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Nurses' and Midwives' Experiences as Mentors in a Clinical Mentorship Program in Rwanda


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A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Nursing

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ABSTRACT

In Rwanda, the provision of maternal and child health care is often hindered by gaps in health care professionals' (HCP) knowledge and skills, and the management of pregnancy related complications in health facilities. These factors contribute to maternal, newborn, and child mortality rates. To help respond to the gaps in clinical knowledge and skills, the Training Support and Access Model (TSAM) project implemented a clinical mentorship program (CMP) in the Northern and Southern provinces of Rwanda that involved mentors supporting mentees' professional development to strengthen nurses' and midwives' capacity to provide knowledgeable maternal and child health care.

This qualitative descriptive study aimed to explore nurses' and midwives' experiences of mentoring in their role as mentors in this CMP. Fifteen mentors were purposefully sampled from a population of 60 mentors. Individual interviews were conducted using a semi-structured interview guide. Five themes emerged from the analysis: 1) Mentors collaborating in teams; 2) Facilitating the mentorship process; 3) Mentors' perceptions of their role in the TSAM CMP 4) Challenges encountered by mentors in the TSAM CMP, and 5) Mentors' recommendations to support future mentor engagement. Findings highlighted the importance of team collaboration which improved the quality of care provided and patient health outcomes, however some challenges were encountered suggesting that an improvement in the CMP plans could further enhance mentors' experiences and ultimately, mentees' knowledge and skill development.

Key words: Mentor, mentorship, nurse, midwife, nursing and midwifery education, Rwanda.

SUMMARY FOR LAY AUDIENCE

The majority of pregnancy and birth related deaths occur in developing countries, with a large proportion of these deaths occurring in Sub-Saharan Africa. Rwanda is a developing country centrally located in Sub-Saharan Africa which has made great strides in reducing maternal and child mortality rates, however despite these achievements the number of maternal and child deaths remains high. Largely, these deaths can be attributed to the lack of adequate knowledge and skills in the management of pregnancy related complications, and the limited opportunities available to health care providers, especially nurses and midwives to upgrade their competencies.

It is within this context that the Training Support and Access Model (TSAM) for Maternal, Newborn and Child Health (MNCH) project in partnership with the Ministry of Health (MoH) and the Rwanda Biomedical Centre (RBC) aimed to reinforce capacity building efforts for health care professionals (HCP), including nurses and midwives. By closing the gap through a clinical mentorship program (CMP) in select district hospitals (DH), it was anticipated by TSAM that nurse and midwife mentors would enhance their knowledge and skills, as well as those of their mentees to ultimately reduce maternal, newborn and child mortality and morbidity rates.

This descriptive qualitative study was conducted as a means to understand the experiences of nurse and midwife mentors engaged in the TSAM CMP in Rwanda. Fifteen nurses and midwives participated in one-on-one semi-structured interviews. Five themes emerged: *mentors collaborating in teams, facilitating the mentorship process, mentors' perceptions of their role in the TSAM CMP, challenges encountered by mentors in the TSAM CMP, and mentors' recommendations to support future mentor engagement.* Findings highlighted the importance of team collaboration which improved the quality of

care provided to patients and contributed to their positive health outcomes. However, some challenges were encountered suggesting that an improvement in the MP plans could further enhance mentors' experiences and ultimately, mentees' knowledge and skill development. The findings serve to inform the TSAM MNCH project, while more broadly the benefits of CMPs can help shape practice, the curriculum of pre-service and in-service education, and policies around professional development activities.

CO-AUTHORSHIP STATEMENT

Marie Chantal Murekatete conducted the research for her master's thesis under the supervision of Dr. Yolanda Babenko-Mould and committee members Dr. Marilyn Evans, Dr. Ellena Andoniou, and Dr. Madeleine Mukeshimana who will be co-authors on presentations and publication of manuscript(s) resulting from this thesis.

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CHAPTER ONE

This chapter provides the background information pertaining to mentors and their contributions to the nursing profession, the global context about maternal, newborn and child health (MNCH) issues with an emphasis on developing countries such as Rwanda, and discusses the relationship between mentoring and the benefits it establishes for MNCH. The chapter provides an overview of the Rwandan health care system, as well as the role that clinical mentorship (CM) plays within the system. The chapter continues with a review of the TSAM clinical mentorship program (CMP), outlines the significance of the study and the study purpose, presents the research questions, and provides a statement of self-declaration. The chapter concludes with a thesis overview.

Background

Strengthening the clinical competence (knowledge, skills and attitudes) of health care professionals (HCP) including those of nurses and midwives through clinical mentorship could support the provision of high-quality clinical care outcomes (Manzi et al., 2017); potentially contributing towards achieving the global target set by the United Nations (UN) under the Sustainable Development Goals (SDGs) to contribute to reducing MNCHM by the year 2030 (UN, 2015). Clinical mentorship enables mentors to foster the professional growth of their mentees (McDonald, 2018), and has been found to improve and maintain competency and expertise in clinical practice (Institute of Medicine [IOM], 2010). Mentors in the nursing profession play an important role towards building robust health care teams, capable of dealing with an array of challenges in the clinical care setting (Hunt et al., 2016), which ultimately strengthens the profession (IOM, 2010).

Globally, approximately 830 women die every day from preventable complications related to pregnancy or childbirth (World Health Organization [WHO], 2018). Maternal mortality appears to be most prevalent in developing countries where 99% of maternal deaths occur (WHO, 2018; Okereke et al., 2013; Ameh et al., 2012; Gabrysch, Zanger, & Campbell, 2012; Grady et al., 2011; De Brouwere, Richard, & Witter, 2010). The WHO (2015) reports that approximately 239 women die for every 100,000 live births in developing countries compared to 12 deaths per 100,000 live births in developed countries. In particular, 66% of these deaths occur in Sub-Saharan Africa (WHO, 2018).

In developing countries, such as Rwanda, nurses and midwives are at the frontline of health care delivery and aim to provide quality pre and antenatal care to women and their newborns babies. Rwanda as a developing country has made large strides in reducing maternal and child mortality rates. In 2015, the reported maternal mortality rate declined from 750 per 100,000 live births in 2005 to 210 per 1,000 live births in 2014-15 (National Institute of Statistics Rwanda [NISR], 2015). There was also a significant decline of newborn mortality rates from 35 to 20 per 1,000 live births (Rwanda Ministry of Health, 2016), and under-5 mortality from 152 to 50 deaths per 1,000 live births from 2005 to 2014, respectively. To further galvanize efforts to reduce maternal and child morbidity in Rwanda, the Rwanda Ministry of Health and Rwanda Biomedical Centre (RBC) collaborate with their partners to target factors that impact maternal and child health. Despite these great achievements, the number of maternal deaths and children dying under five remains high (Rwanda Demographic Health Survey [DHS], 2015). The majority of maternal deaths (61%) may be attributed to a lack of adequate knowledge and skills in the management of complications related to pregnancy and child-birth such as

inadequate management of post-partum hemorrhage (PPH) (Sayinzoga et al., 2016). As such, it is critical that all stakeholders participate in efforts to reduce these unacceptably high rates of maternal and under-five mortality.

Nurses and midwives in Rwanda have limited opportunities for education (formal and or continuing professional development) in maternal and child health (Anatole et al., 2013a). It is estimated, that over 75% of currently certified nurses and midwives did not receive formal post-secondary education (MoH, 2016). It is also the responsibility of nurses and midwives to update their knowledge and skills (Witt, 2011). However, the lack of readily available opportunities to upgrade skills and knowledge (Kasine, Babenko-Mould, & Regan, 2017), as well as the out-of-pocket costs associated with participating in appropriate skill development courses can be unfeasible for most (Ridde, 2010). It is within this context that the Training, Support, and Access Model (TSAM) provides capacity building to health care professionals, including nurses and midwives in an effort to potentially improve MNCH outcomes. By bridging the gap through mentorship in the clinical setting, it is anticipated that nurse and midwife mentors are able to enhance not only their own knowledge and skills, but also those of their mentees to ultimately reduce maternal, newborn and child mortality rates. The literature suggests that mentorship in the clinical setting by a HCP can be used as a strategy to enhance another health professionals' knowledge and skills to improve patient care practices (Mubeezi & Gidman, 2017). Mentorship is defined as a relationship based on mutual benefit, engagement and commitment in which a more experienced or more knowledgeable person (mentor) helps to guide a less experienced or less knowledgeable person (mentee) to develop specific skills and knowledge that will enhance their professional and personal growth (Abdullah et al., 2014). Mentorship is a powerful

strategy to build clinical competence for HCP (Setati & Nkosi, 2017). Mentors can facilitate knowledge and skill development among mentees with limited clinical competencies, with the ultimate aim to improve the quality of care provided to patients (Manzi et al., 2018; Mubeezi & Gidman, 2017). In particular, mentorship may improve mentees' abilities to deliver quality antenatal care and is proposed to be a promising strategy to improve the quality of care in resource-limited health care settings that face a staffing shortage, and where staff could benefit from enhanced education (Manzi et al., 2018). Mentorship has also been found to be an important part of continuous professional development (CPD) for nurses and midwives, as mentors can support mentees' professional development (Ergun, Busse, & Wong, 2017). In particular, nurse and midwife mentors can contribute to the reduction of maternal, newborn, and child mortality (MNCM) rates by supporting mentees' (novice nurses and midwives) knowledge and skill development, which could ultimately improve mentees' provision of quality care to patients (Katsikitis et al., 2013; Manzi et al., 2014; Shehab, Elnour, Al Sowaidi, & Abdulle, 2012).

Rwandan Context

Rwanda is a low-income country centrally located in Sub-Saharan Africa, bordered by Uganda to the North, Tanzania to the East, Burundi to the South and the Democratic Republic of Congo to the West. Rwanda has affectionately come to be known as the country of a “*thousand hills*” with an area of 26,338 square kilometers (UNDP, 2018). This is approximately forty-one times smaller than the size of Ontario, Canada, which has a total area of 1,076,395 square kilometers (World Population Review [WPR], 2018). Considering the area of Rwanda and the current population density of 519 per km², Rwanda is overpopulated (NIS, 2015). Currently, the population of Rwanda is

estimated at 12,659,993 (United Nations [UN], 2019), which is approximately equal to the population of 13.6 million living in the province of Ontario, Canada (WPR, 2018). Largely, 84% of Rwanda's population lives in rural areas which are considered mountainous (DHS, 2015), and almost half (49%) of the remaining proportion live in the capital city, Kigali. It is also estimated that 63% of the population lives below the international poverty line on \$1.25 USD per day, equivalent to \$1.66 CDN dollars per day (DHS, 2015; The World Bank, 2015).

Overview of the Health Care System in Rwanda

The Rwanda health care system is headed by the Ministry of Health, which governs all public and private health facilities. In Rwanda, health services are primarily delivered through the public sector, government-assisted health facilities (GAHF), private health facilities and traditional healers. Broadly, the public sector is arranged as a tiered structure, organized into three levels: central, intermediate and peripheral with each level having a defined portfolio or minimum package of activities (MPA) for which they are responsible. Coordination between the levels aims at preventing overlap and to improve health services delivery and use of resources. At the highest level (central level) the MoH develops, disseminates and coordinates the implementation of health policies, strategies and programs. The intermediate level consists of provincial health offices (11) managed under health, gender and social affairs guidelines. Lastly, the MPA of the peripheral level is perhaps the most fundamental as it is responsible for the provision of health services to the public. Each district consists of an administrative office, a district hospital (DH), primary health care facilities known as Health Centres (HC) which provide services at the sector level, health posts (HP) which provide services at the cell level, and a cadre of community health workers (CHWs) who provide health services at

the village level. All planning, managing, coordinating, evaluating and activities which occur on a daily basis fall under the purview of the peripheral level and within the health district (Figure 1).

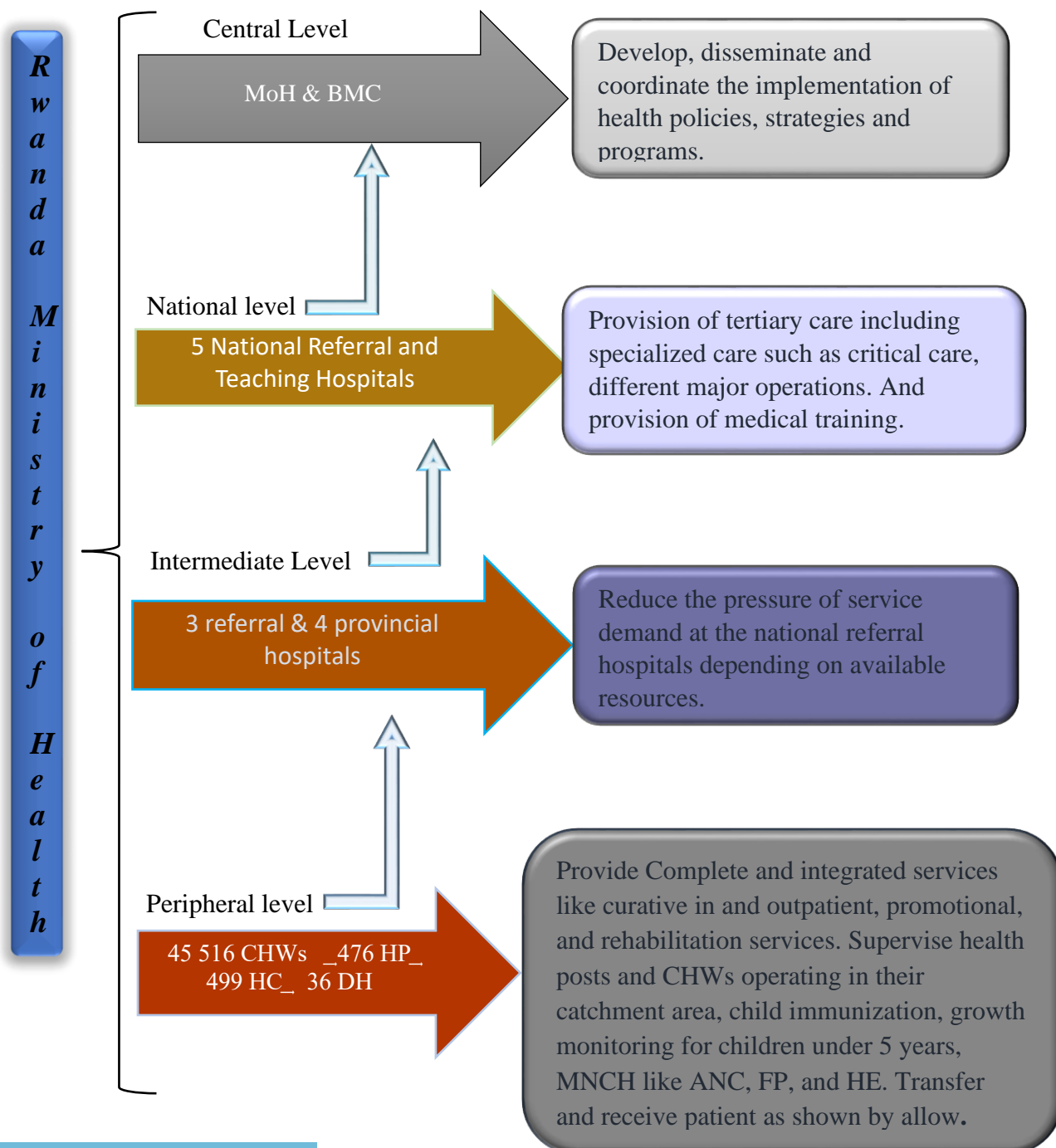


Figure 1. Representation of Health Care System in Rwanda

The minimum package of activities offered by public health institutions (PHI) are covered under Rwanda's universal health care model, the Mutuelles de Santé.

Essentially, the model is a community-based insurance scheme, whereby residents within a designated area pay a premium into a local health fund which can be drawn on when medical care is needed.

The first line of health services are provided by CHWs, when difficult cases present CHWs are trained to recognize them and provide a referral to either the health post or health centre. At the HP nurses and midwives provide basic primary care at the cell level, performing clinical consultations, diagnosis, treatment, and case management. HCP at the HP may transfer complex cases which require admittance, more attention and specialized care to the HC for further care. If appropriate care cannot be provided at the HC, these complicated and/or critical cases are then transferred to the district hospital (DH). General Practitioners (GPs) then assess, diagnose, and manage the case to the best of their capacity – knowledge, skills and available resources. Cases requiring specialized care, are more complicated or are critical are transferred to the provincial hospital, and if necessary, onward to a referral hospital.

Clinical Mentorship in Rwanda

In developing countries such as Rwanda, clinical mentorship is not a new phenomenon within the nursing and midwifery profession (Jacobs, 2017). The idea of mentorship for HCP was introduced in 2005 by the Ministry of Health in collaboration with Partners in Health (Rwanda MoH, 2015) and was integrated into the public health care system in an effort to standardize the quality of health care service delivery in all health facilities (Rwanda MoH & RBC, 2015). The goal of the MoH was to equip HCP

with clinical knowledge, skills, and attitudes to strengthen their existing competencies, gain new capacities, and enhance their confidence in the provision of quality care to patients (Rwanda Ministry of Health, 2015).

