

**FACTORS INFLUENCING JOB PERFORMANCE OF NURSES AND  
MIDWIVES IN POSTPARTUM CARE: CASE OF KIBAGABAGA AND  
MUHIMA DISTRICT HOSPITALS IN RWANDA.**

**By**

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**A mini-thesis submitted in partial fulfillment of the requirement for the  
degree of Masters in Public Health in the School of Public Health, Faculty of  
Community and Health Sciences University of the Western Cape.**

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- Rwanda.



## ABSTRACT

Ensuring a good performance of health workers is one of the key components for provision of quality health care services in order to progress toward one of the priorities of MDGs namely improving maternal health care. In 2005, Rwanda adopted the “Performance Based Financing (PBF)” program to remunerate and motivate health professional based on their job performance. This lead to increase in the number of health workers by 62% between 2005 and 2008 and public subsidies for health worker remuneration tripled. Despite promotion of this motivation mechanism to enhance job performance in maternal health care, recent data in Rwanda show that MMR is still high with 383 per 100,000 live births and high rates of postpartum complications. All these problems have been attributed to poor performance of staff. To date, little research has been conducted on the factors that affect job performance among health care providers in low income countries and particularly in Rwanda. The present study assesses factors that influence job performance of health care providers working in postpartum care in two public hospitals of Rwanda.

Ninety six nurses and midwives were observed providing early and late postpartum care and interviewed about the presence or absence of the performance factors within their work environment. Data were analyzed to determine if there is an association between observed providers performance and variables of interest.

Observation revealed that staff performed poorly in the use of guidelines for the management in the postpartum care. The bivariate analysis showed that (a) receiving feedback about job performance (b) receiving training in postpartum care management, (c) training in the use of the tools for the daily work, (d) being satisfied with the way the work is organized, and (e) finding the organization interested in the staff creativity in general, are factors associated with good performance.

In conclusion, the study identified important factors that need to be taken into consideration when planning strategies to improve the quality of care and reducing morbidity and mortality in the postpartum wards of the two hospitals.

## DECLARATION

I hereby declare that: “*Factors influencing job performance of Nurses and Midwives in Postpartum Care: Case of Kibagabaga and Muhima District Hospitals in Rwanda*”, is my own work, that it has not been submitted, or part of it, for any degree or examination in any other University, and that all the resources I have used or quoted have been indicated and acknowledged by means of complete references

**Signature:**



**Date:** November 17<sup>th</sup> 2011



**Parfait UWALIRAYE**

## **DEDICATION**

I dedicate this work my lovely family especially my wife Rosie R. and my daughter Eliora S., to whom I am eternally grateful for their inspiration and motivation in my studies. Finally, I dedicate this work to all health care providers working in maternal health care worldwide.



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## ACRONYMS

<b>BTC</b>	Belgian Technical Cooperation
<b>DHS</b>	Demographic Health Survey
<b>GFTAM</b>	Global Funds Aids Tuberculosis and Malaria
<b>MDG</b>	Millennium Development Goals
<b>MMR</b>	Maternal Mortality Rate
<b>MOH</b>	Ministry of Health
<b>PBF</b>	Performance Based Financing
<b>UN</b>	United Nations
<b>UNFPA</b>	United Nations Population Funds
<b>WHO</b>	World Health Organization



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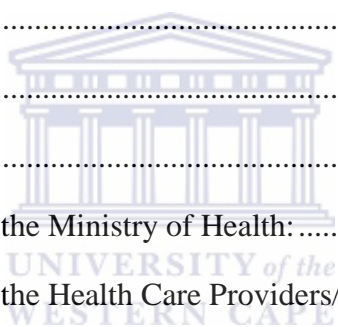
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# CHAPTER 1: INTRODUCTION

This chapter includes the general overview of maternal health care including its situation in Rwanda, the burden of Maternal Mortality Rate (MMR) on the health system and the efforts made by the government to reduce MMR. The concept of health worker performance, its role in reducing the burden of MMR and improving quality of health care services in Sub-Saharan Africa including Rwanda are discussed. The overall aim and objectives of the study including the rationale and the motivation for the study are also presented.

## 1.1 BACKGROUND OF THE STUDY

For more than 20 years, the Rwandan government has established different interventions to improve health status of its population in addition to wealth and poverty reduction (DHS, 2000). In 1987, Rwanda was one of the countries advocating for safe motherhood aiming at improving and understanding effective interventions that will decrease obstacles to health access and reduction of maternal death (UNFPA, 2008; World Bank & WHO, 2003).

One of the objectives of the United Nations Millennium Development Goals (UN MDGs) is to reduce Maternal Mortality Rate (MMR) by an average of 5.4% every year over the period 1990-2015 (United Nations, 2006). Rwanda is one of the 14 countries in the world with high MMR namely 1,300 per 100,000 live births (WHO, 2007 as cited by Chandrasekhar et al., 2011) even though skilled birth attendance has increased from 26% in 1992 to 39% in 2005 and the number of births at health facilities increased from 25% in 1992 to 28% in 2005 (DHS, 1992; DHS 2005). The reproductive health policy was reviewed and reformulated on the 3 principles of equity, integration of health services and improvement of access to health services (MOH, 2005). Thus, meeting MDG's targets for 2015 especially reducing MMR requires improvement of quality of care in antenatal, delivery and postpartum care.

### 1.1.1. The role of health workforce to address the burden of Maternal Mortality

Ensuring a good performance of health workers is one of the key components for provision of quality health care services in order to progress toward Millennium Development Goals target. Even though the number of skilled attendants at delivery and the number of births at health

facilities increase, an assessment of providers' performance is needed to improve efficiency of services.

In 2005, the Government of Rwanda adopted strategies aiming at stimulating health outputs based on incentives coupled with a strong commitment of health community department to ensure that preventive and promotional services are delivered at the community level (Basinga et al. 2011; Sy, Sekabaraga & Soucat, 2010). The government declared its intention to motivate its health workforce by introducing the "Performance Based Financing (PBF)" program which aimed to remunerate and motivate health professional based on their job performance. This program has been implemented through support of partners especially Global Fund to Fight AIDS, TB and Malaria (GFTAM) and Belgian Technical Co-operation (BTC). It led to increase in the number of health workers by 62% between 2005 and 2008 and public subsidies for health worker remuneration tripled (MOH, 2006).

In spite of this, recent data in Rwanda show that MMR is high with 383 per 100,000 live births (MOH 2009). The two facilities facing this problem are Kibagabaga Hospital with 20 maternal deaths per 100,000 and Muhima Hospital 25 per 100,000 live births (MOH, 2009). In 2010, Maternity department of Kibagabaga Hospital has received more than ten patient complaints about quality of care in postpartum care delivery. In addition, high rates of postpartum complications namely 25 cases of sepsis and 24 cases of postpartum hemorrhage have been reported in Kibagabaga hospital (MOH, 2009). All these problems have been attributed to poor performance of staff. Up to now only one factor (motivation through incentives) has been addressed by Performance Based Financing Program. Other factors that influence job performance such as clear job expectations, performance feedback, work environment and work organization, knowledge and skills to perform as described by Fort and Voltero (2004) have not been considered. It is not clear if these factors have an influence in the staff performance in the two hospitals.

To date, few studies have been carried out with regard to factors influencing job performance among health care providers in low income countries and particularly in Rwanda. This study will assess the way the other factors as cited above, affect job performance of health workers.



## **1.2. RATIONALE FOR THE STUDY**

The purpose of this study is to understand how health care providers perform their jobs and why some providers are successful in their task fulfilment and others are not. This information will be used to develop policies and programs that would improve job performance especially in maternal health care provision in Rwanda.

The study also hopes to uncover comprehensive factors influencing job performance in maternal health care provision including the challenges faced by health care providers in their day to day job performance. The findings of this study could also help policy makers to improve programmes and policies for quality health care delivery. Finally, this study will either support or refute the findings of other studies on performance of health care providers in Rwanda.

## **1.3. MOTIVATION FOR THE STUDY**

This study arises from the career's experience of the researcher in working with maternal health care providers as a medical doctor in Rwanda. Moreover, due to the fact that, to date, no study has been conducted to assess factors influencing job performance among maternal health care providers in Rwanda, it is of great importance to assess these factors as a means of achieving important efficiency changes and progressing toward MDGs especially reducing MMR by 2015.

Improving job performance of health care providers is important in providing effective care to all women and their new born children and thus strengthening the health system (Bhutta et al. 2010). This involves stakeholders at different level including health policy makers, researchers and health care providers. However, health care providers have a powerful influence on health care provision and the use of health care resources (Liu & Mills, 2005). That is why their voices should be listened to in order to find a way to improve their job performance (Horton, 2010).

The definition of “job performance” as applied to the practices we will assess is that activities are correctly carried out per national and globally accepted evidence-based guidelines. That is why the study will only focus on the behavioral component of job performance and this will be determined through observation of provider's job activities.

#### 1.4. AIM OF THE STUDY

The aim of this study is to assess factors that influence job performance of nurses and midwives working in postpartum care in two public hospitals in Rwanda.

#### 1.5. OBJECTIVES OF THE STUDY

- To assess the practices of nurses and midwives in postpartum care in the two hospitals.
- To describe job related factors that influence work performance of nurses and midwives in postpartum care in the two hospitals.
- To describe the perceptions of nurses and midwives about organization-level factors that influence their work performance in postpartum care in the two hospitals.

#### 1.6. DEFINITION OF TERMS USED IN THE STUDY

- **Work performance** refers to the ability of a worker (employee) to practice what he knows or learnt using experiential and competence-based training methods to accomplish his work (Spurr et al., 1987) and which depends on factors such as the rate of work, motivation and skills. It is comprised of both behavior and its accomplishments (Fort, 2002). It is usually measured to evaluate effectiveness and efficiency of an organization (Hamidi, Y. & Eivazi, Z., 2010).
- **Job description:** is a written statement that describes clearly and concisely tasks and responsibilities the job entails, most important contributions and outcomes needed from a position, the key qualifications of the job, and if possible, the attributes that underlie superior performance (Palazzo & Kleiner, 2002; Bednarek-Michalska, 2002).
- **Maternal health care:** Maternal health care is the health care of women during pregnancy, childbirth and the postpartum period (WHO, 2008).

- **Postpartum care:** Postpartum care is the care delivered during the period of time following delivery. It lasts approximately 6 weeks or until the reproductive organs return to their normal size (WHO, 2008).
- **Maternal Mortality:** The World Health Organization (WHO) defines the maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2008).

## 1.7. SUMMARY OF CHAPTERS

Chapter one describes the background of the study. The role of health workforce to address the burden of Maternal Mortality in Rwanda is also described. The motivation and the rationale of this study, as well as its objectives, are described.

Chapter two presents the literature review on studies on definitions of work performance and the framework showing the relationship between the performance factors and provider job performance is presented. Furthermore, it presents various factors that can influence job performance in different settings of the health system. The literature review provides the background information for this study and the potentiality of those various factors to enhance work performance.

Chapter three describes the methodology used in this study. The research settings, study design, research subjects and sampling are explained. Furthermore, the chapter describes the data collection methods used in order to acquire unbiased information. Finally, to conclude this chapter, data analysis methods and ethical considerations are described.

