations of the Study**

The study faced various limitations in the process of pre-empting the unknown. Essentially, the data collection process faced four categories of limitations. These were time; openness and transparency issues pertaining to HRH retention, limitations

related to the co-operation from the study participants, as well as the emerged conflict between the GoT and medical doctors during data collection.

- (i) **Time:** Time is examined at two levels. First, the time allocated to collect primary data was too short to accomplish all the field tasks. Only six months were set aside for data collection from three selected study regions, however, it was difficult for most of the study participants to tribute their appointments because of other competing work responsibilities. Consequently, most of the interviews were rescheduled to their convenient time.
- (ii) **Openness and transparency of respondents:** Some HRH were reluctant to respond to questions that required them to indicate their earnings in terms of salaries in line with their job descriptions. This reluctance was caused by unfounded fear of being investigated as suspects for divulging things they would not like to expose to third parties which was perceived as institutional secrets. Measures to overcome this problem included counter checking the information with other respondents in the same department/section and through observation. Also, I tried as much as possible to reduce any possible mistrust by properly presenting myself (through identity card and letters of introduction) and creating rapport with the respondents.
- (iii) **Support and co-operation from study participants:** During data collection a few HRH declined to participate in the study because they mistakenly believed that the research had some political drives. In this case, they feared they could be implicated in their career and professional development. To mitigate this problem, more time was spent to sensitise study participants on the nature and purpose of the study. At the same time, there were few respondents who complained that the questionnaire was too long. It took one hour to answer all the questions well. After explaining the importance of the study they eventually filled out questionnaires.

Since this study was limited to the technical health care staff in public health facilities, some of the study participants especially the newly recruited staff were afraid to offer their responses due to fear of victimisation by their institutional leaders despite the fact that confidentiality was guaranteed to them. Additionally, some were over excited with the employment hence gave responses that were not reflective of the true scenarios on the ground. Also, some respondents attempted to ignore the questionnaires which in turn threatened the response rate. This however, did not affect the study findings as the researcher decided to collect questionnaires hand to hand from the respondents. Also, I persuaded heads of department and sections to help distribute and collect the questionnaires and sometimes interviews were used to verify some information which was perceived vaguely provided by the respondents.

(iv) **Emerged Conflict between the GoT and Medical doctors**

Noticeably, in some areas it was difficult to gather information from doctors and nurses, because during the data collection period, the government was in conflict with doctors. Such situation affected the study by slowing down the data collection process because some doctors and nurses were not ready to fill in questionnaires or be interviewed. As a result, a sample size of 384 respondents for generating quantitative information, as initially planned, was not met. Only 300 questionnaires were returned that provided quantitative data. Likewise, all qualitative data were obtained from 24 participants approached through interviews. However, the situation (and alike) could not weaken the findings for this study because the researcher was able to obtain a response rate of 79.4%. Also, triangulation method was used to test for reliability and validity of the research findings.

(v) **Coverage Area of Public Health Facilities**

Lastly, the study was conducted only in Tanzania mainland and did not cover the other part of Tanzania's islands. In the same token, it limited itself to public health facilities located from three regions (Mbeya, Lindi and Dar es Salaam). Hardly had it covered more regions of Tanzania, it would have been more informative than how it is now. According to the findings of this study and the analysis done on various empirical works it is possible to uncover other results if different regions and other countries with different settings were studied. Thus, the findings could be comparative. However, because of culture and economic similarities among regions throughout the country the findings sought to be reasonable and offer comparable glimpse to other countries.

### **1.7 Operationalisation of Key Concepts Utilised in the Study**

This section delineates three concepts as applied in this thesis. The section does not aim to provide a litany of definitions instead the applicability of the concepts used in the context of this study. The concept utilised include: retention of Human Resource for Health (HRH), healthcare, as well as public health institutions”

#### **1.7.1 Retention of Human Resources for Health**

Conceptually, employee retention is a contested term. Available literature suggests that there is no universal agreed definition of that concept. According to Bidisha and Mukulesh (2013), employee retention is concerned with keeping or encouraging employees to remain in an organisation for a maximum period of time. Likewise, McKeown (2005) conceives employee retentions as keeping right people in the right job and it is more about how organisations treat people. It is further described by Chaminde (2007) as a voluntary move by the organisation to create environment which engage employees for long term stay. For the purpose of this study, retention of Human Resource for Health (HRH) entails the establishment of various strategies for accommodating both, individuals HRH and organisational needs for retaining HRH in public health institutions in order to deliver high quality health care.

It should be noted that employee turnover is an opposite of retention because turnover essentially is referred to as the percentage of employees leaving the organisation for whatever reason(s) in a particular period of time (Phillips & Connel, 2003). If for example, an organisation has employed an average of 1000 people during one particular year and 45 of them left (for a reason), the theoretical employees turnover rate from that year would be 45 per cent. In practice, managers are mostly concerned in gauging the rate of voluntary departures employees who choose to leave at their own will. People may leave the organisation for many reasons such as retirement, ill, health, being fired or a forced redundancy (Phillips & Connel, 2003). Such involuntary separation is usually excluded from the calculation of the employees turnover rate (Leslie Mckeown, 2005). Thus, this study focused on the controllable reasons for employees' leaving an organisation. Employee retention is not only vital in decreasing turnover, recruitment and training costs, but it is also very important in protecting talented employees from joining competitors. Besides, there are several factors which show the importance of employee retention.

For instance, saving the turnover cost which may consume the company's thousands of shillings (Sunil, 2003). Even though it is difficult to calculate the turnover costs and output loss, industry experts quote 25% of the average an employee's salary as a conservative estimate (Sandhya & Pradeep, 2010). Further, company's information loss is another factor which shows the importance of employee retention. Mcgregory (1985) subscribes to the above views by arguing that when an employee leaves his employer, he takes with him the valuable information about his former employer (such as; customers, current projects and the past history of its competitors) to the new employer. Furthermore, a lot of time and money are invested in an employee expecting him to make profit for the organisation in the near future. Thus, it is difficult to realise the investment, when an employee leaves the organisation early (Sandhya & Pradeep, 2010). Additionally, customer services are interrupted where customers do business with a company, in part, because of the employee's reputation. Evidently, when HRH leaves an organisation suddenly, it could lead to loss of contact with potential customers (Phillips & Cornell, 2005).

In the same vein, Sandhya and Kumar (2011) added that the problem of regaining efficiency is experienced, once an employee has resigned. Researchers have also noted that a good amount of time is lost in hiring new employees and orienting him. Besides, one may not get the best out of new employees (Riley, 2009). It is believed that every manager and team member is aware of the problem associated with turnover; however, a review of its likely costs put retention in the proper perspective. Some writers highlight some dangers of organisations fail to retain its staff. For example, high fiscal costs (Dell & Hickey, 2002), loss of output and work flow interruption and poor customer service (Phillips, 2000), have been noted.

More so is the disruption of social and communication network, heavy workload for remaining employees and more critical is tarnishing the image of the organisation (Phillips & Cornell, 2003). Preview studies by Samuel and Chipunza (2009) indicate that several factors are deemed important and critical for employee retention. The factors considered to have a direct effect are work environment, personnel advancement, leadership style and employee achievement (Bernam *et al.*, 2013). Further, Blagwan and Buchan (2008) suggest that the reasons to stay are working condition, salaries, recognition of employees, job security and conducive workplace policies. Furthermore, Phillips and Cornel (2003) suggests that proper work design and interpersonal relationship among employees provide more job satisfaction and intent to stay due to challenging, meaningful, motivating and interesting work.

### **1.7.2 Healthcare**

In this study, the concept of healthcare refers to efforts made to either maintain or restore physical, emotion well being or mental disturbance especially by skilful, well trained and licenced human resource for health. Further, healthcare is conceived by this study as a human right, and not a privileged and should be taken as a public good and not a private good.

### **1.7.3 Public health facilities**

In this study, public health facilities refers to established structures by the national health policy for healthcare delivery coordinated by the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEC). In this study, the surveyed public health institutions included among others the referral hospitals, regional hospitals, district hospitals, as well as wards and villages health facilities. The study was limited to the public health institutions in three regions in mainland Tanzania.

The main focus of this study was to explore the determinants of retention of human resources for health in public health institutions. It laid specific emphasis on clinical staff at all levels namely medical doctors, nurses, pharmacists and laboratory technicians and other technical Human Resource for Health such as lab technicians and radiologist who are directly involved in medical care provision in health care. It did not cover the support staff at the public hospitals such as clerks, security guards, cleaners, drivers, office attendants and other available supporting staff for they are not directly concerned in provisional of medical care. The period within which the study had observed was from 2000 to 2015.

### **1.8 Organisation of the Thesis**

Chapter One of this study laid the introductory foundations of the study. It is organised into background to the problem, problem statement, objectives of the study, research questions and hypotheses, significance of the study, limitations of the study, as well as the organisation of the theses.

Chapter Two, presents definitions of key concepts, theoretical discussion of the study and reviews empirical studies from the global, regional and national contexts; analyse the relationship among variables in the conceptual framework, as well as discussing the theoretical framework that the study revolves at.

The research methodology and procedures are described in Chapter Three. Chapter Four presents analyses and discusses the findings on the determinants of the retention

of HRH examined from the demand side of public health institutions. It includes the examination of the contribution of the demographic factors (age, sex, education and marital status) on HRH retention in Tanzania public health institutions; the effects of salary and fringe benefits provided by the government on retention of HRH; as well as perceived factors by HRH in health worker satisfaction used by the government in the public health institutions. Finally, Chapter Five summarises the key findings, conclusions, and recommendations of the study in addition to suggestions for further studies in this subject area.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews literature related to the study objectives. The chapter has six sub-sections: the theoretical discussion of the study (2.2) that include the overview of the study; the theoretical framework that the study revolves at; as well as the conceptual framework that analyse the relationship among variables (2.3), the survey of issues directly related to the study's objectives (2.4); the critique reviews of what empirical studies have been conducted on this subject from the developed to developing countries, and national contexts (2.5); the synthesis and knowledge gap (2.6) as well as the summary of the chapter (2.7).

#### **2.2 Theoretical Perspectives of the study**

The theoretical perspectives of the study provides an overview of HRH crisis while highlighting the broader picture of the causes, effects as well as interventions that have been conducted on this subject at the global, regional as well as national contexts. Further, it does not only discuss the theoretical framework that the study revolves at, but also draws the conceptual framework that analyse the relationship among variables of the study.

##### **2.3.1 Overview of the HRH Crisis**

Several initiatives and pay increment have been devised to attract HRH to remain and improve their performance as expected by the government. The given measures in place have been anticipated that problems of HRH retention would be mitigated. However, the situation continues to deteriorate tremendously leaving health service provision in precarious condition. For example, given the annual population growth of up to 2.7 per cent (refer Tanzania's 2012 National census), health services is currently overstraining the health system's capacities especially the labour power (MoH, 2004). The trend indicate that between 1994/95 and 2001/02, the active supply of health workers fell from 67,000 (HRH Census 1994/95) to 49,900 health workers (MoH, 2004).

Notably, this trend is associated with civil service reform programme which caused a massive loss of experienced health staff. Furthermore, the neglect of pre-service training and attrition rates aggravated the matter. For example, the Human Resource for health strategic plan 2008-2013, between the years 1993 to 2005 indicate that 23,474 health staff graduated from different training institutions. However, only 3,836(16%) were absorbed into the public workforce. Recent information from the MOHSW about staff recruitment trends in public health facilities indicates that from 205/06 to 2009/10 out of the 23,462 approved posts 16,564 were posted (equivalent to 70.5%). Attrition is another factor that contributed to the loss of public work force. The continuously less favorable resource allocation to rural areas has undermined their health infrastructure including equipment supplies, transport and communication networks. Thus, poor working condition motivated qualified staff to look for job opportunities in other countries (MoHSw, 2013).

Furthermore, the Health Sector Performance Profile Report of 2009 indicates that there was average HRH deficit of 39.4% among the reason which cause this deficit is inadequate retention of health employees specifically with regard to professional cadres like medical doctors, nurses, clinical officers and pharmacists/technicians. The same problems are observed in a tracking study conducted in Dar es Salaam to observe HRH trend between 2007/2008 and 2009/2010 fiscal years.

The study established that the Ministry responsible for health was unable to fill between a quarter to almost half of the available position (budgeted work terms) and an average of 37% of the posted staff did not report to their duty station. Worse enough, even those who reported 13% of them left their working stations (Jennifer and Mkeme 2013). More so, Tanzania has been classified by World Health Organisation (WHO) as a country struggling with an acute shortage of HRH (WHO 2010).

Evidence from available data indicates that, as of 2013 the health system in Tanzania was operating with 36% of the optimum workforce with a vacancy rates in rural

areas up to 70% due to inadequate retention initiatives (MoHSw, 2013). Moreover, data from various studies reveal that despite the current crisis of HRH, Tanzania trains about four thousand health workers per year across all cadres, out of which 15% - 20% do not join the health sector, while 10% of those who joins the health sector leave within the first years.

Furthermore, the sector loses at least 13% to 15% of its workforce every year due to retirement, death, attrition to non-health jobs and temporary departure for higher studies (Angus *et al.* 2009). Worse still it was projected that eight thousands (8,000) HRH will be lost between 2009 and 2019 (Angus *et al.*, 2009). Due to this exodus, about 60% of HRH are employed each year in the Tanzanian public health sector to replace the departed workers. This is also supported by The World Bank report of 2012 which indicated that Tanzania as other sub Saharan countries has five or fewer physicians per 100,000 people. The world health organisation (WHO) has set a density indicator of 2.28 health care professionals per 1000 population as a minimum threshold for public health access (MacKinnon and MacLaren, 2012).

Since Tanzania has a density lower than this, it is thus defined as having critical shortage of health workers due to among other reasons inadequate retention of HRH (URT, 2009). Reports from the ministry of health (URT, 2009) problems in human resource management capacity have led to slow recruitment process, delay in staff placement and slow promotion process. This observation is accentuated by the AHSR (2010) report which shows that, about 300 staff leaves the public health sector annually looking for alternative green pastures elsewhere. Literature reveals that, even in the context of global retention level that has lead to the crisis of HRH, Tanzania stands out as a place of critical needs (Angus *et al.* 2009). Studies assert that although Tanzania has over forty-five million people it just has 5.2 clinical health workers per ten thousand people, which is one fifth of the advised ratio by WHO (SOLIDARMED Report, 2011). In addition, Tanzania has 0.02 physicians per 1,000 persons, the lowest in the world (WHO, 2012). If all cadres of HRH are included, there are 1.4 health workers per 1,000 persons [See, Table 1)] (Munga *et*

*al.*, 2013). Various government reports show that the shortage is not uniform, but there are variations in terms of the distribution of HRH across the country. The Rural areas are more affected than urban areas.

By 2010, the doctor (medical doctor and specialist) population ratio stood at 1:64,000, this also was not uniform throughout the country. Basically, the statistics reveal that the ratio varies from 1:22,000 in Arusha, 1:308,000 in Kigoma and other regions (Nathanael *et al.* 2014). The documented ratio in the Tanzanian health sector in 2013 was 1:20,000 (MOHSW, 2013). According to WHO, the recommended doctor ratio per population is 1:1,000, the existing ratios of doctors to population in Tanzania are extremely high compared to WHO standards (Makasa, 2009). Table 2.1 below illustrates the real situation of HRH retention in Tanzania public health institutions.

Based on the statistics in Table 2.1 below, the disparity between the WHO standards and the reality in Tanzania creates a state of confusion. This is because, the government has not been able to reach the international standards for the MDGs and SDGs for better health. As such, the GoT has not achieved domestic policy objectives such as providing more equitable access to basic health services as advocated by MKUKUTA (2005) which aims at among other things, motivating health workers to meet MDGs and to ensure that health facilities have skilled workers in place (Angus *et al.* 2009).

**Table 2.1: Health Employees Population ratios at National Level (Per 10,000)**

<b>Sn</b>	<b>Profession</b>	<b>Total</b>	<b>HRH PER 10,000 POPULATION</b>
1.	Assistant Dental Officer	172	0.039
2.	Assistant Dental Technologist	10	0.002
3.	Assistant Laboratory Technologist	1,117	0.256
4.	Assistant Medical Officer	1,741	0.399
5.	Assistant Nursing Officer	4,248	0.974
6.	Assistant Radiological Technologist	48	0.011
7.	Assistant Technologist	128	0.029
8.	Clinical Assistant	1,096	0.251
9.	Clinical Officer	5,950	1.364
10.	Dental Assistant	7	0.002
11.	Dental Laboratory Technologist	17	0.004
12.	Dental Surgeon	99	0.023
13.	Dental Technologist	17	0.004
14.	Dental Therapist	187	0.043
15.	Health Laboratory Assistant	156	0.036
16.	Health Laboratory Scientist	86	0.020
17.	Laboratory Technologist	745	0.171
18.	Medical Doctor	1,135	0.260
19.	Medical Specialists/Consultants	346	0.079
20.	Nurse & Nurse Midwives	14,096	3.231
21.	Nursing Officer	2,456	0.563
22.	Occupational Therapist	22	0.005
23.	Pharmaceutical Technologist	236	0.054
24.	Pharmacist	339	0.078
25.	Physiotherapist	118	0.027
26.	Physiotherapist Assistant	12	0.003

**Source:** Adopted from HRH Country profile 2012/13

According to the analysis report by Tanzania's Ministry responsible of health (2010), it was observed that within Tanzania's health sectors there are several challenges related to retaining the HRH, some of these are highlighted below:

- i. The number of HRH per capital is low and continues to decline.
- ii. The number of HRH in rural areas is disproportionally low leading to inaccessible health services/facilities.
- iii. There is a high share of unskilled and very low skilled health workers
- iv. Inadequate motivation of HRH, which results into inadequate productivity and performance.
- v. Inadequate and weak health infrastructure facilities as well as poor working environment. Most of public hospitals suffer from critical shortage of basic facilities such as electric power, medical supplies, and equipment for health services and staff housing. All these demotivate staff from continuing working with public hospitals.
- vi. Regional and district levels capacity of institutionalising and formalising best practice of human resource management such as the ability to hire and replace HRH who have left the public hospitals is limited.
- vii. Mismatch between needed human resource competencies and the skills set available. This mismatch of staff overburdens the available staff who end up leaving the public hospitals. And massive brain-drain to the private sector within the country and abroad, or from rural to urban areas.

Other problems relate to inadequate human resource planning, forecasting, career development and succession planning. More relevant to this study the report indicates that the ministry has inadequately implemented measures to ensure retention of health staff. The situation leaves human resource significantly under-motivated to remain in public health service. The foregoing evidence suggests that there are still persistent retention problems in public hospitals in Tanzania. The above challenges make it harder for the Tanzanian government to meet its goals for improving socio-economic wellbeing of its citizen realised in the MDGs and SDGs Worker Retention and Job Satisfaction.

## **2.4 Relationship between Job Satisfaction and Employees Retention**

According to Kohli and Deb (2008) cited in Bukuwa, et al., (2013), an organization can use its reward system in order to attract and retain the highly needed talents. It is assumed that rewards can impact employee's level of job satisfaction. Therefore, the reward strategy is useful in addressing retention challenges.

Apart from job satisfaction, there are other factors which influence a person to quit his job such as; the state of the economy and availability of other job opportunities (Luthns, 2005). Nonetheless, job satisfaction has, in most cases, been pointed out as a key reason that tends to influence workers' intentions to leave an organization (Bukuwa, et al., 2013). This means that an employee who is satisfied with his job or working condition is not likely to quit his job. Even in the health sector, job dissatisfaction can influence health workers to move from one employer to the other searching more rewarding jobs (Bukuwa, et al., 2013). Therefore, employers need to take deliberate efforts in raising the level of employees' satisfaction as part of retention policy. It widely reported that organizations do periodically conduct employee satisfaction surveys to ascertain areas of satisfaction and dissatisfaction.

### **2.4.1 Consequence of Job Satisfaction on Employees' Behaviors**

Though the concept of employee retention revolves around productivity, the relationship between job satisfaction and productivity is not well established. Noteworthy, the reviewed studies have shown that job satisfaction increases

productivity, and that the two variables (job satisfaction and productivity) are relatively independent of each other. According to Re'em (2011), this is because; firstly, any jobs variations due to satisfaction cannot change productivity. Secondly, in case of correlations, the link may be false, since it may relate to other factors. In other words, job satisfaction and productivity may have separate causal path, i.e., one set of factors (e.g. investing in technology) determine productivity, and another set (e.g. perceived equity of reward) influences job satisfaction, thus employee retention (Greenberg and Baron, 2013).

In some circumstances, there are conditions under which high productivity leads to high job satisfaction. One of the conditions is that, an employee must perceive that intrinsic and extrinsic rewards are contingent upon their productivity. The other condition is that, the extrinsic reward (e.g. salary package) should be equally distributed. Therefore, unequal distribution may fail to influence employees to see the correlations between hard working and reward (Re'em 2011).

Essentially, there is no a simple method for predicting an employee's satisfaction (Re'em, 2011). This is because an employee, who performs well in his job, gets both intrinsic and extrinsic rewards, thus job satisfaction and retention. On the other hand, according to Sandya and Kumar (2011), a poor performer will feel worse about his incompetence, will receive fewer rewards, will be less satisfied with his job, and thus may decide to leave the organization.

It is widely understood that human resource managers contribute considerably in improving productivity. One way is by directly finding an efficient way of meeting goals set, and by indirectly improving the quality of services offered. As productivity increases, it enables an organization to use fewer resources in generating outputs (Chiok, 2001). In business setting, it is important to improve productivity for a long-run success. Equally, a well-managed productivity allows a firm to minimize production costs, save resources and boost profit. In turn, such profit can be used by the firm to improve workers' salary package and the working conditions (Montana,

et al, 2005). The result can be high-quality work and retention of employees for long period (Re'em, 2011).

#### **2.4.2 Job Satisfaction and Employee Withdraw**

Job withdraw happens when unsatisfied individuals decide to avoid the work situation. Basically, employee withdraw from an organization can take many behavioral forms such as; turnover, absenteeism and lateness. According to Philips and Cornell (2003), withdraw may come into two forms namely; psychological (neglect) and physical (exit). Shabnam, et al., (2013) explains that psychological withdraw consist of actions that provide a mental escape from the work environment. This situation may be summed in one saying that, “lights are on, but nobody is home.” In other words, a psychological withdrawal may be referred to as “warm – chair attrition,” meaning that, an employee’s chair remains occupied, but technically he has already left the organization (Lise, et al, 2014).

Generally, psychological withdrawal presents itself in several ways, one of them being daydreaming. Daydreaming is the least serious form of withdrawal, and it occurs when an employee appears to be working but is actually distracted by random thoughts or concerns. Another form is socialization, which means verbal chatting about non–work topics during working hours and/or by using employer’s facilities. Other employees may indicate an internal desire to look busy, even when they are not performing work tasks (Shabnam, et al., 2013). Sometimes employees decide to leave their work station/desks or go for stroll around the building and engage in moonlighting, while spending work time and resources for another job (Lim, 2002, cited in Shabnam, et al., 2013).

Above all, among white collar employees, the most widespread form of psychological withdrawal is cyber loafing, that is, using Internet, Email and Instant messaging access for their personal enjoyment instead of official assignments.

In contrast, physical withdrawal involves actions that provide a physical escape whether in short or long terms from the workplace. Like psychological withdrawal, a

physical withdrawal comes in several ways (Guma, 2011). One of them is tardiness, which means, the tendency of arriving late or leaving early at work (Blau, 1994, cited in Shabnam, et al., 2013). According to Re'em, (2011), it is hard sometimes to avoid tardiness among workers, especially in situations such as; car breakdown or bad weather. Regardless the reason, it represents a calculated desire to spend less time at work. Re'em notes further that long breaks, which includes; extended lunch break, soft drinks break and coffee break are common form of physical withdrawal or escape from work in most organizations. While out of office, it is also likely that an employee may miss or neglect important issue/duty at work that requires his immediate attention (Lise, et al., 2014).

Lastly, it is said that quitting is the most serious form of physical withdrawal. By definition, quitting means a willful departure from employment for various reasons (Philips and Cornell, 2003). Such reasons may include; leaving to seek for more pay or a better career opportunity, dissatisfaction with supervision, working conditions or working schedules, family factors and safety issues (Shabnam, et al., 2013). It should be borne in mind that, circumstances leading to turnover are avoidable, that is, organizations can do something to keep employees to their jobs, e.g., by improving working conditions. Therefore, one can argue rightly that dissatisfied employees are more likely to withdraw from their job than satisfied employees (Mohammad, et al, 2013).

### **2.4.3 Theoretical framework**

The theoretical framework entails the structure that theorises the research problem. In this study, gaps relating to the retention of HRH can best be explained using Herzberg's Theoretical Framework. It is undeniable truth that there are several motivation theories such as equity theory propounded by Stacy Adams, expectancy theory by Victor Vroom as well as the Hierarchy of need theory founded by Abraham Maslow that can be used to understand human behaviour within the retention lens in organisations. However, due to highly criticism of those theories through some scholars such as (Green, 1969; Lawler, 1971; Porter and Lawler, 1968; Carrer and Disttrich, 1978, and Brian and Allison, 2014), their relevance towards motivating human behaviour at our time, have been doubted. Impliedly, this study has highlighted the relevance and critiques of other motivation theories despite the fact that there not relevant in this study but they lay a foundation to the selected theory to backup the study at hand. Based on this arguments this research therefore has laid its focus on Herzberg's two-factor theory to explore and understand gaps relating to the retention of HRH.

### **2.4.4 Equity Theory**

Equity theory has been found important in explaining retention in health sector. The equity theory explains shared satisfaction regarding view of sensible or insensible distribution of resources over interpersonal relationship. The theory was propounded in 1963 by Adams and it is taken as one of the fairness theories. Essentially, Adam affirms that workers look to keep up equity between inputs they bring to a job and outcomes that they receive from it against perceived inputs as well as outcomes of others (Adams, 1965). This theory is based on the notion that workers' motivation at work is affected by the apparent level of value/equity in the organisation (Dunford, 1992, cited in Re'em, 2011:25). The theory it also asserts that, a man's satisfaction is dictated by his apparent value, which is controlled by his input-output balance contrasted with his analysis of others. Basically, input-output balance is the apparent proportion of what a man adds to the employment (Baghael, 2011). According to Baghael (2011), the equity theory suggests that underpay and overpay may lead to

discontent among workers. While underpay causes sentiments of being discriminated and uneasiness, overpay prompts complaints and trouble (Baghael, 2011). As indicated by Adams (1965), resentment is incited by underpay while the sense of guiltiness is driven by overpay. Alves and Ross (1978) believe that people with high prestige occupations such as physicians in the health sector would expect higher pay to reflect their social status. They further observe that employees in general use the ongoing rate of occupation as basis for pay equity judgement. Therefore, payment of whether hourly or monthly wages, is the main concern. In most cases, it is the cause of equality or unfairness (Spector, 2008). Reports by Waldman, Kelly, Arora and Smith (2004); Ologunde, Asalu and Elumide (2006); Mathuer and Inhoff (2006); Mbanefoh (2007); Emegwali (2010); Wyk (2006); Lambrou, Konfodi nopolis and Niakas (2010) observe that lack of job satisfaction, which embodies poor motivational strategy in terms of poor remuneration and pay disparity, appears consistently as one of the reasons for higher attrition rates among the staff of health institutions.

Psychologists have contended that, in any position an employee needs to feel that his commitment and work done are being compensated fairly. In situations where employees feel that they are not valued or paid well, employees may underperform or they might become unfriendly towards the organisation and may decide to quit the organisation either mentally or physically (Mohammed *et al.*, 2013, Baghael: 2011, and Carver *et al.*, 1999).

Moreover, Adam's theory recognises that workers tend to be inspired when decisions are reached fairly (Re'em, 2011). According to Peretomode (2006); Robins and Judge (2007); Armstrong (2009) the theory's assumptions are based on the promise that in addition to being rewarded for their performance, employees in general would want also those rewards to be fair and just relative so that others, most especially, in similar works receive. Furthermore, Greenberg and Baron (2013) pointed out that when assessing fairness, workers are concerned with dignity and respect demonstrated in the course of presenting an undesirable outcome.

What is observed in this theory is that, pay is the most determining factors for retention of HRH. More so is the fairness' and equity relative to what others, most especially in similar works' received. Thus the theory guides in understanding what may influence an employee to leave or stay in that they keep comparing what employees earn in other comparable organisations in order to realise the balanced state of the input-outcome ration.

While considered useful in the contemporary and modernised workforce, but various scholars have criticised the theory on its practical applications in the real world (Mohamed *et al.* 2013, Carrel and Disttrich 1978). For example:-

Much of the research supporting the basic proposition of equity theory has been conducted in laboratory settings and thus has questionable to a real world situation (Miles *et al.* 1987).

Critics further argue that people might perceive equity/inequity not in terms of specific input and outputs. Thus, a business settings, one might feel that his or her compensation is equitable to other employees, but one might view the entire compensation system is unfair (Carrel & Disttrich, 1978).

Therefore, it is observed that the relevance of equity theory may change from culture to culture. As observed by Re'em (2011) in his study of motivating public sector employee where observed that equity theory would fit more in individualistic society rather than in collective one, subsequently, the identification of job satisfactions motivational strategy that could impact more in retention of HRH in this study become imperative.

#### **2.4.5 Expectancy Theory**

It is another important theory that can explain retention in public hospitals. This theory suggests that an individual decides to behave or act in a certain way because he is motivated to choose a specific behaviour over others due to expected results. Basically, a motivation to choose behaviour is influenced by a desire to see certain result (Oliver, 1974). The theory was propounded by Vroom (1964), as the name of

the theory suggests, it focuses on employees' expectations, context and manner in which such expectations are fulfilled at workplaces. Healthcare organisations can provide a quality service only if workers perceive they are considered as value resources and they can be in turn attentive to patients needs (De Simeone, 2003). The underlying assumption to that appropriate level of effort is that, productivity will only be extended if employees' expectations are achieved (Baghael, 2011). As such expectations theory is more concerned with the cognitive processes based on the idea that people believe there are relationship between the efforts they put at work place. The performance they achieve from that effort and the reward they receive from their efforts and performance. The theory does not assume a fixed range of expectation across all employees; rather it suggests the possibility of different sets of expectations. We argue that HRH staff have different sets of expectations. For example, as it would apply to Herzberg two-factor theory and other motivational theories like Maslow (1970), Mc Chellan (1976), HRH expect good working environment, attractive salaries, job recruit, achievement, recognition, good leadership and supervision, job security and status etc. Baghael (2011) argue further that rewards are seen as satisfying or dissatisfying expectations.

