DETERMINANTS OF PATIENT-CENTERED CARE AMONG HEALTH CARE PROVIDERS IN KERUGOYA COUNTY REFERRAL HOSPITAL, KIRINYAGA COUNTY, IN KENYA.

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN HEALTH SYSTEM MANAGEMENT OF MOUNT KENYA UNIVERSITY.

NOVEMBER, 2024

DECLARATION AND APPROVAL

This thesis is my original work and has never been presented for any academic award in any institution.

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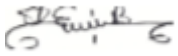
Signature: 

Date: 12/11/2024

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DEDICATION

This work is dedicated to Prof. Mary Ndung'u for her reliable support ,mentorship and continuous encourangement. This accomplishment would not have been possible without her.

ACKNOWLEDGEMENT

I am profoundly grateful to God for His unwavering guidance, strength, and provision throughout this journey. His grace has been my anchor, sustaining me through every step of this thesis. I want to give my deepest thanks to my supervisors, Sr. Dr. Margaret Wandera Nyongesa, Ph.D., Dr. Violet Maritim, Ph.D. for their invaluable support, encouragement and insightful feedback. I also owe heartfelt gratitude to the administrative and staff of Kerugoya County Referral Hospital for sparing their time to allow me to undertake my research at their facility. They all helped very much in the making of this thesis, with their cooperation, openness and willingness to contribute, in all its aspects, the thesis became feasible. Thank you to my family and friends for the love, patience, understanding and encouragement you have given me throughout this process. Even in the tough times you believed in me and that got me through.

ABSTRACT

Recognized as essential for high-quality healthcare delivery, patient-centered care (PCC) is increasingly emphasized. Nevertheless, healthcare providers frequently encounter obstacles in implementing PCC, leading to negative patient experiences and less-than-optimal health outcomes. Patient-centered care (PCC) is increasingly acknowledged as indispensable for delivering high-quality healthcare. At KCRH health care workers felt demotivated because of poor and unfavorable working conditions. Healthcare providers were unhappy because their concerns had not yet been addressed especially the Collective Bargaining Agreement and Return to Work Formula (RTWF) which leads to more strikes as well as demotivation, negative attitude about health care service delivery, such situation has led to complains from patients about care that is not patient centered. The primary objective of this study is to ascertain the factors influencing healthcare providers' provision of patient-centered care at Kerugoya County Referral Hospital (KCRH) in Kirinyaga County, Kenya. The study encompassed healthcare providers at KCRH, totaling 258 individuals, who constituted the target population. From this, a random sample of 157 participants was selected. Employing a analytical cross-sectional research design, the study utilized Yamane's Taro formula to determine the sample size, considering the finite and known target population. Quantitative data were collected through a structured questionnaire and the Patient-Centered Care Assessment Tool (P-CAT), while qualitative data were obtained via key informant interviews guide. Findings suggest that healthcare providers' adoption of a patient-centered approach can be driven by motivation, competency and attitude indicating the importance of cultivating environments where health care providers are able to provide care that is guided by patient needs. The study yielded a PCC score of 43.75, classifying it as "Medium PCC." Proficient medical staff significantly contributed to favorable patient outcomes and satisfaction, underscoring the relevance of competency in PCC. To further explore motivation sustainability and deviant case evidence, future research employing robust longitudinal designs is recommended. Additionally, interventions promoting supportive workplaces, lifelong learning cultures, and competency enhancement are vital for improving patient-centered care practices in healthcare settings. In essence, understanding and addressing patients' unique needs while

fostering provider motivation, competency and attitude are essential for advancing patient-centered care, ultimately enhancing healthcare delivery and patient outcome.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACA	Affordable Care Act
EHRs	Electronic Health Records
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems.
HCP	Health Care Providers
HIV	Human Immunodeficiency Virus
KCRH	Kerugoya County Referral Hospital
KEMRI	Kenya Medical Research Institute
KII	Key Informant Interview
NACOSTI	National Commission for Science, Technology & Innovation
NCQA	National Committee for Quality Assurance
OCPs	Obstetric Care Providers
P-CAT	Person-centered Care Assessment Tool
PCC	Patient centered care
PCHS	People-Centered Health Systems
PHCNs	Public Health Clinical Nurses
SSA	Sub-Saharan Africa
U.S.A	United States of America
WHO	World Health Organization

CHAPTER ONE : INTRODUCTION

1.0 Introduction

Health systems are built on six essential building blocks, as outlined by the World Health Organization (WHO 2023), each contributing to a well-functioning system that supports equitable and effective healthcare. These building blocks are: service delivery; health workforce; health information systems; access to essential medicines; financing; and leadership/governance. Taken together, they serve as the basis for resilient health systems able to deliver quality care, improve population health outcomes and deliver efficient and responsive health care to patient needs (WHO, 2022). This study will concentrate on enhancing the service delivery component of health systems with a special emphasis on promoting patient centered care.