Chapter four presents the results of the study. The job performance score of study participants is described. Descriptive statistical findings of job related factors and organization-level factors are presented as well.

In chapter five, the discussion focuses on interpretation of significant study findings, a comparison of the study with similar studies and the impact of the findings is presented. The

final chapter, entitled “Summary, Conclusions and Recommendations”, serves to summarize the findings, drawing pertinent inferences from the research and proposing suggestions for future action.



## CHAPTER 2: LITERATURE REVIEW

### 2.1. INTRODUCTION

This chapter discusses factors that could influence health worker performance in order to improve the quality of health care, and this constitutes the focus of this research project. Due to the lack of literature about this topic in Rwanda, most of the literature reviewed focuses on international studies. The literature search was conducted using some databases and key terms most used in the study and this is described in the next paragraph.

### 2.2. DATA BASED SEARCH ON FACTORS INFLUENCING PERFORMANCE OF HEALTH CARE PROVIDERS

The literature on factors influencing performance of health care providers was obtained by searching the databases summarized in Table 1. However, books published from 1980-2011 were also used.

**Table 1: Databases and search terms used in the study**

Databases	Search Terms
Academic Search Premier (1995-2011)	Work performance, performance factors, job description, training, performance feedback, supervision, work environment, climate, job appraisal, health care providers, nurses, midwives, postpartum care, Africa, Rwanda.
Medline (1995-2011)	
Emerald (1995-2011)	
Elsevier (1995-2011)	
Science Direct (1980-2011)	
Human resources for health (2000-2011)	

### 2.3. WORK PERFORMANCE FACTORS

Work performance, which is also defined as adherence to an accepted standard or guidelines, is important in ensuring the quality of care. (Rowe et al., 2005; Abas et al. 2003; Whiting et al. 2003).

For a couple of years, there has been an increase in interest in issues related to the enhancement of the performance of workers in low income countries. Human Performance Technology (HPT) experts in low income settings have established a list of factors that can predict an optimal worker performance in a variety of areas and this includes clear job expectations; performance feedback; adequate environment and work organization; motivation and/or incentives; knowledge and skills (Fort & Voltero, 2004; Rowe et al., 2005; Graner et al., 2010; Bradley & McAuliffe, 2009; WHO, 2006 as cited by Henderson & Tulloch, 2006; Shah & Sachdev, 1999). This is illustrated in Figure below.

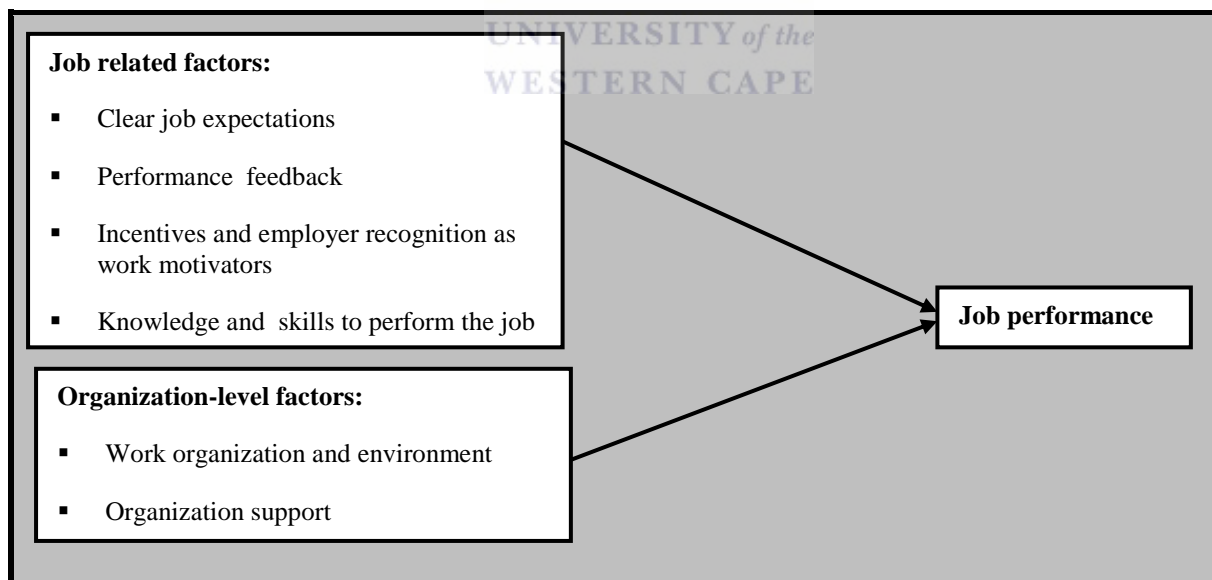


Figure 1: Framework for the performance factors and provider job performance (Adapted from Fort & Voltero, 2004).

According to figure 1 above, clear job expectations help workers to fully understand duties of their position and to know how to carry out the assigned tasks. Timely performance feedback

provides support and guidance to the worker. Adequate work climate and organization motivates workers in the way they interact with each other, and thus improve their daily work performance (MSH, 2002). Incentives motivate staff and finally enhance their job performance. Knowledge and skills improve job performance by ensuring that the worker is competent to perform the tasks associated with the position.

## **2.4. FACTORS INFLUENCING PERFORMANCE IN DIFFERENT SETTINGS OF THE HEALTH SYSTEM**

Factors that influence performance of health care include job expectation, incentives and employer recognition, work environment, performance feedback, performance appraisal, knowledge and skills, supervision and feedback mechanism. The above factors are described in the following paragraph.

### **2.4.1. Performance based payment of health workers**

Little evidence has shown that the performance based payment of health workers is among the interventions that promise to improve access and quality of health care services and thus job performance (Levine & Eichler, 2009; Sy, Sekabaraga & Soucat, 2010). In a study done in Rwanda, Basinga et al. (2011) showed that performance based payment scheme improve both the use and quality of maternal and child health services. In addition, they argued that it could be even a useful intervention to accelerate progress towards MDGs. Liu & Mills (2005) revealed that performance based payment scheme of doctors contributed significantly to the increase the quantity of care provided in Chinese public hospitals.

### **2.4.2. Job expectations**

Several researchers reported that job expectation has been viewed as a valuable tool of effective management of human resources and a prerequisite for effective job performance (Oswald, 2003; Siddique, 2004; Singh, 2008). In 2009, a descriptive cross sectional survey was done in two Sub-Saharan African countries (Sudan and Zambia) to identify factors that could improve job performance among nurses and midwives working in polio eradication and measles control activities. The authors found that written job descriptions, proper training, good supportive supervision, and incentives such as salaries and transport were the most cited by participants as

influencing their job performance (Nkowane, Boualam, Haithami, Ahmed El Sayed & Mutambo, 2009).

### **2.4.3. Work motivators (Incentives and employer recognition)**

Reward and recognition for work has been highlighted as an important driver of performance (Maslach et al., 1996; Maslach & Leiter, 1997). Hamidi & Eivazi (2010) investigated in their study the relationships among employees' job stress, job satisfaction, and the organizational performance in urban health facilities in Iran. They reported that employee's job satisfaction in terms of payment (salaries) influences the organization's performance. The same study also showed a correlation between job satisfaction and organization's performance.

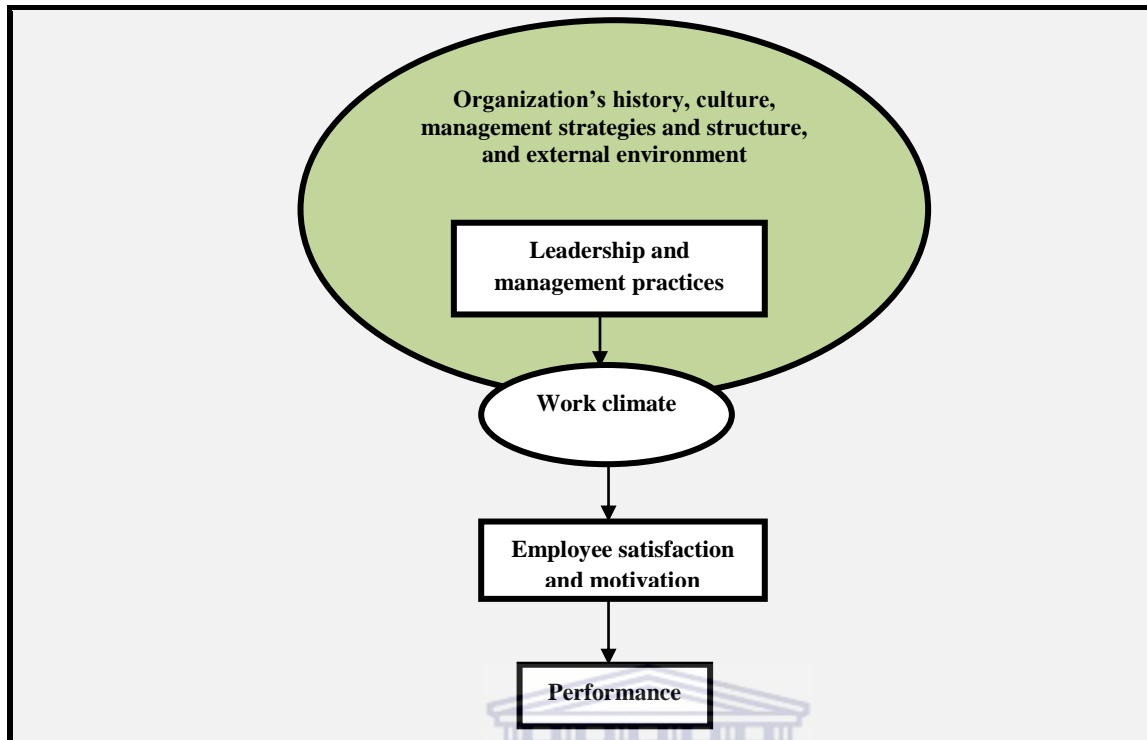
A descriptive qualitative study conducted in Mali (2006) about matching motivation and performance management of health sector workers, described five factors of performance management (job descriptions, continuous education, supervision, performance appraisal and career development) that can influence motivation of health workers (Dieleman, Toonen, Touré & Martineau, 2006).

Findings of a qualitative study about improving motivation among primary health care facilities workers in Tanzania, found that supportive supervision, performance appraisal, career development and transparent promotion are crucial for improving services delivery in addition to financial incentives (Manongi et al., 2006).

### **2.4.4. Work environment and Organizational support**

Employees spent most of their time at workplace; therefore it is important to understand its influence on work performance. The literature has shown that work environment has an impact on the organization performance. The work environment is composed of two components namely organization culture and the climate which is the workplace experienced by individual teams or work groups (Shirey, 2006, Perry et al., 2005; Stringer, 2002). MSH (2002) developed a theoretical framework which shows that performance can be influenced by work climate through employee satisfaction and motivation. These factors are illustrated in the figure 2.





**Figure 2: Factors influencing work climate** Source: MSH (2002:4)

Leach et al. (2009) explored factors influencing surgical teams' performance in a descriptive qualitative study in the University Medical Center of California. They described a positive and supportive work environment; good work organization (scheduling operating rooms, room size appropriate for the procedure, scheduling of personnel and rotational coverage for breaks and lunch) and finally knowledge and skills (experienced and knowledgeable people, knowledge of their role and of the procedure) as "factors of highly performing team" (p.6).

