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Exploring factors influencing the implementation of clinical risk management programs by nurses in public hospitals: a case study of the Mbagathi Hospital in Nairobi Kenya

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EXPLORING FACTORS INFLUENCING THE IMPLEMENTATION OF CLINICAL RISK MANAGEMENT PROGRAMS BY NURSES IN PUBLIC HOSPITALS: A CASE STUDY OF THE MBAGATHI HOSPITAL IN NAIROBI KENYA

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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DEDICATION

This research paper is dedicated to my family; my brother Michael Ogolla, my sister Stephanie Oludo, and my mother Alice Oludo, and to the DAAD team.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

CRM	Clinical Risk Management
DALYs	Disability Adjusted Life Years
EU	European Union
HCOs	Healthcare Organizations
ICT	Information and Communication Technologies
IOM	Institute of Medicine
KNH	Kenyatta National Hospital
LMICs	Low- and Middle-Income Countries
MOH	Ministry of Health
RM	Risk Management
UHC	Universal Health Coverage
WHO	World Health Organization

ABSTRACT

As patient safety becomes a priority issue in health systems, clinical risk management (CRM) continues to gain prominence. CRM refers to strategies aimed at identifying, analyzing, and managing potential risks in healthcare organizations. Evidence shows that implementing CRM among nurses can be difficult in low-resource settings. This study explored the perspectives and experiences of nurses in implementing CRM in the context of a Kenyan public hospital, the Mbagathi Hospital in Nairobi Kenya. The study specifically explored how organizational culture and leadership, and resource availability affect the ability of nurses to implement clinical risk management activities at the Hospital. A qualitative approach was taken. This entailed interviewing up to 20 purposively selected nurses, ensuring that their experiences were captured at different levels of the hospital system. Data was collected using an open-ended interview guide, developed building on the objectives of the study. Data were transcribed and transferred into NVIVO for thematic analysis.

The study findings revealed that the main resource factors that affect the implementation of CRM programs were the limitations of human, financial, and physical, and IT resources. This study also identified leadership factors like poor safety culture, poor leadership support and commitment, and poor collaboration and communication to affect CRM programs. This study concluded that although nurses are expected provide high quality and safe care, these challenges have created an unconducive environment to effectively integrate CRM programs into their professional practice. This study suggests that hospitals should provide a favorable working environment, foster leadership commitment, and support, and avail the necessary resources for the successful implementation of CRM programs. The findings of this study were disseminated by giving written feedback to study participants and the hospital management in form of emails. Dissemination will also be done by publishing the study in a peer-review journal to inform management of other public hospitals on strengthening the implementation of clinical risk management activities, and also to inform research on related topics.

Keywords; Clinical risk management, implementation, nurses, experiences, public hospitals, Kenya, Mbagathi District Hospital,

CHAPTER ONE: INTRODUCTION

1.1. Introduction

Health services provision carries inherent risk. According to (Adibi et al., 2012), the modern processes of care and forms of treatment are quite complex leading to increased opportunities for better care. However, they also increase the risk of harm and adverse events (Adibi et al., 2012). Clinical risks have caused many challenges in the healthcare system, which include severe adverse effects on patients as well as an enhanced financial burden for healthcare (Shojania et al., 2001). Healthcare organizations such as hospitals, face a variety of risks that result in direct patient harm, the spread of infections, and/or loss of vital patient information among many other errors (James, 2013). According to the WHO (2019), about 440,000 global patient deaths result from preventable clinical errors. Proper risk identification and management strategies are necessary to reduce clinical risks and improve patient outcomes. Risk management (RM) is the process aimed at identifying and assessing the factors that may hinder the provision of safe, effective, and efficient care, and putting mitigating measures in place (Hazilah & Kassim, 2017).

Clinical risk management (CRM) is a type of risk management that focuses on clinical processes which directly and indirectly relate to patients (Farokhzadian, Borhani, et al., 2015). Briner et al. (2013) define CRM as the processes, activities, instruments, and structures that identify, analyze, monitors, manage, and prevent clinical risks. Clinical risk management (CRM) is not only used to improve the quality but also the safety of health care services. Farokhzadian, Borhani, et al. (2015) asserts that CRM not only improves the quality of care but also helps assure the safety of patients and healthcare providers. According to Park and Sharp (2019), risk management in the provision of hospital care can also reduce the potential liabilities and costs associated with providing and receiving care. Effective risk management often aims at preventing patient harm and involves risk identification, analysis, assessment, and treatment at every level of the health service (Boothman & Blackwell, 2010). Applying clinical risk management programs in the hospital is therefore important in promoting patient safety.

1.2. Background to the study

1.2.1 Global perspective on patient safety

Although patient safety is a global public health concern, the high prevalence of clinical risks including adverse events, errors, and near misses are still major concerns for many healthcare organizations (Skelly et al., 2021). WHO (2019) predictable that one in every ten patients is injured during hospital care globally and the risk of patient death that occurs due to a preventable clinical accident is estimated to be 1 in 300. These estimates are caused by several adverse effects, 50% of which are preventable (WHO, 2019). Worldwide, one of the 10 top causes of disability and death is the adverse effects that result from unsafe care (Murray & Lopez, 1997). According to Groves et al. (2011), about 10% of patients are injured while receiving care in developed countries and about 5–13% of them succumb to clinical harm (Adibi et al., 2012). Research conducted in the USA stated that the risk of patient harm was 10 times higher than projected (Carayon & Gurses, 2008). About 44,000 to 98,000 patients in the U.S. die each year due to medical errors while the European Union (EU) estimated that between 8 and 12 percent of patients hospitalized suffer from clinical errors (Farokhzadian, Borhani, et al., 2015).

In developing countries like Ghana, Kenya, Uganda, Iran, among others, the potential risk of harm to patients is more than the risks in high-income countries (World Health Organization, 2014). A study on patient safety reported that hospitals in low- and middle-income countries (LMICs) report 134 million patient injuries each year due to unsafe care, causing 2.6 million deaths yearly (A. Jha, 2018). Another study done by Jha et al. (2013) reported that about two-thirds of all adverse events that result from medical harm, and the years lost to disability and death, DALYs, occur in LMICs. A study was done by M. J. Johnstone and Kanitsaki (2007) reported that although many hospitals are trying to enhance safety, clinical risks are still high. These clinical risks impose heavy costs on the healthcare system in these countries (M. Johnstone & Kanitsaki, 2007).

In Kenya, a survey on patient safety standards reported a poor state of patient safety systems at most health facilities (Ministry of Health, 2015). According to the report, less than 1% of public facilities and only about 2% of non-public facilities scored greater than 1 in the risk areas of leadership, competent and capable human resource, safe environment for staff and patients, quality and safety improvements, and patients care (MOH et al., 2015). The study

also reported that insufficient infrastructure and fire safety, and the availability of basic services like electricity and water maximized risks in most health facilities.

1.2.2 The concept of clinical risk management (CRM)

The Institute of Medicine suggested that every healthcare organization (HCO) should cultivate a culture of safety such that their workforce and processes of care focus on improving the safety and reliability of patients (Groves et al., 2011). Safety culture is now a key concern of many healthcare organizations across the world and thus many healthcare organizations implement risk management strategies. According to Groves et al. (2011), clinical risk management (CRM) is helping to improve the safety and quality of healthcare services by identifying conditions that cause patients harm and deploying mitigating measures. Farokhzadian, Borhani, et al. (2015) asserts that the majority of risk management programs are aimed at improving quality and safety, in addition to reducing the risk of litigation and other perverse outcomes such as lowering of staff morale. Risk management ensures that risks are identified early, assessed, and control to reduce adverse outcomes (Briner et al., 2010). Early identification and report of safety issues ensure that necessary controls are set up to minimize the likelihood of occurrence of such risks. Whenever there is an undesirable outcome, a root cause analysis is always done to determine what happened and why it happened so that processes are established to improve the safety of care (Shojania et al., 2001). Since patients are the heart of every healthcare service, the risk management process ensures that any areas that compromise patient safety or any areas that have the potential to cause patient harm are managed (Martinez & Dy, 2016). Health-care professionals should, therefore, consider any anticipated risks and the benefits of each clinical situation before acting.

According to Guo (2015), implementing CRM is best achieved by the following steps: establishing the context and identifying risks; assessing the frequency and severity of the risks; deploying the mitigating measures; and finally, assessing the impact on lives saved, harm reduced and costs averted among others. The first step in risk management is establishing the environmental context to set the ground for the entire risk management process (Guo, 2015). The hospital management should support both the hospital's functions and the risk management system. Based on Guo's (2015) study on “implementation of a risk management plan in a hospital operating room”, the following methods can be used to

identify risks; reviewing current and previous data, audit checks, group discussions, brainstorming, informal discussions, accident reporting as well as causal identification. A standardized reporting checklist is then developed to help to identify potential risks in that institution. After identifying risks, risk analysis is conducted, and subsequent risk elimination is applied (Guo, 2015). Risk analysis helps to understand the nature of the risk and its potential to affect project goals and objectives (Guo, 2015). This information is put in a risk register. Once the risks have been identified and analyzed, an assessment is done to determine the likelihood of their occurrences as well as their impact (Oliver et al., 2004). This assessment can be done using a risk assessment matrix. Risk treatment, also called risk control, is the last and crucial part of an effective risk management system. According to Guo (2015), risk treatment involves making decisions on dealing with risks in both the external and internal environment. This usually involves risk acceptance, risk reduction, risk avoidance, and risk transfer (Guo, 2015).

1.2.3 CRM Implementation

Despite the international efforts to enhance patient safety by implementing CRM, studies have shown that implementing CRM has been a challenge for many healthcare organizations across the world (Rubin, 2016). Getz & Lee (2011) argued that the same resources, time, and energy are not invested in implementing a CRM strategy as they are in formulating them. Several factors affect the implementation of CRM. One is described by Radomska (2015) as the fallacy of detachment where the CRM planning process is done by the upper levels of management, while the implementation is left to the staff who carry out operations (Rajasekar & Khoud, 2014). According to Leibbrandt and Botha (2014), most organizations' cultures do not support the CRM which is implemented within health organizations.

According to a study done on Assessment of Clinical Risk Management, successful implementation of CRM involved managing financial, human, physical, and equipment resources (Farokhzadian, Nayeri, et al., 2015). The authors maintained that the limitations of these resources led to the ineffectiveness of CRM programs. Competent and efficient human resources for health, and availability of equipment and physical assets like technology and physical space are effective in attaining the goals of CRM (Farokhzadian, Nayeri, et al., 2015). Additionally, good leadership is a key driver of a successful CRM implementation process. Kazmi (2008) reported that implementation processes that have

good guidance and oversight often stir up commitment among the staff in the organization. Mapetere et al. (2012) reported that good and supportive leadership ensures that the entire staff embraces the necessary change needed for the implementation process. According to Ngui and Maina (2019) factors that impede the implementation of strategies in Kenyan health organizations include inadequate human resources, financial resources, organizational culture, and technological competencies. Understanding the challenges of implementing CRM from the perspective of nurses, and resolving them, is important in the successful implementation of CRM (Ravaghi et al., 2013).

