HUMAN RESOURCE MANAGEMENT PRACTICES AND RETENTION OF PROFESSIONAL HEALTH WORKERS IN PUBLIC DISTRICT HOSPITALS IN KIGALI, RWANDA

BY

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DECLARATION

Declaration by Candidate

This thesis is my original work and has not been presented in any other university/institution for consideration of any certification. This research has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references are cited using current APA system and in accordance with anti-plagiarism regulations.

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DEDICATION

To

My loved wife, Emerence Umwali

My daughters:

Michelle Ndikumana Atete & Sheila Amelia Ndikumana Kundwa

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This work has been completed with assistance from many people to whom I owe a word of thanks, I am very grateful to my supervisors, Professor Joshua Kwonyike and Professor Ruth Tubey, for their immense support since my introduction to Moi University and all the way up to the completion of this work. Their advice, corrections and remarks have been unwaveringly and wholeheartedly supportive.

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ABSTRACT

Retaining the health workforce has been considered as an important pillar to the health system. However, the challenge of human resources for health in terms of turnover of health workers in Rwanda has been more pronounced in the recent years. The purpose of this study therefore, was to investigate the influence human resource management practices on the retention of professional health workers in public district hospitals in Kigali. The study objectives were: to establish the effect of performance management function on the retention of professional health workers, to determine the effect of financial incentives on the retention of professional health workers, to establish the effect of non-financial incentives on the retention of professional health workers, and to determine the effect of participation and involvement in the decision-making on the retention of professional health workers. The study was devised in the social exchange theory and the equity theory as its underpinning theoretical framework . Grounded in the philosophical paradigm of pragmatism, the study used a cross-sectional research design with a mixed-methods approach. With a population of 402 individuals, the study considered a sample of 252 respondents including doctors, nurses, midwives, pharmacists and dentists from 3 district hospitals. The study instruments entailed a questionnaire as quantitative data collection tool, and interviews and focus group discussions as qualitative data gathering tools. To analyse quantitative data, descriptive statistics were used to assess the perceived status of human resource management practices and the magnitude of intentions to stay, and inferential statistics used to show the effect of predictors on the outcome variable by plotting a multiple linear regression. Qualitative data were analyzed in themes and reported in narrative and verbatim quotes, and were used to complement descriptive findings for better understanding of the magnitude of the study variables. The findings of this study showed a significant and positive effect of performance management function (β=0.183; P=0.004), financial incentives (β=0.189; P=0.003), non-financial incentives (β=0.108; P=0.007) and participation and involvement in decision-making (β=0.425; P=0.000) on retention of health workers. This study is expected to be a major contributor for the improvement of the health system in the country and other similar settings as it has provided the insights for strategic orientation in the area of human resources for health, especially for enhanced retention strategies in relation with integrated human resource management approach.

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ABBREVIATIONS AND ACRONYMS

CVI	: Content Validity Index
DV	: Dependent Variable
HR	: Human Resource
HRH	: Human Resources for Health
HRM	: Human Resource Management
HRMPs	: Human Resource Management Practices
ILO	: International Labor Organization
IR	: Irrelevant
ISCO	: International Classification of Occupation
IV	: Independent Variable
MINALOC	: Ministère de l'Administration Locale
MINISANTE	: Ministère de la Santé
MOH	: Ministry of Health
RDB	: Rwanda Development Board
ROI	: Return on Investment
SPSS	: Statistical Package for Social Sciences
WHO	: World Health Organization
ROI	: Return on the Investment
PMF	: Performance Management Function
FI	: Financial Incentives
NFI	: Non-financial Incentives
PIDM	: Participation and Involvement in Decision-Making
IS	: Intention to Stay
RSSB	: Rwanda Social Security Board

OPERATIONAL DEFINITION OF TERMS

Human Resource Management (HRM): it is the function of the organization having systems and policies aiming at people within that organization.

Employee incentive: it refers to a scheme devised by employers and prescribed to employees for them to do the job, in terms of compensation, recognition, reward or appreciation.

Involvement and participation: it is the process of empowering employees by allowing them to participate in the organization decision-making processes, in order to improve activities that happen at different levels of the organization.

Performance management function: it is a process throughout which employers evaluate employees' performance, and whereby management measures performance against planned targets, provides feedback to employees and documents recommendations for future management action.

Intention to stay: it refers to the employee considering to remain in the present employment relationship with their current employer on long-term basis.

Professional health worker: a professional health worker in this study will be any of the professional health staff in the public district hospital including doctors (specialists or practitioners), midwifes, nurses, pharmacists and dentists.

District Hospital: it is a hospital at District level that receives referrals from and provides general support to health centres, and which works under a referral hospital.

Public Hospital: it is a hospital owned by the government and which receives the government funding.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter relates to the background to the study, statement of the problem, the purpose and specific objectives of the study, the study hypotheses, the scope and significance of the study.

1.1 Background to the Study

The concept of human resource management practices is traced back long time ago, as old as human resource management (HRM) itself (Aslam, Aslam, Ali, Habib, & Jabeen, 2013). In fact, the first human resource management practices are traced back in the ancient China where they [HRMPs] were applied in the army and where the organization of tasks and jobs required good leaders to initiate organizational activities (Aslam et al., 2013). During this period of time, so many organized activities were performed in different areas and they can be associated with practices similar to human resource management in its modern application.

Modern human resources management goes back to the 18th century with the industrial revolution era. During this time, the idea that people are important assets to the organization and that their wellbeing needs to be taken with much consideration started to evolve from the views of Robert Owen and Charles Babbage (Aslam et al., 2013). By advancing the argument that people were crucial to the success of organizations, the two men advocated for the wellbeing of employees. They stressed that employee wellbeing could lead to perfect work and that there was no survival for organizations which did not take care of their employees' wellbeing.

With the influence of Frederick Winslow Taylor (1856-1915), human resource emerged as a specific field and stood as a matter of focus in the 20th century (Rotich, 2015). During this period of time, much attention was shifted to the improvement economic efficiency and the key eye was on the inputs that could effectively contribute to the manufacturing process and thereafter improve productivity. In the 1970s, there was an introduction of the HR Management (Aslam et al., 2013). In fact, the introduction of new technologies was followed by existence of multinational organizations, where a sense of globalization was starting to spread around the world. With regard to this, the Personnel Departments became Human Resource Departments that needed to deal with a growing workforce in the global context (Aslam et al., 2013).

Due to a large pool of workers in the 1980s, changes in the practices relating to work processes were observed as the managers' targets started to shift to increased productivity while at the same time they wanted to reduce the number of employees. As for that, for example, HRM tasks moved from attracting candidates to selection of employees (Aslam et al., 2013). During this time, the HRM function also was concerned with attracting attention of personnel practitioners, and the managers' concern was the workforce that would contribute to excellence of organizations, moving away from traditional practices that brought to adversarial industrial relations (Taylor, 2011).

The changes that occurred in the economic background in the 1990s onwards came with another way of thinking in the area of Human Resource Management. In fact, the increase in the pace of globalization, progress in the high tech especially with the spread of internet and web services became hectic rivalry (Becker, Huselid, & Ulrich, 2001). This made organizations consider human resource management function with much more attention and give it a strategic level of importance in the organization, and from

that time onwards, the overall function of human resource management took the move towards attracting, preserving and holding talented intellectual capital.

In view of the above consideration of human resource management, there have been so many attempts to describe HRM practices as organizational activities that organizational management implements towards employees as a way of ensuring there is a fulfillment of organizational goals (Schuler & Jackson, 1987b). Human resource management practices being a very old concept therefore, many researchers have identified them under different names. De kok, Uhlaner & Thurik (2003) referred to them as best practices; they have been described as high-performance practices by Huselid (1995), or formal (de Kok & Uhlaner, 2001), or sophisticated (Golhar & Deshpande, 1997) or as professional (Gnan & Songini, 2003). In the words of Pfeffer (1998), the most appropriate term given to them is "best HRM practices". From these different points of view, there is no single way of grouping these activities in a set of practices. However, it arises from these different considerations that these practices commonly refer to organizational practices towards employee recruitment and selection, employee rewards, communication, participation and involvement, and performance management.

The concept of employee retention relates to undertaking taking measures to encourage and make employees to remain in the organization for the maximum period of time (Griffeth & Hom, 2001) It determines the organizational present and long term capacity to retain employees (Kyndt, Dochy, Michielsen, & Moeyaert, 2009a). Employee retention has therefore been a matter of focus in today's work environment because the organization survival relies a lot on its capacity to retain key employees (Aquino, Griffeth, Allen, & Hom, 1997)Therefore, recruitment of skilled employees who have the capacity to serve the organization does not stand just stand alone, but it calls for

organizations to devise strategies aiming at retaining the workforce (Kyndt et al., 2009a) While employee retention constitutes one of the most critical issues that organizations are facing today(Allen, 2008) (Allen, 2008), it becomes imperative for all organizations to invest in and retain the human capital. As a matter of fact, in addition to organizational capacity to handle customer satisfaction and organizational performance and many other variables, being able to retain key employees is a major determinant of the organizational ability to maintain its long-term health and success (Bidisha & Mukulesh, 2013).

The need for continuous focus on employee retention is associated with the nature of challenges that organizations are facing today (Arachchillage & Senevirathna, 2017). These challenges concern the growing pressure of globalization, innovation in technology and global competition on the continuing move (Burke & Ng, 2006) in today's organizational environment. In order to overcome challenges that are associated with these factors, organizations need to retain skilled employees because their knowledge and skills play an important role for the survival of organizations (Kyndt, Dochy, Michielsen, & Moeyaert, 2009b).

As organizations continue to put much more focus on employee retention, this practice has spread in different sectors of business environment (Albano & Leaver, 2005; Lethbridge, 2017; Nettle, Semmelroth, Ford, Zheng, & Ullah, 2011; Salman, Ahmad, & Matin, 2014). In the health sector, employee retention has been given much more consideration because human resources for health are among the core foundations of the health system (World Health Organisation, 2010) as it was also stressed through the United Nations Millennium Development Goals (L. Chen et al., 2004; Danon-Hersch & Paccaud, 2005) that were formulated to facilitate the achievement of health targets

by 2015. It is argued that countries can make health systems viable if only they can embark on the investment into the retention of health workforces (Lehmann, Dieleman, & Martineau, 2008)

Bonenberger, Aikins, Akwengo & Wyss (2014) state that when the health workforce is well motivated and consider to remain, institutions take a lot of advantage in the optimization of team relations, strong relationships between the staff and local communities and building up of necessary competencies to perform duties, which leads to optimum care service delivery(Willis-Shattuck et al., 2009) (Willis-Shattuck et al., 2009).

1.2 Statement of the Problem

The management scenario in the era of globalization, increase in work knowledge and accelerating rate of technological advancement among other trends, require organizations not only strive to acquire competent employees but also and most importantly make critical efforts to retain the key human capital (Josan, 2013). In order to prevent loss of competent employees caused by unnecessary turnover, organizations hinge on employee retention as strategic issue to maintain the overall targeted productivity and quality of services offered (Schuler & Jackson, 1987a).

In the health care setting, the 2000 WHO report argues that human resources are the most important inputs of the health system (World Health Organisation, 2000) for their skills and experience are of great intellectual capital on which hinge any success of the health care system. The retention of health workers as a major input to boost the health system being important in this context, though, the health sector is suffering the shortage of health personnel especially in developing countries (Lowell, 2003; Mensab, 2008; Pang, Lansang, & Haines, 2002; Sapkota, Teijlingen, & Simkhada, 2014), and in

many cases this situation is explained by lack of capacity to retain health employees for many organizations.

In fact, turnover is noticed as a big challenge in many health care institutions and while health worker migration is not confined to external movement, in-country migration, from rural to urban and from public to private sector, is also creating problems like leaving some of institutions both understaffed and/or with staff who are often under qualified (El-Jardali, Tchaghchagian, & Jamal, 2009). As it is argued by the WHO (2006), poor retention strategies make health care institutions carry the burden of turnover and its associated challenges including disruptions, increased staff workload, loss of institutional knowledge, reduction of morale among team members and all in all inefficiencies in work processes.

Turnover of health workers being an issue of concern in developing countries, the situation becomes very complex in sub-saharan Africa with both internal and external migration of the health personnel. Connell, Zurn, Stilwell, Awases, & Braichet (2007) state that in this area Africa is faced with challenges of turnover in the health sector caused by external migration of the health personnel.

The problem of turnover among health workers is also stressed in the countries in the region. For example, a study conducted in Uganda (Hagopian, Zuyderduin, Kyobutungi, & Yumkella, 2009) shows that health institutions in this country are faced with important cases of turnover. In the same view point, the issue of intentions to leave and turnover in health care institutions has also been documented by Kenyan researchers (Mwaniki & Dulo, 2008) where doctors and nurses migrate to other countries or leave public health facilities for private health care institutions.

As for other developing countries especially in sub-saharan Africa and the region, Rwanda is also suffering from high turnover rates among professional health workers. In fact, there is growing evidence that the issue of retention of professional health workers in public district hospitals in Rwanda has been more pronounced in recent years (Friederike, 2009; Habarugira, 2012; Lievens, Serneels, Butera, & Soucat, 2010; MINISANTE, 2014). In fact, the challenge of the gap in Human Resources for Health in the country (Condo et al., 2014) expressed by insufficient number of qualified staff (MINISANTE, 2014) does not stand alone, but it is aggravated by high rates of turnover among professional health workers (Habarugira, 2012; Kamanzi & Nkosi, 2011; MINISANTE, 2014; Nkomeje, 2008). For instance, available figures show 11.3% of the rate of turnover among doctors in public district hospitals in Rwanda between 2010 and 2013. For the year 2014 only, the rate of turnover was 12.8% and 10.9 among doctors and nurses (and midwives) respectively (MINISANTE, 2014).

As a result of this obstruction in the health sector, health care institutions-especially district hospitals as major units of health care service provision in Rwanda-will continue to have difficulties to deliver quality of services, persisting workflow inefficiencies, repetitive costs related to hiring the health workforce and dissatisfaction of patients, all of which have significant negative effects on quality of care and patient safety. This being a matter of concern for human resources for health in the country, the study intends to find out whether a management approach can respond to the persisting turnover challenges by investigating into the magnitude of existing human resource management practices in public district hospitals in Rwanda and their effect on professional health workers' intentions to stay in the health care institutions and health care service delivery.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to establish the influence of human resource management practices (HRMPs) on the retention of professional health workers in public district hospitals in Rwanda.

1.3.2 Specific Objectives

The specific objectives of this research were:

1. To establish the effect of performance management function on the retention of professional health workers in the public district hospitals in Kigali, Rwanda
2. To determine the effect of financial incentives on the retention of professional health workers in the public district hospitals in Kigali, Rwanda
3. To establish the effect of non-financial incentives on the retention of professional health workers in the public district hospitals in Kigali, Rwanda
4. To determine the effect of participation and involvement in the decision-making on the retention of professional health workers in the public district hospitals in Kigali, Rwanda.

1.4 Hypothesis

The study tested the following four null hypotheses

H_{01}: Performance management function has no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.

H_{03}: Financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.

H_{03}: Non-financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.

H_{04}: Employee participation and involvement in decision-making has no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.

1.5 Significance of the Study

This study being conducted in the area human resource management, its contribution lies in the efforts to devise relevant intervention measure aiming at retaining professional health workers in Rwanda. In fact, the results of this study are important to human resource managers in Rwanda, hospital management in general especially human resources for health planners, and HR professionals in the health care service delivery, the health workforce (including doctors, nurses, dentists, pharmacists, etc) and the world of academics in the health system.

In the first instance, the study findings will inform hospital management authority and health planners. As for that, the problem of health care turnover continuing to grow in the public health care institutions, these players will be informed of the levels of human resource management practices in public district hospitals, the extent of intentions to stay and the effect of the former on the latter to take subsequent and appropriate action. Results of the study may also be used to assist health care planners in formulating strategies to increase retention rates, job satisfaction and organizational commitment among health employees.

Second, the findings of the study will also benefit the health workforce including doctors, nurses, midwives, pharmacists and dentists as beneficiaries of best management practices. By considering both financial and non-financial incentives, health workers' involvement and participation in decision-making processes, and effective performance management function in hospitals leads to job satisfaction, the

human resource management bodies and health care planners' action in relation with the will to reduce turnover intentions and turnover will benefit employees by devising a different intervention measures in their favor. Health care service delivery being at the centre of any intervention in the health care setting, it is anticipated that by creating rooms for reduced turnover in the hospitals, patients will also benefit from stable health workers upon whom best management practices instill the increased levels of satisfaction and commitment to their organization and duties.

The third and final significance lies in the study's theoretical consideration as it advances knowledge and understanding of how key HRM interventions affect employee retention in health care institutions. In this regard, the findings of the study add to the current dearth of literature of Human Resources for Health. The interdisciplinary nature of this study also justifies its significance due to the approach of bringing into play the application of social sciences on health studies, which therefore explores the retention of health workers through different HRM practices. The area of study being currently under researched, this research provides new data to test western theories and assumptions found in HRM studies about employee retention, especially in the health care setting.

1.6 Scope of the Study

This study was conducted in the area of human resource management. More specifically, it focused on human resource management practices and their influence on the institutions' capacity to retain employees. In fact, the study covered human resource management practices that are believed to affect employee retention. These are implementation of performance management function, financial and non-financial incentives, and involvement and participation decision-making processes. The study

participants being health workers who were employed in the hospitals where the study was conducted, the concept of retention concerned professional health workers' intentions to stay as the latter are major predictors of retention. In this view, the study investigated on health workers' perceived levels of existence, availability and provision of human resource management practices in the health institutions, and whether they are intending to stay in the hospital or health care service delivery for the next three years.

Using cross-sectional research design, the study was implemented in 3 public District hospitals in Kigali city, and data collection was performed between May and June 2017, then covering a period of four months.

The study participants were professional health workers including doctors (both generalist and specialist practitioners, and public health doctors), nursing professionals (including public health nurses), midwifery professionals (including public health midwives), pharmacists and dentists. The definition of a professional health worker was the basis for the inclusion and exclusion criteria of the study participant as recommended in the International Standards Classification of Occupations as professional health workers in the literature of Human Resources for Health (International Labour Organization, 2012).

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter opens with a theoretical framework and focuses on previous research knowledge about human resources management practices and employee retention. Literature describing the nature of human resource best practices that relate to employee retention, in relation with performance management function, financial and non-financial incentives, and employee participation and involvement in organizational decision making processes. The concept of retention was also reviewed. Finally, empirical literature of human resource management practices and employee retention was reviewed. The selection of documents to use and their importance priority depended on their relevance to the developed topic and whether they provide current knowledge in the field of study.

2.1 Theoretical Framework

2.1.1 Social Exchange Theory

The development of the Social Exchange Theory is traced back to almost five centuries ago taking its early footsteps with the works of Thibaut & Kelley (1959) but Homans (1961) is recognized as the founder of the theory which later kept being enriched by inputs from other different theorists. For example, Blau (1964) and Emerson (1976) contributed to the SET by developing more on the exchange perspective as it applies within the field of sociology. The theory is founded on both psychological and sociological frameworks that theorize that cost-benefits analyses and the comparison of alternatives are the foundations of human relationships within the context of social exchange (Homans, 1961).

The social exchange theory is fundamentally grounded on the two main concepts: reciprocity and equity (Homans, 1961), which both generally communicate that the individual comfort derives from their perceiving that the benefits received from a relationship are equal or almost equal to the efforts produced as inputs to that relationship, which determines the type of response after such a perception. In fact, the main characteristic of social exchanges is the feeling of equity, which in turn implies reciprocity to be present (Cropanzano & Mitchell, 2005). Therefore, the individual level of relative perception of satisfaction will lead to a more likelihood of reciprocity, and such satisfaction in the exchange of relationships will more likely push them to maintain the relationship. In that context, social exchange theory proposes motivation as the outcome of rewards individuals gain from social exchanges, and in the absence of which [rewards] they are motivated to avoid costs: either punishments or counterfeit rewards from that relationship in the social exchanges (Blau, 1968; Homans, 1958).

In the words of Homans cited by Emerson (1976), the system of social exchange was summarized in three main propositions: (1) success proposition suggesting that individuals feeling that there are rewarded for their actions will respond with a tendency to repeat the action; (2) the stimulus proposition basing on the assumption that the more often a particular stimulus resulted in the past will create the likelihood of responding to it in the future and (3) the deprivation-sanitation proposition suggesting that the more often the individual has received the reward in the past, the less value s/he will attach to any further unit of that reward

As it is captured in the work of Aryee, Bdhwar & Chen (2002), the social exchange theory in the work environment views the employment relationships as both social and/or economic exchanges. Described as short-term relationships economic exchange relationships involve weaker interpersonal relationships, characterized by the fact that

there are bargained or binding arrangements enforceable through legal sanctions (Blau, 1964), working as bilateral transactions between two parties (Molm, 2003). As it is learnt from Blau [ibid] long-term relationships are created by social exchanges, which, initiated by organizations through a particular treatment of their employees, are founded on the assumption that the latter will reciprocate in response to such a treatment from organizations.

The starting point of social exchange relationships as non-negotiated exchanges in the work environment is when the organization is perceived by its employees as valuing their inputs and contributions and caring for their overall wellbeing (Eisenberger, Fasolo, & Davis-Lamastro, 1990). It is on this basis, therefore, that employees in turn will reciprocate with positive attitudes and behaviors at work, as they build on such perceptions that the organization is equitably dealing with them (Aryee et al., 2002; Haas & Deseran, 1981). This argument of social exchange attached to the norm of reciprocity is also stressed by Gouldner (1960), and Settoon, Bennett & Liden (1996) Selton. The latter emphasize that high quality exchanges are established by the direction of positive beneficial actions towards employees initiated by organizations and/or their representatives, and this in turn pushes employees to reciprocate in a positive ways benefiting the organizations. In this view point, the availability and provision of training and development programs to employees will be reciprocated by desirable work-related behaviors (Haas & Deseran, 1981; Moorman, Blakely, & Niehoff, 1998), and the people representing the organizations, like managers, will be the ones to engage in social exchange with employees as institutions themselves as parties in the relationships cannot have perceptions towards their members (Aryee et al., 2002).

In the area of Human Resource Management, the social exchange theory serves as an approach to understand the relationships that exist between human resource

management practices that are devised by organizations towards employees and the response of the latter being considered as the reciprocal reaction. In fact, in contrast with hard human resource management practices (Storey, 1989) which fully had a focus on reduction of labor costs and increasing efficiency through procedures and rules aiming at controlling employees, soft human resource management practices (Legge, 1995) are based on the mutual interests between organizations and employees, through their empowerment, development and trust for enhanced worker and organizational performance.

Pfeffer (1998) and Marchington & Grugulis (2000) consider soft human resource management practices as high commitment practices that signal management positive treatment of employees through greater worker empowerment and involvement in decision-making processes; extensive communication, training opportunities aiming at task-related skills and personal development, team-working activities that encourage ideas for creative solutions, provision of adequate reward packages in relation with worker effort, reduction of status between management and staff, blue collar and white collar workers, with all workers valued regardless of their role within the organisation.

In response to such practices, basing on the assumption that employees' voluntary actions including intentions to stay (or leave) derive from their perceptions on the expected returns from their contributions to the organization (Osman, Noordina, Dauda, & Othmanb, 2016), the theory explains the reciprocal processes of the relationships between employers and workers (Wittmer, Martin, & Tekleab, 2010). Therefore, the reciprocity relationships as established between two parties will affect individual behaviors including motivation and lower or no decisions to withdraw from the institution, and failure in this exchange relationships will lead to opposite behaviors including consideration to leave the organization (Avanzi, Fraccaroli, Sarchielli,

Ullrich, & van Dick, 2014; Schulz, Luthans, & Messersmith, 2014; Wittmer et al., 2010)

In this view point, some scholars have demonstrated the outcome behavior resulting from social exchange relationships in the light of social exchange theory. In the studies conducted by Chen & Yu (2014) and Sanjeevkumar (2012), it was found out that increased retention rates resulted from employee reciprocal behavior from job security, conducive work environment and social support programs tailored for employees. In addition, a study examining supervisory relationships (Brimhall, Lizano, & Mor Barak, 2014) the level of job satisfaction in terms of communication, decision making and employees empowerment through teams for problem solving affected employee intentions to remain (or leave). In addition, the interface of social exchange was used by Nouri & Parker (2013) and realized that commitment of employees as a result of training and career growth opportunities lead to reduced turnover intentions in the accounting firms.

All in all, the social exchange theory having served as a tool to explain the relationships between organizations and their employees by describing workplace behavior in terms of interactions between employers and employees (Biron & Boon, 2013; Cropanzano & Mitchell, 2005; B. D. Smith, 2005), it was used in this study to predict the effect human resource management practices on the retention of professional health workers in Rwanda. By choosing this theory, it was anticipated that best human resource management practices in the hospitals attract positive work behavior which makes them remain in the institutions.

2.1.2 Equity Theory

The equity theory was developed by John Stacey Adams with the primary focus that calls for a balanced fairness between employee inputs including hard work, skill level, acceptance or enthusiasm, and employees perceived level of outputs in terms of salary, benefits, and other intangible outputs such as recognition (Adams, 1965). In its reviewed version by (Waster, Berscheid, & Waster, 1973) the authors show that social relationships are the basis for perception of fairness. Houseman, Hatfield & Miley (1987) state that the feeling of inequity between two groups will create distress or dissatisfaction because the individual will always believe that the output does not correspond to the input, especially by comparing themselves with people from other institutions. Hence they will de-motivated because of feeling that the level of benefits from input-output scenario is relatively small compared to that of other people.

In the organizational setting, the theory serves as an important basis for employee motivation throughout fair balance between their perceived inputs compared to the level of perceived outputs. In fact, employees are expected to have the minimum of inputs related to effort, loyalty, hard work, commitment, skill, ability, adaptability, flexibility, tolerance, determination, heart and soul, enthusiasm, trust in their boss and superiors, support of colleagues and personal sacrifice. In return to this, they feel that what they gain should be fairly balanced in terms of financial rewards-pay, salary, expenses, perks, benefits, pension arrangements, bonus and commission, interest, responsibility, stimulus, travel, training, development, sense of achievement and advancement, promotion, and intangibles like recognition, reputation, praise and thanks.

In the study investigating into the effect of human resource management practices on the retention of employees, the Equity Theory is believed to be a framework to analyze

the phenomenon under studies. It is anticipated that the input-output ratio as it is perceived by health workers will result in adoption of good behavior resulting in commitment and intending to remain for a long period of time, which in turn will increase retention rates in the hospitals.

2.2 The Concept of Employee Retention

Employee retention refers to various policies and practices which let the employees stick to it for a longer period of time (Vos & Meganck, 2009). In fact, organizations invest time and money to groom new employees, make them a corporate ready material and bring them at par with the existing employees. The organization is completely at loss when the employees leave their job once they are fully trained. Employee retention takes into account the various measures taken so that an individual stays in an organization for the maximum period of time. With regard to this, companies today are interested in retaining valuable employees and good employees are increasingly becoming more difficult to find (Panoch, 2001) while employee recruitment and retention has become a priority (Czurak, 2011).

Beside the rate of turnover for a given period of time which serves as the basis to determine the extent to which the organization has been able to retain its people for that given period of time, it has been argued in the literature and studies of human resource management that employee intention to stay is a measure predictor of retention (Nedd, 2006), as the likelihood that an individual employee will or wants to remain in the organization. In fact, employee perceived intentions to remain (or quit) the organization are indicators of how they would stay in (or leave) the institution once given an opportunity, and this shows the prediction of future retention capacity within the organization. Intentions to stay are mostly used to measure the retention and turnover

in studies involving current employees as the study participants in the organization (Cavanagh & Coffin, 1992b; Price & Mueller, 1981; Van Breukelen, Van Der Vlist, & Steensma, 2004).

Fox (2012) explains why employee retention matters. In fact, high turnover creates high replacement costs and is clearly associated with low levels of customer satisfaction, customer loyalty, and lost revenues. To this end, Padron (2004) argues that retention is particularly challenging today due to an aging work force and a growing imbalance in the supply and demand of qualified personnel. In addition, many of the companies that already spend big bucks to recruit and train talented employees are bracing for even stiffer competition as baby boomers start to retire amid a shortage of skilled labor (Rawe, 2006).

In the continually changing global economy, business needs to understand and utilize key strategies concerning employee retention. Without adapting to potential problems, organizations face debilitating outcomes, one of which is the cost of turnover (Panoch, 2001). Therefore, organizations that will survive in the global changing environment are those which will adapt to realities of the current work environment, and this will mostly depend on their capacity to rely on longevity and success influenced by innovation, creativity and flexibility bringing to retention of employees. As a result, organizations that enhance employee retention strategies get different benefits including reduction in cost of labor turnover, keeping of company knowledge, saving interruption of service or production, improvement of organizational goodwill, and enhancement of efficiency of business and operation (Oginni, Ogunlosi, & Faseyiku, 2013).

2.3 Human Resource Management Models

Human resource management models are a framework that legitimizes and serves as the basis to understand key human resource management practices (Heneman & Tansky, 2002). In fact, when these activities are discharged effectively, they result in a competent and willing workforce who help realize organizational goals. Human resource management not working in the vacuum therefore, it is assumed that economic, technological, political factors as internal and external forces adding to organizational and professional functions all have major connections with human resource management.

There are different HRM models that have been developed to help practitioners manage human resources, and three of these will be mentioned in this study. The Harvard Model (Beer, Spector, & Lawrence, 1984) serves as a guideline to managers and their relationship with employees, and emphasizes on the soft aspect of HRM. This model also focuses on employee commitment and draws conclusions that employees need to be congruent, competent and cost effective. Another HRM model is the Michigan Model (Devanna et al., 1984) which has a focus on hard HRM suggesting that there is a strong necessity to manage people like any other resources: obtained cheaply, used sparingly, developed and exploited fully. In addition to the two previously mentioned models, the Guest Model of HRM (Guest, 1997) which bases its principles on the belief that integrated HRM practices will lead to the individual change in the behavior, then bringing to both individual and organizational performance.

2.3.1 The Harvard Model of HRM

This model which has been developed at Harvard University contains six major components: situational factors, stakeholder interests, human resource management

policy choices, HR outcomes, long-term consequences and a feedback loop through which the outputs flow directly into the organization and to the stakeholders (Beer et al., 1984). Figure 1 illustrates components of the Harvard model of HRM

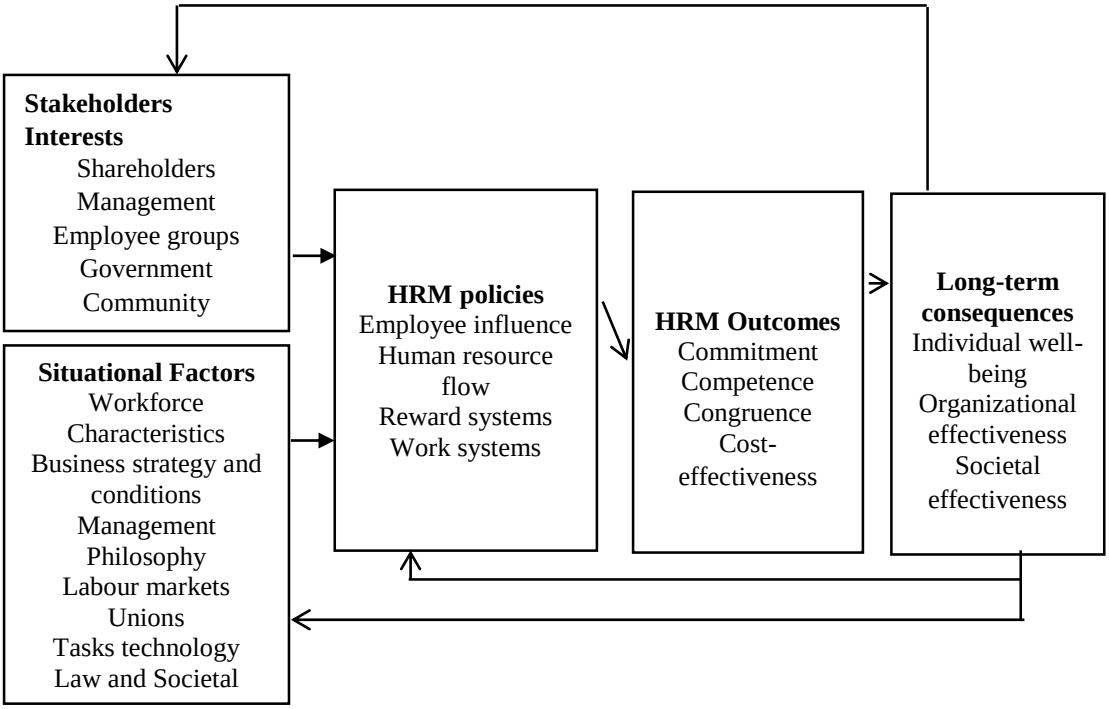

Figure 1: Harvard Model of HRM

Source: Beer et. al., (1984)

As it is displayed in the model, the management choice of HR strategy is influenced by situational factors including workforce characteristics, management philosophy, labour market regulations, societal values and patterns of unionization. Beer et al.(1984) state that while there is the role of trade-offs between interests of owns and those of employees in the organizations contained in the stakeholders interests, human resource management policy choices emphasize that management's decisions and actions in HR management can be appreciated fully only if it is recognized that they result from an interaction between constraints and choices. The model depicts management as areal actor, capable of making at least some degree of unique contribution within

environmental and organizational parameters and of influencing those parameters itself over time.

As far as human resource outcomes are concerned, they relate to employee commitment to the organizational main focus. In addition to this, they concern individual commitment which in turn brings to cost-effective products or services. In fact, utilization of employee effort and experience comes as an important focus in the management of human resources.

While this model is recognized for its strength in classifying HRM inputs and outcomes and cresting the foundations for comparative human resource management (Boxall, 1992), it has been criticized for not being able to describe a coherent theoretical framework for researchers to be able to measure HRM inputs, outcomes and performance (1997).

2.3.2 The Guest Model of HRM

The HRM model that was developed by Guest (1986, 1997) provides a descriptive and comprehensive theoretical framework which shows with clear details how integrated human resource management practices touch both the individual and the organization in terms of performance. In fact, this model recognizes the superiority of human resource management over orthodox personal management because the former seeks employee behavioral commitment to the organization. With regard to this, human resource management through different practices has the primary focus on the individual for his/her full and positive utilization.

Prior to discussing the main components of the model, it is important to highlight a clear distinction between the orthodox personal management and human resource management as it sounds today, with its key practices. As put by Guest cited in Bratton

and Gold (2000), there is a clear distinction between assumptions (or stereotypes) of HRM and personnel management, and these stereotypes serve as criteria to conform that HRM is better. Guest (1997) states, however, that in some circumstances HRM might have some limitations hindering its effectiveness, as for example in cases where it can be simply viewed and limited to a single and simple idea of being an approach to manage the workforce. Distinction between HRM and personnel management is displayed in table 2.1.