Patient centered care (PCC) is becoming increasingly recognized as essential to high quality healthcare delivery (Grover, 2020). However, despite PCC's positive benefits, implementation isn't always easy, resulting in poor patient experiences and even poor health outcomes (Sinaiko, 2019). According to Ahn & Kim, (2021), attending to and recognizing the needs of patients are important to develop positive experiences and health outcomes of patients. However, progress on making patient care more patient centered may be hampered by systemic obstacles in delivering patient centered care brought to bear by provider motivation, competency , and healthcare providers' perspectives in regards to PCC. Additionally, as argued by Alpert *et al*. (2020), patient centered care has become an important concept in healthcare providers as far as healthcare journey or participation by the patient is concerned.

According to Olson,(2021) ,defines PCC as customizing medical service to the individual needs, preferences, and values of specific patients. Additionally, according to Coronado-Vázquez (2020), this approach involves collaborative decision making between health professionals and patients wherein decisions are taken together while taking the patient's view into consideration and asserting patients autonomy.

Minvielle *et al.,* (2021) emphasize the important role of tailoring medical services specifically to suit the chosen needs, preferences, and values for each patient, endorsed by personalized medicine. This recognition calls into account the patient variablity and how we must address these patients with variability for success in healthcare results. Also, Grover (2022) emphasize the importance of active collaboration among Healthcare professionals and patients in supporting shared decision making. Health care providers should create treatment plans that are consistent with what patients want and desire and which bring greater satisfaction and better results by involving patients in their decision making. This approach changes patients from passive consumers of healthcare to active stakeholders in their journey of healthcare delivery (Galletta *et al*., 2022).

Kwame & Petrucka (2021) emphasized the critical importance of empathy and respect by healthcare providers towards patients. Acknowledging patients feelings, concerns, values not only develops a trusting patient provider relationship but also patients engagement in their care. In addition, the researchers emphasize the importance of healthcare providers being culturally competent, and being aware and sensitive to the many cultural backgrounds and beliefs of their patients. By understanding what cultural norms, values and traditions there are, providers are better able to provide care that is respectful,

culturally tailored and that improves patient outcomes and satisfaction levels (Stubbe, 2020).

1.1 Background to the Study

Alpert *et al.* (2020), at the 2030 Annual Primary Care Convention reported that the convention deliberated on the need to support health systems throughout the world, regardless of income levels, with a goal to achieve universal health coverage, and in particular, in low- and middle-income countries by 2030. The convention report by Alpert *et al.*, (2020), at the Global level, highlights that those high-income countries like Europe and America, approximately 48% of patients reported having good access to patient-centered care. However, according to Okeny (2024), at Regional level, in middle-income countries like South Africa, Nigeria, and Kenya, the implementation of patient-centered care is deficient. A notable 58% of patient's express dissatisfaction with the way they are treated and managed.

A study by Ogbogbo (2022) on Healthcare providers' perspectives on patient-centered healthcare in Nigeria were explored through a survey involving 20 nurses, 96% of the health care workers indicated that PCC in Nigeria is facing several challenges, including time constraints due to large caseloads, resource scarcity, inadequate communication and shared decision-making training, and cultural barriers inhibiting patient engagement. The study recommended that addressing these issues through providing healthcare providers with improved training and resources, fostering patient engagement, and enhancing awareness among patients and the public would render patient-centered healthcare accessible to all.

According to a study by Chikanda & Ndlovu (2018) healthcare professionals in South Africa were questioned for their opinions on patient-centered care. The findings indicated diverse interpretations regarding patient-centered care among these providers. For certain providers, it denoted delivering quality care to patients, whereas for others, it encompassed a more comprehensive approach involving and considering individual patient requirements and preferences. At the local level, Motivators and barriers to patient-centered care among healthcare providers in Kenya have been examined by (Mwanzia *et al*., 2022). The study found out that most of the healthcare providers in Kenya (78%) were motivated to provide patient-centered care. In the study a positive correlation was identified between healthcare providers' motivation and the quality of patient-centered care. Patients were more inclined to rate the quality of care highly when healthcare providers exhibited a strong drive to deliver patient-centered care. Furthermore, the study by Olson *et al.*, (2021) revealed that Kenyan healthcare personnel were primarily motivated by a sense of duty (60%), the desire to help others (58%), and a commitment to patient-centered care (56%).