1.2.4 The role of Nurses in CRM implementation

The health care system is made up of different workforce. Among the workforce are nurses who form the largest health professionals' group and assume most of the patients' related responsibilities (Heidarzadeh et al., 2015). Nurses play an important role in the health care system especially in the provision of primary health care services where they provide single-handed services and community-based integrated health care services professionally and ethically to ensure safety (Oldland et al., 2020). Nurses are important sources of patients' information; they implement physician treatment plans and play a major role in inpatient care. While physicians are responsible for medical decisions like diagnosis and treatment decisions, they only spend about 30 to 45 minutes a day with even a critical patient (Kounenou et al., 2011). Nurses, on the other hand, are constantly present with patients and regularly interact with the other carders, and the family members of the patients to ensure coordination and timely communication of the patient's condition (Kounenou et al., 2011). The shortage of nurses has therefore implications for efficiency and costs that impact the quality of patient care (Duffield et al., 2014).

Being the main component of the front-line hospital staff, nurses are critically important in ensuring the safety of patients while providing direct care to them (Wakaba et al., 2014). Since the healthcare environment is dynamic, nurses are required to practice the full extent of their education, experience, and role in keeping patients safe. From a patient safety perspective, the role of nurses involves identifying errors and near misses, observing patients for clinical conditions, understanding the processes of care and the weaknesses found in such processes, communicating any changes in the patient condition, and carrying out duties that ensure the quality of patients care (M. Johnstone & Kanitsaki, 2007). Their contribution is

important in providing safe and effective care and therefore they have the capability and capacity to help in the management and prevention of clinical risks (Wakaba et al., 2014). In a study to determine the role of nurses in the risk management of organ and tissue donation, Saviozzi (2010) reported that nurses share the responsibility to evaluate clinical risks and implement appropriate strategies for error prevention based on their competencies, experience, and education.

Although the quality and safety role expectations of nurses assume that the nursing staff is prepared to fulfill its responsibilities, M. Johnstone and Kanitsaki (2007) report that most nurses are not well equipped to effectively manage clinical risks when delivering patient care. Gaffney et al. (2016) also argue that the majority of the nursing workforce is not prepared to fully implement risk management strategies because of inadequate managerial support. Arguably, if nurses are not aware of their responsibilities or are not fully equipped to fulfill their responsibilities, the quality of healthcare may be compromised (Groves et al., 2011). Since the nursing professionals have direct participation in the safety of patients and are at the forefront of CRM implementation, it is essential to understand their perception of the factors that affect their implementation of clinical risk management that may compromise the quality of care delivery. Nurses' perceptions of what affects their role in providing quality care may be considered an essential and informative source of information about perceived factors. And thus, this study was centered on exploring whether leadership and availability of human, financial, and physical resources affect the nurses' ability to implement CRM in a public hospital in Kenya.

1.2.5 Public Hospitals in Kenya

Universal health coverage (UHC) has become a rallying call for countries globally towards achieving health-related Sustainable Development Goals. UHC seeks to promote coverage and equity in access to health services and to ensure the safety and quality of health services provided (Mccollum et al., 2019). As more low- and middle-income countries (LMICs) are making efforts to achieve universal health coverage, an emphasis has also been put on improving the quality of patients. Kenya is making significant progress in promoting UHC. The Kenya Health system consists of 4 major levels of care: the national level, county level, primary level, and community level, which are stewarded by the national ministry of Health, health regulatory bodies, and the county department responsible for health. The health

workforce threshold in Kenya is 2.5/1,000 for doctors, midwives, and nurses (Wakaba et al., 2014). In the Kenyan public health sector, there are approximately 10 nurses for each doctor (Wakaba et al., 2014). Public hospitals in Kenya are government-funded care provided at the primary healthcare level.

The Ministry of Health has classified public hospitals based on the size of the facility, the services offered, the number of beds, as well as the size of the population it serves. The amenities under the ministry include national referral hospitals, county referral hospitals, and sub-county hospitals. A national referral hospital is established under the State Corporations Act Cap 446 to provide diagnostic, therapeutic, and rehabilitative services (Kipchumba, 2012). The national referral hospital receives patients who are referred from other hospitals within or outside the country and provides learning facilities for medical and nursing students (Kipchumba, 2012). The national referral hospital in Kenya is called Kenyatta National Hospital (KNH). County hospitals, on the other hand, act as referral hospitals for the sub-county hospitals. They coordinate and control all health activities at the county level and provide oversight during the implementation of the health policies, and serve as training institutions for intern doctors and nurses (Masaba et al., 2020). Sub-county hospitals serve as referral units and supervisory centers for smaller health units like health care centers, nursing homes, and dispensaries, and clinics. They are often managed by medical superintendents and serve as a source of information during the planning, implementation, and evaluation of health care programs implemented by the Kenyan Ministry of Health (Masaba et al., 2020).

1.2.6 Mbagathi County Hospital

Mbagathi County Hospital is a County referral hospital located in the capital city of Nairobi, under the Ministry of Health. The hospital was constructed in the1950's to provide health care services for infectious diseases like Tuberculosis, Leprosy, Meningitis, and Measles, which required isolation (Enoch, 2014). It operated under KNH until 1995 when it separated from KNH and became an autonomous district hospital. The hospital has a population catchment of about 400,000 and serves mainly more than 3 million people of low socioeconomic status from a neighboring slum of Kibera. It serves as the main County hospital in Nairobi. Mbagathi County Hospital has a 250-bed capacity with a maternity ward, surgical ward, newborn unit, and growth Monitoring and promotion unit (Enoch, 2014). Its

outpatient services include antenatal clinic, family planning, HIV counseling and testing, antiretroviral therapy, dental clinic, eye clinic, radiology services, and Tuberculosis diagnosis and treatment. The hospital is an approved center for internship training in medical, dental, nursing, and midwifery. Mbagathi hospital is funded by both the government and donors to improve its service delivery (Enoch, 2014).

1.3. Problem Statement

Quality of care is a key element of Sustainable Development Goal 3 that seeks to promote healthy living for all by 2030. The system of care delivery has an emphasis on preventing errors and building a culture of safety (Mitchell, 2008). The delivery and management of safe and quality care are important in all aspects of healthcare. A key priority of the WHO is supporting countries in the implementation of safe and integrated health services by developing policies, guidelines, strategies, and best practices (World Health Organization, 2014). Despite the presence of policies and strategies for preventing and managing clinical risk, the actual implementation is sporadic in most hospitals (Sendlhofer et al., 2015).

WHO report on 'global health risks' showed that high-income countries have relatively few risks of harm compared to low- and middle-income countries (WHO, 2009). This is because most high-income countries have more available resources and thus report higher rates of successful CRM implementation. Results from a study conducted on 'key enablers in fostering clinical risk management (CRM) in hospitals' reported that hospitals that had great organizational resources and good structural conditions were successful at implementing CRM (Briner et al., 2013). Hospitals in countries like Germany, New Zealand, and Switzerland have managed to successfully implement risk management programs because of the availability of resources, great leadership, good staff training on CRM, and good staff participation (Farokhzadian, Borhani, et al., 2015). A study done at a university hospital in Austria to assess the implementation results and outcomes of CRM systems reported that an average reduction of critical incidences of 59% upon the implementation of a CRM system (Buchberger & Schmied, 2020). The efforts of implementing CRM in most hospitals in developing have been daunted by several obstacles. A study done by Adibi et al. (2012) identified obstacles like lack of financial and physical resources, inadequate training programs, high workload, poor organizational culture, unsupportive leadership, and poor understanding and assessment of the implementation process of CRM. Resource constraint

countries like Kenya are still far from achieving international safety standards. The results of a study done by Kimathi (2017) reported that very few hospitals in Kenya have not achieved not good results in implementing CRM programs.

As the largest group of providers focusing on preventing clinical risks, the impact of registered nurses across the world is important to patient safety initiatives. However, studies have identified several challenges faced by nurses in implementing such safety initiatives. A qualitative study done by Farokhzadian et al. (2018) to explore the experiences of nurses of the challenges that are faced in implementing safety culture in healthcare reported insufficient leadership effectiveness, inadequate organizational infrastructure, a gap in team coordination, inadequate efforts to adhere to national and international standards, and non-supportive management as the key challenges affecting the implementation processes. A systematic review was done to explore factors that influence the adherence of nurses' to patient-safety initiatives reported factors like nurses' knowledge and attitudes, appropriate equipment, and ICT, and collaboration by nurses to affect adherence to patient-safety initiatives (Vaismoradi et al., 2020). Another study done to determine the perceptions of healthcare professionals (with the majority being nurses (57%)) in Nyeri County Teaching and Referral Hospital on the factors influencing patients' safety in Kenya found that the hospital management did not set aside resources annually for patient safety programs and that the hospital did not have a clinical risk protocol in place (Kinuthia, 2018).

Despite the presence of policies and strategies for preventing and managing clinical risk, integrating CRM into routine structures in complex hospital setups is a challenge for most hospitals especially those in low-resource settings. For this reason, this study focused on the factors that impede the implementation of CRM in a public hospital in Nairobi, Kenya. Considering the importance of the roles of nurses concerning patient safety and in the implementation of risk management programs, their perception and experiences of the factors that influence the implementation of CRM programs can enable the development and implementation of better strategies.

1.4 Research objective

To explore the nurses' perspectives and experiences on the factors that affect their ability to implement clinical risk management activities by nurses at the Mbagathi Hospital in Nairobi Kenya.

1.4.1 Specific objectives

1. To explore the nurses' perspectives and experiences on the effect of leadership on the implementation of clinical risk management activities by nurses in Mbagathi hospital in Kenya.

2. To explore the nurses' perspectives and experiences on the effect of resource availability on the implementation of clinical risk management activities by nurses in Mbagathi hospital in Kenya.

1.4.2 Research questions

1. How does leadership affect the nurses' ability to implement clinical risk management activities in Mbagathi hospital in Kenya?

2. How does resource availability affect the nurses' ability to implement clinical risk management activities in Mbagathi hospital in Kenya?

1.5 Scope of the study

This study was done at Mbagathi Hospital in Nairobi, Kenya. The study focused on the nursing staff who are directly involved in the implementation of clinical risk management programs. The study took 6 months, between February and July 2021.

1.6 Significance of the study

This study will benefit the management of public hospitals, helping them to appreciate the challenges of CRM implementation and therefore plan accordingly. The findings of this study will offer a better understanding of promoting strategic thinking among the managers of other health institutions as well as the policymakers in the implementation of risk management strategies, and how they can achieve better success on future implementations. The study will also be a reference for future researchers and other academicians on the related topics.

1.7 Limitations of the study

One of the challenges in this study was the tight schedule of the nursing staff, who are the respondents to the study. This study only explored the factors affecting CRM implementation in only one public hospital in only one geographical setting, Nairobi. The transferability of the findings may therefore not be done in other situations and geographical

settings. Additionally, the method used, the qualitative method, left room for personal influence and biases from both the participants and the researcher.