Crigler et al. (2006) found a significant association between the performance and work environment in a study exploring factors that affect health care provider performance in four countries.

Two studies done in developing countries to determine the relationship between organizational factors and performance in hospital settings identified the organizational support and structure as the key organizational factors which are associated with high performance (Aiken et al., 2002; Vina et al., 2000). In a survey assessing the impact of health facilities on health workers' performance, Rechel et al. (2009) found that better-designed health facilities can improve working conditions and staff safety, and enable staff to do their job more effectively. Findings

from a meta-analysis study on relationship between organization support and job performance indicated strong correlations between organizational commitment and job performance when they compare salespeople to non-sales people (Jaramillo et al., 2005).

Mathauer & Imhoff (2006:3) who studied the impact of non-financial incentives and human resource management tools on health worker motivation in Africa demonstrated in their conceptual framework of motivation determinants and processes, that job performance is one of the motivational consequences. The study described the motivation as being the result of good work environment, adequate human resources tools and organization structure. Two occupational injury studies about hospital work environments and rates of sharps injuries identified that nurses working in hospitals with better working environments experienced fewer sharps injuries (Clarke et al. 2002, Clarke, 2007; Smith et al., 2009). Overall, they concluded that hospital safety climate has an important influence on sharps injury rates. These papers highlighted the impact of work environment on health workers practices. A couple of studies demonstrated that poor care environments are associated with high rates of nurses reporting having high burnout levels and job dissatisfaction (Aiken, Clarke, Sloane, Lake & Cheney, 2008). But this research focused only on two sources of work environment data namely “*practice control and job satisfaction*” as described by Duffield et al. (2010:3).

#### **2.4.5. Performance feedback**

Harter et al. (2003) argued that receiving performance feedback on an ongoing work and on a timely weekly basis is fundamental in preventing burnout of health workers, maintaining their levels of engagement, and thus increases job performance. Otherwise, both “*the employee and the work become devalued*” as stated by Freeney & Tiernan (2009: 2).

Several studies about the effect of job performance feedback have shown that feedback about job performance is crucial to motivate and encourage the desired actions for better performance (Cianci et al. 2009; McGee, 2005; Ardalan, 1994; Hillman et al., 1990; Margerison, 1988; Jones, 1980). A cross-sectional study done in two regions of Armenia (Lori and Shirak, 2004) to assess factors affecting performance of primary reproductive health providers (nurse-midwives), revealed that the performance of health providers is strongly associated with receiving performance feedback, having the practical knowledge and skills to use everyday tools of the

trade, and receiving recognition for their work (Fort & Voltero, 2004). Results from a cross-sectional study done in rural Bangladesh assessing monthly performance through meetings in maternal and child health and family planning indicated that the skills of the family welfare assistants remained very high (99%) (Kabir, Gazi, Ashraf & Saha, 2007). These results were the same even though they did not strictly follow the checklists for screening the pill and injectable contraceptive users. The performance review at a timely basis by managers has potentials to improve performance in low-performing areas. Thus instead of encouraging the workers to fill in the checklists, this monthly performance-meetings by managers could prove effective in improving the workers performance.

#### 2.4.6. Knowledge and skills through training

Professional knowledge and skills influence performance when it is combined with organizational support and self confidence. This has been described in a model designed by Hagbaghery et al. (2004) in a study about nurses' understanding and experiences of professional power (See Figure 3). The figure shows that work performance results in applying knowledge and skills with a self confidence conferred by the organization.

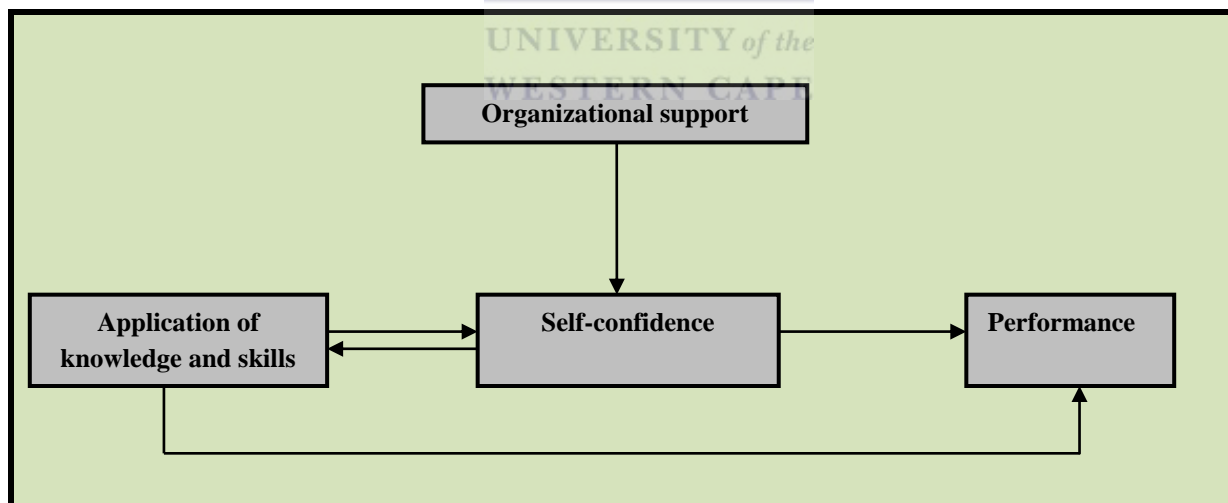


Figure 3: Theoretical model of interaction between self confidence, knowledge and skills and performance (Adapted from Hagbaghery et al., 2004).

The literature review of studies done in low-resource settings to describe the importance of health workers trainings revealed that health workers performance and good client-provider interaction depend on access to adequate equipment and appropriate training (Graner et al., 2010; Mavalankar & Rosenfield, 2005; Pearson & Shoo, 2005; Bruce, 2000).

In a study about improving quality of care in clinical management of severely malnourished children in rural hospitals in South Africa, Puoane et al. (2004) discovered that training and availability of resources were the adequate interventions to address lack of knowledge and resources which were perceived by health care providers as barriers to quality of care. These interventions had a tremendous impact on reducing case fatality rates.

There is also evidence in the literature that guided error-based training is effective and associated with improved role self-efficacy and performance (Hornig, et al. 2005; Lorenzet, Salas & Tannenbaum, 2005).

#### **2.4.6.1. The role of in-service training of health workers**

In-service training has been found crucial to improve daily performance of health workers. A couple of studies have shown that knowledge through in-service training increases work performance of health workers and thus improves quality of service delivery (Brentlinger et al. 2010; Wasunna et al., 2010; Olenja et al. 2009; Naimoli et al., 2006; Zurovac et al., 2004; Kim et al. 1992). While studying the quality of care in malnutrition case management in rural hospitals of Eastern Cape (South Africa), Puoane et al. (2008) reported that in-service training of health workers was one of the factors characterizing hospitals which provided a better care. The authors attributed poor quality of care of children to lack of knowledge and skills in staff in poor performing hospitals.

Bradley & McAuliffe (2009), in an exploratory qualitative study about factors affecting performance and retention of mid-level providers in emergency obstetric and neonatal care within the Malawian health system, have identified limited opportunities for career development and further education, insufficient financial remuneration, and inadequate human resources management systems as the main factors affecting performance of those mid-level providers. The same authors also discovered that the lack of performance-related rewards and recognition are perceived as demotivating factors.

#### **2.4.6.2. Basic training of health workers**

Basic training of health workers is an important factor to improve their work performance. Aiken et al. (2003) studied the relationship between the nurse's education and surgical patient outcomes

and indicated that hospitals with highly educated nurses (with baccalaureate level or higher) experienced lower mortality in surgical patients. The research showed that the nurses' performance through quality of care assessment is strongly associated with their qualification.

#### **2.4.7. Performance appraisal**

A case study about the effects of performance appraisal in the Norwegian municipal health services was done by Vasset et al. (2011) and indicated that performance appraisal has some significant effect on employees' job motivation and helps them to improve their performance by giving specific feedback about the areas of underperformance. O'Neil & Paydos (2008) in a study done in Uganda to improve retention and performance in civil society found that establishing standards of performance and rewarding people for meeting or exceeding them contribute to the success of a program. They concluded that updated job descriptions, developing performance appraisal and strengthening supervision, increase employee satisfaction. This leads to less staff turnover, better performance and finally increased utilization of health services.

#### **2.4.8. Supervision and feedback mechanism**

Studies have been conducted to investigate what improves health worker performance in low and middle income countries. They showed that in comparison to written guidelines, supervision and feedback mechanism are stronger and effective strategies to improve health workers practices (Rowe et al., 2010; Nkowane et al., 2009; Nelson & Morrison-Beedy, 2008; Rowe et al., 2005; Zurovac et al., 2004). Frimpong et al. (2011) added that supportive supervision enhances performance and increases productivity despite the shortage of health worker in primary health care facilities.

While assessing community health workers performance using guidelines in the management of multiple childhood illnesses in Kenya, Kelly et al. (2001) found that inadequate clinical supervision is the reason of the gaps found between the clinical performance of community health workers and the clinical guidelines. In a study conducted in Senegal about quality of service delivery in reproductive health, Suh et al. (2007) revealed that in-service training combined with formative supervision enhance performance of health care providers and improve the quality of care. Puoane et al. (2008) in their study about quality of care in malnutrition case management argued that better supervision and audit with feedback are among factors that affect

quality of care and increase staff performance. But this occurs when staff gets opportunities to learn from mistakes found in their shortcomings.

## **2.5. SUMMARY**

Several studies in health care delivery have discussed factors that could influence health worker performance in order to improve the quality of health care. Thus health worker performance is influenced by various factors such as job expectations, incentives and employer recognition, work environment and organizational support, knowledge and skills through training, performance feedback and supervision and feedback mechanism (O'Neil & Paydos, 2008; Puoane et al., 2008; Rowe et al., 2005; Fort & Voltero, 2004; Graner et al., 2010; Bradley & McAuliffe, 2009; Shah & Sachdev, 1999).

It is likely that factors that influence job performance of maternal health care providers in sub-Saharan countries are similar to those found in Rwanda, although no study has been yet conducted. Therefore, prior to development of policies and programs that would improve job performance in maternal health care provision in Rwanda, a needs assessment is paramount. The approach adopted in this study is based on the needs assessment model, which provides a comprehensive picture on providers' job performance and its influencing factors. The following chapter will discuss the methodology used in this study.

## **CHAPTER 3: METHODOLOGY**

### **3.1. INTRODUCTION**

This chapter describes the method that is used in the study. It includes the research settings, study design and study sample. A description of pilot studies is given, as well as an explanation of how data analysis was carried out. Finally, the issues of ethical consideration related to the study are described.

### **3. 2. RESEARCH SETTING**

The research has been undertaken in two public district hospitals (Kibagabaga and Muhima hospitals) in Kigali City in Rwanda. Two facilities have been chosen because they are the first two public hospitals which have a high average of deliveries per year in the whole country with namely about 3,400 deliveries per year for Kibagabaga hospital and 8,000 deliveries per year for Muhima hospital (MOH, 2010).The postpartum hospital length of stays for patients in the two hospitals are often 24 hours for a vaginal birth and 72 hours for a Cesarean section.