While mentorship programs can be an effective means to improving the quality of care delivered, their effectiveness can potentially be impacted by external influences and factors. These external influences can act as barriers to achieving improved MNCH outcomes, and their impact on effectiveness should always be taken into consideration. In the context of developing countries, such as Rwanda, a lack of supplies, understaffing (Niles et al., 2017; Kagabo, 2017; Manzi et al., 2014), limited organizational support, inability of patients to seek timely care from health professionals (Fischer et al., 2015), and inadequate infrastructure (Chien et al., 2016) can all affect the mentees ability to provide quality care. In the same sense, mentors in health facilities can also face many challenges such as increased workload, unclear mentorship policy, competing demands of mentoring and patient care, lack of motivation, and inadequate equipment (Jervis & Tilki, 2011; Kagabo, 2017; Manzi et al., 2014), which can affect the effectiveness of mentorship.

TSAM Project - Mentorship

The Training, Support and Access Model (TSAM) in Rwanda project was focused on maternal, newborn, and child health (MNCH) with activities supported by Global Affairs Canada from 2016 to 2021. The project involved experts from Canadian universities who worked in partnership with Rwandan experts from the University of Rwanda (the College of Medicine and Health Sciences), the Rwanda Medical and Dental Council (RMDC), the National Council of Nursing and Midwifery, and assigned district hospitals in Rwanda. Along with implementing the CMP, the TSAM overarching project

goals included increasing health professional educators' knowledge and skills in MNCH topics to more strongly support pre-service health professional students' learning and ultimate effectiveness in clinical settings post-graduation, collaborating with health professionals in service to develop and delivery educational workshops on topics such as management of post-partum hemorrhage and newborn resuscitation, and partner with community health worker representatives. The TSAM project goals were framed from an interprofessional collaborative perspective, a gender-based lens, and a foundation of health equity and social justice.

The TSAM project had a structure which included a project Director in both Canada and Rwanda, leadership teams, an administrative team, and operational or 'action' teams. Each of these teams met regularly in person in both countries or communicated via audio-video platforms to share information, discuss plans for implementing and evaluating project goals. TSAM also offered scholarships to health professionals to complete master's and PhD programs. This was highly valuable to health professional capacity building in leadership, education, and research, and graduate students were afforded the opportunity to evaluate TSAM project initiatives as part of their research work for degree completion.

Prior to the initiation of the TSAM project, Global Affairs Canada had supported a capacity building project in partnership between the same Canadian University and academic settings, practice settings, and government agencies in Rwanda. That project was focused in the Eastern province of Rwanda from 2012 to 2015 and one branch of the project involved developing, implementing, and evaluating health initiatives to improve MNCH in 9 district hospitals. During that project, a small-scale mentorship initiative was

undertaken, which showed that health professionals' knowledge and skills improved with mentoring. The findings from that project helped to drive the impetus for an expanded and formalized CMP with the TSAM in Rwanda project.

During the inception phase of the TSAM initiative, the MoH identified the Northern and Southern Provinces as areas of focus for TSAM project activities which would potentially serve to improve the delivery of MNCH care. These provinces were identified by the MoH based on greatest health care needs among expectant mothers, newborns and children. In the Northern Province, TSAM supported three district hospitals, while the other three DH were in the Southern province. In each of the above-mentioned provinces, TSAM operated in five district hospitals implementing the on-site mentorship program which took into consideration the 2016 published mentorship guidelines of the Rwandan MoH.

Once the provinces were identified and districts within each province were assigned, TSAM in collaboration with the National Council of Nurses and Midwives (NCNM), and along with the professional association, the Rwandan Association of Midwives (RAM), identified a group of nurses and midwives to be part of a multidisciplinary team of mentors which contributed to the implementation of this unique mentorship approach. About 60 health professionals, with the majority being nurses and midwives, were involved in the TSAM mentorship program. They received mentorship training and then engaged in the mentor role.

Unique to the Rwandan context, the TSAM CMP is comprised of a team of mentors, including: gynecologist, pediatrician, pediatric nurse, anesthesiologist (or anesthetist), and midwife. These mentors are assigned to a DH, where they conduct

mentorship visits each month for three consecutive days across ten selected DHs found in rural areas of the Northern and Southern provinces of Rwanda. Mentors with expertise in the provision of MNCH provide guidance and education to each of their assigned mentees at the DH. These mentees then draw on the interdisciplinary knowledge gained during mentorship to enhance their knowledge and skills in MNCH care, and to improve their daily practice with patients. It is through this lens that the current study explored the TSAM CMP, with the purpose to more fully understand nursing and midwifery mentors' experience of engaging in the mentoring role, and to understand the facilitators and challenges that accompanied such an experience.

Significance of the Study

A number of studies focusing on the impacts of mentorship have been conducted (Anatole et al., 2013b; Nakanjako et al., 2011; Ndwiga et al., 2014), each finding that mentorship has a positive impact on mentors, mentees and the nursing and midwifery professions as a whole. Many of these studies used quantitative methods, with few implementing any qualitative methods and techniques to explore the experiences of nurse and midwife mentors. Further to this, this study bridges a gap in regard to program evaluation by exploring how nurse and midwife mentors experience the clinical mentorship program implemented by TSAM. The clinical mentorship program involving nurses and midwives under the TSAM project has been implemented for a while, however, to date there have not been any studies conducted exploring nurses' and midwives' experiences as mentors participating in this program.

It was anticipated, that an understanding of the mentors' experiences would be gained, limitations of the CMP clarified, areas for improvement highlighted, and the

benefits of the approach for health professionals and patient care which allow for the CMP to work well, would be identified. Findings from the study could potentially enhance the CMP as it extends more informally post-TSAM project completion, and inform other partners and stakeholders working within the sphere of MNCH in Rwanda. The study findings could also add to the body of knowledge about the benefits and challenges of engaging in clinical mentorship as mentors as a means of increasing knowledge and skills of mentees so that they can provide safer skilled MNCH care.

Study Purpose

The purpose of this study was to explore nursing and midwifery mentors' experience of mentoring health professionals in a CMP implemented by the TSAM project in rural district hospitals in the Northern and Southern Provinces of Rwanda.

Research Question

This study was guided by the following overarching research question: What are nursing and midwifery mentors' experiences of mentoring health professionals in a CMP implemented by the TSAM project in rural district hospitals in the Northern and Southern Provinces of Rwanda? The research sub-questions were: What enabling factors and challenges were experienced by nursing and midwifery mentors during participation in the CMP with the TSAM project in Rwanda? What strategies were used by mentors in the TSAM CMP to facilitate mentees' knowledge and skill development?

Self-Declaration

I am a registered midwife in Rwanda with a bachelor's degree in Nursing Sciences and Midwifery (Honours). I have seven years work experience at the University of Rwanda where I taught normal midwifery, abnormal midwifery and reproductive health in both the Nursing and Midwifery departments. My interest in the experiences of

mentors arose when hearing about a program spearheaded by various American teaching institutions partnering with the University of Rwanda as part of a larger initiative known as the Human Resources for Health (HRH) Program.

The program introduced a twinning approach, whereby faculty from the United States (USF) were paired with faculty from the University of Rwanda (RF), as well as with clinicians and students in order to provide mentorship and increase the knowledge and skill base in specific health fields. USF from partner institutions along with RF, clinicians and students were placed across various health and teaching institutions throughout Rwanda beginning in 2012. At the time, I was working as a clinical instructor at Nyagatare School of Nursing and Midwifery, as well practicing as a registered midwife in the local DH. Through this initiative, the USF provided training and coaching which facilitated a better understanding of mentoring and the mentorship approach overall, which lead to a greater awareness around the importance, purpose and applications of mentorship within the health care setting.

Initially, I was inspired by the level of attention paid to infection control by USF nurses and midwives while caring for patients. I would then often hear RF exclaiming to other health practitioners in the clinical setting that “this is not what we were shown by the USF”. Naturally, I was intrigued in learning more about USF practices. It is from this perspective that I gained increased interest in learning about mentorship practices being applied and implemented by USF. Through numerous interactions with USF, I learned more about the twinning process and the peer to peer exchange of knowledge and skills between the USF (mentor twin) and RF (recipient twin).

With this enhanced understanding of mentorship and increased interest in the offerings of the twinning approach, I began thinking about the barriers undermining my

own practice as a health practitioner and clinical instructor. Upon deeper reflection, I then began considering ways in which improvements could be made to the quality of instruction I was providing to students and the quality of care provided to patients. Drawing on this, I decided to enroll in mentorship training in 2012, and subsequently volunteered to mentor nurses working in rural health centres in Rwanda. These experiences ultimately increased my interest in research around fleshing out nurse and midwife mentors' perceptions about their involvement in informal mentorship programs in Rwanda.

Thesis Overview

This thesis is composed of three chapters. This first chapter includes an introduction to the topic of mentorship with health professionals, an overview of the CMP implemented by TSAM as part of the MNCH in Rwanda project, background and significance of the study, the purpose of the study, research questions, and self-declaration. The second chapter is presented as a manuscript and includes the study details including a review of the literature, study design, sample and setting, methods, findings, a discussion section, implications and recommendations, and study conclusion. The third chapter concludes the thesis with a broader consideration of study implications and recommendations.

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CHAPTER TWO

MANUSCRIPT

Introduction

For centuries, individuals described as ‘mentors’ have shared their knowledge and skills with ‘mentees’, those with less expertise than their mentors in efforts to support mentees’ personal and professional development (Kashiwagi, Varkey, & Cook, 2013; Robinson, 2014; Reh, 2019). In health care settings, mentoring relationships have been documented through the years as resulting in mentees’ increased knowledge, skills and confidence in populations of physicians, nurses, and midwives (Abdullah et al., 2014; Ngoga, 2019). Much of the literature regarding the role of mentors and their impact on mentees’ development has been situated in developed nations, primarily within North American (Gandhi & Johnson, 2016) and across Western European health care contexts (Ambrosetti & Dekkers, 2010; Moore & Wang, 2017). A limited amount of research about mentoring relationships has been conducted in developing nations resulting in the need to better understand mentoring within these contexts, and the mechanisms which can be effectively implemented to develop and maintain consistent positive outcomes (Bennett, Paina, Ssenooba, Waswa, & M’Imunya, 2013; Heimbürger et al., 2011; Nakanjako et al., 2011, 2014).

To date, evidence supports the integration of both formal and informal mentorship into health care practice as a means of supporting mentees’ professional development, particularly in resource limited settings where access to educational opportunities are often limited. By developing and implementing a mentorship program for health professionals in the clinical setting, including nurses and midwives, mentoring can lead to favourable long term outcomes (Schwerdtle, Morphet, & Hall, 2017).

As such, in partnership with the Rwandan government, the Ministry of Health (MoH) in Rwanda, Global Affairs Canada, Western University, and academic and practice partners in Rwanda and Canada, a clinical mentorship program (CMP) was developed and implemented in district hospitals (DH) in the Northern and Southern Provinces of Rwanda, Africa through the Training, Support, and Access Model (TSAM) project in Rwanda. These provinces were identified by the Rwandan MoH to be of greatest need for health professional educational development to address maternal, newborn, and child health (MNCH) issues.

One of the key aims of the TSAM CMP was to prepare health professionals, such as experienced physicians, nurses and midwives working in the area of MNCH to be mentors who would then engage in the mentor role with less experienced health professional mentees in an effort to improve mentees' knowledge and skills for practice in MNCH. It was anticipated that mentees who were involved in the CMP in acute care settings could ultimately provide more knowledgeable and skilled care to address MNCH issues such as post-partum hemorrhage or neonatal asphyxia.

In relation to nurses and midwives in particular, in collaboration with the National Council of Nurses and Midwives (NCNM), the Rwandan Association of Midwives (RAM), and TSAM, a group of nurses and midwives experienced in MNCH were invited to be mentors in the CMP. About 60 health professionals, with the majority being nurses and midwives, became involved in the CMP as mentors with the TSAM project. The mentors first received education about the mentor role and about how to facilitate learning, and then these nurses and midwives engaged in the mentor role with mentees that had been identified and volunteered in a similar fashion as mentors. The selected mentees were health professionals with limited clinical knowledge and skills in MNCH,

but who worked daily with patients in rural DH. Nurse and midwife mentors with the TSAM project were assigned to 10 rural DH in the Northern and Southern provinces of Rwanda to be part of a team of five mentors that included a pediatric nurse, midwife, gynecologist, pediatrician, and an anesthesiologist (or anesthetist). As a team, the mentors initially carried out three consecutive day-long monthly visits which later evolved into mentorship visits which were carried out for three consecutive days, on a bi-monthly basis. At the time of data collection, the program had been in implementation for 23 months.

The aim of this qualitative descriptive study was to explore the experience of nurses and midwives who had engaged in the mentoring role to facilitate learning among mentees in the area of MNCH in rural DH in the Northern and Southern Provinces of Rwanda.

Background and Significance

Maternal and newborn mortality rates reported in developing countries are significantly higher than those reported in developed countries (World Health Organization [WHO], 2018; Ameh et al., 2012; De Brouwere, Richard, & Witter, 2010). In particular, maternal and newborn mortality rates are highest in developing countries within Sub-Saharan African (SSA) (Okereke et al., 2013; Grady et al., 2011). For instance, a woman living in SSA is at 47 times higher risk of dying from pregnancy and birth-related complications such as post-partum hemorrhage, as compared to a woman living in the United States (United States Agency for International Development [USAID], 2012). It is estimated that 960 women died in 2017 from pregnancy and birth-related complications in Rwanda (WHO, 2019) or 248 per 100,000 live births, as

compared to approximately 31 maternal deaths per year in Canada, which translates to 8.3 deaths per 100,000 live births (Statistics Canada, 2019).

In Rwanda, the Demographic Health Survey (2014-2015) showed a maternal mortality rate (MMR) of 210/100,000 live births. By 2017, the MMR rate was 248/100,000 live births (Knoema, 2017). In comparison, Canada reported 7 maternal deaths per 100,000 live births in 2015 (IndexMundi, 2015) and 10 maternal deaths per 100,000 live births in 2017 (CIA, 2019). In 2018, Rwanda's infant mortality rate (IMR) was 29/1000 live births, as compared to Canada with 4.5/1000 live births (Central Intelligence Agency, 2019). In relation to the United Nations Millennium Development Goals, Rwanda had set a target of decreasing the IMR to under 35 by 2015. Although that target has now been surpassed, IMR in developing countries, such as Rwanda, continue to be unacceptably high (Kassebaum et al., 2014). Along with a number of countries in East Africa, Rwanda is making progress in MNCH, but continues to face challenges in meeting the United Nations Sustainable Development Goal of Good Health and Well-being.

Many initiatives have been implemented in developing countries aimed at decreasing maternal and newborn mortality rates (Edwards & Hanke, 2013). For example, in Rwanda various stakeholders in the health sector including Partners in Health (PIH), Maternal Child Survival Program, Intrahealth, and Inshuti mu buzima implemented mentorship programs aimed at decreasing maternal and newborn mortality rates (Uwizeye et al., 2018; Manzi et al., 2014). Specifically, one type of initiative that has been reported to decrease MMR and IMR in developing countries has been clinical mentorship involving health care professionals (HCP) where mentors focus on mentees' knowledge and skill development to address MNCH issues (Manzi et al., 2018;

Schwerdtle et al., 2017). According to Manzi et al. (2018), the Mentorship Enhanced Supervision for Health Care and Quality Improvement (MESH-QI) program was implemented in Rwanda to reinforce the performance of HCP in Antenatal Care (ANC) and ultimately was reported to have reduced maternal mortality through the improved assessment of danger signs. In addition, the intensive mentorship program practiced by the Rwanda Society of Obstetrics and Gynecology was also implemented in hospitals with a high number of maternal deaths to combat the increased preventable and maternal death and had some demonstrated success (Ngoga, 2019).

In many developing countries, it is recognized that nurses and midwives are professionally obliged to update their knowledge and skills so that they can provide quality patient care (Ross, Barr, & Stevens, 2013; Witt, 2011). However, nurses and midwives in developing countries in SSA in general and in many Rwandan contexts in particular, have limited access to or availability of formal education in MNCH or in-service continuous professional development opportunities, such as that which can be provided through clinical mentorship where experienced nurses and midwives facilitate knowledge and skill development in their colleagues with less expertise or experience in addressing MNCH issues (Rwanda Ministry of Health, 2015). Yet, nurses and midwives in developing countries such as Rwanda are expected to provide patient care in limited resource acute care settings such as DHs in rural contexts without strong foundational and ongoing education in MNCH (WHO, 2013).