Basically, expectancy theory is concerned with mental processes *vis-à-vis* choice. It describes the process that an individual undertakes to make a choice. Montana, *et al.* (2008:71) makes it clear that,

*This theory emphasises the needs for organisations to relate rewards directly to performance and to ensure that the rewards provided are those rewards deserved and wanted by the recipients.*

The expectancy theory calls upon the management to show or ensure employees that hard working attracts higher rewards (Mohammad *et al.* 2013). The relationship between work performed and rewards must involve; salary, gratuity, praise and recognition as part and parcel of job satisfaction (Baghaei, 2011).

Like other theories, despite its usefulness, expectancy theory has been widely criticised by Green (1969), Lawler (1971) and Porter and Lawler (1968). Their criticisms of the theory were based upon the expectancy model being too simplistic in nature (Droar, D. 2006).

For instance, Lawler (1965) claims that the simplicity expectancy theory is deceptive because it assumes that if an employer makes a reward, such as financial bonus or promotions, enticing enough employees will increase productivity to obtain the reward (Oliver, R. 1974). However, this works if the employee believes the reward is beneficial to their immediate need. For instance, Tsh. 50,000/- increase in salary may not be desirable to an employee if the increases pushes him or her into tax bracket in which he believes his/her need pay is actually reduced.

In addition to that if anyone in the public service is promoted, there is sometimes a condition for such promotions, that they he/she will be transferred to other locations. In such cases if the new place is far from their permanent resident or is more remote area, employees will not be motivated by such promotions, and the result will be other way around. Because the outcome, which this reward (promotion) will yield may not be valued by those who are receiving it, hence the employee may not be satisfied with that kind of reward hence will withdraw from that organisation.

What is observed from this theory is that, the theory is a process of motivation that emphasise individual perceptions of the environment and subsequent interaction arising because of personal expectations. In this sense, health workers expect the environment in which they perform their work to be conducive. They expect for example, environment with working tools, hospitals with drugs, environment with working tools, hospitals with drugs, environment with safety policies etc.

Another important observation with this theory is that, the theory can be applicable in explaining retention because the government of Tanzania, leaders and health care providers assimilate HRH employee into a larger system. In this sense, HRH

retention and thus retention strategies remain a centre stage for quality health care services.

Another important observation from this theory is that HRH will be motivated to remain if they believe that strong effort will lead to desired rewards. Thus rewards should be directly related to effort put at workplace, attainment of skills and professionalism etc.

#### **2.4.6 Maslow's Hierarchy of Need Theory**

It is another important theory that can explain retention in health sector. It is a theory of human motivation that has received a great deal of exposure in the past. It was developed by Abraham Maslow Commonly referred as "Maslow's" Hierarchy of needs. Maslow utilised the term "Prepotent" to express the theory that "in the human being who is missing everything in life in an extreme fashion, it is mostly likely that the major motivation would be the physiological needs rather than any other. (Maslow, 1943, P.5)

On his part Maslow presented a prepotent hierarchy in five sets of needs which compose the framework. The five sets of need were divided into two categories; basic needs and higher-order needs. While the basic human needs represented by food, water, shelter and safety, these needs according to Maslow (1943) are considered essential for human existence. While higher-order needs are those associated with social activities, esteem building and self-actualisation or constant self-improvement (Brian F, and Allison, C. 2004)

Elaborating further on this theory, Brian and Allison (2004) stated that "each of these needs operates at all times although one deficient set dominate the individual at any one time and circumstances. Further, stated that, the motivation experienced by human fulfill these needs is either derived from internal or external factors. Whereas intrinsic motivation is found in people, who are influenced by factors that cause a sense of accomplishment and pleasure. While extrinsically motivated people are

commonly influenced by factors controlled by others, such as money, and praise (Deci and Ryan, 1985).

Maslow's hierarchy is commonly displayed in a Pyramid fashion with the basic need at the bottom and the higher needs at the top. The needs were depicted in this way to show the significance of each need on the others, with the most important and broadest category being the physiological need at the base (Brian. F, and Allison C. 2004)

**a) Basic needs**

Physiological needs: These are basic needs that are physiologically necessary for one's survival, such as oxygen, Food, Shelter and Sleep. These needs must be met before moving to satisfy needs higher in order.

Safety need: This includes the desire to feel safe and secured, example of this need is the ability to defend one's self the need to have limit or law and a regular routine that an individual is comfortable with. Once physiological needs have been met she/he will move to the safety need.

**b) Higher-order needs**

Social needs: include friendship and companionship, one must know that he/she is not alone in the world and be able to communicate feelings and needs with other individual. It argued by physiologist that one of the most basic desires of human needs is companionship and sense of belonging for instance:

- i. Esteem needs: an individual eventually needs to feel that he/she has a social status. This goes beyond just having social relationship; the individual must feel that in work or at home he/she is making contribution. This also includes recognition of achievement from others.
- ii. Self-actualization. This is the final and highest level of needs, meeting this need is characterised by continuous focusing on personnel growth,

problem solving, life appreciation and peak experiences for one self (Huitt, 2004 in Brain and Allison, 2004)

As an assumption often made by those using Maslow's hierarchy is that workers in modern technologically advanced societies basically have satisfied their physiologically, safety and belonging need. Therefore they will be motivated by the need or self-esteem of others and then self-actualisation. (Baghael, 2011). Consequently condition to satisfy those needs should be meaningful and motivating.

Mitchell (1982) also recommends that organisation pay more attention to upper level needs and fulfill them through systems emphasizing autonomy and recognition. Meaningful work is also a motive according to Re'em (2011 P.220. and as clalofsky and Krishna (2005 cited in Re'em, 2011. P 22) explains "meaningful work is not just about the meaning of the paid work we perform. It is about the way we live our lives. It is the alignment of purpose, value and the relationship and activities we pursue in life" thus it includes the need to maintain proper work life balance.

From the health sector perspective, one observes that HRH will tend to be retained when different conditions have been met. For example, Kotzee and Couper (2006) believe that many health professionals would want to leave hospitals in the rural and disadvantaged areas to gain employment in the urban regions due to the various reasons. They blame on insufficient salary, heavy work load, understaffing, and poor housing. They also observe that lack of safety, lack of basic medical equipment, poor personal relationships, lack of recreational facilities, lack of transport, lack of schooling opportunity for health professionals' children, and lack of job opportunities for health professionals' spouses tempts HRH staff to leave rural disadvantaged areas.

The above factors are evidently falling within the first three levels of physiological, safety and security, belongingness in the Maslow Hierarchy of Needs levels. The physiological factor is considered as the most basic needs of the health professionals

and thus HRH should have access to basics such as food, water and shelter. From safety and security aspect, HRH require safety and security within the hospital as well as within the community in which the health professional resides. Thus the theory inform us that feeling safe and secure at working environment is of utmost importance to ensure the retention of the staff.

The next level of belongingness is also not clearly restricted to the hospital alone. This does involve healthy social interaction with co-worker but also social interaction within its community. More so is the need for HRH staff to feel that their families are not isolated as they would want to feel that areas in which they are working do provide opportunities for the spouse to get job opportunities, there are opportunities for children's schooling ((Kotzee & Couper, 2006) and thus they would not want to feel sense of social isolation resulting in the urge to leave the place therefore, Both Hiriappa (2010) and Aswathappa (2008) strongly believe if a person's basic needs are not satisfied, then those individuals will not be around long enough to attempt to satisfy the higher level of needs in Maslow's Hierarchy. This indicates it is just a matter of time before the health professionals' quest to leave the hospitals found in disadvantaged areas.

Despite valuableness of the theory, the theory has its weakness of the other hand as stated below:-

Maslow's theory has been criticised by many scholars, although the theory remains valuable insofar as it suggest, specific way to motivate employees. Greenberg and Baron (2003), for example, van wart (2008) in Re'em (2011), refer from Maslow that managers should use recognition and rewarding the enhance-low-end need and aspiring techniques such as the encouragement of relatedness/commitment feeling, to meet high end-need.

Maslow's Hierarchy of needs theory was developed by American theorists and research was done only within Americans. Thus, different cultures often values different needs. For example, in collective societies or societies in which family

members and others in groups look after each in exchange for loyalty; belonging is to basic needs while self-esteem is less important. (Brian and Allison, 2004), observe that not only different culture offer different needs, but so do different generation. Therefore, research supports the notion that Maslow's hierarchy may not accurately represent individual needs in a collective culture.

Another weakness of Maslow theory is the fact that there are exceptions of theory. For example; Brain and Allison (2014), compared the firefighters, policeman and the military who risk their lives, every day to save others. This exception shows that there are certain types of people sacrifice their own basic need for welfare of others. It is argued that is possible to achieve self-actualization without having all of your lower need met, there by falsifying the theory (Mc-Leod, 2007). It is from this background this research has opted to use Herzberg's two-factor theory to conduct this study.

#### **2.4.7 Herzberg's Two-Factor Theory**

Herzberg's two-factor theory sometimes referred to as Herzberg's motivation-hygiene theory or the dual factor theory is an important theory to explain HRH retention in public health institutions. The theory was developed by Frederick Herzberg, a psychologist by profession, who theorized that job satisfaction and job dissatisfaction act independent of each other (Herzberg *et al.*, 1959).

According to the Herzberg's theory, employee retention is influenced by two factors, namely motivators and hygiene factors. It further argues that apart from being influenced by two factors, an employee is motivated by internal value rather than values that are externally oriented to the work. In other words, motivation is internally generated and is propelled by variables that are intrinsic to the work which Herzberg called motivators. This intrinsic variable includes responsibility, achievement, personnel growth, recognition, work itself and personal achievement. According to Herzberg's, motivators pertain to job content there are intrinsic to the

job itself and do not results from “carrot and stick incentives”. It comprises the psychological needs for growth and recognition (Kofi *et al.*, 2016).

The theory has been successful adopted by earlier researchers in studying retention (for example, Lipinge *et al.* 2009, Ravivoer, 2005, and Ng’ethe *et al.* 2012) in studying retention of academic staff in Uganda, South Africa and Kenya.; In essence, the relevance of this theory in the context of this study revolves at understanding factors contributing to HRH retention in public health facilities. In the perspectives of public health facilities there are motivators that provide satisfaction at work and influence the way work is done. For example assigning an employee responsibility for a large task at work and providing that employee with the necessary condition will lead to his growth and advancement to higher level tasks.

Furthermore, there are conversely certain factors that dissatisfy employees which in turn lead into turnover. Those factors largely results from non-job related variables extrinsic. These variables are referred by Herzberg as ‘hygiene’ factors which although do not motivate employee but they must be present at the work place to make employees happy and retain them. Hygiene factors though are not direct motivator but there necessary to present satisfaction of employees and sometimes they save as a starting point of motivation to employees which in turn results into good performance and retention of employees since there are necessary to maintain a reasonable level of satisfaction to workers (Vohs, *et al.*, 2013). These factors include working condition, salary, supervisor style, job security, interpersonal relationship, status, and company policy (Herzberg, 1979). Within the perspective of public health facilities, the mentioned above hygiene factors is essential to ensuring that the health work environment does not develop into disgruntling situation.

The assumption of Herzberg’s theory implies that the retention and productivity of health workers on the job can be increased through workers satisfaction, and this come from various reasons, for example, jobs should be challenging enough so that medical doctors and nurses utilise their fuel ability, and employees who are

successfully should be given more responsibility this will make employees more committed to the organisation due to the level of satisfaction from the assigned tasks. This theory therefore serves as the basis for effective retention of HRH for health.

Because of such observations, intrinsic and extrinsic motivators have been recognised by this study to have a converse relationship. Such that intrinsic motivators tend to create motivation when present, while extrinsic motivators tend to reduce motivation when absent (Re'em, 2011). It is from this background that health managers must identify and attend to both sets of factors (intrinsic and extrinsic) in order to improve employees attitude and output which in turn will lead to employee retention and health public hospitals.

What is the applicability of this theory in the context of this study? In the path towards understanding HRH retention in Tanzania's public health institutions, three research objectives had been explored. Among others include: The contribution of the demographic and socio-economic factors (age, sex, education and marital status) on HRH retention in Tanzania's public health facilities; the effects of salary and other Extrinsic motivators provided by the government to constrain retention of HRH in Tanzania's public health facilities; as well as the extent to which the perceived intrinsic factors in health worker satisfaction used by the government contribute on HRH retention in Tanzania's public health institutions.

The use of Herzberg's theory in particular, necessitates the analysis of employee retention factors, namely motivators and hygiene factors, as well as internal value enabled to understand the determinants of the problem at hand. For example, empirical studies by Ng'ethe *et al.* (2012) and Tettey(2006) revealed that extrinsic factors such as good interpersonal relationship, competitive salary, flexible working environment and guarantee job security were perceived by employees as key motivational variables that influence their retention in organisations. These implies that management should not rely on one set of motivation factor such as intrinsic to influence employee retention in organisation, rather a combination of both set of

intrinsic and extrinsic factors should be considered as paramount strategy for sustainable retention of employees at work place.

Regardless of widely acclaimed recognition for his theory, Herzberg's two-factor theory has received a range of criticisms. For instance, critics of Herzberg question the reliability of his theory, in a sense that satisfaction and dissatisfaction cannot exist in a separate scale. This is because separation of satisfaction and dissatisfaction has been shown to be a relic of the critical technique used by Herzberg to record events (Re'em, 2011). Additionally, it is argued that the theory does not allow for individual differences such as personality traits, which tend to affect an individual's unique response to the motivator or hygiene factor (Hackman *et al.*, 1976).

The Herzberg's two-factor theory does not take into account situational variables. These are special features of the environment that have a potential to manipulate the behaviour outcome of the situation. They are the range of changeable variables that affect satisfaction in a particular situation. The Herzberg's theory also makes a correlation between satisfaction and productivity. In essence, it assumes that productivity would be a natural results (Management Study Guide, 2008).

Besides those criticisms, Herzberg's theory is still relevant and has had a major impact over several generations of managers and employers including observations raised by this study. Notably, employers and managers have widely used the theory to improve their working environment by providing motivation to satisfy and retain employees for a longer period of time (Sandiya & Kumar, 2011).

Essentially, reasons for opting Herzberg's Two Factor theory instead of other motivation theories revolves from several issues. Among others is the fact that equity theory and its assumption revolves in the argument that human labour invested in organisation activities should be equal to what employees get. Thus if inputs exceeds the outcome it leads to employees dissatisfaction. Hence equity theory is not important since not all individuals complain about inequalities. Again, the rate of

tolerance of inequalities among employees does differ. On the other hand, the expectancy theory which is based on expectancy is not relevant to our study, since it is hard to quantify perceptions about effort, performance and value of rewards. More importantly, regarding Maslow's theory, it is easily applied in various ways making it difficult to test and study. Moreover, just as norms between individual fluctuations of needs, so do norms between culture (Brian and Allison, 2004). Element like esteem and self-actualisation may have vast different meaning across different work settings making it difficult to standardise Maslow theory and the definition of the components.

The choice of Herzberg's theory is also influenced by the fact that: It recognises that employees' needs are divided into two classes that influence them, thus must be addressed. Besides, Herzberg's theory had been successfully adopted by earlier researches (for example, Lipinge *et al.* 2009, Ravivoer, 2005, and Ng'ethe *et al.* 2012) in studying retention of academic staff in Uganda, South Africa and Kenya. In essence, the theory guided the researcher to ascertain HRH retention factors in Tanzanian public hospitals. It also enables researcher to effectively blend motivating factors to suit special needs of health workers. The theory provides motivating factors to discover aspect that health employee value (Kumar & Sharma, 2002). Notably, the theory provides strategies for health sector with structured operation. Further, it provides an insight in areas that explain what influences health workers employees' level of satisfaction (Stelo, 2013). And lastly, Herzberg's model was chosen because it can be used in situational leadership style and levels. Cullen (2012) supports the argument by saying that Herzberg's hygiene and motivation factors can be intertwined with situation leadership style and levels.

Beside of the above the hygiene and motivators are matched with the appropriate leadership styles and performance readiness levels. Lower levels performance level are matched with employees who are influenced by hygiene factors. An example of this entry level who are situational leadership level or at a readiness level who are influenced by their work environment and pay. whereas an advanced level employee

at a situational leadership level or at a readiness level is looking for incentives and for recognition motivation entry level employees needs their basic needs fulfilled while advanced level employees is reaching for self-actualization and to build their self-esteem.

Moreover, Herzberg's two factors theories supported by intervening variables seem to be able to significantly guide exploration, examination, analysis and explanation of HRH retention by covering a wider scope of combined variables not considered in the literature on health services provision. It also gives a space to deploy a methodology that captures local content specifically in the public facilities in Tanzania.

## **2.5 A Survey of Aspects Directly Related to the Objectives of the Study**

Based on the above conceptual framework, the independent variable delivered from the conceptual framework will be discussed in a subdivided sub-section, that will highlight the relationship between employee retention and factors for retention and show some empirical experience in various countries contexts:

### **2.5.1 Responsibility and Retention**

In principle, responsibility is the degree to which an employee exercises power related to his job at a maximum degree. It is explained further as the ability of an employee to set organisation goals and structure to maximise professional concern (Ng'ethe *et al.* 2012). It refers to an increased feeling of personal responsibility and the degree to which the job provides substantial freedom, independence and discretion to individuals in doing the scheduled work and determines the procedures used in carrying it out (Dockel, 2003). Dockel (2003) notes further that responsibility at work with autonomy may satisfy needs for achievement and accomplishment, which in turn, can generate positive regard for employers and higher level of intent to stay by employees.

Studies by Re'em (2011) support the said view by showing that young employees who are at the bottom of the hierarchy are usually very motivated by receiving responsibility because they feel that they are given autonomy at work. Therefore, it is pertinent to managers that when assigning duties to workers, should clearly distinguish between their role and the role of their employees. It is suggested that managers who offer their employees responsibility should get off their tails and give them a real opportunity to deliver (Dockel, 2003, Buchan, 2009, and Nge'the *et al.*, 2012). It is from this fact therefore, Bernam *et al.* (2013) argues that private sector performs well and can retain best performers because employees are been given more responsibility and autonomy, whereby innovation and risk taking are rewarded as well as accepted. Bernam (2013) notes further that sometimes a new idea proves futile. This is contrary to the public sector, where innovations and risk taking are discouraged and in which there is no tolerance for mistakes.

### **2.5.2 Achievement (on Goal Setting) and Retention**

Studies firmly suggest that goal setting is an extremely effective tool for public managers to motivate and improve performance of public employees (Re'em, 2011). However, goal setting is hardly implemented in the public domain due to; firstly, the public sector has a weak link between performances management and rewards such that employees' motivation to pursue the goal is diminished. Secondly, the politicised environment in which administrators operate is vulnerable to constant goal changes. Lastly, employees suffer from political procedure constantly, thus impeding their ability to attain the target; no matter what efforts they put in (Perry and Porter, 1982:95).

Findings by Re'em (2005) show that vagueness goals and tasks in the public service makes it harder to point out the extent to which a goal has been accomplished. Despite these difficulties, Re'em (*ibid*) suggests that public managers should aspire to utilise goal-setting techniques. Nonetheless, one way to overcome hurdles is to set goals in terms of organisational input or output, rather than outcomes. This is because of the complexity involved in measuring achievement and procedure

constraints' that hinder effectiveness. When tasks are too wide or complex to achieve, then a set of intermediate goals (for example, milestone in the project) should be defined. Moreover, it is better to set goals you do best, than not having goals at all. Substitute goals can also be strategies to be explored to reach the ultimate goal (Durant *et al.* 2006 cited in Re'em, 2011:41). This can motivate employees to achieve their goals, hence encourage them to stay.

### **2.5.3 Personnel advancement and Retention**

Personnel advancement may be referred to as a degree or extent to which an employee perceives his or her chances of being promoted and grow in terms of skills, knowledge and capacity within the organisation. Employees expect to work in a job that provides them with the opportunities to be promoted to new challenging positions and grow in terms of skills and capacity to master their job (Montana, *et al.* 2008). According to Dockel (2003), people should not only be rewarded financially but they should also be offered opportunities to grow within the organisation. In addition, Ng'ethe, *et al.* (2012) found that employees who feel stagnant in their positions are unmotivated. Thus, they would not stay in an unfulfilling position. Promotion offers opportunities for personnel advancement in the job and also is one of Herzberg's motivators which can be used to enhance retention (Herzberg, 1978).

### **2.5.4 Recognition and Retention**

Essentially, employee recognition is a timely, informal acknowledgment of a person or team's effort or business results that support the organisation's goals and values, which have clearly been beyond normal expectations (Buchan, 2009). Appreciation is a fundamental human need. Usually employees respond to expressed appreciation because it confirms that their work is valued. Recognitions always have a positive connotation and acknowledge good behaviour or actions (Logan, 2000). Generally, appreciation costs nothing and is immensely motivating and yet, it is underutilized (Van-Wart, 2005 cited in Re'em, 2011:37). For example, managers can intersperse informal recognition while managing by walking around. They can also offer good words, a short written commitment on submitted papers, a celebration toast, and a pat

on the back or just a warm handshake (Re'em, 2011). According to Re'em (2011), recognition can be provided in two settings namely; person to person and person to group.

The latter form can be done by using the internal electronic system, addressing the staff platform or by changing accomplishment posters on department walls. Studies reveal that public recognition can motivate not only that particular employee, but also her colleagues and subordinates. In addition, it is argued that for recognition to be meaningful to employees, managers should recognise as many employees as possible at all levels (McKeown, 2003). Unlike rewarding, recognition is timeless and should be offered throughout the year (Buchan, 2009). However, it is warned that managers should not automatically recognise every behaviour (especially not in a formal way), in order not to wear out effectiveness of a tool and make it be taken for granted (Howatt, 2005).

McKeown (2003) suggests that a good, useful and effective recognition should be designated and communicated to employees so as to improve their behaviours. McKeown (2003) maintain further that recognition programmes should target at retaining the best employees and should focus on rewarding behaviours that are related to retention. Therefore, McKeown (2003) calls upon the management to focus on people in the recognition programme, and less on the output, such that reward should be on how, not what. Basically, employees tend to stay in organisations when they feel that their capabilities, efforts and performance contributions are appreciated by others.

The presented views are consistent with those from a study by Chiboiwa *et al.* (2010) who examined employee retention strategy in private organisations in Zimbabwe. The study noted that, several factors were attributed to an increase in the level of employee turnover worldwide. The findings indicated that, the way people are treated and recognised is a critical strategy in attracting and retaining them. The challenge for most organisations today is on formulation of an effective employee

retention strategy, with regard to employees considered critical in attaining organisational goals. However, in the real situation employees are not recognised on their effort at work places (Chiboiwa *et al.* 20105). This circumstance tends to discourage employees because they feel unappreciated in their organisation.

### **2.5.5 Work Itself and Retention**

According to Phillips and Cornell (2003), work to be performed should be meaningful and sensible to those placed for it. Imagine the feelings of nervousness one might feel if she/he is placed in a job without description of the end goal or the daily tasks. Questions such as, “what should I do?” may fill the day without any progress being made. In contrast, well-designed jobs facilitate productivity and result in employees’ job satisfaction and retention. A good design includes, giving employees proper tools and the end goals (Brian & Allison, 2014).

As might be expected, the better the job is designed, the higher the productivity and the more satisfied employees would become, and thus, higher degree of intent to stay with the organisation would be realised (Phillips and Cornell, 2003). This is particularly true for top employees who have a reasonable expectation that they were not hired to complete repetitive and uninspiring tasks (*ibid*). Thus, McKeown (2003) suggests that planning of work content to satisfy personnel and career aspiration is an essential element of an effective retention strategy. Whether old or young generation, employees or anything else, top performing employees have little patience for being stuck with what they perceive as dead end job with assignments that are limited or poorly planned and instructed. As a result, they can discourage employees to stay with that organisation, because nothing is near to them, and they become bored such that they may quit the organisation (Oliver 1994). Figure 3 summarises the relationship between retention factors, satisfaction / dissatisfaction of employee’s retention and the impact of motivating factors in retaining employees.

### **2.5.6 Work Environment and Retention**

Work environment is one of the factors that affect an employee's decision to stay or quit his job. According to Chaminde (2007) outputs and efficacy are directly affected by how people work and their working environment. This may include issues such as office space, and equipment like air conditioners, comfortable chairs and the like (Ng'ethe *et al.* 2012). Experience shows that comfortable working condition tends to produce higher level of satisfaction among employees (Sinha, 2013).

In contrast, stressful working conditions result in high levels of dissatisfaction, thus prompting an employee to leave an organisation (Philips & Connell, 2003). Furthermore, employees want certain conditions in their work, for example, to participate in decision-making, opportunity to grow and create several opportunities for their workmates regardless of race, sex or age (Michael & Chipunza, 2009).

Several studies have found that there is a direct link between job dissatisfaction, lack of motivation and intention to quit (Zurn *et al.* 2005; Michael and Chipunza, 2009; Chiboiwa, *et al.* 2010; Graham, 1999; Lehman and Sandurs, 2002). Low job satisfaction is a concern in many poor countries. For example, in Lesotho, Zurn *et al.* (2005) found that, 37 per cent of nurses were dissatisfied with their current jobs. This percentage varied depending on the occupation of the nurse. For example, it accounted for 80 per cent for mental health workers. The main factors causing job dissatisfaction included; unsatisfactory work environment and poor working conditions. Other factors were; inadequate pay and benefits, and lack of equipment. These findings match with those from a study conducted in Swaziland by Stillwell and Mithethwo (2004) which indicated that, feelings of demotivation is the key factor for health staff leaving from the health sectors, due to poor working conditions (such as poor pay as well as no-pay incentives), and stress of working with people living with HIV/AIDS.

Furthermore, a survey undertaken in Mali and Kenya in 2013 revealed that, health workers complained about their working condition. For instance, 42 per cent of

surveyed health facilities had no blood pressure machines, while 28 per cent lacked bandages as well as delivery kits. Thus, survey was a reflection on the efforts for improving working condition by increasing tools for work (Dileman, *et al.* 2006). With regard to improvement of workplace conditions, Dambisya (2007) made reference to incentive programmes being implemented in Angola, Lethoso, Malawi, Mauritius, South Africa, Zambia and Zimbabwe. According to Dambisya (2007), conducive work environment provides a well-maintained building, equipment, medical supplies, adequate staffing and security for staff, including their families.

### **2.5.7 Salary and Retention**

Understandably, attractive remuneration package is one of important factors for retention. This is due to the financial and material desire of an individual (Belbin, 2011; Hijazi and Rowaida, 1999). Many studies from less developed countries indicate that half of employees in organisations are satisfied with their salaries (Rosser, 2004). Noteworthy, salary has been shown to be an important personal issue that may affect satisfaction of employees in various organisations, which may easily influence their intention to stay or leave (Kearney, 2009).

This view was observed by Baghael (2011), who propounded that attractive salary plays an important role in influencing job satisfaction because; first, money is an instrument in fulfilling one's needs; and second employees often see pay as a reflection of managements' concern for them (Kauzya, 2009). Normally, employees want a pay system, which is simple, fair and in line with their expectations. When the pay is seen as fair, based on job demand, individual knowledge and skills, and community pay standards, satisfaction is likely to be the end result (Greenberg & Baron, 2013). What needs emphasis is that; it is not the absolute amount paid that matters, rather it is one's perception of fairness that attracts and retains staff (Brooks, 2005). It is well argued in literature that most Sub-Saharan African government fails to attract and retain well qualified staff because they do not have "opportunity wage," which would enable the public service to compete in the market with others players (Kearney, 2009).

The impact of salary appears to be mixed. It is argued that increases in salary will not necessarily lead to substantial retention (Asnake, 2007). However, it should be noted that not all people leave their jobs for the sake of money (Asnake, 2007). According to Asnake (*ibid*), there are two important reasons; first, meagre salary may prompt workers to leave the job for more money, because it is about survival issues. Second, the rest of workers associate salary with fairness, that is, the manner the available profit is shared. Workers tend to be dissatisfied when they feel that the generated profit is unfairly distributed within the organisation or when it does not seem to match weight of the job and the employee's efforts (Baghael, 2011).

A study conducted by Chiboiwa *et al.* (2005) reveals that registered nurses worldwide had the lowest satisfaction in terms of pay, benefits and incentives (see also, Tshitangano, 2013). In South Africa for example, it was shown that pay complaints dominated work related issues. It is believed that employees not satisfied with their pay are more likely not to perform to their full potential. Furthermore, employees who are dissatisfied with their pay may steal from their employer as a morally justifiable way of supplementing their wages.

This could be a reason behind people's concerns in Tanzania, whereas doctors and nurses in public hospitals are accused of stealing medicines and sell them to private pharmacies. As a result, public hospitals lack essential medicines and care (Sikika, 2010). Buchan (2008) cited in Tshitangano (2013) argued that nurses support a workplace that provides equitable remuneration in a work system that is flexible and focuses on providing quality patient care.

In the same vein, a study conducted by Mwaniki and Dulo (2008) in Kenya on migration of health workers and its impacts on service delivery revealed further that out of 16 countries in East and Southern Africa, Kenya was second only to South Africa in the number of its physicians working abroad. With immigration rate of 51 per cent and with more than 71 per cent of respondents in the field of study, it indicated an intention to leave their jobs and go abroad due to poor pay as well as

other related remunerative and incentives. The main destination of Kenyan doctors and nurses is the United Kingdom (UK) and other developed countries. The main reasons, which caused them to leave Kenya was to seek for better salaries and attractive incentive schemes (Mwaniki & Dulo, 2008).

The presented empirical evidence on pay factor was also summarised in the study report by Muhimbili University (2009). The findings noted that job dissatisfiers and de-motivators are directly responsible for employee retention. For example take home income: compensation (salaries, raises and bonuses) were found to be very important dissatisfiers in the 16 countries reviewed. Dambisya (2007) identifies enhanced salaries, salary top-ups and the like, as central in their incentive deployment and retention programmes. Therefore, improving HRH's take home salaries is one of very important satisfiers (Yumkella & Swai, 2007). Besides, studies conducted in Uganda (Onzubo, 2007) and Mali (Dileman *et al.* 2006) also identified low salaries as a major factor that could make workers decide to leave their current jobs.