#### **3. 2. 1. Kibagabaga District Hospital**

Kibagabaga district hospital is one of the 44 district hospitals in Rwanda. It is situated in Gasabo district which is the first largest district of Kigali, the Capital City of Rwanda. Its population catchment area is 356,122 and the majority of this population is from rural areas. The hospital has 8 departments including Maternity department which has 65 health care providers (nurses and midwives) working in postpartum care. The maternity department is made of four units: the waiting room, labor room, postpartum room and the operating theatre.

#### **3. 2.2. Muhima District Hospital**

Muhima District Hospital is located in Nyarugenge district in Kigali City. It serves 251,642 people and most of them come from rural remote areas. It has a Maternity department which has 40 health care providers (nurses and midwives) working in postpartum care.

### **3. 3. STUDY DESIGN**

A quantitative analytic study design was used in a cross-sectional study assessing factors influencing job performance of nurses and midwives in postpartum care in the two hospitals. This design fits the study aim since the researcher wanted to quantify the relationship between factors influencing job performance and the provider's performance at one particular time. It is cheaper and also ethically safe.

### **3. 4. STUDY POPULATION AND SAMPLE SIZE**

The study population included all nurses and midwives who provide immediate and late postpartum care to postpartum women in the two hospitals. The study sample included nurses and midwives working in postpartum care in the two hospitals. The sample size was inclusive with the total number of one hundred and five (105) health care providers (nurses and midwives) working in postpartum care in the two hospitals. Therefore, it was not possible to get the expected sample of 105 providers because some (6 providers) were on leave and three others had left the hospitals for other jobs. Thus, 96 study participants in total were observed and interviewed.

Inclusion criteria included nurses and midwives who provide postpartum care; work permanently in the two public hospitals and who voluntarily agreed to participate in the study. Exclusion criteria were physicians. The choice of this particular staff category is due to the shortage of doctors and the postpartum care is one of the main tasks of midwives and nurses working in maternal health care.

### **3.5. DATA COLLECTION METHODS**

Data have been collected in accordance to the study objectives. Thus, two methods were used to collect data namely Observation and Face to Face Interviews. Two data collectors (namely physicians) were recruited and trained to collect data especially to do Face to Face interview and one (the Investigator) did the observation.

#### **3.5.1. Observation**

- *To assess the practices of nurses and midwives in postpartum care:*



Using a checklist (Appendix 1) developed from national guidelines modeled on the literature (MEASURE, 2002), the Investigator (myself) observed nurses and midwives in the daily ward rounds (morning and evening) while they were providing postpartum care to clients and a tick was inserted if the task was performed. The researcher was part of the team doing the daily ward rounds in the way that the study participants were not aware of being observed and sometimes he simulated that he was filling the patients' charts or conversing with patients. This was done in unobtrusive way in order to avoid participants behaving differently while they were being observed (Taylor- Powell & Steel, 1996). The average score of each provider for completed tasks in practice was recorded from the filled checklist. In total, there were 30 activities in postpartum care that have been observed. The data collection was done within a period of 49 days (from August 5<sup>th</sup> to September 22<sup>nd</sup> 2011) for the two hospitals and it took about 10 hours per day (almost equal to the daily duty of nurses or midwives). It was carried out by one person (the Investigator) and the average time of one observation session was an hour and a half (1 ½ hour) per provider. The average number of surveyed providers per day was four (4) and each provider was observed two times in two different days and we recorded the average score from the two observation sessions. This was possible due to the help from chiefs nursing who provide the staff weekly timetables. For most of the study participants, observation sessions occurred the same day as face to face interviews and the data collection calendar is mentioned in the table shown in Appendix 3.

This method was chosen because it is a more reliable data collection technique on assessing practices of providers as recommended by national guidelines. However, it does not offer quantitative generalizations on the results (Sarantakos, 1994).

### **3.5.2. Face to face Interviews**

- *To describe job related factors and perceptions of nurses about organization-level factors:*

A questionnaire (Appendix 2) on performance factors developed from the literature (Fort & Voltero, 2004) was used by a trained interviewer (physician) to do face-to-face interviews with those observed providers. Items adapted included background information and questions about job expectations, performance feedback, knowledge and skills to perform the job, incentives and employer recognition as work motivators, work organization and environment, and

organizational support. The questionnaire was in both English and French. Face to face interviews were done by two trained physicians and one interview took about 30 minutes. The researcher invited the participants a short interview. Prior to conducting the interview, the researcher introduced himself and explained them the purpose of the interview and the study in general. Consent forms were signed by those who accepted to participate in the study. After that, the researcher started interviewing participants face to face by asking them questions and filling interview questionnaire.

Interviews were done in 29 days (almost one month) and the days are mentioned in the Table shown in Appendix 3. Collected interview questionnaires were sufficient to run statistical analysis.

This method helped us a lot in getting the desired results because we were able to adapt the questions as necessary, clarify doubt and ensure that the responses are properly understood, by repeating or rephrasing the questions. But it took us a lot of time to get participants for interviews.

#### **3.5.2.1. Questionnaire for factors influencing job performance**

**Section A:** included background information, age, gender, worker category and years of work experience in the facility.

**Section B:** included questions on job related factors, job expectations, performance feedback, knowledge and skills to perform the job, and incentives and employer recognition as motivators,

**Section C:** included questions on organization-level factors, work organization and environment, and organizational support.

#### **3. 5.3. Translation and Pilot Study**

Before data collection, the questionnaires for interviews have been translated from English to French and back translated by a different person into English. The translated questionnaires have been pretested with 15 nurses working in a public health center in order to establish content and face validity. This method helped us significantly in getting how properly questions are understood and how long the interview could take.

The researcher made a few changes according to the responses given by participants. The changes that we made were in the Section B on job related factors “questions related to job expectations” and in the Section C on organization-level factors “questions related to work organization and environment”.

### **3. 6. VALIDITY AND RELIABILITY**

As defined by Sarantakos (1998), Validity is an indication of the extent to which an instrument measures what it is supposed to measure. In this research, the observational checklist has been pre-tested to providers who did not participate in the study in order to make sure that its items or activities were observable and specific. Experts in this field were consulted for their inputs in the development of the data collection tools. The questionnaire for interviews was developed in English and translated into French and back translated by a different person into English. The translated questionnaires were also piloted to establish content and face validity before the study start.

Reliability refers to dependability or consistency of the measurements (Sarantakos, 1998). The physicians who collected data were trained to ensure standardization of the data collection process. Observation of activities was done by one person and this prevented inter-subject bias. The use of two methods of data collection, that is observations and interviews further ensured reliability of data.

This research design allows examining relationships among variables and reduces the possibility of bias and produces results that are more reliable with complementary strengths (Rees & Bath, 2001).

### **3. 7. METHODS OF DATA ANALYSIS**

Data from both questionnaires and observational checklist were entered into Epi Info 6.04 by the researcher himself. Double data entry was used to maximize the accuracy of the data entry and was done by the researcher as well. Data cleaning was done using the study questionnaire to check if the data from participant’s answers match with the answers that were in the questionnaire. This was possible by using Access 2007 and Statistical Package for Social Science (SPSS) Version 15 on a daily basis. Inconsistent or unusual values were flagged and corrected

when possible. At study completion, the data were exported to SPSS 15.0 for assignment of value and variable labels, further cleaning and analysis.

Based on the study objectives and its design, the analysis was more descriptive than inferential statistics. The description of job performance was based on scores obtained from the observational checklist of tasks with a cut off of 80 %: dichotomized as poor performance (<80 %) versus good performance ( $\geq 80$  %) and modeled as continuous variable. Univariate data were analyzed using descriptive statistics namely frequency distributions, proportions, means, medians and standard deviations. Bivariate data analysis was run using chi-square statistics and their respective confidence intervals. The results were illustrated in tables and pie charts.

### **3. 8. ETHICAL CONSIDERATIONS**

The research proposal was approved by the Ethics committee and the Senate Research Committee of the University of the Western Cape and the permission to run the study in the two hospitals was obtained from the authorities of the two hospitals. A signed consent form (Appendix 5) was obtained from each study participant. The consent forms described the purpose of the study, the procedures to be followed and the risks and benefits of participation. Issues of confidentiality and anonymity were explained. With regard to data entry, the study database was password protected.

### **3.9. SUMMARY**

Chapter three described the methodology used in this study. It explained the research setting and the whole procedure of how the data was collected and analyzed. Finally, the chapter explained how the ethical considerations applied in this study. The next chapter will discuss the results of this study.

## **CHAPTER 4: RESULTS**

### **4.1. INTRODUCTION**

In this chapter, the results are divided into Section A describing results from background information of the study populations, Section B the results from participants' job performance score, Section C the results from univariate analysis, Section D the results from bivariate analysis and finally the summary . These comprised age, gender, work category, age groups and years of experience in the current workplace. Findings on the job related factors as well as organization level factors in the two hospitals are separately described. Data from combination of the two hospitals that compare participants' performance score and the above factors are presented.

### **4.2. SECTION A: BACKGROUND INFORMATION**

A total of 105 health care providers were expected to participate in the study, but only 96 were available to participate, the response rate was 91.4%. In total, 34 health care providers were interviewed in Kibagabaga hospital and 62 health care providers at Muhima hospital.

The participants' mean age was 32.2 years with a standard deviation of 7.2 years. The median age was 30 years, with a minimum age of 22 years. Table 2 presents the background information of health care providers who participated in the study. The majority of the participants (86.5%) were females and 13.5% were males. Most participants (70%) were nurses and 30% were midwives. The majority (69.8%) were in the age group of 25-34 years. The largest proportion of participants (62.5%) had between 1-5 years of work experience in the current workplace.

**Table 2: Background characteristics of the sample (n=96)**

Variables	Characteristics	Kibagabaga N (%)	Muhima N (%)
<b>Gender</b>	Male	8 (23.5%)	5 (8.1%)
	Female	26 (76.5%)	57 (91.9%)
<b>Work Category</b>	Nurse	26 (76.5%)	41 (66.1%)
	Midwife	8 (23.5%)	21 (33.9%)
<b>Age groups</b>	15-24 years	1 (2.9%)	3 (4.8%)
	25-34 years	29 (85.3%)	38 (61.3%)
	35-44 years	3 (8.8%)	17 (27.4%)
	More than 45 years	1 (2.9%)	4 (6.5%)
<b>Years in current workplace</b>	Less than one year	0 (0%)	5 (8.1%)
	1-5 years	34 (100%)	26 (41.9%)
	6-10 years	0 (0%)	22 (35.5%)
	More than 10 years	0 (0%)	9 (14.5%)

**4.3. SECTION B: PARTICIPANTS PERFORMANCE SCORE**

The job performance scores were obtained from the observation of tasks performed by nurses and midwives. The scores were dichotomized as poor performance (<80 %) and good performance ( $\geq 80$  %). As shown in the Table 3, the majority (73 study participants) from the both facilities got a performance score of less than 80%.