1.8 Organization of the Study

This proposal is organized into 6 chapters. Chapter one describes the background of the study, statement of the problem, the purpose of the study, objectives of the study, significance of the study, the scope of the study, limitations of the study, assumptions of the study, delimitation of the study as well as the definition of significant terms. Chapter two features the study of literature review against the background of key study variables. It also captures the theoretical framework and conceptual framework that the study is based on. Chapter three features the research methodology used in the study including the research design, sample size and sampling procedures, the target population, data collection procedures, data analysis technique, dissemination of study results, and ethical considerations. Chapter four presents the results of the study while chapter five discusses the results and chapter 6 presents the conclusion and recommendations from the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This literature review explores the experiences of the nurses in implementing clinical risk management (CRM). A review of literature on clinical risk management and on factors that affect CRM implementation; leadership and financial, human, and physical and equipment resources, is conducted to gain a deeper understanding. A systematic search is conducted using databases like PubMed and google scholar.

2.2 Theoretical Review

This study is guided by performance theory because it focuses on the performance of nurses in implementing clinical risk management practices and the factors that influence their performance. Other theories that are relevant to this study are transformational leadership theory and resource-based view theory as they explain how organizational leadership can inspire teams to implement change/strategies, and how organizational internal resources affect an organization's capability to implement strategies, respectively (Collins et al., 2020)(Baroto et al., 2017). However, these two theories only explain how organizational leadership and internal resources influence the implementation of strategies but do not explain the nurses' actions in achieving the goal of safety and how such situational factors affect their actions. Theories like the contingency theory and resource dependence theory (RDT) were not used in this study because they do not explain how leadership and the availability of resources affect the nurses' performance in implementing CRM practices. It is for this reason that this study takes into consideration Campbell's and colleagues' model of job performance.

2.2.1 Job performance theory

Job performance is defined as individuals' actions that contribute to the goals of an organization (Campbell & Wiernik, 2015). According to Campbell and Wiernik (2015), performance is what directly facilitates achieving the organization's goals. Performance is different from indicators like efficiency or productivity as it just involves the execution of actions that must be relevant to the goals of the organization (Campbell & Wiernik, 2015). Patient safety is the goal of most healthcare organizations today and to achieve this,

healthcare professionals are mandated to provide care that is safe to the patients and performs other tasks related to this goal.

Campbell and Wiernik (2015) categorized job performance into hierarchical management performance, peer or team member performance, and individual performance. This study focuses on performance at the individual and team levels as it considers the implementation of CRM among nurses. According to Oldland et al. (2020), the responsibility of nurses in the provision of quality healthcare goes beyond the provision of safe care. They are required to align with the best practices and clinical standards and to participate in the bigger organizational quality system and safety structure including risk management structure. Oldland et al. (2020) argue that the quality of healthcare may be compromised if nurses are not aware of the breadth of their responsibilities, do not perform their responsibilities, or are not equipped to perform their responsibilities.

Campbell and Wiernik (2015) have argued that performance is affected by factors like individual trait variables like; personality, cognitive abilities, individual characteristics and abilities, and motivational dispositions, state variables like; attitudes, relevant skills, and knowledge, and motivation, and situational characteristics like; reward structure, organizational culture, management, and leadership, and, resources. This study focuses on the situational characteristics' factors like leadership and financial, physical, and human resources that affect the performance of nurses in implementing clinical risk management practices. According to Campbell and Wiernik (2015), situational factors like unsupportive environment and leadership and lack of resources affect job performance.

2.3 Empirical Review

2.3.1 Experiences of implementing CRM programs in Public hospitals

The introduction of CRM has resulted in a visible shift regarding patient safety culture across healthcare organizations. However, implementing CRM into the complex routine procedures of hospital organizations has continuously been challenging. CRM implementation can be described as executing tactics in both the internal and external environment to prevent patient harm (Brinkschröder et al., 2014). According to a study done by (Farokhzadian, Nayeri, et al., 2015) on "the challenges of effective integration of clinical risk management into hospitals in Iran", the implementation process of CRM is affected by factors like

organizational culture and leadership, availability of human, financial, physical, and equipment resources. A cross-sectional study done on 200 nursing staff from three teaching hospitals in the southeast of Iran by (Briner et al., 2013) to assess the status of CRM systems reported that organizations that use a bottom-up approach have proven to be unsuccessful implementing CRM than those that use a top-down approach.

Public hospitals in developing countries are often characterized by inadequate financing, inefficiencies, poor quality, and inadequate supplies and equipment (Bloom et al., 2013). According to Jabnoun and Chaker, (2003), the standards of healthcare services in these public facilities in developing countries are usually below the standards of those of private hospitals. A study done by Kimathi (2017) to determine the challenges of the health sector devolution in Kenya reported that public healthcare programs and facilities in Kenya are usually understaffed, lack medical supplies, and are poorly equipped. Kimathi (2017) reported that most public hospitals in Kenya lack adequate personnel with the overall ratio of healthcare workers to the population falling below 230 per 100,000 people which is recommended by WHO. The study also highlighted that most are not well-financed and therefore lack essential supplies and equipment required to reduce the risk of clinical errors. Kenyan public hospitals are struggling to put risk management strategies and structures in place to improve patient safety in their facilities (MOH, IFC, WHO, 2013). Patients in Kenya often prefer seeking care in private hospitals because of their high-quality services and because public hospitals have higher-risk cases of patient harm (Njoroge et al., 2015).

Quantitative research done by Kinuthia (2018) at Nyeri County Teaching and Referral Hospital in Kenya to determine the perceptions of 206 healthcare professionals on the factors influencing patients' safety showed that patient safety was not considered as one of the hospital strategic objectives. The majority of participants in the study were nurses (57%), the majority were female (58.4%), the majority were aged between 21-30yrs (42.3%), the majority were diploma holders (83.2%), and the majority had between one to five years of experience (46.9%). The findings of the study reported that hospital leadership, organizational culture, patient engagement, and communication significantly affected the implementation of patient safety programs (Kinuthia, 2018). The study recommended the hospital set up patient safety programs that involved training all the healthcare professionals

and establishing supportive leadership and culture to ensure implementation of such programs.

A case study conducted by Enoch (2014) at Mbagathi District hospital found that the challenges faced by the hospital in implementing and evaluating the strategic management practices included insufficient funding, shortage of medical supplies, limited bed capacity. According to Enoch (2014), most respondents mentioned the need for additional funding from the government to enable the hospital to carry out capital expenditure projects. The study also highlighted the hospital was faced with staffing challenges; the respondents in the study cited the need to have additional medical staff to assist the hospital in service delivery. With regards to hospital equipment, the study established that the hospital had received a supply of additional equipment which resulted in an increased flow of patients (Enoch, 2014). The study however reported that hospitals responded to some of these challenges by providing additional space within the hospital and outsourcing healthcare workers. The study also noted that Mbagathi hospital developed a 5-year strategy that was not implemented to a greater percentage (Enoch, 2014).

2.3.2 Influence of leadership on CRM implementation

Leadership plays an important role in ensuring the success of risk management in an organization. Implementing and communicating risk management strategies require the strong support and input of the management. A study done by Daly et al. (2014) to determine the importance of clinical leadership in hospital settings reported that effective clinical leadership is important in ensuring quality health care services. The study reviewed literature published on "clinical leadership" to describe the characteristics, attributes, and qualities needed for effective leadership, and to the enablers and barriers to effective leadership in hospitals. The study recorded clinical leadership characteristics like expertise, high motivational and interpersonal skills, ability to empower staff, involvement in inpatient care, and commitment to high-quality practice to be important in ensuring high quality of patient care (Daly et al., 2014). Daly et al. (2014) also reported barriers like lack of incentives, poor communication, clinician mistrust, poor preparation for leadership roles, lack of confidence, role conflict, inadequate resources, curriculum deficiencies at undergraduate levels, lack of vision and commitment, poor teamwork, poor interdisciplinary relationships, and resistance to change to be among the barriers to effective clinical leadership. Daly et al. (2014)

recommended that hospitals should develop clinical leadership skills among nurses and address these barriers to ensure effective management of clinical risks. The leadership skills of nurse administrators can therefore result in the successful implementation of CRM.

A systematic review of papers published in a peer-reviewed journal between 2004 to 2015 done by Sfantou et al. (2017) to assess the difference between different leadership styles and healthcare quality measures reported that leadership styles play an integral role in clinical risk management. The study reported that transformational leadership styles were significantly linked to lower patient mortality, while relational and task-oriented leadership were related to higher patient satisfaction. According to the study, the leadership has the responsibility of providing resources, providing training and educational material, creating an organizational structure, and providing time and budget that support the staff in implementing the risk management program (Sfantou et al., 2017). However, Sfantou et al. (2017) reported that the responsibilities of these leaders are often limited by resources, schedules, cost, and other business priorities. This causes the management not to fulfill their responsibilities and thus affecting the process of implementing risk management programs. In addition to providing necessary resources and training, Collins et al. (2020) reported that implementing risk management practices requires transformational leaders who inspire confidence, encourage active participation, and instill loyalty through a shared vision to strengthen the morale of the staff and increase productivity. Sfantou et al. (2017) concluded that effective leadership contributed to a high-quality work environment leading to a positive safety climate. Health care organizations should therefore to build the capacity of leaders and ensure technical and professional expertise to ensure that CRM practices are well integrated.

The culture within an institution is very important and plays a key role in creating a safe work environment. A cross-sectional study done on 200 hospital nurses in Taiwan, done by Tsai (2011) to determine the association between leadership behavior, organizational culture, and job satisfaction of employees established that the basic responsibility of leadership in any healthcare organization is to create a strong culture of safety. Tsai (2011) defined organizational culture as the beliefs and values that exist in an organization for some time. According to Tsai (2011), the leadership of an organization sets the tone for what's acceptable within the organization. Tsai maintained that the mission, goals, aspirations,

values, and ideals of a company are set by leadership, and this influences the culture of the company. Leaders, therefore, have a responsibility of defining, training, measuring, and rewarding the culture they want to build (Sarros et al., 2002). A hospital with leadership that has set processes, systems, behaviors, and policies that are patient-centered and that focus on reducing risks, is more likely to have fewer incidences of patient harm (Baquillas, 2018). In his study, Tsai (2011) concluded that organizational culture is very essential in providing a healthy environment for risk management. Another study done by (Cooke, 2009) to review key theories of risk and safety and their nursing implications reported that the safety culture of an institution depends on the attitudes, competencies, perceptions, values, and patterns of behavior of individuals and groups within the organization as this determines their commitment to promoting safety. Leadership can therefore be recognized as a major factor for developing organizational culture and for effective implementation of risk management practices.