Table 2.1: Stereotypes of personnel management and human resource management

	PM compliance	**HRM commitment**
Psychological contract	Fair day's work for a fair day's pay	Reciprocal commitment
Locus of control	External	Internal
Employee relations	Pluralist	Unitarist
	Collective	Individual
	Low trust	High trust
Organizing principles	Mechanistic	Organic
	Formal/defined roles	Flexible roles
	Top-down	Bottom-up Decentralized
	Centralized	
Policy goals	Administrative efficiency	Adaptive workforce
	Standard performance	Improving performance
	Cost minimization	Maximum utilization

Source: Guest (1997)

While devising the model, it is hypothesized that superior organizational performance results from employee high commitment and quality. For these characteristics to be implanted in the employee, the scholar points out that integrated HRM practices must be applied coherently in the organization. In his model, it is hypothesized that human resource management practices should be set with the core functional purpose that they

will lead to high employee commitment as one of the HRM outcomes, along with high quality and flexible employees. The model is displayed in table 2.2

Table 2.2: The Guest Model of HRM

HRM Strategy	HRM Practices	HRM Outcomes	Behaviour Outcomes	Performance Outcomes	Financial Outcomes
Differentiation (Innovation)	Selection		Effort/ Motivation	High: Productivity	
	Training	Commitment		Quality	
				Innovation	
Focus (Quality)	Appraisal		Cooperation		
	Rewards	Quality		Low:	
Cost (Cost-reduction)	Job design		Involvement	Absence	
				Labour Turnover	ROI
				Conflict	
	Involvement	Flexibility	Organizational citizenship	Customer complaints	
				Labour turnover	
	Status and Security				

Source: Guest (1986)

With this unique value of employee commitment as the vital HRM outcome, employees become attached and bound to the organization with increased effort, cooperation, involvement and organizational citizenship as obtained behavior outcome. In addition to this, HRM practices contribute to the organization for it to acquire capable, qualified and skillful workforce, entitled and able to produce high-quality services and products, and employees who have the functional flexibility so that they can cope with innovation and change. It is also clear in the model that achieving three HRM outcomes (commitment, quality and flexibility) brings to change of behavior and then performance.

Though the model developed by Guest has been criticized of its weakness in defining HRM as a particular managerial style, it has the strength of clearly mapping out the field of HRM and classifying the inputs and outcomes. More on that point, the model

also examines the goals of associated with normative models of HRM, and these are strategic integration, commitment, flexibility and quality (Bratton & Gold, 2000). Practices that are incorporated in the HRM field in each workforce group therefore include recruitment and selection, appraisal, rewards and development.

2.3.3 The Michigan Model of Human Resource Management

The Michigan model of HRM was developed by the University of Michigan in the 1980s and constitutes early concepts that contributed to the development of human resource management and its practices (Ihuah, 2014). According to the author (ibid), this model links different business strategies and organizational structure and observes how they can bring to contrasting styles of HRM in activities such as selection, appraisal, rewards, and development. For example, a single-product company with a traditional functional structure (that is, structured according to the various functions of the business-finance, accounting, marketing, sales, production and operations, personnel, etc.) will select its people on the basis of their expertise in the specific functions. Appraisal of employee performance will be largely informal and administered via personal contact; the reward system will vary unsystematically across the functions and employee development will be limited primarily to the functional area in which the employee works. On the other hand, a company with a multi-divisional structure and a strategy for product diversification may have a very different system of HRM. Selection would be systematic and according to both functional experience and general management ability. The appraisal system would be formal and impersonal based on quantitative criteria such as productivity and return on investment and on qualitative, subjective, judgments about individual performance.

The reward system would systematically reward contribution to the diversification strategy, and it is likely that bonuses would be paid according to achievement of

profitability targets. Employee development would be more complex and systematic than it would be in a company with a single-product strategy. In the multi-divisional company, employees are accustomed to being periodically transferred to different functions and areas of business. Individual development would be cross-divisional, cross-subsidiary and corporate.

Finally, the Michigan model argues that within HRM there is a human resource cycle affecting individual and organizational performance. It describes the four functions of this cycle as follows: performance is a function of all the human resource components: selecting people who are best able to perform the jobs defined by the structure, appraising their performance to facilitate the equitable distribution of rewards, motivating employees by linking rewards to high levels of performance, and developing employees to enhance their current performance at work as well as to prepare them to perform in positions they may hold in the future.

The Michigan model is considered hard HRM because it is based on strategic control, organizational structure, and systems for managing people. It acknowledges the central importance of motivating and rewarding people, but concentrates most on managing human assets to achieve strategic goals. Subsequent empirical research has not produced evidence of organizations systematically and consistently practicing hard HRM (Truss, Gratton, Hope-Hailey, McGovern, & Stiles, 1997); it found that employees were strongly managed towards organizational goals. A company practicing hard HRM would have a style of management that treats employees in a calculated way, primarily as means to achieving business goals. Its top management would aim to manage the organization rationally and achieve a ‘fit’ between the organization’s strategy, structure, and HRM systems.

This model would be described as ‘hard’ HRM because it emphasizes treating employees as a means to achieving the organization’s strategy, as a resource that is used in a calculative and purely rational manner. Hard HRM focuses more than soft HRM does on using people as resources and as a means towards the competitive success of the organization.

The strength of their approach is that it focuses on the organization and how it can best rationally respond to its external environment. Focusing on the level of the organization has the advantage of drawing attention to aspects partly under the control of management, such as formal strategy, structure, and preferred culture. On the other hand, with regard to its limitation, attending to the organizational level may lead managers to assume that, through organizational strategy, structure, and HR systems, they have more power than they really have to change individuals and influence the external environment.

2.4 Indicators of Human Resource Management Practices

Human resource management is very complex and challenging function in today’s environment of management of organizations. There is a growing body of research stating that organizations have difficulties to manage people more than they do for managing technology and/or capital (Swathi, 2014). While organizations face these challenges of managing people, human resources are considered the most important inputs in the organization. As a result, a comprehensive and effective human resource management through different practices is necessary for any organization which wants to survive in the organizational competitive environment.

Though human resource management practices may differ from one organization to another (Swathi, 2014), it is evident that integration of different HRM practices will

benefit the organization. In fact, the typology of human resource management practices has been turning around the qualification of best practices", (high performance) (Huselid, 1995), formal (de Kok & Uhlaner, 2001), sophisticated(T. H. Wagner, 1998) (T. H. Wagner, 1998) or professional (Gnan & Songini, 2003), it has been to the conclusion by Pfeffer (1998) that they would be better qualified as best practices.

A summary of human resource management practices was suggested by Redman & Matthews (1998) and as from their view point, these practices relate to availability of extensive remuneration systems, including bonuses, team working and flexible job design, training, development and learning opportunities, employee involvement and participation, and performance appraisals. This typology is not far from the one from a recent one provided by Saxena &Tiwari (2009), who argued that HRMPs relate to training and development, employer-employee relations, recognition through rewards, culture building, career development, and compensation and benefits. All in all, in addition to selective hiring of human resources, it is advantageous for an organization to have a comprehensive and effective policy for both financial and non-financial incentives for employees, the organizational strategy for employee involvement and participation in the decision-making processes, and, an understandable and fair process, the ability to implement performance management function.

2.4.1 Performance Management Function

Performance management function is one of the major activities in the typology of Human Resource Management practices. In the view of Armstrong (2008), performance management is a process owned and driven by line management that aims at getting better results from the organization, teams, and individuals by understanding and managing performance within an agreed framework of planned goals, standards and competence requirements. According to Pulakos (2004), performance management

(PM) is a goal-oriented process that seeks to make efforts ensuring that individuals and teams become productive through organizational processes, which ultimately enhances organizational productivity. It is a process by which the organizational strategy can be accomplished and throughout which the value of workforce is measured and improved.

The simplified meaning of performance management defines it as the process through which supervisors and those they lead gain a shared understanding of work expectations and goals, exchange performance feedback, identify learning and development opportunities, and evaluate performance results (Giannetto, 2009). The scholar [ibid.] states that throughout this process, the organizations can create and sustain a workplace environment that values continuous improvement, adapts well to change, strives to attain ambitious goals, encourages creativity, promotes learning and professional development, and this is done through engaging and rewarding for employees. As a result, performance management is considered to be the single largest contributor to organizational effectiveness.

Performance management systems work in process throughout which managers and employees have clear and defined roles and timelines. As suggested by Pulakos (2004), performance management process has four main sections as described in the following figure 2.

Figure 2: Typical Performance Management Process
Source: Pulakos (2004)

What is worth noticing about performance management function is its perceived value which has been described as a poor record (Bratton & Gold, 2000). In fact, performance management is the most continuous and the least popular of all human resource management practices: while employees do not see any point in doing it, managers seem not to like doing it. Despite this record, performance management is an accepted management practice that puts forward the principle that employee performance in the organization should be measured, monitored and controlled (Barlow, 1989) which calls for human resource managers to stand by and put it in practice as people who act as guardians of organizational policies and procedures of an organization. For those who are interested in the affairs of an organization, realizing failure in the implementation of performance management function would mean that the management control of the organization is highly ineffective. As noted by Strebler, Robinson & Heron (1997), appraisal in organizations has become a driver to the competitive advantage because of continuous performance improvement, with its

associated role of information-processing system providing managers with rational, objective and efficient decision-making in relation with performance improvement, identification of training needs, management of careers and setting levels of reward.

All in all, performance management serves as an integral part of the organization for its initiative to goals of employees with mission and vision of that organization. Therefore, in order to enhance sustenance and competitiveness of the organization, it has become a requirement for managers of organizations to consider performance management as an important component of the management function in the modern days of global knowledge and competitive environment (Krishnan, Warier, & Kanaujia, 2013). As result of this, comprehensive and effective performance management systems when in combination with other HRM practices like employee reward and recognitions, improved work conditions and opportunities for training and development, leads to employee productivity, engagement and higher levels of retention, and ultimately the organization performance (Chew, 2016; Krishnan, Warier, & Kanaujia, 2013).

2.4.2 Financial Incentives

One of the major human resource management practices in organizations concerns policies and procedures for financial incentives. Also known by some authors as "rewards' (Kshirsagar & Waghale, 2014), incentives are packages that serve as stimulus, or any form of encouragement, that is designed for the sake of boosting great action, be it in a fixed manner or in addition to an established, fixed form of remuneration. In the words of Criffeth and Hom (2001), incentives refer to a form of compensation in terms of benefits that is provided to employees by their employers as a way of attracting and retain them for doing a certain job.

As it reads from Henderson (1994) and Kshirsagar and Waghale (2014), the first category of incentives is external to workers and is referred to as intrinsic extrinsic rewards. This category of incentives also being called financial incentives, it involves direct compensation in terms of monetary value and encompasses wages and salaries, bonus, commission, individual and group incentives, profit sharing and stock options. Another variant of financial incentives, also called indirect incentives (Henderson, 1994), are paid in a form of benefits or perquisites, and consist of paid time off, health insurance plans, childcare benefits and employee discounts

The most referred to in the typology of financial incentives is pay (Yousaf, Latif, Aslam, & Saddiqui, 2014). This financial reward is offered to employees because of the service they render to the organization. Due to the fact that employees expect a financial reward which is worth their efforts, it is important for organizations to set up reward systems which offer employees the pay which is reasonable, equitable and which satisfies their needs. In fact, an equitable pay makes employees feel that they are recognized for their efforts towards the achievement of organizational goals. As the pay is expressed in terms of money, there is a tendency to believe that money becomes the most important motivator for employees in order to fulfill basic necessities, and that money can serve as an instrument to satisfy non-monetary needs (Sara, Gerhart, & Minette, 2004). The reward pay in monetary value therefore becomes very important for employees, and some scholars (Bohlander & snell, 2004) view it as a means for employees to gain personal triumph and accomplishment.

In addition to financial reward in a form of pay, another type of financial incentives relates to bonuses which are given to employees when they have reached certain standards and quotas to complete a certain project (Yousaf et al., 2014). It is currently

asserted that employee benefits packages have become an important part of the total compensation or organizational expenses (DeCenzo & Robbins, 2010). Benefits have grown in size, importance and variety (DeCenzo & Robbins, 2010; Edgar & Geare, 2005; G. T. Milkovich & Newman, 2008), and are one of the greatest challenges in business today in attracting and retaining quality employees (U.S. Chamber of Commerce, 2008).

In addition to this are fringe benefits as benefits employees receive in addition to their normal pay in order to improve working conditions (Wiley, 1997). Fringe benefits include company car and house allowance. In this framework, employers also provide their employees with other financial incentives in terms of vacations with pay, health insurance, and pension and, in some circumstances, daily meals and drinks, with the purpose of improving their working conditions and motivate them to perform the assigned tasks at their jobs.

2.4.3 Non-financial Incentives

Employee incentives are also devised in a form of non-financial value. There are many packages of non-financial incentives to employees, and most of them are in relation with improvement of conditions of work, opportunities for career development, and training and development (Kshirsagar & Waghale, 2014). In addition to this, non-financial incentives include appreciation, meeting the new challenges, caring attitudes from employer and recognition (Yousaf et al., 2014). In this way, employees have expectations in addition to their monetary benefits in monetary value, and these are health working conditions that can enhance a professional relationship with employers, fulfillment of training and development needs job security.

In relation with the above, the concept of job enrichment relates to the process by which employees are given extra amount of work in order to make it more interesting and meaningful (Choudhary, 2016). This practice is often done to employees through development and intensification, and it has the purpose of making the job more challenging, then increasing employee responsibility. As employees feel the need for more skills in their job, they are motivated by the opportunities for skill varieties, task identity, task significance, autonomy and job feedback, depending on how the management has initiated this practice. Job enrichment has the strength of motivating employees because routine, monotonous, repetitive and unrewarding tasks with an over-controlled structure authority make employees dissatisfied and bored.

Along with other non-financial incentives is training and development, considered as major function in this category and which has been widely discussed in the literature of human resource management (Beardwell, Holden, & Claydon, 2004; Gordon, 1992). In fact, training and development activities act as devices to modify employees' behavior through learning events, activities and programs (Gordon, 1992). Throughout this process therefore, employees get the opportunity to achieve high levels of knowledge, skills, competencies and abilities, which in turn helps them carry out their jobs in an effective manner.

Training and development programs have been recently influenced by both intensification of competition which requires employees to have high levels of skills in the changing business environment, and the arguments on the perceived relative success of organizations which have heavily invested in the human capital (Beardwell et al., 2004). Besides this consideration, organizations have realized that technological changes are very rapid in such a way that employees need to be upgraded for current knowledge and skills. Considering these aspects therefore, a need for organizations to

invest in continuous employee training band development is very necessary, as the main purpose of training and development is to acquire and improve knowledge towards related tasks.

Training and development have been associated with benefits for organizations (Cole, 2002). These include increased confidence and motivations and lower cost of production, reduction of turnover, facilitating management to manage change, providing recognition, enhanced responsibility and the possibility of increased pay and promotion, and improving the availability and quality of staff.

Moreover, human resource management practices encompass the concept of work conditions and job security as another package of non-financial incentives. In fact, work conditions come under different forms including flexibility in working hours and workload, facilities (Aisha, Hardjomidjojo, & Yassierli, 2013), improved physical working conditions (like well-designed workstations, appropriate lightning, mechanisms for noise reduction, suitable equipment and furniture, sufficient safety measure for fire emergencies, existence of personal equipment for protection) , existence of programs addressing lifestyle changes and work/life balance (Swalhah, Irtima, & Zouby, 2013). In addition to these work conditions that employees expect to have from their employers for them to the job with high levels of satisfaction, they expect their organizations to be less or not frustrating and most importantly to feel high level of job security.

2.4.4 Employee Participation and Involvement in Decision-making

The concept of employee participation and that of employee involvement have been considered with slight differences in their conceptual definitions in the literature of human resource management. In essence, employee participation involves workers

exerting a countervailing and upward pressure on management control, which need not imply unity of purpose (Bratton & Gold, 2000). Considered as the softer form of participation, employee involvement is considered as a process of implying commonality of interest between employees and management. Employee involvement being considered in an expanded view of serving to maximize the interests of workers (D. E. Guest, 1986), it should not be restricted to trade unions, but directed to the workforce as a whole (Bratton & Gold, 2000). The link between these two concepts lies in the fact that they both refer to management styles aiming at building a strong motivated workforce, enjoying their jobs and hence longer employment periods expressed in reduction of employee turnaround.

The application of participation and involvement in organizations is perceived by many people as a reflexion of their own attitudes and work experiences, and their own hopes for the future. Participation, in the point of view of managers, refers to consultation, which in turn is considered as a way of improving top-down or upward problem-solving communications. Therefore, there is a tendency for employees and union representatives to believe that opportunities for consultation are worth participation (Bratton & Gold, 2000).

As far as involvement is concerned, its application should mean a lot to employees: influence and take part in decision-making on matters in relation with their working environment. Then, forms of participation where employees are involved in the decision-making processes affecting their working lives are considered as direct participation, and serve as devices to improve job satisfaction and productivity. Indirect participation in a form of joint consultation, for example, involves delegates or representatives of a certain body of an organization to be part of the decision-making

process, and they are associated with industrial democracy in a broad sense. Current methods of employee involvement include involvement through the communication of information, upward problem-solving, quality circles, extended consultation, cross-functional teams, self-directed teams, collective bargaining, worker directors and worker councils (Sofijanova & Zabijakin-Chatleska, 2013).

There are three main reasons which HRM theorists have associated with introduction of employee involvement schemes by management. Verma (1995) evoked a political, moral and ethical justification of such an involvement referring to a society with democratic foundations. In such kind of societies, there is a feeling that involving employees in decision-making processes in matters regarding their working conditions and lives is necessary. This practice therefore impacts on their working lives outcome, hence employee involvement and communications become encouraged.

The Japanese management and the model of excellence school in North America serve as the basis for the second reason to involve employees in decision-making processes: the principle of that employee involvement leads to quality and productivity. The level of success of implemented decision is then associated with the degree of employee involvement in the decision making process. Therefore by creating satisfaction among employees and by improving productivity, employee involvement results in better outcomes for all parties of the organization (Verma, 1995).

Guest (1986) cited in Bratton and Gold (2000) states that perennial managerial problems associated with conflict in the organization becomes the third reason why employee involvement is necessary in the organizations. In fact, introducing employee involvement becomes a solution to those problems which in some circumstances lead to strikes and/or absenteeism. All in all, there is hope for employers who introduce such

participative mechanisms that they are creating confidence between employers and employees, increase of trust, reduction of potential for conflict and increase of the potential for influence on matters related to pay, working conditions and employment security.

Throughout the practice of employee involvement therefore, direct participation of staff in the organizational systems allows the organization to benefit from employees because they have opportunities to provide their own inputs by using their own ideas, efforts and expertise for both solving problems and decision making purposes. In addition to this, the practice of employee involvement increases autonomy in work processes. This happens in forms of participation as individuals or as teams, empowerment and self-managed teams (Sofijanova & Zabijakin-Chatleska, 2013). Mullins (2005) stresses the importance of empowering employees and states that in modern way of management, leaders choose to be facilitators instead of acting like controllers, and therefore they embark on abandoning command-control systems and mechanistic structures. Throughout self-managed teams, the supervisory position is reduced or even eliminated, which allows employees participate in tasks like production planning, resource allocation, determination of budgets, work schedules, making operational decisions, coordination of activities with customers and any other task that might be in their position (Noe, Hollenbeck, & Gerhart, 2008; Torrington, Hall, & Taylor, 2002) .

In the words of Kuye & Sulaimon (2011), the modern style of management does not consider employees as the outsiders to the decision-making processes in their organizations. Instead, they try to consider the inadequacy of the “command and control” model and, with openness and collaborative spirit aiming at benefiting from

employees' talents, managers trust and involve employees at all levels (Hewitt, 2002). According to Singh (2009), Kingir and Mesci (2010), the need to involve employees is to enhance their ability to understand that they are required to be creative and committed to changing their behavior at work. With regard to this, the situation of employee involvement in the organizational decision making processes creates a sense of belonging and a congenial environment where both managers and employees contribute to industrial relations.

2.5 Human Resource Management Practices and Employee Retention

There is a growing body of argument in the literature asserting that human resource management practices affect the retention of employees (Bowen & Ostroff, 2010; Hussain & Rehman, 2013; Laka-Mathebula, 2004; Nishii, Lepak, & Schneider, 2008; Ozolina-Ozola, 2014). Most of these researchers argue that the level of human resource management practices determines the level of retention capacity in institutions, or in other words, that human resource management practices are positively correlated with employee retention. This means that the higher the organizational HRM policies and practices, the lower the rate of turnover of employees in institutions.

In order to show the role of human resource management practices in helping organizations to fulfill their goals, many studies have been done and concluded that human resource management practices are key factors for the survival of organizations in different areas. In fact, human resource management practices have been proved to be very fundamental in the banking industry(S. Islam, Khatun, Faruk, & Mortoza, 2013) (S. Islam et al., 2013) and financial institutions in general (Huselid, 1995), the aviation and airline sector (Patton, 2015), mining industry (Nyamubarwa, Mupani, & Chiduuro, 2013), hospitality and tourism sector (Nickson, 2007), the textile industry(Rajendra, 2014) (Rajendra, 2014), (Hashmi, 2014) and the manufacturing sector (Sarbapriya,

2011) by the fact that they affected employees' intentions to stay and subsequently influence retention in these industries.

2.5.1 Performance Management Function and Retention of Employees

Performance management is considered by as an important human resource management function and so many organizations rely on it for different organizational outcomes (Selvarajan & Cloninger, 2008). This practice involves performance appraisals which serve as a staff evaluation tool and management system as an integral part of human resource management effectiveness in organizations (Guest, 1997). As put in Rue & Byars (2005)'s argument, performance appraisal functions as a means to determine and communicate how employees do their job and come up with effective plans to improve the process of carrying out responsibilities. Therefore, updates on the performance of employees, identification of training needs and adoption of clear intervention practices including plans for training and development are all provided an effective performance management approach. Hence good performance appraisal system results in motivation of employees and extends to their commitment and engagement, then reducing intentions to leave the organization (Selvarajan & Cloninger, 2008).

Researchers conducted a study with the aim of examining the extent to which performance management function contributes to employee retention (Krishnan, Warier, & Muslim, 2013). Using a questionnaire to collect data on sampled respondents to identify the causal factors of employee retention though intentions to stay, the research reinforces the importance of a robust performance management system in aligning employees with the organization's goals, resulting in superior employee commitment, reduction of turnover and organization performance. A similar recent study was done to assess the effect of performance appraisal on employee retention

(Imna & Hassan, 2015). The results of the study showed that performance appraisal, as a process of evaluating employee's performance on the assigned tasks to facilitate further career development and mainly communication between employee and management, was very crucial for determination of levels of employee satisfaction. It was realized, for example, that systematic and effective employee performance evaluation activity, performance evaluation feedback, communication, goal setting, and periodic review are associated with employee job satisfaction and lead to reduction of turnover intentions among employees.

2.5.2 Financial Incentives and Employee Retention

Effective policies governing incentives are good strategies for employee retention Caligiuri, Lepak & Bonache, 2010). In fact, there is a common argument that increase in pay results in reduction of turnover among employees (Trevor, Gerhart, & Boudreau, 1997). Therefore, it is argued that good pay affects job satisfaction and leads to employee commitment and engagement towards organizational goals, which determines high levels of retention capacity (Caligiuri, Lepak, & Bonache, 2010; Cranny, Smith, & Stone, 1992; R. Islam & Ismail, 2004; Steinhaus & Perry, 1996; Weiss, 2002). As employees expect a certain level of monetary rewards for their organizational contribution, pay constitutes a quantitative measure of an employee's worth.

In order to compete for the most talented workers, companies need to provide attractive and equitable pay. The role of pay in attracting and retaining people at work has been stressed for many decades and is increasingly being recognized important in today's competitive, economic environment where strategic compensation planning is needed (Jackson & Schuler, 1995). In the view point of Milkovich & Newman (2004), the idea

that monetary pay is the most important and significant of all determinants of retention was advanced. In the same viewpoint, Moncraz, Zhao, & Kay (2009) concluded in their study that although compensation was not the sole factor to reduce non-management turnover, it was the most important contributor to reduction of management turnover, and acted as a considerable factor to increase employee commitment.

Creating a compensation structure that supports employee retention is a challenge for companies (Feldman, 2000). It is noticeable, for example, that a good number of organization claim they have based pay rise on employee performance while it is not the case; others claim of team related pay rise, but still will continue to reward people for individual achievement (Feldman, 2000). From the same source, it is argued that there will be frustration and cynicism by employees, caused by these inconsistencies in organization, especially when employees see no pay rises while leaders are being richly rewarded.

A study conducted in Nigeria aimed to establish the relationship between financial incentives and employee retention in manufacturing companies (Oni-Ojo, Salau, Dirisu, & Waribo, 2015). Using quantitative data collected from a sample of respondents in selected institutions, a very positive correlation was found between employee wages and salaries, bonuses and fringe benefits with their intentions to stay in the areas of work in the industry. In the same country, a study was conducted in Ogun State in order to examine the influence of compensation packages on employee job performance and retention of employees in higher learning the institutions (Osibanjo, Adeniji, Falola, & Heirsmac, 2014). The authors developed the model which helped them to interpret quantitative data collected from academic and non-academic staff. It was recommended that management could resort to reviewing compensation packages

because a strong relationship was found between compensation packages (salaries, incentives, bonuses, allowances and fringe benefits) and retention of employees.

In an attempt to study the reasons behind high turnover rates among health workers in the health care institutions in Tanzania, a study was conducted for this (Mbilinyi, 2008). While failure to retain hey health workers was associated with many factors, the study found that health professionals were not satisfied with implementation of financial incentive policies, which constituted the pushing factor in the health care institutions of the country.

In the study conducted in Malaysia, researchers wanted to establish the effect of extrinsic and intrinsic factors of motivation on retention (Ali, Amin, & Hamid, 2016). While intrinsic factors affecting motivation were deemed important, researchers realized that organizations which always review rewarding systems and update employees' annual salaries and benefits are likely to have low rates of turnover. Basing on the findings, they argued that wages contribute to employee commitment while dissatisfaction leads to undesirable behavior of leaving the work. Another research investigated into the links between financial incentives employee commitment and retention in organizations (Saleem, 2011) and found out very significant and positive effect reward packages (in terms of promotion and bonuses) on employee commitment and increased turnover rates.

Reviewed studies show that financial incentives create intrinsic behavior in employees, which leads them to enjoying the work, have self-esteem, which in turn makes them feel need for promotion and recognition. By undertaking comprehensive and clear policies and procedures governing reward packages in terms of salaries, allowances, bonuses, performance pay, fellowships, discounts and other compensation schemes,

organizations benefit with retention of employees who support the organization in achieving the goals.

2.5.3 Non-financial Incentives for Retention of Employees

It has come to the attention of researchers that trends redefining modern retention strategies go beyond the traditional salary and benefits packages (Chandranshu, 2012) and compensation (Feldman, 2000) embracing employee motivation through non-financial schemes (Kenneth, 2000) as one of the key factors leading to the diversity and long stay of employees in the organization. In fact, individual job satisfaction, loyalty and commitment are strengthened by the organization ability to devise retention strategies that consider employee needs and desires (Boomer Authority, 2009).

To this end, some scholars rank among top priorities employee recognition, flexibility, improvement of work conditions (Cunningham, 2002), and establishment of a supportive learning and working environment (Walker, 2001). In addition, modern employee retention strategies should be based on effective management systems allowing communication (Gopinath & Becker, 2000) and career development (Boomer Authority, 2009) for a long stay of employee in institutions.

In this view point, Boomer Authority (2009) emphasized the importance of job flexibility on retention of employees of any age in employment flexibility should consider individual work times, responsibilities, location around family responsibilities and workload (Cunningham, 2002; Pleffer, 2007). Moreover, different job flexibility options (Eyster, Johnson, & Toder, 2008) allowing a balance between work and personal obligations is a good contributor to employee commitment, concentration, satisfaction, productivity, loyalty and intents to stay (Prenda & Stahl, 2001).

Employee retention is also predicted by training and development as the latter enhances both behavioral (personal) and technical (professional) development (Ayobami, Wallis, & Mahomed, 2016). In fact, apart from the fact that availability of such opportunities is crucial and that having access to training and development programs for all employees is critical for organizational benefits and cost savings (Prenda & Stahl, 2001), it is argued there training programs available to all employees result in 70% increase in employee retention rates (Eisen, Jasinowski, & Kleineli, 2005). McIntosh (2001) asserts enhanced training foundations (competencies, efficiencies, and intelligence) and advanced development of best practices, cross training, mentoring, and technology changes for all employees enhances retention rates in the organizations (Agrela et al., 2008; Yazinski, 2009). Research indicates that effective employee retention strategies are in line with training methods that engage workers with career challenges, advancement opportunities and supportive work environment (Eisen et al., 2005). It is important for organizations to assist employees in their career development with the purpose of helping them manage many aspects of their lives and make them feel a clear promotion track (Moses, 1999).

A recent study conducted in Pakistan (Haider, Aamir, Hamid, & Hashim, 2014) reviewed the literature on the prevalent non-financial incentives for employee job satisfaction and retention. The reviewed literature came up with crucial findings that non-financial incentives associated with job recognition and appreciation increase employee satisfaction, commitment and attachment to the organization. Another study recently conducted in Nigeria (Oni-Ojo et al., 2015) and it assessed non-financial incentives in relation with retention in the manufacturing industry. The study found a very positive significance between non-financial incentives and employee retention as

the latter employee satisfied and felt valued by the organization, which makes them committed and stable in their working places.

A comparative study between two companies looked at the effect of non-monetary reward programs towards employee motivation in Pretoria (Neelkamal, 2012). In the study findings, it was realized that organizational commitment towards employee career development, coaching and mentoring, and work-life balances made them retain employees more than they did with increasing financial rewards. The study concluded that better working conditions and other non-monetary rewards are crucial retention strategies. In another study conducted in Karachi, Pakistan (Farooq-E-Azam, Shujaat, & Alam, 2013), researchers wanted to measure the influence of non-monetary rewards on employees in the commercial banks and found that training and development and other non-financial packages were significantly related to employee commitment and reduction of turnover.

In the region, while turnover intentions among health workers in Tanzania predicted by lack of working equipment, bad working conditions and lack of supportive supervision in health care institutions (M. A. Munga & Mbilinyi, 2008), a study conducted in Kenya (Gikuya, 2014) realized that companies were introducing non-financial incentives to motivate their employees. In another study conducted in Kenya (2013), the researcher investigated into non-financial incentives and retention of primary and secondary school teachers. The findings of the study show that key non-financial incentives in terms of teacher recognition, personal development, work-life balance and good conditions at the work environment affect their retention.

Evidence in the literature of human resource management shows that employee non-financial incentives are very important factors that positively affect employee retention.

Conducive work environment, training and development programs that are well designed and shared with fairness to all employees, career development programs, recognition, job security and work-life balance are important non-financial packages that can support organizations to retain key employees.

2.5.4 Involvement and Participation in Decision-Making and Employee Retention

The argument that employee participation and involvement in the organizations' decision-making processes is crucial for employee retention has support in the literature of HRM (Arthur, 1994; Bidisha & Mukulesh, 2013; Huselid, 1995; Kacmar, Andrews, Rooy, Steilberg, & Cerrone, 2006; Leghari, Suleman, Leghari, & Aslam, 2014; Nwokocha & Iheriohanma, 2012; Paré & Tremblay, 2007). In fact, employees who are engaged are more productive, content, more likely to be loyal to an organization and attached to it in such a way that their intentions to leave the organization are reduced. In this view point, programs engaging employee participation and involvement are expected to have a positive effect on employee commitment and retention.

In the modern scenario of the management function, keeping employees informed about all important affairs of the business and involving them in decision-making processes at all levels in order to exploit and make use of their talents has become the ideal for many organizations (Hewitt, 2002). This view is supported by Noah (2008)'s argument that employee involvement in decision-making helps in creating a sense of belongingness among the employees, which to create a good congenial working environment and contributes towards building a good employer-employee relationship.

At the same time, low involvement causes employees' feelings of alienation and organizations would not expect staff to remain as long as they are not involved in its decision-making processes (Iftikhar, Jan, & Muhammad Najmi, 2015). Consequently,

lack of employee involvement in decision-making may lead to dissatisfaction and turnover. This adversely effects the organization because of loss of skills and talents of its human capital.

Rondeau & Wagner (2016) did a study on human resource management practices and nursing turnover in Canada from primary quantitative data. They found that high involvement of nurses in decision-making processes was related to lower voluntary turnover. Researchers wanted to investigate into employee involvement and participation and its associated effect in companies after privatization in Pakistan (Khattak, Iqbal, Urooj, & Bashir, 2012). The results of the study revealed high levels of dissatisfaction and turnover intentions among employees because of low levels of employee involvement and participation in terms of team briefing, problem-solving groups and modes of representative selections.

Dissatisfaction among employees were also associated with their intentions to leave the companies in the study that was conducted in Indonesia in a state-owned enterprise (Irawanto, 2015). Results. Employee participation in discussion on recent issues (participation consultation) with employees and among workers was found to likely have a negative significance with motivation and intentions to stay.

All in all, evidence in the literature shows that employee participation and involvement in decision-making increases employee satisfaction and reduces unnecessary turnover in organizations. Employees who perceive a reasonable level of participation and involvement in terms of exposure to shared governance, consultation for merit pay processes, and creation of teams for quality improvement and establishment of systems for suggestion will reciprocate with satisfying work outcomes.

2.5.5 Human Resource Management Practices and Employee Retention in the Health Care Setting

Evidence in the literature of human resources for health shows that human resource management practices are major determinants of retention of health workers (Daneshkohan et al., 2015; Ebuehi & Campbell, 2011; El-Jardali et al., 2009; Kabene, Orchard, Howard, Soriano, & Leduc, 2006; Longmore & Ronnie, 2014; Nyandoro, Masanga, Munyoro, & Muchopa, 2016; Ojakaa, Olango, & Jarvis, 2014; Oyetunde & Ayeni, 2014; Songstad, Rekdal, Massay, & Blystad, 2011; Thi Hoai Thu, Wilson, & McDonald, 2015; Wurie, Samai, & Witter, 2016). In order to investigate on the factors that affect retention of medical doctors, Ronnie & Longmore (2014) did such a study in a medical complex in the Eastern Cape, South Africa. Based on qualitative responses, their conclusions stressed the need to embark on human resource management practices in the health care setting in South Africa. In fact, it was realized that poor levels of the dimension of human resource management led to frustration of doctors in the hospitals, which hindered the institution's capacity to retain medical staff. The unacceptable consideration of the human resource department led to handicapped human resource management practices and constituted a pushing factor to so many medical staff in the institutions, and this created shortage of doctors and adversely affected retention of key health personnel.