### **2.5.8 Leadership Style and Retention of Employees**

Supervisory style is a crucial element in leadership (Ng'ethe *et al.* 2012). It can influence employees' decisions to remain with his employer even when other job opportunities are available elsewhere. Noteworthy, the role of leadership and supervision is crucial in staff retention, since employees most often leave managers not companies. Employees are likely to remain with an organisation if they believe that their managers are interested and concerned with their welfare, if they know their duties, if they are given a role that matches with their ability and if they receive positive feedback or recognition (Mbah & Kemetuna, 2012).

Further, the quality of relationship that an employee has with his immediate supervisor may extend his stay in an organisation (Dockel, 2003). Thus, negative behaviour by managers and peers at workplaces can lead to dissatisfaction (Lyn *et al.* 2005). According to the study conducted by the Corporate Leadership Council in

USA, employees who planned to leave their jobs most often said it was because they felt they were not valued by the management (Raymond *et al.* 2009). Moreover, studies have shown that some organisations have considerably reduced turnover by removing a supervisor that lacks interpersonal skills, a problem they could have prevented in the first place (Nge'the *et al.* 2012).

In other cases, conflict among employees if are not well addressed by the management may fuel job dissatisfaction, thus withdrawal or departure (Dovlo & Delonyo, 2003). It is well documented that turnover is higher if workers do not feel that their values and beliefs fit in the organisation or with workmates. Moreover, studies from Africa reveal that normally employers do not listen to their workers' humble demands (Lyn *et al.* 2005, Kauzya, 2009, Madiha *et al.* 2009; Michael & Chipunza, 2009). This creates hatred and distrust between employers and workers, thus workers end up feeling uncomfortable to stay with the organisation. The above findings corresponds with a survey findings done by Onzubo (2007) in Uganda on the turnover of health professionals in the general hospitals of the West Nile Region which revealed that, the highest departure was among doctors and midwives. The most frequent reason for their departure, apart from remuneration, was poor relationship between staff and managers, and perceived inadequate compensation. Hence, the main focus in that study was to address supervision and compensation dissatisfactions (*ibid*).

### **2.5.9 Company Policy and Retention**

Company policies are statements of guideline and practices dealing with the ongoing day to day business management and administration of the organisation (Blagwan & Buchan 2008). A Company policy acts as a framework that guides on how the company should operate its day to day business. According to Itika (2011) these policies help to establish a common standard of behaviour to be upheld by all parties in the relationship. Literature informs us that a fair company policy should be developed jointly through a process of collective bargaining to ensure objectivity. However, in practice most policies on the public services are of a top down directive.

These types of policies have been the source of many industrial conflicts in many African countries especially in the public sectors (Mutahaba, 2005). Furthermore, most of work place policies in African countries and Tanzania in particular are not easily accessible to workers, such that many employees are ignorant of them. As in Tanzania's health sector, some of the regulatory frameworks are being treated as confidential documents and as a result in some cases they are not applied consistently due to lack of objectivity on the part of some managers. This habit demotivates health employees hence their decision of not staying within their work places (Sinha, 2013). This practice is against the ILO code of conducts which emphasis that fair work place policies be based on best employment practices that ensure standard and uniformity comply with industrial relations (Walker, 2011). This view was also observed by Itika (2011) who noted that work place police should involve collective bargaining because there are different interests between the employer and employees values, objectives and attitudes. Hence, collective bargaining will establish a level of playing field in the employment relationship. This is true because each side (employer and employee) is able to apply pressure such as strikes or termination of contract of services. However, in many African countries this is not the case in practice, because sometimes politicians decide which policy to pass and enact without engaging employees. The impact of all these is translated into industrial conflict in many workplaces in organisations.

#### **2.5.10 Job Security and Retention**

Job security provides employees with a sense of stability from their jobs and the organisation they work for, by giving them an opportunity to make plans, buy homes and achieve a sense of confidence in their own future (Phillips & Cornell, 2003). It is argued by some scholars that, if there is no security of tenure, employees may leave the organisation at any time. Therefore, employees need to feel they are working at a secure job that will be there for them in years to come. In an era of corporate downsizing, mergers and acquisitions, job stability is a critical investment strategy in human capital (Van-Wart, 2008, Belbin, 2011 and Bukuwa *et al.* 2013). Lack of job stability diminishes the employee's sense of attachment and responsibility to the

organisation (Phillips and Cornell, 2003). Issues of job security and safety in the work environment are a growing concern in several African countries including Kenya. In an assessment by Capacity Project (2009), recommended that measures to ensure the safety and security of staff and their families should be considered in developing HR policies. This would create a sense of appreciation as health workers will feel valued and at ease, thereby enabling them to perform well their daily assignments. Based in these empirical studies, job security therefore cannot be compromised as for as employee retention is concerned in public health sectors.

#### **2.5.11 Interpersonal Relationship and Retention**

An interpersonal relationship is more responsive to patient needs, more cost-effective and provides more job satisfaction to all employees than staff members working individually (Dileman & Harnmeijer, 2006). Also, showing courtesy and interest in all employees (regardless of hierarchy) mean that employees' humanity is appreciated and valued (Van Wart, 2008:216). According to Van Wart, 2005, managers are urged to adopt a person-oriented leadership style to demonstrate a positive regard for others to a greatest degree possible. In essence, showing courtesy includes but not limited to; a good morning smile, use of proper language and respect, showing interest, concern and talking to employees on subjects that are beyond the job. In that regard therefore, Re'em (2011), McKeown (2003), Berman *et al.* (2013), Van Wart (2008) suggest that in order to make people feel at home at workplaces, managers should also be attuned to workplaces' environment and be able to intervene proactively where necessary.

Usually, in most public sector offices, interpersonal relationship is hostile, in other words the boss (manager) and employees do not have a cordial relationship because of employees' grievances toward the managers, especially when such grievances remain unaddressed for a long period. Such situation leads to distrust between the management and employees. In due regard, managers always feel that employees are not working, while employees feel that they are treated unfairly by their managers for not fulfilling their demands (Montana *et al.* 2008).

Moreover, given the thirteen factors as would be reflected in Herzberg's two-factor theory, some writers considers other environmental factors that may influence retention. For example, Kavanaugh *et al.*, (2006) observed that there is relationship between job satisfaction and generational differences arguing that aged people with 40 years and above are more satisfied compare to young ones. This also applicable to tenure whereby, a person with long time tenure is likely to be satisfied than the one with low tenure (*ibid*). Other factors relate to social economic climate, where the literature indicates that state of the Economy is the most predictor of retention (Belbin, 2011). If the state of the economy is not conducive, HRH will tend to leave the place or county to greener pastures. More so is gender as observed by Griffeth *et al.* (2000). They observe that job characteristics have different impact on men and women. They are of the view that autonomy seems to be more important for men's job satisfaction than women.

#### **2.5.12 Demographic and Social Economic Factors**

Various literatures indicate that demographic and social economic factors are key contexture forces that explain retention of employees in the working place (Babbie 2010 Baghael 2011, Belbin, 2011). In this study certain demographic and social economic factors have been investigated to establish how they influence and relate to employee retention. These demographic and social economic factors include, employee's age, marital status, tenure and social economic climate. The developed conceptual framework modal used in this study were slightly modified from findings obtained after doing preliminary literature review contributed by previous scholars who used similar demographic and social economic factors in investigating the relationship between job satisfaction and job attitude (Belbin, 2011).

- i. In this study age factor has been included as a demographic factor because the literature has identified that there are different perceptions of job satisfaction and motivation across the age spectrum. For example, studies of health – care professionals which examined the association between job satisfaction and generational differences found that younger nurses had lower

level of job satisfaction while the older age group 40+ had higher level of job satisfaction (Belbin, 2011). For example, younger nurses may be keen to observe retention factors than older and more experienced nurses who are more comfortable in their positions and have been working in them for a long period. Investigating age as a moderating factor may point out whether a certain age or group is more perceptive to the benefit of retention factors.

- ii. Furthermore, tenure of working experience of employees in the working place has been observed. Employees with higher tenure may have familiarity with their work role and have reached a higher level of carrier attainment than those employees with lower tenure. Studies of nurses have shown that nurses with different level of tenure were not motivated to remain with an organization by the same incentives (Belbin, 2011, p.61).
- iii. On the other hand Social economic climate was also observed to see its impact in retention of employees working with the public healthcare facilities in Tanzania. Although it is noted that individual-based and organization-based factors are important to workers' retention, the state of economy has been reported in literature as being the most accurate predictor of labour turnover (Belbin, 2011, p. 61). Further to this, available literature indicates that there is a greater tendency for workers to quit the organization when it is relatively easy to get another job. Therefore turnover rate in the overall markets tends to be higher during times of prosperity compared to economic recession (Belbin, 2011).
- iv. Regarding Sex, it is well known that women, despite having strong psychological attachment to work, have lower expectation, thus employ different social comparison process to men when evaluating jobs. There is ample evidence to the effect that, job characteristics have a different impact on men and women. For example, autonomy seems to be more important for men's job satisfaction than women (Griffeth *et al.* 2000). Based on this fact

women can be easily retained in their work place than men who are more difficult to be retained. According to literature men are busy looking for green pasture in order to supplement their salaries for their family up keep.

In view of the discussions and speculations on the choice of demographic and social economic factors of age, tenure, social economic climate and marital status, it is apparent that determining if there are any influences on the retention of employees retention. Therefore, investigating these demographic and social economic factors and their effect on the dependent variables relationship shades new lights on understating retention of HRH in the public health facilities. Inclusion of these demographic and social economic factors in the conceptual framework modal of this study is a new contribution to the Herzberg's theory.

## **2.6 Critical and Analytical Review of Empirical Literature**

This section reviews literature related to the study in order to unfold the gap that should be filled. A number of empirical studies have been carried from the developed countries are analysed. Among others include four studies by Marjolein *et al.* (2016); Brooks (2015); Abbas *et al.*, (2014) as well as Ramlall (2003).

### **2.6.1 Critical Review of Empirical Literature from Developed & Asian States**

One of the studies relevant to this study was by Brooks (2015) in USA. Alecia studied entry-level Health Care services employee motivation and performance. Based on Vrooms expectancy theory, the purpose of this single-case study was to explore the motivational strategies health care organisations leaders could implement to improve the performance of entry level medical service employees. Through triangulation of data, he found out that only two themes; workplace motivation and organisational leadership affect employee performance and effectiveness.

Another relevant study was conducted in the Netherlands by Dielman and Fan Harnmiejer (2006). This desk study explored health worker's performance in search

of promising practices. The study findings revealed that poor performance was a result of health staff not being sufficient in numbers or not providing is according to standards. Various factors inhibiting staff retention in Netherlands health sector were found. They included personal life style related factors including living circumstances. Other factors relate to health system where HR policy and planning influence retention. The study further revealed that job satisfaction, influenced by health facility factors, such as working condition, management capacity and styles, professional advancement and safety at work place influence retention.

Another interesting study was carried out in Iran by Abbas *et. Al.* (2014). Through a cross-sectional research design, the study aimed at identifying factors affecting health workers motivation and retention in Shahid Beheshili University of Medical Sciences (SBUMS). The study revealed that the main motivating factors for health workers were good management, supervisors, and managers' suggest and good working relationship with colleagues. The study further revealed that unfair treatment, poor management and lack of appreciation were the main demotivating factors. Furthermore the study revealed that 47.2% of health workers believed that existing schemes for supervision were unhelpful in improving their performance. The study concludes that strengthening management capacities in health services can increase job motivation and retention.

Furthermore, another similar study was conducted in India by Sunil Ramlall (2003). The study intended to determine the factor that most significantly influences employee's decision to remain employed at a particular organisation and possible reasons for choosing to leave. Based on survey, observation and interview techniques, the study revealed that the location of the organisation and its compensation packages were paramount factors in retaining employees and that lack of challenge and opportunities at working place are the most factor contemplating leaving the organisation. For sustainable employee retention the study recommends that employers and the government must identify and critically understand the

employee's needs regarding to career, family, education compensation and working condition and continuously meet the employee expectation.

### **2.6.2 Critical Review of Empirical Literature from Developing Countries**

Apart from the critical review of empirical studies from developed World, there are a substantial number of studies in Africa relevant to this study. They include those of Adjei *et al.* (2016), Adzei and Atinga (2012), Roda *et al.*,(2013) and that of Mutale *et al.*,(2-13). One of the studies carried in Africa was in Ghana by Adjei *et al.* (2016), who examined the impact of motivation and identify how intrinsic and extrinsic motivating factors affect the performance of health workers at Korle Bu Teaching Hospital. Through qualitative approach and purposive sampling, the study revealed that job satisfaction, logistic provision and enabling work environment are intrinsic factors that affect work performance and human resource for health retention. Kofi observes that extrinsic factors such as accommodation financial rewards and transportation have influence on work performance and retention. The study revealed that motivation is key to work performance and retention of health workers. The study recommends that motivational policies based on both intrinsic and extrinsic strategies should be adopted by the government and health managers to influence retention.

Another related study was also conducted in Ghana by Adzei and Atinga (2012). Through quantitative study the goal of Adzei and Atinga was to undertake a systematic review aiming at consolidating the existing empirical evidence on the effect of financial and nonfinancial incentive on motivation and retention of health workers. The study revealed numerical statistics regarding both financial and nonfinancial incentive motivation that both are critical for health performance and retention of human resource for health in the Ghanaian health sector. The study recommends that the government should ensure both financial and nonfinancial reward to influence sustainable health worker performance and retention in the Ghana district hospital and the health sector in general.

Notably, the study by Bukuwa, Chisimpa and Masamba (2013) in Malawi is also relevant to this study. Based on a case study of NGOs in health sector in Malawi, the study examined the key determinant of staff retention in Malawi. Through survey, the study revealed that nonfinancial reward and not the financial packages that significantly contribute to employees' satisfaction and their intention to stay and continue working in a particular NGO's. These findings implies that retention strategies is not only about financial issues, but rather other intangible rewards (nonfinancial incentives) that could provide psychological satisfaction of employees which could result in sustainable and longer lasting effect to employees.

Further, the study by Mutale *et al.* (2013) provides an assessment of health workers motivation as part of the baseline survey for health system strengthening interventions in the three Zambian rural districts. The results indicate that motivation varied by gender, health worker, training, and time employed, whereas female and nurse participants had the highest motivation scores while environmental health technician had the lowest scores. So, the retention of female and nurse is higher than the environmental health technicians. As a critique, the sample of this study had more females than males and thus, it raised critics from the findings that the retention of female and nurse is higher than the environmental health technicians.

### **2.6.3 Critical Review of Empirical Literature from Tanzania's Context**

Although Tanzania is one among the developing countries, for the purpose of this study, few studies relevant to the objectives of this study have been subjected into a critical and analytical review of literature. They include that of Aloisia *et al.*, (2016), Calist, (2015), Nathanael *et al.*, (2014), Sikika (2010), Franciscar (2013), Lucy and Irwin (2005) and that of Yumkella and Swai (2007).

The study by Aloisia *et al.* (2016) sought to explain retention of health workers in Tanzania. Although not founded on any theory, particularly the study through cross-sectional survey was interested in looking at what cadres are most problematic to recruit and keep in post. It also sought to establish how and or what related reasons

do health workers leave; what critical incidents to those who stay face and why do they stay and cope. The results indicate that mid-level cadres were problematic to retain and caused significant disruption to continuity of care when they left. The study established that staff left because of negative perception of personal safety, there was a feeling that patient outcome were compromised by poor care or as a result of perceived failed promises. The major conclusion of this study was that HRH system in Tanzania appears to lack transparency.

The study by Calist (2015) was conducted to assess the factors influencing employee retention in Non-Governmental Organisation in Tanzania. While the study banked on small sample of employees of Ifakara health institute (IHI), it assessed factors perceived by employees as influencing retention in Ifakara Health Centre and examined how individual background influenced staff retention at IHI. Using Maslow Hierarchy of needs theory on staff retention, the study revealed that low salaries benefits were the main reasons for employees leaving the organisation. More so are the employee psychological factors related to justice and prestige influenced retention at IHI. As such the study concludes that improved salary especially for middle and lower cadre motivate health workers and make them stay.

Another study by Nathanael *et al.* (2014) addressed HRH crisis in Tanzania. Using only the secondary data from five training institutions, Ministry of Health and Social welfare, Medical Association Board of Tanzania and POPSM, the study concludes that, the shortage of trained health staff in Tanzania is a major challenge. They observed that, the situation is aggravated by low motivation and mal-distribution of the few available staff. The study further reveals that newly employed medical graduates escape the medical profession by doing other well-paying jobs.

Equally important to this study is that of Sikika (2010) whose deployment tracking survey indicated a shortage of staff in all public health facilities. The Sikika (*ibid.*) report indicate that 18 per cent pharmacists, 15 per cent medical doctors and 13 per cent assistant doctors left their duty stations a few months after being employed in

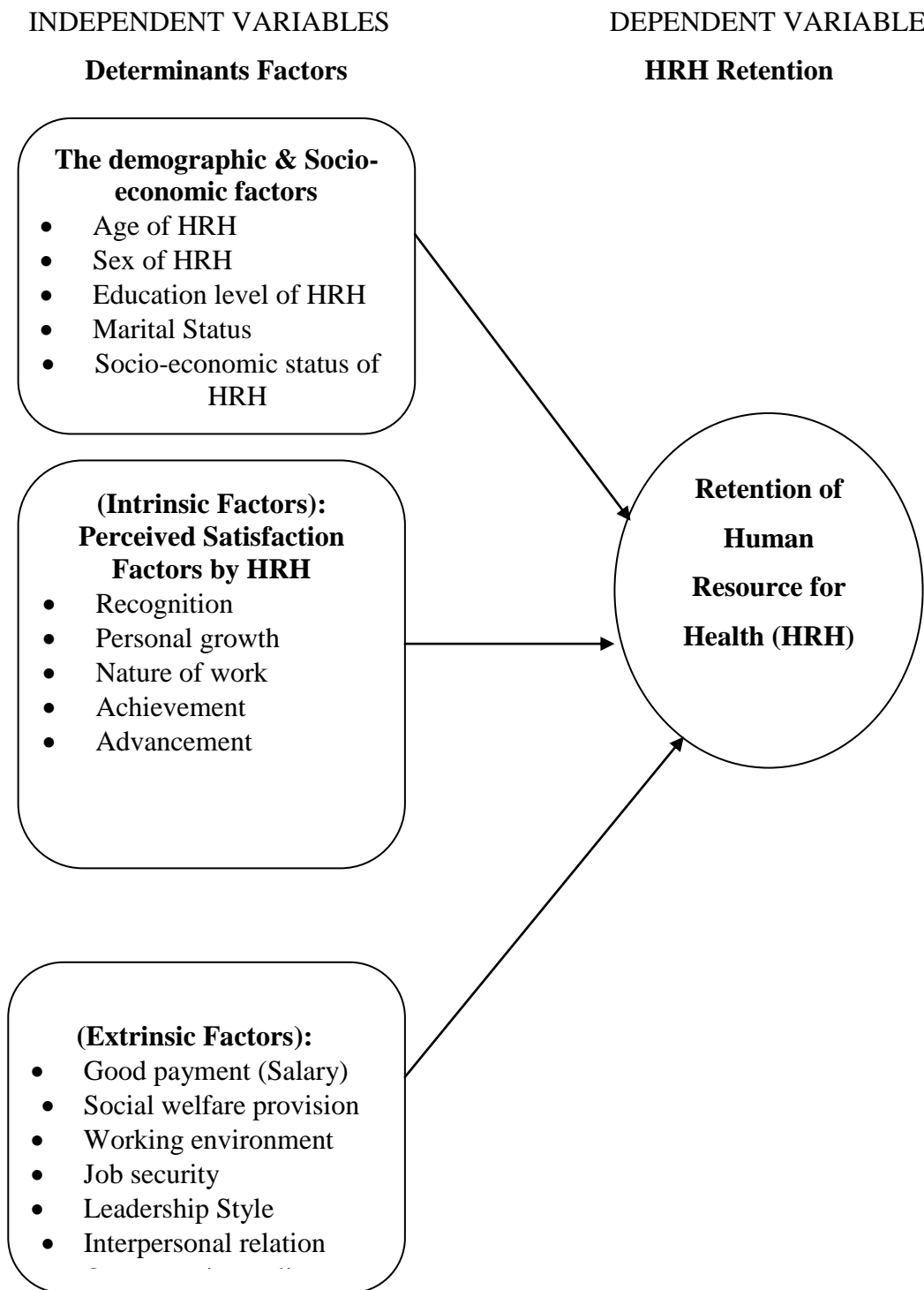
2009. The study established that the medical field has staffing problems in all cadres especially clinical officer, nurses and medical attendants. The study further indicated the HRH gap in the observed district stood at 54%. This study however did not show factors behind this observation. Likewise, a related study by Yumkella and Swai (2007) reveal that, among final year medical students, less than half (48.5%) were willing to apply for or accept rural posts. Although it was generally in health sector, the study indicate that adverse working conditions is a key factor keeping health workers from taking vacant position. Furthermore, other factors are low compensation, overwhelming responsibilities, limited training opportunities and inadequate supervision exacerbated retention problem.

Another related study was conducted by Fransiscar (2013) who assessed human resource practices on retention of health staff in Local Government Authorities. Specifically, the study sought to identify reasons responsible for the failure of the National Health policies in Retaining Health sector employees. It also sought to investigate challenge on implementing human resources practices like work environment and communication facilities.

Although it is not based on rigorous statistical measures, the study revealed that job satisfaction, carrier development opportunities, rewards, compensation and supervision support, working environment and working facilities as important factors for health staff retention in organisations. Furthermore, irrespective its lack of theoretical foundation, the study by Lucy and Ervin (2005) on labour turnover revealed that weak available skills mix relative to health and health system needs led to employee turnover. The study further revealed that too little supervision of lower cadres by few available doctors had negative impact on staff retention.

## **2.7 Conceptual Framework**

The conceptual framework for this study is informed by retention models adapted from Herzberg's theoretical framework to fit the purpose of this study that aimed at examining determinants of HRH retention in Tanzania's public health institutions. According to Kombo and Tromp (2006.49-50), a conceptual framework has a potential usefulness as a tool to assist the researcher to explain the relationship between and among variables, as well as interpret subsequent findings. It forms a part of the agenda for negotiation to be scrutinised and tested.



**Figure 2.1: The Conceptual Framework on the Determinants of HRH Retention**

**Source:** Adapted by the Researcher from Herzberg's theoretical framework, 2016

In the path towards understanding HRH retention in Tanzania's public health institutions, three latent variables have been utilised. Those are; the demographic factors (age, sex, education and marital status); the effects of salary and fringe benefits provided by the government; as well as the perceived satisfaction factors used by the government contribute on HRH retention in Tanzania.

Several indicators of the independent variables of the study are shown in the conceptual framework. They are aligned according to the objectives of the study as presented in the introductory chapter. Among others include: responsibility, achievements, personnel growth, recognition, work itself, personnel advancement, working condition, salary, leadership style, work place policy, job security, interpersonal relation and status while the dependent variable of the study is retention which is the intent to stay with public hospitals.

When employees are given responsibility to exercises powers and autonomy to his job it encourage and motivate employee to achieve their goals hence encourage them to stay (Greenberg & Baron, 2013). Growth and personnel advancement in terms of promotion and career growth motivate employees and hence enhance retention (Herzberg's 1978). Intrinsic factors such as recognition of staff and their status are key motivators which enhance commitment and loyalty to staff to continue working with organisation. Studies indicates that employees tend to stay in organisation where they feel their efforts, capabilities and their contributions are valued and appreciated by the leadership and employers (Mc.Keown, 2003, Howatt, 2005). Similarly design of work itself that giving employees proper tools and the end goal brings meanings and sensible to employees and thus higher degree of intent to stay with organisation would be realise (Phillips & Connel 2003). According to Chaminde (2007) and Sinha (2013), working environment is an extrinsic factor that influences employee's decision to stay with organisation.

Work environment aspects such as physical facilities, salaries, job security, workplace policies, leadership style and psychological aspect like interpersonal relationships are key factors that tend to satisfy employees to remain loyal and committed to stay working with organisation (Philips & Connel, 2003).

In this model, HR outcome (satisfaction and dissatisfaction) is influenced by 15 retention factors, which may result in employee retention or turnover, as indicated by thick black arrow line from satisfaction/dissatisfaction box to employees' retention box in the conceptual framework in Figure 2.1.

## **2.8 The Synthesis and Knowledge Gap**

As discussed in the background of the study and literature review, retention of HRH in health facilities is paramount for quality health delivery in the public hospitals. Empirical evidences drawn and discussed from the review of both, theoretical and critical literature revealed the trends, successes and failures related to the retention of human resource for health. Literally, the review of various studies and reports have brought out the broader picture of how the failure to retain HRH happens, its implications as well as what has been done to reduce such gaps from the global level, regional (sub-Saharan Africa) before coming to the national level in Tanzania. The review of literatures have successful indicated that there are various determinants for retention of human resource for health in health facilities from the developed, developing countries, narrowed to Tanzania's context. On contrary, while explanations for measures undertaken to address the problem of HRH retention have for a long time relied on the established government policies and public initiatives as a supply side to ameliorate the situation.

Little is known from the demand side of the health sector, that is, the human resources for health (HRH). This was the knowledge gap that this study strived to fill at. As a result, the current study raised issues for the observation: Are the retention indicators of HRH established by various Tanzania's health reports consistent with the factors causing the happening in the demand side? The current study examined

the determinants of human resource retention for healthcare in Tanzania's public hospitals while utilising an adapted Herzberg's theoretical framework. Further, regardless of their relevance to this study, the reviewed studies arouse contention to their either theoretical or methodological approaches to the search for unknown. For example, some of these studies were not grounded on any theory which makes testing the relative strength of the various factors and their contribution to retention impossible. These studies by Eilliam (2006), Abbas *et. al.*, (2014), Ramlall (2003), Mutale *et. al.*, (2013), and that of Aloisia *et.al.* (2016), Nathanael *et.al.* (2014) and that Sikika (2010), Joachim (2013), and Lucy and Ervin (2005) are instructive. This study in contrast bridged this gap by using Herzberg Two-factor theory in explaining retention problem for HRH in Tanzania Public Hospitals.

Moreover, most of these studies' findings cannot be generalised as they used either single case study or one method of data collection and analysis. The single case studies are those of Brooks (2015), Abbas *et. al.*, (2014), Adjei *et. al.*, (2016), and Calist (2015). Studies that employed only one method of data collection include those of Harnmiejer (2006), Nathanael *et.al.* (2014). This study in contrast bridged these gaps by using multiple cases (such as various public health institutions from three different regions in Tanzania) and different methods of data collection and analysis to ensure validity and reliability of results. The use of various methods of data collection and analysis also ensured rigorousness and robustness of the study findings.

## **2.9 Summary of Chapter Two**

This chapter reviewed literature on employee retention and tried to link it with the determinants of HRH retention in public health institutions. Based on the reviewed literature, it has been revealed that several factors account for employee retention, and are triggered by various causes, and have different implications. From the review of various literatures differences in the levels of economic development, technological advancement, cultural diversity and different in management practices account for discrepancies in HRH retention.

Despite these differences, we have noted that the issue of motivation and job satisfaction still plays an important role in employee retention worldwide. These have been learned to be the most important drivers of human behaviour at work place which are used to understand and predict people's reactions. Further, in the review of other countries' experience we have learned that, there is no a single solution or strategy which could be uniformly applied in all countries to improve retention of HRH.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology which guided the undertaking of this study. It presents the study area, research design, sample size and sampling procedures. It also covers data collection methods, validity and reliability; data analysis plan and ethical considerations.

#### **3.2 Research Design**

While some theorists consider the universe to be governed by definite principles or laws and these can be discovered objectively (positivism), others believe that reality depends on the interpretation of the observer and the situation prevailing (interpretive). Literally, this study position itself within positivist lens since it revolves at understanding objectively hoe various determinant factors contribute to HRH retention while reflecting scientific claims drawn globally, regionally as well as within the local context.

Yin (2009) states that research design is a plan that guides the investigator in the process of collecting, analysing and interpreting observations. It is a logical model of proof that allows the researcher to draw inferences concerning causal relations among the variable under investigation (Nachmias & Nachmias, 1992). In undertaking this study the researcher adopted explanatory research design to examine the determinants of HRH retention in public health institutions.

This design, however, revolved with the use of quantitative sequential qualitative mixed research approach which was in line with the nature of the research questions of this study. According to Wallen and Fraenkel (2001) the use of mixed research approach for collecting and analysing both quantitative and qualitative data in a single study enhances understanding a research problem at hand from different lens.

The use of mixed research approach was also preferred because it strengthens the findings and inferences made for an in-depth understanding social phenomenon. Through data triangulation, the mixed research approaches were deemed potential to capitalise on the strengths and overcome the weakness of one approach. Also, mixed method approach enabled the researcher to presents both quantitative and qualitative findings sequentially. By doing so, it was easy to explain and interpretate the study findings. In this study, quantitative data dominates over qualitative ones. This is due to the design of research questions of this study. While objective number one and three of the study were quantitatively designed, objective number two was qualitatively designed. Because of that observation, qualitative approach was used to supplement the quantitative research questions. In this study qualitative research provided the contextual information for quantitative research approach. Vanderstoep and Johnston (2009) commend that qualitative perspectives imply on analysis and understanding a study phenomenon through exploration of knowledge, construction and interaction of people. Qualitative data were obtained from interviews and documentary review.

They all aimed at providing an in-depth understanding of determinants of retention of HRH in public health institutions. As recommended by Vanderstoep and Johnson (*ibid.*), qualitative method provided the most suitable approach to enable in-depth understanding of the participant's experiences, feelings and their voice. Despite being appropriate to this study, results from qualitative approach cannot be extended to other population with the same degree of certainty that quantitative analysis can. This is one among the limitations of the use of qualitative approach to search for the unknown. As such, the research relied on quantitative research approach which enabled researcher to address questions that hypothesised relationship among the factors causing the happening in the public hospitals. They were at most measured in numerical and objectively. This study therefore utilised an explanatory research design, from a multiple of cases, blended with a mixed research approach known as quantitative sequential qualitative mixed research approach in which quantitative approaches dominates over qualitative one.