2.3.3 Influence of resource availability on CRM implementation

A hospital that has sufficient resources is likely to find it easy to implement risk management strategies. Research done by (Ngui & Maina, 2019) to determine the influence of resources on strategy implementation in Non-Profit Organizations in the Kenya Medical Research Institute examined how financial, human, and technological resources influenced strategy implementation. In this study, data was collected from 60 management staff at Kenya Medical Research Institute using self-administered semi-structured questionnaires and analyzed using descriptive statistics. The study concluded that proper allocation enables managers to put together efficient and productive teams and avail other resources to smoothen the implementation process. According to Ngui and Maina, (2019), organization workers are important assets to the implementation process as they help in the efficient functioning of the organization. Additionally, the study reported that technological competencies were important in streamlining the interactions both internally and externally. The findings of the study reported that inadequate human resources, financial resources, organizational culture, and technological competencies are the major factors that impede the implementation of strategies in most Kenyan organizations. Effective use of human, physical and financial resources is therefore important in enabling hospitals to provide efficient and high-quality care to patients (Huston, 2003). Insufficient resources in healthcare settings on

the other hand, have major consequences on the quality of patient care (Withanachchi et al., 2007). The leadership of healthcare organizations should therefore provide sufficient financial resources to implement clinical risk management strategies.

Financial resources are key for the implementation of clinical risk management. Results from a qualitative study done to investigate the perspectives of 20 nurses on the challenges of effectively integrating clinical risk management into hospitals in Iran, reported that the participants acknowledged that financial resources are an important requirement for the implementation of CRM (Farokhzadian et al., 2015). According to Farokhzadian et al. (2015), lack of financial resources is the main obstacle to implementing quality improvement and patient safety programs. Insufficient finances result in shortages of medical supplies, qualified and skilled healthcare workers, and the use of less efficient and outdated medical equipment because of a lack of finances to buy the equipment. Farokhzadian et al. (2015) explained that financial resources were critical in the provision of infrastructures like medical technology and equipment and the management of human resources needed for implementing CRM and thus lack of financial resources impedes the implementation process. The study recommended that organizational context should be improved to give nurses a proper and positive atmosphere needed to implement CRM (Farokhzadian et al., 2015). According to Ngugi and Maina (2019), proper allocation of financial resources enables hospitals managers to build productive and efficient teams that enable a successful implementation process. According to Anderson (2013), reducing spending in wasteful areas allows the finances to be re-allocation for the purchase of more efficient resources. Allocation of adequate financial resources and supportive budgets are therefore key priories during the implementation of CRM programs.

A study done by Mojibian et al. (2017) to determine the role of human resources management in risk management and patient safety in Yazd, Iran reported that human resources are among the main factors that hamper the implementation of risk management strategies. In the study, data was collected from experienced medical staff and risk management experts. After analysis using descriptive statistics, it was established that human resources are an important asset as they are directly involved in the implementation of safety programs. The study recommended that organizations should consider human resources to successfully formulate and implement strategies. Competent and efficient

human resources are important in attaining the objectives of a CRM system (Farokhzadian et al., 2015). According to a qualitative study done in Iran by Vaismoradi et al. (2012) to explore the experiences and perspectives of 16 bachelor's degree nurses on how to provide safe care in clinical practice, lack of competent and motivated personnel were major contributing obstacles to nurses' efforts to provide safe care. The study also reported a lack of knowledge and skill, a limited number of nurses with the essential skills and experience, and low accountability and commitment among nurses as other factors limiting the implementation of risk management practices among nurses (Vaismoradi et al., 2012). An analysis of the public sector nursing workforce in Kenya indicated that the shortage of nurses had caused health facilities to over-rely on the few available nurses which makes them overworked, fatigued, and demotivated, this has, in turn, increased the likelihood of patient harm (Wakaba et al., 2014). The capacity of the health workforce is another key factor that influences the implementation of CRM in poor resource settings (Kabene et al., 2006). Capacity building not only empowers nurses but also the patients and communities to ensure accountability. Although they often lack in resource-poor settings, the motivation and continuous professional development of nurses increase confidence in clinical skills which in turn increase the adherence to and implementation of risk management strategies (Nambiar et al., 2017). Effective human resource management strategies are therefore important in implementing the management of clinical risks.

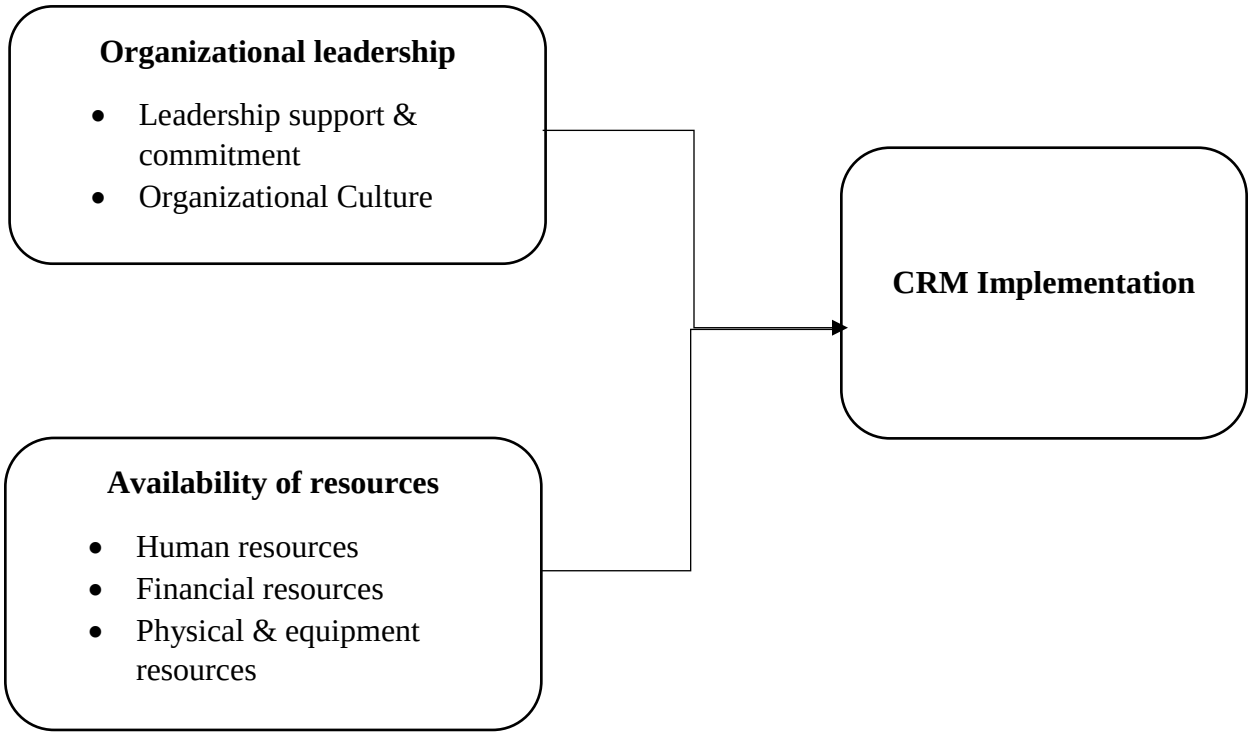
Similarly, the availability of medical equipment and supplies, technology, physical and sanitary environment, is critical in providing a safe environment for both the patients and the healthcare providers (Farokhzadian, Nayeri, et al., 2015). A study done by Krein et al. (2010) to determine the effect of organizational setting on the patient safety and quality improvement efforts in infection prevention revealed that the development of physical and facility resource infrastructures was important for improving the effectiveness of the CRM system. In the study, Krein et al. (2010) considered different aspects of the organizational context to compare and contrast the experiences of different hospitals to determine why and how certain hospitals were more successful with practice implementation than others. The study reported that hospitals with proper and well-developed infrastructure and favorable working conditions were more successful in implementing practice than the others (Krein et al., 2010). According to Ngui & Maina, (2019), technological competence is important in streamlining both internal and external interactions to ensure the success of implementation.

Availability of the three resources mentioned above plays a critical role in implementing clinical risks management practices in public hospitals.

2.4 Conceptual Framework

The conceptual framework shows the variables that influence the implementation of clinical risk management in public hospitals.

Figure 2.1: Conceptual Framework



2.5 Gap analysis

Studies have shown that implementing clinical risk management programs is challenging for most hospitals, and especially hospitals in low resource settings. In Kenya, most public hospitals have not fully implemented risk management programs due to organizational challenges. In Mbagathi hospital, studies have shown that challenges like poor planning, limited resources, limited capacity, and poor support from the leaders, which have been shown to have affected the implementation of most programs. This study explored whether these factors affect the nurse's ability to implement CRM programs in the hospital. The nursing workforce is the largest group of professionals in the health field, play a crucial role

in ensuring the provision of safe and effective care. Studies have however shown a rise in clinical risks in hospitals settings despite the role of nurses in promoting patient safety. It is for this reason that this study explored the factors that affect the implementation of CRM from the nurses' perspectives in Mbagathi hospital to help ensure that the implementation process CRM can be improved for better results.

2.6 Empirical review table

The table below shows the main studies reviewed in this chapter, their findings, and the research gaps that exist in such studies.

Table 2.1; Empirical review table

Empirical studies	**Findings**	**Research gap**
Daly, J., Jackson, D., Mannix, J., Davidson, P. M., & Hutchinson, M. (2014). The importance of clinical leadership in the hospital setting.	The study linked effective clinical leadership to system performance, achievement of health reform objectives, timely and efficient care delivery, and the implementation of key risk management strategies.	The study focused on the importance of clinical leadership but did not directly address how clinical leadership affected CRM implementation.
Farokhzadian, J., Nayeri, N., & Borhani, F. (2015). Rocky milieu: Challenges of effective integration of clinical risk management into hospitals in Iran.	The results from the study indicated that organizational challenges like lack of financial, physical, and human resources created a rocky environment for effective integration of CRM among nurses.	The study explored the challenges of implementing CRM in three teaching hospitals in one area of Iran while this study was

		done in a different geographical context; Kenya.
Kimathi, L. (2017). *Challenges of the Devolved Health Sector in Kenya : Teething Problems or Systemic Contradictions*	The study found most challenges in public hospitals to be related to capacity gaps, lack of infrastructure, and healthcare personnel.	The study does not relate these challenges to the implementation of clinical risk management practices.
Kinuthia, P. M. (2018). *Factors Influencing Patients' Safety In Kenya: Perceptions Of Healthcare Professionals In Nyeri County Teaching And Referal Hospital, Kenya*.	The findings of the study reported that hospital leadership, organizational culture, patient engagement, and communication significantly affected the implementation of patient safety programs.	This study determined factors affecting patient safety programs in general and not CRM programs specifically. The study was also done in Nyeri county and not Nairobi county. Additionally, the study employed a quantitative rather than a qualitative research design.
Krein, S., Damschroder, L., Kowalski, C., Forman, J., Hofer, T., & Saint, S. (2010).	The study reported that hospitals with proper and	The study did not consider the

The influence of organizational context on quality improvement and patient safety efforts in infection prevention: a multi-center qualitative study.	well-developed infrastructure and favorable working conditions were more successful with practice implementation than the others.	experiences of nurses. Additionally, the study was conducted among U.S hospitals and not Kenyan hospitals.
Ngui, D. L., & Maina, J. R. (2019). Organizational Resources and Strategy Implementation in Non-Profit Organizations; A Case of Kenya Medical Research Institute, Kenya.	The findings of the study reported that inadequate human resources, financial resources, organizational culture, and technological competencies are the major factors that impede the implementation of strategies in most Kenyan organizations.	This study was done in a research institute and not in a hospital setup.
Tsai, Y. (2011). Relationship between organizational culture, leadership behavior, and job satisfaction.	The study reported that the culture within an organization plays a huge role in ensuring a healthy environment for promoting patient safety and for the implementation of risk management practices.	The study employed a quantitative approach and investigated nurses in Taiwan which is a different geographical setting.
Vaismoradi, M., Salsali, M., Turunen, H., & Bondas, T. (2012). A qualitative study	The study found that lack of competent and motivated	The study was done among the

on Iranian nurses' experiences and perspectives on how to provide safe care in clinical practice.	personnel, lack of knowledge and skill, a limited number of nurses with the required skills and experience, and low accountability and commitment among nurses were the major contributing obstacles to nurses' efforts to provide safe care.	Iranian nurses while this study focused on the nurses in a Kenyan public hospital.