In the same view point, two studies were conducted in the health care setting in Kenya. By assessing factors affecting retention of human resources for health in Trans-Nzoia County, Butaki (2015) realized that nurses' intentions to stay or leave health care facilities were determined by the institutions' capacity to integrate different HRM practices including training and development of the health personnel, effective policies for compensation and reward, and work life balance. Study results show that such

important factors affecting retention of the health personnel were not given weight in the administration of health facilities, and this neglect had caused high rates of turnover in the health sector. Another study in Kenya aimed at studying factors affecting motivation and retention of health care workers in there desperate regions (Gikuya, 2014). Due to issues that were found in human resource management practices, the study recommended that health care institutions should formulate policies and strategies for both financial and non-financial incentives, benefits and other intervention measures with the purpose of being able to retain health workers.

In an attempt to study the determinants of retention of health workers in rural hospitals in Zimbabwe (Nyandoro et al., 2016), researchers came up with recommendations that there was a need for proactive measures, interventions and strategies important to health professionals at varied stages of their careers in order to attract and retain them in rural areas. In their argument, they (ibid.) asserted that interventions for boosting hospitals capacity to facilitate their employees meet their professional career and socio-economic expectations were found to be very relevant in this framework. Another handicapping factor for retention of health workers was lack of clear measures to initiate equity in human capital development in hospitals, which called for efforts of human resource management departments to work on such a hindrance in order to remove unfairness in providing opportunities for training of health workers.

In a recent study conducted in Sierra Leone, researchers investigated into the determinants of retention of health workers (Wurie et al., 2016). Qualitative findings from life stories showed that though cases of Ebola outbreak had exacerbated substantial health system and human resources for health challenges, there was a need for a new move to motivation of health workers through more focused human resource

management approach, especially in the rural areas. While recent policy reforms had focused on improving financial conditions especially for higher level health workers, other non-financial factors needed more careful attention. In addition, the centralized recruitment and posting system did not allow for responsiveness. Moreover, it was stressed that health workers' involvement and participation in decision-making processes was for them to be integrated in the process of setting national goals, designing strategies and implementing effective policies and programmes relating to their work lives.

Another two studies were conducted in Nigeria. The first one wanted to seek what contributes to the attraction and retention of qualified health workers (Ebuehi & Campbell, 2011). The findings of the study revealed that working conditions, career development opportunities, and appropriate infrastructural issues were still core factors affecting an individual's motivation for rural work, regardless of the health worker's geographic origin. The second study which explored the factors influencing recruitment and retention of nurses in Lagos (Oyetunde & Ayeni, 2014) revealed that retention of health workers was affected by a number of factors including provision of training and growth opportunities, providing study leave for training, sponsoring nurses for conferences and workshops, improving and maintaining safety of nurse, providing assistance to nurses who worked alone, ensuring open and timely communication and open door policies, ensuring availability of work resources, minimizing work related injury by providing lifting equipment, and provision of car loan, house loan, transportation allowance and vacation in form of annual leave. Other strategies included ensuring annual promotion for eligible nurses, and increment in salary and allowances.

Researchers conducted a study in the area of retention of human resources for health in Ghana District hospitals (Daneshkohan et al., 2015) and a move to HRMPs in the health care institutions was recommended. Given the results of the study, strengthening managerial capacity in health services should be emphasized in order to increase motivation of health workers. Considering the negative impact of perceived unfairness on motivation, it was recommended to managers to apply personnel policies fairly on day to day basis, communicate appropriate information about equity to all employees and act in a transparent manner. More on that, it was recommended that a particular attention be given to developing a fair and objective performance appraisal system and implementing supportive supervision strategies.

In Vietnam, researchers investigated into determinants of retention of health workers (Thi Hoai Thu et al., 2015). In their findings, they realized that most disadvantaged part of the health workforce were those working in difficult mountainous and rural environments with limited resources, coupled with little opportunity to practice to maintain and develop professional competencies and with poor supervision. While health workers employed in these areas were considered as highly trained professionals, they saw their knowledge and skills as being eroded, which affected their motivation. The results from this study suggest efforts should focus on providing healthcare workers with the appropriate medical equipment, drug supplies and infrastructure they need to deliver high-quality care. In addition, effective human resource management needs to allow adequate opportunity for HWs to practice, improve their knowledge and maintain their skills. Provision of in-service training should take into account the relevance of the training to the needs of HWs and adopt a practical approach that essentially accelerates the development of the task-relevant skills and competencies of

HWs. In the same way, supervision mechanisms should be reviewed so that training can contribute to boosting the quality of care and worker motivation.

2.6 Study Gaps

A number of studies were conducted to establish the relationship between human resource management practices and retention of health workers. However, most of them were conducted in other countries other than Rwanda; little or no research in Rwanda was conducted with the aim of establishing the links between human resource management practices and retention of professional health workers. This study has provided the insights on the current status of performance management practices in the Rwandan public hospitals, health workers' levels of perception on the existing financial and non-financial incentives, and the level of participation and involvement of professional health workers in the hospitals' decision-making processes. In the same way, the study has shown the current status predicted retention capacity of health workers in the public hospitals by establishing the current status of intentions to stay in these institutions of health care service delivery.

Most studies which were conducted in this area established retention by use of existing retention rates and turnover indices. In fact, while intentions to stay are major predictors of retention and can assist organizations in strategic orientations regarding the future of institutions, it was released that most of studies on this phenomenon relied on a single source of data, without investigating into the views, perceptions and attitudes of current employees in the organizations. In connection with this, most of these studies looked into this phenomenon by considering its variables in isolation of each other, and consequently limiting the possibility to predict retention by used of integrated human resource management approach. This study therefore sought to go beyond this

perspective and establish a holistic view of the effect of human resource management practices on retention of health workers.

The reviewed literature also presents methodological gap. It was noticed that most studies which were conducted in this area used either of qualitative and quantitative approaches, and this is believed to have limited the possibility to overcome barriers that are caused by used of one single paradigm. The current study used mixed methods approach combining both quantitative and qualitative methods of data collection and analysis in order to better understand better the phenomenon under study and minimize the shortcomings that could have been caused by one paradigm.

2.7 Conceptual Framework

The conceptual framework in the present study portrays the effect of human resource management practices (independent variable) on retention (dependent variable) among professional health workers in public district hospitals in Rwanda. This conceptual framework also draws from the Social Exchange Theory as it shows the exchange relationships between the organization (through its representatives) and employees, where reciprocal exchanges happen when employees perceives equity between their contributions to the organization and the way they are treated. In this regard, they respond with positive work behavior by deciding to remain, which in turn leads to high rates of retention. Therefore, the application of this theory to the current study assumes that employee intentions to stay result from best human resource management interventions in terms of financial and non-financial incentives, performance management function, and participation and involvement in decision-making processes

The conceptual framework for the current study is portrayed in figure 3.

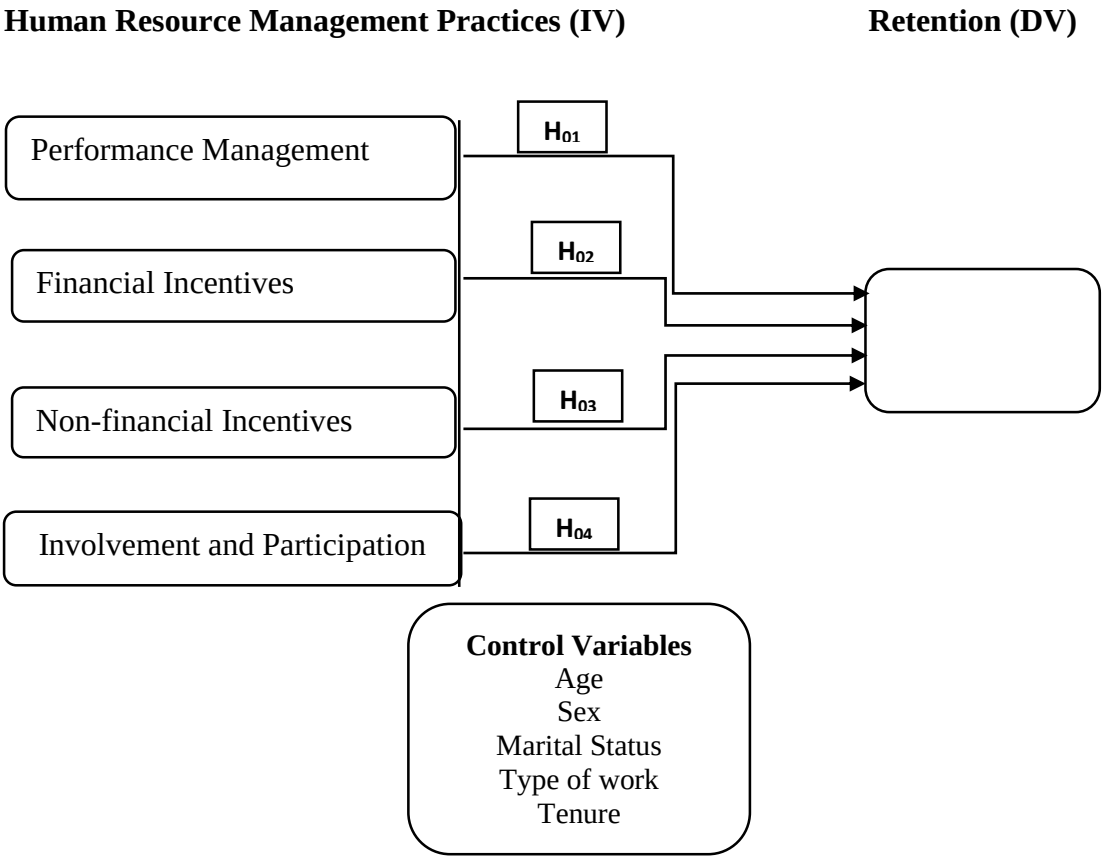

Figure 3: Conceptual framework of effect of human resource management practices on retention

Source: Researcher (2016)

2.8 Operationalization of the Study Variables

As it has been mentioned, the typology of human resource management practices (independent variable) in relation with employee retention entails performance management function, financial incentives, non-financial incentives, employee participation and involvement, and retention is portrayed throughout intentions to stay as its major predictor. Therefore the study variables and their measurements were conceptualized as shown in table 2.3.

Table 2.3: Operationalization of the Research Variables

Type	Variable	Indicators	Measures	Measurement scale
DV	Retention	Intentions to stay (IS)	Respondent' intents to remain or quit	
IV	HRMPs	Performance Management Function (PMF)	Respondents' perceptions on the level of implementation of PMF in terms of: • Performance planning • Performance evaluation • Performance evaluation feedback	Four-point likert scale
		Financial Incentives (FI)	Respondents perceptions on the level of availability and provision of FIs in terms of: • Conditions of employment • Allowances • Fellowships, loans and discounts	Four-point likert scale
		Non-Financial Incentives (NFI)	Respondents' perceived status of NFIs with regard to: • Work environment • Training and development • Career development opportunities	Four-point likert scale
		Participation and Involvement (PI)	Respondents' perceived level of employee PI in decision-making processes in terms of: • Exposure to shared governance • Teams for quality improvement • Consultation for merit pay processes • Establishment of systems for suggestions	Four-point likert scale

Adapted from Sonali (2011) and Alsaqri (2014)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

The aim of this chapter was to describe the design and methodology that were used to investigate the phenomenon being studied: human resource management practices and retention of health workers. Therefore after describing philosophical paradigm that guided the study, full details on other methodological processes that guided that study were explained: the method, study variables, location of the study, target population, sampling techniques and sample size, research instruments, pilot testing, data collection techniques, data processing analysis procedures, the study limitations and finally logistical and ethical considerations were described.

3.1 Area of the Study

The study was implemented in Kigali city, Rwanda. Indeed, Rwanda has four main provinces (Southern Province, Northern Province, Eastern Province and the Western Province) and Kigali City. Each province has Districts as the main units of local administration. Kigali City is not called a province, but it is administered at the level of province as it has districts as well.

With a population of more than 1 million (Nduwayezu, 2015), Kigali (Appendix 1) is the capital and largest city of Rwanda. Its geographic situation is in the centre of the country. Kigali city has been considered the economic, cultural, and transport hub of Rwanda since 1962, the period of independence, and it became the capital of the country (Kigali Institute of Sciences and Technology, 2001). The government ministries and main administration headquarters offices are located in the city. The city is coterminous with the province of Kigali City, which was enlarged in January 2006, as part of local

government reorganization in the country. The city's urban area covers about 70% of the municipal boundaries.

The city is built in hilly country, sprawling across about four ridges and the valleys in between. The tops of the ridges have an average elevation of 1,600 metres, while the valleys are around 1,300 metres. The bigger houses and office buildings tend to be on the tops of the ridges, while the poorer people live in the valleys. The city is ringed most of the way round by higher hills, with some suburban sprawl rising up these. The highest of these is Mount Kigali, with an elevation of 1,850 metres above sea level. Kigali possesses a tropical savanna climate with a pronounced dry season. Kigali is cooler throughout the year than in most other cities around the Equator due to its elevation, which tempers the heat and results in warm rather than hot days and mild rather than uncomfortably warm nights.

Kigali is a province-level city governed by a city council who appoint an executive committee to run the day-to-day operations of the city. The executive committee consists of a mayor and two deputies. The city is split into three administrative districts: Gasabo, Kicukiro, and Nyarugenge, each of which is also governed by the mayor (of the District). It contained parts of the former province of Kigali Rural.

As for the choice of Kigali City as the location of the study, Kigali is a major big city in Rwanda. Kigali being the capital city of the country enjoys a good distribution of health facilities. There are 2 referral hospitals in Kigali, 4 district hospitals, 1 military hospital which also serves for the public, and currently there are 29 health centers in (Joshi, Joshi, Damani, Ng, & Lauwa, 2013). With different types of health services offered to people in the capital city of the country, Kigali attracts different types of professional health workers who are employed in different public district hospitals

available in the city. By choosing Kigali City as the location of the study therefore, it was felt that there was availability and variability of data among respondents. Therefore the researcher targeted the following public district hospitals for data collection: Kacyiru Hospital, Muhima Hospital, Kibagabaga Hospital and Masaka Hospital (Appendix 1).

3.2 Research Philosophy

The philosophical paradigm within which a researcher operates determines the methodology of the study. In fact, philosophical assumptions and theoretical paradigms on the nature of reality and the way reality or knowledge can be studied are foundations from which most researchers make a choice between advocates of quantitative research paradigm and qualitative research paradigm (Campbell & Stanley, 1963; Lincoln & Guba, 2000), and advocates for each side of both being qualified as purists, hence qualitative purists and quantitative purists.

Assumptions that are consistent with the commonly called positivist philosophy are articulated by quantitative purists (Ayer, 1959; Maxwell & Delaney, 2004; Popper, 1959; Schrag, 1992). According to the advocates of this paradigm, there is the same method for both physical scientists and social scientists. It is argued that social observations should be treated as entities and observed in the same way as physical scientists treat physical phenomena (Johnson & Onwuegbuzie, 2004). In addition, quantitative purists entities that are subject to observation should be separate from the inquirer, that is, time and context free generalizations are desirable and possible, and real causes of social scientific outcomes can be determined reliably and validly (Nagel, 1986).

As far as qualitative purists (or interpretivists) are concerned, they insist on the superiority of constructivism (hence their other name, constructivists), idealism, relativism, humanism, hermeneutics (and sometimes, postmodernism) and totally reject positivism (Guba & Lincoln, 1989; Lincoln & Guba, 2000; Schwandt, 2000; J. K. Smith, 1983, 1984). Guba (1990) states that in the point of view of qualitative purists, there is neither need nor possibility for time-and context-free generalizations. In addition, qualitative purists argue that it is not possible to separate the knower and the known, differentiate causes and effects, which gives the power to logic flowing from specific to general (as for example, stating that inductive generalizations generate explanations from the data). Moreover, these purists insist that there is a need to contend the multiple-constructed realities are abound.

From these two stand points, it is worth noticing that both qualitative and quantitative purists view their associated paradigm as the ideal for any activity calling for research procedures. Therefore, they advocate for incompatibility of using both quantitative and qualitative paradigms. One of the leading qualitative purists (Guba, 1990), stated that "accommodation between paradigms is impossible…we are led to vastly divers, disparate, and totally antithetical ends" (p.81). From this standpoint it has been realized for a long time that considerations between purists were considered divisive, then creating two research orientations and cultures: one advocating for superiority of deep and rich observational data, and the other one professing for hard and generalizable data (Sieber, 1973).

Considering these research paradigm wars (Tashakkori & Teddlie, 2010) between positivist and interpretivist paradigms, the third paradigm emerged in the 1960s and became popular in the 1990s: a mixed methods approach. This approach came with the

purpose of bridging the schism between quantitative and qualitative research (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & I, 2004; Tashakkori & Teddlie, 2003, 2010). However, some scientists considered that differences between post-positivism and constructivism were conflicting as the period of paradigm was marked by emergence of debate that focused on the ways in which paradigm and methodology are related (Tashakkori & Teddlie, 2010). With regard to this, pragmatism paradigm emerged as a third set of beliefs, recognizing the "what works" tactic allowing the researcher to handle issues that cannot be dealt with using only either qualitative and quantitative approach.

This study is therefore guided by pragmatism paradigm. Pragmatic paradigm which leads this study is grounded in the mixed-methods approach. Indeed, the pragmatic paradigm is suitable for social and management research (Creswell & Clark, 2011) as well as for scientific research, as it offers a harmonious combination of both quantitative and qualitative approaches suitable for practitioner-based research.

As the philosophical paradigm of the study involves assumptions on the nature of knowledge, or ontology, this study takes the ontological stance of pragmatic paradigm in order to make an exploration of the problem surrounding the issue of human resource management practices in the health care setting. Pragmatism ontology gives priority to the thinking that reality is constantly negotiated, debated, and interpreted in the light of its usefulness in new unpredictable situations. As far as theoretical paradigms of how reality of knowledge can be studied, the study is grounded in the pragmatist epistemological standpoint which is based on the principle that the best method is the one which better brings the solution to the problem under study. Therefore, the study opted for mixed-methods approach of inquiry to the phenomenon, referring to both

quantitative and qualitative methods of data collection and analysis in order to investigate into what professional health workers feel about human resource management practices in public district hospitals at the one hand, and whether they intend to remain in the health care institutions and health care service delivery.

Moreover, the choice of use of pragmatism as the philosophy to guide this study arose from the fact that it permits the researcher a flexible approach to investigation, accommodating an outcome- and adaptive-oriented enquiry method (Johnson & Onwuegbuzie, 2004) and allowing for the use of mixed methods (Creswell & Clark, 2011). This kind of development therefore provides the opportunity of engaging with issues as they emerge. As both inductive and deductive forms of inquiry are allowed by this philosophy, the researcher then has the possibility to use both qualitative and qualitative data analysis.

3.3 Research Design

The study used cross-sectional research design with mixed methods approach. The choice of the design is based on the nature of the problem under study requiring professional health workers' perceived levels of the magnitude of human resource management practices in public district hospitals and their perceived intentions to stay in (or leave) hospitals, and therefore the researcher's intention to measure the respondents' attitudes, opinions and reported observed behavior from a representative sample at one point of time.

The use of mixed-methods approach for this study was motivated by the researcher's intention to use both quantitative and qualitative methods of inquiry in order to be able to better understand the phenomenon under study by use of complementary methods of data collection and analysis, especially in the understanding of the magnitude of human

resource management practices and intentions to stay. This complementarity, along with integration and triangulation involved use of both questionnaires to collect quantitative data, and interviews and focus group discussions to gather qualitative data. In the same manner, mixed-methods approach offered the opportunity to use both quantitative and qualitative data as a way of overcoming challenges that would be in relation with one paradigm being either quantitative or qualitative, what gave the researcher to base conclusions on stronger data provided by both methods.

As the study used both questionnaires, interviews and focus group discussions as data collection tools in order to best understand or develop more complete understanding of the research problem by obtaining different but complementary data, collection and gathering of these data, their analysis and interpretation followed an appropriate strategy. Therefore the study referred to convergent parallel strategy of mixing. This was done for validation purposes and therefore the researcher collected two independent strands of quantitative and qualitative data at the same time/in a single phase, which also means that both methods were prioritized equally. Since each of survey data and qualitative data analysis was kept independent, there was mixing of results during the overall description and understanding of the level of human resource management practices and intentions to stay. However, the methods used for descriptive purposes only being able to show the magnitude of variables, they were backed up by other inferential analysis techniques that are able to predict the effect of independent variables on the outcome variable.

This process involved a number of steps. In fact, both quantitative and qualitative data were collected and gathered to understand the phenomenon under study, which explored the research problem in a manner that is better than just one paradigm. After

quantitative and qualitative data collection, which was done concurrently but independently, the researcher analyzed scores on instruments statistically while dealing with the quantitative component, and then proceeded with qualitative data where interviews and focus group discussions from people's actual words on the study topic provided a complex picture of the situation being dealt with. Then, as part of the process, the researcher integrated qualitative data into quantitative ones for better explanation of their meaning through comparison. This was done to better understand the status of the study variables, or their magnitude, in the area of study.

3.4 Target Population

The study targeted a total population of 402 individuals. These include 89 doctors, 162 nurses, 96 midwives, 23 pharmacists and 32 dentists from 4 district hospitals in Kigali city. The population of the study as from each district hospital where the study was conducted is presented in table 3.1.

Table 3.1: Distribution of the target population

Hospital	Doctors	Nurses	Midwives	Pharmacists	Dentists	Total
Kacyiru Police Hospital	27	48	18	4	6	103
Muhima Hospital	24	42	34	7	11	118
Kibagabaga Hospital	18	35	18	6	7	84
Masaka Hospital	20	37	26	6	8	97
Total	89	162	96	23	32	402

Source: (MOH, 2015)

3.5 Sample Design and Procedure

3.5.1 Sampling Techniques

Three sampling techniques were used to determine the sample size. These are purposive sampling, stratified sampling and simple random sampling. Purposive sampling was used to select Kigali city as the location of the study. Kigali city was chosen as a major big city in Rwanda and the capital city of the country where there was believed to be a variability of data among respondents. Purposive sampling was also used to consider three hospitals apart from Kacyiru because the latter had been a district hospital for less than one year. In fact, having served as a District hospital by less than a year by the time the study was being conducted could not permit to measure the indicator of performance management function as employee performance appraisal is conducted at the end of the fiscal year. In addition, purposive sampling was used to consider all pharmacists and dentists to be included in the study as their number was not big and that they are expected to necessary provide information on human resource management practices in hospitals.

Stratified sampling allowed the researcher to obtain desired representation from various subgroups in the populations being doctors, nurses or midwives. Respondents were selected in such a way that the selected subgroups were contained in the study. Simple random sampling allowed the researcher to obtain single subjects or members from accessible population among doctors, nurses and midwives. It was about assigning a number to each member on the list of doctors or nurses or midwives in each hospital, place them in a container and then pick a number at random until the desired numbers were chosen to be participants in the study.

In order to determine the exact number of doctors, nurses and midwives to include in the study, slovin formula (Guilford & Frucher, 1973) was used to sample them. This formula is written as $n = \frac{N}{1+N(e^2)} n = \frac{N}{1+N(e^2)}$ where N=total population, n=sample size, e=error margin (0, 03). The formula was used to determine the overall total sample of doctors, nurses and midwives in the three hospitals. In order to come up with the number of each stratum (doctors, nurses or midwives), the procedure of proportionate stratification(S. E. Mohammad & Dougherty, 2013) (S. E. Mohammad & Dougherty, 2013) was used. The same approach was used to determine the number of respondents in each hospital. The proportionate stratification formula is written as n*h* = (N*h*/N)*n where n*h* is the sample size for stratum *h*, N*h* = population for stratum *h*, N= total population size and n =total sample size.

3.5.2 Sample Size

As it was pointed out in the previous section, the inclusion and exclusion criteria allowed to work with a sample from three district hospitals: Kibagabaga, Muhima and Masaka. Therefore, a sample including doctors, nurses, midwives, pharmacists and dentists was drawn from the three hospitals through a number of steps including both slovin formula and proportionate stratification:

Step one: Determination of the sample of doctors, nurses and midwives

As the researcher purposively decided to consider all pharmacists (19), and dentists (26), the slovin formula was be applied to the remaining number of the population, which means doctors (62), nurses (114) and midwives (78). Their total number 299, the formula was applied to 299 - (19 + 26), which means 254 individuals including doctors, nurses and midwives (the remaining 45 were considered; the researcher purposively

decided to consider all of them in the study). Applying the slovin formula ($n = \frac{N}{1+N(e^2)} n = \frac{N}{1+N(e^2)}$) to a total number of 254 individuals representing doctors, nurses and midwives, their total sample is $n = \frac{254}{1+254(0.03*0.03)}$

$n = \frac{254}{1+254(0.03*0.03)}$;

then $n = \frac{254}{1+254(0.0009)} n = \frac{254}{1+254(0.0009)}$; and therefore $n = \frac{254}{1.2286} n = \frac{254}{1.2286}$, and finally n= 207 respondents.

Hence the total number of the respondents to be included in the sample was 207 (doctors, nurses and midwives) + 19 pharmacists + 26 dentists, which turns out to be 252 respondents.

Step two: Determination of the total number for each stratum being either doctors, nurses or midwives

In order to come up with the real number of doctors, nurses and midwives to be included in the sample, the procedure of proportionate stratification was used: n*h* = (N*h*/N)*n (n*h* is the sample size for stratum *h*, N*h*= population for stratum *h*, N= total population size and n =total sample size).

Then for doctors, their number was n*h* = (62/254)*207; and then n*h*=51, hence the total number of doctors to be included in the study is 51 doctors.

For nurses, their number was n*h* = (114/254)*207; and then n*h* = 93, hence the total number of nurses to be included in the study is 93 nurses.

For midwives, their total number to be included in the study was n*h* = (78/254)*207, and then n*h* = 63, hence their total respondents in the study will be 63 midwives.

Step three: Determination of the total number of doctors, nurses and midwives in each hospital

The number of respondents calculated in step two include doctors, nurses and midwives from 3 hospitals. As it has been mentioned earlier, the same procedure of proportionate stratification was used for the researcher to have the exact number of doctors, nurses and midwives in each hospital. Then applying the formula (nh = (Nh/N)*n) to sampled respondents in each hospital, the number of doctors, nurses and midwives became:

For doctors, their number in each hospital was n*h*1…n*h*3 = (24/62)*51; (18/62)*51; (20/62)*51 n*h*1 representing hospital 1…and n*h*3, hospital 3.

Therefore the number of doctors in each hospital was: nh_1(Muhima Hospital) = 20; nh_2 (Kibagabaga Hospital) = 15; nh_3 (Masaka Hospital) = 16.

The total number of nurses to be reached in each hospital was nh_1…nh_4: (42/114)*93; (35/114)*93; (37/114)*93, nh_1 representing hospital 1…and nh_3, hospital 3.

Hence the number of nurses in each hospital was: nh_1(Muhima Hospital) = 34; nh_2 (Kibagabaga Hospital) = 29; nh_3 (Masaka Hospital) = 30.

And finally, the total number of midwives in each hospital was nh_1… nh_3: (34/78)*63; (18/78)*63; (26/78)*63, nh_1 representing hospital 1…and nh_3, hospital 3.

And therefore the number of midwives in each hospital was: nh_1 (Muhima Hospital) = 28; nh_2(Kibagabaga Hospital) 14; nh_3 (Masaka Hospital) = 21.

Having purposively considered all pharmacists and dentists, the total sample size and the number of respondents per each stratum is presented in table 3.2.

Table 3.2: The total sample size and the sample size for each stratum

Hospital	Doctors	Nurses	Midwives	Pharmacists	Dentists	Total
Muhima Hospital	20	34	28	7	11	100
Kibagabaga Hospital	15	29	14	6	7	71
Masaka Hospital	16	30	21	6	8	81
Total	51	93	63	19	26	252

Source: The Researcher, 2016

3.6 Data Collection Methods and Procedures

3.6.1 Sources of Data

Data for this study was collected from primary sources through the study instruments that included the questionnaire, interviews and focus group discussions. The data were collected from doctors, nurses (and midwives), pharmacists and dentists from three hospitals in public district hospitals in Kigali.

3.6.2 Data Collection Instruments

Three types of instruments were used in this study: the questionnaire, interview and focus group discussions. The use of more than one research instrument was explained by the fact that research used mixed methods approach soliciting use of both quantitative and qualitative data collection tools, hence allowing the researcher to overcome challenges that might result from the use of one method of inquiry.

3.6.2.1 Questionnaire

The questionnaire was of two categories. The first category was the questionnaire for human resource management practices which was administered to professional health workers. The second category was the questionnaire for professional health workers'

intentions to stay. The questionnaire was used in this study for the purpose of collecting quantitative data. The questionnaire contained both structured and unstructured questions to elicit respondents' perceptions and opinions on the variables and indicators of the study. The questionnaire was designed in such a way that it focused on the areas in line with research objectives. In addition to the fact that he questionnaire was believed to be a strong instrument to gain diversified views and opinions for large samples (Hussey & Hussey, 1997), its use was also dictated by the design and approach of the study. Moreover, the questionnaire was advantageous in that it not only elicited data from respondents in an impersonal manner and that they could not only be able to express their views and opinions freely, but also allowed them to use their own pace to answer it.

Built on the four-point Likert scale (Amin, 2005; Boone & Boone, 2012; Sisson & Stocker, 1989), close-ended questions were given to respondents opportunities to make a definite choice expressing the direction and strength of each statement, and for them not to give answers that are socially pleasant instead of providing the reality of the issue being investigated on (Nowlis, Kahn, & Dhar, 2002). By designing the questionnaire therefore, the neutral response from traditional five-point Likert scale was left out (Sisson & Stocker, 1989). The mode of rating for closed ended questions in human resource management practices and intentions to stay questionnaire was 4= strongly agree 3= agree, 2= disagree and 1= strongly disagree. As for open-ended questions, respondents expressed their views and experiences to answer questions in the full writing style.

3.6.2.2 Interview Guide

The study instruments also contained interviews as its second type, and had two categories. First, there was structured interview guide on both human resource management practices, and, second, the one for intentions to stay and both of them were administered to professional health workers. The purpose of the interview was to get respondents' opinions, ideas and attitudes on the subjects that had not been captured in the questionnaire. It was also used to enrich the data collected by use of the questionnaire, by providing details on such data. The interview guide was developed on the assumption that respondents had knowledge on the topics that are being discussed.

All in all, the interview as the type of instrument for this study was used because of its strength to provide complex textual descriptions of how people understand, live or experience the issue which was being studied, with full expression through behaviors, opinions, relationships and emotions (Atieno, 2009). During the phase of data collection also, respondents could ask questions which were answered by the researcher and by doing so, the quality of the resultant data was increased. In addition, during the interview, the researcher was able to stimulate additional information from the interview participants so as to expand the findings.

3.6.2.3 Focus Group Discussion Guide

The third type of instrument was the focus group discussion guide .In order to explore more on the issue of human resource management practices and health workers' intentions to stay (or leave), focus group discussions were organized. In fact, it was believed that by grouping together respondents with similar backgrounds and experiences where involved health professionals would agree or disagree with each

other on different issues in the discussion, focus group discussions would generate qualitative data containing a range of opinions and views that would be used to get the meaning of findings from quantitative data. As for that, focus group discussions were organized around the main indicators of the study variables: implementation of performance management, availability and provision of financial incentives, the status of non-financial incentives, the level of participation and involvement in decision-making processes, and intentions to stay.

3.6.3 Data Collection Procedures

As per cross-sectional survey research design and convergent parallel strategy of mixed methods approach, both quantitative and qualitative data were collected and gathered at the same period of time and were given equal priority during this phase. In fact, the researcher and research assistants administered the questionnaire for quantitative data collection. It was ensured that the questionnaire was administered to targeted respondents among professional health workers in hospitals where the study was conducted. They also ensured on when to retrieve the questionnaires.

During the same period of time, the researcher and two research assistants embarked onto gathering qualitative data by conducting interviews and focus group discussions. These were electronically recorded to avoid any viewpoint that could go unnoticed or forgotten before transcription. The number of interviews to be carried out was determined following the phenomenon of data saturation (Bonde, 2013; G. Guest, Bunce, & Johnson, 2006). The scenario of qualitative data gathering among professional health workers in hospitals where the study was conducted is displayed in table 3.3.

Table 3.3: The progression of interviews and definition of changes by rounds of activities

Interview guide	Interview round	Total number of interviews	Total number of focus group discussions	Definition of thematic expressions in interview and FGDs rounds	Definition of changes in rounds' thematic expression
Human resource management practices	1 2 3 4 . N	4 8 12 16 . N	1 2 3 . . N		
Intentions to stay (or leave)	1 2 3 4 . N	4 8 12 16 . N	1 2 3 . . N		

Source: Adapted from Guest, et al. (2006)

As it reads from table 3.3, the initial cases for interviews involved 4 interviewees among professional health workers in one hospital for each interview guide followed by the identification of their overarching thematic expressions. Additional four cases from professional health workers were added until no new thematic expressions are identified in the rounds of interviews (Bonde, 2013; G. Guest et al., 2006) and, as for that, until saturation point was reached among professional health workers.

As for focus group discussion, the researcher and research assistants started with one focus group discussion in the first hospital where they carried out the study. Each focus group discussion had at least 7 individuals (Krueger, 1988) and the dual-moderator focus group discussions (where one moderator ensured the smooth running of the discussion while another one ensures all topics are covered) was conducted. As the study was implemented in 3 public district hospitals, once the researcher and research assistants realized that saturation point (that is, no more new ideas are coming up from members of the groups) was reached before focus group discussions were conducted in

all hospitals of the study, they had to decide to wind up the activity. During focus group discussions and interviews, respondents were coded depending on whether they were from the first, second or their hospital. Therefore, during data analysis, such codes were used to identify respondents. For example, NU: Nurse, DO: Doctor, MI; Midwife, DE; Dentist and PHA: Pharmacist. Therefore, NUH102 means Nurse, Hospital 1, respondent 2, MI320 means Midwife, Hospital 3, respondent 20, etc. In total 29 interviews were recorded and 4 focus group discussions were conducted.