In Rwanda, there is a need to strengthen nurses' and midwives' capacity to provide effective and quality care in order to continue to provide quality MNCH care and ultimately decrease MMR and IMR. Research has highlighted how nurses and midwives are motivated to update their knowledge and skills to support effective care delivery

(Uwajeneza, Babenko-Mould, Evans, & Mukamana, 2015; Kasine, Babenko-Mould, & Regan, 2017). It is in this regard, the TSAM in Rwanda project partnered with the MoH and Rwandan Biomedical Centre (RBC) to develop and implement a mentorship program for HCP in practice, including nurses and midwives, in selected DHs to improve MNCH. In particular, this study was conducted to understand the ways in which mentors experienced their role of mentoring health professionals, the facilitators and barriers of the mentorship program, and the strategies used by mentors to support mentees' knowledge and skill development. It is anticipated that findings from this study will inform future CMP initiatives about how to enhance the mentor role and the effectiveness of the CMP overall, and will inform the MoH about the ways mentors can influence mentee capacity for MNCH care provision in rural DH in Rwanda. Findings from this study may also inform health administrators and HCP in developing and developed countries about the benefits and challenges of implementing clinical mentorship programs.

Literature Review

To gain an understanding about mentorship among nurses and midwives as mentors in clinical settings, a review of the literature was conducted using online searches including Allied Health Source, CINAHL, SCOPUS, PubMed databases, and web search engines such as Google Scholar. The ancestry search strategy was also used in this review to find articles that related to mentors and mentorship in developed and developing countries. The following search terms were used: *Nurse, Midwife, Mentor, Clinical Mentorship, Maternal Health, Newborn Health, and Child Health, Continuous Professional Development, Education, Mentorship*. Inclusion criteria included articles that used qualitative, quantitative, or mixed methods approaches, were written in English,

were related to mentorship in general and mentoring in particular in nursing and midwifery, and published between 2000 and 2019 to capture contemporary research about mentorship and health care professionals (Abdullah et al., 2014). Classic literature beyond the year 2000 was also included to provide a historical foundation about mentorship, and the role of mentors in particular.

The search yielded 334 research-based articles, 319 of which were discarded after review of the title and abstract due to duplication or lack of alignment with the study. As such, 16 research-based articles remained to be used in the literature review. In addition, 12 articles, considered to be classic works, were also used in the review. The literature review is organized in the following manner: First, a brief overview is presented about the historical development of mentorship. Next, mentorship of HCP in clinical settings globally are noted. Following this, mentorship in clinical settings involving HCP in developing countries is presented with a particular focus on studies involving nurses and midwives in SSA and Rwanda.

Historical Development of Mentorship

Mentoring has been defined as a reciprocal and collaborative learning relationship between two, sometimes more, individuals with mutual goals and shared accountability where the capacity of both the mentor and mentee is enhanced (Schwerdtle, Morphet, & Hall, 2017; Ehrich, Tennent, & Hansford, 2002). Mentorship was written about as early as the 8th century in the epic poem called ‘Odyssey’ written by Homer where, in Greek tradition, a mentor was considered as a loyal friend and advisor to Odysseus, the King of Ithaca. Additionally, a mentor helps promote Odysseus' son, Telemachus, while Odysseus was away fighting the Trojan War. Therefore, the mentor becomes Telemachus' teacher, coach, counselor and protector, building a relationship based on

affection and trust (Colley, 2002). The foundational elements of the mentor role have remained quite similar across centuries and mentorship has been written about in nursing and midwifery in relation to both formal and informal mentoring that takes place in academic and professional practice contexts (Eller, Lev, & Feurer, 2015; Freedman, 2009; Nowell, White, Mrklas, & Norris, 2015). Mentoring in nursing is a crucial part of the nursing profession (Veeramah, 2012), and a critical component for success in nursing science (Metcalf, 2010). It is a means by which a more experienced individual (mentor) guides a less experienced one (mentee) through knowledge transfer and collaboratively working together to build practical skills. It is expected that the mentor maintains and develops their knowledge, skills and competence to ensure they are able to effectively coach, train and guide the mentee, ultimately improving the quality of care delivered to the patient.

The WHO (2005), notes that clinical mentoring should be part of the CPD process which emphasizes the enhancement of the professional skills and competencies of the healthcare provider (mentee) to deliver sustainable high-quality clinical care. Mentorship is a powerful strategy to build clinical competence for HCP (Setati & Nkosi, 2017), and it has been found that mentored health care practitioners do a better job, advance more rapidly, and are satisfied with their job than the unmentored individuals (LaFleur & White, 2010). In addition, mentorship improves the quality of care provided to clients especially for students and personnel with a low level of knowledge and skills (Mubeezi & Gidman, 2017). This results in mentees who perform better on their tasks, advance more rapidly, and are more satisfied in their job as compared to those who do not receive mentoring (LaFleur & White, 2010).

Mentoring to facilitate professional learning of healthcare professionals has evolved since the 1970s and was officially implemented in pre-registration nursing and midwifery education in the 1980s (Mitchell & Davies, 2016). Mentoring has been used as the way to socialize new nurses into the profession, growing and developing their talent, later used as the way to retain experienced nurses and to prevent nurse shortage (Green & Jackson, 2014; Ojemeji, 2017), by reducing the number of nurses who leave the profession (Huybrecht, Loeckx, Quaeys, De Tobel, & Mistiaen, 2011). In addition, mentorship fosters and supports positive organizational cultures, upholds the standards of the profession and prepares nurse leaders for the future (LaFleur & White, 2010).

A significant body of literature has provided a variety of definitions about mentorship depending on different paradigms in many disciplines. The definitions provided aim to attribute the role of supporting, guiding, and role modeling the student in clinical areas and/or the less experienced or new nurse to cope with their new role. Researchers see mentorship as a relationship that uplifts personal and professional development (Andrews & Wallis, 1999; Wheeler & Cooper, 2010; Wagner & Seymour, 2007). In addition, Matthew (2019) showed mentoring as a fundamental form of human development where one person invests time, energy and personal knowledge in assisting the growth and ability of another person.

Many years ago, mentorship had existed in many disciplines and continues to evolve as an important strategy used by mentors to enhance mentees' ability to grow in a certain career through the mentoring process (Ehrich, Tennent, & Hansford, 2002). Therefore, a mentor is someone who helps another person to cope with a new situation, career development or personal growth, or new job or major change in personal

circumstances. In addition, the person being helped is often called the learner or the mentee (McKimm, Jollie, & Hatter, 2007). Finally, mentoring takes place when the mentor and mentee relationship is maintained over a period of time.

Mentorship of Health Care Professionals in Clinical Settings Globally

Mentorship improves the quality of care provided to clients especially for students and personnel with a low level of knowledge and skills (Mubeezi & Gidman, 2017). It has been reported as provision of a bridge from didactic training to independent clinical practice (International Training and Education Center for Health [I-TECH], 2018).

Mentorship, as a crucial part of continuous professional development (CPD), plays an important role in the development of students', nurses' and midwives' careers (Ergun, Busse, & Wong, 2017). Furthermore, mentorship enhances nursing skills, attitude, job satisfaction, and organizational commitment of new nurses (Weng et al., 2010).

Norwood (2010), conducted a study to explore the lived experience of 13 nurse mentors in various clinical settings, specialties, and roles in Columbia. The aim was to understand facilitative practices, obstacles, and benefits of mentorship through one-on-one interviews. The findings revealed that meaningful relationships between the mentor and mentee sustained the mentoring relationship. In addition, the findings revealed that a successful mentoring process depended on effective communication, active listening, and mutuality of both parties. It was also identified that mentors found preparing for the role both to be a positive and negative influential factor to mentorship. The most common obstacles mentioned included time, lack of organization support, and matching the mentor and mentee. Conversely, the perceived facilitative practices of mentorship included individual characteristics of mentors, institution, and professional factors and were primarily attributed to promoting benefits such as giving support to the profession,

stimulating mutual learning, and revitalizing the passion for nursing. Conducting a similar study, to uncover the experiences of nurses and midwives within the Rwandan context would be of great benefit.

Mentorship in Clinical Settings: Sub-Saharan Africa

According to WHO (2010), of the 68 countries with the highest burden of maternal and child mortality and account for 97% of maternal and child deaths worldwide, 53 do not meet critical human capital thresholds to provide essential health services. Generally, it is considered essential to have 23 physicians, nurses and midwives to a population of 10,000 people to deliver rudimentary health services. Sub-Saharan Africa accounts for approximately 33% of this global burden of maternal, newborn and child disease, and has only 2.8% of the health workforce (WHO, 2010). The problem is further compounded by the quality of care provided to the patient, the need to build the capacity of the workforce through implemented programs such as training and mentorship for health care providers (Schwerdtle et al., 2017), and poor adherence to national health care guidelines by HCP in SSA countries (Pembe et al., 2010). Although, in recent years extensive emphasis has been placed on improving the quality of care provided in the healthcare sectors (Gagliardi, Webster, Perrier, Bell, & Straus, 2014), there is still much to be done in regard to the enhancement of programs, organization and delivery of health care services and health outcomes (Gagliardi et al., 2014). For instance, one of the approaches applied to strengthen the capacity of HCP within the SSA context, includes didactic methods. However, evidence suggests that this type of training does not improve the quality of care provided to clients (Leslie, Gage, Nsona, Hirschhorn, & Kruk, 2016).

Furthermore, other studies have highlighted the fact that both mentors and mentees are often more motivated to participate in such initiatives due to the financial gains, rather than for the educational benefits yielded by attending training (Ridde, 2010). Similarly, Hakizimana (2007) noted that often the same participants are selected to attend the same or comparable training sessions, repeatedly. Highlighting the fact that in the majority of cases, there are other more suitable participants which are overlooked in the selection process, resulting in the same individuals gaining from the benefits of attending these sessions. As a means to circumvent this form of nepotism, and minimize the training gap, clinical mentorship has been suggested to be one of the most effective strategies to reinforce the capacity of HCP in developing their skills, and the delivery of quality care to the patient (Magge et al., 2015a; Manzi, Hirschhorn, Sherr, Chirwa, Baynes, et al., 2017).

Within the context of SSA, a number of studies have found that mentorship improves the clinical knowledge and skills of health workers especially nurses and midwives. For example, a quantitative study conducted by Okereke, Tukur, Oginni, and Obonyo (2015), in Northern Nigeria evaluating health workers' knowledge following the introduction of clinical mentoring in Jigawa State, demonstrated that clinical mentoring improves clinical knowledge of mentored personnel. This study included 33 health workers composed of 18 nurses/midwives, 4 medical officers, and 11 community health extension workers from five health facilities in Jigawa State after being involved in clinical mentoring. Questionnaires were used to collect demographic data, knowledge information of mentored health workers, and key departmental activities before and after a 6-month period of clinical mentoring. The results show that over 90% of the 33 mentored health workers demonstrated an increase in their knowledge scores. The mean

percentage score of the health workers increased significantly from the time the clinical mentoring began, from 56.3 ± 2.1 to 74.7 ± 1.7 ($p < 0.001$) after six months of clinical mentoring (Okereke et al., 2015).

In 2017, Setati and Nkosi conducted a hermeneutic phenomenological study to explore the perceptions of professional nurses on student mentorship in clinical areas in Polokwane municipality hospitals, in Limpopo province in South Africa. The study involved 16 nurse managers who managed all unit activities and were involved in the students' mentorship. The purpose of the study was to determine the meaning of engaging in the role of mentor in a CMP as perceived by senior nurses and identify the challenges and success faced during the mentorship of students in clinical practice. The findings highlighted that mentoring was perceived by these nurse mentors as a valuable tool to apply in the preparation of student nurses for their future professional role. Participants also reported that a caring attitude is important, with other factors such as time, available resources and good communication further contributing to the success of the mentoring process and perceptions about mentorship. This study shows that nurse mentors which have a positive perception of mentorship can substantively improve the capacity of the mentee.

The above findings are also consistent with the results from a qualitative study carried out in selected health facilities in Kenya, by Ndwiga et al. (2014), exploring mentors' and mentees' experiences towards peer mentorship where SRH-HIV service integration was ongoing. The study involved 35 service providers (nurses and midwives) of whom 23 were mentors and twelve were mentees. The findings from the mentors' and mentees' interviews indicate that mentorship is a feasible and acceptable method of training among mentors and mentees. In addition, participants expressed that cordial

relationships and consensus to work together to achieve a specific set of skills largely influences the success of peer mentoring. Moreover, mentorship improves the mentee's knowledge, skills, teamwork, and self-confidence in the delivery of care. Further, the findings also revealed that support from managers, the selection of a mentor, a positive work environment, sufficient supplies, and resources contributes to the success of mentorship interventions.

In Uganda, a phenomenological study conducted by Mubeezi and Gidman (2017), to explore how mentors perceived their role, knowledge, and skills in mentoring nurse students. The authors found that mentors were confident in their capacity to teach clinical skills, but they had gaps in the application of theory related to clinical skills. The study involved five qualified practicing nurses and midwives, registered with the Uganda Nurses and Midwives Council, who had participated in teaching students in clinical practice for at least a year. The reported challenges such as resource shortages, poor preparation by students for clinical, time constraints, lack of interest from the students and short clinical placements.

In summary, the literature demonstrates that SSA faces two critical issues: 1) the quantity/distribution of healthcare providers and 2) the skills of those providers, particularly in specialty areas, and that mentorship is an efficient and critical strategy to improve knowledge, skills and confidence to carry out clinical tasks. It can be considered as the critical missing link between formal academic education and CPD which can support nurses and midwives in resource limited settings, to build their capacity.

Mentorship in Nursing and Midwifery in Rwanda

The link between positive health outcomes and a sufficient number of well-qualified health workers has been well established (Dussault & Dubois, 2003; WHO,

2006; Crisp, Gawanas, & Sharp, 2008). However, training and retaining a cadre of skilled health workers and professionals to provide health services is often layered with many challenges, especially in low-and-middle-income countries. Recognizing this link and the shortage of health professionals, particularly in specialty areas, the MoH with support from the Centers for Disease Control and Prevention and The Global Fund to Fight AIDS, Tuberculosis and Malaria, jointly initiated the Human Resources for Health (HRH) Program. Beginning in 2012, this innovative program operated for seven years, with the purpose of increasing the number of highly qualified health professionals to provide quality health care in Rwanda. The program focused on training Rwandan health professionals, in-country, by providing specialty and subspecialty training by faculty from 23 United States teaching institutions (USI) in the fields of health management, public health, medicine, dentistry, nursing and midwifery. The faculty from these USI (USF) were “twinning” with Rwandan faculty (RF) at clinical teaching sites and universities with the goal of transferring skills to the RF, who in turn will continue to educate future health professionals and mentor new RF (Ndenga et al., 2016). Twinning as a form of mentorship is a partnering program that contributes to the sustainable improvement of service delivery and safety (Makokha et al., 2014).

The twinning approach became the cornerstone of the HRH program in Rwanda and paved the path for similar mentorship interventions to be implemented. An assessment of the twinning program showed that the link between satisfaction, spending time with the HRH twin, goal setting and perceived skills transfer was very strong (Ndenga et al., 2017).

All USF and RF in the program between August 2012 and May 2014 were invited to participate in a survey to share their experiences: exploring goal setting, satisfaction

and perceptions of the effectiveness of skill transfer with this approach. Data was collected using a 71-item questionnaire for RF and an 85-item questionnaire for USF, administered through Survey Monkey®.

All participants (n=112 USF and n=145 RF) were invited to use the platform to self-report their experiences. The response rate among RF was 49% ($n = 71/145$) and among USF the rate was 93% ($n = 107/112$). A total of 69 physicians (55, 14), 68 nurses and midwives (36, 32), and health managers 12 (7, 5), respectively, shared their views about the three operational outcomes: 1) goal setting; (2) perceived skill transfer from USF and RF, and (3) satisfaction with the twinning process. The difference in the number of questions between the USF and RF questionnaires resulted from the need to include additional questions for preparation and adjustment of USF to Rwanda. The results showed that 89% of RF and 71% of USF set goals. Bivariate analysis showed that 52% of RF reported that the skills were effectively transferred from their twin compared to less than 10% of USF. Thirty-eight percent (38%) of RF and 28% of USF reported satisfaction with the program. The HRH helped RF to improve their skills using the twinning program as a means to transfer skills. Of special note, is the remarkable difference in perception around effective skill transfer. This could potentially originate from the gap the RF might have prior to the twinning program and the extent to which the USF wished to transfer the skills. The study was important to quantitatively look at both parties (USF and RF) to improve the mentioned program. However, the study did not look at the experiences of the USF as mentors in a twinning role which is a form of mentorship and thus supports the need for this study.

In Rwanda, experienced clinical mentors from district hospitals typically meet with mentees at the health center level. Manzi et al., (2014), found that mentees perceived

interactive and collaborative capacity-building as an approach to build their confidence not only in integrated management of childhood illness (IMCI) services but also in the nursing care provided in general. Using focus group discussions and in-depth interviews with health workers, they explored the effectiveness of clinical mentorship to improve pediatric quality of care at the health center level in rural Rwanda. The aim of the study was to investigate the perceived benefits and acceptability of the Mentoring and Enhanced Supervision for Healthcare (MESH) providers program at HC for healthcare worker (HCW), mentees providing IMCI services, health center directors, and district hospital (DH) directors. Forty-four health workers from Kirehe and Southern Kayonza districts participated, including 40 direct HCW recipients of MESH from 21 supported health centers, two district hospital directors, and 2 IMCI clinical mentors. The findings reveal that the respondents perceived interactive and collaborative capacity-building as an approach to build their confidence not only in IMCI but also in the nursing care provided. In general, MESH was appreciated by respondents and helped them terminate poor practices during the provision of routine care and were able to provide better and more efficient care. While this study looked at the outcomes of mentorship, it also did not explore the nurses or midwives experiences as mentors.