### **3.3 Scope of the Study**

The study was limited to the public health facilities located in three regions of Tanzania's mainland. Within those public health facilities, clinical staff at all levels were surveyed. Among others were medical doctors, nurses, pharmacists and laboratory technicians and other technical Human Resource for Health such as radiologist who are directly involved in medical care provision in health care.

The study did not cover the support staff at the public hospitals such as clerks, security guards, cleaners, drivers, office attendants and other available supporting staff for they are not directly concerned in provisional of medical care. However, it included key informants who supplemented information for this study. Among them include: Health administrative officers, medical councils of Tanzania, medical workers' association and medical registration bodies and ex-Human Resource for Health.

The period within which the study had observed was from 2000 to 2015. This is the period within which comprehensive public service reforms were undertaken and implemented. The research was conducted in three selected region of Dar es Salaam, Mbeya and Lindi as justified in the section 3.4 of this thesis.

### **3.4 Study Area**

This study was carried out in Dar es Salaam, Mbeya and Lindi regions; and two districts were selected from each region. Among the basic reasons for the choice of the study area were based on regional employee retention rates as indicated by Ministry of Health and Social Welfare with regards to human resource information system of 2013. The choice of Dar es Salaam was based on the following grounds: first, Dar es Salaam had a high employee retention rates of 99% compared to other regions in Tanzania (Human Resource Information System, 2013). Secondly, it was chosen due to the fact that it serves as a commercial and government business centre, where many public servants are employed. Hence, it was envisaged that respondents would be reached easily.

The choice of Lindi was influenced by being among the poorly serviced and remotely located regions in Tanzania. Secondly, Lindi region has the lowest employee retention rates of 91% compared to other regions in Tanzania. Lastly, Mbeya region was selected because it had a moderate health retention rates of 93.24% and available evidences indicate that the regions historically have been the source of many HRH conflicts, strikes and employees go slow as observed by Sikika (2010).

Furthermore, the choice of study district in the three selected regions was based on the employee retention rates (highest and lowest retention rates). For instance in Dar es Salaam, Kinondoni District was selected because it has high rate of retention of 99.5% compared to Temeke District which had 95% retention rate. Likewise, in Lindi region, both Lindi and Kilwa Districts were selected. This is because while Lindi District had high retention rate of 91.2%, Kilwa District on the other hand had the lowest retention rate of 64.5% compared to other Districts. Lastly in Mbeya region, Mbeya District and the then Mbozi District which currently belong to Songwe region were selected. This was due to the fact that Mbeya District had the highest retention rate of 95.4% while Mbozi District had 89 retention rate.



**Figure 3.1: Map of Tanzania showing distribution of study area**

**Source:** URT, 2012

### **3.4.1 Description of Dar es Salaam Region**

Dar es Salaam region is a city such that it is the largest city in Mainland Tanzania located in coastal area with a total surface area of 1,800 kilometres square. According to the 2012 national census, the region has a population of 4,364,541, which is higher than the pre-census projection of 3,270,255. It was reported that there was 5.6 percent average annual population growth rate, which was the highest in the country (URT, 2012). It is also the most densely populated region with 3,133 people per kilometre square (URT, 2012). Administratively, the region is divided

into three Districts namely; Temeke, Kinondoni and Ilala, which are also municipal councils. The population of Dar es Salaam is highly mixed due to rural to urban migration and settlement of different ethnic groups (URT, 2011).

#### **3.4.2 Description of Mbeya Region**

Mbeya Region is located on the South-west of Mainland Tanzania, commonly known as the Southern Highland. Mbeya region is bordered with five regions, namely; Rukwa, Tabora, Iringa, Njombe and Ruvuma. The population of Mbeya region has experienced a significant growth with an average of 2.1 percent annually between the 2002 and 2012 censuses. The population was 1,270,854 in the 2012 census compared to 1,124,481 in 2002. Therefore, there is a significant increase of 146373 people (13.0 percent) during the intercensal period (URT, 2012). Administratively, the region is divided into the following ten Districts: Rungwe, Mbeya Rural, Mbeya City, Mbozi, Momba, Mbarali, Kyela, Ileje, Chunya and Busokelo (URT, 2011).

#### **3.4.3 Description of Lindi Region**

Lindi region is located in the South-eastern part of Tanzania, bordering the Indian Ocean to its East, Pwani region to its North, and Ruvuma as well as Mtwara in South. Much of the western part of the Lindi Region is in Selous Game Reserve. According to the 2012 national census; the region had a population of 864,652 compared to 787,624 in 2002 census. The region had 0.9 percent average annual population growth rate between 2002 and 2012 censuses. The region has the following six administrative Districts: Kilwa, Lindi, rural, Lindi urban, Liwale, Nachingwea and Ruangwa.

#### **3.4.4 Population of the study**

The population of the study was drawn from the Regional Medical Officer's (RMOs) and District Medical Officer's (DMOs) in the respective regions and districts. The population from which the information was obtained included medical practitioners who were specialist doctors, medical doctors, assistant medical doctors, clinical

assistants, pharmacists, and technologists. Others study participants included health administrative officers, medical councils of Tanzania, medical workers' association and medical registration bodies and ex-Human Resource for Health.

The doctors at all levels were targeted because they are responsible for diagnosis and prescription of proper medical service. Some of them are also in charge of health facilities. Pharmacists were targeted because they dispense medicine to patients as prescribed by the doctors and clinical officers. Dispensing wrong medicine or dosage can adversely affect the health care service efficiencies; Technologists were targeted because they assist the doctors and clinical officers by carrying out tests to assist diagnosis of patient's problems, whereas wrong tests can lead to wrong disease diagnosis hence wrong prescription that could lead to wrong medication.

The nurses were targeted because they administer the medical care including drugs to patients as prescribed by doctors and clinical officers. Medical councils, medical workers association and medical registration bodies included in the study because they directly deal with medical profession regulation hence they are important to ensure professionalism for effective health service provision. Finally, ex-HRH were included in the study because they were seen as important in providing information on factors caused them to leave the public hospitals. Therefore, all these health care professionals, respondents from regulatory bodies and workers association, as well as Health Administrative Offices (HAOs) were included because they play an important role in provision of health care hence their loss affects the patient.

#### **3.4.5 Sample size**

In this study, the unit of analysis included: Medical doctors, nurses and other clinical staff of all levels that are directly involved in provision of medical services in health care. The sample size for quantitative part of the study was obtained through using a formula suggested by Kothari (2005). This formula was used to establish the sample size because the total population of the study was inadequately known due to presence of ghost workers in the public service.

$$n \geq \frac{Z^2_{\alpha/2} p(1-p)}{d^2}$$

Where,

$Z_{\alpha/2} = Z_{0.025} = 1.96$ , is the confidence level value obtained from normal distribution table

d = is the chosen margin of error (0.05)

p=0.5, is the estimated value for the proportion of a sample which gives the optimal sample size in absence of known population.

Therefore,

$$n \geq \frac{(1.96)^2 (0.5)(1-0.5)}{(0.05)^2} = \frac{3.8416 \times 0.25}{0.0025} = \frac{0.9604}{0.0025} = 384.16 \approx 384$$

$$n \geq 384$$

Thus, this study utilised a sample size of 384 observations for quantitative part of the study. It was meant for generation of quantitative information as highlighted by objective 1 and 3 of the study. While the first objective of the study sought to understand:

- i. The extent to which both, the demographic factors (age, gender, and marital status) and socio-economic status contribute on HRH retention in Tanzania's public health facilities?

The second objective of the study sought to understand:

- ii. The extent to which both, the level of salary and other extrinsic motivations provided by the Government of Tanzania (GoT) constrain retention of HRH in Tanzania's public health facilities?

On the other hand, the study utilised a sample size of 24 participants who were selected purposively (refer sub- section 3.4) for qualitative part of the study. It was

meant for generation of qualitative information as highlighted by Table 3.3 which was meant to explain the second objective of the study. Collectively, this attracted the response rate of  $(24 + 300) / 408 = 79.4\%$  .

**Table 3.1: Sample size of the Study**

Specialisation (Title)	Respondents from public organisations	Ex-HRH Respondents Sample	Total Sample	Returned questionnaire	Sampling Frame
Medical Registration body	1	0	1	1	ofc of the registrar
Medical workers associations	1	0	1	1	ofc of work Ass
Medical councils	1	0	1	1	ofc of med councils
Medical specialists	15	0	17	6	hospitals
Regional and District	18	0	18	8	RCs & DCs
Medical officers, Regional & District Health Secretaries					hospital
Medical Officers(MOs)	48	4	51	48	hospital
Assistant Medical Officers (AMOs)	50	3	54	33	hospital
Clinical Officers (COs)	50	3	53	32	hospital
Clinical Assistant	48	3	51	46	hospital
Nursing Officers	58	2	61	56	hospital
Nurses	50	2	53	47	hospital
Laboratory Technicians (Technologists)	12	2	15	14	hospital
Pharmacists	6	2	8	7	hospital
Total/Sample Size	358	22	384	300	hospital

**Source: Field data (2013)**

### 3.5 Sampling Procedure

This study employed purposive sampling, snowball sampling and simple random sampling to select relevant study areas, health facilities and respondents. Purposive sampling technique is a non probability sampling design was used to select the Regions, Districts and health facilities. In Dar es Salaam, the selected districts were Temeke and Kinondoni, while in Lindi, the study selected Kilwa district and Lindi districts, finally, in Mbeya region, Mbeya district and Mbozi districts were selected. Generally, a total of 30 health facilities from sampled districts in all surveyed three regions were selected (see annexure 4).

Through purposive sampling techniques a total of 24 respondents were selected for interviews. In addition, 22 ex-HRH were traced and located through snowball sampling techniques. Apart from utilising purposive sampling for selection of 24 study participants who generated qualitative knowledge, the same technique was used towards selecting all surveyed health facilities in Tanzania. On the other hand, simple random sampling was used to select 362 cadres out of 384 sample size for generating quantitative information (please refer Table 3.1). The use of simple random sampling was significant in this study because it cancelled out biasness and therefore each staff from the population had equal opportunities of representation into the sample.

The main criteria in selecting studied health facilities were accessibility, health facility level and the rural urban criterion, because these facilities were selected purposively as indicated above.

- i. Accessibility was mostly considered before selecting the study health facilities such that those areas which were easily reachable were considered first among others, because some areas in Lindi and Mbeya specifically in Mbozi district were very difficult to reach by the researcher.
- ii. Also the selection was based on health facility levels that is, the researchers aim to sample two consultant hospitals, four regional hospitals and six district hospitals from which health centres and dispensaries were randomly selected based on health facilities criteria.
- iii. Under the urban-rural criterion, the researcher aimed at purposely selecting two districts from each region whereas one was from rural and the other from urban areas. This was not meant for comparative purposes of the cases, rather drawing a holistic picture to substantiate the problem of HRH retention in Tanzania.

### **3.6 Data Collection Methods**

The study used four data collection methods namely, interviews, questionnaires, documentary review and observation checklist the use of different methods aimed at

complement and capitalise strengths of each data collection tool and analysis as well as overcome weakness of one another. It also aimed at increasing validity and reliability of study results.

### 3.6.1 Questionnaire

The researcher administered questionnaires to obtain information from health workers in public hospitals and ex-HRH. Through this method, data were collected from 300 respondents in public hospitals and ex-Human Resource for Health. The researcher's choice to use the questionnaire on most of the respondents was based on the nature of the study design which attracted more numerical data to be collected and analysed. It also ensured anonymity during data collection which enabled the respondents to respond genuinely without fear of identification. The study used a close-ended questionnaire with a Likert scale format as seen in annexure 10.

**Table 3.2: Distributed and returned questionnaires from the respondents**

Item	Number of Questionnaire distributed	Number of Questionnaire received	Percentage
Region			
Dar es Salaam	128	108	28.1
Mbeya	128	110	28.7
Lindi	128	82	21.4

**Source: Field data (2012-13)**

Before the distribution of questionnaire, they were tested to 20 respondents at Mkuranga hospital. Testing aimed at helping to iron out misconceptions if any. However, most of the questions were found relevant for collecting required information. Table 3.2 above provides number of questionnaire distributed according to different categories of respondents. Despite its strength, questionnaires cannot be explained and clarified to respondents such that can be misinterpreted and answers cannot be put in real world context.

### 3.6.2 Interviews

Both structured and unstructured interview guide as presented in annexure 7 and 8 were employed to collect data. The use of this method was intended to get first-hand information to validate and clarify the information collected through questionnaire. The choice of those respondents (Table 4) was necessitated by the fact that they are the one who directly are responsible for HRH retention because they are leaders who are expected to ensure there are motivation strategies for retention.

Moreover, the criteria for selecting this category was sought to be the best approach for getting desired data from health workers decision-making bodies. Getting in touch with this category of respondent was through appointments. Furthermore, interviewing not only helped to corroborate data assembled from other sources, but also provided a means of accessing interviewee interpretations, and understanding the feelings of HRH with regard to satisfaction with the government services to retain them in public health sector. Therefore, this study interviewed 24 respondents whereby the researcher gathered rich and depth information from the primary source. While the method has its own strength, it is unlikely to be representative of a particular population. Moreover, it is difficult to direct compare the results of in-depth interview because each interview is unique and might be specific to a particular interaction. This weakness was offset by use of questionnaire data.

**Table 3.3: Summary of interviewed respondents**

Unit of inquiry	No. of respondents (s) selected	Percentage No. of respondent interviewed
Medical registration body	1	5
Medical workers associations	1	5
Medical councils	1	5
Director Muhimbili Referral Hospital	1	5
Regional Medical	3	15
District Medical officers	5	25
Regional Health Secretary	3	15
Head of Health Centres	5	25
Heads of Dispensaries'	4	20
Total	24	100

**Source: Field data (2013)**

### **3.6.3 Documentary Reviews**

The researcher collected secondary information through review of several documents such as Health performance report, incentives schemes available in health sector and Health related Policies such as; Human Resource Policy Guideline 2005, Health sector strategic plan 2003-2008/2008-2015 primary health development programme (MMAM) 2007-2017. The review of these documents provided information on retention strategies, incentives schemes available in public hospitals so as to find out if they motivate or demotivate retention of Human Resource for Health in public hospitals. Information from policies was gathered to establish if they created good working environment for health staff as advocated by those policies.

### **3.6.4 Observation Check List**

In undertaking this study, a set of questions was used as a checklist in order to capture specific variables and indicators. This helped the researcher to record comments and actual views on the working environment together with tools that mirrored reality on the ground. In this study, checklist helped the researcher to validate information gathered through questionnaires, interviews and documentary review by observing the reality from the phenomenon on the ground. Hence, this helped to test authenticity of results by reflecting on actual material fact. The questions included key variables and indicators outlined in Annexure 12.

### **3.7 Measurement of Variables**

It is important to note that one way of attaining objectivity is identifying a systematic way of measuring a phenomenon being studied. As such qualitative and quantitative data were measured in different ways. The qualitative data were assigned themes which were measured through respondent's responses for example; in measuring the dependent variable "retention" was measured through the employee's expression of intent to continue working for the organisation, satisfaction with their jobs and also through their loyalty and commitment to the organisation. With quantitative data variables investigated were measured using scales taken and modified from existing literature. The type of scales selected for various sections of the study included:

dichotomous scales, which was used to elicit a “yes or no” answer; categorical scales – which used multiple items to elicit a single response; ordinary scales used to rank items; and interval measures – where its difference in the response between any two points were the same as sported by (Cavan *et al.*, 2001: Hair, *et al.*, 2005: Zikmund, 2003 cited in Belbin, 2011:80).

In this study, variables were grouped into two categories which included intrinsic factors and extrinsic factors. The intrinsic factors included: responsibility, achievement, personnel growth, recognition, work itself, and personnel advancement. Extrinsic factors included: working condition, salary, supervision style, company policy, job security, interpersonal relation and status.

All intrinsic and extrinsic variables were measured using Likert scale, to get respondents’ opinions from the least to the most satisfaction level for continuing to work with public hospitals [1 : Very low, 2: Low, 3: Neutral, 4: High, 5 : Very high]. Also moderating factors were measured using Likert scales to get satisfaction level and motivation to continue working with public hospitals (1: not at all, 2: to some extent, 3: neutral, 4: quite a large extent, 5: to a great). Section A under Part 1 regarding respondents’ background, used a categorical scale to determine their characteristics such as age, position, marital status and tenure. The section also used dichotomous scales to record and elicit ‘yes’ and ‘no’ answers.

Furthermore, this section also had four open-ended questions; (question number 10, 11, 12 and 14). Their answers were edited and categorised for the subsequent data analysis. Section B, Parts II to VIII covers retention factors, while section B, Part IX probed on employees’ feelings regarding the public health sector. Likewise, this part used a Likert scale to examine how strongly subjects agreed or disagreed with the statements using anchors [1: strong disagree, 2: Disagree, 3 : Neutral, 4 : Agree and 5 : strong agree].

Also, in this section, Likert scale was used to measure respondents' opinions from the least satisfaction level to the most satisfaction level for HRH to continue working with the public hospitals [ 1 : Very low, 2 : Low, 3 : Neutral, 4 : High, 5 : Very high]. All items in this study that used dichotomous, category and interval scales were considered close-ended questions for the purpose of excluding alternatives which would later affect data analysis and alter findings from the study due to respondents' bias (see also Belbin, 2011). Table 5: - presents the sections of survey instruments and relevant measures used in each question.

**Table 3.4: Measures of Variable Adopted**

No.	Section of Survey	Question No.	Measures	
1	Section A Part 1	Question 2 to 8	Category Scale	Age, Position and gender Range of choice given: select one.
2	Section A Part 1	Question 3, 9 and 15	Dichotomous Scale	Yes or No Male or Female
3	Section A Part 1	Question 10 to 14	open ended Question	edited and categorised for data analysis
4	Section B Part II to VIII	Question No. 17 to 26	Likert Scale	[ 1: Strong agree, 2 : Disagree, 3 : Neutral, 4 : Agree 5 : Strong Disagree]. [ 1 : Very Low, 2 : Low, 3 : Neutral, 4 : High 5 : Very high] [ 1 : Very satisfied, 2 : Satisfied, 3 : Neutral, 4 : Unsatisfied and 5 : Very unsatisfied]
5	Appendices checklist questions observation schedule	9 to 10 1 to 6 1 to 7	observation schedule and checklist	data obtained was edited and categorised for analysis

**Source:** Adopted from Belbin, (2011), and modified by the researcher depending on variables and measures used.

In this study, the five point Likert scale was chosen over other scales such as seven points, nine points and ten points scales because of coefficient alpha reliability with Likert type scale which has shown an increase up to five points (Jakobsson, 2004). Besides, an increase from five to seven or above on rating scales does not

improve reliability of rating (Belbin, 2011). For instance, Cavana *et al.* (2001), support justification for the use of this scale, by pointing out that, the magnitude of the difference between 1 and 2 is the same as the magnitude of the difference between 4 and 5 or any other two points to each item. In due regard, this study opted to use the five point scale.

### **3.8 Validity and Reliability of the Study**

The test for establishing quality and thoroughness in research includes reliability, internal validity and external validity (Belbin, 2011). Hence, validity and reliability are two important and fundamental characteristics of any measurable procedure in research.

#### **3.8.1 Validity of the Study**

In this study, the researcher used a combination of research methods, which helped to reduce the risk of systematic biases due to a specific method. Data collection methods such as interviews, questionnaires, documentation review, and checklist were used to support and check one another's validity. To achieve the highest validity possible, survey instruments were carefully designed and thoroughly tested to a smaller and similar population, in Mkuranga Hospital, Coast region. Moreover, data collection and analysis procedures were carefully planned and documented as well as followed up. Besides, data collected from the field were cleaned up such that inaccurate pieces of information were detected and removed. Such measures were carried out at the initial stages in order to ensure that the researcher got accurate results. On the other hand, to ensure external validity was made possible by the method for obtaining a required sample of 384 which makes the results generalisable.

#### **3.8.2 Reliability**

To ensure the greatest reliability possible of the study, the following issues were taken into consideration. The measurement instruments were validated through interviews with selected respondents and content validity. Furthermore, pilot testing was conducted using a smaller sample with similar characteristics in Mkuranga

district at Mkuranga hospital with 20 respondents. Besides, triangulation of data collection methods served as a means of mutual confirmation of measures and validation of findings. Collection and data analysis procedures were carefully documented in a step logical process. Also, the development of the research project, survey instruments and findings were discussed and guided by two supervisors prior to finalizing the study.

### **3.9 Data Analysis**

In this study both qualitative and quantitative data were analysed separately. The aim was to draw valid inferences about what has been analysed and to avoid any spurious relationships. While quantitative data were subjected to computer software, Statistical Package for Social Science (SPSS) version 20. This programme enabled the researcher to record variables, deal with nursing variables and to weight and select cases and to compute new variables and affect permanent or temporary transfer nation. Through the use of SPSS programme the researcher determined partial correlation coefficient between independent and dependent variable (Nachmias & Nachmias, 2008 and Kothari 2006).

This enabled the researcher to confirm the existence of relationship, direction of relation and strength of relationship between the dependent variables and the identified independent variables. Qualitative data were organised before being edited, coded, tabulated or compiled by the researcher. As such triangulation was employed in data analysis. In the course of presenting the findings, quantitative data were concretized by qualitative data obtained through interviews and information obtained from documents and checklist.

#### **3.9.1 Data Cleaning**

Data cleaning or data scrubbing is the process of detecting and collecting or removing corrupt or inaccurate information from a record, set, table, or database. This approach was used in order to identify incomplete, incorrect, inaccurate and irrelevant data. In this study data cleaning was part of data quality control

mechanism. Data cleaning was conducted after data collection. The returned questionnaires were deeply scrutinised to ensure that data were accurate and questionnaires were properly completed. During editing of completed and returned questionnaires, preliminary analysis was conducted for data cleaning. Coding was done in order to simplify the analysis. Likewise, collected data were labelled in order to reduce workload. Also, coding allowed the researcher to reduce a large quantity of information into a form that could be easily handled, especially by a computer programme.

Furthermore, outlier check and missing data check were performed and errors were corrected in order to ensure that only variables under the study were covered. Preliminary analysis was not presented because it was mainly for data cleaning. The entered data in SPSS system were checked to correct wrongly entered values. Since questionnaires were assigned serial numbers and entered in sequence, it was easy for the researcher to track data entered wrongly and rectify the mistakes. Qualitative data were checked for quality assurance by re-reading the notes taken from the field.

### **3.9.2 Quantitative Data Analysis**

As shown early, quantitative data were analysed using SPSS version 20. Analysis started by examining the characteristics of the respondents according to demographic variables of age, sex, marital status, education level, position or cadre, and years of working experience. Original cadres were operationally regrouped by merging those that were closely related because the number of respondents for some cadres, such as laboratory technicians, pharmacists was very small. Maternal and child health aide, medical attendant and nursing assistant were joined to form a single category of assistant nurse. Registered, public health nurses, enrolled public health nurses, registered nurses and enrolled nurses were combined into a single category and referred to as nurse officer. Clinical officers, assistant clinical officers and medical assistants were combined into a single category “clinical/medical assistant. Medical specialists and medical officers remained unchanged. Lastly, Laboratory technicians, Pharmacists, registered midwives and enrolled midwives were combined and

referred to as other specialist/cadre. The results were presented using tables with frequencies and percentages.

Quantitative data on the other hand, were analysed descriptively and inferentially. In particular, the SPSS version 20 aided to compute for inferential statistics (correlation co-efficient) through administered structured questionnaires to establish whether there is association, correlation and strength of variables in explaining HRH retention. On the other hand, factor analysis was used to reduce the number of variables into group of variables with similar characteristics together to produce a small number of factors. Grouped variables are capable of explaining the observed variance in the larger number of variables in the study (Habing, 2003). In performing factor analysis, the first stage was to compute the correlation matrix of intrinsic and extrinsic variables using SPSS software. The correlation matrix was used to check the pattern of relationships, singularity and multi- co linearity between intrinsic and extrinsic variables. Kaiser-Meyer-Olken (KMO) test was used to measure reliability and strength of the relationship among variables, acceptable if  $>0.5$  these test were pre condition for factor analysis to be performed.

At the second stage, variables were extracted from the correlation matrix based on the correlation coefficients of the variables. Principal component analysis with Varmox rotation was used as a method of extraction in SPSS software. Finally, the variables were rotated in order to maximise the relationship between the variables. The idea of rotation was to reduce the number of variables on which the variables under investigation with high loadings were grouped to form three components. Collectively, these components were named as achievement, recognition and work environment. After reducing variables into three component factors, summated rating scales of emerged factors due to factor analysis were calculated. These scales are widely used across the field of social sciences to measure not only attitudes, but also opinions, personalities, and descriptions of people's lives and environments as well (Spector, 2008). The summated scale was used in this study because of the multiple

items that were combined or summed up. In this process each individual item was measured.

Furthermore, stepwise multiple linear regressions were used to investigate the best predictors of motivation and retention of employees. Summated rating scales of factors grouped from factor analysis were considered as the predictor variables in multiple linear regressions. Stepwise multiple linear regressions are the methods for selecting predictors of a particular dependent variable on the basis of statistical criteria in the model (Burnham *et al.* 1998 and An *et al.* 2006). Multiple linear regressions were used because summated rating scales generated from the factor analysis were continuous scales and an appropriate regression analysis for this type of data (Caldis, 2007 and Diker, 2010). The summated rating scales variables included achievement, recognition and working environment. Multiple linear regressions were presented as a function with more than one predictor variables. This led to the following multiple linear regressions mean function:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p \dots\dots\dots (1)$$

Where  $\alpha$  is the intercept and  $\beta_p$  are called slopes or coefficients. Y is dependent/outcome variable which in this study was motivation for retention of employees and X are independent variables which include achievement, recognition and work environment.

Factor analysis was also used in respect of intrinsic and extrinsic factors. In this study, factor analysis was used because it groups variables with similar characteristics together to produce a small number of factors from a large number of variables which are capable of explaining the observed variance in the larger number of variables.

Ordinal logistic regression was performed in order to measure the relationship between dependent variable and independent variables by using probability scores as

predicted values of the dependent variable. The ordinal logistic regression is known as proportional odds model. This is an extension of logistic regression model for binary responses whenever the outcome variable was an ordinal response. The outcome or dependent variable of this study was retention of employees which were measured with Likertscale type which considered ordinal scale (Jakobsson 2004). while independent variables included the following moderating variables: (gender, age, social economic status and marital status). The dependence of Y on X for the ordinal logistic model had the following representation:

$$\Pr (Y \leq y_j | X: x) = \frac{\exp(\alpha_j - X' \beta)}{1 + \exp(\alpha_j - X' \beta)}, j: 1, 2 \dots k. \quad \text{-----} \quad (2)$$

Or equivalently this can be expressed using the following logistic formula:

$$\text{Logistic}(\Pi_j) = \log\left[\frac{\Pi_j}{1 - \Pi_j}\right] \quad \text{-----} \quad (3)$$

Where:

Y is ordinal response variable with possible values  $1, \dots, r$

X :  $(X_1, \dots, X_k)$  are independent predictor variables

$\alpha_1, \dots, \alpha_{r-1}$  and  $\beta : (\beta_1, \dots, \beta_k)$  are unknown regression coefficients

$\Pi_j = \Pr(Y \leq y_j)$  is the cumulative probability of the event

$$\text{Logistic}(Y \leq y_j) = \alpha_j + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots \dots + \beta_i X_k \quad i: 1, 2, \dots k. \quad \text{-----} \quad (4)$$

Further factor analysis was used to identify the most intrinsic and extrinsic variables that associate with human resources' retention to establish the factor that counts most. Factor analysis was performed through three stages: construction of correlation matrix, extraction and rotating of factors. Correlation matrix was generated for all variables to assess the pattern of relationship between variables which include singularities in data. Kaiser-Meyer-Olken (KMO) test was used to measure reliability and strength of the relationship among variables or sampling adequacy, acceptable if  $>0.5$  (Hair, et al., 1998) Bartlett's test of sphericity was also used to test the null hypothesis that the original correlation matrix is an identity matrix. According to Hogarty, for factor analysis to work, the correlation matrix should be not identity

matrix. Therefore, these tests are precondition for factor analysis (Hogarty, et al., 2005).

The second stage in factor analysis was factors extraction from the correlation matrix based on the correlation coefficients of variables with the Eigen values. Principal component analysis was used as a method of extraction. Finally, factors were rotated in order to maximize the relationship between the variables and some of the factors. The idea of rotation was intended to reduce the number of factors on which variables under investigation have high loadings.

Summated rating scales of factors that emerged due to factor analysis were calculated. These scales are widely used across the field of social sciences to measure not only attitudes, but also opinions, personalities, and descriptions of people's lives and environments as well (Spector, 1992). The summated scale was used in this study because of the multiple items that were combined or summed. Secondly, in this process each individual item was measured, something that has an underlying, quantitative measurement continuum (Spector, 1992; Diker,2010).

Furthermore, in this study, stepwise multiple regressions were conducted to investigate the best predictors of retention of employees. Stepwise multiple regression is a way of choosing predictors of a particular dependent variable on the basis of statistical criteria. Multiple regressions is an extension of simple (bi-variety) regression. Multiple regression was presented as a function with more than one predictor variable. This led to the following “multiple regression” mean function:

$$Y : \alpha + \beta_1X_1 + \dots + \beta_pX_p, \text{-----} (5)$$

Where  $\alpha$  is the intercept and the  $\beta_p$  are called slopes or coefficients. Y is dependent/outcome variable (employee retention) and X are independent variables. Collectively, these are: achievement, recognition and work environment.

### **3.9.3 Qualitative Data analysis**

The literature describes the process of qualitative data analysis as involving: preparing and organising masses of raw data collected, data reduction, categorizing the data into themes in relation to the research problem, questions and conceptual framework of the study by using a process of coding, and condensing the codes to produce larger meanings; and finally displaying the data in an organized, compressed assortment of information that allows verified conclusions to be made (Creswell, 2007; Miles & Huberman, 1994). As detailed below, the analysis of qualitative data in this study were prepared, organised and categorised into themes in relation to research problem, question and conceptual framework.