3.7 Measurement of the Study Variables

3.7.1 Dependent Variable-Retention

Health workers' retention was measured through intentions to stay. In fact, intention to stay being a major predictor of retention of employees, it has been largely used in such studies with the purpose of capturing current employees' stand, which determines the future retention status in the institution (Mustapha, Ahmad, Uli, & Idris, 2010; Nasyira, Othman, & Ghazali, 2014; A. Zaghloul, M. F. Al-Hussaini, & N. K. Al-Bassam, 2008). To this end, a two-item close-ended adapted questionnaire was used to measure intentions to stay (Alsaqri, 2014; Markowitz, 2012; A. A. Zaghloul, M. F. Al-Hussaini, & N. K. Al-Bassam, 2008) served to this purpose. In addition, this questionnaire also contained one open ended question which was formulated in such a way that respondents had the opportunity to express their own views and opinions in a full writing style Moreover, interviews and focus groups discussion on this variable focused on the main theme of considering to remain (or leave) the hospital.

3.7.2 Independent Variable-HRMPs

The independent variable (HRMPs) has four main indicators: performance management function, financial incentives, non-financial incentives, and participation

and involvement and a 62-item questionnaire was used to collect data on these variables. First, performance management function was measured by a 13-item adapted questionnaire (Iowa Department of Public Health, 2012; KardasLarson [online]) investigating into health workers' perceptions on the implementation of this function in terms of development and planning of performance (6 items), performance review or evaluation (5 items) , and rewarding performance (2 items). Qualitative data was also collected under these main indicators.

In order to establish the dimension of financial incentives, the study used a 14-item adapted questionnaire (Ekpudu & Ojeifo, 2014; Sonali, 2011)was used order to capture health workers' perceptions on the level of availability of conditions of payment: including salaries, wages and other compensation in monetary value (4 items), allowances (5 items), performance payments (2 items), fellowships, loans and discounts (3 items) offered to employees.

For non-financial incentives, a 23-.item questionnaire (Akbar, Riaz, Arif, & Hayat, 2018; Mitchell, Goodman, Alter, Oh, & Faulkner, 2015) was used to investigate on the status of work conditions: including work autonomy and clarity of roles and responsibilities, sufficient resources, recognition of work and achievement, supportive management, manageable workloads and their effective management, effective management of occupational health and safety risks, effective employee representation and communication, enforced equal opportunity policy, maternity and paternity leave, and flexible working hours (11 items), training and development opportunities: availability of training opportunities, fairness in sharing opportunities, management support to apply what was learnt during training on the work site, quality of training (5 items), and support for career and professional development: including effective supervision, access to and support for training and development opportunities,

continuous education, sabbatical and study leave opportunities, and planned career breaks: (6 items). Qualitative data collection was also organized on the basis of the main themes on the measures of non-financial incentives.

Finally, health workers' participation and involvement in the hospitals' decision-making processes was investigated through a 13-item adapted questionnaire (Le Var, 2014; Siong, 2012) seeking health workers' perceptions on the degree of satisfaction with exposure to shared governance (2 items), terms for quality improvement (3 items), consultation for establishment of merit pay processes (3 items), and establishment of systems for suggestions (5 items). The main themes described by these measures were also used to collect qualitative data on this indicator.

3.7.3 Control Variables

The control variables that were included in the study were gender of respondent, their age, marital status, experience (tenure) and the type of work (whether the respondent is a doctor, a nurse, midwives, dentist or pharmacist). The need to include control variables was to reduce their possibility of affecting the relationship between dependent and independent variables, which may lead to spurious results. Gender was measured by establishing whether the respondent was male or female, the age was measured by establishing whether the respondent's age fell into the category of below the age of 30, within 31-40 years, within 41-50 years, within 51-60 years and the age of 61 and above. The respondents' experience was established by whether they had worked for less than one year, between 1 and 3 years, between 4 and 6 years, between 7 and 9 years, and 10 years and above. The type of work was established whether the respondent was a doctor, a nurse or midwife, a dentist, or a pharmacist).

3.8 Reliability and Validity

It is essential for the researcher to conduct a pilot stud before embarking on the actual study as a prior preparation to doing actual research, especially by testing or trying out instruments that will be used in the study. Therefore the pilot study is very important in that it tells the researcher whether there are issues with research instruments, that is whether they are too complicated or inappropriate, and therefore gives prior warning on whether the major or actual study might fail. In addition to this, the pilot study provides opportunities for the researcher to identify issues about wording, phrasing, contents, layout, length and coding, which are very significant for the overall results to be expected from respondents. Therefore the pilot study is an opportunity to amend all these issues in case they might be there. For the sake of improving the questionnaire and checking whether it could be a comprehensive material for respondents therefore, the researcher conducted a pilot study on the subjects with the same characteristics as respondents who will participate in the actual study.

3.8.1 Reliability of Instruments

Internal consistency reliability was used. As the questionnaire for this study entailed groups of items to measure different aspects of the same concept (either human resource management practices or retention), it was believed that the Cronbach coefficient alpha would be a good measurement of consistency reliability. The latter was considered among groups of items combined to form a single scale to ascertain how the different items complement each other in their measurement of different aspects of the same variable. The use of internal consistency reliability was also triggered by the fact that the questionnaire was constructed on the likert scale model, which provided interval scale data. Therefore, the results that were obtained from the pilot study allowed the

corrections in the questionnaire, like for example rephrasing the statements to make them more understandable by respondents.

To this end, the researcher determined the reliability of the questionnaire after pre-testing the instrument. This was done through a pilot study which was conducted on 21 health workers with the same characteristics as respondents, from the southern province 3 district hospitals, and the pre-test data was subjected the Cronbach formula:

$\alpha = (\frac{n}{n-1})1\text{-}\frac{\sum(SD_i^2}{SD_t^2}$where$\alpha$ is Cronbach alpha, n the number of respondents to the questionnaire, SD_i^2, the variance of the questionnaire scores and $\sum(SD_i^2$ the sum of the variances of item scores. Cronbach alpha coefficient test of reliability was calculated based on the recommended acceptable alpha of 0.62 in social sciences (Hair Jr., Black, Babin, & Anderson, 2010). Results of reliability testing are presented in table 4.1.

3.8.2 Validity of Instruments

In order to ensure that research instruments are real measures of what they are supposed to measure (Zikmund, Babin, Carr, & Griffin, 2013), face validity content validity, criterion validity, and construct validity approaches were addressed. To determine face validity, personal opinion or appreciation was expressed as whether or not the construct was measuring what it was supposed to measure by inspecting their appropriateness. Therefore, the instrument for data collection was presented to lecturers from the School of Business and Economics at Moi University with expertise in the area of human resource management. These lecturers assessed the relevance of instruments, and whether or not they fully represent the domain of study, and they provide their comments and suggestions that helped the researcher to improve the research instruments. In addition, the researcher ensured credibility by adopting strategies to help ensure honesty among the interviewees during the administration of interviews

and focus group discussions. This was done specifically by giving opportunities to each interviewee to refuse to participate in the interview or focus group discussion in order to ensure that the sessions involved those who were genuinely willing to participate and prepared to give information freely and encouraging the interviewees to be as much frank as possible (Shenton, 2004).

In order to establish criterion validity, the findings of the study were generalized to the population of professional health workers in the public district hospitals in Rwanda, from which the sample of the study was drawn. As for construct validity as the extent to which constructs theoretically identify with each other to measure an idea in light of the speculations fundamental within a research (Milton & Gregory, 2009), a review of theories that underlie the study variables was done to establish it. In addition, the researcher looked at the correlation matrix and the inter-construct correlations to establish it convergent and discriminant validity as they relate to construct validity. Results for correlation matrix are presented in table 4. 21.

3.9 Data Processing and Analysis

3.9.1 Data Processing

After data collection, careful examination of the returned questionnaires was done in order to make observations on the ones to be considered for data analysis. Then the process of data coding by assigning numerical symbols for data entry was done. An examination of coded data was done in order to minimize the errors while entering data in the software. The data were therefore checked and cleaned to ensure accuracy and completeness, and the data was processed to check on outliers.

3.9.2 Data Screening

Preliminary data screening was done by comparing the original data on the questionnaire with the data entered in the software. Each questionnaire having been assigned with a code in the same order as in the software, the code was used to counter-check the data on the questionnaire and the entered ones. In addition, preliminary descriptive statistics were run and observed in order to check on the accuracy. The data were also subjected to correlations and preliminary regressions to test the assumptions of the regression model and to detect whether there were outliers.

3.9.3 Data Analysis

The data analysis procedure for this study was informed by the research design. Both quantitative data and qualitative data were analyzed. The study being guided by convergent parallel strategy as a variant of mixed methods design, data from the survey and those from interviews and focus group discussions were analyzed separately and were later merged and compered to explain the status of human resource management practices and intentions to stay.

3.9.3.1 Descriptive Statistics

Descriptive statistics were presented in a form of frequency distributions. Apart from descriptive statistics for social and demographic characteristics of respondents (age, gender, marital status, education level, tenure in the service and nationality), the magnitude of human resource management practices from health workers and intentions to stay was described in terms of health workers' perceptions on the level of status, availability and provision of the indicators of these variables in the hospitals.

Likert-scale data were analyzed using both descriptive and inferential statistics (Amin, 2005; Boone & Boone, 2012; Ockert, 2005) of the study variables. The analyzed data

were from close-ended questionnaires measuring human resource management practices and intentions to stay. In this regard, descriptive statistics of means and standard deviations were used to measure the magnitude of variables. The interpretation of means was based on the mean real limits in the interpretation of the four-point Likert scale responses (Amin, 2005; Anumaka & Kyolaba, 2013; Bizimana & Orodho, 2014) where the mean within 3.26-4.00 = higher, 2.51-3.25 = high, 1.76-2.50 = low and 1.00-1.75 = lower. The mean limits applied to the variables of the study were interpreted as very satisfying, satisfying, fairly satisfying and no-satisfying level of implementation of performance management function; higher, high, low and lower level of availability and provision of financial incentives; higher, high, low and lower status of non-financial incentives; higher, high, low and lower level of participation and involvement of health workers in the hospital decision-making processes; and intentions to stay.

Table 3.4. Interpretation of the mean range in a four-point Likert scale

	Response	**Value**	**Lower limit**	**Upper limit**	**Interpretation**
HRMPs	SA	4	3.26	4.00	Very satisfying/very high/very often
	A	3	2.51	3.25	Satisfying/High/often
	D	2	1.76	2.50	Fairly satisfying/Low/rarely
	SD	1	1.00	1.75	Not satisfying at all/Lower/never
IS	SA	4	3.26	4.00	Very high
	A	3	2.51	3.25	High
	D	2	1.76	2.50	Low
	SD	1	1.00	1.75	Very low

SA=Strongly agree A=Agree D=Disagree SD=Strongly Disagree

Source: Amin (2005), Anumaka and Kyolaba (2013), Bizimana & Orodho (2014)

The standard deviation is an indication of the average distance from the mean. A low standard deviation would mean that most observations cluster around the mean. A high standard deviation would mean that there was a lot of variation in the answers (Bizimana & Orodho, 2014; Christensen & Stoup, 1991).

3.9.3.2 Correlation Analysis

In order to identify associations between variables, correlation analysis was performed. The data analysis software was used to compute the Pearson Product Moment Correlation coefficient as the statistical measure to determine associations between variables, with values ranging between +1 and -1 (Vanderstoep & Johnston, 2009). It is assumed that high correlations between covariates will make it difficult to establish their effect on the outcome variable (Hair Jr. et al., 2010). In this regard, the correlation coefficients allowed to examine the strength of relationship between explanatory variables and the outcome variable. The output was checked for correlation coefficients greater than 0.04 at significance level of 0.05 as the acceptance level (Tabachnick & Fidell, 2007). The establishment of correlations and correlation matrix was facilitated by SPSS software.

3.9.3.3 Regression Model and Regression Analysis

Quantitative data were also be subjected to inferential statistics of multiple linear regression analysis (Pallant, 2005; Sykes, 1992) to institute the R-square (R^2). The R^2 showed the coefficient of determination of the amount of variability explained in the dependent variable (retention) by the independent variable (human resource management practices). Multiple regression also established the Regression Weights (Beta) which is the amount of contribution of a variant of the independent variable, which is either performance management function, financial incentives, non-financial incentives, or participation and involvement while holding other variants constant.

The Multiple Regression model (Keller, 2014) was used to compute the multiple regression coefficients. This is written as $y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e$ where the predictors are $x_{1=}$ performance management function, $x_{2=}$ financial incentives, x_3= non-financial incentives, $x_{4=}$ participation and involvement, and e = the error term that symbolizes other variables that may affect the dependent variable. β_1, β_2, β_3 and β_4 being variations in the dependent variable explained by each of the predictors while holding other factors constant therefore, β_1 was the contribution of the first independent variable (performance management function) to the dependent variable (retention of health workers). β_2 was the contribution of the second independent variable (financial incentives) to the dependent variable (retention of health workers). β_3 was the contribution of the third independent variable (non-financial incentives) to the dependent variable (retention of health workers) while β_4 was the contribution of the fourth independent variable, which is participation and involvement on retention of health workers as a dependent variable.

In a nutshell, beta weights showed which variant (either performance management function, financial incentives, non-financial incentives or participation and involvement) of the independent variable had a larger contribution to the dependent variable. The beta weights also showed the increase in the dependent variable for every unit change in percentage of the variant of the independent variable (that is, for every increase by a factor of one standard deviation). The significance of each beta coefficient was established at $p < .05$, which also was used to test the hypotheses (Amin, 2005; Christensen & Stoup, 1991; Ofori & Dampson, 2011). The computation of the required statistics was facilitated by the Statistical Package for Social Sciences (SPSS).

3.9.3.4 Underlying Assumptions of Multiple Linear Regression

It was important to test statistical assumptions of the model used in the data analysis before running regression analysis. In fact, owing to the fact that statistical tests are based on assumptions, there was need to test whether the model used fulfilled such assumptions in order to avoid errors that could have been caused by use of the model which did not fit the data analysis (Park, 2013).

(1) Linearity

Linearity was checked as the assumption which is based on how the data presented graphically are in a straight line (Tabachnick & Fidell, 2007). Examination of the scatter plots and observation of histograms is one of the most common technique to check for linearity of data, and identify non-linear patterns within the data (Hair Jr. et al., 2010).

(2) Normality

Normality is the assumption that a data se tis well-modeled by a normal distribution (Usadọlọ, 2016). Some of the techniques used to check for normality of data include the observation of histograms and the examination of kurtosis and skewness of data. (Usadọlọ, 2016). This study checked for normality by use of kurtosis and skewness statistics which must be equal to or less than a critical value of +/- 2.28 or +/-0.001 with 0.05 and 0.01 levels of significance, respectively, to claim for existence of normality (Tabachnick & Fidell, 2007).

(3) Homoscedasticity

This is the assumption that dependent variables show the same (or almost the same) levels of variance, or in other words, that they are evenly distributed (Hair et al. 2010; Kline 2011). There are different ways of checking for

homoscedasticity of data, but in this study the examination of residual scatter plots (Hair Jr. et al., 2010) was referred to. In fact, there is homoscedasticity of data when on the residual scatter plot the evenly distributed data take a rectangular shape (Tabachnick & Fidell, 2007).

(4) Multicollinearity:

Multicollinearity is a phenomenon in which one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy, which affects both the explanation and estimation processes (Tabachnick & Fidell, 2007). The variance inflation factor and tolerance value (Kutner, 2004) were used to check for (multi)collinearity in this study, in order to establish how a specific independent variable is explained by another independent variable: VIF were supposed to be equal to or less than 1; tolerance values were expected to be more than 1.

3.9.3.5 Qualitative Data Analysis

Qualitative data analysis for this study involved a number of activities. First, all the data from interviews and focus group discussions were transcribed in the word format in order to make them manageable for better organization and uploading into the software. Second, data were uploaded in the NVivo software, and to start actual analysis, the researcher proceeded with giving codes to different data themes and sub-themes depending on different issues that were explored during qualitative data collection phase of the study. In the same way, the researcher noted personal reflections and other necessary comments in the margin of the original text in the word format while at the same time using them to make comprehensive organization of data by themes by creating the nodes in the software. Therefore, thematic analysis was done to identify key themes in the textual data. In fact, this involved sorting and sifting through the data

in order to identify similar phrases and statements, relationships between variables, patterns or themes, and distinct differences between subgroups and common sequences. This involved the categorization of ideas and concepts. Using narrative forms therefore, similar categories were brought under the main over-arching themes in order to make a comprehensive text displaying data findings. During this phase also, the data from open ended questions were analyzed in the same way as they included respondents' free writing on the issues that were investigated in the study. Therefore the main findings of qualitative data were used to understand the magnitude of human resource management practices as perceived by health workers.

3.9.3.6 Triangulation of Data

After the analysis of qualitative data, the process of data triangulation and interpretation followed. This was done by siding the themes from textual data with numerical data under descriptive statistics in narrative forms. By doing so, the researcher sought to support the findings on the magnitude of indicators by exploring more on the status of human resource management practices in terms of availability and provision of financial incentives, the status of non-financial incentives and performance management function, and the level of health workers' participation and involvement in the hospital decision-making processes.

3.10 Limitations of the Study

The research process might be affected by some limitations resulting from respondents, methods of data collection and the data analysis techniques that are used in order to achieve the objectives of the study. Firstly, the researcher had limited control over respondents' honesty and personal biases. In fact, the study being conducted in the health care setting, health workers might have been reluctant to disclose true

information on the current practices of human resource management in their areas of work. In the same way, there might have been cases where health workers feared to disclose information on their intentions to leave the facilities fearing that this might impact on their jobs. Moreover, it is possible that that respondents may have exaggerated the situation compared to how it was in reality.

Secondly, the study being conducted in public district hospitals in Rwanda, its results might be different from the ones that can be generated from health institutions of the different type. This limits the possibility of generalization of results across all health care institutions. In addition, the study having focused on professional health workers, the findings might only be generalized to the types of respondents who participated in the study and limiting the possibility of extending generalization of results to any other personnel in the health care setting such as administrative and support staff or community health workers.

Moreover, the study focused on employees who were in the service at the time when the research was conducted. Therefore, it is possible that professional health workers who have resigned might have provided different opinions on the levels of human resource management practices in the health care setting and the major determinants of employee turnover in the health institutions in Rwanda.

3.11 Logistical Considerations

First, the researcher established a research budget specifying the amounts to be incurred on every activity of the study. Once the budget was drawn, the researcher drew a detailed study implementation plan to allow a smooth succession of activities, printing, packaging, data collection, transcription, reduction, editing, coding, collating and encoding into the computer and statistical treatment using SPSS 20.0 for quantitative

data and NVivo for qualitative data. Second, the researcher applied for and secured an introduction letter serving as the school management authorization to proceed with data collection. Third, a research permit was applied for and secured from the University of Rwanda Research Review Board for the research to abide by the laws governing the framework for conducting research activities in Rwanda. Then the researcher recruited two (2) research assistants and trained them on research materials. After acquiring the research permit from the University of Rwanda Research Review Board, the researcher sought authorization from the three hospitals which in turn officially introduced the research team to the respective departments in order to start research activities in those units. The authorization was provided in a form of official letter signed by the hospital Director after recommendations from the hospital Research and Ethics Committee. Thereafter and the research assistants embarked on the data collection process.

3.12 Ethical Considerations

Specific measures were devised to ensure adherence to the ethics of conduct of research. Agreement was sought from the informants and informed-consent rules were followed properly to ensure that the informants' participation is voluntary. Firstly, the purpose of the study was explained to respondents. Secondly, the researcher informed respondents that participation in the study was voluntary, and that respondents were free to withdraw from it at any time they judged it necessary. In addition to this, the relevance and benefits from the study were communicated to the respondents beforehand. In fact, the researcher emphasized the nature of the study and the principle of free choice to adherence to informed consent by insisting more on volunteerism. In this regard, respondents were given the opportunity ask questions before, during and at the end of the study. Thirdly, the researcher respected respondents' rights to safeguard their personal integrity, by ensuring confidentiality and anonymity were kept to

guarantee that no harm could be visited to the participants. In addition, the researcher adhered to the standards on intellectual property by properly acknowledging the sources of information, and all references were uploaded in Endnote for proper citation and referencing in the APA system.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Overview

This chapter presents the findings of the study and their interpretation. Firstly, the chapter starts with the response rates and presentation of social and demographic characteristics of respondents who participated in the study. Secondly, descriptive findings from both the survey and interviews and focus group discussions are presented. Presentation of these findings is based on each of the main variables, and the outcome variable. Thirdly, regression analysis was done to establish the effect of human resource management practices on the retention of employees. Fourthly, the chapter ends with the testing of hypotheses of the study:

4.1 Data Preparation and Screening

4.1.1 Reliability of Instruments

Before the survey questionnaire was used to collect the data in hospitals, reliability of instruments was ensured. This was done by a pilot study individuals from the southern Province having the same characteristics as the sample. Therefore, internal consistency reliability was measured by use of Cronbach's alpha. As it is displayed in table 4.1, the Cronbach's alpha was beyond the recommended value of between 6 and 7.

Table 4.1: Reliability tests results.

Variable	Initial items	Final Items	Cronbach's Alpha
PMF	13	13	.941
FI	14	14	.876
NFI	22	22	.930
PIDM	12	12	.933
INTS	2	2	.808

PMF: Performance Management Function, FI: Financial Incentives, NFI: Non-Financial Incentives, PIDM: Participation and Involvement in Decision-Making

Source: Survey Data, 2017

4.1.2 Response Rate

The questionnaire for quantitative data collection was delivered to 5 categories of professional health workers. As the questionnaire was distributer to 12 medical specialists, 38 medical doctors, 93 nurses, 63 midwives, 19 pharmacists and 26 pharmacists, the total number of questionnaires distributed turned out to be 252. For all the questionnaires distributed among medical specialists and medical doctors, the return rate was 91.5% and 97.4% respectively. While all questionnaires distributed to nurses and midwives were all returned for data analysis, the respective response rate among pharmacists and dentists was 84.2% and 96.1%. All in all, 243 well filled questionnaires out of 252 which had been distributed among professional health workers in the hospitals were returned, resulting into the total response rate of 96.4%, exceeding the minimum recommended response rate of 60% as suggested by Fincham (2008).

4.1.3 Missing Data

Before undertaking the important stage of data analysis, the data have to be examined carefully to check whether there are missing values as occurrences unavailability of valid values for cases in one or more variables (Hayes, 2012). Before the questionnaire was distributed to respondents, its items and the way it should be filled were explained in the morning departmental meetings upon appointment with the head of department (or service). The usefulness of fully filling the questionnaire was also explained along with other ethical considerations during those short meeting sessions. After the data collection process, all the questionnaires were checked for missing values and notes were taken and recorded. According to Tabachnick and Fidell (2007) missing values of less than 5% for each item can be substituted by the mean, and this technique was used

to respond to such issues in the screening of data for this study. It was noted, however, that missing values were less than 2.7 % of the cases.

4.1.4 Analysis of Outliers

Outliers are abnormal which may be found in the data set and that substantially differs from the rest, with respect to the values of one variable, or in a multivariate data, in respect of combination of values for several variables (Barnett & Lewis, 1994). Outliers are checked for before embarking on other data analysis procedures because they have the potential to strongly influence on the parameters estimates of the model used for the data, which in turn may create ambiguity or mistakes during the concluding phase, or simply bring to inaccurate predictions [ibid]. Univariate outliers are checked for using standardized scores within the interval of -3.0 to 3.0 (Osborne & Overbay, 2004). For multivariate outliers, they are detected by use of Mahalanobis distance (D^2) (Osborne & Overbay, 2004; Tabachnick & Fidell, 2007), which indicates the distance of the case to the centroid of all cases of explanatory variables. In case the probability of the D^2 of the case is below 0.001, it is considered as an outlier. By using these two techniques, it came out that no outliers were identified.

4.2 Demographic Characteristics of Respondents

The social and demographic characteristics of the sample are described in this section and provide the nature of respondents who participated in the study. The social and demographic characteristics are concerned with 243 respondents whose questionnaires were returned and considered for data analysis. To this end, the description of the study participants was done by cross-tabulating the respondents' area of work (considering whether a professional health worker was a medical specialist, medical doctor, nurse, midwife, dentist or pharmacist) with other social and demographic variables including age, gender, marital status, level of education, experience in both the health service and

the current health facility, and the nationality. Table 4.2 summarizes the social and demographic characteristics of the study participants in terms of counts and percentages for each category.

Table 4.2: Social and demographic characteristics of respondents

	Area of work						
	Medical Specialists	General Medical doctors	Nurses	Midwives	Dentists	Pharmacists	Total
N	11 (4.52)	38 (16.23)	93 (38.27)	60 (24.69)	25 (10.28)	16 (6.58)	243 (100.00)
Gender							
Male	7 (63.64)	19 (50.00)	52 (55.91)	31 (51.67)	11 (44.00)	9 (56.25)	129 (53.09)
Female	4 (36.36)	19 (50.00)	41 (44.09)	29 (48.33)	14 (56.00)	7 (43.75)	114 (46.91)
Age of Respondents							
30 years and below	0 (0.00)	6 (15.79)	21 (22.58)	16 (26.67)	0 (0.00)	0 (0.00)	43 (17.70)
Between 31-40 years	3 (27.27)	14 (36.84)	33 (35.48)	25 (41.67)	11 (44.00)	4 (25.00)	90 (37.04)
Between 41-50 years	8 (72.73)	17 (44.74)	32 (34.41)	13 (21.67)	11 (44.00)	11 (68.75)	92 (37.86)
51 years +	0 (0.00)	1 (7.53)	7 (7.53)	6 (10.00)	3 (12.00)	1 (6.35)	18 (7.41)
Marital status							
Single	4 (36.64)	14 (36.84)	25 (26.88)	15 (25.00)	2 (8.00)	5 (31.25)	65 (26.76)
Married	7 (64.64)	24 (63.16)	60 (64.16)	45 (75.00)	18 (72.00)	11 (68.75)	165 (67.90)
Divorced	0 (0.00)	0 (0.00)	3 (3.23)	0 (0.00)	5 (20.00)	0 (0.00)	8 (3.29)
Separated	0 (0.00)	0 (0.00)	3 (3.23)	0 (0.00)	0 (0.00)	0 (0.00)	3 (1.23)
Widowed	0 (0.00)	0 (0.00)	2 (2.15)	0 (0.00)	0 (0.00)	0 (0.00)	2 (0.82)
Level of Education							
Secondary education (A2)	0 (0.00)	0 (0.00)	2 (2.15)	0 (0.00)	1 (4.00)	0 (0.00)	3 (1.234)
University Diploma (A1)	0 (0.00)	0 (0.00)	32 (34.41)	32 (53.33)	17 (68.00)	2 (12.50)	83 (34.16)
Bachelor's Degree (A0)	0 (0.00)	33 (86.84)	55 (59.13)	28 (46.67)	7 (28.00)	14 (75.50)	137 (56.38)
Masters' Degree	8 (72.72)	5 (13.46)	4 (4.31)	0 (0.00)	0 (0.00)	0 (0.00)	17 (7.00)

PhD	3 (27.28)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3 (1.23)
Experience in the Health Care Service Delivery							
Below 1 year	0 (0.00)	0 (0.00)	5 (5.38)	1 (1.67)	0 (0.00)	0 (0.00)	6 (2.47)
Between 1 and 3 years	0 (0.00)	10 (26.32)	25 (26.88)	19 (31.67)	5 (20.00)	8 (50.00)	67 (27.57)
Between 4 and 6 years	2 (18.18)	18 (47.37)	31 (33.33)	15 (25.00)	4 (16.00)	4 (25.00)	74 (30.45)
Between 7 and 9 years	5 (45.45)	8 (21.05)	15 (16.13)	15 (25.00)	9 (36.00)	1 (6.25)	53 (21.81)
Between 7 and 9 years	0 (0.00)	0 (0.00)	7 (7.53)	0 (0.00)	1 (4.00)	0 (0.00)	8 (3.29)
Between 10 years and more	4 (36.36)	2 (5.26)	10 (10.75)	10 (16.67)	6 (24.00)	3 (18.75)	35 (14.40)
Experience in the Current Hospital							
Below 1 year	0 (0.00)	10 (26.32)	12 (12.90)	5 (8.33)	2 (8.00)	0 (0.00)	29 (11.93)
Between 1 and 3 years	2 (18.18)	14 (36.84)	26 (27.96)	23 (38.33)	9 (36.00)	8 (50.00)	82 (33.74)
Between 4 and 6 years	7 (63.64)	12 (31.58)	43 (46.24)	28 (46.67)	11 (44.00)	5 (31.25)	106 (43.62)
Between 7 and 9 years	2 (18.18)	2 (5.26)	12 (22.90)	4 (6.67)	3 (12.00)	3 (18.75)	26 (10.70)
Between 7 and 9 years	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
10 years and more	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Nationality							
Rwandan	11 (100.00)	30 (78.95)	93 (100.00)	58 (96.67)	22 (88.00)	16 (100.00)	230 (94.65)
Non-Rwandan	0 (0.00)	8 (21.05)	0 (0.00)	2 (3.33)	3 (12.00)	0 (0.00)	13 (5.35)

Note: Figures in brackets show percentages to total

Source: Survey Data, 2017

As it reads out from table 4.2, a big number of respondents consists of nurses and midwives represented by a respective percentage of 38.27% and 24.69% of the total number of respondents whose returned questionnaires were considered for use in data analysis. General medical doctors make 16.23 % of the total number of respondents, followed by dentists who represent 10.28% of the sample. Another group of respondents comes from pharmacists and medical specialists who respectively make a percentage of 6.58% and 4.52% of respondents whose data provided in the answered questionnaire was considered valid for use in data analysis.

The overall age of respondents varied according to the category of respondents. In fact, while majority of medical specialists (72.73%) and pharmacists (68.75%) are in the age category of 41 to 50 years age, majority of midwives (41.67%) and general medical doctors (44.74%) are in the category of 31-40 years of age. Of all dentists who participated in the study, 88% of them were concentrated in the age category of 31-40 (44%) and 41-50, with only six of them (12%) being in the category of 50 years of age and above. Similarly, nurses in the age category of 31-40 and that of 41-50 make almost a total of 70% while 22.58% and 7.53% fell in the categories of below 30 years of age and 50 years of age, respectively. Medical specialists in the age category of 31-40 made 27.27% of the total respondents among specialists, which is close to the percentage of pharmacists who fall in this age group (25%). While the category of age with the least number of respondents is 50 years and above (7.53% among medical doctors and nurses, 10% and 12% among midwives and dentists respectively, and 6.53% of the total pharmacists), no single respondent was in the age of below 30 years of age among medical specialists, dentists and pharmacists. It is also worth noticing that though the age group of 30 years and below makes 43 % of the total number of respondents who participated in the study, the percentage is relatively small across the respondents' areas

of work in comparison with other groups of age: there is only 15.79% of this age group among general medical doctors, 22.58% among nurses and 26.67% among midwives. All in all out of 243 respondents whose returned questionnaires were considered for use in this study, the categories of age of 31-40 and 41-50 made a percentage of 37.04% and 37.86% respectively, then totalizing a percentage of almost 75% of the total number of respondents.

In terms of marital status, the collected data on social and demographic characteristics of respondents reveal that married respondents make 67.90% professional health workers who participated in the study, followed by single respondents representing 26.76% of the total number of respondents. While only 8 (3.29%) respondents were found out to be divorced, widowed and separated consisted of 1.23% and 0.82% of the total number of respondents respectively. Among professional health workers who are in the category of medical specialists, they were all found out to be in the categories of married and single (64.36% and 36.64%, respectively) with none of them being in the three last categories of divorced, widowed and separated. Another group of professional health workers with no single respondent in the category of divorced, widowed and separated consists of midwives and pharmacists; only 6 nurses reported to be either divorced (3.23%) or widowed (3.23%) and 2 of them (2.15%) fall in the status of those who are separated. It also turns out to realize that among dentists, married respondents make a total of 72%, while 8% and 20% are single and divorced respectively. In addition, while 64.16% of nurses and 75.00% of midwives are married, respondents who reported to be single in these categories of health workers represented a respective percentage of 26.88% and 25.00%.

Professional health workers with secondary education were identified among nurses (2.15%) and dentists (8.00%) and none of them was counted among the remaining categories of respondents. Similarly, none of respondents among medical specialists had a university diploma or bachelor's degree, as it was the case for general medical doctors with university diploma. In the same viewpoint, it was realized that the maximum level of education which was identified among midwives, dentists and pharmacists was bachelor's degree and none of these categories was reported to have gone further with the university education with Masters and Doctor of Philosophy (PhD). While all medical specialists had either master's degree (72.72%) or PhD (27.28%) as the highest level of education, most of general medical doctors had a Bachelor's degree (86.84%) with a very small number (13.46%) with Master's degree. The Bachelor's degree was found to be also hold by many respondents among pharmacists (75.50%), nurses (59.13%) and midwives (46.67%); respondents with university diploma turned out to count in big number among dentists. All in all, 137 (56.38%) out of 243 respondents whose returned questionnaires were considered for use in data analysis had university education with bachelor's degree, followed by professional health workers with university diploma (34.16%). While the respondents with secondary education and PhD represented only 1.23% each, the total number respondents with university education and who had gone further up to masters' level consisted of 7% of the total number of respondents.

The demographic characteristics of respondents in this study also considered professional health workers' tenure in the health care service. In this regard, it was realized that no respondent among medical specialists, general medical doctors, dentists and pharmacists has been working as a professional health workers for less than one year. In the same way, there were no respondents among medical specialists in the

category of between 1 and 3 years as wells as between 10 to 12 years. Similarly, no respondents were found with the experience of between 10 and 12 years among general medical doctors, midwives, dentist and pharmacists. It was revealed through the data, however, most medical specialists had between 7 and 9 years of experience in the health care service profession (45.45%) and more than 13 years of experience (36.36%). As far as general medical doctors are concerned, their experience in the health care service delivery ranged from between 4 and 6 years (47.37%) through the range of between 1 and 3 years (26.32%) to that of between 7 and 9 years (21.05%) with only a percentage of 5.26% who have been in this profession for more 13 years. The data also show that half of both midwives and nurses are in the range of between 4 and 9 years; the range of between 1 and 3 years of experience consists of 26.88% and 31.67% of nurses and midwives respectively. While 50% of pharmacists had been in the profession for the period ranging from 1 to 3 years, most dentists had been in the profession for the period ranging from 7 to 9 years (36.00%) with the same percentage in the range or between 1 and 6 years (20% for between 1 and 3 years; 16% between 4 and 6 years of experience). The overall count of years of experience among respondents shows that the range of between 1 and 6 years had almost 60% of respondents (30.45% for the range of 4-6 years and 27.57% for the range of 1-3 years of experience). While the range of between 7 and 9 years of experience has 21.81% of respondents, those with more than 14 years of experience in the health care service delivery were found out to be 14.40% and only 2.47% of the total number of respondents had the experience of less than one year in the health care service profession.