**Table 3: Participants performance score for the study sample (n=96)**

Study sites	Job performance score N (%)	
	$\geq 80$ % (Good)	< 80 % (Poor)
Kibagabaga hospital	6 (17.6%)	28 (82.4%)
Muhima hospital	17 (27.4%)	45 (72.6%)
<b>Total</b>	<b>23</b>	<b>73</b>

#### 4.4. SECTION C: UNIVARIATE ANALYSIS

##### 4.4.1. Job related factors

**Table 4: Job related factors in the two hospitals**

Variables	Characteristics	Kibagabaga N (%)	Muhima N (%)
Had a clear job description	Yes	0 (0%)	60 (96.8%)
	No	34 (100%)	2 (3.2%)
	<b>Total</b>	<b>34 (100%)</b>	<b>62(100%)</b>
Aware of hospital performance objectives	Yes	4(11.8%)	27(43.5%)
	No	23(67.6%)	28(45.2%)
	I don't know	7(20.6%)	7(11.3%)
	<b>Total</b>	<b>34 (100%)</b>	<b>62(100%)</b>
Performance Feedback	Yes	2(5.9%)	4(6.5%)
	No	32(94.1%)	58(93.5%)
	<b>Total</b>	<b>34 (100%)</b>	<b>62(100%)</b>
Level of skills to perform the job	Somewhat adequate	34(100%)	61(98.4%)
	Very adequate	0(0%)	1(1.6%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
Having received training in postpartum care	Yes	13(38.2%)	27(43.5%)
	No	21(61.8%)	35(56.5%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
Being trained in the use of tools	Yes	11(32.4%)	35(56.5%)
	No	23(67.6%)	27(43.5%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
Receiving any non financial incentives	Yes	1(2.9%)	4(6.5%)
	No	33(97.1%)	58(93.5%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
Verbal recognition or appraisal from supervisor	Yes	30(88.2%)	50(80.6%)
	No	4(11.8%)	12(19.4%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
Getting opportunities for promotion	Yes	9(26.5%)	13(21%)
	No	25(73.5%)	49(79%)

<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
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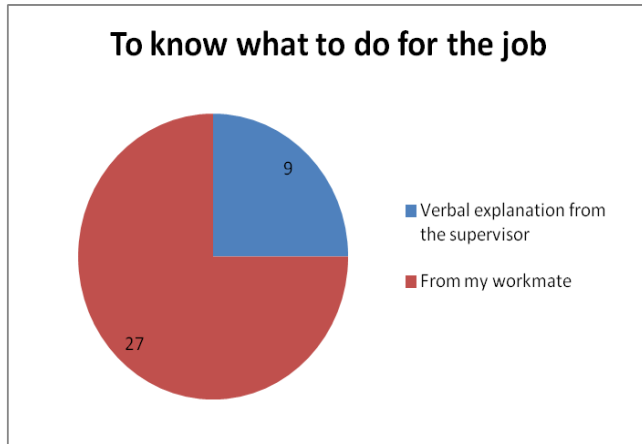
Respondents were asked if they had a clear job description. Responses are displayed in Table 4. All 34 (100%) health care providers from Kibagabaga hospital reported not having a clear job description while almost all providers 60 (96.8%) from Muhima hospital reported that they have it. According to the table 4 above, a big number for participants from both hospitals reported:

- Not being aware of their hospitals performance objectives: 23(67.6%) and 28(45.2%)
- Not receiving performance feedback: 32(94.1%) and 58(93.5%)
- Having somewhat adequate skills to perform their jobs: 34(100%) and 61(98.4%)
- Not receiving any training in postpartum care: 21(61.8%) and 35(56.5%)
- Not receiving any non financial incentives: 33(97.1%) and 58(93.5%)
- Never getting opportunities for promotion: 25(73.5%) and 49(79%)

However, most participants from both hospitals, 30(88.2%) and 50(80.6%), reported that they receive verbal recognition or appraisal from their supervisors. A bigger number of participants, 35(56.5%) from Muhima hospital as compared to those of Kibagabaga hospital 11(32.4%) reported that they have been trained in the use of tools.

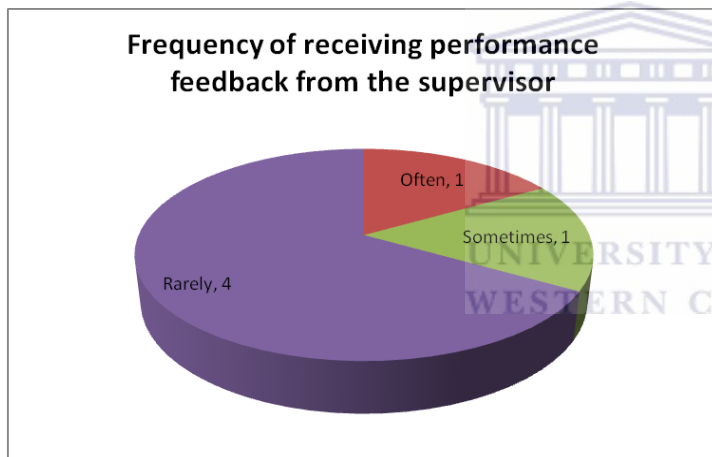
Out of 36 of providers who reported not having a clear job description in Table 4, 27 (75%) reported that they get were guided by their workmates (See below Figure 4).





**Figure 4 : Participants who reported on how they knew what to do for the job (n=36)**

The figure 5 below shows that 4 out of 6 providers shown in Table 4 and who were receiving feedback from supervisors about their job performance have reported receiving it “rarely”.



**Figure 5: How frequent participants receive performance feedback from supervisor (n=6)**

#### 4.4.2. Organization-level factors

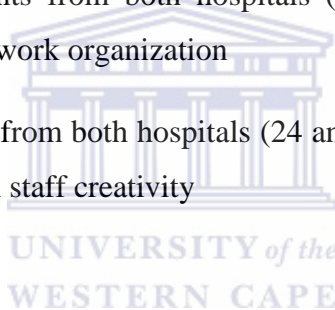
**Table 5: Organization-level factors as perceived in the two hospitals**

Variables	Characteristics	Kibagabaga N (%)	Muhima N (%)
<b>General view of the work place</b>	Very good	2(5.9%)	6(9.7%)
	Good	26(76.5%)	45(72.6%)
	Fair	6(17.6%)	10(16.1%)
	Poor	0(0%)	1(1.6%)
	<b>Total</b>		<b>34(100%)</b>
<b>Level of satisfaction about work</b>	Completely	2(5.9%)	10(16.1%)

<b>organization</b>	satisfied		
	Somewhat satisfied	32(94.1%)	49(79%)
	Not at all satisfied	0(0%)	3(4.9%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>
<b>Organization interest in staff creativity</b>	Yes	10(29.4%)	9(14.5%)
	No	24(70.6%)	53(85.5%)
	<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>

The table 5 indicates the results as follows:

- Most participants from both hospitals (26 and 45) reported that they perceive their hospitals as a good workplace.
- A large number of participants from both hospitals (32 and 49) reported that they are somewhat satisfied about their work organization
- A large number of participants from both hospitals (24 and 53) reported also that they do not find their hospitals interested in staff creativity



Due to a small sample size, data from both hospitals was combined and will not be presented separately in the bivariate analysis.

#### **4.5. SECTION D: BIVARIATE ANALYSIS**

##### **4.5.1. Job related factors versus Job performance**

###### **4.5.1.1. Job description vs. participants job performance**

In both facilities just over half of providers (51), reported not knowing any set performance objectives in their organizations. As Chi squared test ( $X^2$ ) is 1.68, this shows that there is no association between participants' performance and having clear job description. The findings were not statistically significant as well ( $p > 0.05$ ).

**Table 6: Job description vs. participants job performance (n=96)**

Job description	Job performance N (%)				
Variables	Good	Poor	OR (95% CI)	P-value	Chi Square (X <sup>2</sup> )
<b>Clear job description</b>					
Yes	17(73.9%)	43(58.9%)	0.51(0.18-1.43)	0.19	1.68
No	6(26.1%)	30(41.1%)			
<b>Total</b>	<b>23</b>	<b>73</b>			
<b>Aware of hospital performance objectives</b>					
Yes	10(43.5%)	21(28.8%)		0.417	1.75
No	10(43.5%)	41(56.2%)			
I don't know	3(13%)	11(15%)			
<b>Total</b>	<b>23</b>	<b>73</b>			



#### 4.5.1.2. Performance feedback

As indicated in the Table 7, the majority of providers from both study sites (90) said they do not receive any feedback about their job performance. And all the remaining 6 participants who answered that they receive feedback reported that the feedback was work related and they received it from their supervisors. Bivariate analysis revealed an association between participants' job performance score and receiving performance feedback ( $X^2 = 12.38$ ), ( $p < 0.001$ ).

**Table 7: Performance feedback vs. participants job performance (n=96)**

Performance feedback	Job performance N (%)				
Variables	Good	Poor	OR (95% CI)	P-value	Chi Square (X <sup>2</sup> )
<b>Performance Feedback</b>					
Yes	5(21.7%)	1(1.4%)			
No	18(78.3%)	72(98.6%)	0.05(0.005-0.45)	0.0004	12.38
<b>Total</b>	<b>23</b>	<b>73</b>			

#### **4.5.1.3. Knowledge & Skills to perform the job**

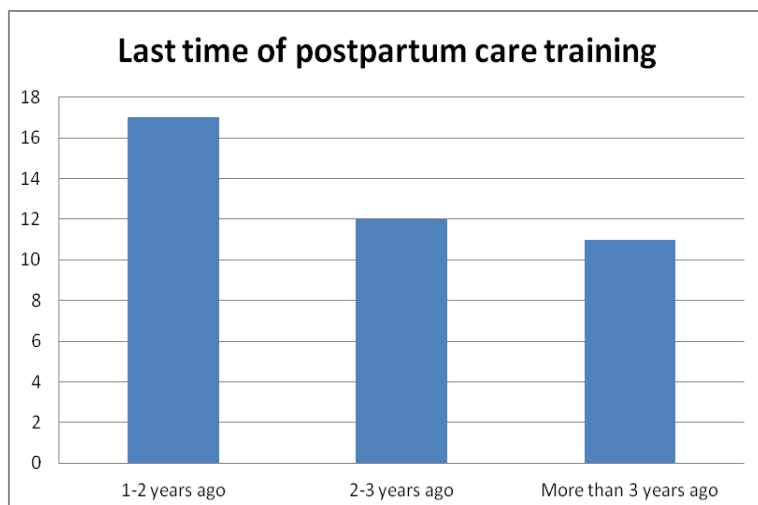
Although the largest proportion of participants (99%) reported that their level of skills to perform the job was adequate, no significant association ( $p=0.57$ ) was found between participants' performance and level of skills to perform the job ( $X^2 = 0.32$ ) (see Table 8).