The process of analyzing qualitative data began with the data management stage, i.e. data preparation and organization. In this stage sets of data i.e. transcriptions of documentary data, interviews, checklist results were clearly indexed using colour and name indices and organized into clearly labeled paper and computer files in a style that facilitated easy and fast retrieval of the data. This process was preceded by summarizing documentary data, and transcribing field notes and audiotapes of interviews and checklist (Wolcott, 1990, in Silverman, 2006, p.88). transcription of the tapes was made after playing and listening to them repeatedly in order to capture respondents' talk, interactions and other aspects (word for word) that are often missed, glossed over or ignored in research works (Silverman, 2006). Given the importance of field notes in this stage, the next part briefly explains the procedures involved in preparing field notes.

The writing of field notes, including recording observation data, was theoretically driven in the sense that only responses and aspects related to the research problem and questions were recorded. Moreover, field note writing was not haphazard. Rather, it was based on five sets of questions suggested by Emerson, Frets and Shaw (1995, in Silverman, 2005, p. 174 which one needs to consider: (1) what are people doing? (2) how exactly do they do it" (3) how do people characterize and understand what is going on? (4) what assumptions do they make? And (5) what do

I see (going on) here? What did I learn from these notes on interviews and checklist why did I include them?. Short notes were taken during each interview and things were recorded in their natural settings. These notes were then expanded immediately while the memory of conversations, interactions and checklist result was still fresh in the investigator's mind. This approach, alongside audio-taping of interviews and records of checklist, where allowed, helped to preserve the originality of the data, which contributed to enhancing the validity (credibility) and reliability of the study (Miles & Huberman, 1994). Moreover, considering the limited time and financial resources available, the quest to achieve detailed analysis of the study problem and the need to keep data analysis within feasible limits, the transcriptions of interviews and checklist were limited, in the sense that the process of transcribing was selective, including only those parts of the data that illuminated the research problem and questions and conceptual framework (Marshall & Rossman, 1995). Being mindful of the criticism of selective transcribing for its potential to lead to "massive data loss, distortion and reduction of complexity", efforts were made to retain the originality of the data in the form of accounts of the respondents in relation to the research problem and questions.

After preparing and organizing the data, the analysis continued by reviewing and inspecting the data sets so as to become familiar with the data, gain an overview and make sense of the database. This stage intended getting a feel of the body of materials and fact collected, which entailed "immersion" in the organized data sets by reading and rereading them while memoing major ideas, key concepts, themes and patterns, i.e. the main categories of information emerging from the data in relation to the research objectives and questions (Creswell, 2007). According to Creswell (2007), this stage involves "hearing" what the respondents said, i.e. figuring out what the data show. The data reading stage also involved editing to correct noted errors across the sets of data and also data cleaning or reduction which helped to discard irrelevant material. Data reduction made what seemed voluminous and overwhelming data manageable.

Base on the data reading and memoing stage, the analysis shifted its emphasis towards “inductively” generating categories and patterns from the data sets. This phase entailed reflecting on larger thoughts suggested by the data, and identifying, forming and describing salient themes in relation to the study objective, questions and the study conceptual framework. The main focus was on identifying recurring ideas and patterns of information emerging from the data sets that linked respondents and settings together (Marshall & Rossman, 1995). The literature shows that the categories generation phase of data analysis is the most intellectually challenging phase. As Creswell (2007) argues, while this is the most difficult, complex, ambiguous and creative activity phase, it “represents the heart of qualitative data analysis”. According to Schatzman and Strauss (1973) the most fundamental operation in the analysis of qualitative data is that of discovering significant classes of things, events and properties which characterise them.

For the purpose of testing and verifying theoretical constructs and assumptions emerging from the data, a pattern matching technique was used. This involved relating emerging pieces of information by identifying their consistency and difference (Yin, 2003). It also entailed comparing “empirically based pattern(s) with theoretical propositions which are predicted patterns concerning the HRH retention in the public health facilities. The comparison helped to establish patterns that the data matched better with (Yin, 2003). This approach helped to satisfy the study at hand that required linking data with theoretical framework. Furthermore, in order to build a chain of evidence, emerging patterns, themes and relationships were critically discussed and rival or alternative explanations and possibilities were used to question “patterns apparent (overt patterns) from the data” (Marshall & Rosman, 1995). This process was meant to provide ‘a critical look’ on the data for their adequacy, probity that is credibility and to ascertain the degree to which the data illuminated the determinant HRH retention for health care in Tanzanian public health facilities.

Also this state involved interpreting emerging data categories in accordance with the selected theoretical ‘lenses’ or constructs described below, which helped to satisfy the study criterion requiring establishing “criteria for interpreting the findings” (Yin, 2003). Data interpretation entailed assigning meanings to themes, categories and patterns surfacing from the data in relation to the research questions. As Marshall and Rossman (1995) observe, “raw data have no inherent meaning, the interpretive act brings meaning to those data and displays that meaning to the reader through the written report.

Lastly the analysis process reached the accounting stage. Following this stage data findings were described within the context of the setting of the respondents, the study site and the research problem using a narrative approach in order to portray meaning and draw logical conclusions (Creswell, 2007). Specifically, this involved presenting “accounts of social phenomena or social practices by means of extensive illustrative quotations” (Wilkinson, 2004) from interview data, and also by using relevant tabulations and thematic analysis checklist data with a view to painting a ‘rich picture’ of the investigated problem from observed phenomenon based on their natural settings and context.

#### **3.9.4 Analysing documentary data**

According to literature four approaches have been used to analyse documentary data: content, discourse, narrative and ethnographic analysis (Silverman, 2006; Spencer et al, 2003; Wilkinson, 2004). Content analysis approach was applied to analyse documentary data in this study is content analysis. According to Wilkinson (2004), “At its most basic, content analysis entails inspection of the data (sets) for recurrent instances of some kind these instances are then systematically identified (and counted) across the data set, and grouped together by means of a coding system. The selection of content analysis was based on the nature of research questions criterion. The literature shows that content analysis is used to address the ‘what’ and ‘how often’ (signaling the ‘extent’) questions (Morgan & Spanish, 1985, in Wilkinson, 2004). These criteria closely match the first research objective on

perceived intrinsic in order to assess the contribution of perceived intrinsic factors on health workers satisfaction for HRH retention in Tanzania Public Health facilities. The magnitude of frequency counts this method generates provided some indication of the extent to which HRH perceives/satisfies with the intrinsic factors and the extent to which it contributes employees motivation and retention in Public Health facilities in Tanzania.

Content analysis process involved three main stages. The first stage entailed inspecting the selected documents and systematically identifying instances, i.e. categories that signaled perception of HRH on intrinsic factors and how they are satisfied with those factors to the extent which motivate them to stay as required by second research question. To make analysis in a logical order such that data analysis became feasible, analytic themes/categories generated from documentary data were reduced or condensed to only three organizing themes, which were eventually applied to address the second research question: (1) fostering HRH motivation (2) fostering HRH satisfactory (3) fostering HRH intent to stay. Units of analysis were words and phrases in the selected documents (Wilkinson, 2004), which helped to track political and administrative plans that, were presumed to be amongst the possible factors explaining the nature of intervention and government policies and the extent to which this government initiatives motivate employees in the public health facilities in Tanzania.

Finally the analysis proceeded by counting the number of coded instances of interventions and retention of policy decisions in each of the analytical themes (Silverman, 2006), regarding the nature and the extent of those policies and intervention motivates HRH to stay in public health facilities. The existing experience of retention problems in the public health facilities and the global retention problem at large support this analysis.

### **3.10 Ethical Consideration and Clearance**

First, before engaging with data collection process, the researcher sought permission from relevant authorities, to allow him investigate and write about the nature of HRH retention in public health facilities. In meeting that ethical objective, ethical clearance was sought from relevant authorities including Mzumbe University of Tanzania, the then the Ministry of Health and Social Welfare, the regional and District Commissioners Office as well as the local authorities offices in the selected councils. Second, although the researcher was interested in respondents' feelings/attitudes/perceptions about the study, he notified them that their participation was voluntarily, and that it would not cause any harm as whatever information respondents would release to the research fellow. Therefore, oral consent was sought from the respondents before engaging to data collection. Cautiously, the information provided remained strictly confidential between the respondent and the researcher.

Likewise, the study participants were required to sign in a special form as an indicator of their consent and voluntary participation in this study. Also, during an interview, neutrality was maintained, by not taking side to either of social, political or administrative group that impacted HRH retention in the public health facilities. Also in process of writing the report or presenting the findings, data were not manipulated, and the names and agreed identifiers of respondents did not feature in the final report. Their anonymity were ensured through the use of code of names which were agreed between the respondents and the principal researcher in the fieldwork. In a situation whereby, lack of understanding English language as a medium of communication compromises with the interview the questionnaires were translated into Swahili.

Lastly, the research data will be kept for a period of at least five years in a secure location by arrangement of my mentor. Thereafter, the interview recordings stored in a USB will be incinerated.

### **3.11 Summary of Chapter Three**

This chapter provided the methodology of the study. The study utilised an explanatory research design that revolves with a quantitative sequential qualitative mixed research approach from a multiple of cases observed from a study sample size of 384 administered through questionnaires and interviews. Both, probability and non-probability sampling techniques were involved in the study. The study also ensured validity and reliability of results, while confining to ethical standards.

## **CHAPTER FOUR**

### **PRESENTATION OF RESULTS AND ANALYSIS OF FINDINGS**

#### **4.1 Introduction**

This chapter presents results and analyses the research findings from the study that examined the determinants of HRH retention in Tanzania's public health facilities. The presentation of results is organised according to three research objectives of the study which include: The contribution of the demographic and socio-economic factors on HRH retention in public health facilities; the extent to which the perceived intrinsic factors in worker satisfaction used by the government retain HRH in public health facilities; as well as the effects of salary and fringe benefits provided by the government on retention of HRH in public health facilities. The chapter is structured to include the demographic characteristics of the study participants in section 4.2; the contribution of the demographic and socio-economic factors on HRH retention in section 4.3; the perceived intrinsic factors in worker satisfaction for HRH retention in section 4.4 as well as the effects of salary and fringe benefits provided by the government on retention of HRH in section 4.5.

Structurally, while the first section present and analyses the contribution of demographic factors including (age, gender, marital status, socio-economic status) on HRH retention; the second section present and analyses the perceived factors from the demand side of HRH related to intrinsic factors that determines HRH retention in public health institutions. Likewise, the third section presents findings based on the third objective of the study which sought to examine the extrinsic factors from the demand side of HRH related to the retention of health workforce in public health institutions. Among others include indicators of independent variables such as (personnel advancement, working environment, salary and incentives, leadership and management in public hospitals) are presented. In this regard, 13 indicators of independent variable which includes both intrinsic and extrinsic factors as highlighted by objective two and three were analysed. Since there were many

determinants, to easy the analysis, all those factors were reduced to three themes through factor analysis. These are working condition, recognition and achievement.

**Table 4.1 The Demographic Characteristics of the Study Participants**

Characteristics	Number	Percentage
Sex		
Male	160	57.6
Female	118	42.4
Age		
18 – 25	18	6.5
26 – 35	80	28.8
36 – 45	82	29.5
46 – 55	81	29.1
56 above	17	6.1
Marital status		
Married	198	71.2
Single	61	21.9
Widow/Divorced	19	6.8

**Source: Field data (2013-14)**

Table 4.1 presents the demographic characteristics of the respondents working with the Public Service Health Facilities. A total of 362 respondents were distributed with questionnaire and 278 questionnaires were returned.

The results from Table 4.1 indicate that 57.6% of respondents were males while 42.4% were females. This implies that more males were enrolled in this study. Furthermore the results show that 83% of respondents were aged between 36 to 45 years, while 17% were aged 56 and above. The results also show that majority of health workers are aged between 26 to 55 years in public hospitals. Therefore, this was encouraging because it was easy to get the needed information across all the age group spectrum of employees within the public health facilities.

Furthermore, Table 4.1 indicates the marital status of the respondents, where as the results show that 71.2% were married and 6.8% were widow or divorced. This indicates that majority of the respondents were married.

## 4.2 Contribution of Demographic and Socio-economic Factors on HRH Retention

The results under this section address the first objective which sought to examine the contribution of the demographic and socio-economic factors on HRH retention in public health facilities. While the demographic factors include age, sex, and marital status, the socio-economic factors include all economic activities surrounding the work place other than formal employment such as agricultural activities, fishery, non-farm income generating activities. The result in Table 4.2 presents participants responses to the contribution of the demographic and socio-economic factors on HRH retention in public health facilities. .

**Table 4.2: Contribution of Demographic and Socio-economic Factors on HRH Retention**

**(N= 278)**

Factors	Not at all n(%)	Some extent n(%)	Neutral n(%)	Large extent n(%)	Great extent n(%)	Total n(%)
Social economic status	64(23)	74(27)	69(25)	47(17)	24(9)	278(100)
Age	65(23)	54(19)	56(20)	55(20)	48(17)	278(100)
Marital status	57(21)	56(20)	68(25)	52(19)	45(16)	278(100)
Tenure in a profession	73(26)	47(17)	90(32)	48(17)	20(7)	278(100)
Sex	119(43)	35(13)	67(24)	39(14)	18(7)	278(100)

**Source:** Field Data (2013/2014)

Results from Table 4.2 show that age is a great factor in explaining HRH retention. In particular, 37% of respondents agreed to (a large extent 20% and a great extent 17%) that age can motivate workers to stay in public health sector. The second important moderating factor was marital status which has a bearing on family commitment, where 34.9% (a large extent, 19% and a great extent 16%). This was followed by socio-economic status, which accounted for 26% (a large extent 17% and a great extent 9%) and sex which accounted for 21% ( a large extent 14% and a great extent 7%). The presented results, match with results from interviews and

documentary reviews. Results from interviews indicate (80%) interviewed HRH disclosed that majority of HRH who remained working with public hospitals were mostly influenced with socio-economic activities available at their locations.

They claimed that such economic activities supplemented low salaries paid by the government; otherwise they would have left the public service long time. In addition, interviews results revealed that the age group that was difficult to retain is the younger HRH, aged between 24- 45. These seems to be more mobile in searching for better paying jobs. The results can be substantiated by words from one respondent in Mbeya, who claimed that:

*It has been very difficult to retain newly employed young health workers at government hospitals, Such young HRH have many ambitious and expectations of getting rich very quickly and hence they seek for higher pay jobs. I have observed many skilled young employees assigned to Mbeya region, remained only for few months and a maximum of two years and then quit to other jobs in other places (Interviews with a respondent in Mbeya region on 20th September, 2013).*

A respondent from Dar es Salaam adds that young HRH have high rate of turnover compared to the old ones. He commended that:

*At my age (54), I cannot leave the public service, because no one else within public service can employ me. After all I fear losing my pension, I have worked for more than 30 years, and therefore, I am forced to stay even though the working environment is not conducive for me. (Interview with a respondent at Mwananyamala referral hospital 31/1/2014).*

While, another respondent from Lindi complemented that by saying that:

*If I decide to leave now, I can leave because I have nothing to lose, after working for one year. I do not see any value of staying under these poor working conditions, it is discouraging.” (Interview conducted on 04/02/2014 Lindi)*

Regarding social economic activities information from interview show that HRH stay, because they have something to supplement to their salaries: one respondent

from Mbozi District in Mlowo Dispensary had this to say during an interview session:

*My brother, these developments are not a result of my work as an employee in the hospital. I have more than 20 acres of maize and five acres of coffee. All what keep me working in the public hospital if not for these other economic activities, I would have left this job a long time ago.(Interviews on 06/02/2014)*

Notwithstanding another respondent from Mbozi District opined that:

*“I quitted the job because I was given a transfer to Chunya District. I did not accept that transfer because I thought I would lose my economic undertaking which generates more incomes than my salary. (Interview with a respondent in Mbozi on 10/02/2014)*

Regarding marital status, interview has revealed that some HRH opt to remain with the public hospital because of family matters such that those who were bachelor were found more mobile than the married one. One respondent from Muhimbili National consultant hospital said that:

*I am working with the public hospital because I am married and have the duty of taking care of my children. My husband bears all the costs of running the family, so I feel comfortable to work here even though I am not motivated (Interview on 14/06/2014)*

While data from interviews reveal that un-married (bachelor) HRH were found difficult to retain. As one respondent from Lindi in explaining his marital status had this to say:

*Even if I quit, I have nothing to lose, because there is nothing to motivate me here. After all, I am thinking of going back to school, I do not have family attachments.(Interview with a respondent at Kiwanja Mpaka health centre in Mbeya on 20/06/2014)*

Table 4.2 presents the HRH perceptions on retention of HRH by region and position/cadre. Essentially, it highlights how the HRH from several public health institutions perceive the retention strategies established from the supply side of the Government of Tanzania (GoT) trigger them stay in public hospitals.

**Table 4.3 Retention of HRH by Region and Position/Cadre (N= 278)**

Factors	Not at all n(%)	Some extent n(%)	Neutral n(%)	Large extent n(%)	Great extent n(%)	Total n(%)
<b>Region</b>						
Dar es Salaam	7(7)	10(10)	26(26)	54(54)	7(7)	100(100)
Mbeya	4(5.3)	47(62.7)	4(5.3)	16(21.3)	4(5.3)	75(100)
Lindi	7(6.8)	52(50.5)	31(30.1)	11(10.7)	2(1.9)	103(100)
<b>Position/ cadre</b>						
Medical Specialist	0	3(50)	3(50)	0	0	6(100)
Medical officer	2(4.2)	21(43.8)	18(37.5)	4(8.3)	3(6.2)	48(100)
Clinical/Medical assistant	3(5.1)	35(61.0)	14(23.7)	4(6.8)	2(3.4)	59(100)
Dentist	0	5(83.3)	1(16.7)	0	0	6(100)
Nurse Officer	6(9.5)	38(60.3)	13(20.6)	4(6.3)	2(3.2)	63(100)
Assistant Nurse	4(6.9)	32(55.2)	9(15.5)	11(19.0)	2(3.4)	58(100)
Other specialist/cadre	3(7.9)	18(47.4)	15(39.5)	2(5.3)	0	38(100)

**Source:** Field Data (2013/2014)

The results from Table 4.3 show that to a greater extent, health workers working in Dar es Salaam have great preference to stay in their respective public hospitals compared to other surveyed regions. In particular, 61% of respondents in Dar es Salaam agreed this. This was in contrary to the 26.6% of the study participants in Mbeya and 12.6% of the study participants in Lindi. Furthermore, Table 4.2 indicates that the lower Position/cadre has great extent to stay in public hospitals compared to higher position/cadres such as medical specialist and medical officers which account for extent of 0% for medical specialist to extent of 14.5% (large extent 8.3% and a great extent 6.2%) for medical officers. On the other hand results show that clinical officer's account for 10.2% and Assistant nurses account for 22.4%. Further, ordinal logistic regression was performed to determine the most significant motivating factors which lead to employees retention.

Table 4.4 presents the results of ordinal logistic regression. Pearson Chi-Square test was used as Goodness-of-fit statistics to observe if the model fits well. Good models have largely observed significance levels for Pearson's tests and deviance p-values.

**Table 4.4: Factors associated with retention of employees using multivariate ordinal logistic regression model**

		Coefficient	Std. Error	p-value	95% CI	
					Lower Bound	Upper Bound
Threshold	[retention : 1]	-4.514	.749	.000	-5.981	-3.047
	[retention : 2]	-3.149	.719	.000	-4.557	-1.741
	[retention : 3]	-1.860	.706	.008	-3.245	-.476
	[retention : 4]	-.998	.700	.154	-2.370	.375
Gender	Female	Ref.				
	Male	-.211	.235	.370	-.672	.250
Social economic status		0.469	0.178	0.008	0.12	0.819
Age	56 and above	Ref.				
	18-25	-2.196	.724	.002	-3.614	-.777
	26-35	-1.486	.584	.011	-2.631	-.340
	36-45	-1.415	.579	.015	-2.550	-.280
	46-55	-1.290	.575	.025	-2.417	-.164
Education level	Master's and above	Ref.				
	Primary	-.217	.655	.741	-1.500	1.067
	Secondary	.778	.503	.122	-.208	1.764
	Diploma	.221	.443	.618	-.646	1.088
	First degree	-.195	.466	.676	-1.107	.718
Marital status	Widow/divorced	Ref.				
	Married	-.319	.487	.512	-1.273	.635
	Single	-.669	.550	.224	-1.746	.409

Goodness-of-fit statistics: Pearson chi-square p-value: 0.398; Deviance P-value: 0.664

**Source:** Field Data (2013/14)

In this model the p-values are greater than 0.05, which suggests that the model fits. The relevant predictors of motivation and retention of employees included in the model were sex, age, education level and marital status of the respondents. Basically, the findings of the study indicate that age was significantly associated with motivation and retention of the employees. This implies that young age decreases the likelihood of being motivated to the level of being easily retained in public health hospitals than older age of 56 and above as indicated by negative coefficient. Since

the coefficients are negatives whereas one unit decrease in age group (that is, from 56 and above to 46-55), we expect a 2.20 decrease in the Log odds of being at a higher level of retention, when other variables in the model are held constant. Also social economic status was found to be associated with motivating health workers to stay in public hospitals. Conversely, sex, education level, and marital status were not significantly associated with motivation to the level that can lead to retention. This analysis implies that age and social economic status have major impact on retention motivation in the public hospitals.

### **4.3 The Perceived Intrinsic Factors in Workers Satisfaction for HRH Retention**

This section presents results for the second objective, in the course of attending this objectives, three human resource practices were considered, these were;- personnel achievement, improved working condition and leadership styles. The aim was to examine the extent to which these factors determine the retention of HRH in public hospitals. Therefore individual perception and opinion of respondents on practices and effects of retention strategies were measured through 5 point Lickest scale from strong disagree, Disagree, Neutral, Agree and Strongly Agree. For the sake of analysis, strongly agree and agree were grouped together as “agree”, while strongly disagree and disagree were grouped together as “disagree” and the neutral were categorised as “undecided”. The responses obtained were quantified using percentages and tabulated as shown in the Table 4.4

#### **4.3.1 Role of Personnel Advancement Practices on Retention of HRH**

On the question of personnel advancement as a strategy for HRH retention the researcher considered five issues on which the respondent were requested to react whichever was applicable at their work place. These include; good training opportunity and development opportunity, recognition of employee training and achievement promotion based on performance and competence, clear HR development plan and succession of leadership. Table 4.5 summarises results from 278 returned questionnaires regarding the perception of employees working with the public health facilities on personnel advancement to retention.

**Table 4.5: Perceptions on Personnel advancement on Retention of HRH**

Statement	Agree		Disagree		Undecided		Total
	No	%	No	%	No	%	
Good training and development opportunity	105	38	133	40	40	14	278
Recognition of employee training and achievement	90	32	153	55	35	13	278
promotion based on competency	78	28	177	64	23	08	278
Clear HR development plans	67	24	168	60	43	16	278
Leadership succession	62	22	161	58	55	20	278

**Source:** Field Data (2013/2014)

From the study findings in Table 4.5 on the question concerning training and development opportunities as a strategy for retention, responses indicate that out of 278 respondents, 105 (38%) agreed while 133 (48%) disagree, but 40 (14%) of respondent were undecided. This means that a bigger number of respondents (133) (48%) are not motivated by this strategy. Regarding recognition of employees training and achievement, as a strategy for HRH retention, findings indicate that out of 278 respondents, 90 (32%) agreed while 153 (55%) disagree and the remaining 35(13%) respondents were undecided.

Results regarding promotion based on competence as a strategy for HRH retention indicated that out of 278 respondents, 78 (28%) agree that this strategy has effect while 177 (64%) disagree and the remaining 23 (08%) were undecided. As to whether there are clear HRH development plans, out of 278 respondents 67 (24%) respondent agree with the strategy, while 168 (60%) disagree with the strategy and the remaining 43(16%) respondents were undecided.

Regarding of leadership succession, the researcher expected to get feedback as to whether this strategy has effect on HRH retention. Results indicate that out of 278 respondents, 62 (22%) of respondents agree with the strategy. While 161 (58%) disagreed, 55 (20%) of respondents were undecided. This quantitative result corresponds with qualitative result from one of the respondents in Dar es Salaam who reiterated that:

*Succession leadership has not been implemented in public health sector, succession strategy is not considered for appointment at all....., I guess there are other hidden criteria that are used for one to be appointed for leadership position..... Okay! Accept it or not ..... this are my views (interviews on 23/10/2013 in Dar es Salaam).*

### 4.3.2 Effects of Working Environment on Retention of HRH

On the question of improved working condition as a strategy for HRH retention, four issues were considered on which the respondent were requested to react whichever was applicable at their work place, these issues were modern technology, enough and modern working tools, fair and competitive salaries and equal pay for work of comparable value. Table 4.6 summarises results from 278 returned questionnaires regarding the perception of employees working with the public health facilities on effects of Working Environment on Retention of HRH.

**Table 4.6: Respondents Opinions and Perception on Improved Working Environment**

Statement	Agree		Disagree		Undecided		Total
	No	%	No	%	No	%	No
Modern Technology to perform	67	24	170	61	41	15	278
Enough and modern working tools	45	16	191	69	42	15	278
Fare and Competitive salaries	53	19	176	63	49	18	278
Equal pay for work of comparable value	41	15	190	68	47	17	278

**Source:** Field Data (2013/2014)

The question on the extent that modern technology has had effect on HRH retention, indicate that out of 278 respondents, 67 (22%) agreed that available technology has had motivational effect to retention. While the majority, 170 (61%) disagreed with the strategy, the remaining 41(15%) were undecided. Moreover, results from interviews from Mbozi in Mbeya, and Dar es Salaam, show that out of 20 respondents, majority of the respondents (75%) had the impression that inferior technology demotivated them to continue working in public hospitals. For example one of the respondents in Mbozi said:

*As a Laboratory technician, I learnt to test and examine various patients' samples, but due to lack of modern equipment, unreliable electricity and test regards, I am sometimes forced to guess, a pattern that makes the test results unreliable.(interview on 28<sup>th</sup> April, 2014).*

Through checklist, the results reveal that modern technology is available in Consultant, Referral and District hospitals. These technologies included the availability of X-rays, Ultra-sounds, Magnetic Resonance Imaging Scan (MRI's) etc. On working tools, the researcher intended to capture the perception of respondents on whether improved working tools had effect on their retention. The results indicate that, out of 278 respondents, 45(17%) thought there were enough tools as a strategy to motivate for retention. Conversely a good number of 191 (69%) thought that the health facilities lacked enough working tools.

Moreover, interview responses indicate that out of 20 respondents, 16 (80%) were of the view that the hospitals had inadequate working tools with the exception of referral and consulting hospitals. Some of the responses from Kilwa District hospitals and Lindi District hospital are instructive:

*It is difficult to attend emergency cases related to labour at our dispensary because we do not have delivery equipment and a special delivery room, but we usually take the risk of attending them, because we cannot let them die under pretext of not having equipment (interview on 12/11/2013).*

In the same vein another respondent from Lindi hospital lamented that

*We are overburdened, no.... not with my medical practice ... there are about 150 – 200 patients in this hospital daily, Still we are performing without adequate supplies and equipment, It is a terrible working environment, I Sometimes work for more than 12 hours per day, because I cannot leave the patients in queue and close the office as you see them now!! All of them are waiting for my service, I am tired my brother! (Interviews with a respondent on 14/02/2014).*

Furthermore, results from checklist reveal that 85% of health facilities lack medicines and other medical facilities. While that would be the case in district hospitals, referral and consulting hospitals like Mbeya, Muhimbili, Mwananyamala and Temeke hospitals had few equipments.

The researcher further inquired on the extent to which the salaries offered by employers were competitive to attract retention. The results indicated that out of 278 respondents only 53 (19%) participants agreed that salary was competitive to motivate for retention. However, majority of respondents more than 63% objected to the adequacy of this strategy. Again, the interviews indicate that out of 20 respondents, majority (75%) thought that the level of salary compensation was inadequate to attract retention. The remaining 5 (25%) were indifferent in explaining the adequacy of salary packages. Corroborating with this interview quantitative results, one extract from one of the respondents in Vwawa hospital in Mbeya and Dar es Salaam (MH) had this to say:

*Is there any fairness for a person working with TRA to be paid five million per month compared to medical doctor who is paid less than three million per month regardless of the risk involved in the profession?" This is unfair and it discourages us the most from continuing working with the government (interviews on 30<sup>th</sup> April, 2014)*

On the same issue another respondents added that:

*Staying in this office does not mean that I am satisfied with the government salaries. It is not enough to cater for my basic needs, pay for my children's school fees and help my relatives. To attain these requirements, I have to do other jobs not related to medical field so as to subsidise my income. For me I am engaged in maize and coffee agriculture. Therefore, I spend most of my time doing my businesses rather than the work I am employed for (interviews on 10/01/2014).*

Regarding equal pay for work of comparable value, the researcher asked the question to capture the extent to which the HRH salaries as compared to other government institutions motivated them to stay. The result indicate that out of 278, only 41 (15%)

agreed that it would encourage them to stay. Conversely 190 (68%) disagree that their salaries were comparable to other government institutions. The rest, 47 (17%) were undecided on the issue. These results are supported by interview responses which to a large extent asked the results to the previous question. During the interview, 15 (75%) of respondents through that HRH's remuneration could not be compared to salaries of other institutions like Tanzania Revenue Authority (TRA) and Bank of Tanzania (BOT).

Further, on documentary review results have indicated the same trend as observed in "Waraka wa Maendeleo ya Utumishi Na. 1 2009 Kumb. Na. AC.129/260/01" indicates salary structure for medical cadres, which range from TGHS. K. to TGHS.A (equivalent to Tanzania shillings. 4,200,000/- to Tanzania shillings. 432,000/-) while other sectors such as financial sector i.e. TRA, BOT and other managerial posts within the government range from 15,000,000/- to 900,000/- (URT 2015).

#### **4.3.3 Effects of Leadership Styles on Retention of HRH**

Looking on Leadership as a strategy for HRH retention two issues were considered important principles on participative leadership which the respondent were requested to mention whichever was applicable at their work place; these were issues like participation in decision making and encouragement of good work relationship between employees and management. Table 4.7 summarises results from 278 returned questionnaires regarding the perception of employees working with the public health facilities on effects of Leadership Styles on Retention of HRH.

**Table 4.7: Respondents Perceptions on Effects of Leadership Styles on Retention of HRH**

Statement	Agree		Disagree		Undecided		Total
	No	%	No	%	No	%	No
Allows Participation in decision making	82	30	118	42	78	28	278
Encourage Good work relationship	133	48	83	30	62	22	278

**Source:** Field Data (2013/2014)

From the responses, the study findings revealed that the answers to the question that asked if the management involve/allowed employees in decision making, out of 278 respondents 82 (30%) agreed while 118 (42%) disagreed to be involved and participated in decision making but 78(28%) of respondent neither agreed nor disagreed.