As far as the tenure in the current facility is concerned, it was realized that all respondents have stayed for the hospitals where they are currently working for 9 years or less, as none of them was found to have stayed in the hospital for 10 years or more.

It is worth noting that while majority of medical specialists (63.64%), nurses (46.24%), midwives (46.67%), and dentists (44.00%) have been working in the current hospital for the period ranging from 4 to 6 years, the period ranging from 1 to 3 years of stay in the current hospital contains majority of general medical doctors (36.84%) and pharmacists (50.00%), with another big number of general medical doctors in the period ranging from 3 to 6 years of experience (31.58%) in the current health care institution. Although no medical specialist had been in the current institution for less than one year, a good number of them (18.18%) have been in the current hospital for a period ranging from 1 to 3 years. Nurses, midwives and dentists who had been in the current hospital make a total of 27.96%, 38.33% and 36.00% respectively, while the respective percentage of 26.32%, 12.90%, 8.33% and 8.00% show the number of general medical doctors, nurses, midwives and dentists who had been working for the current health care institution of the period of less than one year. In a nutshell, while no professional health worker among respondents was found to be working for the current institution for 10 years or more, majority of them (43.62%) had stayed in the current hospital for the period ranging between 4 and 6 years. Important is to note that the period ranging from 1-3 years of experience in the current health care provision facility had a percentage of 33.74% of respondents, with that of less than one year and the one of between 7 and 9 years hold 11.93% and 10.70% of the total number of respondents.

The social and demographic characteristics of respondents also investigated into whether a professional health worker is a national citizen or a foreigner. In this viewpoint, almost all professional health workers who responded to the questionnaire were Rwandan nationals (94.65%) with the rest being of foreign nationality (5.35%). Foreign nationals were found to be performing their duties among medical general doctors (21.05%), midwives (3.33%) and dentists (12.00%).

4.3 Performance Management Function

In order to assess the performance management function, a 14-item close-ended questionnaire was distributed to health workers for them to express their perceptions on how performance management is implemented in their respective hospitals. The items on the questionnaire assessed the perceived level of planning of performance management function, performance evaluation process and feedback after performance management review.

In general, around 50% of respondents were on the view that there exists a performance plan which is available to professional health workers (SA=30.50%; A: 23.50%) and that the management and professional health workers discuss performance targets and deliverables (SA: 28.8%, A: 24.7%). It was revealed through their responses that more than 50% of respondents were in disagreement with the fact that professional health workers are allowed to express their views and provide inputs for performance targets (and performance management function in general) (D=35.4%; SD=16.5%) , professional health workers' responsibilities being clearly defined in the performance management document (D=45.3%; SD=6.2%), and performance measures for professional health workers being well documented in writing and recorded for reference for the next step of the process (D: 32.9%; D=22.2%). Generally, a slightly high level of perceived performance management planning was noticed according to the Likert scale mean ranges interpretation as the mean was 2.82 (St. Dev=0.88) for this indicator. In fact, apart from documenting of performance measures which was rated low (Mean=2.39; St. Dev=0.87), other measures of this indicator of performance management function were perceived to be at high level: discussing performance targets with management (Mean=2.78; St. Dev=0.91), clear definition of health

workers' responsibilities in a performance management document (Mean=2.65; St. Dev=0.89).

The status of performance management function was also examined through the perceived level of health workers' performance evaluation activity. In general, less than 50% of respondents who participated in the study were in agreement that professional health workers were provided with right amount of constructive criticism (feedback about the areas for improvement) as part of performance feedback (SA=18.9%; A=39.9%), and that line managers reach employees agreed about the aspect of performance (SA=19.9%; A=39.1%). On the other side, it was noticed that between 50% and 60% of respondents were in disagreement with periodical conducting of performance review (D=37%; SD=16.9%), fairness in conducting professional health workers' performance evaluation in hospitals (D=12.8%; SD=42.8%) and allowing health workers to take part in the process of performance evaluation by freely express their views (D=38.7%; SD=15.8%). All in all, performance evaluation was perceived high (mean=2.51; St. Dev=0.99) as its average mean slightly went beyond the minimum cut off (2.50) for the categorization of a high range according to the interpretation of likert scale mean ranges. This was due to the fact that apart from one measure of taking part in the performance evaluation process which was rated low (mean=2.48; St. Dev=0.87), others measures were perceived to be high.

The third indicator which was used to establish the level of implementation of performance management process was provision of performance feedback after a performance evaluation exercise. In fact, while a slightly high level of perception was noticed in the measures of providing health workers with right amount of constructive criticism (feedback about the areas for improvement) (mean=2.76; St. Dev=0.76),

positive feedback for good performance as part of performance feedback (mean=2.75; St. Dev=0.76) and line managers and health workers reaching an agreement about the aspect of their performance (mean=2.55; St. Dev=0.94), providing performance feedback on due time was rated low (mean=2.44; St. Dev=0.92).

All in all, performance management function was established through three main indicators: performance planning, performance evaluation and performance feedback after a performance review exercise and 13 items were used to measure this variable. It was revealed that health workers' perceptions rated performance management function as slightly high (mean=2.59; St. Dev=0.92). Descriptive statistics of perceived level of implementation of performance management function are presented in 4.3.

Table 4.3: Perceived status of implementation of performance management function (N=243)

Implementation of performance management function	SA	A	D	SD	Mean	Std. Dev
Performance planning						
There exists a performance plan which is available to professional health workers for preparedness	74 (30.50	57 (23.5)	108 (44.4)	4 (1.6)	2.82	0.88
The management and professional health workers discuss performance targets and deliverables	70 (28.8)	60 (24.7)	103 (42.4)	10 (4.1)	2.78	0.91
Professional health workers are allowed to express their views and provide inputs for performance targets (and performance management function in general)	53 (21.8)	64 (26.3)	86 (35.4)	40 (16.5)	2.53	0.97
Professional health workers' responsibilities are clearly defined in the performance management document	55 (22.6)	63 (25.9)	110 (45.3)	15 (6.2)	2.65	0.89
My line managers (direct supervisor) and I agree on the performance targets and criteria for performance evaluation	60 (24.7)	59 (24.3)	75 (30.9)	49 (20.2)	2.53	0.85
Performance measures for professional health workers are well documented in writing and recorded for reference for the next part of the process	41 (16.9)	68 (28.0)	80 (32.9)	54 (22.2)	2.39	0.91
Average					2.61	0.95
Performance evaluation						
Professional health workers' performance review is done periodically	58 (23.9)	54 (22.2)	90 (37.0)	41 (16.9)	2.53	0.87
During performance evaluation, professional health workers are allowed to take part in the process and they can express their views	46 (18.9)	65 (26.7)	94 (38.7)	38 (15.8)	2.48	0.97

Professional health workers' performance evaluation is done with fairness in this hospital	54 (22.2)	54 (22.2)	104 (42.8)	31 (12.8)	2.53	0.97
Average mean and Standard deviation					2.51	0.99
Performance evaluation feedback						
Professional health workers get feedback regarding their performance in due time	46 (18.9)	43 (17.7)	126 (51.9)	28 (11.5)	2.44	0.92
You and your line manager reach agreement about the aspect of your performance	46 (18.9)	95 (39.1)	99 (40.7)	3 (1.2)	2.75	0.76
Professional health workers are provided with right amount of constructive criticism (feedback about the areas for improvement) as part of performance feedback	46 (18.9)	97 (39.9)	97 (39.9)	3 (1.2)	2.76	0.76
Professional health workers are provided with positive feedback for good performance as part of performance feedback	54 (22.2)	51 (21.0)	113 (46.5)	25 (10.3)	2.55	0.94
Average mean and standard deviation					2.62	0.84
Composite mean					2.59	0.92

SA=Strongly Agree A=Agree D=Disagree SD=Strongly Disagree

Source: Survey Data, 201

As from the mixed methods approach, qualitative data were used to complement descriptive findings from quantitative data. The qualitative data gave more details on professional health workers' experiences and views on the implementation of performance management function in order to complement quantitative data on this variable. The analysis of interview and focus group discussion cases provided from different health workers were presented using narrative and verbatim patterns.

In general, health workers' views and experiences as they relate to the implementation of performance management function were summarized around the main themes of how they view performance planning signing performance contracts and setting goals in their different hospitals, conducting of performance evaluation activity, challenges which are associated with performance evaluation, issues related to fairness in this exercise, and feedback after performance evaluation.

In this regard, respondents who participated in the interviews and focus group discussions had different views on the implementation of performance management function. First, it was noticed from majority of respondents that they understood the necessity for performance planning, but the challenge was related to the rotation of health workers from one department to another, which makes it difficult to make a follow up on the planned targets. Second, performance evaluation was a recognized activity in hospitals. However, some issues were raised about fairness during the process. Lastly, it was realized that for performance feedback most of time it was for blaming health workers who did not perform well, and positive feedback or constructive criticism was lacking.

Generally, it was noticed that qualitative findings supported findings of quantitative findings on the perceived status of implementation of performance management function. In fact, as it was captured from respondents' submissions, most cases reported difficulties

in performance management planning as the core business of performance management function in the hospitals.

The divergent experiences on performance planning in the hospitals, led to finding out that this function existed in some hospitals as it was confirmed by respondents DEH208, NUH211, DOH204 and PHAH312. Another one uttered that:

> *Thank you... Staff and managers in the same services sat together and prepared their performance contracts. They set performance contracts for themselves; for example, stating that each new born in the maternity department (….) nothing is difficult since they are their own performance contracts* (MIH211).

Although this indicator was rated high, it had a mean closer the maximum of a low value in the interpretation of mean ranges. Considering findings from interviews and focus group discussions, this can be supported by movement to different services might come along with different other responsibilities, as it was put by one nurse who said: "…what I know is that an employee is deployed in this or that service. You cannot determine in advance what to be done this year, next year…" (NUH303). This idea is not far from that of a midwife who mentioned that:

> *"As you know things are not that easy in the health sector. I may sign performance contract in service of ambulance today; then next month I'm rotated to another service which has different tasks. There are a lot of challenges. In addition, during the performance planning, professional health workers are not involved and the rotation process has an impact vis-a-vis the implementation of performance."* (MIH101, 2017)

The reported difficulties in the performance management planning in the hospitals were stressed by the fact that some health workers felt that it was almost inexistent as it emerged from one of the respondents who asserted that "I don't know….maybe you can ask somebody else, but I can't say I know that planning exists; I don't see it here….in fact I have never seen it…" (NUH105, 2017).

Considering the fact that performance planning often goes with signing performance contracts and setting goals to achieve during a certain period of time, some health workers reported that "we don't have any performance contracts" (PHAH209, 2017).

Having performance planning was reported with some challenges which come along with it in some units of work where setting a health worker's performance targets may be challenged by the fact that sometimes his/her task needs other people's intervention to be completed: "we agree on performance contract items but it is sometimes difficult as, for example, in the maternity department, you need to meet other doctors, midwifes and nurses for you to arrive to a full completion of the task. (DOH204, 2017).

The challenges related to performance management planning in the hospitals were also thought to be due to the fact that setting the targets does not involve professional health workers and consider their inputs, but rather are presented to them for signature as it was submitted by one of them that:

> *That may be difficult. Actually, we are always given forms. I am not involved in setting performance targets…they [line managers] come and tell us what they have decided to put in performance contracts. They often tell us what to put in performance contract, (Uh-huh) and tell us that failure to achieve the targets will result into a punishment* (FH16, 2017).

Apart from performance planning, respondents also shared their experiences on performance review. In general, it came out from their submissions that performance appraisal was a function mostly involving line managers and did not have anything to do with front line employees, as one of them stated that: "…unless it was done when I was on leave. I do not have any information about that. Maybe it is done by our managers on our behalf…" (NUH103, 2017). On the same, another professional health worker stated that:

> *May be I have never had chance to do that. They have not given us the evaluation results, showing how they evaluated. We really set targets like performing this or that task and see how they are achieved. On may have a certain problem leading to a certain mistake but when time has come for us to evaluate our performance contracts, we look at how we performed among ourselves. We can identify someone with poor performance. They have not evaluated and provided us with results and tell us that this was bad or good."* (NUH315, 2017)

From respondents' experiences, it was noticed then that that performance evaluation in some instances consisted of just filling the form and not thoroughly consider agreed upon targets. The respondent put it that:

> *The person in charge of the maternity ward brings the performance forms, say like for ten of them for the whole service. After we have filled them, s/he takes them to the HR, who in turn will put them in everyone's file. When it is time for evaluation, everyone is given the form back to be filled before submission as we did at the beginning. No other time is provided to look at better performance*. (MIH101, 2017)

As far as feedback which is provided to employees after performance evaluation is concerned, the general finding was related less exposure to this main component of performance review, as it came out from one focus group discussion:

> *That is not possible; we do not meet. No, they don't. That is what I have been saying. May be they are going to change the way it used to be. I think they are going to change it because it has been a topic under discussion for the last four years, as most of us are not provided with feedback after performance review* (FH16, 2017).

Other respondents argued that: "They have never called me for feedback. Personally, nobody has called me. Maybe others have been called. Maybe my direct line manager, or maybe the responsible of service… Nobody has called me" (MIH211, 2017). "No. Not yet….. I have never seen it [performance feedback] happening here" (PHAH2011, 2017). The following also mentioned the same worry:

> *That has never happened. What happens is just blaming us. They never talk about better performances* (DEH223, 2017)

> *This has never happened. Sometimes they call you early in the morning before you rotate, telling you to sign the performance results. Then, because of tiredness, it becomes impossible to have a discussion. What you do is just to sign and rush home to rest* (FH23, 2017).

In the whole, professional health workers' views on performance management function in the hospitals echoed the feeling that there were loopholes in the way it was done. Having insisted that performance management "is not fair" in the institutions, another two respondents (MIH313, FH11) said that there was a need for hospital managers to devise a clear way to implement performance management function from its planning through appraisal to feedback, especially by having professional health workers' collaborate with line managers for better outcome, as they mentioned that "I think they are going to change the approach. In fact, we are usually given the form at the beginning and another one at the end of the year without any guidance, so there is a need for change of the way it is done"(MIH313, 2017). Another respondent said: "I think they are going to change the strategy. Otherwise, the employee was the one to set the targets and evaluate her/himself, nothing else" (FH11, 2017). In the same view point, a nurse respondent stated that:

> *That is what I said. I am saying that performance contracts are not prepared because everyone sets the targets s/he feels able to achieve, often lacking quality. For example, someone may state that s/he will fill up forms because s/he knows how to write and take notes. S/he can similarly say s/he will take vital signs. Anyway, one sets easy targets in order to avoid having troubles during evaluation often because there is no guideline, due to lack of collaboration between employees and managers in that matter. Another example is about employee promotion. In fact, it is often said that people should be promoted after a given period of working time. However, this is not the case here; yet, it should be done and related to performance contracts and reflect evaluation results* (NUH313, 2017).

All in all, it came out from descriptive findings that most measures of implementation of performance management function were rated high, and this was supported by

qualitative findings. In fact, respondents' views and experiences showed that they were aware of performance planning because most of them said they knew performance targets were set in advance. They also revealed that performance evaluation was conducted and that in some instances, there was a performance feedback.

However, findings from the data on the perceived level of performance management function were low in terms of documenting performance targets. This is in tandem with findings from interviews and focus group discussions which raised many issues on performance planning because of shifting from one department to another, some tasks which needed the intervention of other health personnel for their full completion. Quantitative findings also showed that there was lack of timely feedback after a performance evaluation exercise, which corroborates with most respondents' submissions in the interviews and focus group discussions, where the most important claim was that they didn't even get such a feedback.

4.4 Financial Incentives

In order to assess the level of availability and provision of financial incentives, a likert scale questionnaire was distributed to health workers. Financial incentives were established in terms of availability of conditions of employment (including salaries/wages), allowances (including benefits) and discounts and fellowships, loans and discounts.

As for conditions of employment, it was realized that a big number of respondents were in disagreement with the statement that the salary provided was enough for them to meet the requirements (D=30.9%; SD=45.33%). The same trend was observed for the procedure for salary promotions and their being clearly understandable to health workers (D=35.4%; SD=37.9%) and for equitable and fair payments (D=28.8%;

SD=36.6%). On the basis of the Likert scale mean ranges interpretation, it was found that salaries and wages (mean=1.84; St. Dev=0.92), equity and fairness in payments (mean=2.13; St. Dev=0.87) as well as availability and clear comprehensive procedures for salary promotions (mean=2.01; St. Dev=0.93) were perceived to be at low level. The only measure which was rated high is related to comprehensive policies and procedures used to determine salary structure (mean=2.58; St. Dev=0.97). It was consequently realized that the indicator of conditions of employment was generally rated low (mean=2.14; St. Dev=0.99).

In terms of allowances provided to health workers, majority of respondents were in agreement that medical and health insurance packages were well structured and sufficient to cover medical and health costs (SA=52.3%; A=20.2%). This was the same for allowances for retirement benefits (SA=3.3%; A=55.1%). For other measures of this indicator, a big number of respondents were in disagreement with the statements measuring them. In this regard, a perceived low level of availability and provision of allowances was noticed for provision of overtime payments the job done out of normal working hours (mean=1.74; St. Dev=0.76), transport allowances (mean=1.85; St. Dev=0.76) and bonuses (mean=2.25; St. Dev=0.89). A slightly perceived high level was noticed medical allowance to cover health costs (mean=2.81; St. Dev=0.87). All in all, it was revealed that the overall consideration of availability and provision of allowances as part of financial incentives in the hospitals was low (mean=2.28; St. Dev=0.85).

Financial incentives were also established in terms of availability and provision of fellowships, loans and discounts. It emerged from respondents' provided responses that the level of childcare benefits as additional compensation scheme was perceived low

(mean=2.03; St. Dev=0.85). A perceived low level was also noticed with availability and provision of discounts and additional compensation scheme (mean=1.97; St. Dev=0.88) and procedures for such payments (mean=2.44; St. Dev=0.85). The overall average mean of the indicator of fellowships, loans and discounts showed that it was perceived as low (mean=2.26=St. Dev= 0.83).

The availability and provision of financial incentives in hospitals being established in terms of conditions of employment, allowances, fellowships loans and discounts was perceived to be low (mean=2.23; Sd Dev=0.88) according to the Likert scale mean ranges interpretation. The summarized descriptive statistics for this variable are presented in table 4.4.

Table 4.4: Perceived level of availability and provision of financial incentives (N=243)

Availability and provision of financial incentives	SA	A	D	SD	Mean	Std. Dev
Conditions of employment: salaries/wages						
My salary/wage is enough to meet basic requirements	15 (6.2)	43 (17.7)	75 (30.9)	110 (45.3)	1.84	0.92
The payment provided in public district hospitals is equitable and fair for all professional health workers	37 (15.2)	47 (19.3)	70 (28.8)	89 (36.6)	2.13	0.87
Policies and procedures used to determine salary structure are understandable to professional health workers	33 (13.6)	60 (24.6)	93 (38.3)	57 (23.5)	2.58	0.97
Procedures for salary promotions are available and clearly understandable to professional health workers	31 (12.8)	34 (14.0)	86 (35.4)	92 (37.9)	2.01	0.93
Average					2.14	0.99
Allowances and financial benefits						
Professional health workers are provided with bonuses as part of benefits for performance in their duties	26 (10.7)	59 (24.3)	110 (45.3)	48 (19.8)	2.25	0.89
Professional health workers are provided with overtime payment for the job done out of normal working hours	15 (6.2)	22 (9.1)	91 (37.4)	115 (47.3)	1.74	0.86
Transportation allowance is sufficient for professional health workers to cover transport expenses from and to their job	8 (3.3)	31 (12.8)	122 (50.2)	82 (33.7)	1.85	0.76
Medical and health insurance packages are well structured and sufficient to cover medical and health costs	49 (20.2)	127 (52.3)	41 (16.9)	26 (10.7)	2.81	0.87
The compensation allowance for retirement is reasonable for professional health workers in public district hospitals	8 (3.3)	134 (55.1)	69 (28.4)	32 (13.2)	2.48	0.76

Professional health workers in public district hospitals are provided with paid time-off incentives	58 (23.9)	52 (21.4)	106 (43.6)	27 (11.1)	2.58	0.97
Average					2.28	0.85
Fellowships, loans and discounts						
Our institution provides childcare benefits to professional health workers as an additional compensation scheme	16 (6.6)	45 (18.5)	113 (46.5)	69 (28.4)	2.03	0.85
Some discounts on health services are provided to professional health workers in our institution as an additional compensation scheme	16 (6.6)	43 (17.7)	102 (42.0)	82 (33.7)	1.97	0.88
The hospital has performance payments schemes available to professional health workers	32 (13.2)	99 (40.7)	102 (42.0)	10 (4.1)	2.62	0.76
Procedures for performance payments to professional health workers are fair and equitable across staff levels	35 (14.4)	61 (25.1)	124 (51.0)	23 (9.5)	2.44	0.85
Average					2.26	0.83
Composite					2.23	0.88

SA=Strongly Agree A=Agree D=Disagree SD=Strongly Disagree

Source: Survey Data, 2017

In order to have a deep understanding of the level of availability and provision of financial incentives, interviews and focus group discussion were organized around this variable. The target was to have qualitative data to complement quantitative data on the perceived status of financial incentives. The main themes that were noticed in the course of qualitative data analysis included complaint about salaries, transport allowances, facilitation and advocacy for loan acquisition, accommodation and additional benefits as part of compensation scheme

In the course of qualitative data analysis on the conditions of employment, it came out from respondents that that the salary was not the only big issue that faced them in their health profession. It was mentioned by one pharmacist, for example, who stated that:

> *Ok, in general, I can say that…..It is not bad because…..people are waged according to their level of education and these things are standard in all hospitals except things related to PBF which can be vary from time to time….So for the salary, I can really say….there is no problem with it.* (PHAH17, 2017).

On the side of health workers who mentioned that salaries provided to them was not enough, it was reported in most cases that compared to the increasing change of in the living expenses, salaries could not cover the basic necessities. One of them submitted that:

> *Ok….For the time being, the salary isn't enough at all compared to the costs of things on the market. For example one kilo of rice is now twice its cost in 2014, and it is the same for sugar. All things have gone up in price but the salary has not. It remains the same. Generally speaking, if one compares the worker's needs and their salary, they are all out of proportion. Although you wouldn't think so, the salary is a common matter in general.* (DEH223, 2017)

Another one uttered that:

> *Salary itself is not enough compared to the prices on the market. They increased too much whereas the salary is still the same. The salary doesn't go up. Long ago one kilo of beans was RwF200, one kilo of potatoes was RwF100frs. Today, prices have changed*

> *dramatically but salary hasn't. It is not enough at all.* (FH35, 2017)

The previous professional health workers' views were not different from another nurse who mentioned that the cost of basic necessities had been going up to such an extent that there was a struggle in trying to cover them up. In addition to this, it was also revealed that the salary did not go up in accordance with experience in the service. In her submission, she stated that

> *In my opinion the salary is not still enough compared with the prices on the market. Be it transport, shopping, school fees, or any other thing in the everyday life of a health worker. Look…my salary has not changed for the last ten years, whereas prices on the market are growing too much. Let me tell you about transport fee, for example at the time, one used to pay RwF from (……), today one pays RwF200 whereas may salary is still the same, there is no change* (MIH320, 2017).

Participants to interviews and focus group discussions also expressed their views on other financial benefits. For this, some of them recognized that there was the amount of money which was contributed monthly for their medical insurance and retirement allowances. In recognition of such allowances, one of them said that

> *Professional health workers in this hospital are still young. Nobody has gone in retirement. I think there are regulations about such allowances. However, I know that on the pay slip there is an amount of money we contribute in RSSB, then covering medical insurance and retirement allowances. I think the retirement benefit is the money that one gets when it is time to retire* (PHAH318, 2017).

But for some respondents, it was realized that they did not have interest in the retirement benefits as one of them mentioned that:

> *I don't know anything about the Social Security Fund. What I know is one can get updates. I hear about people talking about getting retirement benefits, but I am not interested in knowing about it. I don't have any interest about it. Nobody has. Some people get information when they request about it but I have never done it. I haven't thought about it [retirement benefits] yet,*

> *eh….there is still much time. Unless you want to advise me to follow it up and get information about it, I still have much time to think about it. With regard to the RAMA (health insurance), I don't have any problem. Whenever I want a medical service, I don't find any problem with it.* (NUH209, 2017).

On the other hand, it was difficult for professional health workers to describe such allowances and make a difference between them and the basic salary, as one of them said that "Ok….It isn't clear. One cannot distinguish what transport is or housing allowances from the salary, we just get our salaries at the end of the month. I can't tell you this is for transport, this is for house allowance" (NUH208, 2017).

On the same issue of transport, some respondents knew transport allowance was provided with their salaries, but they mentioned that it was not enough to cover transport costs. One of them said, for example:

> *In fact, as the number of public transport vehicles is small, you spend too much time at the station and get late. And the allowance we are given for transport is not enough. Actually, that is why we get late to work. We spend too much time at stations waiting for a common transport –which is usually cheap – because we cannot afford a motorbike to be on time, because of the lack of enough money* (NUH102, 2017).

It was revealed, however, that there was availability of compensation benefits for health care providers with additional responsibilities, though they were said to be at lower rate. From one of professional health workers who talked about this, it was learnt that:

> *Well, I used to get some when I was the head of the maternity ward. I also used to get it when I was in charge of the surgery room. Normally, any staff with special responsibilities gets incentive at the end of the month. I used to get fifteen thousand but this amount didn't match my responsibilities. In fact, I could even come at the weekend and work whenever any staff was absent. As a result, I could leave very late. At the moment, the amount has increased to thirty thousand* (MIH320, 2017).

For other benefits like professional health workers benefitting study leaves for their education, or their children and spouses benefiting special health care schemes and any

other benefits in terms of financial gain, it was reported that they were not available or existed at a very low level. This emerged out from views of respondents DOH206, FH13, FH32, NUH314, FH22 and DE105.

All in all, while professional health workers' views from qualitative data were in line with findings for quantitative survey. The overall consideration of professional health workers' perceptions on the level of availability and provision of financial incentives in public district hospitals showed that generally there was a dominant low perception on them. This low perceived levels of financial incentives across majority of its majors was corroborated with qualitative findings which showed that respondents viewed that salaries were low. In addition, transport allowances and other benefits were also said to be low. It was also noticed from both the survey findings that loans and discounts were perceived to be at low level, which was in relation with qualitative findings where respondents said they did not have such schemes and that where they were available, it was at very low rates. In the same way, having noticed that medical benefits were perceived to be high was in line with qualitative findings that respondents confirmed they were enough.

4.5 Non-financial Incentives

In order to assess the status of non-financial incentives, a 22-item questionnaire was used to investigate into perceived status of working conditions, training and development, and career development. Starting with working conditions, a combined view of responses showed that between 50% and 60% of respondents were in agreement (by either agreeing or strongly agreeing with the proposed statement) with provision of enough equipment (SA=5.8%; A=48.1%), existence of appropriate and enough lightning at the work place (SA=35.8%; A=30%) and the fact that health workers were

not frustrated because of poor working conditions (SA: 14.8%; A=375). For other measure of this indicator, it was observed that more than 50% of respondents were in disagreement (by either responding with "disagree" or "strongly disagree"). For example, it turned out to realize that close to 63% respondents were in disagreement with existence of reasonable workload for health workers. In the same way, more than 55% were in disagreement with hospitals facilities being in good conditions and the availability of safety measures including personal protection against risks caused by the nature of job at the hospital.

Basing on the interpretation of likert scale response mean ranges, it was noticed that only three measures of working conditions had a mean of between 2.50 and 3.25, therefore being rated as high: provision of enough equipment (mean=2.51; St. Dev=0.72), appropriate and enough lightning at work place (mean=2.93; St. Dev=0.97), and management recognition of the work-life-balance principle (mean=2.61; St. Dev=0.86). Other measures were perceived by respondents as low: the workload for professional health workers in our hospital is reasonable (mean=2.45; St. Dev=0.94), professional health workers are facilitated to have flexible working hours (mean=2.24; St. Dev=0.80), hospital facilities (offices, wards, theatres, wash rooms…) are in good conditions for professional health workers (mean=2.16; St. dev=0.87), mechanisms for noise reduction for better working conditions in the hospital (mean=2.44; St. Dev=0.84, flexibility to allow lifestyle changes in the hospital (mean=2.46; St. Dev=0.68), availability of safety measures including personal protection against risks caused by the job in the hospital (mean=2.47; St. Dev=0.85), feeling of enough security measures for health workers and their personal belongings and the work equipment provided to them in this hospital (mean=2.41; St. Dev=0.97), feeling non frustration at work because of poor working conditions at the hospital

(mean=2.44; St. Dev=0.99). The overall mean of conditions of work rated it as low (mean=2.46).

The second indicator which was used to establish non-financial incentives was training and development, which was measured using 5 items. Generally, the number of respondents who were in disagreement with the proposed statements outweighed those who were in agreement with them. For example, more than 70% of respondents disagreed that training and development opportunities served as the basis for promotion and allowances (SD=30.5%; D=44%) and fairness in sharing available training and development opportunities (D=51.0%; SD=21.8%). All on all, the indicator of training and development was rated low (mean=2.16; St. Dev=0.89). In fact, a perceived low level of training and development was noticed across all its measures: existence a training and development policy concerning all professional health workers in the hospitals (mean=2.22; St. Dev=0.94), provision of opportunities to go for training and development opportunities with fairness (mean=2.16; St. Dev=0.90), encouraging health workers who come from training to share what they have learnt to other colleagues (mean=2.23; St. Dev=0.95), line managers and supervisors supporting professional health workers who come from training to use skills and techniques learnt during training sessions (mean=2.20; St. Dev=0.81), and training and development opportunities serving as the basis for professional health workers to be promoted and given allowances (mean=2.01; St. Dev=0.87).

Finally, non-financial incentives were established in terms of perceived level availability and provision career development opportunities. It observed through the responses that in general a big umber of respondents were in disagreement with proposed statements measuring the status of career development in the hospitals. It was

therefore realized that this indicators of career development was rated low (mean=2.29; St Dev=0.79) as its measures were all perceived as low: hospital management and administration initiating career development systems to support professional health workers in developing their career, The hospital has self-assessment tools to facilitate professional health workers to understand their own desires, aspirations, likes and dislikes (mean=2.18; St. Dev=0.72), hospital management and administration organizing career planning workshops to help professional health workers learn from others' reality in career development (mean=2.15; St. Dev=0.77), professional health workers receiving individual counseling in order to understand their own goals and to make changes in the everyday practices (mean=2.18; St. Dev=0.83), job rotation programs and assessment centers for professional health workers to be able to reinforce their career development (mean=2.44; St. Dev=0.91), professional health workers being recognized for good job or high achievement (by being congratulated in the public, being given certificates, etc) (mean=2.31; St. Dev=0.70)

The overall mean of non-financial incentives was 2.34 and it was below the threshold of 2.50, which is the minimum for a four-point likert scale mean range interpretation to be rated as high. Therefore non-financial incentives were perceived to be at low level as it is presented in table 4.5.

Table 4.5: Perceived status of non-financial incentives (N=243)

Availability and provision of non- financial incentives	SA	A	D	SD	Mean	Std. Dev
Working conditions						
The workload for professional health workers in our hospital is reasonable	48 (19.6)	45 (18.5)	120 (49.6)	30 (12.3)	2.45	0.94
Professional health workers are facilitated to have flexible working hours	15 (5.6)	75 (30.9)	110 (45.3)	43 (17.7)	2.24	0.80
Hospital facilities (offices, wards, theatres, wash rooms…) are in good conditions for professional health workers	8 (3.3)	93 (38.3)	74 (30.5)	68 (28.0)	2.16	0.87
Professional health workers in this hospital are provided with enough equipment for them to be able to do the job well	14 (5.8)	117 (48.1)	93 (38.3)	19 (7.8)	2.51	0.72
There is appropriate lightning in the working places in the hospital for me to be able to do the job well	87 (35.8)	73 (30.0)	63 (25.9)	20 (8.2)	2.93	0.97
There are mechanisms for noise reduction for better working conditions in this hospital	24 (9.9)	93 (38.3)	94 (38.7)	32 (13.2)	2.44	0.84
There is flexibility to allow lifestyle changes in the hospital	14 (5.8)	98 (40.3)	118 (48.6)	13 (5.3)	2.46	0.68
Hospital management recognize work-life-balance principle and I enjoy it at my working place	48 (19.8)	67 (27.6)	114 (46.9)	14 (5.8)	2.61	0.86
There is availability of safety measures including personal protection against risks caused by the job in this hospital	32 (13.2)	72 (29.6)	112 (46.1)	27 (11,1)	2.47	0.85

I feel that there are enough security measures for me, my personal belongings and the work equipment provided to me in this hospital	38 (15.6)	73 (30.0)	85 (35.0)	47 (19.3)	2.41	0.97
I feel that I am not frustrated at work because of poor working conditions at this hospital	36 (14.8)	90 (37.0)	64 (26.3)	53 (21.8)	2.44	0.99
Average						
Training and development opportunities					2.46	0.86
There is a training and development policy concerning all professional health workers in this hospital	30 (12.3)	52 (21.4)	103 (42.4)	58 (23.9)	2.22	0.94
Professional health workers in this institution are given opportunities to go for training and development opportunities with fairness	28 (11.5)	38 (15.6)	124 (51.0)	53 (21.8)	2.16	0.90
Professional health workers who come from training in this hospital are encouraged to share what they have learnt to other colleagues	30 (12.3)	56 (23.0)	99 (40.7)	58 (23.9)	2.23	0.95
Line managers and supervisors support professional health workers who come from training to use skills and techniques learnt during training sessions	16 (6.6)	62 (25.5)	120 (49.4)	45 (18.5)	2.20	0.81
Training and development opportunities serve the basis for professional health workers to be promoted and given allowances	16 (6.6)	46 (18.9)	107 (44.0)	74 (30.5)	2.01	0.87
Average					2.16	0.89
Career development opportunities						
Hospital management and administration initiate career development systems to support professional health workers in developing their career	14 (5.8)	52 (21.4)	142 (58.4)	35 (14.4)	2.18	0.72
The hospital has self-assessment tools to facilitate professional health workers to understand their own desires, aspirations, likes and dislikes	16 (6.6)	46 (18.9)	140 (57.6)	41 (16.9)	2.15	0.77

Hospital management and administration organizes career planning workshops to help professional health workers learn from others' reality in career development	21 (8.6)	47 (19.3)	130 (53.5)	45 (18.5)	2.18	0.83
Professional health workers receive individual counseling in order to understand their own goals and to make changes in the everyday practices, if possible	36 (14.8)	70 (28.8)	102 (42.0)	35 (14.4)	2.44	0.91
Job rotation programs and assessment centers for professional health workers to be able to reinforce their career development	17 (7.0)	70 (28.8)	142 (58.4)	14 (5.8)	2.37	0.70
Professional health workers are recognized for good job or high achievement (by being congratulated in the public, being given certificates, etc)	35 (14.4)	56 (23.0)	130 (53.5)	22 (9.1)	2.42	0.84
Average					2.29	0.79
Composite mean					2.34	0.85

SA: Strongly Agree A=Agree D=Disagree SD=Strongly Disagree

Source: Survey Data, 2017

The qualitative phase for this variable was in relation with respondents views' and experiences on non-financial incentives in the public district hospitals in order to complement data from survey on it. The main themes which emerged during the analysis were related to the working environment in terms of workload and working hours, communication, office equipment, personal security for health workers, their belongings and equipment, mechanisms for noise reduction and frustration related to work conditions, work-life balance and life style changes, existence of training and development programs, fairness in sharing such opportunities, sharing of knowledge after a training opportunity, career development, etc.