A follow-up study, in the same districts assessed the effectiveness of the MESH program. Researchers reviewed the antenatal care checklists completed from October 2010 to May 2011 (n = 330) before the implementation of the mentorship program as a baseline measurement. The checklists completed from February to November 2012 during program implementation were then compared against the baseline. The study assessed the effect of the Mentorship, Enhanced Supervision for Healthcare providers and Quality Improvement (MESH-QI) intervention. The results of the study showed that the

MESH-QI program reinforced the quality of antenatal care (ANC) as shown by the improvement in the danger sign assessment score from 2.1% at baseline to 84.2% after MESH-QI ($p < 0.001$). The results showed an improvement when controlling for focused ANC-training status and level of nurse mentees' education. The assessment of danger signs improved significantly for non-first ANC visits in both districts of which had lower-danger sign assessment scores at baseline. The findings revealed that MESH-QI is a promising intervention to improve quality of care in resource-limited settings facing staffing challenges, including low levels of training and education. The study revealed the benefits of mentorship, in this regard, hearing from nurse and midwife mentors would be of great value.

Benefits and Facilitators of Mentorship for Mentors

Many factors have been noted in the literature which facilitate the mentorship process. Nurses and midwives worldwide benefit from participating as mentors in mentorship formal programs and informal mentoring professional relationships. Prior to the initiation of the mentoring role, the mentor should possess the required competencies (knowledge, skills, and attitudes) in the area of mentorship to transmit with confidence knowledge and skills to mentees (Kok et al., 2015). To successfully achieve this, the mentor should be able to create a positive relationship to facilitate an effective learning environment (Gagliardi, Straus, Shojania, & Urbach, 2014). Additionally, trust must be established and maintained throughout the process of clinical mentorship. Therefore, with trust and good understanding, clear goals in regard to mentorship may be established and achieved. This can lead to the success of the mentorship process for both the mentor and mentee.

Hamburg (2013), noted that through knowledge transfer, employees can gain the required skills to succeed in their roles. In this context, the skilled mentors prepare mentees to assume more advanced responsibilities overtime. In clinical mentorship, knowledge and skills can be transmitted through group discussion, bedside teaching, in-vivo demonstration and in-vivo practice. The study by Wolak, McCann, Queen, Madigan, and Letvak (2009), used focus group methods in their study of the experiences of mentees and mentors in a structured mentorship program. Generally, mentors expressed the joy of seeing the mentees growing in the profession. Ndwiga et al. (2014) reasoned that through mentorship, mentors benefit more as they may be recognized and appreciated by their managers. Whereas, the majority of nurse mentees express the motivation to provide quality care services to the clients. Furthermore, Ndayambaje et al. and Ndayisaba et al. (2017), reveal that mentorship increases mentees' competence in the provision of care and reduces the referral rates at the higher-level health care facilities.

Research literature in nursing and midwifery reveals a significant challenge in retaining quality staff (WHO, 2005). However, mentorship has been used as a way to avert staff shortages as experienced nurses could be retained to mentor nurses who are new graduates or new to a particular unit, thereby maintaining a cohort of more experienced and developing nurses (Huybrecht et al., 2011). In the same line, LaFleur also identified mentorship as an invaluable tool that attracts and retains new nurse leaders. Furthermore, through mentorship, HCP can grow in the profession and develop their talent via the socialization of new nurses in the profession (Green & Jackson, 2014). The same author noticed that mentorship supports the organization's culture.

LaFleur and White (2010), highlight that mentorship prepares the nurse for carrying future leadership roles and to uphold the standards of the profession. They

noticed that mentorship can rapidly accelerate the advancement of the mentored individual (mentor and mentee) and this results in better performance in their role, which leads to better job satisfaction as compared to unmentored individuals. In addition, Mubeezi and Gidman (2017), indicate that mentorship improves the quality of care provided by the student (mentee) to the client.

Barriers/Challenges for Mentors in the Mentorship Process

Notwithstanding the type of clinical mentorship program used, mentors pursuing their mentoring role consistently expressed a challenge of lacking time resulting from increased clinical workloads which were noted as the most frequent barrier (Lafleur & White, 2010). In addition, the lack of self-confidence as a mentor, lack of confidence in interpersonal skills, personal skills and qualities were also noted as a barrier for mentors. A significant body of research originating from health centers in SSA also strongly demonstrates that the mentorship process is challenged by the shortage of staff (Ajeani et al., 2017; Green, Azevedo, et al., 2014; Magge et al., 2015b; Manzi, Hirschhorn, Sherr, Chirwa, & Baynes, 2017; Manzi et al., 2014a, 2013; Naikoba et al., 2017; Ndayambaje et al., 2017; Ndayisaba et al., 2017; Ndwiga et al., 2014). These studies strive to understand the effectiveness of various mentorship programs implemented in SSA by different non-governmental organizations (NGOs), in partnership with the MoH to address the knowledge gap in that area. All the NGOs intended to improve the quality of care provided to the patient by strengthening the health worker skills, especially the nurse's skills.

Summary of the Literature

Mentorship has been evolving in the domain of nursing since approximately 1970 (Mitchell & Davies, 2016). Mentorship supports the profession, stimulates mutual

learning, and revitalizes the passion for nursing (Norwood & Hutchison, 2010). The studies reviewed also show that mentorship helps students to meet their expectations in clinical placement (Myall, Levett-Jones, & Lathlean, 2008). In Sub-Saharan Africa, mentorship has been shown to be effective to improve clinical knowledge and skills of the mentored healthcare providers (Okereke, Tukur, Oginni, & Obonyo, 2015; Setati & Nkosi, 2017; Green et al., 2014; Ndwiga et al., 2014), and the mentorship implemented in Rwanda through the HRH program showed that the mentees developed important clinical and interpersonal skills and were satisfied by the mentorship program (Ndenga et al., 2016). The mentorship and enhanced supervision for healthcare providers (MESH) and quality improvements implemented in Kayonza and Kirehe, helped the mentees to avoid poor practices during routine care and provided better and more efficient care to the clients (Manzi et al., 2018). Many factors have been noted in the literature to facilitate the mentorship process such as training of mentors to gain knowledge, skills, and attitude required in mentorship, good environment, mutual trust, and the establishment of goal setting (Gagliardi, Webster, Perrier, Bell, & Straus, 2014; Kok et al., 2015). While mentorship does offer many benefits, challenges were identified in the literature such as the shortage of staff and resources, poor preparation of mentees for clinical, time constraints, lack of interest and short clinical placements for students (Ajeani et al., 2017; Green & Jackson, 2014; Magge et al., 2015; Manzi et al., 2017; Manzi et al., 2014; Naikoba et al., 2017; Ndayambaje, Anderson, Yoder, & Ewing, 2017; Ndayisaba et al., 2017; Ndwiga et al., 2014).

Statement of the Purpose

The purpose of this study was to explore nursing and midwifery mentors' experience of mentoring while involved in a CMP implemented by the TSAM project in rural district hospitals in the Northern and Southern Provinces of Rwanda.

Research Question

This study was guided by the following research question: What are nursing and midwifery mentors' experience of mentoring while involved in a CMP implemented by the TSAM project in rural district hospitals in the Northern and Southern Provinces of Rwanda? The research sub-questions were: What facilitators and challenges were experienced by nursing and midwifery mentors who participated in the CMP implemented by the TSAM project in Rwanda? What strategies were used by mentors in the TSAM CMP to facilitate mentees' knowledge and skill development?

Methodology

Design

A descriptive qualitative design was used to explore the experience of mentoring from the perspective of nurses and midwives as mentors involved in a CMP implemented by the TSAM project in its supported health settings in Rwanda. Wanting to gain a rich description of individuals' experiences of the phenomenon under study, a descriptive qualitative design (Sandelowski, 2010) was implemented. Unlike other methodologies, such as ethnography or phenomenology that are constructed on a particular technique and procedures, the qualitative descriptive design is grounded in the general principles of naturalistic inquiry (Hyejin, Sefcik, & Bradway, 2004 ; Sandelowski, 2010).

Lambert and Lambert (2012), state the goal of qualitative descriptive study design is to garner a comprehensive summary of a specific phenomenon experienced by

individuals or a group of individuals in everyday life. Many authors (Sandelowski, 2004; 2010) propose that a qualitative descriptive design uses an approach that allows in-depth understanding and rich descriptions of experiences, and findings that respond to the local conditions. As such, qualitative description aims to present the phenomenon to its natural occurrence. The descriptive qualitative approach clearly helps to present the study findings in a clear language that describes the phenomena under study (Colorafi & Evans, 2016). The use of this approach in studies offers the opportunity to provide a comprehensive summary of accurate participants' experiences (Colorafi & Evans, 2016); Sandelowski, 2010). Given the limited research using a qualitative descriptive approach in the Rwandan context about the phenomenon of being a mentor in a CMP, and with a sample of nurses and midwives, this type of design is well suited for this study.

Sampling Strategy

Using both convenience and purposive sampling (Sandelowski, 1995) participants were selected based on their willingness to participate in the study and who could share their experience of participating in the TSAM CMP, as mentors, as they were considered knowledgeable about the phenomenon under study. Fifteen mentors (nine midwives and six nurses), from a total of 60 mentors who were identified and selected by the TSAM project in collaboration with professional bodies and associations from a large number of HCP in the TSAM assigned district hospitals, participated in the study. At the start of the CMP, these mentors received mentorship training that was provided by TSAM. It was believed that they had developed experiences through the mentoring process and were able to provide a deep understanding of their experiences of having engaged in the mentoring role.

Study inclusion criteria were as follows: nurses and midwives who were selected to be mentors in the TSAM project in Rwanda, had received the pre-mentorship training, had actively participated in the CMP, were able to speak and read English or Kinyarwanda, and consented to have their interview digitally-audio recorded. The nurse or midwife who did not fulfill the above-mentioned criteria, were not actively participating in the mentorship project and/or had not consented to be interviewed and recorded were excluded from this study. It was anticipated that approximately ten to twenty participants would be interviewed. Given that qualitative research does not rely on specific sample size calculations (Polit & Beck, 2017), the researcher decided to suspend the interview process after the 15th interview as a result of saturation. Twenty mentors had volunteered to participate in the study, however after in-depth interviews with 15 of the volunteers, no new information was being gleaned.

Study Setting

This study took place in Rwanda. Rwanda is a small and landlocked East African country located in the great lakes region in Sub-Saharan Africa. The TSAM CMP was implemented across ten district hospitals (DH) in rural areas of Rwanda. Five of these hospitals, are located in the north of the country. The remaining five are located in the southern province of Rwanda. These sites were selected as they fall within the assigned districts allocated to the project by the MoH.

Recruitment of Participants

After receiving ethics approval from Western University (Appendix A) and the Institutional Review Board (IRB) of the University of Rwanda (Appendix B), the Rwanda TSAM project manager leading the CMP made initial contact with the sixty potential participants who attended the mentorship training. At the same time, the TSAM

project manager provided the letter of information containing the study information and researcher's contact information and consent form (Appendix C) and invited the interested individuals to notify the researcher. Twenty mentors showed their interest in participating in the study and contacted the researcher using the provided email address. The interested individuals provided their contact information their name, place of work, contact details - email address and telephone number. The interested mentors, together with the researcher, scheduled a mutually convenient date, time, and location for the interview to take place.

Prior to initiation of the data collection process, each individual was provided with a hardcopy of the letter of information and consent form for review. The interested nurse or midwife mentor was asked if they had any study-related questions, and those questions were addressed. Then, the researcher requested the individuals to sign the study consent form if they wished to proceed with being digitally audio-recorded for the study. Participant recruitment continued until it was determined that data saturation was reached. It was determined that data saturation was achieved at the 15th participant among the 20 nurse and midwife mentors who volunteered to participate in the study, as there was no new information shared from the participants.

This approach was suitable for the study purpose to uncover the common themes in nurses' and midwives' experience as mentors in the CMP implemented in Rwanda. The semi-structured interviews enabled the researcher to make specific inquiries and for participants to be at liberty to tell their story freely in their own words (Polit & Beck, 2014).

Data Collection Process

A semi-structured interview guide (Appendix D) was used to collect the primary data through in-person one-to-one individual interviews. The data collection was conducted from April to May 2019. Using a telephone call, the researcher and the interested participant communicated to identify a convenient and comfortable location for the participant to be interviewed. Participants interviewed in different places depending on their choice. Some chose their personal office, home, or other convenient and comfortable settings. The interested participant was reminded about the interview a day before about the meeting. Three participants changed the originally scheduled time of their interviews due to conflicting work schedules, nonetheless the interview was rescheduled and conducted on an alternate day.

The interview guide included questions such as, "Tell me about your experience as a TSAM mentor after receiving the mentorship training." Participants were given an option to be interviewed in either Kinyarwanda or the English language, based on their aptness to express themselves freely and their ability to explain concepts. Probing questions accompanied the semi-structured interview guide as a means to encourage participants to provide richer responses about their experiences. To capture all the information, and to avoid the distraction that could result from taking notes during interviews, each individual interview was digitally audio-recorded with the prior consent of each participant. Of the fifteen participants interviewed, six of them were conducted in English and the remaining 9 were conducted in Kinyarwanda. The shortest interview lasted 25 minutes and 15 seconds, and the longest interview lasted for 67 minutes and 52 seconds.

Field notes were made by the researcher after each interview to document observations, including facial expressions and emotions expressed during the interview. According to Phillippi and Lauderdale (2018), these field notes can corroborate what was expressed orally, and also provide additional insights. To ensure the integrity of the data, the audio-recorded data collected from the interviews was transcribed verbatim by a hired transcriptionist who signed a confidentiality agreement (Appendix E). Given that English and Kinyarwanda are both official languages in Rwanda and either language could be used for the interview, the transcripts in Kinyarwanda were then translated to English by the researcher who is fluent in both languages. At the end of each interview, participants were encouraged to contact the researcher if they wanted to provide supplementary information or input, and that it would be considered for inclusion, if shared prior to the data analysis phase.

Data Analysis

The data analysis for this study was guided by an inductive content analysis (Erlingson & Brysiewicz, 2017). When there is a limitation in the literature about the phenomenon of interest like in the Rwandan context, Noble and Smith (2014) suggest that this type of analysis is a suitable technique to be used in qualitative research. Inductive content analysis includes open coding, creation of categories and identification of themes from the collected data (Noble & Smith, 2014). Given the scarcity of literature about the experiences of nurses and midwives as mentors after participating in mentorship training, this process of data analysis was appropriate for the current study.

After the initial interview had been conducted, the de-identified transcribed digital audio-recordings were attentively compared to the original audio recordings and field notes to ensure the interviewee data was accurately transcribed and complete. As

suggested by (Sutton & Austin, 2015), all transcribed data (interviews and field notes) were read several times to gain a sense of the whole and to increase the validity of the results. As a first step, the researcher read participant transcripts, while at the same time listening to the corresponding audio-recordings to ensure the accuracy and completeness of the transcribed data. Afterwards, to gain a more complete understanding of what had been said by the participant, the researcher read and re-read each transcript in its entirety. To better organize the transcribed data, the management software tool NVivo Pro, version 12 was used. The researcher repeatedly read each transcript then proceeded with the process of open coding, by carrying out a line by line review of the participants' transcripts. Sandelowski (2010), indicates that coding involves circling the piece of text in a transcript and assigning a code to it. To carry this out, the researcher went back and forth to compare participants' comments. The researcher highlighted the pieces of text from each interview and afterward assigned an appropriate code to it. These pieces of text are words, phrases and sentences contained in each transcript. The researcher established a coding guide which contained the codes from the transcripts. Similar codes were assembled together to form categories that portray similar ideas or concepts. The research team reviewed the initial categories to determine the best fit. Afterwards, the linkages between categories lead to further conceptualization leading to distinct themes emerging from the data. Thorne (2016) suggests that through this process, a rich and detailed understanding of the phenomenon under study is created.

These themes described the experience of nurses and midwives as mentors in a clinical mentorship program after receiving the mentorship training. Descriptive statistics were used to analyze demographic data, and a concise account of the data was prepared to present the findings.

Evaluative Criteria for Trustworthiness

To demonstrate the rigor of this study, four criteria were identified by Lincoln and Guba (1985), to be used to ensure trustworthiness, namely: credibility, transferability, dependability, and confirmability.

Credibility is the degree by which the results from a study remain truthful to the participants (Elo et al., 2014; Lincoln & Guba, 1985). Lincoln and Guba (1985), see credibility as the extent to which the interpretations illustrate the experience of the participants. As Lincoln and Guba (2007), suggested, the researcher ensured or established the tenet of credibility. Through a purposive selection of the participants who had the experience of engaging in clinical mentorship as mentors after receiving the mentorship training. The conversation between the researcher and participants during the interview and probing questions allowed the participants to provide a detailed and rich description of their experience during the period of mentorship. Similarly, to Schwandt, Lincoln, & Guba (2007) suggestion, the researcher and the supervisor discussed the developing themes describing the phenomenon under study.