2.7 Summary

This Chapter reviewed the relevant literature relating to clinical risk management, and the experiences of implementing CRM in Kenyan hospitals. Leadership and resource availability has had a focus in this chapter, especially in terms of their influence on the implementation of clinical risk management. The research supported that leadership model and characteristics influence the culture of the organization which in turn influenced the implementation of risk management programs. Additionally, the research supported that limited financial, physical/equipment, and human resources have an impact on the implementation of clinical risk management programs. The chapter reviewed Campbell JP and colleagues' theory of job performance that guided this study. The theory supports that nurses have the responsibility to perform their tasks in line with best practices, clinical standards, and the organizational quality system and safety structure. The chapter also analyzed the gap that exists in this study. The conceptual framework illustrated the relationships between leadership, resource availability, and the implementation of CRM.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology adopted in carrying out the study. The chapter presents the research design adopted, the instruments used in collecting data, the procedures used in data analysis, presentation, and dissemination of the study results.

3.2 Research design

The study employed an in-depth qualitative research design to explore the perceptions and experiences of nurses on the factors that influence the implementation of clinical risk management practices at Mbagathi hospital. A qualitative method is a research method that focuses on the commonality of a lived experience among a group of people. The approach's main goal is to describe the nature of the phenomenon in question (Creswell, 2013). This study used a phenomenological research design to examine the lived experiences of the nurses as they perceived them. Neubauer et al. (2019) define phenomenological design as a form of qualitative research that studies the lived experiences of an individual. The thematic analysis method was used to identify themes and patterns that were related to the experiences of participants with the organizational challenges of implementing CRM, according to Kiger and Varpio (2020). The independent variables were the research objectives which are organizational leadership and availability of financial, human, and physical, and equipment resources.

3.3 Participants and Sampling

Purposeful sampling was used to select participants. According to Palinkas et al. (2015), the purposeful sampling technique entails the identification and selection of respondents who are knowledgeable and experienced with the subject of interest. This technique was used in this study to ensure the collection of in-depth information from the right respondents. Nurses were recruited by written invitations that informed them of the purpose and methods of the study and asked them to indicate their willingness to participate. The sampling process continued until saturation to capture the rich and diverse perspectives and experiences of the nurses. According to hospital data, Mbagathi hospital has 200 nurses. Only a sample of a population is chosen for each study in qualitative research; the study research objectives and the characteristics of the study populations determine that and how many people to choose

(Gill et al., 2008). Sample size guidelines for qualitative studies suggested a range between 20 and 30 interviewees to be adequate (Boddy, 2016). The sample size for the key participants in this study was defined using data saturation.

The interview involved 20 purposively selected respondents with diverse backgrounds in age, sex, and years of work experience from different nursing units including; 2 nurses from the surgical unit, 2 from the pediatric unit, 2 from the maternity unit, 2 from the mother and child unit, 2 from accident and emergency unit, 2 from the female medical-surgical ward, 2 from the male medical-surgical ward, 2 from the renal unit, 2 from the mental unit, and 2 from the administration. The respondents were interviewed depending on the recommendations and the information gathered. Interviews stopped once data saturation was achieved. According to Boddy (2016), theoretical saturation can be used as a guide in designing qualitative research, with practical research illustrating that samples of 12 may be cases where data saturation occurs among a relatively homogeneous population. The inclusion criteria included the willingness to participate in the study, having an experience of more than 5 years of nursing experience, a diploma, and a bachelor's degree in nursing. The chosen respondents were knowledgeable on the research problem and were expected to give reliable information.

3.4 Data collection procedure

Individual, face-to-face, semi-structured, in-depth interviews were used to obtain data. All interviews began with an open question that asked participants to describe their understanding of CRM and their experiences in implementing CRM. The interviews lasted 45 to 60 minutes and took place in a quiet room. With the participant's permission, the interviews were audio-recorded. Before data collection, permission to carry out the research was sought. An authorization letter was obtained from the university and a research permit was obtained from the National Commission of Science, Technology, and Innovation (NACOSTI). This permit was used to collect data from the participants. The researchers first visited the selected hospitals, introduced themselves to the hospital administrator who was contacted by appointment before the visit. Brief information was given in regards to the research topic and the purpose of the study was explained to the interviewees, assuring them of the confidentiality of the information to be gathered.

3.5 Risk Assessment

This study posed no economic or physical risks. Participants were encouraged to skip questions that they were not comfortable with. Confidentiality of the information provided was maintained by leaving out the participants' names in the interview forms. The participants remained anonymous throughout the study without any form of identification

3.6 Data analysis and presentation

Data were analyzed using a thematic analysis approach. Thematic analysis is a method of analyzing qualitative data. It is often applied to texts and related data, and more particularly interviews and open-ended questions (Maguire & Delahunt, 2017). This analysis examined the collected data deeply to identify common themes, topics, thoughts, and other factors expressed within the text. Data was collected by interviewing nurses from the Mbagathi hospital in Nairobi, the verbatim data collected were transcribed after every interview session. Analysis began by reading the transcripts several times to get a general view of the nurses on the research topic. Next, significant thoughts, insights, phrases, and sentences which pertained to the lived experiences of the participants on the issue of interprofessional collaboration were clustered into common themes that addressed the research objectives.

3.7 Dissemination of study results

To ensure that the outputs from the research inform practice and thereby maximize the benefit to patients and the hospital, the study results were disseminated to the following key audiences; the nursing provider staff and other hospital staff, and the hospital management. Dissemination of study results included giving written feedback to study participants in form of emails to the hospital staff. The results will also be disseminated to the public and academia by publishing the study in a peer-review journal and a local health newsletter. Due to the COVID-19 restriction, face-to-face interaction was not used as a dissemination vehicle. This will enable interaction with key audiences like the hospital staff and the hospital management to influence attitudes and behavior change. Dissemination of the findings of this study began within six months of completion of the study.

3.8 Validity and Reliability

Leung, (2015) defines validity in qualitative research as the appropriateness of the processes, tools, and data used in a study. This study ensured validity by ensuring that the sampling technique used, the methodology used and the analysis of data was appropriate in this study.

To enhance validity, this study adopted a phenomenological design to examine the perceived lived experiences of the participants, purposeful sampling to identify and select participants who are well experienced and knowledgeable in the subject under study, and thematic analysis to identify, describe and report the themes and patterns that emerged from the participants' experiences. Additionally, validity was enhanced by ensuring that the research questions were in line with the desired outcome. Reliability, on the other hand, refers to the consistency of the processes used and the results obtained (Leung, 2015). According to Taherdoost (2018), an instrument is said to be reliable when it produces accurate and consistent results over and over under the same condition. In this study, reliability was involved constant data comparison and peer reviews from both the ethical committee and supervisor. The reliability of the data instrument was done by conducting a pilot test with 5 respondents. The interview was repeated with the same respondents to compare the responses after which irrelevant questions were determined and removed.

3.9 Ethical approval

The ethical approval for the study was acquired from the ethics committee affiliated with Strathmore University, and the official research permission for collecting the data was obtained from NACOSTI. The objectives of the study were explained to the participants before data collection. Informed consent was also obtained from respondents before they were included in the study to uphold the ethical research standards, and they were made to sign consent forms. The data collected was exclusively used for this study and was treated with a high degree of confidentiality. To ensure confidentiality, the study participants did not include their names in the questionnaires. Additionally, the participants were encouraged to withdraw from the study whenever they wished to.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction

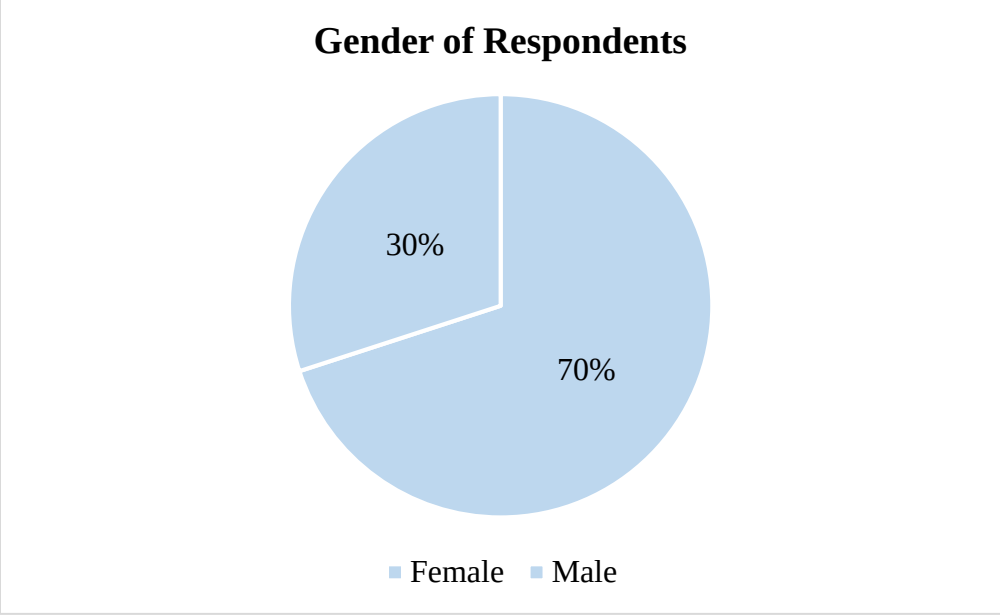
This chapter presents the results of the data collected, analyzed, and interpreted on the specific objectives. The study aimed to explore the factors that influence the implementation of clinical risk management practices among nurses in Mbagathi District Hospital in Nairobi, Kenya. The results comprise the socio-demographic characteristics of the respondents and the leadership and resource factors influencing the implementation of clinical risk management practices. 20 participants were interviewed.

4.2 Socio-demographic characteristics

4.2.1 Gender of the respondents

As shown in figure 4.1 below, the majority of nurse's respondents in this study were female 75% (n=14) while only 25% (n=6) were male. However, both genders participated in this study, and hence no bias in the findings.