Regarding good work relation between employees and the management as a strategy to motivate HRH retention results indicate that out of 278 respondent, 133 (48%) agreed that leadership encourage good work relationship among employees and the management, while 83 (30%) disagreed but 62 (22%) were undecided.

However, results from interviews differ from that of questionnaires, as out of 20 respondents 14 (70%) respondents revealed that inadequate work relationship demotivates HRH to stay working with public hospitals. This data is more substantiated by an extract from one of the respondents in Lindi who said that:

*We are here as if we are orphans, leaders do not listen to our genuine demands and concerns, especially our rights. Our leaders are mere agents of oppressors (government), we are denied of our rights, such that the actions of our leaders frustrate us to the extent of hating them".(interviewer on 5/01/2014 in Lindi)*

Apart from the HRH perceptions on the effects of three selected intrinsic employee factors as strategies of retention used by the government as elaborated in objective two, the study sought to find out other management aspects that affect employee's

retention in their respective public health facilities. Through interviews majority of respondents were of the views that: Delays in paying extra duty allowances, on call allowance, risk allowances unstatutory deductions (such as Uhuru Toach/ Mwenge) Delays in Promotion, favouritism in Training and Inadequacy of incentives) negatively affect staff morale and commitment hence intent to stay. Others cited poor work place policies imposed from the top, which lack ownership at work place by employees due to absence of bargaining processes in its development demotivate employees to stay committed and retain their labour with public hospitals.

Also, they indicated that absence of hardship allowances in hard to reach areas negatively affected employees' level of attachment and commitment to stay in health care institutions in the public health services throughout the country. Further, the researcher sought to get respondents' opinions on what best practices they thought need to be put in place in the public hospitals to help enhance retentions: Among the responses were that, there should be timely payments of overtime and extra duty allowances, payment of competitive salaries based on equity, performance related salaries be introduced, pay and improved housing allowances, risk allowances, on call allowances and introduce payment of hardship allowances and special incentives in hard to reach areas, such as providing Transport and housing loans.

Additionally, they suggested that salaries and allowances be harmonized across the Public sector based on qualification and experiences of employees. Others felt that work place policies be developed jointly through bargaining process between health employees and decision makers for ownership hence commitment of employee and intent to stay. Others felt that there should be timely and equitable promotion of staff based on merit because delay of promotion tended to discourage staff to continue working with public hospitals. While these findings on practices and effect of retention strategies to employees would be reflected to Herzberg's theoretical framework, it is imperative to present the findings on the extent to which Herzberg's two-factor theory explain retention of HRH in the public hospital on the next section.

#### 4.4 Effects of Governments' Salary and other Extrinsic Motivations on retention of HRH

This section presents the findings for the third objective of the research which sought to examine the extent to which both, the Governments' salary and other extrinsic motivations provided constrain retention of HRH in Tanzania's public health facilities. On the other hand, correlation matrix was used to check the pattern of relationships singularity and multi co-linearity between variable. Factor analysis was performed to reduce the number of variables into group of similar characteristics to produce a small number of factors which are capable of explaining retention of HRH. Finally, step multiple regression were conducted to establish the significance of each factor in the model to explain retention. Table 4.8 below indicates the mean and standard deviation weight score of intrinsic and extrinsic factor motivating retention of employees.

**Table 4.8: Mean score and standard deviations of factors motivating HRH retention**

Factor	Mean	Std Deviation	Analysis N
Intrinsic factors			
Recognition	3.34	1.41	278
Work itself	3.28	1.28	278
Personnel growth	3.22	1.30	278
Responsibility	3.14	1.33	278
Achievement	3.19	1.29	278
Advancement	3.17	1.24	278
Extrinsic factors			
Supervisory and leadership style	3.10	1.27	278
Working condition	4.30	0.95	278
Salary	3.79	1.24	278
Company policy	3.25	1.21	278
Job security	4.15	1.05	278
Interpersonal relation	2.92	1.34	278
Status	3.24	1.23	278

**Source:** Field Data (2013/14)

Table 4.8 presents descriptive statistics results for all variables under investigation. Employees' satisfaction level on 13 factors considered to motivate them were presented in five point Likert scale (1,; Very low, 2, Low 3, Neutral, 4, High 5, Very

high) in order to establish employees' satisfaction level. The results from the study indicate that working condition scored the highest mean of: 4.30 others were job security (4.15), salary (3.79), recognition (3.34) and the interpersonal relations with the lowest mean of (2.92)

Interview on the question of working condition indicate that majority (75%) of respondents disclosed that working condition in most public health facilities was inadequate and very hostile for safety. This means that 75% of respondents were from Dar es Salaam, 71% from Mbeya and 80% from Lindi. All of them thought that working condition is important for motivation and retention of HRH in public hospital. Moreover, all 20 (100%) respondents from all regions said that although salary is important factor for motivation and retention but should be accompanied with other non-financial incentives for sustainable HRH retention in Public hospitals. Regarding job security, interview results indicate that majority (80%) of respondent through that this factor is important in explaining retention. Moreover, in explaining dissatisfaction on working condition, salary and job security respondents in Lindi, Mbeya and Dar es Salaam had this to say:

*My brother, the working life here is very pathetic. It is only God who knows how we manage to continue surviving in this hazardous environment, leave alone poor working environment we are subjected to, but the salary that we get does not meet even our basic needs, It is discouraging (A respondent interviewed in Lindi Regional Hospital on 10/02/2014).*

On the other hand, respondent from Mbeya Regional hospital adds that:

*I spent six years in medical training expecting to get a fair reward based on sensitivity of the job, number of years invested in training and the importance of the profession itself, only to find out that, it is the profession that frustrates most. I feel like I should go for public health training and change my job. Public health profession pays more than being a mere medical doctor. (Interviews - Muhimbili on 13/02/2014).*

Furthermore, a respondent from Muhimbili National hospital had very frustrating views regarding salaries, as he claimed that:

*I do not see the future in this job, I cannot build the house, my children cannot go to good schools, and I cannot help my relatives who paid for my tuition fees when I was schooling. Why should I remain working in the government hospital? (Interview on 11/02/2014 Mbeya)*

Further the results from correlation matrix are appended as annexure 2 to indicate the relationship between intrinsic and extrinsic factors. The results indicated that correlation coefficients were not greater than 0.9, suggesting that there is no singularity between intrinsic and extrinsic variables. On testing multicollinearity, determinant values were 0.015, which are greater than the necessary value of 0.00001. Therefore, multicollinearity was not a problem for these data and therefore it was of no need to eliminate any variables at that stage. This implies that each variable can explain the motivation for retention of human resource in public hospitals.

Bartlett's Test of Sphericity was significant (approximated to be  $\chi^2$ :1144.579, df:78,  $p < 0.001$ ) and the Kaiser-Meyer-Olkin (KMO) was acceptable at 0.847 providing evidence for performing the factor analysis. Table 4.8 below shows extraction of factors and per cent of variances attributed by each factor.

**Table 4.9: Total variance explained**

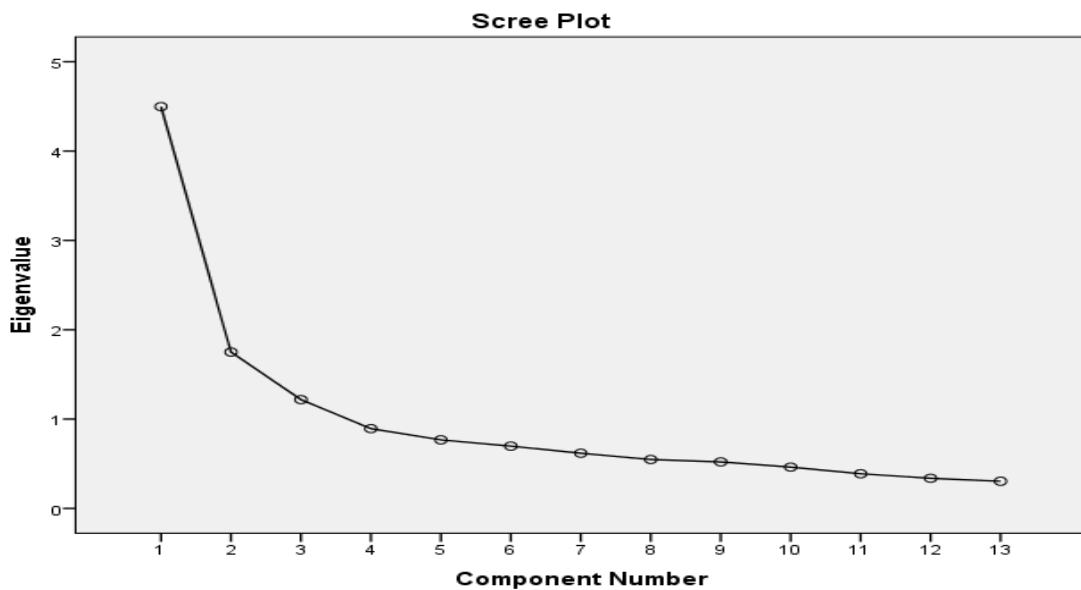
Total Variance Explained									
Component	Initial Eigen-values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.497	34.593	34.593	4.497	34.593	34.593	3.301	25.394	25.394
2	1.750	13.462	48.054	1.750	13.462	48.054	2.351	18.081	43.475
3	1.218	9.370	57.424	1.218	9.370	57.424	1.813	13.949	57.424
4	.893	6.868	64.293						
5	.767	5.901	70.193						
6	.697	5.362	75.555						
7	.618	4.752	80.307						
8	.547	4.211	84.518						
9	.521	4.004	88.522						
10	.463	3.560	92.082						
11	.388	2.982	95.064						
12	.338	2.596	97.660						
13	.304	2.340	100.000						

Extraction method: principal component analysis

**Source:** Field Data (2013/14)

Results from Table 4.9 indicates the factors extracted from the analysis along with their Eigen values, the per cent of variance attributable to each factor, and cumulative variance of these factors. The findings indicate that the first factor (component 1-Achievement) accounted for 34.593% of variance, the second (Component 2-Recognition) counted for 13.462% while the third (Component 3-Working Environment) counted for 9.370%. All the remaining factors (components) are not significant to explain retention but the variance in each variable that can be explained by the retained factors are represented by the communalities after extraction by table 4.8.

Figure 4.1 shows the plot of the eigenvalues against all the factors. The plot is useful for determining how many factors (component or new variables) to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 3 and 4. Note also that factor 4 has an eigenvalue of less than 1, so only three factors have been retained. Figure 4.1 below show the eigenvalue against all extracted factor.



**Figure 4.1: Eigenvalues against all factors**

**Source:** Field Data 2013-2014)

Figure 4.1 indicates that only three factors were retained (component 1, 2, and 3), because the sum of the Eigenvalue cannot exceed the number of items in the analysis, and that each item contributes one to the sum of variances.

Likewise, Table 4.9 shows the rotation component matrix for extraction of variables to the new factors or components. It also shows variables extracted using varimax (orthogonal) rotation. It only shows three factors or components extracted from 13 variables.

The idea of rotation is to reduce the number of factors by looking to which variables under investigation that have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier as indicated in Table 4.9.

**Table 4.10: Rotated component matrix for extraction of variables**

Rotated Component Matrix <sup>a</sup>			
	Component 1	Component 2	Component 3
<b>Achievement</b>	.812		
Advancement	.807		
Personal growth	.759		
Responsibility	.692		
Supervisory and leadership style	.506	.502	
Interpersonal relation	.493	.445	
<b>Recognition</b>		.797	
Status		.702	
Work itself		.626	
<b>Working condition</b>			.786
Salary			.678
Job security			.628
Company policy			.493
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 6 iterations.			

**Source:** Field Data (2013-14)

Table 4.10 shows three factors or components which were extracted from 13 variables. The first component was named achievement and it includes achievement, advancement, personnel growth, responsibility, supervisory as well as leadership styles, and interpersonal relation. These variables have similar characteristics of explaining the retention of HRH in public hospitals. Secondly, recognition, status, and work itself were substantially loaded on factor 2 which have also similar characteristics for explaining motivation for retention of HRH in public hospitals were named as recognition.

Thirdly, working condition, salary, job security and company policy were substantially loaded on factor 3 and were named as working environment. These factors were used as variables for further analysis to identify further, factors explaining retention. Finally, summated scales of the three factors that emerged from the factor analysis were calculated, and stepwise multiple linear regressions were done, Table 4.10 shows the findings of the study.

**Table 4.11: Stepwise multiple linear regression results**

	Unstandardised Coefficients		Standardised Coefficients	P-value
	B	Std. Error	Beta	
Constant	3.106	.260		<.001
Working Environment	1.072	.114	.715	<.001
Recognition	.379	.125	.230	.003

**Source:** Field Data (2013-14)

Results from step by step multiple regressions revealed that working condition with a P value of (.001) and recognition with a P value (.003) which is less than alpha (0.05) was found significantly to be associated with motivation and possible retention of HRH. Conversely, achievement did not show any evidence of association with motivation and retention and thus was removed from the model.

The Beta value is used to answer the question which of the factor plays a more important role in retention of HRH. Also, results in Table 11 above indicate that the most important factor is working condition with a beta value of 0.715 followed by recognition with a beta value of 0.230 respectively.

While working condition was found statistically significant, results from interview indicated that 12 (60%) out of 20 respondents had the view that working condition were poor and inadequate. To express their level of dissatisfaction due to disappointment of current status of working environment one respondent said that:

*I was not employed in the public hospital as an observer of people dying of lack of drugs. As a professional, I thought I was employed to treat patients and not observe them dying because of lack of medicine. Therefore, I had to quit the public service to utilise my expertise effectively (Interview carried on 15/09/2013 in Dar es Salaam)*

Result from checklist schedule on table 4.12 as observed on working condition and aspect surrounding the health facilities in the three visited regions displays the real situation as it was found during the study. In this study the researcher sought to check out the important facilities in the health working environment of which availability will facilitate smooth working operation and enhance retention of HRH in public hospitals.

Provision of facilities includes the supply of for instance; quality of working premises, fittings and equipment, availability of protective gears for protection against hazardous activities like surgeries, operation and other contagious diseases, adequate housing/quarters available, reasonable number of offices and wards available as per recommended standards, reasonable office spaces to allow maximum privacy and Medicine. Table 4.12 summarises the findings on the grounds.

**Table 4.12: Summary of Findings from Checklist.**

Names of Health facilities	I	II	III	IV	V	VI	VII
Lindi-Mingoyo Dispensary	x	x	x	x	v	v	X
Lindi-Mitwero Dispensary	v	x	x	x	v	x	X
Lindi Health Centre	v	v	v	x	v	x	X
Mpala Dispensary	V	x	x	x	v	v	X
Kilwa Health Centre	X	x	x	x	x	x	X
kilwa District Hospitals	V	v	v	v	v	v	X
Mbozi District Hospitals	X	v	v	V	v	V	X
Tambukareli Dispensary	V	V	x	x	V	x	X
kiwanjampaka dispensary	X	x	x	x	V	x	X
Mbezi Dispensary	V	v	x	x	x	x	X
Mlowo Dispensary	V	v	x	x	v	x	X
Iyula Health Centre	V	x	x	v	v	v	X
Igawilo Health Centre	V	x	x	x	x	x	X
Isyesye Dispensary	V	v	x	x	x	v	X
Sinza Hospital	V	v	v	x	v	v	X
Lindi Referral Hospital (Sokoine)	V	v	v	v	V	v	X
Mbeya Regional Hospital	V	v	v	x	V	v	X
Mbeya Consultant Hospital	V	v	v	v	V	v	X
Mwananyamala Hospital	V	x	v	x	X	v	X
Temeke Hospital	V	v	v	x	X	v	X
Kigamboni Health Centre	V	x	x	v	X	x	X
Muhimbili National Consultant Hospital	V	v	v	v	V	v	X
Hateleli dispensary	X	x	x	x	X	v	X
Igamba Health centre	X	v	x	x	V	x	X
Kibangu dispensary	X	x	x	x	X	v	X
Mlimani health centre	V	v	v	v	V	v	X
Mingoyo dispensary	X	v	x	x	X	v	X
Mitwero dispensary	X	x	x	x	X	v	X

**Source:** Designed by the Researcher during Fieldwork Survey using annexes 12

\*\*\*X - stand for inadequate

\*\*\*V - stand for adequate/available

**KEYS:**

- I : Condition of working premises.
- II : Fittings and equipment.
- III : Availability of protective gears for protection against hazardous activities like surgeries, operation and other contagious diseases.
- IV : Adequate housing/quarters available.
- V : Number of offices and wards available as per recommended standards.
- VI : Office spaces to allow maximum privacy.
- VII : Medicine.

The results captured through checklist reveal that working condition on health facilities is inadequate. For example, on consultant and referral hospitals the adequacy of working condition ranged from 71 to 86%. The situation was different in District, health centres and dispensaries where the adequacy of working condition was below 50% of requirements. Surprisingly, results on issues of drugs supplies indicate that all of health facilities (100%) had problems.

Furthermore, results in Table 4.10 suggest that recognition improves motivation and increases the likelihood of HRH to remain in public health sector, because the coefficient is positive. Statistically, as one unit increases in working environment from low to high (we expect 1.072) and 0.379 recognition (from low to high), increase in the motivation and retention level if all other variables in the model are held constant.

While recognition was found statistically significant, interview results indicated that 14 (70%) out of 20 respondents had the view that their efforts were not recognised, despite the fact that they worked in difficult conditions. These results are corroborated with interview extract from one of the respondents in Lindi who lamented that:

*Despite the fact that we are working under non-conducive environment, we are always subjected to insults from all directions, politicians, citizens, and the government. It is as if we are doing nothing. But we are working hard although we do not have enough working tools and our efforts have never been recognised and rewarded accordingly.(interviews on 12/09/2013 Lindi)*

Another respondent at Mwananyamala referral hospital added that:

*The government does not value our work. We are not valued, none recognises our status as doctors, see how the Tanzania Revenue Authority (TRA) staff and Bank of Tanzania (BOT) employees are being remunerated! We cannot even ask why and how all this discrepancy of payments happen. They will catch and put you into grave ... see what happened to Dr. Ulimboka. It is like we are nothing to the government when it comes to demanding our rights,...look at how we are deprived,... it is a shity job, ( A respondent at Mwananyamala Hospital 8/2/2014).*

Furthermore, apart from Herzberg's two-factor theory the researcher sought to establish other retention factors outside Herzberg's two-factor theory that respondents thought influence retention at their work place.

The majority of respondents said that social economic activity outside their job motivate staff because it supplements their earning from other economic sources such as Agriculture, fishing and other business surrounding their environment of work. To express how economic activities motivate employees one of respondents from Mbozi District in Mlowo Dispensary had this to say:-

*My brother, these developments are not a result of my work as an employee in the hospital. I have more than 20 acres of maize and five acres of coffee. All what keeps me working in the public hospital are these other economic activities, otherwise I would have left this job a long time ago.(Interviews on 06/02/2014)*

Others felt that, age group of employees determine the stability to continue working or leave the job. They added that younger age are more mobile searching for better paying jobs than older age hence difficult to retain them.

A respondent from Dar es Salaam adds that young HRH have high rate of turnover compared to the old ones. As he commended that:

*At my age (54), I cannot leave the public service, because no one else within public service can employ me. After all, I fear losing my pension, I have worked for more than 30 years, and therefore, I am forced to stay even though the working environment is not conducive for me. (Interview with a respondent at Mwananyamala referral hospital 31/1/2014).*

The above concern was complemented by a respondent from Lindi who added that:

*If I decide to leave now, I can leave because I have nothing to lose, after working for one year. I do not see any value of staying under these poor working conditions, it is discouraging.” (Interview conducted on 04/02/2014 Lindi)*

When asked about the whereabouts of those young ages and other professionals who left went, their responses among other things included migration to urban and big cities where they can easily get part time in private hospital and others sectors outside the health sectors, such as NGOs and CDOs that are considered to offer better payment and conducive working environments while other migrate to abroad.

On the reasons advanced for leaving the job, the interviewee cited un-conducive working environment, poor and uncompetitive pay, poor working condition associated with the aspects such as inadequate working tools, lack of career advancement, lack of modern equipment and high workloads this were perceived by interviewees as demotivating factors.

In the last question to this section, the respondents were requested to outline in their opinion other factors or conditions which they felt needed to be put in place to

enhance retention. Their responses included: Government to device a means or develop a special local recruitment policy especially for lower cadres to be recruited on their local areas to enhance retention. They also felt that there should be collaboration/participation in developing HRH intervention policies with health employees, also added that retention of HRH should be dealt with differently based on its context, Hence, HRH intervention retention should not be general throughout the country but be based on its context to ensure sustainability of retention of HRH. To enhance commitment and retention some of the respondents suggested that the government should develop special life insurance policy for health staff and their family to ensure their life security due to unsecured work environment they are subjected with.

#### **4.5 Summary of Chapter Four**

This chapter presented the results of the data that were analysed from three specific research questions that aimed at: examining the extent to which the following demographic and socio economic factors (age, gender, marital status, socio-economic activities and tenure in profession) contribute on HRH retention in Tanzania's public health institutions; finding out how do perceived intrinsic factors in health worker satisfaction contribute on HRH retention in Tanzania's public health institutions; as well as examining the extent to which both, the level of salary and extrinsic motivations provided constrain retention of HRH in Tanzania's public health institutions. Numerical figures are presented as a result of both, the descriptive and inferential types of data analysis . The next chapter presents a detailed discussion of the findings.

## **CHAPTER FIVE**

### **DISCUSSION OF THE FINDINGS**

#### **5.1 Introduction**

This chapter presents discussion of the findings presented in chapter four. The discussion of the study findings is organised according to the three research objectives of the study which include: The contribution of the demographic and socio-economic factors on HRH retention in Tanzania's public health facilities; the extent to which the perceived intrinsic factors in worker satisfaction used by the government retain HRH in Tanzania's public health facilities; as well as the effects of salary and fringe benefits provided by the government on retention of HRH in Tanzania's public health facilities.

#### **5.2 Contribution of the Demographic and Socio-economic Factors on HRH Retention**

From the analysis of this objective, several indicators such as age, sex, marital status, socio economic status and years of service were included. As reported from the previous chapter, mixed results were found.

First, it was revealed that age is a great factor in explaining HRH retention. The second important was economic social factors. The presented results collaborate with results from interviews and documentary reviews which indicate that the majority of HRH who remained working with public hospitals were mostly influenced with socio-economic activities available at their locations. They claimed that such economic activities supplemented low salaries paid by the government; otherwise they would have left the public service long time before. In addition, interviews results revealed that the age group that was difficult to retain is the younger HRH, aged between 24- 45. This seems to be more mobile in search for better are paying jobs. In line with the retention of HRH by region and position/cadre, the following have been observed.

First, health workers working in Dar es Salaam have great preference to stay in their respective public hospitals compared to other surveyed regions. This could be explained by the fact that in Dar es salaam, there are good future including working environment and career advancement due to high level of advancement compared to other regions. Furthermore, the findings of the study indicate that the lower Position/cadre has great extent to stay in public health facilities compared to higher position/cadres such as medical specialist and medical officers.

Further, the results of ordinal logistic regression which was performed to determine the most significant motivating factors which lead to employees retention, it was observed that when the p-values are greater than 0.05, the model fits. The relevant predictors of retention of employees included in the model were sex, age, education level and marital status of the respondents. Basically, the findings of the study indicate that age was significantly associated with motivation and retention of the employees. This implies that young age decreases the likelihood of being motivated to the level of being easily retained in public health hospitals than older age of 56 and above as indicated by negative coefficient. Since the coefficients are negatives whereas one unit decrease in age group (that is, from 56 and above to 46-55), we expect a 2.20 decrease in the Log odds of being at a higher level of retention, when other variables in the model are held constant. Also social economic status was found to be associated with motivating health workers to stay in public hospitals. Conversely, sex, education level, and marital status were not significantly associated with motivation to the level that can lead to retention. This analysis implies that age and social economic status have major impact on retention motivation in the public hospitals.

### **5.3 The Perceived Intrinsic Factors in workers Satisfaction for HRH Retention**

The critical shortage of HRH staff in Tanzania is and continues to be a challenge facing the health sector. This is compounded by low motivation for retention (Munga & Mbilinyi, 2008). The government designed different retention strategies to ensure retention of HRH in public hospitals. The second objective of this study assesses the

contribution of perceived intrinsic factors in health worker satisfaction on HRH retention in Tanzania's public health institutions. In due regards, this section discusses the findings obtained from the analysed and presented data.

Regarding personnel advancement the result indicated that personnel advancement plays a significant role in retention. The finding indicated that the majority of respondents had the perception that the strategy was not adequate. As such, it is important to note that Personnel advancement, as an intrinsic factor as per Herzberg's two-factor theory, is very important and a key motivating factor for employee retention because it gives chances to employees to grow in terms of skills, knowledge and capacity within the organisation. It is regarded as a motivator because employees, like other human beings, expect to advance and work in a job where there is prosperity in terms of promotion and growth in order to master their activities and gain status at work place rather than being stagnant in their positions.

This has been also supported by Dockel (2003) who stresses that people should not be rewarded financially but also should be offered opportunity for growth within the organisation. The findings indicate that the majority of respondents had the perception that this strategy was not practised adequately and that its effect was not as what HRH expected according to scheme of service. The nurses and doctors scheme of service provides that personnel should be promoted every after three years but this was not found to be practised and thus it cause dissatisfaction of employees to remain with public hospitals. The findings therefore are inadequately reflecting the findings by Chay and Norinan (2003) on creating value for employees, investment in employee development which showed that perception of investment in development can improve nurses' morale and dedication to the level that emotionally binds them to the organisation and encourages them to stay. The implication is that the health care organisations have inadequately paid greater attention, both in investing and planning development activities that promote and develop organisational commitment and job satisfaction among HRH. This is where Armstrong (2009) cautions that lack of clear career path or development is a major cause of poor

employee retention. His (Ibid) advice is that, in the situation where many employees are not satisfied to maintain work force, the management needs to provide career opportunities by providing employees with wider expectation, encouraging promotion from within and developing equitable promotion procedures. Panice (2005) argues that talented employees are required for maintaining competitive advantages and that employees want career growth opportunity to develop and rise to higher levels of the career ladder.

The results show that despite the fact that there is high value attached to personnel advancement, the career advancement practices were practically unavailable, growth opportunity was inequitably provided as few would benefit. Even normal career advancement practices such as position movement and internal promotion were impractical due to either inadequate continuous promotion development among HRH staff or the general tendency of the employee to freeze promotion. While this would be the case, Adzei and Atinga (2012) advise that continuous professional development, such as sponsorship to attend training both short and advanced courses in their area of specialisation, has a strong motivational effect on retention.

Messmer (2000) views that a key factor to employee retention is training and development. Deery (2008) adds that on the job training increases retention and commitment to employees to stay. Leidner (2013) is also of the view that employees' loyalty is improved through training and development. In due regard, these opportunities enable workers to cope better with job requirement, and may take up more challenging duties and achieve personal goals of professional advancement (Mathauer & Imhoff, 2006).

Related to personnel advancement is the working environment for HRH in public hospitals. We argue that personnel advancement cannot be achieved unless there is good working environment in which HRH may feel like wanting to grow to the highest level. We further argue that no HRH would wish to advance his/her career in

work environment which is not conducive. We stress that inadequate working environment cannot give room for personnel growth.

Therefore, good working environment has also been considered as a motivating factor for HRH retention. To Herzberg's, this is the extrinsic or hygiene factor which though not a direct motivator, is important for employee retention. As such, availability of modern working equipment, relevant technology, office space and housing are important in this case. Munga *et al.* (2009) maintain that secure working environment and proper working gears are key factors for HRH retention at a work place.

The results of this study however indicated that the working environment in all visited areas was pathetic. Lack of equipment like gloves, chairs, delivery equipment and uniforms characterised the visited health facilities. The results reflect what Penfold *et al.* (2013) observed; that health facilities lack equipment, which again affects their desire to stay. The implication is that HRH inadequately benefit work environment that provide sense of belonging. Miller, Erickson and Yust (2001) and Wells and Thelen (2002) maintain that good working environment with modern technology, and equipment, have a very good chance to justify and retain employees by providing them an appropriate level of practicing their professions which finally motivate them to stay.

One would argue that lack of equipment has the tendency to increase insecurity and stress which again prompt HRH staff to leave the organisation. This is where Munga *et al.*(2013) advise that proper working environment with working gear are key factors for HRH retention. It can be argued that without adequate working condition, HRH are likely to be stressed.

Stressful situation for HRH retention emanates from lack of inadequate equipment at primary public facilities. The inadequacy can be revealed from the state of the art laboratories, working gear like gloves, uniforms etc which characterised health

facilities. In referral hospitals, stressful situation for HRH retention emanates from lack of modern equipments. The findings are supported by the study of Michael & Chipunza (2009) and Baghael (2011) which show that stressful working condition is considered as factor for dissatisfaction which results in a go slow or decision to quit the organisation. This imply that for HRH to stay, modern laboratories, availability of primary test equipment like that of malaria, diarrhoea, stool and urine analysis would motivate HRH to stay. It is also maintained that lack of technology demotivates HRH as they cannot utilise their knowledge, skills and ability and they end up being frustrated because they do not exercise their professions fully. In this respect, Phillips and Connel (2003) observe that HRH want certain conditions in their work place for proper exercise of their professions.

Apart from work place working condition, HRH would be encouraged to stay at their place of work if accommodation, though a hygiene factor, is readily available. Accommodation is a major challenge to most of HRH in visited health facilities. Thus, accommodation counts as one of the dissatisfies and thus prompts HRH to leave their work places. Results of the study confirm that accommodation is a retention factor for HRH in public hospitals. The study by Lopez (2011) informs that most health workers are willing to go and work in deprived communities and urban centres if they are assured of decent accommodation.

The foregoing discussion on practices on employee advancement, working condition and attractive incentive package can hardly be effected if leadership and management do not upbeat to ensure retention. As such, one of the critical roles of hospital management is to create a work environment that will endear the organisation to employees (Samwel, 2008). Results regarding hospital leadership and management indicated that there is dissatisfaction with hospital leadership. As such there is a perception among many HRH that top management was inadequately committed to providing good management to employees. Such environment arguably provides less opportunity for staff to participate in decision making on matters that concern them and their work place.