Transferability is concerned with the level to which the results of one study can be applied to other situations (Shenton, 2004). To allow readers to have a clear understanding of the phenomena, the researcher provided a thick description of the phenomena under study, thereby enabling readers to compare the instances the phenomenon was described in the research report with those that they have seen emerge in their situations (Lincoln & Guba, 2007). Shenton (2004) notes that to assess the extent to which findings may be true of people in other settings, similar projects employing the same methods but conducted in different environments could well be of great value. In this study, the researcher enhanced transferability through the deep description of the

study setting, the data collection method used, length of data collection sessions and the time period over which the data was collected.

Dependability refers to the issue of reliability, to show if the work is repeatable - in the same participants, the same context, with the same methods, and able to obtain the same results (Shenton, 2004). However, the varying nature of the phenomena examined by qualitative researchers renders such provisions problematic (Creswell, 2014). To address the dependability issue, the processes of the study were recorded and documented in detail creating an audit trail. The data was collected similarly from one participant to another, and the interview questions were kept in the same vein with the study purpose. This was done to enable future researchers to repeat the work and see if it will generate similar findings.

Confirmability refers to the objectivity of the study. It is concerned with the level to which the findings of the study are formed by the participant experience and not researcher bias, interest or motivation (Guba & Lincoln, 1985). Steps must be taken to help ensure as far as possible that the work's findings are the result of the experiences and ideas of the participants, rather than the characteristics and preferences of the researcher (Shenton, 2004). In addition, Miles and Huberman (1994) consider that a key criterion for confirmability is the degree to which the researcher declares his or her own predispositions. To guarantee the confirmability, an audit trail was gathered during the study to provide a record of how the data ultimately lead to the development of recommendations. This is expected to allow the reader to trace the course of the research step-by-step via the decisions made and procedures described.

Ethical Considerations

Ethics approval to conduct this study was obtained from the Research Ethics Board for Health Sciences Research Involving Human Subjects at Western University and the College of Medicine and Health Sciences (CMHS), Institutional Review Board at the University of Rwanda. Prior to the voluntary participation in this study, participants expressed their satisfaction with the explanation provided by the researcher about the letter of information sent to them by the TSAM MNCH manager on behalf of the researcher and voluntarily signed consent. Confidentiality and anonymity were observed throughout this study. Participants were asked to refrain from disclosing any information that could identify them or others. Any identified information disclosed during the interview was not included in the transcripts. Participants were also reminded not to respond to any question they felt uncomfortable replying to. The participants had the right to stop participating in the interview at any time and the right to stop or withdraw from the study at any time. If any participant decided to withdraw from this study prior to the analysis phase, their data would be removed and destroyed permanently from the study database.

The collected data were de-identified and transcribed by a hired transcriptionist who signed a confidentiality agreement prior to accessing the transcripts. The de-identified and numerically coded transcribed data were stored in an electronic password protected NVivo file on the researcher's encrypted and password-protected flash drive. The hardcopy information, such as transcripts and consent forms, were kept in a locked cabinet in the principal investigator's office. The digital audio-recording device was stored in the graduate student researcher's and transcriptionist's home in a locked cabinet. The information on this device was deleted after transcription and after the accuracy of

transcriptions was checked. As per Western University's policy, all hard copies of documents and electronic files will be destroyed after seven years. After this time period, all paper copies will be securely shredded, and all electronic information will be permanently deleted.

Study Findings

This study findings emanated from a sample of 15 female nurses and midwife mentors (NMM) who voluntary participated in the TSAM CMP in the ten assigned DH in the Northern and Southern provinces of Rwanda.

With consent, fifteen (15) interviews were conducted with nurse and midwife mentors, in the previously arranged space of their choice. All mentors were female, with the majority, 60% being between the ages of 31 and 40 years old. The youngest mentor was 31 years old, and the oldest was 56 years old. Most of the participants interviewed were midwives (60%), with the remaining 40% being nurses. A large number of these mentors had received a bachelor's level degree 46.66%, 40% received an advanced diploma in their field, and 13.33% held a master's degree. Sixty percent (60%) had 1-10 years of professional experience, and 26.6% had 11-20 years of professional experience. Only one participant had more than 20 years of experience in her field. Almost 27% of the participants had mentorship experience prior to engaging in a mentor role with the TSAM project. The participants mentored their mentees in the following areas: maternity (53.33%), neonatology (13.33%), and pediatrics (26.66%).

Table 1

Descriptive Statistics: Age and Professional Years for Participants

	N	Minimum	Maximum	Mean	Std. Deviation
Age of Participants	15	31	56	40.33	6.914
Professional years of experience	15	7	20	12.33	4.353
Valid N (listwise)	15				

Thematic Findings

The analysis yielded the following five main themes: (1) Mentors collaborating in teams; 2) Facilitating the mentorship process; 3) Mentors' perceptions of their role in the TSAM CMP; 4) Challenges mentors encountered while engaged in the role with TSAM CMP, and 5) Mentors' recommendations to support future engagement in the role. Sub-themes within each of the five main themes are presented and discussed below.

Theme One: Mentors Collaborating in Teams

The TSAM CMP presented an interprofessional team approach to learning and care provision. The teams were generally composed of mentors with a professional focus in maternal and child health. A typical mentor team was composed of a gynecologist, midwife, pediatrician, pediatric nurse and anesthesiologist (or anesthetist). Each mentor in the team was assigned to work with one or more mentees at an assigned hospital. Prior to engaging in the mentoring relationship with mentees, mentors went to their assigned hospital as a team for one full day to gain a sense of the hospital location, layout, and to initiate relationships with hospital team members. During the mentorship period when the

mentors were on site for a session with their mentees, one of the mentors would prepare and present a topic of interest in a morning meeting. For this meeting, nurses, midwives, physicians, medical directors, and the in-charge of nurse, in-charges were invited to participate. Engaging each of these HCP presented an opportunity to discuss the topic of interest in relation to maternal and child health. After these morning presentations, each mentor would connect with their mentees and work together in their unit to facilitate mentees' knowledge, judgment, and skill development in relation to the individual patient and family health situations occurring in the units that day.

As well as working in the units, mentors would accompany their mentees as a team to the simulation lab in the hospital to facilitate mentees' learning about maternal and child health issues so that mentees could be prepared to address similar health issues in a real-world context when the mentors might not be presented. Mentor 14 stated, "...Where we find that there is a gap, we emphasize on learning. We tried to do some demonstrations, we did bedside teaching on the real case, and where there is no case, we did simulation ". Whenever there was a complicated case or a patient who needed to receive a variety of interventions, the team of mentors and mentees worked together with that patient and everyone assumed a role in the health care team to provide care.

As one mentor noted,

I can remember one time we had a case of post-partum hemorrhage. The woman was bleeding, and we had to work as a team. There was an anesthetist there, there was a pediatrician waiting to receive the baby, and thus give a good example to nurses and midwives and to the whole staff who are seeing that we are collaborating... we worked as a team, hand in hand to provide quality care

(Participant 1).

As shared by the mentor above, the collaborative environment fostered by the team provided a sense of collegiality, creating a safe space where problems could be addressed together. All participants really welcomed the innovative design of the TSAM mentorship program and valued the interprofessional collaboration the design nurtured.

What I like a lot with the TSAM mentorship program is the team working because as we go to the clinical setting, we go as a team. There is a gynecologist, midwife, pediatrician, pediatric nurse, and there is an anesthesiologist or anesthesiologist, so we work as a team, and then we collaborate (Participant 1).

The unique design of the mentoring team, promoted a mentorship culture based on the complementarity of each of the specialties. This enhanced the willingness of the mentors to collaboratively work together towards a common goal without antagonistic competitiveness.

Because in our team, we are five mentors here, and we also have the team leader. When you have a team leader, she organizes the team. When we have the mentorship, she can decide for you, maybe you will prepare something to be presented in the staff meeting. Together we can share and give her the addition on a topic to be presented (Participant 9).

All participants keenly noted the benefits of the team mentorship program, which they felt strongly facilitated the mentorship process by encouraging collaboration between mentors.

The team members move together from the TSAM office to the field... [and], whenever needed, they used to work together to teach the mentees

and save the life of the patients at a single point. This collaboration was highly appreciated by the participants.

"...the group is very, very collaborative. We are brothers and sisters"

(Participant 6).

I'm with a pediatrician, and we work together. When there is something missing during my presentation, he can complement in order to have a common understanding. We share the idea during our mentorship role and help each other to take care of patients (participant 9).

Furthermore, the training offered to the mentors by TSAM helped to inform the mentors' attitudes towards one another, encouraging a healthy respect for the expertise and knowledge each mentor brought to the team. Team members considered one another as equals, and team management was horizontal rather than vertical and hierarchical. Strong relationships between the mentors were forged on the common task of facilitating the professional development of mentees, rather than professional dominance through power dynamics, judgement, or criticism. This attitude nurtured good communication between the mentors, and also between the mentors and mentees, supporting an atmosphere which was conducive to learning for all.

You see, mentorship is on a friendly basis between mentor and mentee. If you don't create a friendly environment between you and your mentees, they see you as someone who came to give order and does not follow your instructions. We did not apply for order on them. We were part of the team, and we were even at their level, we discussed, we make them our friends then, they felt free to us and asks us wherever they need our support (Participant 5).

Theme Two: Facilitating the Mentorship Process

Sub-Theme 2.1: Conducive Environment (Hospitals). Most of the participants stated that mentorship would not have been successful without the facilitation of hospital administrators and management. Hospital managers consistently introduced and welcomed the team of mentors each time they arrived for the mentorship visit. This helped each team and individual mentor to feel as though they were working in an inclusive, supportive and safe environment. The welcoming attitude of hospital administrators and management created an enthusiasm and passion among the mentors which in turn was reflected in the pride they demonstrated while mentoring their mentees.

The hospital director, the director of nursing, were always aware when we go, and during morning staff meeting, they always introduced the mentor group to the whole staff. They know we are there to assist them through mentorship. So any person who may need our contribution or our support they were always welcomed (Participant 1).

In the same vein, hospital management actively supported and informed the selection process of mentees since they are the most familiar with their HCP team, and able to recognize the characteristics within each nurse and midwife, which would make them an ideal candidate to receive mentoring; "the institution just help us to choose those mentees; they encouraged them to be mentees" (Participant 6). Acknowledging the value of the mentorship visits, hospital administration often made arrangements to ensure that mentees were available for scheduled mentorship visits:

The hospital setting they are helpful because they availed mentees and the hospital managers served also as a facilitators (Participant 1).

When you want to do something we communicate with the institution, and they give the facilitation, which means even if some mentees could be absent, but they tried their best (Participant 9).

Sub-Theme 2.2: Support from TSAM. Participants acknowledged both the financial and non-financial contributions provided by the TSAM project, which allowed each of them to fulfill their roles and responsibilities as mentors more effectively and efficiently. TSAM provided operational and logistical support to ensure mentorship visits continued as planned, on schedule and with the appropriate mentorship tools. Recognizing the commitment and contributions required of each mentor, the project provided a stipend while they engaged in, in-field mentorship activities. An established amount was provided to each mentor to cover incidentals while in the field, such as daily per diem, transportation costs, accommodation fees and meals. The stipend helped to offset costs associated with participating in the mentorship program as mentors often had to cancel participating in other income generating activities.

...TSAM has always been helpful to us. They helped mentors to implement mentorship because they always facilitate logistically by providing cars [transportation], giving facilitation fees, and providing mentorship tools (Participant 1).

Participants indicated that they were sufficiently equipped with the knowledge and skills to achieve their goals successfully.

The training offered by TSAM equipped me with knowledge and skills in regard to mentorship conduct (Participant 4).

The training we received, it is about the main competencies to focus on during mentorship, and then during that training, we reviewed the different technique,

procedures like the procedures to help mother survive, the procedures to help baby survive. And those training equipped me with knowledge, skills and attitude to help mentees (Participant 1).

Participants also commonly agreed that the pre-mentorship training provided around the process of mentorship helped the mentors to feel confident in carrying out their mentorship role. Additionally, the provision of equipment to use during mentorship was perceived by the mentors as the factor that facilitated their efforts the most to translate knowledge and skills to mentees:

Yeah of course, because, I always refer to those materials we used during the training at the beginning...sometimes I have to make a presentation, to mentees or to all staffs in clinical setting, then, I refer to the presentation we had during the mentorship training to also provide it to mentees and other staffs (Participant 1).

We received the training about how to conduct mentorship, and we were also trained on specific topic like stuff related to maternal and under-five mortality rates reduction. After being trained I engaged in mentor role. Although, sometime may be a vocation to teach the mentees, but when you receive the training of course there is an increase of knowledge and skills (Participant 4).

TSAM project prepared us through trainings, they gave us trainings on different things, so we can go with a good package to complete the task in mentorship (Participant 7).

Lastly, the TSAM manager leading the mentorship program would often conduct site visits to ensure that all aspects of the program were operating well. This hands-on

approach motivated mentors and fueled their enthusiasm since they felt supported both in and out of the field. This proactive attitude towards problem solving, consistent engagement with the program and dynamic improvement processes based on feedback from the field increased the acceptability of the mentorship program among hospital administrators and mentees.

Theme Three: Mentors' Perceptions of their Role in the TSAM CMP

Sub-Theme 3.1: Mentors' Perceived Benefits for Themselves. The participants showed that their knowledge and practice improved through the TSAM CMP. To mentor the mentees, mentors had to keep their own skills and knowledge updated to address the needs of mentees. Prior to mentorship, the mentors were prepared for a mentoring role, receiving training specifically on mentorship techniques. Even if the content of the training was not new to them, mentors expressed that the refreshed knowledge and skills gained through the training received was beneficial. For instance, Participant (14) shared that "TSAM also give us the knowledge. I have the knowledge and skills to share. They tried to update what I have, to do my duty. Refreshing me, so I am able to share what I have". Mentorship also improved their capacity to conduct online research and increased their knowledge around specific MNCH related topics as they had to adequately prepare for mentorship visits and an array of possible questions which could be posed by the mentees.

Me I can say that it helped me much to improve my knowledge, in fact it does because before I go to mentor, I have to read. I have to look to the national guidelines. Know what it requires, so that each orientation we do through mentorship, we do that by orienting them on the national guidelines (Participant 5).

The TSAM CMP also increased mentors' ability to transmit their knowledge and skills. As this mentorship program was the first experience for a number of the mentors, they expressed that at the beginning, it seemed to be difficult for them, but gradually with the support of the team, they felt confident in knowledge and skill transmission.

Mentorship is like update for my skills and knowledge as a mentor. In the training for the TSAM, I gained the confidence of presenting or teaching the mentees (Participant 2).

Sub-Theme 3.2: Mentors' Perceptions of Benefits for Mentees. Mentors demonstrated that the CMP improved the knowledge and skills of the mentees and many staff in general. Mentors stated that when they began mentorship visits, the mentees were not able to perform some procedures, and that this mentorship equipped them with the standard procedures of doing their work. Mentees also learned to use the protocols available to guide them in their practice and independently take the initiative to search in books or on the internet for information which would better inform their practice:

For example, before, I can say they used to do routine care, but when we started mentorship, our mentees follow standardized procedures. They follow the good practice; they are also improved on teamwork. Because now they know that the patient is not only for one person but a team of professionals...they ask one another to take care of the patient as we do during the mentorship. Now I saw that the teamwork is now improved (Participant 9).

...there is what we call kangaroo mother care (KMC). It was done for improved babies who are stable, who can be taken to their parents. But something like intermittent kangaroo mother care was not being done, yet

it is helpful on babies with hypothermia. We taught our mentees the importance of intermittent KMC such as preparation of the newborn to go in kangaroo mother care room, after becoming stable, increases bonding, prevents hypothermia, etc...Mentees took it as a habit, it's one of the new techniques acquired during TSAM CMP. Currently they are excellently performing it themselves. And they acknowledged the help of the mentors as they told us that they didn't know that technique before (Participant 11).

Throughout the program mentors anecdotally indicated that mentorship had been conducive in increasing the knowledge and skills of mentees. Consequently, this enhancement of knowledge and skills among the mentees (gained through mentorship), resulted in an unintended consequence as turnover among HCP at district hospitals began to increase. District hospitals unable to compete with better offers from other health facilities were losing their trained personnel to other health facilities. While mentorship is designed to help hospitals improve the quality of care delivered to patients, the risk of turnover can influence that outcome. As such, the investment made by the hospitals within the TSAM assigned districts to build capacity experienced a setback as they began to lose trained personnel, "during mentorship, we go with the international standards. They have the standardized skills and knowledge needed on the labor market. Reason why my mentees moved away" (Participant 9).

During mentorship visits, mentors transferred knowledge and skills during the morning staff presentations prepared on a relevant topic of interest, or on a challenging patient case which may have presented. Often, bedside teaching would also take place, with the mentor performing the skill, while the mentee observed. Then the mentee would

carry out a counterdemonstration with the mentor observing and identifying any gaps in performance and provide constructive feedback to improve their technique.