Figure 4.1 Gender of respondents

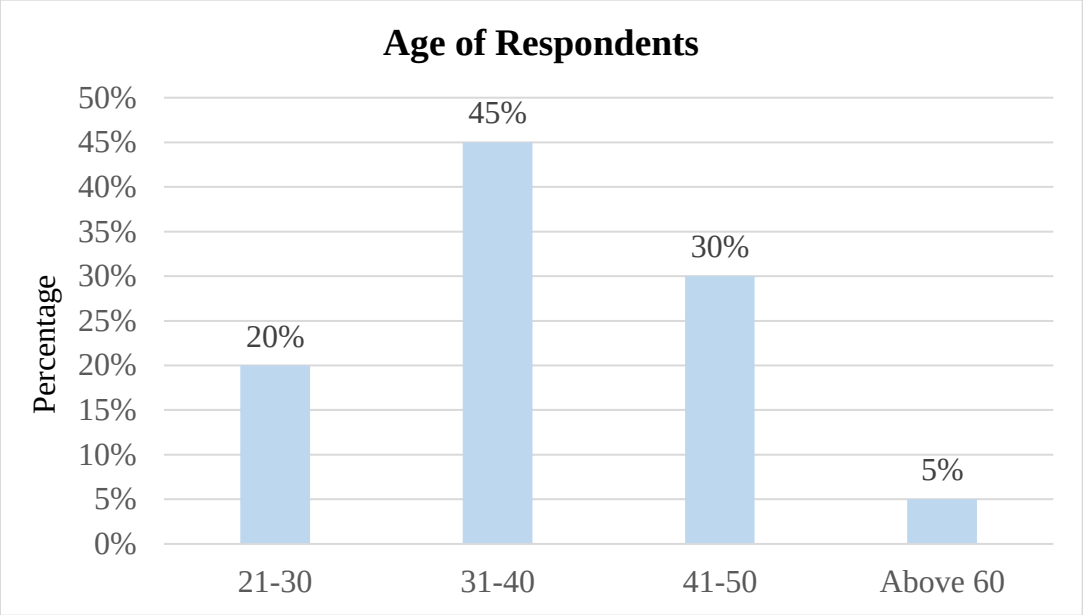


4.2.2 Age of the respondents

The majority of respondents in the study 45% (n=9) were between the ages of 31-40 and only 20% (n=4) and 30% (n=6) were between the ages of 21-30 and 41-50, respectively.

This means that the majority of the nurse's respondents were mature enough to give reliable information.

Figure 4.2 Age of the respondents



4.2.3 Academic qualification of the respondents

In this study, the academic qualification of the respondents was represented by their highest education level. As shown in Table 4.1 below, the majority of respondents 50% (n=10) had a bachelor's degree in nursing while 40% (n=8) had a diploma in nursing. This indicates that the respondents were qualified enough to participate in this study.

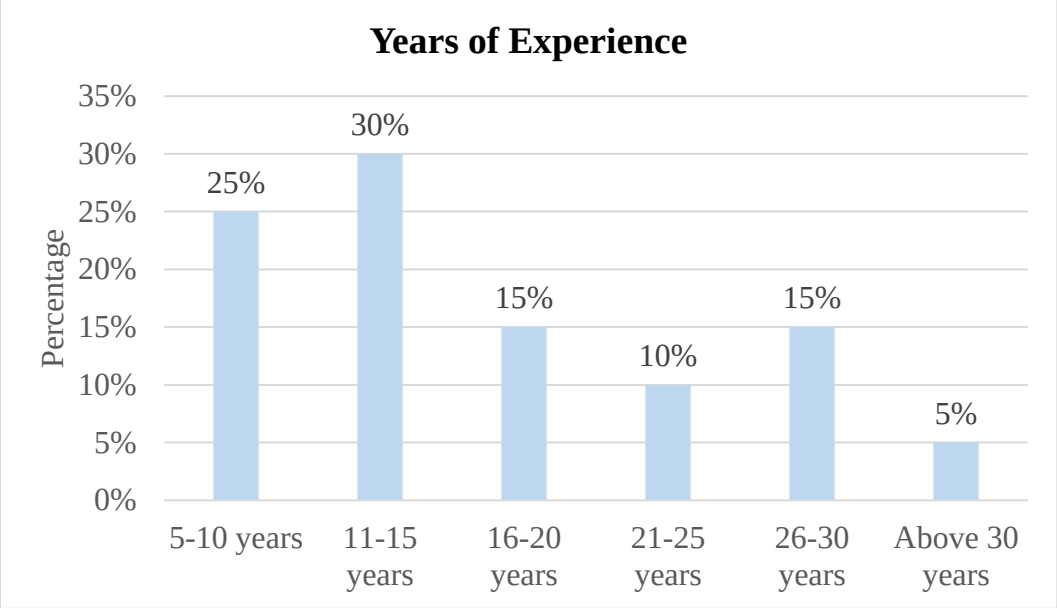
Table 4.1 Education level of respondents

Highest Educational Level	**Frequency**	**Percentage**
BSc. Nursing	10	50%
Diploma in Nursing	8	40%
Diploma in mental health/psychiatric nursing	2	10%
Total	**20**	**100%**

4.2.4 Work experience of the respondents

As shown in figure 4.3 below, the majority of the participants 75% (n=15) had over 10 years of work experience while only 25% (n=5) had under 10 years of work experience. This shows that the respondents had worked long enough to be well conversant with the topic of the study.

Figure 4.3 Work experience of respondents



4.2.5 Designation of respondents

The majority of respondents in this study 80% (n=16) were registered nurses and the other 20% (n=4) were nurse managers as shown in table 4.2 below.

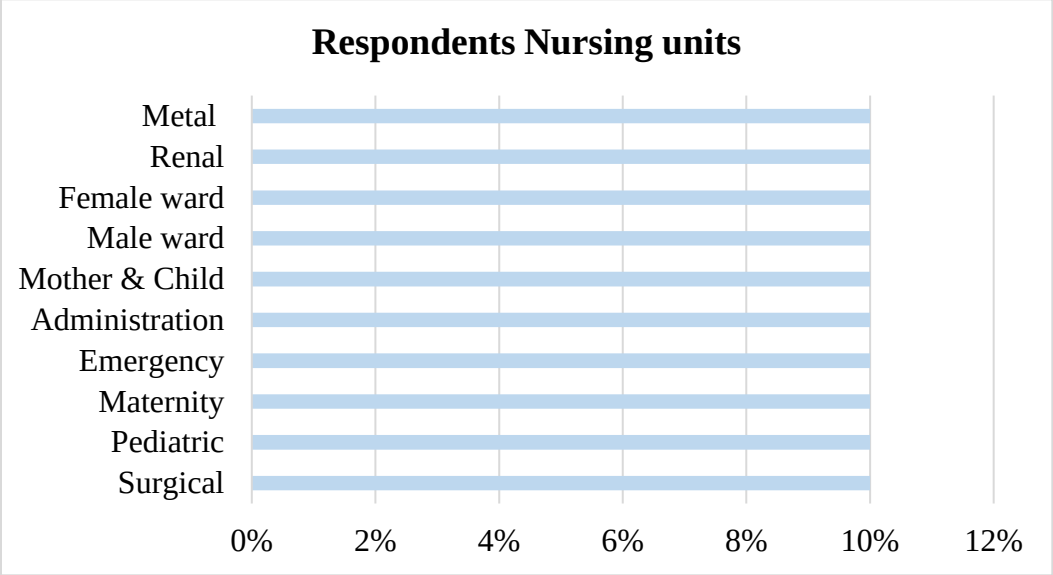
Table 4.2 Designation(s) of respondents

Designation	Frequency	Percentage
Registered nurses	16	80%
Nurse manager surgical unit	1	5%
Nurse manager renal unit	1	5%
Nurse manager NBU	1	5%
Nurse manager emergency unit	1	5%
Total	**20**	**100%**

4.2.6 Respondents Nursing Units

As indicated in figure 4.4 below, an equal number of respondents 10% (n=2) represented each nursing unit; surgical, pediatric, maternity, emergency, administration, MCH, renal unit, mental unit, male and female medical-surgical wards. This representation facilitated comprehensive data collection on the implementation of CRM at Mbagathi hospital.

Figure 4.4 Respondents nursing units



4.3 Findings

The thematic analysis of the data collected produced two themes and five codes as shown in the table below.

Table 4.3 Themes and sub-themes of the study

Themes	**Sub-themes**
Organizational culture and leadership	Leadership support and performance • Poor supervision • Poor leadership style • Poor understanding of CRM systems and requirements Organizational culture • Poor safety culture

	• Resistance to change • Ineffective communication
Resource factors	Financial resources Human Resources • Understaffing/shortage of staff • Lack of motivation • Inadequate training • Inappropriate evaluation of performance • Individual characteristics and professional commitment Physical and equipment resources • Medical facility, and medical equipment and supplies • Technology

4.3.1 Organizational culture and leadership influencing CRM implementation

This theme consisted of two sub-themes of ‘‘leadership support and performance’’, ‘‘culture of safety and resistance to change”, and “communication”.

Sub-theme; Leadership support and performance

According to the experiences of the participants, although leadership support and performance were necessary for successfully implementing CRM programs, the leadership of the hospital provided limited support and governance needed to successfully implement CRM. The participants reported poor leadership behaviors including poor quality of supervision, lack of proper leadership style, and poor understanding of CRM requirements.

Poor supervision. According to the experiences of the participants, poor supervision is a challenge in implementing CRM programs. One registered nurse stated the following point concerning the poor supervision:

One of our nurse managers, most of the time, is inactive and just sits in the office and does not know what goes on the ground. When allocating duties, another nurse manager does not

consider the experiences and qualifications of nurses but instead just allocates duties to any nurse available.

A nurse manager reported:

Although not to the standard, most nurse managers perform their supervisory duties to their best. The issue is not even with the nurse managers, the issue comes when the nurse managers report to the hospital management and nothing is done.

Another nurse reported;

You find that most of us are not aware of what we are required to do, we just carry out our clinical duties and try as much as possible to help and not harm the patients. I don't think most nurses and even our leaders understand what CRM programs to implement.

Poor leadership style. Data also showed poor leadership style as a challenge in implementing CRM programs. Some participants said that some managers are always looking for non-compliance, what staff has not done instead of the positive things that the staff has done. A nurse said;

Some nurse managers scold you when you do a mistake instead of correcting you. For example, one junior nurse administered a drug incorrectly and he was criticized but not corrected.

Another nurse said;

There was a time a new nurse did not make a correct entry when documenting a patient's information. He was shouted at publicly instead of being shown how to do it correctly. It was quite embarrassing for him.

Some participants also reported that some nurse managers do not resolve issues correctly. In addition, injustice was mentioned as a leadership challenge. Some participants reported that some managers did not treat staff equally. One clinical nurse said:

There are nurse managers who favor others more than others. For example, one nurse manager gives his/her favorite staff off days on weekends and not others.

Poor understanding of CRM systems & requirements. The data from the participants suggested that most leaders do not have a clear understanding of the basic principles and administrative aspects of CRM requirements. A nurse stated:

We do not get adequate support to institutionalize CRM systems in our hospital because our high-ranking managers are not familiar with the systems and do not know the system's requirements at all.

Another nurse also said;

I think our leaders should learn and understand different programs of CRM so that they can teach us and encourage us to do the same.