Inadequate time allocation, poor planning for specialized training, complex administrative arrangements, cultural differences, difficulties of integrating technology, shortages of health care providers, lack of opportunities for professional development, poor personal beliefs and values about PCC, inadequate communication with patients, and lack of pay incentives among other challenges in the healthcare system have resulted in low patient care (Mwihia, 2020). Consequently, the absence of comprehensive and specialized training, particularly in Patient-Centered Care (PCC), has detrimental effects in regards to competency in providing PC. It not only impairs healthcare professional's proficiency and

the ability of PCC delivery but also affects their attitude towards patients and the quality of patient care (Rose William *et al.,* 2020).

1.2 Statement of the Problem

In Kirinyaga County, Kerugoya County Referral Hospital (KCRH) is the primary referral centre which ensures that in the county it serves as many patients as possible from the whole county. However, at the same time, KCRH experiences a myriad of problems that make it difficult to provide PCC. The first challenge is limited resources, the second is lacking infrastructure and shortage of health care providers. In addition to that, there are organizational factors like complex administrative processes, and poor financial support which impedes attempts to satisfy heterogeneous healthcare requirements of the population. However, despite its broader patient based services, KCRH, ability in serving care that is truly responsive to the needs and preferences of individual patients is hindered by these ongoing challenges (Njeru & Kagoiyo, 2021).

Problems at KCRH include both financial constraints and difficulty of integration of modern healthcare technology that affect the ability of healthcare providers to provide patient centric care,focusing on efficiency at the expense of patients' welfare, resulting in circumstances where patients' needs are ignored. Although some studies contend that racial and cultural cross would be obstacles to PCC, that is not the case at KCRH, where a vast preponderance of the patient population is culturally homogenous. Nevertheless other variables like the lack of patients centred communication training for healthcare providers and inadequate specialized resources to handle patient care present great impediments to the successful implementation of PCC (Mwihia, 2020).

This study addresses this knowledge gap by exploring the factors influencing delivery of patient centered care at KCRH. It analyzes the extent to which healthcare providers at KCRH are currently providing PCC, as well as the determining factors that either facilitate or interfere with delivering PCC to clients at the hospital. These study is important to understand PCC delivery at KCRH, in order to make policies that enhance the quality of care at KCRH, that healthcare services at KCRH are not just available and efficient, but responsive to the special needs and preferences of patients. By addressing these issues robust patient centered care delivery at KCRH are created, to better patient satisfaction, improve health outcome, and healthcare quality as a whole in the region.

1.3 Purpose of the Study

This study aimed at establishing the main determinants of patient centered care by health care service providers in Kerugoya County Referral Hospital, Kirinyaga County Kenya. The study explored factors that influence delivery of PCC with a view for improving policy changes and practical interventions for better healthcare delivery in similar settings. The results helped inform efforts to improve the training, resource allocation and organizational practices of care delivery systems, so that care is responsive to the patients' needs and preferences, leading to better patient outcomes and satisfaction.

1.4 Broad Objective

To identify the determinants of Patient-Centered Care among health care providers at KCRH, Kirinyaga County, in Kenya.

1.4.1 Specific Objectives

1) To determine the influence of healthcare provider motivation on patient-centered care (PCC) at KCRH, Kirinyaga County, in Kenya.
2) To establish the role of healthcare provider competency on patient-centered care (PCC) at KCRH, Kirinyaga County, in Kenya.
3) To assess the influence of healthcare provider attitude on patient-centered care (PCC) at KCRH, Kirinyaga County, in Kenya.
4) To analyze the level of healthcare provider patient-centered care (PCC) at KCRH, Kirinyaga County, in Kenya.

1.5 Research Questions

1) What is the influence of motivation on patient centered care (PCC) among health care providers at KCRH, Kirinyaga County, in Kenya?
2) What is the role of competency on patient-centered care (PCC) among health care providers at KCRH, Kirinyaga County, in Kenya?
3) What is the influence of attitude on patient-centered care (PCC) among health care providers at KCRH, Kirinyaga County, in Kenya?
4) What is the level of patient-centered care (PCC) among health care providers at KCRH, Kirinyaga County, in Kenya?