Unlike the results of this study other researchers revealed that HRH feel better motivated when managers give them the opportunity to participate in regular meetings (Hagopian *et al.*, 2009). The argument is that managers have to responsibly structure the work place and provide employees with an environment that enables them resist external attractions (Taplin and Winterton 2003).

The prevailing culture of management care (Shennan *et al.*, 2008) and organisation management style, and the quality of the relationship an employee has with his or her immediate manager are important factors that elongate employee stay in an organisation. Employees are more motivated when their leaders provide them with a clear sense of vision and mission, listen to them and make them feel valued and recognised by their leadership no matter what their job (Who, 2006). For example, a study conducted in Zimbabwe by Stilwell (2001) concluded that employees in rural areas by having good leadership and supportive management were motivated well and remained working with the health sector in spite of hard working condition and low financial incentives.

In due regard, supervisor support, flex-time, work family culture and co-worker support and organisational support (Yanadoria & Katob, 2010) significantly reduce employee turnover intention. Studies suggest that employee's perception regarding organisation is strongly influenced by their relationship with the supervisor (Eisenberger *et al.*, 1990) and that leadership behaviour of hospital managers has significant positive relationship with retention (Mc Neese-Smith, 1995). While one would argue that the results in this aspect were influenced by antagonistic relation between doctors in public hospitals and their leaders from the ministry responsible for health termed as "Ulimboka crisis," this antagonistic relationship led to HRH dissatisfaction and thus a feeling of not being valued. Under such circumstances, HRH are likely to develop to higher propensity to leave the organisation than staying as cautioned by Raymond *et al.* (2009). Again one may argue in support of Dockel (2003) that employees often leave managers not organisation in a sense that HRH prefer leaders who show interest and concerns of their welfare.

This points to the fact that the successful strategies to encourage retention particularly rest on the ability of health managers to strengthen their relationship with subordinates (Adzei & Atinga, 2012). From this discussion on practices and effects of retention strategies we note that results of this study have to a large extent indicated that the practices of the devised retention strategies have inadequately attained the desired goal of motivating HRH remain in public hospitals. In fact, HRH have the feeling of leaving the public hospital and some have altogether left the public hospital. The designed retention strategies have practically benefited few HRH leaving majority demotivated. While these strategies would be reflected to Herzberg's two-factor theory one would be tempted to discuss the extent to which Herzberg's two-factor theory explains retention of HRH in public hospitals of Tanzania in the next section.

#### **5.4 Effects of Government Salary and Other Intrinsic Motivations on Retention of HRH**

This section discusses the findings for the third objective of the research, which sought to examine the extent to several extrinsic factors propounded by Herzberg's two-factor theory including the GoT Salary and fringe benefits contribute on the HRH retention in public hospitals. As such, this section discusses data resulting from descriptive statistics, factor analysis, multiple regression and interview analysis. The results reflect extrinsic factors that include working condition, salary, company policy and job security. To Herzberg's two-factor theory, salary is an important hygiene factor which encourages and stimulates employees' performance due to levels of satisfaction with payment which in turn results in retention. Despite the high value attached to salaries, the result of this study revealed that, majority of HRH felt that the salaries and other incentives such as on call allowances and risk allowances, were inadequate, unfair and inequitably administered as compared to other organisations. Perceived low salaries and unfair payment of HRH in the public health facility negatively affected HRH staff motivation to remain. These results reflect WHO's (2006) study findings which indicated that unfairness in payment had negative correlation with retention of HRH in public hospitals.

The results imply that there is unfair payment of HRH which significantly discourages them to stay. While Armstrong (2009) argues that money may not in itself provide intrinsic meaning, in this study it acquires a significant motivating power because it symbolises so many intangible goals. Hence, financial reward in the form of money remains arguably the significant motivation strategy that enhances health employees (Akintoye, 2000) to remain with health facilities. Therefore, improving employee satisfaction and effort to retain HRH fair financial reward would make health workers comfortable to continue working with the public hospitals.

The findings reveal that working condition, (salary, job security and company policy) and recognition (recognition, status, and work itself) were statistically significant in explaining retention of human resource for health. These findings rhyme the Sikika's (2011) study which revealed that poor working environment and inadequate working condition (such as poor salaries, working facilities, housing allowances and inadequate drugs) were found to be critical issues for HRH in public hospitals. Working environment which scored the highest mean compared to other factors indicate that it is one of the most important factors for smooth operation in any organisation, which may ultimately influence HRH retention. The multiple regression results indicated that working condition was found to be significantly associated with retention of HRH.

While statistical value would place as an important factor for retention, it was however described as inadequate and thus working conditions were hostile. These hostile conditions can hardly help retain HRH. These observations concur with Ng'ethe *et al.*, (2012) and Phillips and Connel (2003) contentions that without favourable working environment, staff are not likely to stay in public offices. These quantitative results are complemented by interview responses which indicate that hospitals in Lindi lack office space where one office would accommodate three doctors at a time negating the need for privacy among patients as per WHO

standards. Emerging from this information, the working conditions in all three regions remain pathetic and thus inadequately encourage HRH retention. These findings do not conform with the findings from Dambisya (2007) and Dieleman *et al.*, (2006) which shows that good working environment is a pre-requisite for HRH retention.

Job security which scored the second highest mean is considered as an extrinsic factor for retention. As such it is statistically significant factor for retention. The findings again concur with findings echoed by Phillips and Connel (2003) who thought that job security provides an opportunity to make plans like buying homes and attain a sense of confidence in their future. While the factor scores high in explaining retention, lack of perceived job security characterises, doctors and nurses in Lindi and Mbeya. Often times they engage in other income generating activities like fishing and agriculture to subsidise their meagre salaries and as a survival option in the future. These observations reflect the study by Samwel (2008) who stresses that employees place great importance on a certain job or activities because they provide them with a guaranteed source of income to sustain their living.

These activities lead to socio-economic stability and psychological well-being which are highly significant to the life of employees with low income and characterised by poverty. Therefore, the intrinsic assumption of two-factor theory stresses that employees would be mostly committed to the job which satisfies their needs otherwise the perceived job insecurity is negatively correlated with commitment to stay with an organisation. The implication is that, doctors and nurses will rarely spend most of their time at work place in favour of other paying businesses and secured jobs which again the salary paid by the government becomes a subsidy instead of being the basic income. The implication is that HRH staff may not necessarily quit the work place and decide to remain while psychologically absent.

Moreover, another important aspect in working environment is company policy. Results indicated that health employees are not satisfied with most of the policies in

the health sectors. The major argument from HRH was that most of the policies were just imposed from the top by politicians who decide which policy to enact and without the consent of health worker who at last implement them. According to Mutahaba (2005) these top down policy models have been the source of many industrial conflicts at work places particularly in the public sectors.

As such for a company policy to be meaningful and objective, collective bargaining processes would be preferred by employees to avoid frequent conflict and ensure smooth labour relation at working place. The study results and the argument made concur with Itika (2011) who notes that work place policies should undergo collective bargaining due to different interests between employer and employee value, objective and attitude. These have also been well advocated in Herzberg's two-factor theory, that company policy though is not a direct motivator, is an important hygiene (extrinsic) factor which constitutes a framework that guides operation of an organisation and is concerned with actual job performance. Hence, if they are perceived inadequate, they tend to demotivate employees to work hard and stay committed with such an organisation (Sandya & Kumar, 2011). Furthermore, most of policies in health sector are treated unnecessarily confidential, such that in some cases were found not consistently applied. This habit is against the ILO code of conduct which emphasises best employment practices that ensure standards and uniformity across all employees (Walker, 2011). This argument is also supported by Sinha (2013) who argues that inconsistencies of work places policies demotivate employees to stay committed and retain their work force in those organisations.

Recognition formed the second cluster under intrinsic and extrinsic variables in explaining human resource for health retention. The findings reveal that recognition had a significant mean value score which signifies to be statistically significant on explaining human resource for health retention in public hospitals. From the multiple regression results, recognition also positively explains retention. These findings reflect what Van Wart (2005) and Re'em (2011) advise on the need for staff recognition in terms of appreciation expressed through good work, good behaviour

or actions. While recognition statistically explains staff retention, a paradox is that HRH have the feeling that their contribution is not recognised. In the words of Shaban *et al.* (2013) the HRH are likely to become truant and psychologically withdrawn from the workplace if HRH do not feel recognised. In due regard, incidences of turnover would increase due to inadequate recognition (Chiboiwa *et al.*, 2005).

Work design is yet another factor contributing to human resource for health retention. Basically positive thinking of the work itself becomes part and parcel of work design. It has the highest probability in influencing human resource for health retention. In visited areas, work design appeared to be pathetic. The design was in terms of availability of working tools, and the danger involved in performing their duties. The existence of precipitating factors to HIV and AIDS pandemic made it more provoking. The findings concur with McKeown (2005); Philips and Connel (2003) who maintain that better designed jobs have higher productivity and more satisfaction, thus higher degree of intent to stay.

While work design would explain retention, the design of work has influence on individual achievement. Individual achievement at workplaces has been singled out as a factor for retention in public service. This view is advanced by writers like Re'em (2011) and Perry (1982) who stress that individual performance in public offices and restricted interference by politicians in goal achievement and areas where employees fulfil their responsibility motivate public servants to stay in office.

In the previous section, this data indicated that as a government strategy, this was dissatisfaction among HRH. Although statistically it was found to be insignificant in explaining retention, we still hold that given that HRH are not satisfied, there are obvious grudges on part of HRH on achievement. For example, the result of interviews and documentary review show the growing apathy on individual achievements. Personnel growth and achievement is rare as employee felt hard to get promotion, skills development and knowledge due to budget constraints. Most HRH

had spent many years without being promoted. Most of HRH had not attended skills improvement programmes necessary for enhancing their capacity.

The study argues that achievement in health sector can be explained by the freedom to practice professionally. The finding shows that doctors and nurses have inadequate autonomy to practice their profession due to political directives. This arguably demotivates HRH something which is against Docket's (2003) advice that people should not only be awarded financially but also should be offered an opportunity to fulfil their achievement professionally. To HRH that is against professional code of conduct that guide their practices.

Therefore, the discussion in this section points out that, intrinsic and extrinsic factors play substantial role in explaining retention in public health hospitals. The study has shown statistically significant relationship between working environment and recognition as factors for HRH retention. The discussion pointed out that retention is explained by conducive working environment which entails the availability of attractive salaries, collaborative work place policies and job security. Moreover, if there is a well-designed work, employees' effort and status are acknowledged accordingly, it will increase motivation of staff and the desire to stay. However, unlike the statistical results, the situation on the ground indicated that satisfaction on these factors is negligible.

## **5.5 Summary of Chapter Five**

There have been deliberate efforts by the Government to retain HRH in public health facilities. Basically, the efforts were designed to suit specific strategy which was regarded to be effective for HRH retention. On its analysis, the study paid attention to the practices and effects of existing HRH retention strategies with reference to the extent to which the Herzberg's two-factor theory explains retention of HRH in public hospitals in Tanzania. Little consideration of the contribution of the demographic factors on retention of HRH in public health institutions has been realised as a

setback that revolves around several implemented GoT policy guidelines related to retention of HRH in health sector.

Equally important, the intrinsic factors from Herzberg's two-factor theory had little effects on what HRH expected as per scheme of service in Tanzania public health facilities. Normal career advancement practices such as position movement and internal promotion were impractical due to inadequate continuous promotion development among HRH staff. However, on the other hand, although extrinsic or hygiene factors are important for HRH; retention the practice revealed pathetic working environment, inadequate salary, fringe benefits and other incentives negatively affected HRH retention. For that matter, insecurity among HRH scored the second highest mean in affecting the HRH's desire to remain in public hospitals in Tanzania. Leadership and management of public hospitals were considered vital for HRH retention though inadequate commitment among top management affected the HRH retention to a greater extent. Lack of democratic decision making, lack of transparency, unsupportive management, disharmonious employment relations and less recognition were some of leadership and management elements that affect HRH retention in public hospitals in the country.

In general, the study has pointed out that although intrinsic and extrinsic factors play a greater role in HRH retention. Arguably, it suffices to assert that Tanzania's public health facilities are negatively affected by impractical application of retention strategies with reference to Herzberg's two-factor theory. To a greater extent, the inadequacy rests on lack of commitment in leadership and management style by the top management. The study, recommended new initiatives to be taken by policy makers and hospital administrators to effectively implement HRH retention intervention based on local settings to rescue the situation.

## CHAPTER SIX

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Introduction

This chapter provides a summary, main conclusion and recommendations for further research from the study that examined the determinants of HRH retention from the demand side of healthcare delivery in the Tanzania's public health facilities. Three specific objectives were established from which three research questions were synthesised to guide the study. The existing gap from various strategies for addressing staff shortages in healthcare facilities have added urgency to search for the determinants of human resource retention for healthcare in Tanzania's public health institutions while utilising an adapted Herzberg's theoretical framework. The study had an ambitious aim of examining the research problem from the demand side that is, analysing the problem within the lens of health workforce, while ignoring a bit the supply side informed by Government of Tanzania guidelines and procedures for HRH retention.

Literature relating to the contribution of the demographic and socio-economic factors on HRH retention in public health facilities; the effects of salary and other intrinsic motivations provided by the government on retention of HRH in public health institutions; as well as the extent to which the perceived factors in health worker satisfaction used by the government contribute on HRH retention in public health institutions were reviewed. The conceptual framework of the study was designed based on Herzberg's two-factor theory and empirical studies.

An explanatory, mixed research design was employed to examine the determinants of HRH retention for healthcare in public health institutions. Data were collected from both, primary and secondary data. The target population was human resource for health specifically technical staff from the three selected regions (Dar es Salaam,

Mbeya and Lindi) who were selected through purposive sampling, snowball sampling and random sampling techniques.

## **6.2 Summary of the Study Findings**

### **6.2.1 Contribution of the demographic and socio-economic factors on HRH retention**

It was revealed that age is a great factor in explaining HRH retention. Evidently, interviews results revealed that the age group that was difficult to retain is the younger HRH, aged between 24- 45. This seems to be more mobile in search for better are paying jobs. In line with the retention of HRH by region and position/cadre, the following have been observed.

The second important demographic factor was marital status which has a bearing effect on family commitment. This was followed by far with the socio-economic status which accounted for 26%. The presented results collaborate with results from interviews and documentary reviews which indicate that the majority of HRH who remained working with public hospitals were mostly influenced with socio-economic activities available at their locations which supplemented low salaries paid by the government; otherwise they would have left the public service. It was also observed that health workers working in Dar es Salaam have great preference to stay in their respective public hospitals compared to other surveyed regions. This could be explained by the availability of good working environment and career advancement compared to other regions.

Furthermore, the findings of the study from the ordinal logistic regression observed that when the p-values are greater than 0.05, age was significantly associated with motivation and retention of the employees. This implies that HRH who are at the young age have the likelihood of being motivated to the level of being easily retained in public health hospitals than older age of 56 and above as indicated by negative coefficient. Also social economic status was found to be associated with motivating health workers to stay in public hospitals. Conversely, sex, education level, and

marital status were not significantly associated with motivation to the level that can lead to retention. This analysis implies that age and social economic status have major impact on retention motivation in the public hospitals.

### **6.2.2 Perceived factors in workers satisfaction for HRH retention**

The critical shortage of HRH staff in Tanzania is and continues to be a challenge facing the health sector. Regarding personnel advancement, the result indicated that personnel advancement plays a significant role in retention. The finding indicated that the majority of HRH had the perceptions that the strategy was not adequate implemented. Literally, personnel advancement gives chances to employees to grow in terms of skills, knowledge and capacity within the organisation. This has been also supported by Dockel (2003) who stresses that people should not be rewarded financially but also should be offered opportunity for growth within the organisation. It was also observed that although the nurses and doctors have scheme of service which provides them to be promoted every after three years, this was not practised. As a result, it caused dissatisfaction of employees to remain with public hospitals.

Further, the study findings showed that despite the fact that there is high value attached to personnel advancement and the career advancement practices, those practices were practically unavailable. While this would be the case, Adzei and Atinga (2012) advises that continuous professional development, such as sponsorship to attend training both short and advanced courses in their area of specialisation, has a strong motivational effect on retention. Related to personnel advancement is the working environment for HRH in public hospitals. To Herzberg's, this is the extrinsic or hygiene factor which though not a direct motivator.

Munga *et al.* (2009) maintain that secure working environment and proper working gears are key factors for HRH retention at a work place. The results of this study however indicated that the working environment in all visited areas was pathetic. Lack of equipment like gloves, chairs, delivery equipment and uniforms characterised the visited health facilities. Apart from work place working condition,

HRH would be encouraged to stay at their place of work if accommodation, though a hygiene factor, is readily available. Accommodation is a major challenge to most of HRH in visited health facilities.

The study by Lopez (2011) informs that most health workers are willing to go and work in deprived communities and urban centres if they are assured of decent accommodation. Likewise, the results regarding hospital leadership and management indicated that there is dissatisfaction with hospital leadership. As such there is a perception among many HRH that top management was inadequately committed to providing good management to employees. Such environment arguably provides less opportunity for staff to participate in decision making on matters that concern them and their work place.

In due regard, supervisor support, flex-time, work family culture and co-worker support and organisational support (Yanadoria & Katob, 2010) significantly reduce employee turnover intention. Studies suggest that employee's perception regarding organisation is strongly influenced by their relationship with the supervisor (Eisenberger *et al.*, 1990) and that leadership behaviour of hospital managers has significant positive relationship with retention (Mc Neese-Smith, 1995). While one would argue that the results in this aspect were influenced by antagonistic relation between doctors in public hospitals and their leaders from the ministry responsible for health termed as "Ulimboka crisis," this antagonistic relationship led to HRH dissatisfaction and thus a feeling of not being valued. Under such circumstances, HRH are likely to develop to higher propensity to leave the organisation than staying as cautioned by Raymond *et al.* (2009).

This points to the fact that the successful strategies to encourage retention particularly rest on the ability of health managers to strengthen their relationship with subordinates (Adzei & Atinga, 2012). From this discussion it can be revealed that to a large extent the devised retention strategies have inadequately attained the desired goal of motivating HRH remain in public hospitals. In fact, HRH have the feeling of

leaving the public hospital and some have altogether left the public hospital. While these strategies would be reflected to Herzberg's two-factor theory one would be tempted to discuss the extent to which Herzberg's two-factor theory explains retention of HRH in public hospitals of Tanzania in the next section.

### **6.2.3 Effects of Government Salary and other Extrinsic motivations on retention of HRH**

To Herzberg's two-factor theory, salary is an important hygiene factor which encourages and stimulates employees' performance due to levels of satisfaction with payment which in turn results in retention. Despite the high value attached to salaries, the result of this study revealed that, majority of HRH felt that the salaries and other incentives such as on call allowances and risk allowances, were inadequate, unfair and inequitably administered as compared to other organisations. Perceived low salaries and unfair payment of HRH staff in the health public hospitals negatively affected HRH staff motivation to remain.

The results imply that there is unfair payment of HRH which significantly discourages them to stay. While Armstrong (2009) argues that money may not in itself provide intrinsic meaning, in this study it acquires a significant motivating power because it symbolises so many intangible goals. Hence, financial reward in the form of money remains arguably the significant motivation strategy that enhances retention of health employees (Akintoye, 2000).

Likewise, the findings of the study reveal that working condition, (job security, company policy, and recognition) were statistically significant in explaining retention of human resource for health. These findings collaborate with the Sikika's (2011) study which revealed that poor working environment and inadequate working condition (such as poor salaries, working facilities, housing allowances and inadequate drugs) were found to be critical issues for HRH in public hospitals. Working environment which scored the highest mean compared to other factors indicate that it is one of the most important factors for smooth operation in any

organisation, which may ultimately influence HRH retention. The multiple regression results indicated that working condition was found to be significantly associated with retention of HRH. These quantitative results are complemented by interview responses which indicate that hospitals in Lindi region lack office space where one office would accommodate three doctors at a time negating the need for privacy among patients as per WHO standards.

### **6.3 Conclusion**

Since 2006, the Tanzania's government through the ministry responsible for health has made deliberate efforts to induct, educate as well as retain HRH in her health systems in order to improve health service delivery. However, reliance of national HRH retention policy, strategies and plans cannot be claimed to have helped much reduce the gaps for HRH retention due to reliance of government initiatives as a supply device that ignores the demand side needs and interests of healthworkforce. Based on the study findings, I conclude that the implementation of government policies and public intervention related to HRH retention should be based on both job and context related motivators, as well as reflecting local settings.

### **6.4 Implication to the Herzberg's two factor theory**

The findings of the study especially from the first object deviates from Herzberg two factor theory which views intrinsic and extrinsic factors to be the only determinants of HRH retention. Since demographic and socio-economic factors relate with HRH retention in Public health facilities. Inclusion of demographic and social economic factors in this study has broadened the understanding of the problem of human resource retention in the public health facilities in Tanzania. This therefore is an absolute new implication to the theory.

### **6.5 Implication to the Tanzania's Health Policy**

Since the constant hunt for greener pastures and moonlighting is the order of the day of HRH, and there are no indications that the trend will reverse in the near future, the findings of this study observes a need to device the local recruitment policy that

reflects the nature of work and local context set ups embedded from both supply and demand side of HRH. By doing so, the proposed Tanzania's health policy will adhere with the goals of Tanzania's development vision by 2025, the 2000 MDGs as well as 2015 SDGs. Based on the objectives which this study sought to achieve and in accordance with the summary of the findings presented above, the following concluding remarks within the policy lens can be drawn:

- a) First, it is crucial for the government and health facilities management to aspire HRH by attracting and retaining health workforce through a number of strategies which builds employee sense of ownership in their routine working in public health institutions.
- b) Secondly, since constant hunt for greener pastures and moonlighting is the order of the day of HRH and there are no indications that the trend will reverse in the near future, this study recommends to the government and policy makers and health facilities managers to device the local recruitment policy that reflects the nature of work and local context set ups.
- c) Third, since the results indicate that working condition, salary, job security and company policy, recognition, status, and work itself are significantly associated with HRH retention. It is crucial for the policy makers (Tanzania's government technocrats) to understand and design the retention policy which accommodates differential perceptions of what motivates one to stay in public health facilities from different contexts.
- d) Also, it is worth noting that all government intervention strategies related to employees' retention should be developed jointly by all key stakeholders between the government, health employees, as well as community members in their local context.
- e) Equally important, focused priority on work infrastructure development is another important policy recommendation to the government and policy

makers to improve retention of HRH in public health facilities. Evidence from this study has shown that human resource in the public health sector quits because of poor working environment and inadequate working facilities. Collectively, work place infrastructures such as conducive working environment and adequate working tools and facilities have a potential impact on retention of employees.

### **6.6 Suggestions for Areas for Further Research**

This study was conducted in three regions of Tanzania, which are Dar es Salaam, Mbeya and Lindi regions.

- a) First, a similar study can be conducted after five years for comparable purposes. The result from comparison study can inform the government and policy makers as to whether the problem of retention still persist in the public health facilities. Understanding and knowing the recurring of retention problem or improvement of retention may result in to review of policies of available health policies or device new policies and strategies which are research based evidence for retention sustainables.
- b) Second, similar studies can also be conducted in other regions of the country. This kind of study can broadly inform the government, policy makers, health facilities managers and other stakeholders to understand the magnitude of the problem of HRH retention across the regions in Tanzania.
- c) Third, similar studies can be conducted in public health facilities in other countries in order to generalise the findings for comparable purposes.
- d) It can also be suggested that the comparison can further be done between the relatively developed African nations to least developed nations because countries have different cultures and economic settings, which are likely to have differing explanations on HRH retention problems.

- e) The findings of the study revealed that most of human resource for health who left the public health facilities went to work for private sector and other institution outside the health sector. Similar studies should also be conducted in private sector and other institutions outside the health sector to establish retention strategies developed and adopted by the institution so as to learn how these strategies are embedded within the institutions dynamic working environment.

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# **ANNEXES**

## **Annex 1: Clearance letters and Research Permit for Ethical Justification**

## Annex 2: Correlation Matrix

Factor		Recognition	Work itself	Personnel growth	Responsibility	Achievement	Advancement	Supervisory and leadership style	Working condition	Salary	Company policy	Job security	Interpersonal relation	Status
Correlation Coefficient	Recognition													
	Work itself	.421												
	Personnel growth	.219	.540											
	Responsibility	.233	.502	.589										
	Achievement	.100	.299	.530	.480									
	Advancement	.155	.327	.560	.511	.621								
	Supervisory and leadership style	.392	.446	.490	.399	.369	.510							
	Working condition	.128	-.011	-.001	-.17	.025	.026	.023						
	Salary	.127	.158	.197	.051	.131	.202	.154	.315					
	Company policy	.160	.214	.277	.245	.255	.238	.308	.182	.292				
	Job security	.187	.151	.020	.005	.026	.060	.094	.355	.200	.257			
	Interpersonal relation	.248	.329	.359	.473	.367	.412	.370	-.115	.071	.301	.101		
	Status	.412	.407	.341	.417	.259	.392	.420	-.005	.056	.280	.181	.430	
	Sig. (1tailed)	Recognition												
Work itself		.000												
Personnel growth		.000	.000											

Factor	Recognition	Work itself	Personnel growth	Responsibility	Achievement	Advancement	Supervisory and leadership style	Working condition	Salary	Company policy	Job security	Interpersonal relation	Status
Responsibility	.000	.000	.000										
Achievement	.047	.000	.000	.000									
Advancement	.005	.000	.000	.000	.000								
Supervisory and leadership style	.000	.000	.000	.000	.000	.000							
Working condition	.017	.430	.492	.002	.336	.333	.354						
Salary	.017	.004	.000	.196	.014	.000	.005	.000					
Company policy	.004	.000	.000	.000	.000	.000	.000	.001	.000				
Job security	.001	.006	.370	.469	.335	.160	.059	.000	.000	.000			
Interpersonal relation	.000	.000	.000	.000	.000	.000	.000	.028	.120	.000	.047		
Status	.000	.000	.000	.000	.000	.000	.000	.468	.178	.000	.001	.000	

**Determinant: .015 Source: Field data, 2013-14**

### Annex 3: Hospitals Visited during the Survey

S/N	REGION	HOSPITALS
1.	Mbeya	<ul style="list-style-type: none"> <li>• Mbeya Consultant Hospitals</li> <li>• Mbeya Regional Referral Hospitals</li> <li>• Mbozi District Hospital</li> <li>• Igawilo Health Centre</li> <li>• Iyula Health Centre</li> <li>• Mlowo Dispensary</li> <li>• Isyesye Dispensary</li> <li>• Kiwanjampaka Dispensary</li> <li>• Hatelele Dispensary</li> <li>• Igamba Health Centre</li> <li>• Nane nane Dispensary</li> </ul>
2.	Dar Es Salaam	<ul style="list-style-type: none"> <li>• Muhimbili National Consultant Hospital</li> <li>• Mwananyamala Referral Hospital</li> <li>• Temeke Referral Hospital</li> <li>• Sinza Hospital</li> <li>• Kigamboni Health Centre</li> <li>• Tambukareli Dispensary</li> <li>• Mbezi Dispensary</li> <li>• Kibangu Dispensary</li> <li>• Mlimani Health Centre</li> <li>• Kimara Dispensary</li> </ul>
3.	Lindi	<ul style="list-style-type: none"> <li>• Lindi (Sokoine) Regional Referral Hospital</li> <li>• Kilwa District Hospital</li> <li>• Lindi Urban Health Centre</li> <li>• Kilwa Health Centre</li> <li>• Mingoyo Dispensary</li> <li>• Mitwelo Dispensary</li> <li>• Mpala Dispensary</li> <li>• Lindi Health centre</li> <li>• Kilwa Kivinje Dispensary</li> </ul>

## **Annex 4: Summary of real situation in the surveyed hospitals cases**

### **DAR ES SALAAM REGION**

#### **CASE 1: Muhimbili National Consultant Hospital**

The results of assessing working centres and hospitals are presented in Table 24. Table 16 reveals that the quality of working premises at Muhimbili National Consultant Hospital was good and adequate. Fittings and equipment were good but not adequate for a National Consultant hospital like Muhimbili. The number of buildings and offices for Doctors per standard is not adequate. In particular, there was no enough space to allow privacy for patients, and inadequate drugs and other medical equipment. Further, the researcher observed that there was inadequate number of housing for staff and long patients' queues.

#### **Case 2: Mwananyamala Hospital**

Mwananyamala hospital currently has been upgraded to a referral hospital, serving Kinondoni District. Table 16 reveals that Mwananyamala hospital like Muhimbili, has good working premises but not adequate. Also, results indicate that the hospital has no enough staff housing and office spaces, thus the hospital is experiencing patients' long queues. Number of buildings is not adequate as per recommended standards. Further, a total number of doctors and nurses was found not enough to cater for increased number of patients due to HIV and AIDS pandemic in the area. Again, lack of beds in wards was seen to be a serious problem, since patients were sleeping on the floor, while other patients shared beds.

#### **Case 3: Temeke Referral Hospital**

Like Mwananyamala, Temeke hospital has been upgraded from District Hospital to Referral Hospital to cater for Temeke District. Table 16 reveals that the quality of working premises was inadequate for a referral hospital as per recommended standards. Only few Doctors had houses, the rest has no houses near the hospital. The number of buildings and office space is not adequate to cater for the dense population of the District, leading to long patients' queues at the hospital. Again,

there is no enough beds for patients, most patients share beds, while others sleep on the floor.

#### **Case 4: Sinza Hospital**

The Sinza hospital is located in Kinondoni District. The hospital has 13 Medical Doctors against the recommended number (i.e., 25); 17 AMOS against 25 recommended number, and 18 CO against 26 recommended number. Table 16 reveals that, there are inadequate working premises, housing for HRH and office spaces to ensure patient's privacy and proper medication. Likewise, long queues were observed at the hospital due to inadequate staff, office spaces and wards to accommodate patients at the hospital.

#### **Case 5: Kigamboni Health Centres**

Kigamboni Health Centre is in Temeke District. According to Table 16, the quality of the centre is good, since the centre has enough buildings and office spaces, thus ensuring patient's privacy. Protective gears were found to be adequate. However, there was no enough housing to cater for all HRH. Also, the number of HRH was found inadequate i.e., there was only 1 MD, 1 AMO against 4 required for a health centre, 5 CO against 14 required and 8 nurses against 15 required number for a health centre.