**Table 8: Knowledge & skills to perform the job vs. participants job performance (n=96)**

Knowledge & Skills to perform the job	Job performance N (%)		OR (95% CI)	P-value	Chi Square (X <sup>2</sup> )
	Good	Poor			
<b>Level of skills to perform the job</b>					
Somewhat adequate	23(100%)	72(98.6%)		0.57	0.32
Very adequate	0(0%)	1(1.4%)			
<b>Total</b>	<b>23</b>	<b>73</b>			
<b>Having received training in postpartum care</b>					
Yes	17(73.9%)	23(31.5%)	0.16(0.06-0.46)	0.00032	12.94
No	6(26.1%)	50(68.5%)			
<b>Total</b>	<b>23</b>	<b>73</b>			
<b>Being trained in the use of tools</b>					
Yes	20(87%)	26(35.6%)	0.083(0.02-0.31)	<0.0001	18.47
No	3(13%)	47(64.4%)			
<b>Total</b>	<b>23</b>	<b>73</b>			

The Table 8 also shows that a small number of participants (40) reported receiving training in postpartum care. Data show that there are a large number of participants (50) who have not been trained in the use of tools. In the bivariate analysis, a significant association was found between having been trained in the use of tools and participants performance (X<sup>2</sup> =18.47), (p<0.001).



**Figure 6: Last time of postpartum care training**

Out of 40 of providers who reported in Table 8 receiving training in postpartum care and almost half of them (17) in both hospitals have received that training 1-2 years ago (See below Figure 6 below).

#### 4.5.1.4. Incentives and Employer recognition as work motivators

All the 96 participants reported receiving financial bonuses in addition to their salaries when their assigned work has been well performed. These are given as Performance Based Financing (PBF) incentives in all public hospitals and it's given very often on a monthly basis.

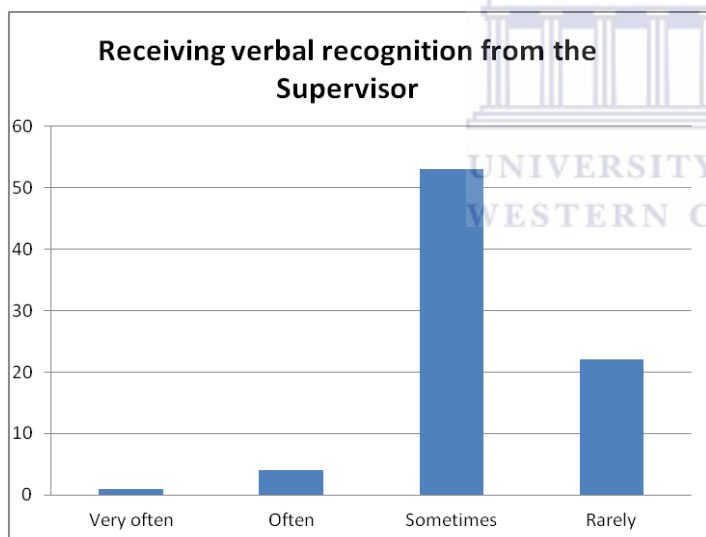
**Table 9: Incentives and employer recognition vs. participants job performance (n=96)**

Incentives and employer recognition	Job performance		OR (95% CI)	P-value	Chi Square (X <sup>2</sup> )
	Good	Poor			
<b>Receiving any non financial incentives</b>					
Yes	3(13%)	2(2.7%)	0.18(0.02-1.2)	0.052	3.76
No	20(87%)	71(97.3%)			
<b>Total</b>	<b>23</b>	<b>73</b>			
<b>Verbal recognition or appraisal from supervisor</b>					
Yes	21(91.3%)	59(80.8%)	0.41(0.08-1.92)	0.24	1.38
No	2(8.7%)	14(19.2%)			
<b>Total</b>	<b>23</b>	<b>73</b>			

**Getting opportunities for promotion**

Yes	8(34.8%)	14(19.2%)	0.44(0.16-1.26)	0.12	2.41
No	15(65.2%)	59(80.8%)			
<b>Total</b>	<b>23</b>	<b>73</b>			

The majority of participants (91) reported not receiving any non financial incentives such as transport means, communication cards from their organization. However, most of them (80) responded positively about receiving a verbal recognition or appraisal from their supervisor. Table 9 indicates that very few participants (22) from both hospitals reported getting opportunities for promotion. No association ( $X^2 < 3.84$ ) and no significance ( $p > 0.05$ ) were found between participants' job performance and three variables described in the table above (i.e. receiving non financial incentives, receiving verbal recognition or appraisal and getting opportunities for promotion).



**Figure 7: Ever received verbal recognition from the Supervisor**

The figure 7 shows that among the 80 participants in both hospitals who reported receiving a verbal recognition or appraisal from their supervisor, a big number of them (53) reported receiving that verbal recognition or appraisal “*sometimes*”.

## 4.5.2. Organization-Level Factors versus Job Performance

### 4.5.2.1. Work organization & Environment

In both hospitals, all participants reported that they found their departments not well equipped in terms of instruments and supplies for providing a good quality of care to the patients at its level. Generally, the majority of participants in the two hospitals (71) find their organization as “good” work place. A high proportion of them (84.4%) are bit satisfied about their work organization. Bivariate analysis found a significant positive association between being satisfied about their work organization and participants performance ( $X^2 = 27.08$ ), ( $p < 0.001$ ).

Data described in Table 10 show that most of the participants (77) generally find their organization not interested in their staff creativity by allowing innovations to improve work environment or climate. A positive significant association was found between finding the organization interested in staff creativity and participants performance ( $X^2 = 25.71$ ) and there was a significance ( $p < 0.001$ ).

**Table 10: Work organization & Environment vs. participants job performance (n=96)**

Work organization & Environment Variables	Job performance N (%)		OR (95% CI)	P-value	Chi Square ( $X^2$ )
	Good	Poor			
<b>General view of the work place</b>					
Very good	5(21.7%)	3(4.1%)		0.06	7.38
Good	15(65.2%)	56(76.7%)			
Fair	3(13%)	13(17.8%)			
Poor	0(0%)	1(1.4%)			
<b>Total</b>	<b>23</b>	<b>73</b>			
<b>Level of satisfaction about work organization</b>					
Completely satisfied	10(43.5%)	2(2.7%)		<0.001	27.08
Somewhat satisfied	12(52.2%)	69(94.5%)			
Not at all satisfied	1(4.3%)	2(2.7%)			
<b>Total</b>	<b>23</b>	<b>73</b>			



<b>Organization interest in staff creativity</b>					
Yes	13(56.5%)	6(8.2%)	0.07(0.02-0.22)	<0.001	25.71
No	10(43.5%)	67(91.8%)			
<b>Total</b>	<b>23</b>	<b>73</b>			

#### 4.5.2.2. Organizational support

In both hospitals, all participants reported never having supervisions/evaluation regarding their assigned job in the past 6 months (see Table 11).

**Table 11: Having had supervisions/evaluations to the assigned job in the past 6 months**

<b>Having had supervisions/evaluations to the assigned job in the past 6 months</b>	<b>Kibagabaga N (%)</b>	<b>Muhima N (%)</b>
One week ago	0(0%)	0(0%)
One month ago	0(0%)	0(0%)
Three months ago	0(0%)	0(0%)
Never	34(100%)	62(100%)
<b>Total</b>	<b>34(100%)</b>	<b>62(100%)</b>

#### 4.6. SUMMARY

This chapter presented the findings of the study. The results showed that the majority of the participants were females and the number of nurses was two times the number of midwives. The majority of participants were in the age group of 25-34 years and the largest proportion of participants had between 1-5 years of work experience in the current workplace.

In addition, the job performance scores obtained from the observation of tasks performed by nurses and midwives showed that most of the participants from the both facilities got a performance score of less than 80%. Various factors such as having knowledge and skills to perform the job, receiving performance feedback, being satisfied with the work environment and

organization were found to have a positive association ( $p > 0.05$ ) with the participants' performance score. Interpretation of the results will be discussed in the next chapter.



## **CHAPTER 5: DISCUSSION**

### **5.1. INTRODUCTION**

This chapter focused on comparisons between the findings of the current study and those of related studies. The job performance score that participants obtained and the reason behind are discussed. A number of job related and organizational level factors experienced by study participants and found to be having an association with job performance are also discussed in relation to similar studies. Finally, a number of limitations of the study are highlighted.

In addition, the aim of this study was to assess factors that influence job performance of nurses and midwives working in postpartum care in two public hospitals. Although the study had a small sample size (96 participants) some interesting findings were revealed.

### **5.2. PARTICIPANTS' PERFORMANCE**

While the largest of participants (99%) reported that their level of skills to perform the assigned job was adequate, the results from the observation indicated that most of the study participants do not comply with the guidelines and standards used in postpartum care management. Most of the tasks included in the checklist are crucial procedures for ruling out life-threatening complications after birth. These findings explain the reason behind high rates of postpartum complications and patient complaints about quality of care that has been reported (MOH, 2009). These findings are not surprising as more than half of participants (56) had not received training in post partum care.

### **5.3. KNOWLEDGE AND SKILLS TO PERFORM THE JOB**

Studies show that health workers perform better when they are well equipped in terms of knowledge and skills required to perform the job. They know what to do and they perform their jobs according to what they have been trained for. The current study also found that having received training in postpartum care management and having been trained in the use of the tools for the daily work was related to good job performance of staff. These findings are supported by

a variety of studies (Leach et al., 2009; Olenja et al., 2009; Kabir, et al. 2007; Dieleman et al. 2006) which highlight appropriate training as one of the key elements associated with health workers performance. Similarly, findings from Fort & Voltero (2004) showed that training in the use of the tools for the daily work was one of the main predictors of provider's performance.

Work oriented training contributes tremendously to performance enhancement and generally to personal development if its contents match with skills required in the field and the choice of target group. In addition, proper training is among well-known factors that are crucial to improve health workers performance. Researchers have confirmed these findings in different Sub-Saharan African countries (Malawi, Zambia and Sudan) (Nkowane et al., 2009; Bradley & McAuliffe, 2009).

The quality of service delivered by health workers reflects their compliance to evidence-based guidelines. More specifically, availability of clinical evidence-based guidelines, in-service training and adequate supervision improves quality of care (Rowe et al., 2009; Zurovac et al., 2004; Naimoli et al., 2006). This is understandable because in-service training allows transfer of knowledge and skills by those who had received a specific training to other staff who do not. This helps the untrained staff to become more confident in their assigned jobs. In-service training and supervision initiate newly recruited health workers to their new job assignments and corrects their practices if necessary while it makes the trainer staff to feel appreciated and recognized as team leaders. This motivates them and pushes them to perform well.

The findings of the current study also confirm those of Hagbaghery et al. (2004) who developed a theoretical model which explains the interaction between self confidence, knowledge and skills and how these affect work performance. This makes sense as workers spend three quarters of their time at work and most of them besides the patient performing procedure which may be detrimental to patients. They therefore need to be confident with their performance.

#### **5.4. PERFORMANCE FEEDBACK**

The current study also found that having received feedback about the job performance influenced work performance of staff. These findings confirm the findings of Fort & Voltero (2004) who demonstrated that feedback on job performance was one of the main factors predicting

performance in health care providers working in postpartum care. This appears to be logical by the fact that feedback on job performance from the employer (supervisor) makes a slight change in the employee's behaviour towards his job because it gives the employee the morale and strength to perform. But this factor is not sufficient to predict job performance. That is why it needs to be associated with other factors.