Sub-theme; Organizational culture

Poor safety culture. According to the participants' experiences, a safety culture was necessary for the implementation of CRM. Participants however reported that the culture of safety has not been well adopted in the facility. One nurse said:

Safety culture has not been well adopted by most staff. For example, in our meeting sessions about errors and patient safety incidents, some people resist any ideas that are indifferent to theirs. Instead of considering how to improve the ideas of others, they just shut it down.

Another challenge nurse faced concerning the culture of safety is the fear of punishment or blame whenever they do a mistake. One of the nurses said:

I prefer not to report errors because I do not want to suffer consequences that come with it, like having a reduced evaluation score.

Participants also reported a culture of poor response rate to medical errors. One maternity nurse said:

When an error occurs, it takes between one to three months for a meeting to be held to figure out what caused the error and how it can be mitigated.

Resistance to change. The participants reported that there is a culture of resistance to change in the organization. Concerning resistance to change, one of the nurse managers said:

There is always resistance to new programs aimed at managing risks. For example, no one attends departmental meetings aimed at addressing issues of safety. Nurses always have excuses saying that they do not have enough time and that they have are too many patients to attend such meetings.

A nurse in the male ward stated;

In our unit, we had a new manager who introduced the concept of work partners where each nurse was assigned to another nurse to help them through any challenge they might face in their duties. Nurses did not take it seriously, they only did for a week stopped. They were only doing it to please the nurse manager.

Ineffective communication. Participants considered communication to be essential in implementing CRM programs. Data from the interviews showed an overall communication gap in implementing risk management programs. However, they reported that communication was better among nurses compared to between nurses and doctors. A nurse said:

Communication is usually fast among the nursing staff and also from the nurse managers. The problem comes when nurses have to communicate to cadres like doctors, sometimes they don't listen to us.

However, some nurses reported that sometimes there could be a breakdown in the flow of communication. One nurse said:

Sometimes managers give information to other nurses to pass it around and this could delay the flow of information.

Data also reported that there exists a culture of hierarchy and power difference between nurses. This sometimes causes junior nurses to hesitate to raise their concerns. A nurse said:

Sometimes if we make recommendations or raise any concerns, our recommendations are dismissed so some of us do not feel comfortable raising those issues.

4.3.2 Resource factors influencing CRM implementation

The participants acknowledged that the implementation of CRM involves management of "human", "financial", "physical, and equipment" resources, but reported limitations and shortcomings of these resources.

Sub-theme; Financial resources

The participants considered financial resources as an important requirement for the implementation of CRM. According to the participants, limited financial resources have slowed down the implementation of CRM programs. One head of nurse said:

We have been writing action plans for improving equipment, manpower, etc. but it is always left unimplemented due to a lack of budget. No improvement usually occurs because of a limited budget, and therefore priority is usually given to ongoing patient safety projects rather than new projects.

Another nurse expressed:

We currently have a shortage of masks but the hospital is not in a position to procure them.

Sub-theme; Human resources

According to the participants' experiences, skillful, adequate, motivated, and competent human resources are effective in achieving the objectives of a CRM system. However, mentioned the following challenges with the human resource:

Understaffing/shortage of staff. The experiences of the participants indicated a lack of sufficient competent and experienced staff. This has caused exhaustion and inadequate productivity among the nurses, and thus affecting the implementation of CRM activities. A nurse manager asked:

How could we effectively implement CRM yet we do not even have the power to provide more nurses?

One nurse expressed:

Like today the nurse who was present for the afternoon shift was alone against 30 patients.

Another nurse estimated that about 70% of clinical errors in their facility are caused by nurses' fatigue that results from insufficient staff. The nurse said:

You find that two nurses are responsible for 40 patients, who need special care, on a shift. This makes it so difficult for these nurses to implement risk management.

Lack of motivation. The participants acknowledged that motivated and energetic staff is important for implementing CRM strategies. The data however indicated that most nurses are not motivated to perform their tasks. This has caused dissatisfaction and indifference among the nursing staff, affecting their participation in CRM activities. In this case, one nurse said:

There are no financial incentives. Sometimes we do not get overtime pay. Most nurses are unmotivated, and risk management initiatives are seen as extra work that they need to be paid for.

Another nurse said:

Most nurses ask for sick offs not because they are sick but because they are demotivated and emotionally exhausted.

Participants also expressed that they get too busy to even have breaks during the day. They reported that the only time they get breaks is when they are finishing their shifts. They also expressed concerns about their safety. A nurse said:

We are not motivated to work because we are not secure. There are many cases where the patients' relatives slapped and beat a nurse. The hospital should work on staff safety.

Inadequate training. Data from the interviews indicated that internal training programs were held once a month to foster the culture of integrating CRM into nurses' practice. The participants reported that they receive little to no training on risk management or patient safety. They reported that they occasionally get training like infection prevention and control (IPC) at the county level but not at the institution level. The participants expressed that they are not adequately empowered to participate in the implementation of CRM. When asked about the effectiveness of their training, a nurse stated:

Most of our training is usually in the morning, which is mostly our working hours. So, most nurses miss out on the training because they have to attend to the crowded wards or sometimes just attend half of it. Also, some of these educational programs and tests are taken for formality just to get evaluation scores.

About lack of educational resources, a nurse manager said:

I wish we had access to available teaching materials so that we can study in our own free time when we do not have a lot of work to do. We do not have such resources.

Inappropriate evaluation of performance. Although nurses acknowledged that performance evaluation is an important technique for empowering staff to achieve CRM objectives, they expressed dissatisfaction in their organization's system for rewarding and punishing

employees. They considered the evaluations to be unfair. A nurse with 11 years of experience expressed*:*

There is a lot of prejudice in evaluating performance. People who are dedicated in their work, who are patient-centered, and report errors are not appreciated; they are treated the same as the rest.

Another nurse also stated;

Instead of pointing out areas that we need to improve, some managers are so critical and not sensitive when giving us feedback.

Individual characteristics and professional commitment. The personality and psychological characteristics of the staff had a great effect on the implementation of CRM. Data collected reported that some staff are stubborn and do not take corrections about their errors. One head nurse said:

Some nurses have very bad tempers and often disturb the shift work and concentration of others, which can increase the clinical risks.

The participants' experiences also revealed that some nurses have many professional faults and shortcomings. A nurse with 9 years of experience stated:

A junior nurse who was unskilled administered pethidine medication through IV instead of IM causing the patient to have a respiratory arrest.

Data also reported that some nurses lacked professional commitment and accountability. This has caused negligence and injury to patients, and also a failure of CRM programs. One nurse manager said:

Some emergency nurses did not pay attention to patients' conditions. The patient was unstable and required immediate attention but was neglected. After some time, they realized that the patient had died. There was no accountability at all!

Sub-theme; Physical and equipment resources

Physical assets and extensive equipment are required for implementing CRM. From the participants' perspectives and experiences, limited equipment resources have made implementing CRM very difficult for nurses. The following emerged as a challenge under this sub-theme:

Medical facility, and medical equipment and supplies. The participants reported that the facility has some important medical equipment and supplies that are necessary for managing clinical risks. They reported that they have received upgraded medical equipment from donors and well-wishers over the past years. The participants however expressed that they do not have enough space in the facilities. A medical-surgical ward nurse stated:

We have the beds but we do not have the space. Sometimes when a patient comes we get overwhelmed with admissions; a patient is referred to the hospital but all beds are full. At times we have to keep the patient in outpatient or the cold hallway as we wait for some patients to be discharged; this is dangerous for the patient. Currently, we have 250 beds but we need more space to put the beds.

Data from the interviews reported that the hospital has resources but does not have the rooms or space to keep this equipment. A maternity nurse said:

In the labor ward, one bed is shared by five mothers. There are only two delivery rooms; after delivery, a mother has to stand immediately to give another mother a chance to deliver.

Technology. The participants agree that information and communication technologies (ICT) are critical in empowering personnel in clinical care and decision-making. However, much of the new technology was not available in the hospital, and most nurses lacked the necessary knowledge and abilities to use them. The participants also testified that the flow of information is very poor in the facility. One of the nurses said:

We don't have a well-organized electronic system for managing patient safety information. We need to adopt an electronic way of documentation instead of using paper which consumes time.

Another nurse stated:

I wish we had good information technology with ready and adequate information that we can access at any time. In my opinion that would help us prevent errors because we can easily read about some of the dilemmas we face.

CHAPTER FIVE: DISCUSSION, CONCLUSION, AND RECOMMENDATION

5.1 Introduction

This chapter discusses some insights gained into the factors affecting the implementation of CRM systems in public hospitals by exploring Mbagathi hospitals' nurses' experiences. The chapter also discusses the conclusions, recommendations, and limitations of the study.

5.2 Discussion

In this study, the main theme derived from the analysis of the data were: organizational culture and leadership challenges, and limitation of resources. The ultimate mandate of healthcare providers is to ensure patients' safety throughout the care and treatment process, provided that they have support and a conducive organizational environment. The results from this study, however, suggested that although nurses are expected to provide safe and high-quality care by implementing and integrating CRM in the care process, they are not given an appropriate organizational environment to attain safe care using CRM systems. The mentioned organizational challenges have created barriers to implementing CRM in the institution. This indicates that the hospital is far from achieving safe conditions for patients. The results indicated that Mbagathi hospitals' organizational environment has not been successful in ensuring that the health and well-being of their patients are protected during the process of care.

Organizational culture and leadership challenges were among the factors that have hindered the successful implementation of CRM programs. The results from this study reported that the hospital lacks a culture of safety and has a culture of resistance to change. Other studies have reported that weaknesses in safety culture and resistance to change pose major challenges in developing and implementing such programs (Dehnavieh et al., 2013). According to Dehnavieh et al. (2013), the culture of blame, harsh reactions, lack of teamwork, and lack of support from managers could discourage the staff from reporting clinical errors. The findings from this study also reported that poor leadership performance and support. According to the findings, the hospital's leadership lacks proper leadership styles and understanding of CRM requirements and also lacks qualities required to foster commitment among the staff. Another study done by Christie (2015) reported that lack of leadership commitment and support, lack of accountability, and inefficient leadership posed

significant challenges in implementing quality programs. To successfully implement CRM, it is important to foster a culture of safety and reinforce strategies for change and leadership support and performance.

When exploring the organizational culture affecting CRM programs in the hospital, this study also found a communication gap. The findings reported poor flow of information and ineffective communication which has affected the implementation of CRM programs. Some studies have also reported ineffective communication as an obstacle to implementing safety programs. Poor culture of safety and communication failure is one of the leading causes of large-scale safety incidences in hospitals (Leonard et al., 2004). A study done by Burgener (2020) reported that poor management that overlooks safety communication channels and ignores employee concerns and feedback can affect the management of risks. Another study done by (Kachalia et al., 2018) reported that health facilities with great teamwork and communication strategies showed higher nurses' satisfaction and thus better implementation of patient safety programs. According to Kachalia et al. (2018), leadership support plays a key role in promoting effective communication in nursing practice. Hospitals with leaders who embrace the concepts of communication and teamwork are more likely to successfully integrate risk management into their daily practices (Kachalia et al., 2018). Organizations should therefore provide effective training and leadership support that enhances more effective communication to successfully implement CRM programs.