#### **Case 6: Mbezi Dispensary**

Mbezi Dispensary is in Kinondoni District catering for Mbezi ward. Like other dispensaries, the Mbezi Dispensary is headed by AMO the dispensary had 1 AMO, 5 CO out of 8 required, 10 nurses out of 15 required. Table 16 results reveals that the quality of working premises is poor; no housing for HRH, no enough buildings and office spaces for HRH, there is long patients' queues(due to inadequate of office spaces and number of HRH required). The fittings and equipment were observed to be inadequate in terms of number and poor in quality.

### **Case 7: Tambukareli Dispensary**

Tambukareli is in Temeke District. It caters for Temeke ward. Like other dispensaries in Dar es Salaam, Tambukareli is headed by an AMO, had 6 CO out of 8 required, 1 Assistant ACO out of 2 required, 1 nurse out of 12 and 4 labour assistants. Further, this dispensary had inadequate housing, buildings for office spaces, and number of required HRH. as a result, the dispensary has long patients' queues.

### **Case 8: Mlimani Health Centre**

Mlimani health centre is in Dar es Salaam region. The hospital was established to cater for university of Dar es Salaam. The quality of the centre is good compared to other centres in Dar es Salaam. Various working facilities were found to be adequate. The number of staff was found also to be adequate, where as there were 2MD, 5 AMO against 4 required, 7 CO against 14 required and 9 nurses against 15 required number for the health centre.

### **Lesson learnt from Dar es Salaam Region**

- i. There is more numbers of HRH staff in Dar es Salaam hospital than in Mbeya and Lindi Region.
- ii. Dar es Salaam's working condition is more conducive compared to Lindi.
- iii. Medical facilities such as drugs, protective gears, housing and Beds in wards are critical issues in all hospitals in Dar Es Salaam.
- iv. Muhimbili National Consultant hospitals, Mwananyamala and Temeke Referral hospitals have more HRH than other consultant and Referral hospitals surveyed in this study.

## **MBEYA REGION**

### **Case 9: Mbeya Consultant Hospital**

Mbeya Consultant Hospital is in Mbeya region. The hospital was upgraded from a Zonal Referral Hospital to Consultant Hospital to cater for the Southern Highland Zone. According to Table 16, the hospital has adequate and quality working premises unlike other hospitals in the region. There is adequate buildings and office spaces required for a consultant hospital. It has adequate housing facilities for HRH, though not enough to accommodate all of them. However, the number of HRH was found not matching the recommend number for a consultant hospital, i.e., there was only 12 specialist out of 22 required, 25 MDs out of 36 required and 170 Nurses out of 362 required. The patients' queues were observed to be normal compared to other hospitals.

### **Case 10: Mbeya Referral Hospital**

Mbeya Regional Referral hospital is located in Mbeya region, serving the Mbeya region. According to Table 16, the hospital has adequate and quality working premises. It further reveals that, the number of buildings for offices and wards are adequate. More importantly, office spaces to allow privacy was adequate. However, Table 16 reveals that despite available number of offices and wards, the hospital had no single housing for HRH. Furthermore, the hospital had only 10 specialists out 22 required, 16 MDs out of 90 required and 30 nurses out of 262 required. Also, Mbeya Referral hospital had long patients' queue due to inadequate number of HRH. Interestingly, it was also found that in Mbeya referral hospital; absenteeism, strike and go-slow among HRH was an order of the day.

### **Case 11: Mbozi District Hospital**

Mbozi District hospital is situated in Mbozi District, the hospital caters for Mbozi District. Essentially, the hospital had no specialist Doctors as recommended. This is because each District hospital is required to have at least 1 public health specialist to serve as the District Medical Officer. Further, the hospital had 1 MD out of 2 required, 26 AMOs out of 42 required and 59 nurses out of 78 required. According

to Table 16, the hospital had adequate but old and dilapidated buildings; it had also adequate office spaces and wards that allow privacy for patients. However, the hospital experienced long patients' queues due to inadequate HRH.

#### **Case 12: Iyula Health Centre**

Iyula Health Centre is in Mbozi District, and caters for Iyula wards. The centre had no any AMO, had only 1 CO out of 9 required and had only 4 nurses out of 14 required. Further, Table 16 reveals that the centre had adequate and quality working premises compared to other health centres in the region. The results also show that, the centre had adequate housing quarters as per available HRH staff, adequate buildings for wards and office spaces. There was no queue at all. However, Table 24 also shows that the centre had inadequate working tools (such as protective gears), and drugs, thus patients were directed to buy from the nearest shops.

#### **Case 13: Igawilo Health Centre**

Igawilo Health Centre is in Mbeya District (under the Mbeya City Council), the centres caters for all the city population as the Mbeya City Council had no District Hospital. The centre had 2 AMOs out of 3 required, 1 CO out of 9 required and 18 nurses. Table 16 reveals that the centre had adequate and good quality of working premises, adequate buildings for office spaces and wards. However, the centre had inadequate living quarters for HRH and other Medical facilities such as drugs and protective gears. Also, the centre had long patients' queues due to inadequate number of HRH. Noteworthy, absenteeism, strikes and go-slow of HRH was not registered as a problem at the centre.

#### **Case 14: Isyesye Dispensary**

Isyesye Dispensary is in Mbeya District, within Mbeya City Council. The dispensary had 1 CO out of 2 required, 3 nurses out of 4 required and 1 Laboratory Assistant. Table 16 reveals that the dispensary had adequate and good quality working premises as required. It also had adequate buildings for office spaces, thus patients' privacy was guaranteed. Notably, no queue problem at the dispensary. However, the dispensary had inadequate medical facilities such as groves and drugs.

**Case 15: Kiwanja Mpaka Dispensary**

Kiwanja Mpaka Dispensary is in Mbeya District, within Mbeya City Council. The dispensary had 10 COs out of 2 required, 23 nurses out of 4 nurses recommended for a normal dispensary and 4 laboratory Assistants out of 1 recommended for a dispensary. Table 16 reveals that the dispensary had adequate buildings for office spaces that guarantees patients' privacy and had all protective gears for. However, Table 24 shows that the dispensary had inadequate drugs.

**Case 16: Mlowo Dispensary**

Mlowo dispensary is in Mbozi District that caters for Mlowo Town. The dispensary had 3 COs against 2 recommended for the dispensary, 5 nurses against 4 required and 1 laboratory Assistant as recommended. Table 16 reveals that, the dispensary has inadequate working premises, and housing quarters for HRH, the situation that violate patients' privacy. Furthermore, results under Table24 reveals that the centre had inadequate Medical facilities such as drugs and other protective gears to accommodate Mlowo Town's population. According to MHSW's standards, Mlowo Town was supposed to have a health centre instead of a dispensary. As a result, the dispensary faces long patients' queues.

**Case 17: Hatelele Dispensary**

Hatelele Dispensary is in Mbozi district, carter for Hatelele village, Makuwa village and Nondo village. The dispensary had only 1 CO's against 2 recommended for dispensary, 3 nurses against 4 required for the dispensary. The dispensary has no any laboratory employee that is required for the dispensary. The dispensary had 3 staff housing but facilities were found inadequate as per recommended standards.

### **Case 18: Igamba Health Centre**

Igamba health centre cater for Igamba ward. It is one of the oldest health centre in Mbozi district, it was established in 1970's. the hospital had only 1 AMO out of 2 required, had 2 CO out of 3 require and had 7 nurses against 15 required for the health centre. The building of the health centre was found old, but not dilapidated , further the working facilities was inadequate like in many health centre visited in Mbeya region. The health centre has few houses to accommodate all staff. It was found that most of staff has been accommodate by the villagers.

### **Lesson learned from Mbeya Region**

- i. More hospitals have adequate buildings and office spaces compared to Lindi.
- ii. There is good working environment and infrastructure compared to Lindi.
- iii. HRH are more likely to stay working with hospitals in Mbeya compared to Lindi, because in Mbeya Region there is various economic activities that attract HRH to work and stay.

## **LINDI REGION**

### **Case 19: Lindi (Sokoine) Regional Referral Hospital:**

Sokoine Hospital is in Lindi region, serving Lindi region as a Referral Hospital. The hospital had 1 specialist out of 22 recommended, 7 Medical Officers out of 36 required and 125 nurses out of 262 required. The majority of HRH at the hospital were AMOs and COs. Table 16 reveals that, the hospital had adequate buildings for wards and office spaces that allow patients' privacy. On the other hand, it was found that, the hospital had only few staff quarters to accommodate all entitled HRH. Due to inadequate number of HRH, the hospital faces a serious problem of long patients' queues throughout the week. Also, the hospital had inadequate drugs and other medical facilities, such as protective gears and patients' beds.

**Case 20: Kilwa District hospital**

Kilwa District Hospital is in Kilwa District, the hospital had no specialist doctors as recommended for the District hospital. In terms staffing, the hospital had 1 Medical Officer out of 2 required, 3 AMOs out of 22 recommended and 13 nurses out of 49 required for the District hospital. According to Table 16, the quality of working premises was inadequate and dilapidated. Also, there is inadequate number of buildings for wards and office spaces, thus violating patients' privacy. Not only that, but also the hospital faces a critical crisis of patients' beds, for instance in some wards three patients shared one bed and others slept on the floor. Moreover, medical facilities such as protective gears and drugs were seen to be a concern. However, patients' queues were unbearable for HRH, such that, most of them work more than 12 hours per day due to inadequate number of HRH available at the hospital.

**Case 21: Kilwa Health Centre**

Kilwa Health Centre is in Kilwa District and caters for Kilwa Town. The centre had 1 AMO out of 2 required, 1 CO out of 3 required and 6 nurses out of 15 required for the health centre. According to Table 16, working premises, wards, and office spaces were inadequate and dilapidated, the medical facilities such as drugs and protective gears was completely in a pathetic conditions, thus the working environment was very poor, such that it discouraged staff to continue working with the centre. The centre also experienced long patients' queues throughout the week due to inadequate HRH staff.

**Case 22: Mpala Dispensary**

Mpala Dispensary is in Kilwa District, serving Mpala Village and nearby villages. The dispensary had no CO and Clinical Assistant as recommended by the MHSW. The dispensary was headed by one medical attendant, out of recommended 2, it had 1 attendant and there was no any nurse at the dispensary. According to Table 16, the dispensary had inadequate and poor working premises, had no toilet, and two dilapidated rooms which serves as doctors' rooms, and inadequate medical working facilities, such as drugs, groves and delivery beds for expecting mothers.

### **Case 23: Lindi Urban Health Centre**

Lindi urban health centre is in Lindi District, within Lindi Municipality, it caters for Lindi Municipal population due to the fact that Lindi Municipality has no District Hospital. In terms of staffing, the centre had 1 specialist doctor, 2 Medical Doctors, 4 AMOs out of recommended 2, and 16 Cos out of recommended 3 for a health centre. Despite available number of HRH in the centre, Table 16 reveals that the quality of working premises was poor. The result reveals further that the centre had inadequate buildings for wards and office spaces that do not allow patients' privacy. Again, the centre faces critical shortage of drugs and protective gears.

### **Case 24: Mitwelo Dispensary**

Mitwelo Dispensary is in Lindi District, serving Mitwelo Village and nearby villages. The dispensary had a total of 4 HRH out of 6 HRH required. Specifically, the dispensary had 1 CO out of 2 CO required, 2 nurses as recommended and 1 medical attendants. According to Table 16, the dispensary had adequate (and good) working premises, housing quarters, and buildings for office spaces. Nonetheless the dispensary had inadequate HRH as per recommended standard for a dispensary, thus could not deliver quality health services.

### **Case 25: Mingoyo Dispensary**

Mingoyo dispensary is in Lindi District, serving Mingoyo Village and nearby Villages. The dispensary had 1 CO out of 2 required, 2 nurses out of 2 recommended for a dispensary. However, it had no medical attendants. According to Table 16, the dispensary had poor working premises, i.e., old and dilapidated buildings, experienced shortage of drugs and other medical facilities such as protective gears, delivery beds and etc. The dispensary had also inadequate HRH, such that, the available HRH worked for more than 12 hours per day. The dispensary had no housing or accommodation for HRH.

### **Lesson learned in Lindi Region**

- i. Poor working environment and hard life in some of the areas.
- ii. Remoteness of these areas and inaccessible hospitals due to poor infrastructure has caused the region to have few HRH.
- iii. The natives of this area are not welcoming compared to Mbeya, this natives' attitude has made the area to be hated by HRH.
- iv. Lindi Region have few HRH compared to Mbeya and Dar es Salaam, while the situation is worse in Kilwa District.
- v. Most dispensaries in Lindi Region are headed and served by medical attendant instead of CO as required.

**Annex 5: Interview guides for health managers (Regional and District Health Secretaries, Regional & District Medical Officers, Head of Dispensaries and Health Centres)**

FORM NO.....Date of the Interview:.....

Code names:.....

Name of the Public Health Facility:.....

**Informed Consent:**

Good day. I am Mr. Hassanal Issaya, a PhD Candidate in the School of Public Administration and Management in the Mzumbe University. This discussion is being conducted to get your inputs in a research study entitled as: **“The Determinants of Human Resources Retention for Healthcare in Tanzania’s Public Health Facilities”** The aim of the study is to inform evidence-based Human Resources management practices and policy restructuring for retention of HRH in Tanzanians public health facilities. I am especially interested in your feelings/attitudes/perceptions about the study and any suggestions you may have.

Please note that your participation is voluntarily, and that it will not cause any harm as whatever information you provide will remain strictly confidential between you and I. We pledge to ensure anonymity where required and as agreed between us through the use of code names. There are no foreseeable risks for your participation in this study, and if you have any question or concerns about participating in this study, please contact my supervisor/mentor at the following number +255 675 249875. You are free to withdraw from this study at any time of your choice without any negative or undesirable consequences to you. Please sign below as an indicator of your consent and voluntary participation in this study.

\_\_\_\_\_  
Signature of respondent/Participant

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

**Probing Questions**

1. What is the required number of health professionals in your jurisdiction (Region/District or Referral Hospital) as per population ratio recommended standard by WHOM? .....

2. What is the current number of HRH (per cadres and specialisation) and what is the deficit number of staff

Current number.....

Deficit number.....

3. Which factors do you think make your employees satisfied or dissatisfied with management services? Please, explain. At the level of the firm, how do you know about that?

.....  
.....  
.....

4. Does your firm have strategies (programmes) for employee motivation and satisfaction to make them stay working within the public health services? Please, mention them.

.....  
.....  
.....

5. Apart from personal achievement, working condition and leadership style as per objective only, what are other management aspects affect employees' in the hospital?

.....  
.....  
.....

6. In your opinion what best management practice do you think is needed to put in place to help enhance retention in public hospitals?

.....  
.....

7. In your own opinion, apart from Herzberg's two-factor theory, aspects such as working condition, salaries, supervisory and leadership styles, employee recognition, work itself and personnel growth factors, what other factors do you think are key for employees' retention?

.....  
.....  
.....

8. In your opinion what other factors or conditions which you feel needed to put in place to enhance retention?

.....  
.....  
.....

**Annex 6: Interview guide for ex-HRHs who left the Public Service**

FORM NO.....Date of the Interview:.....

Code names:.....

Name of the Public Health Facility:.....

**Informed Consent:**

Good day. I am Mr. Hassanal Issaya, a PhD Candidate in the School of Public Administration and Management in the Mzumbe University. This discussion is being conducted to get your inputs in a research study entitled as: **“The Determinants of Human Resources Retention for Healthcare in Tanzania’s Public Health Facilities”** The aim of of the study is to inform evidence-based Human Resources management practices and policy restructuring for retention of HRH in Tanzanians public health facilities. I am especially interested in your feelings/attitudes/perceptions about the study and any suggestions you may have.

Please note that your participation is voluntarily, and that it will not cause any harm as whatever information you provide will remain strictly confidential between you and I. We pledge to ensure anonymity where required and as agreed between us through the use of code names. There are no foreseeable risks for your participation in this study, and if you have any question or concerns about participating in this study, please contact my supervisor/mentor at the following number +255 675 249875. You are free to withdraw from this study at any time of your choice without any negative or undesirable consequences to you. Please sign below as an indicator of your consent and voluntary participation in this study.

\_\_\_\_\_  
Signature of respondent/Participant

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

**Probing Questions**

1. When did you leave/quit the public health sector? .....

2. What do you think health employees go when they left the public hospitals?

.....

3. Do you enjoy your current employment as compared to your previous job in the public health sector?

.....

.....

.....

4. If yes to question 3, what makes you enjoy your current employment than when you were working in the public health sector?

.....

.....

.....

5. Why did you decide to quit working in the public health sector? (Please, outline your pushing factors)

.....

.....

.....

6. What do you think are the effect and impact of you and other professions leaving the public health sector?

.....

.....

.....

7. In your own opinion, is there any cost associated with employee turnover?

Yes

No

( )

8. If yes (to question 7), what are they?.....

.....  
.....

9. Based on your knowledge and experience, what do you think is the future of public health sector in terms of having quality employees and service provision to the citizen?

.....  
.....  
.....

10. Based on question 9 above, what is your advice and recommendation to the health sector, professionals, policy-makers and the government at large? (measures and optional strategies to be taken to resolve the prevailing situation)

.....  
.....  
.....

11. From your own experience, what is your message to the policy-makers and the government in terms of policy implications?

.....  
.....

**Annex 7: Questionnaires for ex-HRH who left the Public Health Services**

FORM NO.....Date of the Interview:.....

Code names:.....

Name of the Public Health Facility:.....

**Informed Consent:**

Good day. I am Mr. Hassanal Issaya, a PhD Candidate in the School of Public Administration and Management in the Mzumbe University. This discussion is being conducted to get your inputs in a research study entitled as: **“The Determinants of Human Resources Retention for Healthcare in Tanzania’s Public Health Facilities”** The aim of of the study is to inform evidence-based Human Resources management practices and policy restructuring for retention of HRH in Tanzanians public health facilities. I am especially interested in your feelings/attitudes/perceptions about the study and any suggestions you may have.

Please note that your participation is voluntarily, and that it will not cause any harm as whatever information you provide will remain strictly confidential between you and I. We pledge to ensure anonymity where required and as agreed between us through the use of code names. There are no foreseeable risks for your participation in this study, and if you have any question or concerns about participating in this study, please contact my supervisor/mentor at the following number +255 675 249875. You are free to withdraw from this study at any time of your choice without any negative or undesirable consequences to you. Please sign below as an indicator of your consent and voluntary participation in this study.

\_\_\_\_\_  
Signature of respondent/Participant

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

How satisfied I was with this aspect of work?					Aspect of the Job	How important these aspects of my job are to me?				
Very little	A fair amount	Quite a bit	A lot	Very much		Very little	A fair amount	Quite a bit	A lot	Very much
1	2	3	4	5	My salary	1	2	3	4	5
1	2	3	4	5	Fair company policy and procedure	1	2	3	4	5
1	2	3	4	5	Being recognised when I do a good job	1	2	3	4	5
1	2	3	4	5	Having a supportive supervisor	1	2	3	4	5
1	2	3	4	5	Having supportive co-workers	1	2	3	4	5
1	2	3	4	5	Feeling good about my work	1	2	3	4	5
1	2	3	4	5	I get high status at work	1	2	3	4	5
1	2	3	4	5	There is opportunity for personnel growth at work	1	2	3	4	5
1	2	3	4	5	There is opportunity for training for personnel advancement	1	2	3	4	5
1	2	3	4	5	My job is highly secured	1	2	3	4	5
1	2	3	4	5	I am responsible for my job	1	2	3	4	5
1	2	3	4	5	Hardworking is a journey for personal achievement	1	2	3	4	5

**Annex 8: Questionnaires for public health staff**

FORM NO.....Date of the Interview:.....

Code names:.....

Name of the Public Health Facility:.....

**Informed Consent:**

Good day. I am Mr. Hassanal Issaya, a PhD Candidate in the School of Public Administration and Management in the Mzumbe University. This discussion is being conducted to get your inputs in a research study entitled as: “**The Determinants of Human Resources Retention for Healthcare in Tanzania’s Public Health Facilities**” The aim of of the study is to inform evidence-based Human Resources management practices and policy restructuring for retention of HRH in Tanzanians public health facilities. I am especially interested in your feelings/attitudes/perceptions about the study and any suggestions you may have.

Please note that your participation is voluntarily, and that it will not cause any harm as whatever information you provide will remain strictly confidential between you and I. We pledge to ensure anonymity where required and as agreed between us through the use of code names. There are no foreseeable risks for your participation in this study, and if you have any question or concerns about participating in this study, please contact my supervisor/mentor at the following number +255 675 249875. You are free to withdraw from this study at any time of your choice without any negative or undesirable consequences to you. Please sign below as an indicator of your consent and voluntary participation in this study.

\_\_\_\_\_  
Signature of respondent/Participant

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

**Section A: Background Information**

Please, mark with a (v) where applicable

Name of the organisation

.....

What is your position/title in the organisation (write .....

3. What is your Sex?

1. M ( )

2. F ( )

What is your age (years)?

18-25 ( )

26-35 ( )

36-45 ( )

46-55 ( )

56 and above ( )

5. What is your highest education level?

Primary education ( )

Secondary education ( )

Diploma ( )

First degree ( )

Master degree level ( )

Doctoral degree level ( )

6. How many years have you been working for the public health service?

4 years and below ( )

5 – 15 years ( )

16-25 years ( )

26 years and above ( )

7. Marital status

Married ( )

Single ( )

Widow ( )

Divorced ( )

8. How many times have you changed your job or career?

Never ( )

Just once (1 x) ( )

Just twice (2x) ( )

Just thrice (3x) ( )

More than four times (4 and more)( )

9. Are you a member of any trade union at your work place?

Yes ( ) No ( ) Don't know ( )

10. Have employees in your organisation ever conducted and organised a strike demonstration or any go-slow

Yes ( )

No ( )

11. If yes, in (a) when was it.....and explain why?.....  
.....  
.....

12. Are you happy with your current employer? What aspects make you happy or unhappy with your current employer or job? Why?  
.....  
.....  
.....

13. The management in my organisation is very concerned and it addresses employees' problems positively. Do you agree with this statement?

Yes ( )

No ( )

Don't know ( )

**Section B:**

The aim of this part is primarily to inquire if you are aware of any action that has ever been taken by the public health sector as an employees' retention strategy from the list below. Please look at each of the retention strategies currently offered by the public health sector in the table below and indicate in Column A by circling:

1: Yes if you are aware of the strategy or 2: No if you're not aware

Column B has a list of retention strategies, please indicate in Column B by circling your view of the effectiveness of the strategy, where:

1: Not effective, 2: slightly effective, 3: neutral, 4: effective, 5: very effective

S/N	Employees' retention strategies	Are you aware of any of these strategies?		In your opinion, how effective is each strategy?				
		Column (A)		Column (B)				
		Yes	No	Not Effective	Slightly Effective	Neutral	Effective	Very Effective
	Personnel advancement							
1	Good training and development opportunity	1	2	1	2	3	4	5
2	Promotion based on performance and competency	1	2	1	2	3	4	5
3	Succession of leadership	1	2	1	2	3	4	5
4	Clear human resource development plan	1	2	1	2	3	4	5
5	Recognition of employee training and achievement	1	2	1	2	3	4	5
	Improvement of working condition							
6	Up to date technology to perform	1	2	1	2	3	4	5
7	Enough and up to date working equipment	1	2	1	2	3	4	5
8	Fair and motivating employment policies and labour laws	1	2	1	2	3	4	5
9	Provision of health and wellness programmes	1	2	1	2	3	4	5
	Salary packaging							
10	Competitive salary package offered	1	2	1	2	3	4	5
11	Equal pay for work of comparable value	1	2	1	2	3	4	5
12	Salary payment is based on qualification and job weight	1	2	1	2	3	4	5

S/N	Employees' retention strategies	Are you aware of any of these strategies? Column (A)		In your opinion, how effective is each strategy? Column (B)				
		Yes	No	Not Effective	Slightly Effective	Neutral	Effective	Very Effective
13	Provisional of good retirement benefit	1	2	1	2	3	4	5
	Supervisory and leadership styles							
14	Allows participation in decision making	1	2	1	2	3	4	5
15	Mentor and advice staff on their job	1	2	1	2	3	4	5
16	Objectivity of performance evaluation and feedback	1	2	1	2	3	4	5
17	Encourage good work relationship	1	2	1	2	3	4	5
18	Promotion is on merit basis	1	2	1	2	3	4	5
19	Professional associations are encouraged	1	2	1	2	3	4	5

S/N	Employees' retention strategies	Are you aware of any of these strategies? Column (A)		In your opinion, how effective is each strategy? Column (B)				
		Yes	No	Not Effective	Slightly Effective	Neutral	Effective	Very Effective
	Other retention factors							
20	Overtime and extra duty allowances	1	2	1	2	3	4	5
21	On call allowances	1	2	1	2	3	4	5
22	Provision of free housing	1	2	1	2	3	4	5
23	Provision of risk allowances and compensation	1	2	1	2	3	4	5
24	Human resources financing	1	2	1	2	3	4	5
25	HIV and AIDS workplace policy	1	2	1	2	3	4	5
26	Access to health professionals and health care	1	2	1	2	3	4	5
27	Leadership, governance and accountability	1	2	1	2	3	4	5
28	Partnership in human resources (PPP)	1	2	1	2	3	4	5
29	Comprehensive human resources information system at all levels	1	2	1	2	3	4	5
30	Work force management and utilisation	1	2	1	2	3	4	5
31	Human resources for health coordination	1	2	1	2	3	4	5

### Section C:

To what extent do the following aspects of the job retention factors influence you to continue working in the public health sector?

[1: Very low, 2: Low, 3: Neutral, 4: High, 5 : Very high]

S/ N	Variable	Levels of extent				
1	Recognition	1	2	3	4	5
2	Work itself	1	2	3	4	5
3	Personnel growth	1	2	3	4	5
4	Responsibility	1	2	3	4	5
5	Achievement	1	2	3	4	5
6	Advancement	1	2	3	4	5
7	Supervisory and leadership style	1	2	3	4	5
8	Working condition	1	2	3	4	5
9	Salary	1	2	3	4	5
10	Company policy	1	2	3	4	5
11	Job security	1	2	3	4	5
12	Interpersonal relation	1	2	3	4	5
13	Status	1	2	3	4	5

**Section D:**

The following questions are not about work force retention but are moderating factors (please circle your preferred responses where:

1: not at all, 2: to some extent, 3: neutral, 4: quite a large extent, 5: to a great extent

S/N	Question statements	Level of extent				
		1	2	3	4	5
1	To what extent do you feel that the current social economic status has motivated you to stay employed in the public health sector?					
2	To what extent age is a factor for you to stay working in the public health sector?					
3	To what extent family/commitment responsibility (due to marital status) has been a base for your continuing working in the public health sector, despite other factors which might be demotivating you?					
4	Is tenure in health professional a factor influencing you to continue working in the public health sector or quitting the job? If yes or not, to what extent is it a contributing factor?					
5	To what extent sex motivate you to remain or quit from working for the public hospitals?					

**Section E: Feelings of employees on working in public hospitals.**

The following set of statements relates to your feelings about public hospitals.

[Please respond by circling the number which best reflect your own evaluation.]

24. If the general conditions and working environment remain as it is, the possibility to quit this job will be:

Very low

Very high

[1, 2, 3, 4, 5]



## **Annex 9: Checklist Schedule of General Condition of Public Health Service**

1: Record comments on:

Quality of working premises

Types and quality of procured materials

Fittings and equipment

Availability of protective gears for protection of hazardous activities such as:

(Surgeries, operation and other contagious diseases)

2. Cross check validity of data collected through:

(a) Interviews

(b) Questionnaires

(c) Documentary sources

This will be done by observing the physical phenomena or occurrence on the ground to mirror the reality by looking physically.

3. Physical facilities review:

(a) Number and standard of employee housing/quarter available

(b) Number of buildings for offices and wards available against the required standard

(c) Office spaces to allow maximum privacy

4. Medicine and other medication facilities

Check the type of medicine and medical facilities provided to patient (if they are enough and given on timely basis)

5. The existing relationship between patients and health personnel:

Check the relationship if it is a friendly one, this will indicate professionalism among health workers and readiness to continue working in the public health sector (commitment of employees at work).

6. Queues in service provision

This will indicate and help the researcher to establish patients-HRH population ratio (i.e. doctors: patient ratio and nurse: patient ratio as per WHO recommended ratios).

7. Absenteeism/strikes and go-slow

The researcher will check if there is an element of absenteeism, or go-slow among employees. This will inform the researcher the real situation at workplaces, hence predict the future of the public health sector as far as retention of employees is concerned.

**Annex 10: Checklist list for Data Collection Instruments**

Checklist for key informants:

(A) Factors that influence retention of employees & turnover

(1) Work environment: Checklist

Indicators	Tick	Explanation
Existence of appropriate technology		
Modern working equipment		
Presence of safety gears		
Guarantee of security of tenure		
Provision of health/wellness programme		

(2) Company policy: Checklist

Indicators	Yes	No	Explanation
Existence of freedom of expression and association?			
Employment contract available?			
Accessibility and transparency of policy?			
Service details available?			
Contract duration stated?			

(3) Interpersonal relations: Checklist

Indicators	Yes	No	Explanation
Existence of teamwork			
Does delegation of power exists?			
Time for interaction with co-worker available?			

(4) Job security: Checklist

Indicators	Tick	Explanation
Availability of life insurance		
Availability of job safety gear		
Availability of clear employment contract document		

(5) Effect of labour turnover to the public health sectors and other health stakeholders

To those who remains with the public health service: Checklist

Indicators	Yes	No	Explanation
Reduce access to clinical wards			
Lower the quality of health care and productivity			
Decreases staff morale			
Leads to higher provider costs			
Increases workloads to staff			

To other health stakeholders: Checklist

Indicators	Yes	No	Explanation
Creates negative image of the organisation			
Causes disruption of social and communication network			
Loss of organisation memory			
Leads to higher recruitment cost for replacement			

(6) Basic personal needs of HRH to make them remain with the public health sector: Checklist

Indicators	Yes	No	Explanation
Availability of extra work pay			
Availability of workplace hazards allowance			
Availability of on call allowances			
Availability of risk allowances			
Availability of housing allowances			