Other studies described feedback through supervision as one of the motivating factors for the health workers that enhances their performance (Rowe et al., 2005, Nelson & Morrison-Beedy, 2008). This could be explained by the fact supervision followed by feedback often helps health workers to know where they are in achieving their targeted goals. This motivates them because they feel supported and further enhances their work performance.

## **5.5. WORK ENVIRONMENT AND WORK ORGANIZATION**

Staff that was satisfied with the way the work is organized and those that found their organization interested and allowed staff creativity in general, were found to perform better than those who were not positive about their organization.

The findings of the current study support those of (Crigler et al. 2006; Hughes et al., 2002; Beaulieu et al., 1997; Laschinger & Havens, 1996; Sabiston & Laschinger, 1995) who also reported that poor work environment leads to decreased job performance. Other studies found a supportive work environment and good work organization as factors that influence performance through job satisfaction (Leach et al., 2009; Rechel et al., 2009) and motivation (Mathauer & Imhoff, 2006). This can be understood by the fact that health workers cannot achieve results by themselves even though they strive everyday to produce sustainable health outcomes especially to reduce morbidity and mortality in their communities. That's why they need support from their organizations. The support can be offered in terms of providing good work environment and work organization. This decreases health workers absenteeism, increases their work interest and initiative and thus increases work performance.

However, Takase et al. (2005) reported contradictory findings to the present study findings. Their study found no relationship between job performance and perception of work environment

characteristics. The authors attributed this to the fact that some health workers categories prioritize their professional needs and values rather than good job performance.

In summary, this study found that work performance of health care providers working in postpartum care is influenced by five factors namely receiving feedback about job performance, receiving training in postpartum care management, being trained in the use of the tools, being satisfied with the way the work is organized, and finding the organization interested in the staff creativity in general.

## **5.6. STUDY LIMITATIONS**

The first limitation of this study is the risk of observer bias. The observer tried to minimize this by doing observation unobtrusively. Even though the process of being observed by the researcher may have resulted in improved performance, it was assumed to be unlikely, because the observer was a physician working in one of the two hospitals and he was observing while he was doing patients ward rounds. The second one is the generalisability of the findings. This is due to the small sample size, which is the result of logistic and financial constraints. The third one arises in the results of job performance with a high percentage of health care providers with low job performance score. This is indicative of gaps in performance between actual performance and what might be desired or expected. Finally, the fourth one is that the study focused only on the behavioral component of performance through the observation of skills and concentrated on how performance scores are associated with each performance factor. However, it did not include other components of performance (e.g. accomplishments). Further analysis on the causes of the gap is needed in order to determine which performance factor would affect performance most.

## **5.7. SUMMARY**

The discussion dealt with the major findings of the study. Similarities to other studies were described with regard to the factors found to be having an association with job performance. The limitations of the study have also been described. The conclusion and recommendations based on the study findings will be presented in the next chapter.

## **CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS**

### **6.1. INTRODUCTION**

In this chapter, the major issues in the study are provided in conclusion, followed by the suggested recommendations arising from the study.

### **6.2. CONCLUSION**

The findings of this assessment indicate that performance remains a big issue in health workers working in the two district hospitals. Lack of knowledge, poor supervision and feedback were identified as factors responsible for the poor performance of health workers. In addition to the above factors, work environmental factors are also indispensable to make them perform better. The present study findings have direct policy and programmatic implications on maternal health care provision and on quality health care delivery in general in Rwanda.

### **6.3. RECOMMENDATIONS**

Based on the findings of the study, the recommendations are:

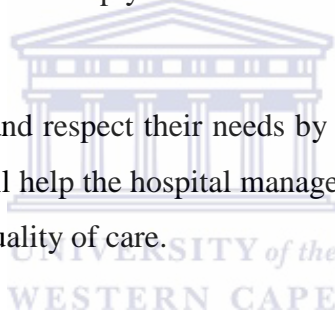
#### **6.3.1. Recommendations to the Ministry of Health:**

- A performance appraisal system should developed by the Ministry of Health to encourage and motivate health care providers in their daily task fulfilment.
- There is an urgent need to carry out a detailed study to evaluate health workforce performance according to defined national performance indicators for staffing needs.
- The Ministry of Health in close liaison with the Ministry of Education, other government agencies and non-government organizations should train more midwives, since the number of midwives is low compared to the demand of people requiring maternal health care.
- It is essential to increase provision of appropriate in-service training to health care providers in order to emphasize clinical practice as well as strong client-provider interaction skills.

- Norms and standards of healthcare delivery services need to be reviewed, revised and published. This will constitute the basis for assessment of working conditions of health workers at each health facility.
- A tremendous effort should be made to strengthen leadership and management practices and to implement a leadership development program at all levels. This will improve work climate and motivate health personnel to perform.

### **6.3.2. Recommendations to the Health Care Providers/Hospital management:**

- Provide clear job description to health care providers and timely routine schedule of supervisions/evaluation regarding their assigned jobs.
- Encourage health care providers to respect norms and regulations as they are stated in the Ministry of Health statute and to comply with evidence based guidelines used in maternal health care.
- Listen carefully to the clients and respect their needs by encouraging them to give feedback about service delivery. This will help the hospital management to develop guided error-based feedbacks and thus improves quality of care.





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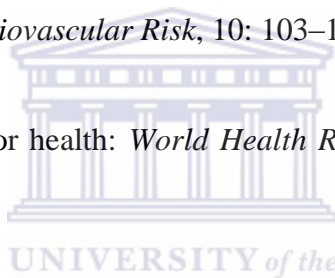
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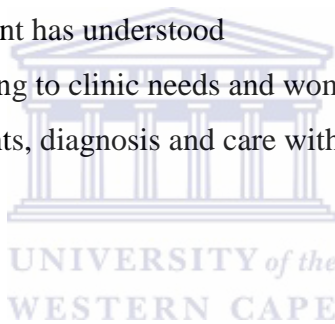
## **APPENDICES**

### **Appendix 1: Check-list of tasks in Postpartum Care**

#### **Responses will be Yes/No**

1. Washes hands with soap & water and dries them
2. Greets and calls woman by her first name and introduces him/herself if first visit
3. Ensures woman is in a comfortable environment
4. Explains purpose of the session and nature of the procedures
5. Asks questions and allows client to express herself
6. Pays attention and is interested in personal problems of the woman
7. Asks about last pregnancy and delivery: evolution, outcome, any complications
8. Asks about present status and any danger signs: bleeding, severe headache, abdominal pain
9. Explores pulse rate
10. Explores blood pressure
11. Takes temperature
12. Examines skin and conjunctivae
13. Checks for oedema, redness and varicose veins – legs
14. Inspects and palpates abdomen for uterine involution
15. Examines breasts and inquires for any lactation problem
16. Examines lochia (amount, color, smell)

17. Asks about baby's health: sleeping, feeding, posture, skin color, breathing, fever
18. Assesses baby's health: feeding, posture, skin color, breathing, fever
19. Informs woman about her health condition
20. Informs woman about the baby's health condition
21. Informs woman about potential complications and trains on self assessment
22. Orients woman about breast feeding and breast care
23. Orients woman about personal hygiene
24. Orients woman about gender, sexuality and STI prevention
25. Counsels woman about her nutritional needs
26. Orients woman about hospital/clinic services (e.g. location, hours, etc.) for follow-up
27. Orients woman about baby vaccination
28. Orients woman about birth spacing and contraception
29. Solicits questions to ensure client has understood
30. Schedules appointment according to clinic needs and woman's convenience
31. Records all findings, assessments, diagnosis and care with client
32. Thanks client for her time



**Appendix 2: Draft Interview Questionnaires related to Performance Factors.**

**A. BACKGROUND INFORMATION**

NO	QUESTIONS & INSTRUCTIONS	RESPONSES		Skips				
A01	Sex	Male Female	1 2					
A02	Worker category	Nurse Midwife	1 2					
A03	In what year were you born?	Years of birth <table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>						
A04	How old were you at your last birthday?	Years	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>					

A05	When did you start working at this facility? <i>Precise the month and the year</i>	Month..... Year.....		
A06	How many years have you been working for this facility?	Years	<input type="text"/>	<input type="text"/>

**B. JOB RELATED FACTORS**

**This section is about job related factors that you perceive from your organization.**

<i>Job expectations</i>				
No	QUESTIONS & INSTRUCTIONS	RESPONSES		SKIPS
B01	Do you have a clear job description?	Yes No	1 0	If Yes=1 → B03
B02	If No, how do you know what to do for your job?	Verbal explanation from the supervisor From my workmate Refused	0 1 99	
B03	Did your organization set performance objectives in all departments including yours? By performance objectives, I mean objectives that each department want to meet in terms of quality of service delivery.	Yes No I don't know Refused	1 0 88 99	

<i>Performance feedback</i>				
No	QUESTIONS & INSTRUCTIONS	RESPONSES	SKIPS	
B04	Do you receive any feedback about your job performance?	Yes No I don't know Refused	1 2 88 99	If No=2 → B09
B05	If Yes, what types of feedback on your job performance did you receive?	Work related Behaviour related	1 2	

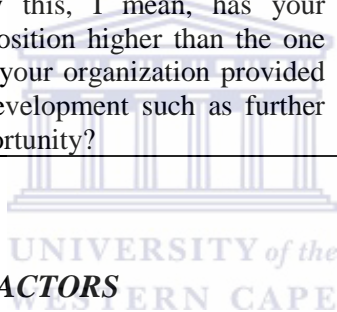
		I don't know	88	
B06	In the past 12 months, how often did you receive that feedback: Very often, often, sometimes, or rarely?	Very often Often Sometimes Rarely	1 2 3 4	
B07	From whom did you receive that feedback: Your supervisor, your colleagues, clients, or I don't know?	Your Supervisor Your Colleagues Clients I don't know Refused	1 2 3 88 99	
B08	How can you qualify the type of feedback that you receive: positive and constructive, negative and discouraging, or I don't know?	Positive and constructive Negative and discouraging I don't know Refused	1 2 88 99	

<i>Knowledge &amp; Skills to perform the job</i>				
No	QUESTIONS & INSTRUCTIONS	RESPONSES	SKIPS	
B09	How adequate are your skills in regard to your expectation in your work performance: very adequate, somewhat adequate, not at all adequate, or I don't know?	Very adequate Somewhat adequate Not at all adequate I don't know Refused	1 2 3 88 99	
B10	Have you ever received any training in postpartum care management?	Yes No Refused	1 2 99	If No=2 →B12
B11	When was the last time you received that training?	1-2 years ago 2-3 years ago More than 3 years ago I don't know Refused	1 2 3 88 99	
B12	Have you ever been trained in the use of the tools that you need for your daily work? By tools, I mean vital signs monitoring machine for blood pressure, temperature, oxygen saturation etc...	Yes No Refused	1 2 99	

<i>Incentives and Employer recognition as work motivators</i>				
No	QUESTIONS & INSTRUCTIONS	RESPONSES	Skips	
B13	Do you receive financial bonuses in addition to your salary when your assigned work has been performed well?	Yes No	1 0	If No=2 → B12



		Refused	99	
B14	If Yes, how often did you receive that bonus: Very often, often, sometimes, or rarely?	Very often Often Sometimes Rarely	1 2 3 4	
B15	Do you receive any of these non financial incentives: such as transport means, communication cards and compensation for extra hours done?	Yes No I don't know Refused	1 0 88 99	
B16	Do you receive any verbal recognition or appraisal from your supervisor when you perform your work very well or when you work for extra hours?	Yes No I don't know Refused	1 0 88 99	
B17	If Yes, how often did you receive work recognition in the past 12 months: very often, often, sometimes, or rarely?	Very often Often Sometimes Rarely	0 1 2 4	
B18	Since you work in this facility, have you ever get any opportunities for promotion? By this, I mean, has your organization promoted you to a position higher than the one you was occupying before or has your organization provided you any opportunity for career development such as further education (studies) or training opportunity?	Yes No Refused	1 0 99	



### C. ORGANIZATION-LEVEL FACTORS

The following questions are about how you view your organization. This information will help us keep track of how you find your organization as your work place.