Between mentorship visits, mentors also graciously and generously shared their time with mentees whenever assistance was needed. Often, they provided mentorship by phone, through WhatsApps messages, short message service (SMS), and emails. Thus, building and maintaining continuous interaction and support outside of scheduled visits, which also improved their motivation for the next mentorship visit.

...by the time my mentees encounter a complicated case, they ask me what to do. And they may use telephone call or WhatsApp. I may even call her. We have already permitted them to call us even in usual days (without mentorship) they may call us when they have a problem for clarification (Participant 4).

...I remember, there was two premature babies that they received. So, they called telling me that these babies are weak and asked me what they could do. I explained to them through a phone call, and finally, I was pushed to reach the mentee at the place for assistance, we treated those children, and they recovered (Participant12).

When it's not the time to be here, we can communicate with email, with WhatsApp, with also the short message and phone call. When my mentees need the documents, I send them via email (Participant 9).

Sub-Theme 3.3: Mentors' Ultimate Influence on Patient Care. The mentors' support of mentees professional development was perceived to have had an influence on the quality of care provided to patients. Given that mentorship was conducted using a team approach, complicated cases or near miss patient incidents were treated by mentors

and mentees, and where required mentors and mentees made joint decisions to transfer the patient to a higher-level health facility for further management. As reported in the following quote:

... there was a transfer from the health center of a woman who doesn't have the recordable blood pressure that even the fetal heart beats were not there. When we reach there, that lady was in shock, almost dying. We tried to do our best as a team. The gynecologist came, and when they reached the theatre, they found that the mother had ruptured uterus. They did their best with the anesthetist and that mother recovered (Participant 6).

The participants indicated that patients also benefited from this mentorship by receiving care from skilled personnel. Through mentors' shared experiences, they noted that patients were happy to receive the appropriate health care from the mentor-mentee teams in their respective hospitals, in close proximity to their homes, saving them from additional expenses and the stress of travelling to a referral hospital far from their area.

...we found the patient in critical condition with fever, he was really in critical condition, when we did the rounds we found that the patient have the anemia due to severe malaria, and mentees were treating him like having sepsis. And now, yesterday, we add the anti-malaria drugs which improved the patient. The family was very very happy, and they said that aaaahhh I was praying to God and you came here and treat my patient without taking ambulance to Kigali (Participant 9).

Sub-Theme: 3.4: Mentors' Indirect Influence on Patient Care. Mentors served as a vital link between district hospitals, where mentorship was carried out and the

referral hospitals which provide specialized care and where the majority of mentors practiced. This affiliation resulted in better quality of care provided to patients, offering them benefits and advantages to treatment which otherwise they would not have had access to.

I remember the case which was at emergency pediatric. The patient was having severe pneumonia with pleura effusion. The patient was critically ill, yet he had not had health insurance. I was with pediatrician, immediately we decided the transfer. I called to the emergency pediatric at CHUK, I told them you can receive this patient even if there is no health insurance. I designated some nurses there, to take care for that patient, to find the materials to put the chest tube. The patient was transferred to CHUK and was managed and got improved (Participant 14).

The hospital benefited from the TSAM CMP in terms of service establishment and organization to care for the patient. The mentors noted that there were some non-operational services, and the TSAM mentors helped the staff to initiate them in order to help the patients fully.

They had everything, but they were careless. But our team attacked them, now recovery was going on well but now there is a good improvement, there are so many things that we helped them, and even to them, they are proud and very happy (Participant 5).

Theme Four: Challenges Encountered by Mentors in the TSAM CMP

One of the main challenges mentors highlighted were the long intervals between mentorship visits. Mentors expressed concern over the long periods between visits with the mentees, initially visits were conducted once a month which was considered

reasonable and appropriate, however after a period of time, the length of time between grew, and visits were reduced to one every two months. Another concern which stemmed from the same issue, was the fact that the mentors were not informed about the impending change or consulted.

...at the beginning, we conducted mentorship once a month and currently once in two months for three consecutive days (Participant 12).

Within a short time, the effects of the longer intervals between mentorship visits began to be reflected in the learning of the mentees. On many occasions mentorship content and teachings which were provided had been forgotten by the mentees, requiring that mentors dedicate additional time to review previous topics. This lost time impacted future teachings, as new content, skill transfer and practice could not effectively be achieved in a condensed period of time. The scheduling change, which was considered abrupt and unexpected by the mentors consequently disrupted their schedule as well, resulting in the need to reorganize their clinical duties, and also disrupting scheduling and clinical rosters at their respective health care facilities. As a secondary consequence, the mentees' clinical schedule was also disrupted leading to missed mentorship visits and affecting the mentor-mentee relationship.

When we started our mentorship, we did monthly mentorship. In that period it was very nice as we teach and demonstrated procedures to the nurses, we could follow our mentees quickly for every month. But now, we can teach the topic, and after two months, they forgot everything. It's like they restart again. This is a great challenge to move forward. It is very difficult. But we tried our best (Participant 13).

Changes with the mentorship schedule, from monthly to bi-monthly and subsequent adjustments to the stipend provided by the TSAM project to mentors resulted in financial impacts, which affected some of the mentors' perspectives about the program. While mentors continued to believe the work was important, meaningful and worthwhile, the reduced financial motivation along with the challenges of taking on additional workload, left some mentors feeling frustrated and disconnected from the decisions being taken in the management of the program. As a result, this group of mentors sought out other health care providers who were not trained in mentorship, to monitor on their behalf.

When we went in the meeting, they said that “money is there money is there”, but suddenly, where they were giving us 20,000 RWF they are giving us 10, 000 RWF, where there were giving us 10, 000 RWF they give us 6,000 RWF and people were discouraged, and some continued to quit or find other persons who can go in mentorship for them. In the beginning, I am telling you, it was consistent, and people were motivated. Thereafter, they started reducing things slowly by slow; the restoration fees [meal per diem] that were given to us was reduced from 10,000 to 6,000 RWF. Everything was reduced without noticing us until they even reduced the mentorship visits (Participant 5).

These, changes which were perceived negatively by the mentors were further compounded by challenges faced in the field. Although the project provided logistical support to and from the mentorship site, mentors were responsible for their own transportation and accommodations while in the field. The physical distance and the geographical location of some of the hospitals in relation to the closest area where

accommodations could be found was tiresome, and considerable time was spent travelling in difficult conditions, especially during the rainy season.

...the long-distance, uuh far away from where we are doing mentorship and the place where to get accommodation is like 10 kilometers. We leave early the morning we go there then come in the evening because on that mentorship site, no closer place where we can stay...(Participant 2).

Overall, some participants criticized the changes which emerged from the program's inception until the intermediary point, especially since the modifications to the mentorship program were exclusively decided by the project, and without direct consultation with the mentors about a sustainable and mutually agreeable solution which would support the obligations of the project, and also satisfy the needs and requirements of the mentors.

In terms of CMP acceptability by hospital management and administrators, initially not all mentorship sites were eager and agreeable to implementing the program. Mentors suggested that there was resistance by some hospital managers which had difficulty understanding the essence of mentorship and the value this could bring to improving the quality of care and patient outcomes. At first this hesitance was manifest through missed mentor-mentee visits, whereby mentees were not made available to attend the scheduled mentorship sessions, often discouraging the mentors. Gradually, the problem was resolved, and at the time of interviews, mentors were generally pleased with the strong collaboration which emerged between themselves and hospital leadership.

At the beginning doctors and heads of clinical seemed to resist but we met a nurse, the chief nursing was so good. And she was dynamic and she was vocal. She insisted that saying that these people came to help us. At the

beginning they wanted to create a resistance. Later on they become our friend (Participant 5).

Mentors also noted that staff shortages at the hospital affected the mood, attitudes, and general perceptions of the nurses and midwives (mentees) work environment. With multiple demands on their time, the mentees were displeased with their inability (due to constraints) to properly care for their patients and closely monitor their conditions and progression towards recovery. Ultimately, this led to the delivery of poor-quality care which increasingly concerned and frustrated the mentees.

They mentioned it to me. You know that we are working in maternity and we wish not to have the birth asphyxia. But it can happen any time without knowing because there is no one stayed there to monitor those mothers (Participant 14).

Due to this shortage of staff, mentors regularly found themselves providing care to patients in the wards of the hospitals they were visiting, rather than mentoring. With staff shortages, mentees were also required to work in more than one unit, as such it was difficult to carve out time for mentorship visits, and to fully reap the benefits of a typical mentor-mentee relationship.

...I remember one day; I was the only one in maternity. I delivered three mothers without any mentee. The mentee was administering drugs to mothers in post-cesarean ward...I was also supposed to go in the theatre to mentor on Helping Baby Breathe, but I didn't because they couldn't wait for me and I couldn't leave the unit with patients alone (Participant 14).

Theme Five: Mentors' Recommendations to Support Future Mentor Engagement

Some participants provided constructive feedback and ways in which the program could be improved upon, others felt the program was fair, effective and efficient and should remain unchanged. However, a point of consensus among all mentors, to be considered in the future design and implementation of a mentorship program is the frequency of mentorship visits. As a minimum, mentors suggest one visit per month.

I would like the program to stay same because they trained us and sent us on field with skills and knowledge. It helped us and they gave us three days to stay with mentees. If I could be the in charge of team, I would make it every month regularly because it would be better to check on them (Participant 12).

The success of many initiatives to a certain extent is dependent on the level of satisfaction of those implementing the program. Determinants of satisfaction can include perceptions about the level of engagement, inclusiveness and sense of empowerment to shape, guide and manage the initiative. As stakeholders, mentors expressed the importance of being included in decision-making processes, which would potentially increase the level of satisfaction, resulting in improved performance and increased retention.

.....if there is any change they have to call mentors and tell them: "this is what happened, how you see it?" At some point mentors reached the point and said that this is disrespect, if we stop going today can those people (TSAM) go there? Anywhere it's a two way we need them and they need us....(Participant 5).

Provided that some challenges were faced during the TSAM CMP, some ideas were suggested by mentors for better improvement of the future CMP. Some participants

wished to have a quarterly meeting of mentors and mentees together to discuss the progress of mentorship for further improvement.

I think I would also add some quarterly meeting. To have all mentees together with their mentors and then share experiences, best lessons learned from one site to another. Having all mentees together it builds their knowledge, skills and attitude if they see that something happens successfully in one site and then they will wish also to implement it in another site (Participant 1).

Furthermore, mentors suggested that level of engagement, performance and motivation could be improved with the incentivization of the program, both for mentors and mentees. While a common understanding exists that program sustainability is always a critical consideration and financial incentives may not be feasible, suggestions were made about other methods to encourage involvement, motivate participation and retain trained mentors and mentees. Notably, mentors agreed that at a minimum, a certificate of recognition should be provided acknowledging the number of hours committed which could be applied towards CPD accreditation, specifically license renewal. This would certainly encourage attendance and participation in all mentorship visits.

Similarly, realizing that mentees also need some form of motivation, mentors provided feedback on methods to encourage mentees to continue participating. They mentioned that anything whether big or small, could be of great importance to motivate the mentees. For example, in some instances, mentors provided meals and refreshments to mentees, using this opportunity to bond and build stronger more resilient mentor-mentee relationships. Mentors recognized that any type of appreciation further motivated the mentees, increasing their vested interest and resulting in a more impactful and successful mentorship experience.

So one mentee told me this: "you really helped us so much, but we would like some motivation... looking at the time, we have been together three times in a month and their commitment, we should really recognize these people. We are humbly requesting the TSAM to design good certificates with CPD points so that we can give them to our mentees. Even if they don't pay them, this certificate will help them renew their license to practice (Participant 12).

Mentors also proposed that mentees should be invited to attend future TSAM mentorship training sessions. Participants found the training to be very valuable and suggested the training would augment the mentees' knowledge and skills, further complementing activities during mentorship visits. An important spin-off of this, would be a mentor-mentee meet and greet and orientation session, allowing the mentors and mentees to introduce themselves to one another, gain familiarity with each other as a way to prepare the foundation for the first mentorship visit.

We can organize the training of mentors and mentees outside of the hospitals. After receiving such training, we can come to the hospital for implementation. The mentee will be...I can also say the mentee will be motivated and will have more time to ask the questions. And as mentors also we will have more time to discuss what we want, to be implemented for the next time because most of the times it was difficult to discuss with the mentees on bedside due to shortage of staff and many things to do (Participant 13).

Lastly, mentors recommended that the communication framework used by the project should be revisited. Communication at the best of times can be complex, let

alone when coordinating groups of people with busy and constantly changing schedules. Mentors noted that despite communication from the project to the Director General or the Clinical Director at the hospital about the mentorship visit, it was often overlooked, and the project staff would forget to make arrangements and inform the mentees. The problem was further compounded by the irregular schedule of the visits.

Well, sometimes there is a problem of communication. The TSAM send to director-general or clinical director a message that we will do mentorship. Sometimes they forget to inform the mentees about the day for the next mentorship. So, there should be improvement of communication between mentor and mentee. If I know it before, I can inform my mentees to be available during the mentorship period (Participant 11).

Summary

Participants openly shared their experiences with the mentorship program, the methods which they shared knowledge and transferred skills with the mentees and were able to provide constructive feedback and points of improvement for future mentorship programs. Highlighting challenges which could be addressed to improve the impact and outcomes of similar programs. The value of mentorship and the benefits of mentorship programs in resource-limited settings became evident, clearly emphasizing the importance of such programs in increasing the knowledge and skills of both mentors and mentees. These benefits of course, are imparted onto patients with improvements in the quality of care received by more knowledgeable and skilled HCP.

Discussion and Recommendations

Nurses and midwives are the frontline health care professionals who aim to consistently provide quality MNCH related services at health centers in Rwanda, and if

need be, they transfer complicated cases to district hospitals (DH), and provincial referral or university teaching hospitals (UTH). The TSAM focused CMP efforts at the district hospital level due to the perceived benefits identified by the Rwandan MoH that could result for nurse and midwife mentees, as well as patients. The TSAM CMP was considered by the Rwandan MoH as a clinically situated initiative that could foster enhanced knowledge and skills among mentees and strengthen interprofessional collaboration between HCP from the various levels of participating hospitals. Further, given the shortage of nurses and midwives in Rwanda in general and in rural health centres in particular, and considering the limited continuing education opportunities afforded to nurses and midwives practicing in rural settings after their initial diploma or degree program, a CMP was viewed by the MoH in Rwanda and TSAM partners to be a viable initiative to support professional development in the area of MNCH. the importance of the interprofessional collaboration to plan together and be able to evaluate the results. Such collaboration was evident, as mentors shared ideas with mentees and DH clinical administrators about how to manage complicated cases in order to support the health of women and children.

This qualitative descriptive study was undertaken to explore nurses' and midwives' experiences of engaging as mentors in a clinical mentorship program implemented by the TSAM project. Five themes namely (1) mentors collaborating in teams 2) facilitating the mentorship process, 3) mentors' perceptions of their role in the TSAM CMP, 4) challenges mentors encountered while engaged in the role with TSAM CMP, and 5) mentors' recommendations to support future engagement in role, emerged from the analysis.

Nurses and midwives who participated in this study, enthusiastically expressed their appreciation of the TSAM CMP. The mentorship program was designed to support inter-professional collaboration with a team of five mentors with expertise in the areas of maternity care, pediatrics, and anesthesia services. Study participants shared clinical success stories rooted in their collaborative efforts as a team. TSAM project reports corroborate what participants in this study discussed in terms of the many ‘near misses’ cases that were saved by the mentorship team working together during mentored clinical days. Further, these study findings mirror the findings from a study by Denicola, Altshuler, Denicola, and Zabar, (2018) where they found interprofessional mentorship supported collaboration and effective professional practice.

All mentors - nurses and midwives, received the pre-CMP training during a three day orientation session organized and conducted by the TSAM project to support an understanding of what constituted effective mentoring and how to be a mentor. Nakanjako et al. (2011) and Ajeani et al. (2017) noted that mentors need to be fully prepared for their role by receiving training in mentoring, prior to the initiation of the mentoring role that enables them to develop confidence in their abilities to support mentees. In the literature, mentors have noted the need for logistical and financial support to successfully carry out their mentoring role, a detail which was stressed by the mentors of the TSAM CMP. Lastly, nurses and midwife mentors who participated in this study reported that the hospital was a conducive environment to effectively perform their role as mentors, which supports the findings of Norwood (2010), who explored the experience of nurse mentors and the importance of organizational support to the success of formal mentorship programs. .

The study findings also illustrate the perceived benefits pertaining to MNCH, to the mentors themselves, mentees, and ultimately, but indirectly, to patient care. As highlighted by Ndwiga et al. (2014), mentorship benefits the mentors, mentees, the patients and the whole institution in general. The mentors increase their knowledge and ability to teach mentees. Mentees also gain knowledge and skills from working together with experienced mentors. In addition, patients benefit from mentorship by receiving quality care from both mentors and mentees.