In this regard, health workers reported that the necessary equipment is provided: "Ok….The necessary equipment is available because…even when you don't have everything you are in need of, they give you explanations on that and, as I can see the management is willing to provide us with what we need... (NUH212, 2017).

However, it was also mentioned that there is a need for provision of enough equipment, especially by shortening the long process of requesting equipment between hospitals and higher organs in the health system:

> *Sometimes, the equipment is not enough. In fact, processing the requests might take too long because the hospital is not able to afford them. However, the administration is aware of necessity of having enough the equipment. The problem is that the process lasts long and gives challenges that hinder daily activities at our work place* (DEH223, 2017).

The issues around conditions of work also sought views on the availability of offices to health professionals, physical personal security, that of health workers' belongings and that of equipment provided at work, lightning and noise reduction mechanisms in the work area. In general, health workers reported that the offices were assigned according to the needs. While doctors reported that they were provided with offices (DOH319,

DOH104 & DOH206), nurses and midwifes said they were provided with a common room as one of them said that: "as nurses, we work together; we don't have offices (NUH102)" and that: "The nursing job requires you to be closer to the patients. There is nothing we can do about it. We have to make sure we are not far from them. There is no need for offices. (NUH122, 2017).

As it also emerged from respondents, there were companies in charge of cleaning the work place, although for some of them the wards seemed to be small compared to the number of people who sought health care services:

> *Keeping it clean is not a problem because there are companies in charge of that. In case of dirtiness, we inform the person who is responsible for that-normally one in each department. As far as its size is concerned, the ward is not large enough compared to the number of patients we have. For instance, in the neonatology section, we can receive about 140 patients in a month. We can have around 40, 35, twenty per day. It is too small and there is nothing we can do about it."* (MIH320, 2017)

In the same view point, it was reported that security of the equipment provided at work and that of personnel belongings was assured by professional guards to such an extent that they felt they were safe; it was also revealed through their views that the work place was clean (FH12, FH16, FH13, FH24, FH35 & FH31). It came out from their feeling, however, that a medical profession might exposes professional health workers to feeling uncomfortable and insecure due to some patients' behavior as it was revealed by a health worker who stated that:

> *Oh…that is a challenge. Security may not be a problem as such, among the staff. But the problem can be the reactions from the patients: a patient may not accept her conditions. Let me give an example as a nurse. After delivery, the patient may have pain or her new born may die. Then she may react negatively. Two weeks ago, a man was about fighting when he was in the maternity ward. He wanted to beat a midwife. He couldn't understand that the baby had died before they got at the hospital-when they were at the health center. He thought it was due to carelessness. It was difficult when he was called*

> *to sign. It was clear he could behave badly. In a situation like this, security is not good. And also to note is that there is no follow-up on such a case, the patient cannot be charged of such misconduct* (NUH207).

It could also be heard from respondents that a medical profession exposes health workers to risks of getting some illnesses, which is sometimes a threat them:

> *We are at risk. In fact, you may receive someone (…..) suffering from tuberculosis and s/he can die in your eyes. This can result in an infection. You can get infected with it. Similarly, you can get in contact with someone with hepatitis and you are not aware of that-you know that is transmitted through the blood. So you can get it very easily* (DOH206, 2017).

The working conditions in any work environment also is concerned with job security. It was then realized that some grapevine stories that circle around hospitals cause discomfort of health workers and feeling the fear of losing jobs because of lack of efficient communication on the planned structures and reforms in the institutions and the sector in general. One of them submitted that:

> *Well, we are worried we can lose our jobs due to the upcoming restructuring, we hear people saying that. We didn't use to have such a worry. Now with the forthcoming restructuring, we are worried some people will lose their jobs […] we don't know why they want to restructure, I heard people saying that. So it means that you are always worried, wondering whether you will allowed to continue to do your job or not* (NUH315, 2017).

Non-financial incentives in terms of working conditions also relate to flexibility in working hours, workload and timetable and reduction of working hours for staff who are pursuing further education. As different views regarding this point emerged from respondents, it was found out that staff might negotiate some working hours and time off (FH12. FH33, FH34, FH23, DEH105 & NUH212). However, it was also reported that there might be difficulties to get reduction of work hours unless it is an education and training scheme which is recommended by the ministry, especially in the case of scholarship as it was noticed from a respondent that:

> *It cannot happen unless the Ministry of Health provides you with a scholarship. In this case, there used to be two categories: e-learning where people study every two weeks, spending two weeks at work and the other two studying. The program was live. Alternatively, one could apply for a full time program which could take two or three years and resume work afterwards. In this case, one could just go. Unlikely, one could not expect to get any facility to study at weekends or in evenings as it is at some universities. The manager could not reduce your workload because of studies"* (MIH224, 2017).

Availability and provision of training and development opportunities was main theme during qualitative analysis for this variable. It was noticed that there was a number of different opportunities available in hospitals in order strengthen the health personnel on the current knowledge in the health profession. This was confirmed by respondents (FH11, FH12, FH15, FH22, FH24, FH34, PHAH317 and PHAH318). One medical doctor said that training may be dictated by current policies in the health system, which requires hospital administration to align training with such policies, as he uttered that:

> *….for example, training on gender-based violence. Sometimes a doctor is sent for training in order to help the victims. In fact, we may find that there is a need to train the personnel who could help in relieving the pain resulting from gender-based violence, non-communicable diseases as well as maternity issues. Staff, especially doctors, get together and assess the needs. Indeed, we have a team in charge of supervision and mentoring. The committee advises us on policies and indicates where there is a training need. They mediate between us and the administration while making decisions on identified areas where staff can be trained"* (DOH104).

While reporting on how available opportunities were provided to health professional in the hospitals, they said that on the one hand people who went for training were selected with fairness as it was revealed that;

> *We convene a meeting and make a list of how people will follow each other to attend trainings. The order is done randomly and then we make a list. Whenever there is a training opportunity in the department, we use the same list and the next person goes for training. Everyone has to wait until their turn comes. However, since the number of training is limited, one can spend the whole year without attending any training. It is also possible that training invitation can be specific for a given person like the head of the laboratory service.*

> *In this case, s/he is the one to attend. On the contrary, it may be seeking for one staff in the laboratory. In this case, we use the timetable already established in the service to know the next person attend the training* (DOH206, 2017).

Another two staff with similar views said that "… there is a plan in different services and when there are opportunities, professional health workers go for training according to needs and priorities, and the pre-established list is used to determine who will attend the training" (NUH121) and that "about trainings, there is a calendar in each service which is submitted to the service of quality assurance where they are kept, and when there are opportunities, professional health workers go for training according to needs to the established calendar" (NUH122).

On the other hand, however, a bit of unfairness in appointing staff who went for training was reported. Some health professionals reported that either the same people attended trainings repeatedly or they did not know how a training plan was established among the staff because they just realized that their colleagues had gone for training. One respondent said that

> *We do not know how they are planned. We just hear that someone has left for training. I think this depends on managers and who they want to attend. We don't have any training plan or timetable showing who will attend the forthcoming training. One person can get training opportunity for two consecutive times*" (NUH314, 2017).

The same view was shared by another midwife who said that

> *No I went for trainings when this hospital started operations, long time ago…… Sometime, I hear people saying that some of us went for training. That is how things work here. One hears people saying that someone from midwives unit went for training and it is the same person who goes there one, two, three times* (MIH320, 2017).

Another important point was in relation with the extent to which professional health workers who came from training had opportunities to share what they had learnt during training sessions with their colleagues at work or whether the training content was in

line with what they did at work. Though it was confirmed that the training content was always in conformity with the trainees' areas of work, the views on sharing skills acquired from training were different, with some staff saying that it was not always possible to share with colleagues what they had learnt during training. Therefore it was mentioned, for example, that

> *Yes, of course. Well, after the training, you have to provide a report. When you have finished, you ask for an opportunity to share you experience with colleagues. Then they tell you the day for presentation. When the training concerns everybody, you go to the hospital hall; when it is for service staff only, you share with them. Medical training often requires practice. That is why practice at work is difficult.) Normally while at work, you have to train your colleague. However, you may fail because of too much work. That is why it is difficulty for people to know something while working at the same time* (NUH108, 2017).

Lack of opportunities to share what they learnt in the training was also reported by professional health workers who said that "I've never seen it here. I always see people in this department go for training but have never seen anyone coming and sharing with us what the training was all about" (MIH313) and that "to tell you the truth, they don't [share what they have learnt]" (PHAH318).

However, it came out from respondents' wishes that sharing what the staff have learnt in training was very important. One health worker mentioned that "it is not frequent. It does not happen frequently. This could be better because the trainee represents the service/department or even the entire hospital in training where everyone is actually supposed to attend. For this reason, we can be aware of the training targets" (FH21, 2017).

It was revealed that opportunities for career development were limited in the hospitals, though professional health workers themselves had little knowledge on this practice. In

fact, it was revealed that beyond doing their jobs as a profession, the functions related to the career development opportunities seemed to be of little interest for some staff.

It was noticed, however, that some health workers decided to get a different degree as a way of trying to shift from a health profession to a different one, which implies lack of interest in the career as it was mentioned that "Of course they can. People prefer other domains, so there are people who have university degrees in management. I even know somebody who has found a job in the local government with because of his degree in management. Others are always doing exams…" (NUH101, 2017).

It was noticed however, that some health workers were devoted to health care service delivery profession and committed to it develop their career. It was learnt that:

> *I'm very happy to be a nurse. The proof is that I followed this career in Secondary Level. At the completion of this level in 2013, it was not easy to find a job. Even those who were employed considered leaving it immediately. They preferred sociology and other domains, so others discouraged me. But me, I didn't lose heart. Even today, if I were given an opportunity to pursue my studies, I would continue the same field. I am so glad to help people, the patients* (NUH215, 2017).

From a general perspective, findings from a survey on the status of non-financial incentives showed a mixed status rating some non-financial measures high, and other low. The analysis of qualitative data also showed divergent views on the existence and provision of non-financial incentives in public district hospitals. In fact, it was revealed that respondents recognized that training and development was available in almost all hospitals, and that it was it was provided depending on the needs. But they wished there could be more fairness in determining health workers who attend such trainings. It also emerged as an issue when it came to knowing whether trained staff have opportunities to share what they have learnt with colleagues at work. For other working conditions like offices and security, it was revealed through respondents' views that health workers

were a bit satisfied with their status. It also emerged from their experiences that opportunities for career development were very limited, although respondents themselves had very little knowledge on it.

4.6 Participation and Involvement in Decision-Making

The variable of participation and involvement in decision-making was established through four main indicators: exposure to shared governance, creation teams for improvement, consultation for merit-pay processes and establishment of systems for suggestions in the hospital. As it was noticed, close to 51% of the total number of respondents were in agreement that health workers were consulted for their views aiming at solving problems affecting them at the work place (SA=13.6%; A=38.7%) and it was therefore perceived to be high (mean=2.54; St. Dev=0.86). However, the two remaining measure of exposure to shared governance were rated low. In general, basing on the four-point Likert scale mean ranges interpretation, exposure to shared governance was rated low (mean=2.39; St. Dev=0.89).

Participation and involvement was also established in terms of creation of teams for quality improvement within the hospital. It was noticed that one two measures were rated high: professional health workers from different departments are facilitated to meet (under supervision of management) in order to improve on the common goals (like provision of quality of health care) (mean=2.56; St. Dev=0.89), and professional health workers being given opportunities to meet in groups in order to identify, analyze and solve work-related problems pertaining their job (mean=2.51, St. Dev=0.98). In general the indicator of creation of teams for quality improvement within the hospital was perceived to be at high level (mean=2.51; St. Dev=0.90).

As far as consultation for merit-pay process is concerned, only one measure of this indicator was perceived to be at high level: management and administration provide support for self-directed teams for the improvement of issues related to mission and vision, policies and procedures within the hospital (mean=2.51; St. Dev=0.98). Other measure of this indicator were perceived as low, and therefore, the mean average for the responses on this indicator rated it as low (mean=2.35; St. Dev=0.91).

The last indicator of participation and involvement in decision-making was establishment of systems for suggestion. The four-point likert scale response mean range interpretation shows that the indicator was rated high (mean=2.71; St. Dev=0.86) as all its measures were perceived as high: work councils for professional health workers having effective channels to address professional health workers' challenges (mean=2.98; St. Dev=0.88), professional health workers' council suggestions being understood and considered by hospital management (mean=2.63; St. Dev=0.80), work councils being considered as good organs for protection of professional health workers' rights (mean=2.53; St. Dev=0.75)

In a nutshell, the interpretation of the likert scale responses mean range shows that participation and involvement was perceived by respondents as low (mean=2.49; St. Dev=0.86). Descriptive statistics for the level of participation and involvement in the hospital decision-making processes are shown in table 4.6.

Table 4.6: Perceived level of participation and involvement in decision-making (N=243)

Participation and involvement in decision-making	SA	A	D	SD	Mean	Std. Dev
Exposure to shared governance						
Professional health workers are consulted for the views aiming at solving problems affecting them at the work place	33 (13.6)	94 (38.7)	88 (36.2)	28 (11.5)	2.54	0.86
Employees are consulted for views on decisions regarding their work lives	9 (3.7)	80 (32.9)	110 (45.3)	44 (18.1)	2.24	0.78
Average					2.39	0.82
Teams for quality improvement						
Professional health workers are given opportunities to meet in groups in order to identify, analyze and solve work-related problems pertaining their job	56 (23.0)	50 (20.6)	100 (41.2)	37 (15.2)	2.51	0.98
Professional health workers from different departments are facilitated to meet (under supervision of management) in order to improve on the common goals (like provision of quality of health care)	32 (13.2)	79 (32.5)	107 (44.0)	25 (10.3)	2.48	0.84
Employee are grouped in self-directed teams (without supervision of management) for improvement on common goal (like provision of quality of health care)	64 (26.3)	44 (18.1)	101 (41.6)	34 (14.0)	2.56	0.89
Average					2.51	0.90
Consultation for merit pay processes						
Decision from these meeting are considered by management and administration of the hospital	31 (12.8)	66 (27.2)	99 (40.7)	47 (19.3)	2.33	0.93
Hospital management and administration provide necessary support for self-directed teams (internal rules and regulations, mission and vision of the hospital, policies and procedures) for their improvement	48 (19.8)	66 (27.2)	91 (37.4)	38 (15.6)	2.51	0.98

Professional health workers in this hospital take part in determination of their colleagues who should receive merit pay	33 (13.6)	69 (28.4)	108 (44.4)	33 (13.6)	2.41	0.88
Professional health workers take part in deciding the amount of merit pay to be given to a colleague in the case such a practice is to happen at the hospital	29 (11.9)	31 (12.8)	139 (57.2)	44 (18.1)	2.18	0.86
Average					2.35	0.91
Establishment of systems for suggestion						
Work councils for professional health workers have effective channels to address professional health workers' challenges	39 (16.0)	66 (27.2)	124 (51.0)	14 (5.8)	2.98	0.88
Professional health workers' council suggestions are understood and considered by hospital management	38 (15.6)	91 (37.4)	102 (42.0)	12 (4.9)	2.63	0.80
Work councils are considered as good organs for protection of professional health workers' rights	35 (14.4)	64 (26.3)	140 (57.6)	4 (1.6)	2.53	0.75
Average					2.71	081
Composite mean					2.51	0.86

SA= Strongly Agree A=Agree D=Disagree SD=Strongly Disagree

Source: Survey Data, 2018

In compliance with the design and approach of the study, quantitative findings in line with perceived status of participation and involvement was complemented by respondents' views on how health workers participate and are involved in the hospital decision-making processes. The main themes from the findings of this variable were in relation with the conceptualized measure, and they mainly concerned exposed to shared governance, communication, participation in decision making, creation of teams for quality improvement, councils for and teams for merit pay processes, establishment of systems for suggestion and consultation for merit pay within the hospital.

For exposure to shared governance, it was found that in some cases management consults health workers for their in inputs for a well-informed decision-making. One respondent stated that:

> *When there is a need to make a decision, a meeting of all the staff is convened and any detail is given. In this case, medical staff give their opinions before the final decision is made. This is done for decisions regarding staff in general or any other person working here. Medical staff are given the proposal decisions for them to react. Then they agree on the final decisions* (DOH312, 2017).

In some cases, it came out from respondents' views that there could be meetings aiming at endorsing a particular decision, but without necessarily having it enriched or challenged by health workers' interventions and inputs:

> *There is no problem. Our line managers welcome our opinion, but sometimes, managers can bring their own suggestions at the meeting and present to the audience for appreciation. Employees will try to bring in their own inputs but managers will stick to their initial propositions* (FH34, 2017).

As for communication channel between the management and health workers, it came out of their reported experiences that lack of effective and clear communication strategies caused health workers to decide to find out information they needed directly from managers' offices: "This doesn't happen. Indeed, when there is a need for

managers to explain things, they say that anyone who need explanations will meet them in office (DEH223, 2017). Lack of effective communication channels was also mentioned to such an extent that health workers found it impossible to have direct communication with senior managers in the hospital as it was put that "no way has been provided for ordinary staff to communicate with senior management (PHAH317, 2017). One of them noted that:

> *We are all mature. Whenever there is a problem, they should ask you instead of warning you. You see, when someone has said something behind your back, they should consult you before they give you warning letter. This means there is a wide gap between managers and ordinary staff* (MIH313, 2017).

Another one uttered that

> *No. They don't consult us in any way. When there is no information, rumors start going round from anywhere. For example, when the incentive motivation delays, they do not call us for a meeting to get the right information about it; instead, they let rumors circulate* (MIH313, 2017).

Concerning teams and boards facilitating effective communication, it was reported that in some institutions such organs were available and helped the staff do deal with some issues, as it was mentioned:

> *…. what I can say is that the way things are done here is fair. We have one or two customer care officers; when there is a claim from either a patient or a health worker, they address those customer care officers. In addition, there is a team in charge of accreditation, another in charge of quality improvement. All these organs are complementary to solve problems and to improve the quality of service aiming at doing things as they have to be done* (FH34, 2017).

Other measures of this variable included participation and consultation for merit pay processes. Respondents' views revealed that at the end of the year, the hospital may need to award best employees. It was then noticed that health workers themselves appoint such employees through established channels (PHAH31, 2017). Respondents also revealed that the systems for suggestions were only limited to meetings from the

departments where they were expected to provide their inputs on how to improve the services and send their wishes to senior management (NUH101, 2017).

In general, the perceived level of the variable of participation and involvement was rated low in almost all its measures as it was captured from the findings of the survey. Although qualitative findings reveal that in some instances health workers are consulted for issues regarding decision-making in hospitals, it was also noticed that there are loopholes in communication between senior management and front line health workers. Therefore, in addition to low levels of perception on the measures professional health workers' participation and involvement in the hospitals decision-making processes from a quantitative survey, the findings from interviews and focus group discussions also showed that this practice was not at satisfying level in the hospitals.

4.7 Intentions to Stay

The outcome variable of this study is was the retention of professional health workers. The concept of retention was measured through intentions to stay (which is a major predictor of retention) with the indicators seeking the views of professional health workers in terms of whether they would be willing to stay in the health institutions for the next 5 years or whether they are planning to stay in the institutions as long as possible. The respondents' perceptions on whether they are considering to stay either for the next five years or for as long as possible show that all in all, the intention to stay is slightly high as the composite mean (mean=2.61; St. Dev=0.89) is closer to the upper threshold of an estimated low intention. It was realized that feeling to stay in the hospital for the next five years is at high level (mean=2.79; St. Dev=0.98), compared to a low level of intentions to stay for as long as possible (mean=2.43; St. Dev=0.80). Descriptive statistics of intentions to stay are presented in table 4.7.

Table 4.7: Perceived intention to stay in the hospital (N=243)

Intentions to stay	SA	A	D	SD	Mean	Std. Dev
I am willing to stay in this hospital for the next 5 years	80 (32.9)	60 (24.7)	76 (31.3)	27 (11.1)	2.79	0.98
I feel that I would continue to work in this hospital as long as possible	22 (8.8)	91 (37.4)	104 (42.8)	26 (10.9)	2.43	0.80
Composite mean					2.61	0.89

SA=Strongly Agree A= Agree D=Disagree SD=Strongly Disagree

Source: Survey Data, 2017

During the interviews, respondents were asked if they were intending to stay in the hospitals or to go. It was realized that most of them were of the point that they were not having the intentions to leave. It was however, noticed that some of the respondents openly confirmed that they were looking for other jobs and that they were definitely considering to leave (DEH101, DOH207). During the focus group discussions, however, respondents were rather referring to the number of other health workers in the same departments who are no longer in their institutions, pointing out that the same conditions have remained unchanged and that it has not taught any lesson. It was .observed that it could be a sign of intentions to quit for some of them.

4.8 Factor Analysis

Factor analysis is considered as a series of statistical techniques that help users to make sense of complex multivariate data (Everitt & Hay, 1992). Generally speaking, factor analysis groups variables into smaller number of underlying dimensions in order to find relationships among them. In this regard, factor analysis determines the degree to which

a set of measured cluster is merged together and it extracts the salient dimensions from the larger set of variables (Norman & Strelner, 2000).

By doing so, it acts as a tool for data reduction, which removes redundancy or duplication from a set of correlated variables. In fact, someone dealing with data analysis may not be able to observe relationships with eyes, but such checks are performed by a software in order to ensure the existence of relationships which are shown in the matrix, before proceeding to advanced statistics such as regression analysis (Hodgetts, Hagler, & Hodgetts, 2006).

One of the most common technique used for factor analysis if exploratory factor analysis, which involves common factor analysis or principal component analysis (Hair Jr. et al., 2010). Common factor analysis consists of extracting factors from shared variance and principal component analysis extracts them based on unique, shared and error of total variance (Hair Jr. et al., 2010). These two techniques having the capacity of giving the same results, though, principal component analysis is suggested as a better technique because factor component analysis is associated with common factor analysis problems of estimating commonalities (Hair Jr. et al., 2010; Stevens, 2002). Varimax rotation is used in principal component analysis to ensure the number of factors in accounting for variance in latent variables (Harman, 1976; Podsakoff, MacKenzie, & Podsakoff, 2012). This rotation facilitates the distribution of variables into patterns that represent different factors in a simple and clear manner for easier reading and interpretation (Hair Jr. et al., 2010). Under Varimax rotation also, the loading score for each variable on each factor extracted is highlighted. Bearing in mind that the term score is considered to be the correlation between items and factors (Stevens, 2002), the cut-off points of 0.32 and above have been suggested if one needs to determine which

variables to include in the factor (Tabachnick & Fidell, 2007). However, Hair Jr. et al (2010) recommend a cut-off point of 0.40, but for studies of at least 200 units of sample. Sampling adequacy was measured by both Kaiyer-Meyer-Oklin (KMO) measure and Bartlett's test of sphericity (Hodgetts et al., 2006; Norman & Strelner, 2000), where the scholars recommend 0.60 of KMO (with some believing that 0.50 would still be acceptable). With Bartlett's test of sphericity, a chi-square statistic is procuded and allows to test the hypothesis (H_0) the correlation matrix is made up of diagonal elements equal to 1 and off-diagonal elements equal to 0 (Hodgetts et al., 2006).

4.8.1 Factor Analysis for Performance Management Function

Factor analysis for performance management function stated with checking for sampling adequacy by use of KMO, in order to verify if the variable is suitable for factor analysis. The KMO statistic was found to be 0.896 and Bartlett's test was significant at $P<0.05$ as it is shown in table 4.8.

Table 4.8: KMO and Bartlett's test for performance management function

Kaiser-Meyer-Olkin		.896
Approx. Chi-Square		2540.808
Bartlettls Test of Sphericity	Df	78
	Sign	0.000

Source: Survey data, 2017

Performance management function component that had Eigen values greater than 1 were extracted. As it is indicated in table 4.9, two components explaining a total variance of 68.184% were extracted.

Table 4.9: Performance Management Function Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.640	58.766	58.766	4.930	37.926	37.926
2	1.224	9.417	68.184	3.933	30.258	68.184

Extraction Method: Principal Component Analysis
Source: Survey Data, 2017

Then Varimax rotation with Kaiser Normalization was used as it is displayed in table 4.10.

Table 4.10: Rotated Factor Loadings for Performance Management Function

Factors	Factor loading	Cronbach α
Factor one		.937
Professional health workers are allowed to express their views and provide inputs for performance targets (and performance management function in general)	.749	
You and your line manager (direct supervisor) agree on the performance targets and criteria for performance evaluation	.772	
Performance measures for professional health workers are well documented in writing and recorded for reference for the next part of the process	.826	
Professional health workers' performance review is done periodically	.843	
During performance evaluation, professional health workers are allowed to take part in the process and asked their views	.825	
Professional health workers' performance evaluation is done with fairness in the hospital	.716	
Professional health workers get feedback regarding their performance in due time	.751	
Factor two		.875
There exists a performance plan which is available to professional health workers	.697	
The management and professional health workers discuss performance targets and deliverables	.823	
Professional health workers' responsibilities are clearly defined in the performance management document	.772	
You and your line manager reach agreement about the aspect of your performance	.660	
Professional health workers are provided with right amount of constructive criticism (feedback about the areas for improvement) as part of performance feedback	.730	
Professional health workers are provided with positive feedback for good performance as part of performance feedback	.626	
Cronbach's α		0.706

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Source: Survey data, 2017

The items were rotated using the Varimax with Kaiser Normalization and, on this basis, 7 items were loaded on factor 1. Accounting for 58.76 %of variance, they included "professional health workers are allowed to express their views and provide inputs for performance targets (and performance management function in general)", "you and your line manager (direct supervisor) agree on the performance targets and criteria for performance evaluation", "Performance measures for professional health workers are well documented in writing and recorded for reference for the next part of the process", "professional health workers' performance review is done periodically", "during performance evaluation, professional health workers are allowed to take part in the process and asked their views", "professional health workers' performance evaluation is done with fairness in the hospital" and "Professional health workers get feedback regarding their performance in due time". The variable loadings on this factor ranged between 0.749 and 0.843. The second factor in this category loaded with all the remaining 6 items: "There exists a performance plan which is available to professional health workers", "The management and professional health workers discuss performance targets and deliverables", "Professional health workers' responsibilities are clearly defined in the performance management document", "You and your line manager reach agreement about the aspect of your performance", "Professional health workers are provided with right amount of constructive criticism (feedback about the areas for improvement) as part of performance feedback" and "Professional health workers are provided with positive feedback for good performance as part of performance feedback". This factor accounted for 9.41% and its variable loadings ranged between 0.626 and 0.823.

4.8.2 Factor Analysis for Financial Incentives

KMO and Bartlett's statistic test were performed the variable of financial incentives to test for sampling adequacy. Results in table 4.11 show that the variable was suitable for factor analysis.

Table 4.11: KMO and Bartlett's test for financial incentives

Kaiser-Meyer-Olkin		.779
Approx. Chi-Square		2033.315
Bartlettls Test of Sphericity	Df	91
	Sign	0.000

Source: Survey data, 2017

Financial incentives components that had Eigen values greater than 1 were extracted. As it is indicated in table 4.12, three components explaining a total variance of 65.049% were extracted.

Table 4.12: Financial Incentives Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.477	39.120	39.120	3.098	22.129	22.129
2	2.316	16.542	55.661	3.093	22.092	44.221
3	1.314	9.388	65.049	2.916	20.828	65.049

Extraction Method: Principal Component Analysis
Source: Survey Data, 2017

Using Varimax rotation with Kaiser Normalization, items were rotated and results are presented in table 4.12.

Table 4.13: Rotated Factor Loadings for Financial Incentives

Factors	Factor loading	Cronbach α
Factor one		.829
Professional health workers are provided with overtime payment for the job done out of normal working hours	.865	
Transportation allowance is sufficient for professional health workers to cover transport expenses from and to their job	.845	
The compensation allowance for retirement is reasonable for professional health workers in public district hospitals	.651	
Our institution provides childcare benefits to professional health workers as an additional compensation scheme	.690	
Some discounts on health services are provided to professional health workers in our institution as an additional compensation scheme	.628	
Factor two		.855
My salary/wage is enough to meet basic requirements	.780	
The payment provided in public district hospitals is equitable and fair for all professional health workers	.616	
Policies and procedures used to determine salary structure are understandable to professional health workers	.663	
Professional health workers in public district hospitals are provided with paid time-off incentives	.899	
The hospital has performance payments schemes available to professional health workers	.696	
Factor three		.734
Procedures for salary promotions are available and clearly understandable to professional health workers	.809	
Professional health workers are provided with bonuses as part of benefits for performance in their duties	.663	
Medical and health insurance packages are well structured and sufficient to cover medical and health costs	.612	
Procedures for performance payments to professional health workers are fair and equitable across staff levels	.661	
Composite Cronbach alpha		.806

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Source: Survey Data, 2017

The first factor for items measuring perceived level of availability and provision of financial incentives accounted for 39.120 % of the total variance and loaded with the following 5 items: “Professional health workers are provided with overtime payment for the job done out of normal working hours”, “Transportation allowance is sufficient for professional health workers to cover transport expenses from and to their job”, “The compensation allowance for retirement is reasonable for professional health workers in public district hospitals”, “Our institution provides childcare benefits to professional health workers as an additional compensation scheme”, “Some discounts on health services are provided to professional health workers in our institution as an additional compensation scheme”. The loadings for this factor ranged between 0.628 and 0.865

As for the second factor, it was found to account for 16.542 % of the total variance and loaded with the following 5 items with the loadings ranging between 0.616 and 0.899 “My salary/wage is enough to meet basic requirements”, “The payment provided in public district hospitals is equitable and fair for all professional health workers”, “Policies and procedures used to determine salary structure are understandable to professional health workers”, “Professional health workers in public district hospitals are provided with paid time-off incentives” and “The hospital has performance payments schemes available to professional health workers”.

The last factor accounting for 9.388% of the total variance contained 4 items with loadings of more than 0.60 and ranging from 0.612 and 0.809. The items were: “Procedures for salary promotions are available and clearly understandable to professional health workers”, “Professional health workers are provided with bonuses as part of benefits for performance in their duties”, “Medical and health insurance packages are well structured and sufficient to cover medical and health costs”, and

"Procedures for performance payments to professional health workers are fair and equitable across staff levels".

4.8.3 Factor Analysis for Non-financial Incentives

KMO and Bartlett's statistic test were performed the variable of non-financial incentives to test for sampling adequacy. Results in table 4.14 show that the variable was suitable for factor analysis.

Table 4.14: KMO and Bartlett's test for non-financial incentives

Kaiser-Meyer-Olkin		.853
Bartlettls Test of Sphericity	Approx. Chi-Square	3597.844
	Df	210
	Sign	0.000

Source: Survey data, 2017

Non-financial incentives components that had Eigen values greater than 1 were extracted. As it is indicated in table 4.15, five components explaining a total variance of 71.763% were extracted.

Table. 4.15: Non-Financial Incentives Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.246	42.027	42.027	5.512	25.055	25.055
2	2.361	10.733	52.759	4.765	21.660	46.715
3	1.737	7.895	60.655	2.170	9.862	56.577
4	1.425	6.476	67.131	2.011	9.141	65.719
5	1.019	4.632	71.763	1.330	6.044	71.763

Extraction Method: Principal Component Analysis
Source: Survey Data, 2017

Using Varimax rotation with Kaiser Normalization, items were rotated and results are presented in table 4.15.

Table 4.16: Rotated Factor Loadings of Non-Financial Incentives

Factors	Factor loadings	Cronbach α
Factor one		.918
The workload for professional health workers in our hospital is reasonable	.700	
There is flexibility to allow lifestyle changes in the hospital	.673	
Hospital management recognize work life balance principle and I enjoy it at m y working place	.840	
There is availability of safety measures including personal protection against risks caused by the job in this hospital	.740	
I feel that there are enough security measures for me, my personal belongings and the work equipment provided to me in this hospital	.605	
I feel that I am not frustrated at work because of poor working conditions at this hospital	.812	
There is a training and development policy concerning all professional health workers in this hospital	.613	
Professional health workers in this hospital are given opportunities to go for training and development opportunities with fairness	.774	
Hospital management and administration organizes career planning workshops to help professional health workers learn from others' reality in career development	.630	
Professional health workers receive individual counseling in order to understand their own goals and to make changes in the everyday practices, if possible	.803	
Job rotation programs and assessment centers for professional health workers to be able to reinforce their career development	.627	
Factor two		.898
Professional health workers are facilitated to have flexible working hours	.603	
Professional health workers in this institution are given opportunities to go for training and development opportunities with fairness	.774	
Professional health workers who come from training in this hospital are encouraged to share what they have learnt to other colleagues	.811	
Line managers and supervisors support professional health workers who come from training to use skills and techniques learnt during training sessions	.825	

Training and development opportunities serve the basis for professional health workers to be promoted and given allowances	.728	
Hospital management and administration initiate career development systems to support professional health workers in developing their career	.714	
The hospital has self-assessment tools to facilitate professional health workers to understand their own desires, aspirations, likes and dislikes	.638	
Factor three		.762
There is appropriate lightning in the working places in the hospital for me to be able to do the job well	.781	
There are mechanisms for noise reduction for better working conditions in this hospital	.732	
Factor four		
Hospital facilities (offices, wards, theatres, wash rooms…) are in good conditions for professional health workers	.822	
Professional health workers in this hospital are provided with enough equipment for them to be able to do the job well	.731	
Factor Five		
Professional health workers are recognized for good job or high achievement (by being congratulated in the public, being given certificates, etc)	.725	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Source Survey Data, 2017

The first factor for this scale included the following 10 items: “The workload for professional health workers in our hospital is reasonable”,” There is flexibility to allow lifestyle changes in the hospital”, “ Hospital management recognize work life balance principle and I enjoy it at m y working place”, “There is availability of safety measures including personal protection against risks caused by the job in this hospital”, “I feel that there are enough security measures for me, my personal belongings and the work equipment provided to me in this hospital”, “I feel that I am not frustrated at work because of poor working conditions at this hospital”, “There is a training and development policy concerning all professional health workers in this hospital”, “Professional health workers in this hospital are given opportunities to go for training and development opportunities with fairness”, “Hospital management and administration organizes career planning workshops to help professional health workers learn from others’ reality in career development”, “Professional health workers receive individual counseling in order to understand their own goals and to make changes in the everyday practices, if possible”, and “Job rotation programs and assessment centers for professional health workers to be able to reinforce their career development”. With loadings ranging between 0.605 and 0.840, this factor accounted for 42.027% of the total variance.