<i>Work organization &amp; Environment</i>				
No	QUESTIONS & INSTRUCTIONS	RESPONSES		SKIPS
B19	In general, How do you view your organisation? Would you say it is an: excellent, very good, good, fair, or poor place for work?	Excellent Very good Good Fair Poor	0 1 2 4 5	
B20	Do you find your department well equipped in terms of instruments and supplies for providing a good quality of care to the patients at its level? I mean, does your department has all required medical equipments and a permanent stock for supply that you need to provide a good quality of care? These instruments include neonatal resuscitation kit, obstetrical care kit, vital signs monitoring machine etc...	Yes No I don't know Refused	1 0 88 99	

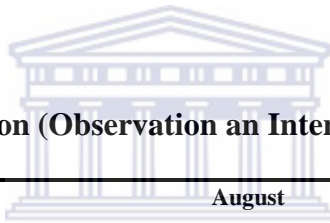
B21	How satisfied are you with the way you work is organized in terms of tasks repartition, work hours, in service supervision and teamwork: are you completely satisfied, somewhat satisfied, or not at all?	Completely satisfied Somewhat satisfied Not at all satisfied Refused	0 1 2 99	
B22	In general, do you find your organization interested in the creativity of staff? By creativity of staff, I mean staff innovations in introducing new ideas of improving work environment (climate).	Yes No I don't know Refused	1 0 88 99	

<i>Organizational support related questions</i>				
B24	In the past 6 months, when have you had a supervisions/evaluation regarding your assigned job: One week ago, One month ago, 3 months ago, or never?	One week ago One month ago 3 months ago Never Refused	0 1 2 3 99	
B25	In the past 6 months, what types of supervision/evaluation did you receive: administrative (by checking forms and patient charts), clinical (by observing you while providing care and the work in the department), or I don't know?	Administrative Clinical I don't know Refused	0 1 88 99	
B26	Did you see fairness in those supervisions/evaluations?	Yes No I don't know Refused	1 0 88 99	

**CLOSING:** Thank you for taking part in this study. The information you shared will be very helpful. I asked a lot of personal questions and some of them may have upset you. If there is something you would like to discuss with a counselor, please let me know (*break here*). Please remember that all of the information you shared will be kept private. Thank you again for talking with me.

**REMINDER:** Mark end time of interview on front of questionnaire.

**Appendix 3: Days of data collection (Observation an Interview)**



Month	August																											
Date	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Observation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Interviews																						X	X	X	X	X	X	X

Month	September																					
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Observation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Interviews	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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**Appendix 4: PARTICIPANT INFORMATION SHEET**



**UNIVERSITY OF THE WESTERN CAPE**

**School of Public Health**

Private Bag X17 • **BELLVILLE** • 7535 • South Africa

Tel: 021- 959 2809, Fax: 021- 959 2872

## Confidentiality Agreement

Factors influencing job performance of Nurses and Midwives in postpartum care in two district hospitals in Rwanda.

I, \_\_\_\_\_ (print name), agree to abide by the following rules and restrictions on the use of data from the study entitled “Factors influencing job performance of Nurses and Midwives in Postpartum Care: Case of Kibagabaga and Muhima District Hospitals in Rwanda”:

1. I **WILL NOT** remove study participants records with direct identifiers (such as participants names or addresses), whether in paper or electronic format, from the study site without the explicit and written permission of the Study Coordinator.
2. I **WILL NOT** divulge study participants information to other persons other than the study personnel. The release of this information will only be done with full consent of the study participants.
3. I **WILL** protect all electronic study participants records of any type, whether with or without participants identifiers, using passwords of at least 8 characters in length. This protection includes the participants’ records that constitute the study dataset.
4. I **WILL NOT** delete/shred/destroy any study paper or electronic records unless with specific written instructions from the Study Coordinator.
5. I **WILL NOT** give the access password(s) to any persons other than those who have signed the data use agreement.
6. I **WILL** treat all data at my desk/site confidentially and maintain paper records that could directly or indirectly identify any individual in a designated locked file cabinet.
7. I **WILL** keep all hard copies of preliminary data runs locked in a file cabinet when not in use and will shred them when they are no longer necessary to my analysis.
8. I **WILL NOT** produce a back-up data tape of the study datasets except as required for the maintenance of the system. I **WILL** ensure that that the back-up datasets are also stored according to the full confidentiality guidelines mentioned above.
9. I **WILL NOT** remove paper or electronic files, records or databases from the worksites.

10. I **WILL NOT** remove hard copies of study participants records, confidential communications, or any records containing sensitive data and information from the worksites.
11. I **WILL NOT** remove from the work site tabulations or data in any format that could directly or indirectly identify any individual. I **WILL NOT** divulge any information on tabulations and other data formats to non-study personnel.
12. I **WILL** maintain confidentiality of records on individuals in all discussions, communications, e-mails, tabulations, presentations, and publications (and the like) by using only the minimum information necessary to describe the individual case.

I have read and understood this document on the use of data from the Study.



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

Role in the study: \_\_\_\_\_

Organization \_\_\_\_\_

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

UWALIRAYE Parfait

## **PARTICIPANT INFORMATION SHEET**

**Study Title:** Factors influencing job performance of Nurses and Midwives in postpartum care in two district hospitals in Rwanda.

**Principal Investigator:** UWALIRAYE Parfait

**Research purpose:** I am a final year MPH student at the SOPH, University of the Western Cape and I am required to do a Mini-thesis. My research project focuses on assessing factors that influence job performance of nurses and midwives working in postpartum care in two public hospitals in Rwanda. The purpose of the study is to learn how health care providers perform their jobs and why some providers fulfill their tasks successfully and others do not or they need a support. This information will be used to develop policies and programs that would improve job performance especially in maternal health care provision in Rwanda.

**Information on research:** We are inviting you to participate in this study because you are working in postpartum care in this facility. If you agree to participate, the following will happen:

- A researcher will observe some of the activities while caring for patients in the ward. You will also be interviewed. The interview will take no more than 1 hour to complete. During the interview, you will be asked questions about job related factors and perceptions about organizational level factors that could influence your daily task fulfillment.

**Risks:** There is a slight risk of loss of privacy by participating in this study but procedures have been put into place to minimize this risk. Your research records will be confidential as the law permits. Also, some of the questions during the interviews may make uncomfortable. If that happens, you can skip the questions or stop the interview.

**Benefits:** There is no direct benefit to you for participating in this study. The information you provide, however, will help our health policy makers to improve programmes and policies for quality health care delivery.

**Alternative procedure:** The alternative option is not to participate in the study. Your decision to participate will not affect your work climate or working conditions at this facility or any other facility in Rwanda.

**Confidentiality:** Your name will not appear on the interview questionnaire. You will be only identified by a code. Information collected during individual interviews will not be shared directly with department staff. The information gathered in your interview will be kept in a locked and secure place for up to five years and during that time the study team staff will have access to this information. Additionally, members of the Rwandan National Ethics Committee

and UWC Ethics Committee may look at the research records. After five years, the hard copies of the study files will be destroyed. All study staff will be required to sign confidentiality agreements.

**Voluntary participation:** You are being invited to participate in this study. Your participation is completely voluntary and you have the right to stop the interview at any time. You do not have to answer any questions that you do not want to answer. Your decision to participate or not will in no way affect your work climate or working conditions at this health facility.

**For additional information:** If you would like to have more information about the study, you may contact:

UWALIRAYE Parfait, MD

Principal Investigator, Kibagabaga District Hospital

P. O Box 6260, Kigali, Rwanda

Tel: +250 0788624354

E -mail: [parfait81@gmail.com](mailto:parfait81@gmail.com)



I am accountable to Prof. Thandi Puoane, my Supervisor at UWC. Her contact details are:

Thandi Puoane, B (Cur), MPH, Dr PH, Professor

PhD Coordinator, School of Public Health

Private Bag X17, Bellville, 7535, Tel: +27 21 959 3084

Cell: +27 82 707 5881, Fax: +27 21 959 2872

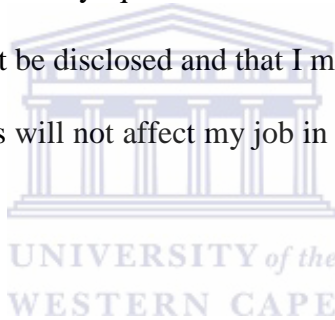
Email: [tpuoane@uwc.ac.za](mailto:tpuoane@uwc.ac.za)



## **Appendix 5: Informed Consent Form**

**Title of Research Project:** Factors influencing job performance of Nurses and Midwives in Postpartum Care: Case of Kibagabaga and Muhima District Hospitals in Rwanda.

The study has been described to me in language that I understand well. Thus, I freely and voluntarily agree to participate. All my questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not affect my job in any way at this facility or any other facility in Rwanda.



Signed by Interviewer:

Signed by participant:

Date\_\_\_\_\_

Place\_\_\_\_\_

If you have any questions, please do not hesitate to ask or contact:

**UWALIRAYE Parfait, MD**

Principal Investigator, Kibagabaga District Hospital

P. O Box 6260, Kigali, Rwanda

Tel: +250 0788624354

E -mail: [parfait81@gmail.com](mailto:parfait81@gmail.com)

Study ID Number

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## Appendix 6: Formulaire de consentement

**Titre du Projet de recherche:** Les facteurs influençant la performance parmi les infirmières et les sages femmes qui offrent les soins postpartum : Cas des hôpitaux de districts de Kibagabaga et Muhima au Rwanda.

Cette étude m'a été décrite dans la langue que je comprends très bien. Ainsi, j'accepte d'y participer librement et volontairement. Toutes les questions concernant l'étude ont été bien répondues. J'accepte aussi que mon identité ne sera pas dévoilée et que je peux me retirer de l'étude n'importe quand et sans donner aucune raison. Cela n'affectera en aucun moyen mon travail dans cette formation sanitaire.

Signé par l'interviewant:

Signé par le participant:

Date \_\_\_\_\_

Lieu \_\_\_\_\_

Si vous avez des questions, s'il vous plait n'hésitez pas de nous contacter:

**UWALIRAYE Parfait, MD**

Investigateur Principal, Hôpital de district de Kibagabaga

P. O Box 6260, Kigali, Rwanda

Tel: +250 0788624354

E -mail: [parfait81@gmail.com](mailto:parfait81@gmail.com)

Study ID Number

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