Despite the benefits gained from the TSAM CMP, the participants expressed some challenges. Long intervals between mentorship visits was highlighted, which resulted in large breaks between mentored experiences for mentees, and weakened connections between mentor and mentee. The change in schedule of mentorship visits also disorganized mentors' plans and timetables, including the availability of mentees. If mentorship is to be considered effective, a regular schedule should be maintained. A consistent routine can enhance the availability of both mentors and mentees.

While mentorship can be used as a technique to recruit and retain health personnel (Green & Jackson, 2014), the findings showed that some mentees, after improving their knowledge and skills, sought better employment opportunities outside of the institutions which invested in their training and provided professional development opportunities. Their enhanced knowledge, skills and competencies also made them more sought after, giving them a competitive advantage. Anatole et al. (2013) noted the same challenge in their implementation of a mentoring program. They mentioned that turnover of HC nurses was identified as a challenge to the MESH program, as the trained and mentored nurses decided to quit for different reasons such as moving from rural to urban areas, seeking increased salaries, and/or to pursue further formal education.

In the study by Setati and Nkosi (2017), the shortage of personnel impacted the quality of patient care. This aligns with the findings from this study as a shortage of staff at the district hospitals (designated mentorship sites) was also seen as an obstacle. The availability of the mentees during mentorship greatly impacted the mentorship process. Nonetheless, mentors and mentees put every effort into maintaining continuous interaction via phone calls, SMS and WhatsApp messages to improve patient care even outside of mentorship visits, which also helped to sustain motivation.

To overcome these challenges and to improve future mentorship programs, participants suggested that institutional support should be provided to establish an academic mentoring program at one of the local colleges. This could potentially alleviate the time constraints and pressures of both mentors and mentees. Freeing up some of their time, allowing them to fully devote their energy to participate in a designated program. This would of course be coupled with mentorship in a clinical facility. Participants suggested that this could also facilitate a mentor-mentee matching process, as mentors and trainees work closely together, and gain a better understanding of each of their roles and responsibilities. Successful completion of the academic mentoring program would provide a certificate of recognition and credit towards CPD accreditation.

Limitations

Given the time and travel constraints of this study, member checking was not possible. To ensure the credibility of data in qualitative research, member checking is recommended. Nevertheless, probing questions were used and participants' statements were reframed during the interview to ensure the capture of accurate views from the participants.

Conclusion

The findings of this study offer important insights to organizations who seek to implement similar programs in the future in Rwanda. The TSAM CMP program involved a comprehensive approach to support MNCH services at the district hospitals by enhancing knowledge and skills of nurses and midwives and other health professionals through training, support or mentorship and access of clients/mothers, newborns and children, and integrating five cross-cutting themes to MNCH such as gender, ethics, interprofessional collaboration, maternal mental health, and gender-based violence. Nurses and midwives, while working to save lives of women, newborns and children, also need to have an opportunity to develop professionally. Engagement in a CMP is one of the ways that nurses and midwives and other health professionals can partner as interprofessional team members to deliver health care in work environments where team members are respected and valued for their unique contributions and body of knowledge. That being said, there is much to learn from the challenges experienced by mentors in the TSAM project to be able to improve the ways in which future CMP are structured and implemented. To improve CMP, mentors recommended to shorten the interval between mentorship visits to sustain the mentor-mentee connection. They also suggested that the CMP could be applicable to other contexts in developing countries, especially Sub-Saharan Africa. Nonetheless, the TSAM CMP was highly regarded by mentors who participated in this study. The shared experiences from nurses and midwives highlighted the importance of expanding the clinical mentorship to other district hospitals in Rwanda.

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CHAPTER THREE

IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

Worldwide there is a shortage of healthcare professionals (HCP) (Callaghan, Ford, & Schneider, 2010). This shortage is even more exacerbated in Sub-Saharan Africa which carries the greatest burden of disease globally and has the some of the fewest resources – human and financial (Kinfu, Dal Poz, Mercer, & Evans, 2009). In addition, this shortage is further compounded by an unequal distribution of HCP between urban and rural areas, high patient ratios, inadequate training, skill mix imbalance, and limited professional development opportunities (Kinfu et al., 2009). These health care environment issues also intersect with socio-cultural-political-economic environments (Schwerdtle, Morphet, & Hall, 2017). Rwanda mirrors the aforementioned health care environment issues – with considerable staff shortages across health facilities (Rwanda Ministry of Health [MoH], 2015) and health care providers migrating from rural areas to the capital city, Kigali and the surrounding suburbs in search for better life opportunities. Some of the factors leading to and contributing to these moves from rural to urban settings include the lack of opportunities for professional development and limited physical resources in rural health facilities (Schwerdtle et al., 2017), higher pay and more varied employment opportunities in health care, academia, or with agencies outside of formal health care institutions.

Studies have shown that mentorship is among one of the strategies used to recruit and retain human resources, especially health care providers in remote areas (Rohatinsky & Ferguson, 2013; Manzi et al., 2014). Mentorship increases confidence, decision-making and expertise needed for nurses and midwives to develop professionally (Norwood, 2010). In the same sense, mentors play an important role in providing support

throughout the learning process to enhance the development of mentees (Weng et al., 2010). The MoH in Rwanda, in collaboration with the Training Support and Access Model (TSAM) project, implemented a clinical mentorship program (CMP) to enhance the knowledge and skills of healthcare providers, and to also contribute to staff motivation and retention in rural hospitals. An exploration of nurse and midwife mentors' perspectives of their mentoring role adds to the body of literature and knowledge in the nursing profession and can contribute to the development of improved mentorship programs (Norwood, 2010). It is in this regard, that the study involved nurses and midwives who participated as mentors in this CMP.

The findings of this study highlighted that the TSAM CMP used an interprofessional collaborative approach that was highly valued and praised by the mentors. The mentors were satisfied by the support provided from the TSAM project and hospital administrators during the implementation of the mentorship program. The mentors expressed that this mentorship opportunity enhanced their knowledge and practice, as well as that of the mentees to adequately manage patients. The patients received quality care from both mentors and mentees, as reported by the participants. Furthermore, the mentors promoted the collaboration of district hospitals where mentorship was being implemented and the referral hospitals where mentors were from. This collaboration eased the transfer process of the patients. However, mentors revealed they encountered challenges and some benefits that have implications for practice, education, research, and policy.

Implications for Practice

The study findings revealed the need to improve the practice of mentors in order to adequately implement the mentorship program. For mentorship to be successful,

effective mentors should have adequate knowledge, skills, and motivation to promote quality patient care (Kok et al., 2015). In this study, mentors revealed that they were initially educated about mentorship and were provided with a package of materials to be used with the mentee, which included clinical assessment questions to stimulate in-depth discussion about clinical cases. Further, CMP mentors were financially supported with a stipend by the TSAM project. However, mentors were demotivated by a reduction in the stipend being provided the course of the project, which occurred without their direct consultation. This left a few mentors feeling detached from CMP, which led to their unwillingness to mentor to the end of the TSAM project. This situation resulted in the involvement of some health professional colleagues delegated by the original mentor to act as mentors for mentees, but the delegated mentors had not received the original CMP mentor preparation. Studies have shown that mentors provide not only knowledge and skills to enhance the development of the mentee but also psychological support such as counseling and friendship to discuss diverse topics with the mentee (Weng et al., 2010). An effective mentoring program supports the establishment of sustainable, ongoing relationships built on respect and trust between the mentor and mentee, which can result in the mentee strengthening their clinical competencies (Setati & Nkosi, 2017). The delegates used by some mentors in the CMP decreased the type and extent of professional interaction previously enjoyed by the mentees with the 'official' TSAM assigned mentor, and this had an undesirable effect, demotivating the mentees as they were subject to receiving training and feedback from mentors which they had not built a safe and trustworthy relationship with, and who had not been trained in mentorship. This finding creates an opportunity for future CMP developers to create structures and lines of communication that were foundational to the program to try and avoid instances of

attrition from the CMP. Such could potentially sustain the motivation of mentors and enhance the impact of mentorship on mentees' clinical practice. Furthermore, the coordinators of the mentorship program should emphasize strategies that foster adequate mentorship by the trained mentors, recognizing the inappropriateness of delegating a mentor which has not been trained and asking them to assume a role within the mentorship program.

At the beginning, mentorship involved one in-field visit, for three days, every month. Thereafter, the mentorship became one visit of three days, every two months. The participants conveyed that this long interval between mentorship visits lead to disconnection between mentors and mentees. Significant concern was expressed over the need to review the same content material and clinical procedures, repeatedly as mentees had forgotten what they were taught during previous sessions. Both mentors and mentees wished to sustain regular visits with short intervals to enhance the continuous development of the mentees without interruption. The next mentorship program should consider regular and frequent mentorship visits to successfully help the mentees. The mentors also suggested a quarterly coordination meeting to discuss the progress of mentorship and make adjustments based on the encountered experiences to enhance practice. There is also a need for program implementers, in this case TSAM management, to consult with mentors prior to taking a decision in regard to mentorship implementation.

Sustained collaboration between mentors and mentees – working together side by side, is a cornerstone to the effectiveness of mentorship. Mentors encountered challenges with mentees who were absent or busy, usually completing other tasks during the designated time which was earmarked as dedicated time for mentorship. In some

instances, mentors were unable to find their mentees. This absence and disruption hampered the mentees' development and consequently undermined the quality of care provided by the mentee. While staff shortages are common, it is important that hospitals make a concerted effort to avail the mentees for mentorship. Secondly, a reliable communication strategy and plan, with frequent reminders leading up to the mentorship visit could help to improve oversights with scheduling at the hospital which contributed to mentee absenteeism,

TSAM CMP increased not only the knowledge and skills of the mentors and mentees; but also, it eased the patients' access to specialized care in mentored hospitals, and when necessary mentors facilitated the transfer process and acceptance of the patients at referral hospitals. This finding showed that mentorship by highly skilled mentors from higher level health facilities served as clinical outreach, and ultimately helped patients in unexpected ways. The approach of TSAM to use specialized mentors should be considered by the MoH to enhance the development of the mentees, alleviate the burden of staffing shortages, support low-skilled staff, and increase the number of patients being treated at local hospitals and consequently reducing the pressure on referral hospitals. The MoH should sustain the use of a revised TSAM CMP, based on findings about mentorship such as those emanating from this study, and expand it to the other district hospitals which fell outside of the districts assigned to TSAM and did not receive mentorship using this model.

Implications for Education

The quality of healthcare services depends on the quality of education received by healthcare providers (Abdullah et al., 2014). Didactic training and supervision have been shown to be ineffective in enhancing knowledge and skills of trainees in the health

domain (Leslie, Gage, Nsona, Hirschhorn, & Kruk, 2016). In contrast, mentorship has been shown to be effective in both knowledge and skill development, and staff retention (Green & Jackson, 2014). In many countries including Rwanda, nurses and midwives lack opportunity for capacity development especially in rural areas (Schwerdtle et al., 2017; Ross, Barr, & Stevens, 2013). In Rwanda, mentors shared that the TSAM CMP strengthened the capacity of both mentors and mentees in rural districts. Based on this, the Ministry of Education, MoH, and other stakeholders should consider the use of mentorship as an approach in the capacity building of their staff.

The collaboration of professionals during mentorship enhances team member roles and a conducive learning environment (Rohatinsky & Ferguson, 2013). Intra-professional collaboration (IPC) used in the design of this mentorship model was highly valued and appreciated by the mentors. They recognized this as the easiest way to complement each other during knowledge and skill transfer. This effective approach could be considered by the MoH and other stakeholders when planning and implementing mentorship programs for healthcare providers. The Ministry of Education and the College of Medicine and Health Sciences, University of Rwanda can integrate this element of IPC in the student curriculum to prepare them for teamwork and collaborative relationships in their clinical practice, which could result in positive patient outcomes.

Although the findings showed that demotivated mentors renounced their role and assigned an untrained delegate to take their place, the relationship built and nurtured with the mentee in the short period prior to this was of critical importance for the professional development of the mentee, mentor and the professions (Norwood, 2010). A mentor serves as a counsellor, a role model and a trusted friend. Considering the importance of mutual trust and interaction between mentor and mentee, there is a need to maintain one

mentor during the whole program to enhance collaboration and trust. The TSAM team, MoH, and other stakeholders could emphasize the importance of mentors adhering to their assigned role within a mentorship program, and any appeal for a personnel change should be requested through formal procedures and protocols. At a minimum this will reduce sudden mentor-mentee pair changes and support continuity in relationship development, as well as capacity building of nurses and midwives through knowledge and skill enhancement.

Implications for Research

Most of the studies carried out about mentorship in the nursing profession have focused on mentees' perceptions, rather than those of mentors (Abdullah et al., 2014; Singh, Pilkington, & Patrick, 2014; Andrews & Wallis, 1999). There is a scarcity of studies published about nursing and midwifery mentors' experiences who participate in mentoring in low and middle-income countries. To the best of our knowledge, no study has been conducted to date in Rwanda to explore the mentors' experience of participating in the TSAM clinical mentorship program. This study adds to the body of knowledge about mentors' perspectives of mentorship for nurses and midwives.

This study used a descriptive qualitative approach to explore the experiences of nurses and midwives who participated in the TSAM CMP in Rwanda. Given that one mentor was mentoring more than one mentee, a quantitative study to describe the mentor-mentee ratio and the impact of mentorship on career development may be important to compliment what is known from qualitative studies. Furthermore, professional associations and councils are often involved in the planning and implementation of mentorship programs, but in most instances they are not included in the research process. As key stakeholders, their insights, experiences and perspectives are crucial to the

success and improvement of these mentorship programs. A study to explore the perceptions of nursing leaders, as well as the impact of mentorship on quality of care as delivered by mentees would add value to the development of knowledge in nursing and midwifery in this area. Since this study explored only the experiences of mentors, it would be beneficial to hear about the mentees' experiences for comparative purposes. Lastly, it would be of great value to assess the effectiveness of mentorship and areas of improvement from both the mentors' and mentees' perspective.

Mentorship is intended to improve the quality of care provided by the mentees (Setati & Nkosi, 2017). Within the context of the TSAM project, the overarching goal of the mentorship program was to improve MNCH across the health facilities assigned to TSAM. A control trial to study the impact of TSAM mentorship on maternal and child health in mentored and non-mentored DH may add to the body of knowledge on the effectiveness of TSAM mentorship. Furthermore, it was suggested by the mentors, that improved knowledge and skills contributed to the turnover of nurses and midwives from rural to urban health facilities. A study to explore the effects of mentorship on nurses' and midwives' turnover may help to strategically implement measures to prevent or reduce turnover rates.

Implication for Policy

Rwanda has a shortage of health care providers (Rwanda MoH, 2015). The world health organization recommends an optimal ratio of 16 nurses and midwives per 10,000 people in low and middle income countries (Niles et al., 2017; Macias & Mwijarubi, 2013), but Rwanda remains significantly under the optimal ratio with 1 nurse per 1,227 people and 1 midwife per 18,790 people (Rwanda, MoH, 2014). In addition, this crisis is

compounded by the maldistribution of health care providers between rural and urban areas, as well as high turnover rates.

Mentorship to build the capacity of healthcare providers has been identified as a potential strategy to retain senior nurses and midwives (Manzi et al., 2014). Mentored nurses and midwives perform better, are satisfied with their job, and advance more rapidly in their career than their unmentored peers (Lafleur & White, 2010). Learning and career development have been identified as important strategies to retain nurses and midwives in their workplaces (Weng et al., 2010). However, the findings of this study noted contrary results. Even though this study was not intended to explore the effect of mentorship on staff retention, the participants disclosed that currently, mentorship is contributing to staff turnover from rural health facilities to urban or higher-paying institutions.

Once the mentored nurses and midwives increase their knowledge and skills, they are often recruited by other health facilities in urban areas. This leads to the persistence of unexperienced staff and human resource shortages in rural health facilities. Regrettably, mentorship had a negative effect on retention, increasing levels of staff attrition among hospitals which were part of the mentorship program. This has revealed an interesting opportunity for the MoH and policy makers, as they are challenged to design, develop and implement a clear policy around professional development activities and mandatory service at the institution which invested in the mentees' training. This could help reduce turnover immediately after training is completed, especially in remote areas where support at health facilities for underserved communities can be greatly improved.

Conclusion

This research explored the experiences of nurses and midwives as mentors participating in a CMP implemented by the TSAM project in rural district hospitals in the Northern and Southern Provinces of Rwanda. The research findings point to a variety of opportunities through practice, policy, and education to improve and enhance the TSAM CMP from the perspective of the mentors' experiences. A number of challenges were encountered with the delivery of the mentorship program, which warrants a review of some of the program's aspects which could be modified to provide an improved mentor experience, while also enhancing the mentorship of mentees and ultimately, patient outcomes. Recommendations are proposed to the MoH, and other stakeholders such as, the Ministry of Education, and professional bodies, including the National Council of Nurses and Midwives, and the Rwanda Association of Midwives to build the capacity of mentors, strengthen the knowledge and skills of mentees and increase the quality of care offered to patients. The acceptability of the mentorship program as an approach to build capacity in the health facilities provides a feasible, long-term and sustainable solution to enhance health care providers' competencies.