The second factor included items with loadings ranging between 0.603 and 0.825 and explained 10.733% of the total variance. The items were **“**Professional health workers are facilitated to have flexible working hours, Professional health workers in this institution are given opportunities to go for training and development opportunities with fairness”, “Professional health workers who come from training in this hospital are encouraged to share what they have learnt to other colleagues”, “Line managers and supervisors support professional health workers who come from training to use skills

and techniques learnt during training sessions", "Training and development opportunities serve the basis for professional health workers to be promoted and given allowances", "The hospital has self-assessment tools to facilitate professional health workers to understand their own desires, aspirations, likes and dislikes", and "Hospital management and administration initiate career development systems to support professional health workers in developing their career".

The third factor had four items having loadings of more than 0.70 and explaining 7.895% of the total variance. These were "There is appropriate lightning in the working places in the hospital for me to be able to do the job well", "There are mechanisms for noise reduction for better working conditions in this hospital".

The fourth factor had two items having loadings of more than 0.70 and explaining 6.476% "The items were **"**Hospital facilities (offices, wards, theatres, wash rooms…) are in good conditions for professional health workers", and "Professional health workers in this hospital are provided with enough equipment for them to be able to do the job well".

The last factor had one item: "Professional health workers are recognized for good job or high achievement (by being congratulated in the public, being given certificates, etc)" and it accounted for 4.632% of the total variance.

4.8.4 Factor Analysis for Participation and Involvement in Decision-making

KMO and Bartlett's statistic test were performed the variable of participation and involvement in decision-making to test for sampling adequacy. Results in table 4.17 show that the variable was suitable for factor analysis.

Table 4.17: KMO and Bartlett's test for participation and involvement in decision-making

Kaiser-Meyer-Olkin		.869
Bartlettls Test of Sphericity	Approx. Chi-Square	2438.229
	Df	78
	Sign	0.000

Source: Survey data, 2017

Participation and involvement components that had Eigen values greater than 1 were extracted. As it is indicated in table 4.18, two components explaining a total variance of 68.418% were extracted.

Table 4.18: Participation and Involvement in Decision-Making Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.030	58.586	58.586	4.169	34.741	34.741
2	1.180	9.832	68.418	4.041	33.677	68.418

Extraction Method: Principal Component Analysis
Source: Survey Data, 2017

Using Varimax rotation with Kaiser Normalization, items were rotated and results are presented in table 4.19.

Table 4.19: Rotated Factor Loadings of Participation and Involvement in Decision-Making

Factors	Factor loadings	Cronbach α
Factor one		.894
Professional health workers from different departments are facilitated to meet (under supervision of management) in order to improve on the common goals (like provision of quality of health care)	.718	
Employees are grouped in self-directed teams (without supervision of management) for improvement on common goal (like provision of quality of health care)	.677	
Decision from these meeting are considered by management and administration of the hospital	.794	
Hospital management and administration provides necessary support for self-directed teams (internal rules and regulations, mission and vision of the hospital, policies and procedures) for their improvement	.738	
Professional health workers in this hospital take part in determination of their colleagues who should receive merit pay	.794	
Work councils for professional health workers have effective channels to address their challenges	.713	
Factor two		.892
Professional health workers are consulted for the views aiming at solving problems which are in the hospital	.762	
Employees are consulted for views on decisions regarding their work lives	.852	
Professional health workers are given opportunities to meet in groups in order to identify, analyze and solve work-related problems pertaining their job	.662	
Professional health workers take part in deciding the amount of merit pay to be given to a colleague in the case such a practice is to happen at the hospital	.712	
Professional health workers' council suggestions are understood and considered by hospital management	.624	
Work councils are considered as good organs for protection of professional health workers' rights	.854	
Composite Cronbach alpha		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Source: Survey Data, 2017

The first factor of perceived participation and involvement in decision-making scale had 6 items with loadings ranging between 0.677 and 0.794, and explaining 58.586% of the total variance. This factor included the following items: “Professional health workers from different departments are facilitated to meet (under supervision of management) in order to improve on the common goals (like provision of quality of health care)”, “Employees are grouped in self-directed teams (without supervision of management) for improvement on common goal (like provision of quality of health care), “Decision from these meeting are considered by management and administration of the hospital”, “Hospital management and administration provides necessary support for self-directed teams (internal rules and regulations, mission and vision of the hospital, policies and procedures) for their improvement”, “Professional health workers in this hospital take part in determination of their colleagues who should receive merit pay”, and “Work councils for professional health workers have effective channels to address their challenges”.

The second factor explaining 9.832% of the total variance had 6 items loadings ranging between 0.624 and 0.854. These were: “Professional health workers are consulted for the views aiming at solving problems which are in the hospital”, “Employees are consulted for views on decisions regarding their work lives”, “Professional health workers are given opportunities to meet in groups in order to identify, analyze and solve work-related problems pertaining their job”, “Professional health workers take part in deciding the amount of merit pay to be given to a colleague in the case such a practice is to happen at the hospital”, “Professional health workers’ council suggestions are understood and considered by hospital management”, and “Work councils are considered as good organs for protection of professional health workers’ rights”.

4.8.5 Factor Analysis for Retention

Retention was measured by two items of intention to stay; so principal component analysis was not conducted for this variable.

4.9 Testing Assumptions of Linear Regression Analysis

4.9.1 Linearity

According to Stock and Watson (2001), linearity is the assumption of linear regression models that, there are linear relationships that can be observed between variables. It is therefore important to check for this assumption before subjecting the data to a regression analysis. There are different ways of examining linearity, but the most common one and which was used in this study was suggested by Hair et al. (2010): examining residual scatter plots in order to identify if there are nonlinear patterns in the data. With an examination of the scatter plots (Appendix 12) and by examining the correlation matrix, no major deviations were observed and the data were found to be linear. A positive correlation indicates a positive linear association, and the strength of the positive linear association increases as the correlation becomes closer to +1 (Moore & Notz, 2012).

4.9.2 Normality

In the most commonly used statistical methods (correlation, regression and experimental design), it is recommended to check for normality assumption as they all basically assume that observations will follow a normal distribution, or in other words, that the sample is drawn from a normally distributed population (Keya & Rahmatullah Imon, 2016). There are several methods of detecting normality (Keya & Rahmatullah Imon, 2016; Mardia, 1980), but Chambers et al. (1983) suggest that graphical methods can be good tools where scatter plots and residual plots are advised for checking or diagnostic statistical method. Normality can be examined by both kurtosis and

skewness, by calculating the z-values (Hair Jr. et al., 2010). The data will be confirmed as normally distributed if the calculated z-value is equal to or less than a specific critical value, which is frequently less than or equal to 2.58 (at 0.01 level significance) or less than or equal to 1.96 (at 0.05 level of significance) (Hair Jr. et al., 2010; Usadọlọ, 2016). By examining the skewness and kurtosis statistics therefore, it was found out that the values were within the recommended ranges as presented in table 4.20

Table 4.20: Testing of normality

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
PFMGT	243	.609	.156	-.985	.311
FINIC	243	1.223	.156	-1.047	.311
NONFINC	243	.859	.156	.214	.311
INVOLV	243	.505	.156	-.734	.311
INTS	243	-.166	.156	-1.028	.311
Valid N (listwise)	243				

Source: Survey Data, 2017

4.9.3 Homoscedasticity

Homoscedasticity was another assumption to test in this study. It states that there should be a similarity of variance in the across values of explanatory variables (Hair Jr. et al., 2010) or, in other words, that the variances of the predictions determined by regression remain constant. To this end, a test of homoscedasticity was carried out by plotting a residual scatter plot. This plot shows one axis for predicted scores and one axis for errors of prediction. Therefore, if the scatter plots are (or approximately are) in a rectangular pattern, there is homoscedasticity (Tabachnick & Fidell, 2007). It was found out that the assumption of homoscedasticity of data in this study was fulfilled (Appendix 13).

4.9.4 Multicollinearity

The preliminary observations from correlation matrix served as the basis to predict how the relationships between different variables looked like. However, the data were subjected to regression analysis and run the Variance Inflation Factor where collinearity statistics (including VIF and tolerance values) (Kutner, 2004) were captured as it is presented in table 4.21.

Table 4.21: Results of multicollinearity test

	Collinearity Statistic	
Variable	**Tolerance**	**VIF**
Performance Management Function (PMF)	.361	2.767
Financial Incentives (FI)	.469	2.131
Non-financial Incentives (NFI)	.260	3.852
Participation and Involvement in Decision Making PIDM	.230	4.354

a. Dependent variable: INTS (Intentions to stay)

Source: Survey data, 2017

The interpretation of the results of multicollinearity test rely on the recommended thresholds of VIF, which should not be greater than 10, and that of tolerance ratio, which should not be less than 0.1 (Kutner, 2004). As it is displayed in table 4.20, all the values representing tolerance ratios were found to be more than 1. In the same way, the VIF values were between 2 and 3.3, the values which are less than 10. To this end, there was no multicollinearity problem in the data, which meant there was no doubt for subjecting them to further regression tests.

4.10 Correlation Analysis

Correlation may be described as the degree of association between two variables (Garcia Asuero, Sayago, & González, 2006). Correlation is done by assessing the significance of connection between two variables. Correlation is done by performing the Pearson correlation to study the extent of movement of two variables from one case

to the next one, which in turn shows how these two variables move together. The correlation coefficient (r) ranges between 0 and 1. (Garcia Asuero et al., 2006). According to Wei, Marthandan, Ching, Oi & Arumugam (2009), it is concluded that there is no correlation between two variables when the value of (r) is 0; a perfect correlation will be shown by the value of (r) which is 1. They [ibid] also note that when the r value is negative, the two variables are considered to be moving in the same direction while a negative r value shows that there is a movement of two variables in the different trend. The Pearson correlation coefficient within the values of 0.5 and 1.0 is considered strong, the one between 0.3 and 0.49 is considered as medium while a week correlation coefficient is the one which is between 0.10 and 1.29 (Jangir and Begum, 2008). Results of correlation analysis are presented in table 4.22.

Table 4.22: Correlation matrix of the study variables

Variable	PMF	FI	NFI	PIDM	INTS
PMF	1.000				
FI	.467**	1.000			
NFI	.647**	.722**	1.000		
PIDM	.794**	.584**	.793**	1.000	
INTS	.597**	.361**	.550**	.655**	1.000

****Significant at P<0.01 (2-tailed)**
PMF: Performance Management Function, FI: Financial Incentives, NFI: Non-Financial Incentives, PIDM: Participation and Involvement in Decision-Making, INTS: Intention to Stay

Source: Survey Data, 2017

As results from correlation analysis in table 4.22 show, all the hypothesized relationships statistically significant at the level $p \leq 0.01$, which implies that there was a satisfactory external validity of the measures. By examining the Pearson correlation coefficients, it is noticed that PMF (r=0.597; P<0.01), FI (r=0.361; P<0.001), NFI

(r=0.550; P<0.01) and PIDM (r=.665; P<0.001) are positively and significantly correlated with intentions to stay. It is also important to note that there are correlations within predictors, and all correlations are within normal acceptable ranges.

4.11 Hypotheses Testing

In order to test the hypotheses for this study, quantitative data were subjected to inferential statistics. Quantitative data were of the three categories: the data for measures of human resource management practices, intentions to stay, and demographic characteristics. The data for demographic characteristics were used as control variables; the ones for measures of human resource management practices were used as predictors of intentions to stay. Therefore, a hierarchical multiple regression analysis was conducted of which the model summary is presented table 4.23.

Table 4.23: Model summary

Model	R	R Square	Adjusted R Square	R-Square change	Std. Error of the Estimate
1	.270[a]	.081	.073	.081	.88343
2	.766[b]	.738	.722	.657	.67728

a. Predictors: (Constant), Tenure, Area of Work, Gender, Marital Status, Age

b. Predictors: (Constant), Tenure, Area of Expertise, Gender, Marital Status, Age, INVOLV, FINIC, PFMGT, NONFINC

Legend: FINIC: Financial Incentives; INVOLV: Participation and Involvement; PFMGT: Performance management function; NONFINC: Non-financial incentives

Source: Survey data, 2017

As it can be depicted from table 4.22, control variables were included in the first step to observe the extent to which they explain change in the outcome variable. Control variables were age, gender, marital status, area of expertise and tenure (experience). The R-Square in the first model is 0.81, which means that they accounted for 8.1% of variance in the outcome variable.

By considering the summary of the second model which included the main predictors (PMF, FI, NFI & PIDM) while accounting for control variables, the R Square changed to .738 from 0.81, which means a change of 0.657. This was interpreted that 65.7% of variance in the outcome variable was explained by the four predictors (performance management function, financial incentives, non-financial incentives and participation and involvement in decision-making).

As a result of the hierarchical multiple regression model with results from both steps, the unstandardized and coefficients, the t and significance values at 95% of confidence intervals, and collinearity statistics are presented.

Table 4.24: Results of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sign	95.0% Conf. Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.173	.322		9.841	.000	2.538	3.809		
	Gender	.037	.122	.020	.301	.764	.178	.204	.951	1.051
	Age	.078	.035	.142	2.225	.027	-.035	.114	.837	1.195
	Area of Work	.135	.048	.172	2.818	.005	.042	.043	.980	1.020
	Marital Status	-.024	.106	-.016	-.229	.819	-.233	.184	.798	1.254
	Tenure	.363	.072	.332	5.042	.000	.014	.072	.712	1.405
2	(Constant)	.318	.354		.899	.369	-.379	1.015		
	Gender of	-.074	.092	-.040	-.809	.420	-.255	.107	.944	1.060
	Age	.031	.029	.057	1.095	.275	-.025	.087	.828	1.207
	Area of Work	-.085	.038	-.109	2.246	.026	-.160	-.010	.963	1.039
	Marital Status	.056	.081	.038	.691	.491	-.104	.216	.757	1.321
	Tenure	.033	.036	.054	.941	.348	-.037	.104	.697	1.436
	PFMGT	.284	.103	.183	2.434	.006	.081	.487	.361	2.767
	FINIC	.117	.117	.189	3.530	.003	.048	.115	.469	2.131
	NONFINC	.192	.160	.108	1.190	.007	.122	.107	.260	3.852
	INVOLV	.607	.138	.425	4.402	.000	.335	.880	.230	4.354
a. Dependent variable: INTS										

Legend: INTS: Intention to stay, PFMGT: Performance Management Function, FINIC: Financial incentives, NONFINC: Non-financial incentives, INVLOV: Participation and involvement. *Source: Survey Data, 2017*

Table 4.24 shows that control variables of age (β=0.078; p=0.027), area of expertise (whether the respondent is a doctor, a nurse, a midwife, a dentist of a pharmacist) (β=0.135; p=0.005) and tenure (experience) (β=363; p=0.000) positively and significantly predict intentions to stay. For the main explanatory variables, it was found out that they are all positive significant predictors of intentions to stay: performance management function (β=0.183; p=0.004), financial incentives (β=0.189; p=0.004), non-financial incentives (β=0.108; p=0.007) and participation and involvement in decision-making (β=0.425; p=0.000). It was also noticed that by observing the t values, participation and involvement in decision-making (t=4.402) highly contributed to the model, followed by financial incentives (t=3.530), performance management function (t=2.434) and non-financial incentives, in that order.

Based on the multiple linear regression results, therefore, all the hypotheses (Ho1, Ho2 Ho3 and Ho4) were rejected.

Table 4.25: Summary of hypotheses testing

Hypothesis	P-value		Decision
H_{01}: Performance management function has no statistically significant effect on the retention of professional health workers on the public district hospitals in Rwanda.	0.004	Significant	Reject
H_{02}: Financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.	0.003	Significant	Reject
H_{03}: Non-financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.	0.007	Significant	Reject
H_{04}: Employee participation and involvement in decision-making has no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda.	0.000	Significant	Reject

CHAPTER FIVE

SUMMARY AND DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Overview

This chapter is concerned with the summary and discussion of the findings, conclusions, recommendations and suggestions for further research.

5.1 Summary and Discussion of Findings

5.1.1 Effect of Performance Management Function on the Retention of Health Workers in the Public District Hospitals

The first objective of the study was to examine the effect of performance management function on professional health workers' intentions to stay in the public district hospitals. As it was dictated by the convergent parallel mixed-methods design, a variant of mixed methods approach, both quantitative and qualitative data were analyzed in order to understand the status of performance management function as perceived, experienced and viewed by respondents who participated in this study. It was therefore found out that performance management function in general was fairly satisfying, with some weaknesses in some practices as it was confirmed by both quantitative and qualitative findings.

These findings on the perceived status of implementation of performance management function are in agreement which results of studies that were conducted in Uganda (Lutwama, Roos, & Dolamo, 2013) and Malawi (Bradley & McAuliffe, 2009), where in the former respondents reported that performance management was common practice, but with some loopholes in its planning, setting performance targets and timelines, which in essence is a challenge to having a comprehensive performance

appraisal framework. The divergent levels of perceptions on performance management review coupled with the study participants' revelations on issues regarding fairness in the performance appraisal collaborate the findings from a study which was conducted by Mathauer & Imhof (2006) which shows that some health workers in Kenya were undergoing performance appraisal while others reported that they were not aware of what the function was all about. In the same way, respondents' perceptions and experiences showed that although feedback was recognized as an existing practice after a performance review, not everyone was exposed to receiving feedback and so being rewarded for it, which in general supports findings from studies by Lutwama et al. (2013), Bradley & McAuliffe (2009), and Manongi, Marchant & Bygbjerg (2006).

This objective having been to examine the effect, descriptive findings were not able to perform such a function. In this regard, further analysis was carried out at the advanced level in order to determine the effect of the predictor on the outcome variable. In essence, the hypothesis for the first objective was (H_{01}): Performance management function has no statistically significant effect on the retention of professional health workers on the public district hospitals in Rwanda. The results after multiple linear regression did not support the hypothesis and it was rejected. In fact, the study found out that performance management function is a predictor of intentions to stay in the public district hospitals (β=0.183; p=0.004; t=2.434). This means that an increase by one unit in standard deviation of performance management function will result in an increase of 0.434 (0.183) standard deviation in intentions to stay.

The scholarly view of these findings is that a comprehensive performance management function in health care institutions from its planning phase through performance appraisal to feedback after a performance review will boost commitment of health workers and create good work behavior leading to reduced or no intentions to quit. The

findings are therefore in congruence with the ones from a study conducted by Paul & Anantharaman (2003) from which a significant effect of performance appraisal on reduced turnover intentions was noticed. The findings are in tandem with those of a study conducted by Krishnan, Warier & Kanaujia (2013) who found a negative correlation between performance management function and intents to leave, then giving ways to conclude that retention of employees is positively affected by a comprehensive performance management system among other things. In another study conducted by Moran et al. (2014), clear and fair performance evaluation systems and management conducted expertly along with other HRM interventions were found to increase commitment and retention of staff in the health care institutions.

5.1.2 Effect of Financial Incentives on the Retention of Health Workers in the Public District Hospitals

The second objective of the study was to establish the effect of financial incentives on professional health workers' intentions to stay in public district hospitals in Kigali, Rwanda. The analysis of this objective started with presentation and interpretation of data from a quantitative survey on perceived availability and provision of financial incentives in the public district hospitals, which were complemented and compared with qualitative findings from interviews and focus group discussions on the same variable. Generally, financial incentives were perceived to be low in almost all its measures. It was however revealed that some indicators were rated high, like medical allowances provided in the public district hospitals to cover for medical and other health related costs. The findings from the survey were closely in relation with findings from qualitative data, which showed that financial incentives in terms of salary, allowances, fellowships and discounts were viewed to be at low level.

There is a number of studies which were conducted in the area of human resources for health, especially in sub-saharan Africa, and which tackled health workers' levels of satisfaction as related to financial incentives in health care institutions, including hospitals (Manafa et al., 2009; Rouleau, Fournier, Philibert, Mbengue, & Dumont, 2012; Willis-Shattuck et al., 2008). Most of these studies claimed a rethinking of new strategies to improve financial incentives for the health personnel, including professional health workers. In a recent conducted in Ghana (Bonenberger et al., 2014), it was revealed that though there is a belief to say that the country is among those whose health workers' financial gain is high compared to other countries in the West African region, but health workers still had to claim that salary levels and other financial benefits were not satisfying to the because of increasing living costs and challenges related to the health care service delivery profession.

Apart from the status of financial incentives in public district hospitals which was captured through health workers' views, perceptions and experiences on this phenomenon, inferential statistics was used to plot the extent to which financial incentives affect health workers' intentions to stay. Conditions of employment which include salaries and other allowances, as well as performance allowances, were found to be associated with intentions to stay. While most studies on the effect of the influence of financial incentives on the retention of health workers or their intentions to stay do not specifically show the extent to which performance allowances predict either intentions to stay of retention of health workers (Nyandoro et al., 2016; Willis-Shattuck et al., 2008), salary (Aluku, 2012; Marjolein Dieleman, Cuong, Anh, & Martineau, 2003; Ojakaa et al., 2014), accommodation and transport allowances (Lehmann et al., 2008) were found out to be determinants of health workers' intentions to stay as lack

of health care institutions to provide adequate salaries and allowances was associated with their intentions to leave institutions.

The results from the survey, interviews and focus group discussions being only descriptive, they could not explain the effect of the predictor on the outcome variable. It was therefore important to advance the study to further analysis by performing a regression analysis in order to examine the effect of financial incentives on intentions to stay (a major predictor of retention). The second objective was associated to the hypothesis (H_{02}) that "financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda". In fact, the regression findings showed that financial incentives were a positive predictor if intentions to stay (β=0.189; p=003; t=3.530). It was found out that an increase in the unit of standard deviation of financial incentives will result in the increase of 0.189 standard deviation of intentions to stay. Hence the hypothesis was not supported.

These findings support the results of the study by Ojakaa et al. (2014) which focused on the role of financial incentives and retention of staff in the health sector and concluded that a comprehensive remuneration to health workers positively affects retention. The scholars recommended that there is need to devise better compensation systems to be able to attract and retain competent professional health workers. In the study conducted by Lai (2011), it was concluded that one of factors to make health workers feel they are committed and reduce their intents to quit was to be paid a reasonable, good salary.

The findings of the study are also in conformity with those of Thomas and Butts (2009) whose study revealed a positive relationship between performance allowances and retention. These findings are not far from conclusions from studies by Zimmerman &

Darnold (2009) and Griffeth (1999) who investigated into the role of allowances on the retention and asserted that such financial schemes make employees high performance remain because of the possibility of getting more reward.

In addition, a study conducted by Bonenberger et al. (2014) examined different human resource management interventions that could be associated with retention of health workers in in Ghana. The findings of the study established a positive relationship between wages, health workers' access to education and promotions opportunities, and retention and reduced intentions to leave. A positive effect between financial incentives and intentions to stay is also in conformity with results of other studies which examined the role of compensation on retention in the Arabic countries (F. A. Mohammad, Yoshifumi, Sakdan, & Ayman, 2013; S. E. Wagner, 2006).

5.1.3 Effect of Non-Financial Incentives on the Retention of Health Workers in the Public District Hospitals

The third objective of the study was to examine the effect of non-financial incentives on professional health workers' intentions to stay in public district hospitals in Kigali, Rwanda. The findings of the descriptive survey on the perceived status of work conditions, training and development and career development as the key indicators of this variable revealed that in general they are perceived low. Although the qualitative findings revealed that respondents were not satisfied with fairness in sharing training and development opportunities, workload, flexibility and working hours, a satisfying level of the availability of such trainings according to the needs in the institutions was noticed. It was also noticed that offices and equipment, security and general work environment were at satisfying level. However, little knowledge on career development was noticed across levels of respondents.

Findings of such patterns in the status of non-financial incentives were also found in other studies, although most of them relied a quantitative approach to study this phenomenon. In the study that was conducted in Port Harcourt, Nigeria (Gabriel & Nwaeke, 2015), researchers found that a fairly interesting availability of job enrichment, lifestyle changes and job autonomy. Kathure (2014) conducted a similar study at the Kenya Tea Development Agency and found that career development opportunities and training were being given much consideration. In conformity with these findings also, a study conducted in Ethiopia (Haile, Yemane, & Gebreslassie, 2014) revealed that close to 70% of respondents were considering that training opportunities, prizes and recognition among other non-financial incentives were at a fairly good level.

In essence, the descriptive findings from the survey, interviews and focus group discussions served as the basis to understand the status of non-financial incentives in the public district hospitals as they were perceived, viewed and experienced by respondents. As the second objective had the hypothesis (H_{03}) that "non-financial incentives have no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda", quantitative data were subjected to inferential statistics (regression analysis) in order to predict the effect of explanatory variable on the outcome variable. To this end, it was found out that non-financial incentives had a statistically significant effect on the intentions to stay (β=0.108; p=0.007; t=1.190). In fact, it was noticed that an increase by one unit in standard deviation of non-financial incentives results in the increase of 0.108 standard deviation of intentions to stay. Therefore the hypothesis was rejected.

In relation with other studies that have been conducted with the purpose of examining the effect of non-financial incentives on retention especially in the area of human

resources for health, the study findings are in agreement with study conducted by Lehmann et al. (2008), which confirmed that working environment, working conditions, coupled with mechanisms for supporting career development among health workers positively influence health workers' retention. The study argued that manageable workload, job security and supervisor support among other interventions leading to health workers' reduced intentions to leave. Another recent study aimed at studying factors that predict attraction and retention of primary health care workers in Kenya (Ojakaa et al., 2014). Its findings confirmed the hypothesis that work conditions and career development positively affected health workers' intentions to stay, the latter being a major predictor of retention. The study findings are also in congruence with other studies which investigated into the determinants of health workers' retention (Marjolein Dieleman et al., 2003; M Dieleman, Toonen, Toure, & Martineau, 2006; Zurn, Poz, Stilwell, & Adams, 2004). Generally, these studies realized that availability of equipment at work place, support from management, mechanisms for supporting health workers to develop their career and organizational arrangements positively affected health workers' intentions to stay. In the same way a positive strong association between non-financial incentives and retention was confirmed by a study which involved six countries: Cameroon, Ghana, Senegal, South Africa, Uganda and Zimbabwe (Awases, Gbary, Nyoni, & Chatora, 2004).

Similarly, these findings confirm those from studies which were conducted by Dussalt & Franceschini (2006) and Aluku (2012) who analyzed different aspects of human resource management practices relating to non-financial incentives. Their conclusions were that a less likelihood of staying in health institutions among health workers is associated with lack of equipment, supplies and other infrastructure, stress, poor management of workload and lack of mechanisms for flexible working hours, and poor

management support. In the same manner, the issue of equipment and supplies, coupled with workload management policies and supervision are variables that were found to positively affect health workers' intentions to stay in Mullei et al. (2010) 's study findings.

In addition, the findings are another evidence that the more health workers are facilitated to make their career growth dreams realized, the more they are likely to get committed to their job and become loyal to their institutions, which reduces intentions to leave and translates into high rates of retention (McCarthy, Tyrrell, & Cronin, 2002; Willis-Shattuck et al., 2008). This is not far from Cavanagh & Coffin (1992a)' study which found out that a less likelihood of leaving among health workers was predicted by high levels of promotional opportunities.

Moreover, a study conducted in Ethiopia (Ayalew et al., 2015) found out that training of health workers predicts retention of health workers. Unfairness (Engeda, Birhanu, & Alene, 2014) and lack of such opportunities was associated with intentions to leave (Getie, Betre, & Hareri, 2015), and a study conducted in Malawi (Schmiedeknecht et al., 2015) argued that continuous education of health workers positively affected their retention. Other studies on non-financial incentives (M Dieleman, Gerretsen, & van der Wilt, 2009; M Dieleman, Toonen, Toure, & TMartineau, 2006; Mathauer & Imhoff, 2006; K. V. Rondeau & Wagar, 2016; World Health Organization, 2010; YangYang, Yan-Hui, Jing-Ying, & Hong-Fu) generally confirmed that a comprehensive review of working conditions and training of health workers were crucial to the retention of the health personnel.

5.1.4 Effect of Participation and Involvement in Decision Making on the Retention of Health Workers in the Public District Hospitals

The forth objective of this study was to establish the influence of employee participation and involvement in decision making processes on health workers' intentions to stay in public district hospitals in Kigali, Rwanda. The analysis for this objective started with data from a survey which aimed at establishing the levels of perception on the extent to which health workers participate and are involved in the hospitals decision-making processes. The findings showed that, in general, health workers were fairly satisfied with the level of participation and involvement in decision-making. It was noticed, however, that there are some areas where health workers were not satisfied with, especially with exposure to shared governance and communication between top management and low level health professionals. The findings from interviews and focus group discussions also were used to complement the ones from the survey, and their comparison showed that they almost had many points in common.

Although the descriptive analysis of both the data from both the survey and interviews and focus group discussions revealed the status of health workers' participation and involvement in decision-making in the public district hospitals, their tools of analysis were limited and they were not able to predict the effect of health workers' participation and involvement in decision-making processes and intentions to stay. In fact, the fourth objective had a hypothesis (H_{04}) attached to it and it stated that "employee participation and involvement in decision-making has no statistically significant effect on the retention of professional health workers in the public district hospitals in Rwanda". To this end, further analysis was conducted by doing regression analysis for this purpose. The findings from regression analysis showed that participation and involvement of health workers in the hospitals decision-making processes statistically and significantly

affected intentions to stay (β=0.425; p<0.001; t=4.402). These findings mean that increasing the level of participation and involvement in decision-making by a unit of standard deviation results in 0.425 standard deviation of intentions to stay. Hence the hypothesis was not supported.

Employee participation and involvement has been a matter of study and some scholars have found that it positively affects employee retention. Therefore the findings corroborate with Kand & Rekor (2005)' s research findings that involving health workers especially nurses in the hospital decision-making processes makes them feel more committed to work. The scholars note that that systems for suggestion and exposure to shared governance are key practices that need to be initiated in health care institutions in order to reduce intentions to leave among nurses.

In the same view point, another two studies conducted by DiMeglio et al. (2005) and Mohr, Burges, & Young (2008) examined the interventions that could lead to reduced intentions to leave and turnover among health workers. It came out from the findings of these studies that making good use of group cohesion and team-based strategies influence health workers' intentions to stay and leads to improved retention rates (DiMeglio et al., 2005). In addition to this, connecting with line managers to share front line health workers' concerns coupled with encouraging and involving them in the decision-making processes was found to be associated to change in the work behavior while deciding whether to stay or not stay (Roche, Duffield, Dimitrelis, & Frew, 2015). In the same view point, significant associations between health workers' involvement and participation and intentions to stay were recommended in the World Health Organization (2010) survey s and it was stated that effective decision spaces influences

health workers' stability and reduction in turnover intentions(K. V. Rondeau & Wagar, 2016) (K. V. Rondeau & Wagar, 2016).

5.2 Conclusions

This general purpose of this study was to establish the effect of human resource management practices (HRMPs) on the retention of professional health workers in public district hospitals in Rwanda. Using a cross-sectional survey research design with a mixed-methods approach, the study collected used a survey questionnaire, interviews and focus group discussions to establish the effect of performance management function on the retention of professional health workers in the public district hospitals, to examine the effect of financial incentives on the retention of professional health workers in public district hospitals and to establish the effect of participation and involvement in decision-making on the retention of professional health workers in the public district hospitals.

The study tested four null hypotheses which were all not supported. In fact, results from the first hypotheses showed that performance management function significantly and positively affects health workers' intentions to stay. From these results, it was concluded that effective and comprehensive implementation of performance planning, performance evaluation and performance feedback is greatly contributes to retention of professional health workers.

The second hypothesis which was tested in this study showed that financial incentives are significant and positive predictors of professional health workers' intentions to stay. Based on the findings, the research concluded policies and programs which are tailored to the improvement of availability and provision of financial incentives in terms of salaries, allowances, fellowships, discounts, loan schemes and other financial benefits

could significantly contribute boost workers' positive response and contribute to retention in the hospitals.

The third hypotheses tested showed that non-financial incentives positively and significantly had an effect on health workers' intentions to stay. Based on the findings, the study concluded that non-…the improvement of the level of availability and provision of financial incentives including improved good working conditions, provision and fair sharing of training and development opportunities and career development opportunities could lead to reduced turnover and boost retention of professional health workers in the public district hospitals.

The fourth hypothesis tested revealed that there is a positive significant effect of participation and involvement in decision-making on health workers' intentions to stay. Based on the findings of the study, a conclusion was made that professional health workers' participation and involvement in the hospital decision-making processes through exposure to shared governance, creation of teams for quality improvement, consultation for merit pay process and establishment for systems for suggestion could contribute to the improvement of retention capacity in the public hospitals.

In general, by examining the effect of human resource management on the retention, the study has contributed to the current understanding of major predictors of retention of employees in the health care setting, and in the area of study. In fact, with very limited studies in the health care institutions in Rwanda, the study has concluded that while most studies investigate into retention of health workers through their levels of satisfaction by focusing on financial incentives as the main predictors, it was concluded that a human resource management approach focusing on a step-by-step implementation of performance management function, coupled with policies and

programs regarding availability and provision of financial and non-financial incentives along with high level integration of professional health workers in the hospital decision-making processes would provide a response to the issue of turnover in the health care institutions, including public district hospitals.

5.3 Implication of the Study to Theory and Practice

5.3.1 Contribution to Theory

The study sought to establish the effect of human resource management practices on the retention of health works in the lens of social exchange theory. This theory being fundamentally based on costs and rewards (Homans, 1961), it captures the concept of social relationships within a reciprocal framework between the organization through managers or its representatives and employees. In this regard, such social exchanges will stimulate individuals (employees) to make decisions based on long-term benefits including the organizational practices towards their satisfaction.

As it applies to this study, the theory was used as a tool to explain how social exchanges work in the work environment. In fact, the fundamental principles of fairness and value towards the employees, expressed in terms of what the organization does form them (fair appraisal systems, strong and effective communication channels, clear and focused training and development, strong career development strategies, policies governing promotions and salary structures, participation and involvement in decision-making processes) result in reciprocal relationships which act on employees behavior at work. Therefore, the study findings have shown that the theory principals can be used to create long-term relationships between public district hospitals (through the managers or representatives) and health workers. It was found out that health workers' intentions to stay are largely determined by human resource management practices.