The other theme identified in this study was the challenge of human resources. According to the results, the implementation of CRM programs in Mbagathi hospital is affected by the shortage of staff, poor motivation, inadequate staff training, lack of professional commitment among the staff, and poor evaluation of performance. Several studies have also reported that safety improvement programs can be affected by challenges in human resources. Kinuthia (2018) reported that a lack of motivated and competent personnel was a barrier to implementing patient safety programs. Farokhzadian, Nayeri, et al. (2015) reported that the shortage of healthcare professionals, inadequate personnel with the necessary skills and experience, and lack of appropriate knowledge and skills affected the implementation of CRM programs. Ahmed et al. (2019) identified poor collaboration, inadequate training, lack of support systems, miscommunication, high workload, and stress to be among the factors that affected the implementation of risk management programs. Another study done

by Briner et al. (2010) reported that inadequacies in empowerment programs and lack of training on patient safety and risk management could affect CRM strategies.

A qualitative study was done to explore the problems of the clinical nurse performance appraisal system. The study reported that poor performance appraisal could affect the implementation of quality programs as it affects the efforts of enhancing professional competence, and development, communication, and motivation (Nikpeyma et al., 2014). According to Nikpeyma et al. (2014), hospitals should give nurses proper feedback and documentation of their performance evaluation to improve their performance. In a study done in Taiwan, nurses' personalities affected the implementation of quality programs (Teng et al., 2007). According to Teng et al. (2007), the nurses' openness and positivity positively affected quality programs while nurses' lack of empathy and stubbornness negatively affected the quality programs. Another study that was done to determine the effect of nurses; professional commitment on patient safety reported that nurses' professional commitment enhances the quality of care (Al-Hamdan et al., 2017). This means that if nurses are not committed to their professional and ethical duties, the performance and implementation of risk management programs can be affected.

In terms of financial resources, limited financial resources were reported to restrict the implementation of CRM programs in the hospital. Results from this study were similar to those of the previous studies. Findings from a study done by Akinleye et al. (2019) to determine the relationship between hospital finances and quality and safety of patient care reported that financially stable hospitals were in a better position to implement and maintain highly reliable risk management systems. Such hospitals can provide ongoing resources for risk management and quality improvement programs. Findings from a study done by Encinosa and Bernard (2005) also showed that patients had significantly higher chances of having nursing-related patient safety events when the hospital's profit margins decrease because of attempts to cost-cut on programs and activities that are meant to manage risks. According to Dong (2015), hospitals with limited fiscal resources have additional pressure on the essential resources needed to implement safety programs. For instance, hospitals experiencing financial difficulties may not be in a position to hire more human resources. According to Som (2007), limited financial resources for human resource management could cause problems with implementing CRM.

The other concern or challenge that emerged from this study was the limitation of physical resources and information technology. The findings from this study showed that although the hospitals have the necessary medical equipment, the facility lacks space to keep the equipment and to keep up with the high influx of patients. Other studies have also reported a lack of physical resources and information technology to be major obstacles to implementing CRM programs. A study done by Reiling et al. (2008) reported that poorly designed facilities and the lack of technology and equipment have a significant impact on nurses' performance. The results from this study also reported that the nurses do not have a station for tea breaks and rest. Having nursing stations where nurses can have breaks could reduce fatigue and improve the efficiency of nurses (Reiling et al., 2008). The lack of technology was also found to affect CRM implementation in the facility. A study done to assess the impact of health information technology on patient safety concluded that health information technology improves patient's safety by improving compliance to practice guidelines and implementing risk management programs to reduce reducing clinical errors, and therefore hospitals should invest in information technologies (Alotaibi & Federico, 2017).

The organizational environment in which nurses provide care affects their job satisfaction and working relationships which in turn affect the quality of care by deterring the implementation of risk management programs. The main problem to implementing quality improvement programs in public hospitals is a lack of resources, particularly human, financial, physical, and information technology. A better organizational context increases the satisfaction of employees which increases the tendency to implement and integrate CRM in practice. Leaders can increase the likelihood of CRM programs being implemented by creating a positive and appropriate environment and by giving support and encouragement, this will in turn significantly reduce patient safety incidents.

5.3 Conclusions

This study explored the factors that affect the implementation of CRM programs from the perspectives of nurses. The study findings revealed that, although nurses are required to provide high-quality and safe care, public hospitals have not provided favorable organizational context to sufficiently help them integrate risk management into their professional practice. The findings of the study revealed that the main resource factors that

affect the implementation of CRM programs are the limitations of human, financial, and physical, and ICT resources. The study also identified cultural and leadership factors like poor safety culture, poor leadership support and commitment, and poor collaboration and communication to affect CRM programs. These organizational challenges have created an unconducive organizational environment for the effective implementation of CRM programs. An in-depth and comprehensive study of the organizational factors is an important step for hospitals to successfully implement CRM programs. Additional quantitative and qualitative research should therefore be done to assess the facilitators and more barriers to CRM implementation and to develop interventions for improving CRM implementation.

5.4 Recommendations

Public hospitals should provide a favorable working environment and avail the human, financial and physical resources needed to implement risk management programs. Additionally, the hospitals should improve on their management practices including leadership commitment, support, proper supervision and feedback, and appropriate performance appraisal and motivation, and also build a culture of safety to successfully implement CRM programs. This study also recommends that hospitals establish good teamwork, collaboration, and effective communication and encourage an open-door policy where staff can easily consult and ask questions to successfully implement CRM. A more comprehensive study of different hospitals, different geographical localities, different environmental conditions should be done to identify the factors that were not captured in this study. Additionally, the study recommends that additional qualitative and quantitative studies should be done to assess the facilitators and more barriers to CRM implementation and to develop interventions for improving CRM implementation

5.5 Limitations

This qualitative study explored the factors affecting the implementation of CRM in only one public hospital in Nairobi, Kenya. The transferability of the findings should therefore be done with caution. A more comprehensive study on the factors affecting CRM implementation should be with the inclusion of different hospitals with different geographical locality and different environmental conditions, to identify the factors that might have not been captured by the limited scope of this study, and to inform national strategies for improving CRM implementation.

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APPENDIX I

ETHICAL APPROVAL

Strathmore UNIVERSITY

10th September 2021

Ms Ogolla Christine,
ogolla.christine@strathmore.edu

Dear Ms Ogolla,

RE: Exploring factors influencing the implementation of clinical risk management programs at public hospitals: A case study of the Mbagathi Hospital in Nairobi Kenya

This is to inform you that SU-IERC has reviewed and **approved** your above **SU-master's** research proposal. Your application reference number is **SU-IERC1049/21.** The approval period is **10th September 2021 to 9th September 2022.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 48 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 48 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and also obtain other clearances needed.

Yours sincerely,

for: Dr Virginia Gichuru,
Secretary; SU-IERC

STRATHMORE UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE (SU-IERC)
10 Sep 2021
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Cc: Prof Fred Were, **Chairperson; SU-IERC**

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APPENDIX II

RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **373380**

Date of Issue: **23/September/2021**

RESEARCH LICENSE

This is to Certify that Ms.. Christine Atieno Ogolla of Strathmore University, has been licensed to conduct research in Nairobi on the topic: Exploring Factors Influencing the Implementation of Clinical Risk Management Programs in Public Hospitals: A case Study of the Mbagathi Hospital in Nairobi Kenya. for the period ending : 23/September/2022.

License No: **NACOSTI/P/21/13024**

373380

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

APPENDIX III

PARTICIPATION INFORMATION SHEET AND CONSENT FORM

Introduction: This is a master's thesis by Christine Ogolla, an MBA Healthcare Management student at Strathmore University. This study is supervised by Dr. Francis Wafula of Strathmore University.

This information sheet gives you details about the study that will make you make an informed decision as to whether you want to participate in the study. You will be allowed to seek any clarification regarding the study before you sign the consent form.

Objective: The purpose of this study is to "***Explore the factors that affect the implementation of clinical risk management strategies in Mbagathi Hospital***".

Significance: Findings from this study will provide healthcare managers with a better understanding of the implementation of risk management strategies, and how they can achieve better success on future implementations.

Participation: Participation in this study will involve answering questions that will be asked using a semi-structured questionnaire. Participation in this study is entirely voluntary and respondents will not be forced to answer questions they are not willing to answer.

Compensation and Benefits: There will be no direct monetary benefit/compensation for participation in this study. The results of the study will however be used to address the factors that affect the implementation of clinical risk management.

Risk: This study poses no economic or physical risks. Participants can skip questions that they are not comfortable with.

Confidentiality: This study maintains the confidentiality of the information provided. The participants will remain anonymous throughout the study without any form of identification.

Conflict of interest: The researcher and the supervisor confirm that there is not a conflict of interest among them.

CONSENT FORM

If you agree and fully consent to participate in this study, please sign below; I hereby offer my consent to undertake this study. The nature of the study, potential risks, and benefits have been fully explained to me. I am also aware that my participation is voluntary and may choose to withdraw from the study at any time without any consequences or explanations. I have also been assured that anonymity will be maintained and all the information provided will be strictly confidential. I confirm that all my concerns about the study have been adequately addressed and understood.

Participants Signature..... Date.....

I consent that have fully explained the nature and contents of the study in detail and the participant has voluntarily agreed to participate without any form of pressure or coercion.

Investigator Signature.....Date.....

For any Clarification, please contact

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APPENDIX IV

INTERVIEW TOPIC GUIDE

Interview guide for the Nursing staff at Mbagathi Hospital

Identification Number	
Date of Interview	
Age	
Gender	
Nursing Unit	
Years of experience	
Start time	
End time	

1. What is your perceived importance of clinical risk management in a hospital?
2. Would you please describe your experience with integrating clinical risk management in your organization?
3. From your experience, what requirements are necessary for CRM in your hospital?
4. What are some of the existing clinical risk management programs in your institution?
5. What activities have been carried out in implementing these CRM programs in your hospital?
6. What barriers and challenges have you experienced in implementing these activities?
7. Does the hospital administration support the implementation of CRM? If yes, how? If not, what would you like to see happen?
8. How would you describe the leadership style in implementing CRM in your organization?
9. Does your organization effectively communicate during the implementation of risk management programs? How often?
10. Are you aware of what the management does to monitor the implementation of CRM?
11. What training or course have you taken on CRM?

12. What organizational resources have been put in place to promote clinical risk management practices? For instance, what equipment support CRM practices?
13. One part of the key to the successful implementation of CRM can be found in the implementation of Information, Communication & Technology (ICT). How would you describe ICT in fostering CRM practices in your organization?
14. How does your employer provide the necessary finance that supports the implementation of CRM?
15. What factors do you think negatively influence the implementation of CRM in the Hospital?
16. In your opinion, which measures should be put in place to mitigate these factors that negatively influence the implementation of CRM?
17. What would you propose be done to improve the implementation of risk management strategies in your facility? What would be the challenges? What should be done differently and how?
18. In your opinion, what components of the implementation process should be adopted and strengthened?
19. Do you think there are other better ways to communicate during the implementation process?
20. Is there anything else you would like to add?