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LIST OF APPENDICES

Appendix A: Ethics Approval from Western University



Date: 8 March 2019

To: Dr. Yolanda Babenko-Mould

Project ID: 111895

Study Title: Nurses' and Midwives' Experiences as Mentors in a Clinical Mentorship Program in Rwanda

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 26March2019

Date Approval Issued: 08/Mar/2019 09:39

REB Approval Expiry Date: 08/Mar/2020

Dear Dr. Yolanda Babenko-Mould

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Revised Email Script for Recruitment - Clean Copy	Email Script	22/Feb/2019	Revised Version 1
Revised Email Script for Recruitment in Kinyarwanda	Translated Documents	22/Feb/2019	Revised Version 1
Revised Letter of Information and Consent - Clean Copy - Feb 25, 2019	Written Consent/Assent	25/Feb/2019	Revised Version 2
Revised Semi-structured Interview Guide - Clean Copy	Interview Guide	20/Feb/2019	Revised from original
Second Revised LOI and Consent in Kinyarwanda - Feb 26, 2019	Translated Documents	26/Feb/2019	Revised Version 2

Documents Acknowledged:

Document Name	Document Type	Document Date	Document Version
Translation Attestation	Translation Certificate	10/Dec/2018	1

No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.


Please do not hesitate to contact us if you have any questions.

Sincerely,

Nicola Geoghegan-Morphet, Ethics Officer on behalf of Dr. Joseph Gilbert, HSREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B: Institutional Review Board (IRB) of the University of Rwanda


UNIVERSITY OF RWANDA COLLEGE OF MEDICINE AND HEALTH SCIENCES
CMHS INSTITUTIONAL REVIEW BOARD (IRB)

Kigali, 12th /11/2018

MUREKATETE Marie Chantal
School of Nursing and Midwifery, CMHS, UR

Approval Notice: No 373/CMHS IRB/2018

Your Project Title "*Nurses' and Midwives' Experiences of Engaging in Mentoring Role in Clinical Practice in Rwanda: A qualitative Descriptive Study*" has been evaluated by CMHS Institutional Review Board.

Name of Members	Institute	Involved in the decision		
		Yes	No (Reason)	
			Absent	Withdrawn from the proceeding
Prof Kato J. Njunwa	UR-CMHS	X		
Prof Jean Bosco Gahutu	UR-CMHS	X		
Dr Brenda Asimwe-Kateera	UR-CMHS	X		
Prof Ntaganira Joseph	UR-CMHS	X		
Dr Tumusiime K. David	UR-CMHS	X		
Dr Kayonga N. Egide	UR-CMHS	X		
Mr Kanyoni Maurice	UR-CMHS	X		
Prof Munyanshongore Cyprien	UR-CMHS	X		
Mrs Ruzindana Landrine	Kicukiro district		X	
Dr Gishoma Darius	UR-CMHS	X		
Dr Donatilla Mukamana	UR-CMHS	X		
Prof Kyamanywa Patrick	UR-CMHS		X	
Prof Condo Umutesi Jeannine	UR-CMHS		X	
Dr Nyirazinyoye Laetitia	UR-CMHS	X		
Dr Nkeramihigo Emmanuel	UR-CMHS		X	
Sr Maliboli Marie Josee	CHUK	X		
Dr Mudenge Charles	Centre Psycho-Social	X		

After reviewing your protocol during the IRB meeting of where quorum was met and revisions made on the advice of the CMHS IRB submitted on 26th October 2018, **Approval has been granted to your study.**

Please note that approval of the protocol and consent form is valid for **12 months.**

You are responsible for fulfilling the following requirements:

1. Changes, amendments, and addenda to the protocol or consent form must be submitted to the committee for review and approval, prior to activation of the changes.
2. Only approved consent forms are to be used in the enrolment of participants.
3. All consent forms signed by subjects should be retained on file. The IRB may conduct audits of all study records, and consent documentation may be part of such audits.
4. A continuing review application must be submitted to the IRB in a timely fashion and before expiry of this approval
5. Failure to submit a continuing review application will result in termination of the study
6. Notify the IRB committee once the study is finished

Sincerely,

Date of Approval: The 12th November 2018

Expiration date: The 12th November 2019

**Chairperson Institutional Review Board,
College of Medicine and Health Sciences, UR**

Cc:

- Principal College of Medicine and Health Sciences, UR
- University Director of Research and Postgraduate Studies, UR

Appendix C: Letter of Information and Consent



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LETTER OF INFORMATION AND CONSENT

Study Title: Nurses' and Midwives' Experiences as Mentors in a Clinical Mentorship Program in Rwanda

Document Title: Letter of Information and Consent for Nursing and Midwifery Mentors

Principal Investigator: Dr. Yolanda Babenko-Mould, Associate Professor

Contact Information: Arthur Labatt Family School of Nursing
FIMS & Nursing Building
Faculty of Health Sciences
Western University

Graduate Student Researcher (GSR): Marie Chantal Murekatete, RNM, BScN, MScN Student

Arthur Labatt Family School of Nursing
FIMS & Nursing Building
Faculty of Health Sciences
Western University

Background: In Rwanda, maternal, newborn and child mortality rates remain unacceptably high with 61% of all maternal deaths attributed to a lack of adequate skills in the management of complications related to pregnancy. To help curb this rate,

the Training, Support, and Access Model (TSAM) for Maternal, Newborn, and Child Health in Rwanda project developed a unique mentorship program to strengthen the capacity of in-service nursing and midwifery health practitioners with an aim of increasing their knowledge and skills through education.

Purpose of the study: The purpose of this study is to explore the lived experience of nurses and midwives who were engaged in the role of mentor participating in the clinical mentorship model implemented by the TSAM project in Rwanda.

The findings of this study have the potential to enhance the current mentorship model, and to inform other partners and stakeholders working within the sphere of maternal, newborn, and child health in Rwanda. It is anticipated that findings will also add to the body of knowledge about the benefits and challenges of engaging in clinical mentorship for health professionals in Sub-Saharan Africa as a means of increasing knowledge and skills of mentees so they can provide safer skilled maternal, newborn, and child care.



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Invitation to participate in a research study: As part of a group of nurses and midwives which have taken on a mentor role, you are being invited to voluntarily participate in this research study which aims to explore your experiences as a nurse and midwife mentor participating in the clinical mentorship model being implemented as part of the TSAM project in Rwanda.

The purpose of this letter is to provide you with the information needed to make an informed decision about whether or not you would like to participate in the study. It is important to know and understand what the research involves. Please take the time to read this letter carefully and should you have any questions, please feel free to ask at any time.

Eligibility: All nurses and midwives who were selected to be mentors in the TSAM project in Rwanda and are able to speak and read either English or Kinyarwanda, and consent to have their interview digitally recorded.

Study design and procedures: Nurse and midwife mentors who agree to participate in this research study will take part in a face-to-face individual interview at a time and location convenient to both the interviewer and participant. It is anticipated that the study sample will include 15 participants.

The interview will be conducted using a semi-structured interview guide and will be a maximum of 90 minutes in length. Demographic information will be collected during the interview. The interview will be digitally audio-recorded.

Possible risks and harms: Given that privacy can't be guaranteed, a risk of breach of privacy exists with study participation. However, efforts will be made to protect participants' privacy in this study. There are no other known or anticipated risks or discomforts associated with participating in this study.

Confidentiality: Any information or data that is collected during the study will be kept confidential. Transcripts will be de-identified and numerically coded. The digital audio-recordings will be permanently deleted from the device once the interviews are transcribed. De-identified transcribed and numerically coded data will be stored in password protected word documents electronically on Western University's password protected OWL system. The transcribed and de-identified data will also be stored in a password protected electronic file in NVivo, which is a password protected data management software. Only the Principal Investigator and the GSR will have access to the password protected, de-identified electronic file, as they will each have NVivo software loaded on their laptop computer in order to open and read the file being stored on their password protected and encrypted memory sticks. The transcribed de-identified data, which will include demographic information, will also be stored on password protected word documents, which will be stored on the same encrypted and password protected memory sticks as those which will store the NVivo file. The graduate student researcher will have one memory stick - when not being used by the graduate student researcher for study related purposes, the memory stick will be stored in a file cabinet located in a locked university office



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belonging to the Dean of the School of Nursing and Midwifery, the University of Rwanda. The Principal Investigator will have the second encrypted and password protected memory stick. When not being used by the Principal Investigator, the memory stick will be stored in a file cabinet within the Principal Investigator's locked university office at Western University.

A master list containing each participant's full name, email address, and phone number will be stored in hardcopy format, along with the signed consent forms, in a file cabinet in the locked office of the Dean of the School of Nursing and Midwifery, University of Rwanda. The master list will be stored in a cabinet that is separate from the cabinet where the memory stick is being stored.

The master list with identifiable data will be deleted by secure shredding at the conclusion of the current study. Audio-recordings will be permanently deleted from the recording device immediately after the graduate student researcher has compared the transcribed interview data to the audio-recorded data. The consent forms will be securely shredded and all de-identified electronic data will be permanently deleted 7 years after conclusion of the study, as per Western University's policy.

If the results of the study are published, your name will not be used and no information that identifies you will be released. Representatives of the University of Western Ontario Health Sciences Research Ethics Board may require access to your study-related records or may follow up with you to monitor the conduct of the study.

Future use of data: By consenting to participate in this study, you are agreeing that your data can be used beyond the purposes of this present study by either the current or other researchers (e.g., to answer a new research question).

All de-identified and numerically coded data will maintain your anonymity and a future researcher will not be able to identify you as a research participant.

Right to withdraw from study: Participation in this study is voluntary and you may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your current state as a mentor or future participation as a mentor. Upon your request, your data may be withdrawn from the study prior to the data analysis phase, as data will be pooled for the purposes of analysis.

By consenting to participate in the study, you are not waiving any of your legal rights as a research participant.

Compensation: You will not be compensated for your participation in this research study.



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Benefits of participating in the study:

Personal - You may not directly benefit from participating in this study, however the study will provide an opportunity to share your story with a health professional who will share your experiences, broadly with educators, health professionals and policy makers.

Institutional - The private and public nursing and midwifery schools will benefit from the findings of this study as the results can be shared with clinical instructors which can potentially improve their ability to mentor students in clinical settings. Health care administrators, nurses, and midwives may benefit from the study findings, as insights might be used to shape future clinical mentorship programs in health care settings of Rwanda. Furthermore, the insights gathered from the research will potentially identify specific enhancements to be included in the TSAM mentorship model

Societal - It is proposed that when mentors support the professional knowledge and skill development of mentees in clinical practice, that individuals and families in society may ultimately benefit from more enhanced care patient care.

Contacts for further information: If you have any further questions about this study, you may contact me, the graduate student researcher, Marie Chantal Murekatete up to March 15, 2019,

You may also contact Dr. Yolanda Babenko-Mould, the Principal Investigator of this study.

If you have any questions about your rights as a research participant or the conduct of this study, you may contact the Office of Human Research Ethics, Western University. The office oversees the ethical conduct of research studies and is not part of the study team. Everything that you discuss will be kept confidential.

This letter is yours to keep for future reference.



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CONSENT FORM

Study Title: Nurses' and Midwives' Experiences as Mentors in a Clinical Mentorship Program in Rwanda

Principal Investigator: Dr. Yolanda Babenko-Mould, Associate Professor, Arthur Labatt Family School of Nursing, University of Western Ontario

Graduate Student Researcher (GSR): Marie Chantal Murekatete, RNM, BScN, MScN Student, Arthur Labatt Family School of Nursing, Western University

I have read the study Letter of Information, have had the nature of the study explained to me, all questions have been answered to my satisfaction, and I agree to participate in the study.

I agree to use of my data for a future study.

I agree to have the study interview digitally audio-recorded.

Name of Participant (please print) _____

Signature of Participant _____

Date: _____

Name of Person Obtaining Informed Consent (please print) _____

Signature of Person Obtaining Informed Consent _____

Date: _____

Appendix D: Semi-structured Interview Guide

1



Study Title: Nurses' and Midwives' Experiences as Mentors in a
Clinical Mentorship Program in Rwanda

Points to state prior to beginning the audio-recording: During the audio-recorded interview you are asked to refrain from disclosing information that will identify you or others. Should any identifying information be disclosed during the interview, it will not be included in the transcript. You have the right to stop participating in the interview at any time and the right to withdraw from the study at any time.

Semi-Structured Interview Guide

Please tell me about yourself:

- What is your age?
- What is your gender?
- How long have you been a nurse or midwife?
- What type of clinical unit(s) did you mentor the mentee(s)?
- How many times a week did you connect with your mentor each week during the TSAM clinical mentorship program?
- What methods of communication was used with your mentee(s) when you were not directly together in the clinical setting during the TSAM clinical mentor program (i.e. email, telephone, text, video chat)?
- Overall, on how many occasions did you engage in the mentor role with the mentee directly in the clinical setting during the TSAM clinical mentor program?
- What is the highest level of education you have completed?

Share with me your experiences as a TSAM mentor after receiving the mentorship training?

Probe: Tell me about why you volunteered to be a mentor in the TSAM project?

Probe: What type of preparation to be a mentor did you receive through the TSAM project?

Probe: How did the mentorship training through TSAM prepare you for the mentor role?

Probe: How could the mentorship training have been improved to enhance your role as a mentor?

What factors within or external to the practice setting facilitated (supported/helped) you to carry out your role as a mentor?

Probe: What did you enjoy about being a mentor?

What factors within or external to the practice setting limited or were barriers you experienced in carrying out your role as a mentor?

Probe: What did you find to be challenging about being a mentor?

Were you able to find solutions to overcoming or dealing with the barriers experienced while carrying out the mentor role? If so, what solutions were most and least effective/useful?

In what ways did your role as a mentor improve the professional practice of another health professional (i.e., knowledge, skills, judgement)?

In what ways did your role as a mentor ultimately influence patient care?

What action or strategies did you engage in to sustain or improve the quality of the mentor-mentee relationship?


Based on your experiences as a mentor with TSAM, if you were to engage in the mentor role again in the future, what changes would you make to support effective mentor-mentee relationships?

Probe: If you could design a mentoring program, what would it look like – what would be important elements of such a program?

Is there anything else that you would like to share about the mentoring relationship that I did not include?

Thank you for taking the time to complete the interview and sharing your experience of being a mentor.

Appendix E: Confidentiality Agreement

Western 

Confidentiality Agreement

Project Title:

Principal Investigator:
 Dr. Yolanda Babenko-Mould, RN, PhD
 Associate Professor and Thesis Supervisor of Marie Chantal Murekatete
 Arthur Labatt Family School of Nursing
 FIMS & Nursing Building,
 Faculty of Health Sciences
 Western University
 London, Ontario, Canada

Graduate Student Researcher:
 Marie Chantal Murekatete, MScN Student,
 Arthur Labatt Family School of Nursing
 Faculty of Health Sciences
 Western University
 London, Ontario, Canada

I understand confidential information will be made known to me as:

an interpreter
 a transcriber
 an audio assistant
 a video assistant
 a research assistant

for a study being conducted by Dr. Babenko-Mould and Marie Chantal Murekatete of the Faculty of Health Sciences- Arthur Labatt Family School of Nursing, Western University. I agree to keep all information collected during this study confidential, and will not reveal by speaking, communicating, or transmitting this information in written, electronic (disks, tapes, transcripts, email) or any other manner to anyone outside the research team.

Name of Transcriptionist:
 Signature of Transcriptionist:
 Date: 25/05/2019

Name of Principal Investigator: _____ (please print)
 Signature of Principal Investigator: _____ Date: _____

Version Date: 25/11/2018

CURRICULUM VITAE

Marie Chantal Murekatete

EDUCATION

- Master of Science in Nursing student (MScN student), Western University, Fall 2017-Present
- Bachelor's of Nursing Sciences, University of Rwanda, 2013-2015
- Advanced Diploma (A₁) in Midwifery, Nyagatare School of Nursing and Midwifery, 2007-2009
- Advanced Level (A₂) in Biology and Chemistry, Ecole des Sciences de Nyamagabe, Rwanda 2004

WORK EXPERIENCE

Tutorial Assistant, University of Rwanda - 2016 to Present

- Assisting in the classroom and clinical teaching of undergraduate nursing and midwifery courses
- Proctoring, grading students' works and returning assignments to students
- Leading class discussion sections, tutorials, and simulation teaching and learning, leading the modules
- E-learning coordination activities (preparing the teaching timetable, served as a liaison for student and teachers, follow-up of learning and teaching process)
- Assisting faculty members or staff with simulation teaching and field research.

Clinical Instructor, Nyagatare School of Nursing and Midwifery - 2010-2015

- Conduct simulation teaching activities
- Mentor students at the clinical site.

Registered Nurse Midwife Nyagatare Hospital in Rwanda 2010-2013

- Managing women in labor
- Offering maternity care services (admitting women in gynae and obstetrical unit, conducting deliveries, offering postnatal care services, management of gynecological cases)

Selected Scholarly Activities

B-EmONC Continuous Professional Development (CPD) Provider with Maternal and Child Survival Program (MCSP) from 1st May 2016-July, 2017.