The findings of the study confirm the body of evidence in literature that an integrated approach of human resource management practices in the organization will affect employees who in turn will reciprocate with commitment and attachment, then leading to the intentions to remain as a major predictor of retention (Bowen & Ostroff, 2010; Hussain & Rehman, 2013; Laka-Mathebula, 2004; Nishii et al., 2008; Ozolina-Ozola, 2014; Patton, 2015; Rajendra, 2014) . And in fact, perceiving reciprocity between health workers and the hospital creates trust, commitment, attachment among health workers which builds up robust extended engagement into extra behavior of considering to remain (Knights & Kennedy, 2005; Lester, Turnley, Bloodgood, & Bolino, 2002) as a result of what the organization has done for them in terms of analyzed human resource management practices.

In this regard, the study has emphasized the extent to which social exchange theory can be used as a framework to study the work environment in terms of reciprocity between employees and the organizations: employee response with intention to remain being a reciprocal exchange to fairness and value from the organization in terms of how it treats them.

This study was also conducted in the lens of perceived fairness as it is contained in the equity theory developed by Adam (1965). In fact. The equity theory addresses fairness on the basis that employees in the organization can make social comparisons and thereafter perceive that it (through representatives and managers) is being fair or unfair to them. By doing so, an assessment of the ratio of the level of inputs to that of outputs, which is at the same time compared to other ratios of the same level employees within or outside the system. As it was argued by Adams [ibid], the feeling of equity happens when employees perceive that the level of input results into reasonable reward and, by

comparison of other employees with similar job level. In this situation, a level of justice is perceived by the employees, which in turn results into satisfaction and balanced exchange. This satisfaction will be followed by employee's embracement of work behavior including commitment and will to remain. The opposite, that is when employees perceive unfairness and inequity between the level of inputs and that of outputs, and especially when they feel that the ratio input-output is not similar with other employees doing the same job, will lead to dissatisfaction and a different work behavior like considering to quit.

In a nutshell, the equity theory has been used in the motivation studies especially in explaining factors that affect employee retention (Azumah, 2011; Mamah & Ulo, 2015 ; Sandhya & Kumar, 2011; Sun, 2016). This study having found out a significant and positive effect of human resource management practices on the retention of health workers, its findings have served as another basis to emphasize the usefulness of the equity theory as the framework to understand how employee work behavior and job outcomes are driven by what the organization does for the employees and how it treats its them.

5.3.2 Contribution to Practice

The study is considered to be contributing on the literature of human resources for health, especially in sub-saharan Africa and the region in general, and Rwanda in particular. In fact, although there is an existing body of knowledge on retention of health workers, but most studies in the study setting and area have rarely undertook a large scale consideration of integrated human resource management practices and their effect on the retention of health workers, as they mostly focused on financial incentives or just coupled with very few measures of satisfaction to explain retention. This study

having deeply explored other factors that affect retention of health workers like availability and provision of non-financial incentives to health professionals, implementation of performance management function in health care institutions and involvement and participation of health workers in the hospital decision making processes, its findings can be used by human resources for health policy makers, managers and researchers. In addition, studies on the retention of health workers in the study setting have rarely predicted retention by investigating into intentions to stay. Therefore, there has been a trend of investigating into such studies by just subjecting inferential statistics on the retention rates and turnover indexes. Such studies are absolutely necessary and can give insights on the current practices within the organization and the existing retention rate and turnover, but a study on the intentions to stay has been able to detect the current consideration of whether employees are considering to remain or to quit, which predicts the future of organizations in terms of retention. Moreover, a mixed-methods approach has been rarely used in such studies in order to understand the views and experiences form different levels of health workers on the existing human resource management practices as they apply in their organizations. With such an approach, a deep understanding on the status of health workers involvement in decision-making was revealed as well as the level of training and career development opportunities, performance evaluation activity, and financial incentives. Therefore, the study provides the insights on how health care institutions including public hospitals can increase institutional retention capacity through an integrated human resource management approach.

5.4 Recommendations

This study has found that there performance management function, financial incentives, non-financial incentives and participation and involvement in decision-making

significantly and positively affect retention. Based on these findings therefore, it is recommended that the ministry of health should revisit policies governing both financial and non-financial incentives provided to health professionals in the public district hospitals as a means of reducing intentions to leave and turnover in general. In addition, human resource departments at hospital level in collaboration with senior management and other departments should consider the guidelines of implementation of performance management function in all its phases as a way of fostering motivation of health professionals and increase health institutions to retain health workers. Moreover, the hospitals' senior management should consider involvement and participation of professional health workers in the hospitals decision-making processes as a way of reducing frustration and enhancing better outcomes in terms of commitment which leads to reduction of intentions to leave.

5.5 Further Research

As this study was unfolding, some questions arose and did not find answers. Hence, recommendations were made for further research so that an attempt can be made to answer the questions left unanswered. Firstly, a study on human resource management challenges in the public district hospitals would be carried out. Second, a study would be conducted to analyze human resource management policies in the health care setting in Rwanda. Thirdly, a comparative study on turnover intentions (or intentions to stay) would be conducted in both public and private health care service provision institutions.

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APPENDICES

Appendix 1: Human Resource Management Practices and Intentions to Stay Survey Questionnaire

Instructions:

- This questionnaire has two parts (Part I & Part II). Part has five (5) sections (A, B, C, D, E)
- For close ended questions, answer by putting a tick (∨) under the rating that best fits your perception with regards to the statement. For open ended questions, answer in full writing. You are requested to write in the provided space.

PART I

SECTION A: Demographic information of professional health workers in public district hospitals

1. Gender: Male ( ) Female ( )

2. Age range: Below 20 ( ) 21 -25 ( ) 26-30 ( ) 31-35 ( ) 36-40 ( )

41-45 ( ) 46-50 ( ) 51-55 ( ) 56-60 ( )…..61-65 ( )……66 and above

3**.** Highest level of education:

Secondary (Advanced level) (A2) ( )

University/College level (Diploma level) (A1) ( )

University level (Bachelor's degree) (A0) ( )

University level with Master's degree (Maitrise) ( )

University level with a PhD (Doctorat) ( )

Any other (Please specify): ……..

4. Area of qualification…….

5. Area of work: Medical Specialist ( ) General Medical Doctor ( ) Nurse ( ) Midwife ( ) Dentist ( ) Pharmacist ( )

6. Add any other responsibility that you have (e.g., Director, Head Nurse, Matron, Head of Department, etc): …….

6. Marital status: Single ( ) Married ( ) Divorced ( ) Separated ( ) Widowed ( )

7. How many years have you been in the health professional career?
Below 1 year ( ) 1-3 years ( ) 4-6 years ( ) 7-9 years ( ) 10 and above-

8. How many years have you been to this facility/Hospital?
Below 1 year ( ) 1-3 years ( ) 4-6 years ( ) 7-9 years ( ) 10 and above-

11. Nationality: Rwandan ( ) Non Rwandan ( )

SECTION B: Public District Hospitals Financial Incentives

12. **Implementation of performance management function in the public district hospitals**

Occurrence and frequency of: development and planning of performance management process, review of performance, feedback after performance appraisal

NB: For each statement, put a tick (∨) under the rating that best fits your choice

Very often= 4, Often= 3, Rarely = 2 or Never = 1

S/N	Statement	4	3	2	1
12.1	There a performance plan which is available to professional health workers				
12.2	The management and professional health workers discuss performance targets and deliverables				
12.3	Professional health workers are allowed to express their views and provide inputs for performance targets (and performance management function in general)				
12.4	Professional health workers' responsibilities are clearly defined in the performance management document				
12.5	You and your line manager (direct supervisor) agree on the performance targets and criteria for performance evaluation				
12.6	Performance measures for professional health workers are well documented in writing and recorded for reference for the next part of the process				
12.7	Professional health workers' performance review is done periodically				
12.8	During performance evaluation, professional health workers are allowed to take part in the process and asked their views				
12.9	Professional health workers' performance evaluation is done with fairness in the hospital				
12.10	Professional health workers get feedback regarding their performance in due time				
12.11	You and your line manager reach agreement about the aspect of your performance				
12.12	Professional health workers are provided with right amount of constructive criticism (feedback about the areas for improvement) as part of performance feedback				
12.13	Professional health workers are provided with positive feedback for good performance as part of performance feedback				

12. 14Provide any other experiences and perceptions you have on how performance management function is implemented in public district hospitals.

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Section C:

Level of availability of financial incentives in terms of: Conditions of employment (pay/wage/salary); bonuses, benefits and allowances; performance payments.

NB: For each statement, put a tick (∨) under the rating that best fits your choice according to your level of perception with the availability of the item expressed in the statement

Strongly agree= 4, Agree= 3, Disagree= 2 or Strongly disagree = 1

S/N	**Statement**	**4**	**3**	**2**	**1**
13.1	My salary/wage is enough to meet basic requirements				
13.2	The payment provided in public district hospitals is equitable and fair for all professional health workers				
13.3	Policies and procedures used to determine salary structure are understandable to professional health workers				
13.4	Procedures for salary promotions are available and clearly understandable to professional health workers				
13.5	Professional health workers are provided with bonuses as part of benefits for performance in their duties				
13.6	Professional health workers are provided with overtime payment for the job done out of normal working hours				
13.7	Transportation allowance is sufficient for professional health workers to cover transport expenses from and to their job				
13.8	Medical and health insurance packages are well structured and sufficient to cover medical and health costs				
13.9	The compensation allowance for retirement is reasonable for professional health workers in public district hospitals				
13.10	Professional health workers in public district hospitals are provided with paid time-off incentives				
13.11	Our institution provides childcare benefits to professional health workers as an additional compensation scheme				

13.12	Some discounts on health services are provided to professional health workers in our institution as an additional compensation scheme				
13.13.	The hospital has performance payments schemes available to professional health workers				
13.14.	Procedures for performance payments to professional health workers are fair and equitable across staff levels				

13.14 Provide any other experiences and perceptions you have on salaries and benefits offered to professional health workers in public district hospitals.

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SECTION D: Non-financial incentives for professional health workers in public district hospitals

14. Level of availability of non-financial incentives in terms of conditions of work environment, training and development practices, and career development

NB: For each statement, put a tick (∨) under the rating that best fits your choice according to your level of perception with the availability of the item expressed in the statement

Strongly agree= 4, Agree= 3, Disagree= 2 or Strongly disagree = 1

Very often= 4, Often= 3, Rarely= 2 or Never = 1

S/N	**Statement**	**4**	**3**	**2**	**1**
14.1	The workload for professional health workers in our hospital is reasonable				
14.2	Professional health workers are facilitated to have flexible working hours				
14.3	Hospital facilities (offices, wards, theatres, wash rooms…) are in good conditions for professional health workers				
14.4	Professional health workers in this hospital are provided with enough equipment for them to be able to do the job well				
14.5	There is appropriate lightning in the working places in the hospital for me to be able to do the job well				
14.6	There are mechanisms for noise reduction for better working conditions in this hospital				
14.7	There is flexibility to allow lifestyle changes in the hospital				

14.8	Hospital management recognize work life balance principle and I enjoy it at m y working place				
14.9	There is availability of safety measures including personal protection against risks caused by the job in this hospital				
14.10	I feel that there are enough security measures for me, my personal belongings and the work equipment provided to me in this hospital				
14.11	I feel that I am not frustrated at work because of poor working conditions at this hospital				
14.12	There is a training and development policy concerning all professional health workers in this hospital				
14.13	Professional health workers in this institution are given opportunities to go for training and development opportunities with fairness				
14.14	Professional health workers who come from training in this hospital are encouraged to share what they have learnt to other colleagues				
14.15	Line managers and supervisors support professional health workers who come from training to use skills and techniques learnt during training sessions				
14.16	Training and development opportunities serve the basis for professional health workers to be promoted and given allowances				
14.17	Hospital management and administration initiate career development systems to support professional health workers in developing their career				
14.18	The hospital has self-assessment tools to facilitate professional health workers to understand their own desires, aspirations, likes and dislikes				
14.19	Hospital management and administration organizes career planning workshops to help professional health workers learn from others' reality in career development				
14.20	Professional health workers receive individual counseling in order to understand their own goals and to make changes in the everyday practices, if possible				
14.21	Job rotation programs and assessment centers for professional health workers to be able to reinforce their career development				
14.22	Professional health workers are recognized for good job or high achievement (by being congratulated in the public, being given certificates, etc)				

14.23 Provide any other experiences and perceptions you have on non-financial incentives (conditions of work, training and development, career development, recognition, etc) that are provided to professional health workers in public district hospitals.

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SECTION E: Involvement and participation of professional health workers in public district hospitals' decision-making processes

15. Occurrence and frequency of: exposure to shared governance in the hospital, upward problem-solving, teams for quality improvement (quality circles, cross-functional teams, self-directed teams), collective bargaining, worker councils, consultation for merit pay process, establishment of systems for suggestions

NB: For each statement, put a tick (∨) under the rating that best fits your choice

Very often= 4, Often= 3, Rarely= 2 or Never = 1

S/N	Statement	4	3	2	1
15.1	Professional health workers are consulted for the views aiming at solving problems which are in the hospital				
15.2	Employees are consulted for views on decisions regarding their work lives				
15.3	Professional health workers are given opportunities to meet in groups in order to identify, analyze and solve work-related problems pertaining their job				
15.4	Professional health workers from different departments are facilitated to meet (under supervision of management) in order to improve on the common goals (like provision of quality of health care)				
15.5	Employee are grouped in self-directed teams (without supervision of management) for improvement on common goal (like provision of quality of health care)				
15.6	Decision from these meeting are considered by management and administration of the hospital				
15.7	Hospital management and administration provides necessary support for self-directed teams (internal rules and regulations, mission and vision of the hospital, policies and procedures) for their improvement				

15.8	Professional health workers in this hospital take part in determination of their colleagues who should receive merit pay				
15.9	Professional health workers take part in deciding the amount of merit pay to be given to a colleague in the case such a practice is to happen at the hospital				
15.10	Work councils for professional health workers have effective channels to address professional health workers' challenges				
15.11	Professional health workers' council suggestions are understood and considered by hospital management				
15.12	Work councils are considered as good organs for protection of professional health workers' rights				

15.13. Provide any other experiences and perceptions you have on professional health workers' involvement and participation in the public district hospitals' decision-making processes

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Part II

Intentions to stay in the hospital

NB: For each statement, put a tick (∨) under the rating that best fits your choice (whether you have a very high intention, high intention, low intention, or no intention at all)

Strongly agree = 4, Agree= 3, Disagree= 2 or strongly disagree = 1

S/N	**Statement**	**4**	**3**	**2**	**1**
1.1	I am willing to stay in this hospital for the next 5 years				
1.2	I feel that I would continue to work in this hospital as long as possible				

1.4.Provide any other perceptions you have about leaving or staying at the job as a professional health worker…….
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Appendix 2: Human Resource Management Practices and Intentions to Leave Interview Guide for Professional Health Workers

I am a PhD student conducting research on Reengineering Human Resource Management Practices towards Retention of Professional Health Workers in Public District Hospitals in Kigali and the Western Province in Rwanda. The study interest is to assess current existing human resource management practices in public district hospitals and how they affect professional health workers' intentions to leave or stay in their working areas. I would like you to tell me about the status of human resource management practices in the hospital where you are employed and what you feel about continuing to work either as a professional health worker or in this hospital. I hope that your professional experience will provide an important perspective on the questions that I want to ask you. Could you please tell me if you have any questions in relation to this interview before we proceed?

1. Tell me about your responsibilities as [position] at [institution].
2. How long have you been working as [current position]?
3. How do you think of financial incentives that are provide to professional health workers in public district hospitals in terms of
    a. Salary/pay/wage?
    b. Bonuses?
    c. Performance pay?
    d. Benefits (transport allowance, hospital car, health insurance, retirement benefit, childcare benefits, …)?
4. How can you describe non-financial incentives available in this hospital for professional health workers in terms of
    a. Conditions of work (offices, lightning, noise reduction, wards, equipment, security,…)?
    b. Training and development opportunities for professional health workers?
    c. Career development?
    d. Employee recognition?
5. What do you think of professional health workers' involvement and participation in the hospital decision-making processes?
6. How do you perceive the implementation of performance management function in this hospital?
7. What is you general appreciation of these hospitals in this hospital? Why?
8. Do you think they would be important in the current management of professional health workers? How?

PART TWO

9. Suppose that you were free to choose,
    a. Would you consider staying in this hospital for long?
    b. Would you consider continuing to work as professional health worker?
    c. Would you continue to work in the same area?
    d. Would you consider finding the job (same job) in another country?
10. Do you have anything else to add to this interview

Appendix 3: Focus Group Discussion Guide

(Participants have been contacted and they have been gathered in the room)

I. Introduction

Good morning everyone.

My name is Celestin Ndikumana.

I work in the College of Arts and Social Sciences of the University of Rwanda and a PhD student at Moi University, Kenya. I am conducting research on Reengineering Human Resource Management Practices towards Retention of Professional Health Workers in Public District Hospitals in Kigali and the Western Province in Rwanda.

I have come with…… who serves as the research assistant for this study.

We thank you for agreeing to participate.

The purpose of this study is to learn about the magnitude of human resource management practices in the public district hospitals and how these practices affect retention of professional health workers. We hope to learn things that policy makers and health planners in the department of health systems can use to improve management interventions including incentives, performance management and improvement of other working conditions in order to boost retention of professional health workers in public hospitals in Rwanda

The information you give us is completely confidential, and we will not associate your name with anything you say in the focus group discussion.

We would like to tape the focus groups so that we can make sure to capture the thoughts, opinions, and ideas we hear from the group. No names will be attached to the focus groups and the tapes will be destroyed as soon as they are transcribed.

If you have any questions now or after you have participated in the discussion, you can always contact me or the research assistants.

Note to the moderator: Before the discussion starts, the researcher and research assistants will check on the following

- Letting participants know that the discussion group will last about one hour
- Reminding the participants that we want to learn from them (positive and negative)
- Recalling that we are not trying to achieve consensus, we're gathering information
- Bearing in mind that there is no virtue in long lists: we're looking for priorities
- Reminding participants that they can feel free to move around
- To recall where the toilets and exit (if in the room) are

- Set up ground rules (asking the group to suggest some ground rules. After they brainstorm some, make sure the following are on the list: ***everyone should participate, information provided in the focus group must be kept confidential, stay with the group and please don't have side conversations, turn off cell phones if possible, have fun***)

II. Discussion

(**Turn on the recorder**)

Well, let us get started.

1. How do you think of financial incentives that are provide to professional health workers in public district hospitals in terms of
   e. Salary/pay/wage?
   f. Bonuses?
   g. Performance pay?
   h. Benefits (transport allowance, hospital car, health insurance, retirement benefit, childcare benefits, …)?
2. How can you describe non-financial incentives available in this hospital for professional health workers in terms of
   e. Conditions of work (offices, lightning, noise reduction, wards, equipment, security,…)?
   f. Training and development opportunities for professional health workers?
   g. Career development?
   h. Employee recognition?
3. What do you think of professional health workers' involvement and participation in the hospital decision-making processes?
4. How do you perceive the implementation of performance management function in this hospital?
5. What is you general appreciation of these hospitals in this hospital? Why?
6. Do you think they would be important in the current management of professional health workers? How?
7. If you were given an opportunity to be employed elsewhere, would you consider leaving
   a. Your current job?
   b. Your profession?
   c. Your institution?

   Why?

8. Is there anything else that you would like to add on this discussion?

   Well, we have come to the end of our focus group discussion.

   Thank you very much for your inputs

Appendix 4: Consent Form I

Consent Form

This consent form should be read and signed by all the respondents accepting to be included in the study entitled: Reengineering Human Resource Management Practices Towards the Retention of Professional Health Workers in Public District Hospitals in Kigali, Rwanda.

PART A: This part deals with the general provisions of the informed consent. Participants are requested to read and understand these provisions before signing the form.

Introduction

My name is Celestin Ndikumana working at the College of Arts and Social Sciences-University of Rwanda and pursuing a Doctor of Philosophy (PhD) in Human Resource Management at Moi University, Kenya. As a partial fulfilment of the requirements for the award of the degree, I am undertaking a study to investigate into human resource management practices and their influence on retention of professional health workers in public district hospitals in Kigali, Rwanda. You have been selected to take part in the study and are therefore invited to participate in it.

Study procedures

If you agree to take part in this study, a questionnaire to fill will be given to you. The questionnaire completion will take about fifteen minutes, but the time can be allocated to different sessions depending on your rhythm to fill the questionnaire, and the availability of time to you. Once filled up they will be collected by the research assistant, sealed and delivered to the researcher.

Risks of study participation

Generally, there are no risks anticipated to cause any pain or discomfort to you during the study. The research assistant will explain the procedures. You are free to ask any questions, and these will be handled.

Study costs

There are no payments for respondents who will agree to take part in the study and for the study procedures

Confidentiality

The information collected from you shall be strictly confidential and shall be kept under lock and key. Your names or any other information that can identify you will not be sought for to be used in this study, reports, publications or presentations. You are assured that immediately the data is analysed and research completed all the raw data shall be destroyed.

Participation information

Participation is voluntary and there are no risks at all. It is your decision to participate or not to participate in this study. If at any time you wish to withdraw from participating in the study, you can do so, and this will not affect any future participation or relations with anyone or any institution.

Contacts and questions

The researcher conducting this study is Celestin Ndikumana.

You may ask any questions you have to the research assistants, or if you have any questions later, you are encouraged to contact the researcher through mobile telephone number: (+250)788 833975, or emails cndikumana@hotmail.com or cndikumana@cartafrica.org

We kindly appreciate you support and cooperation.

Appendix 5: Consent Form II

CONSENT FORM: PART B

Please read the information sheet (PART A) carefully before completing and signing this consent form. If there are any questions you have which are not clear to you regarding this study, please feel free to ask the research assistant prior to signing the consent form.

Participant Statement

I,(initials only)…….....hereby give consent to Celestin Ndikumana or his research assistant (by the name) ---------- to include me the proposed study entitled "Reengineering Human Resource Management Practices Towards the Retention of Professional Health Workers in Public District Hospitals in Kigali, Rwanda)".

I have read the information concerning this study, and I fully understand the aim of the study and what will be required of me if I accept to take part in the study. The risks and benefits have been explained to me. Any questions I have concerning the study have been adequately answered and I am satisfied. I understand that I can withdraw from this study anytime if I wish to do so without giving any reason and this will not affect any future participation or relations with anyone or any institution. I understand that I will fill a questionnaire that will take about fifteen minutes to complete. I therefore consent voluntarily to participate in this study.

Name of Participant or Respondent (initials only) .....

Signature .....Date / .....

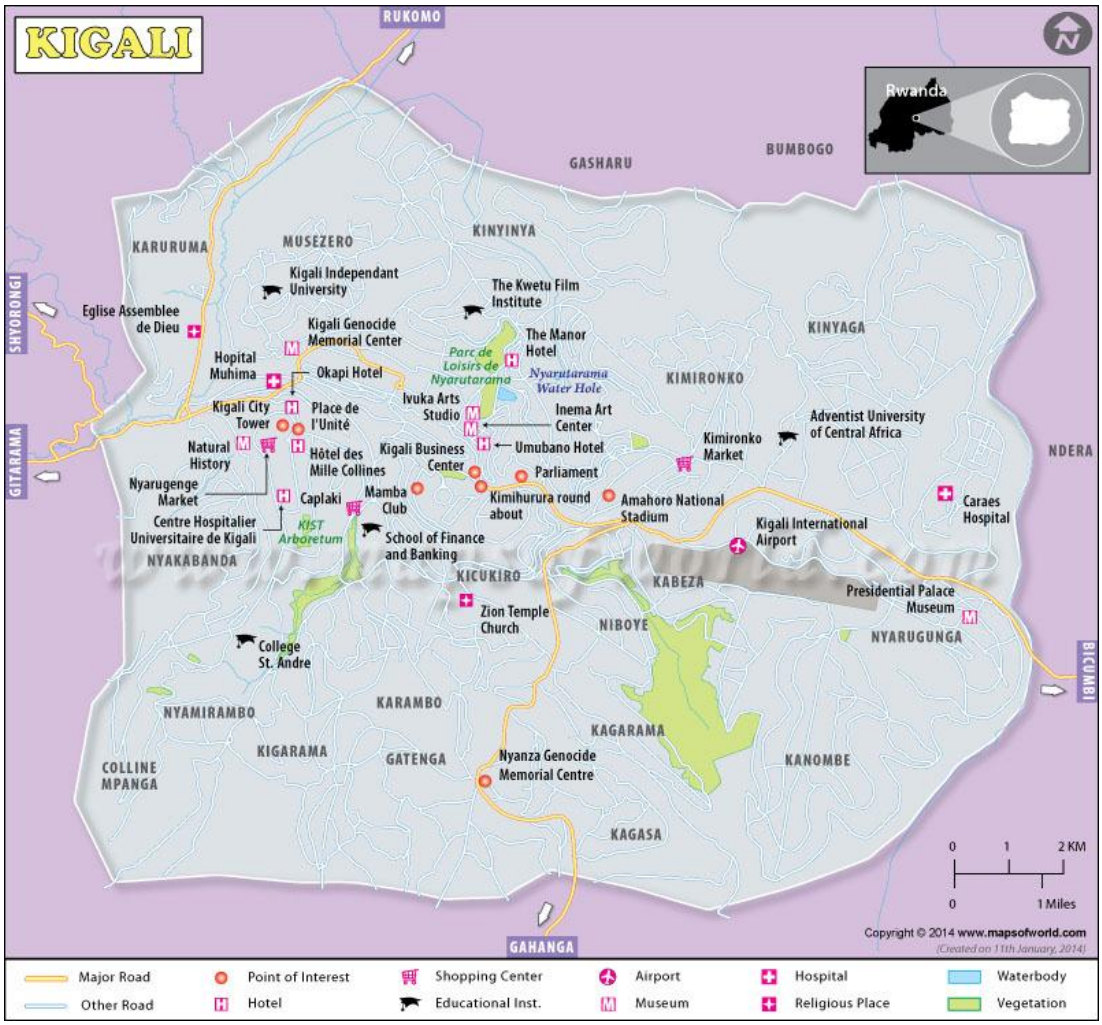
Name of the person taking consent……

Signature /…..... Date …….

Name of the researcher……

Signature ….....Date …….....

Appendix 6: Map of Kigali City



Appendix 7: Data Collection Authorization provided by the School

MOI UNIVERSITY
SCHOOL OF HUMAN RESOURCE DEVELOPMENT
DEAN'S OFFICE

P.O. Box 3900
ELDORET
KENYA.

Tel./Fax 254-053-43153/43620 Ext.434

REF: MU/SHRD/PG/77 **28th April, 2017**

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: CELESTIN NDIKUMANA - SHRD/PhDH/03/15

This is to confirm that the above named is a Ph.D student in the Department of Development Studies, School of Human Resource Development undertaking Ph.D course in Human Resource Management.

He has successfully defended his proposal entitled ***"Effect of Human Resource Management Practices on the Retention of Professional Health Workers in Public District Hospitals in Kigali, Rwanda"*** and he has been cleared to proceed to the field for data collection.

Any assistance accorded to him will be highly appreciated.

Yours faithfully,

DR. RUTH J. TUBEY
DEAN, SCHOOL OF HUMAN RESOURCE DEVELOPMENT

/mc

Appendix 8: Research Clearance

COLLEGE OF ARTS AND SOCIAL SCIENCES
DIRECTORATE OF RESEARCH, INNOVATION & POST-GRADUATE STUDIES

Huye, 2nd May 2017
Ref: 016/RPGS/017

Mr. Celestin Ndikumana
College of Arts and Social Sciences
University of Rwanda

Dear Mr. Ndikumana,

RE: ETHICS CLEARANCE FOR YOUR STUDY

Reference is made to your application for the ethics clearance of the study entitled "*Effect of human resource management practices on the retention of professional health workers in public district hospitals in Kigali, Rwanda*". The study will be carried out in public district hospitals in Kigali.

Having reviewed your application and been satisfied with your protocol, your study is hereby granted ethics clearance. The ethics clearance shall last for **three months** from 10th May 2017, and it is renewable on request upon submission of the progress report in accordance with the Guidelines of the Institutional Review Board (IRB) of the College of Arts and Social Sciences. You will be required to apply to IRB for clearance before making any major changes in the protocol during the implementation stage. At the end, the IRB shall need to be given the final report of your study.

We wish you success in this important study.

UNIVERSITY OF RWANDA
Directorate of Research and Postgraduate Studies
College of Arts and Social Sciences

Dr Alphonse Muceeru,
Chairperson, Institutional Review
College of Arts and Social Sciences,

Cc:
- Principal, College of Arts and Social Sciences
- Director of Research, Innovation and Postgraduate Studies, UR

EMAIL: research.cass@ur.ac.rw P.O. Box 56 Huye, Rwanda WEBSITE: www.ur.ac.rw

Appendix 9: Data Collection Authorization-Hospital 1

REPUBLIC OF RWANDA

KIGALI CITY
GASABO DISTRICT
KIBAGABAGA HOSPITAL
PO. BOX. 6260 KIGALI

Kibagabaga, ...05..../.05../2017
N° ...263..../HOP.KIBAG./2017

NDIKUMANA Celestin
University of Rwanda
College of Arts and Social Sciences
School of Social Sciences
TEL 0788833975

RE: APPROVAL TO YOUR REQUEST

Dear Sir,

Reference is made to your letter dated 18th May 2017 requesting a permission to conduct a research at Kibagabaga district hospital on " Effect of Human Resource Management Practices on the Retention of Professional Health Workers in Public District Hospitals in Kigali";

I would like to inform you that your request has been received and accepted.

Sincerely,

Dr MUTAGANZWA Avite
The Director of Kibagabaga hospital

Appendix 10: Data Collection Authorization-Hospital 2

REPUBLIC OF RWANDA

Masaka, 01/06/2017
Ref :1072/MSK/DH/2017

KIGALI CITY
KICUKIRO DISTRICT
MASAKA HOPITAL
B.P 3472 KIGALI
E-mail: masaka.hospital@moh.gov.rw

NDIKUMANA Celestin

Re: Permission to conduct research

Dear Sir,

Refering to your letter of 18th May 2017 requesting for approval to conduct research on the effect of human resource management practices on the retention of professional health workers in Public District Hospital in Kigali, we write this letter to inform you that you are authorized to conduct this research in Masaka District Hospital.

Sincerely.

Dr. Marcel UWIZEYE
Masaka District Hospital Acting Director

Appendix 11: Data Collection Authorization-Hospital 3

REPUBLIC OF RWANDA

KIGALI CITY
NYARUGENGE DISTRICT
MUHIMA HOSPITAL
P.O. BOX 2456 KIGALI
Tél. /Fax : +252 50 37 7
E-mail : muhima.hospital@moh.gov.rw
19th June, 2017

ETHICS COMMITTEE/ COMMITTEE D'ETHIQUE

Review Approval Notice

Dear NDIKUMANA Celestin

Re: Your request to conduct a research at Muhima hospital.

During the meeting of ethic committee of Muhima District Hospital that was held on 13 June, 2017 to evaluate your demand to conduct an academic research study on "***Effect of Human Resource Management Practices on the Retention of Professional Health Workers in Public Districts Hospitals in Kigali, Rwanda***; we are pleased to inform you that the Muhima Hospital Ethic Committee has approved your request.

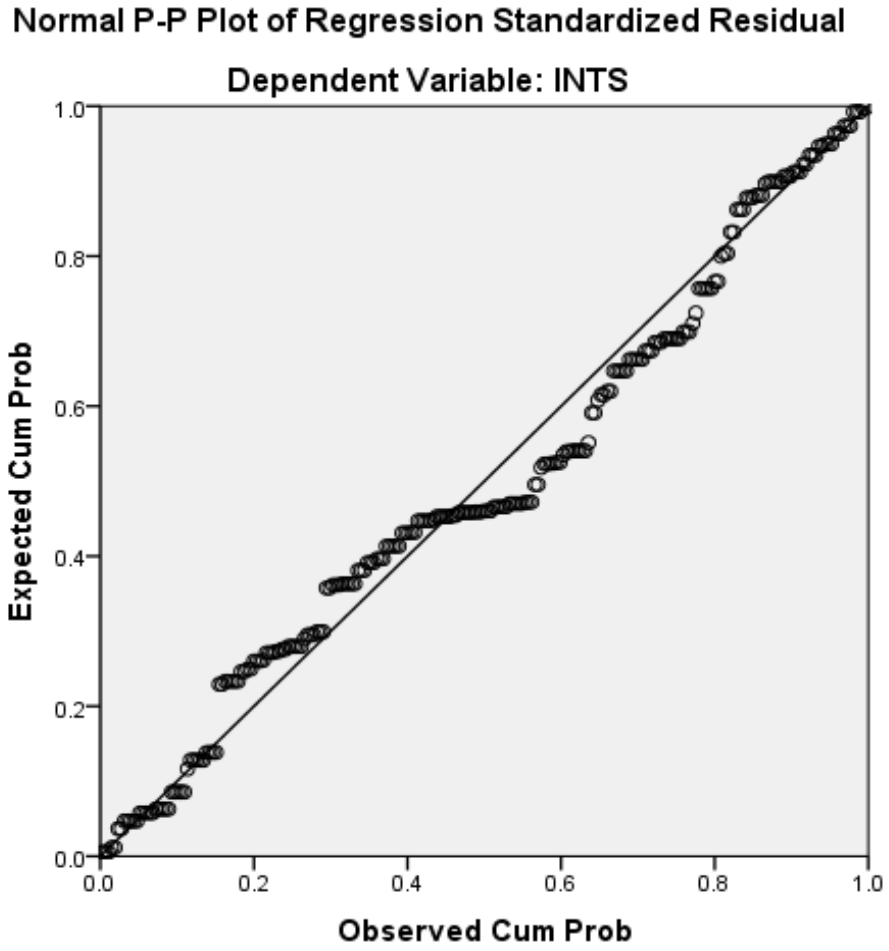
You are required to submit progress report(s) regularly as dictated by your proposal. Furthermore, you must notify the committee of any proposal change(s) or amendment(s), serious or unexpected outcomes related to the conduct of the research, or research termination for any reason. The committee expects to receive a final report at the end of the research.

Yours sincerely,

MUHIMA HOSPITAL ETHIC COMMITTEE

DR. UWINTWARUGUHA YEZE Aimée Victoire
Chair Person, Ethics Committee

Appendix 12: Normal P-P Plot of Regression Standardized Residual



Appendix 13: Regression Standardized residual