1.6 Justification of the study

Lack of Patient centered care (PCC) has been directly linked to poor patient outcomes and these outcomes include increased morbidity, mortality and disability and as such PCC is important to be investigated among healthcare providers. Poor PCC leads to inadequate

patient provider communication which often causes poor adherence with treatment plans, missed diagnoses, complications, and all contribute to poor health outcomes. For example, research indicates that things such as poor communication and lack of patient centered practices are correlated with greater incidence of hospital readmissions, complications and uncontrolled chronic conditions (Stewart *et al.,* 2011). In Kenya, Mwanzia *et al*. (2022) reported that 58% of patients were unsatisfied with their PCC, which resulted in what undermines their health outcomes, such as increased mortality rates. These issues are of particular concern in rural as well as resource limited settings such as Kerugoya County Referral Hospital (KCRH) where the care provision is marred with innumerable challenges. This focused study of the determinants of PCC at KCRH addresses these gaps to favorably identify factors that determine the delivery of health care, thereby improving patient satisfaction, health outcomes, reducing morbidity and mortality. The insights into the very specific problems faced by healthcare providers at KCRH in PCC, provide a foundation for interventions aimed at improving PCC impact and thereby overall hospital quality and patient safety in Kenya.

1.7 The Scope of the Study

The study conducted at KCRH examined the determinants of patient centered care (PCC) among healthcare providers. It focused on key variables identified in theory and empirical literature reviews and conceptual framework, examined healthcare provider motivation, competency and attitude as independent variables (IVs) whereas the working environment serves as a mediating variable. Data collection also included factors like interpersonal relationships and organizational support. Despite its narrow focus, strict randomization during sampling ensured the findings could be utilized to develop interventions enhancing

PCC delivery not only at KCRH but potentially throughout Kenya's healthcare system, given the similarities with other counties. Thus, the study's outcomes have broader implications for improving patient care beyond its immediate setting. The study examined what influences and makes the healthcare providers at KCRH, Kirinyaga County, in Kenya, provide (and/or not provide) PCC at Hospital setting.

1.8 Limitations of the Study

1. The cross-sectional descriptive nature of the study lacks a comparison group, which meant that only conclusion about association (not causal) between the variables was possible. Despite this limitation, the study employed rigorous data collection and analysis methods to ensure reliability and validity. Statistical techniques, such as correlation analysis, were utilized to identify significant associations between variables.
2. The narrow Geographical scope of confining the data collection to only one Level 5 public hospital in the 6-Level Kenyan Healthcare System, and a single County out of the 47 in Kenya was another limitation of the study. To mitigate this, the study ensured a comprehensive understanding of the specific context of the chosen hospital and county.

1.9 Assumptions of the Study

It was assumed that the healthcare workers participating in the study would cooperate and give honest opinions about the topic. Additionally, it was thought that the answers from these participants could be applied to other healthcare workers, especially those working at Kerugoya County Referral Hospital.

1.10 Operational Definition Of Key Terms

Attitude	in this study refers to the mental and emotional disposition that healthcare providers bring to their interactions with patients, colleagues, as well as their work in general.
Communication skills	encompass the ability of healthcare providers to effectively convey information, listen attentively, and engage in open dialogue with patients and other healthcare team members.
Competency	refers to possessing the requisite or necessary clinical practice and interpersonal skills required for effective communication, collaboration, as well as the delivery of PCC.
Cultural competency	refers to the awareness, understanding, and integration of cultural factors into healthcare practices, ensuring that care is respectful, relevant, and responsive to the cultural backgrounds and beliefs of patients.
Empathy	refers to the ability of healthcare providers to understand and share in the feelings of their patients, demonstrating compassion and sensitivity to their emotional experiences.
Health Care Providers (HCP)	refers to a licencesed professional responsible for delivering a spectrum of medical services, treatments and care to individuals seeking healthcare services.
Motivation	refers to the health care worker's willingness, desire and enthusiasm to provide high-quality care, engage in

	continuous learning, as well as contribute positively to the patient treatment outcomes.
Patient Satisfaction	measures the extent to which patients are pleased with the healthcare services they receive, including factors such as quality of care, communication, and overall experience.
Patient-Centered Care (PCC)	refers to a holistic approach that places emphasis on addressing the unique needs of patients, considering the concerns of caregivers, relatives, and families involved in the healthcare process.

CHAPTER TWO : LITERATURE REVIEW

2.0 Introduction:

This chapter thoroughly reviews general, empirical, and theoretical literature. In addition, the chapter summarized previous studies, identified other researchers' contributions, and filled gaps in their scholarly works. The conceptual framework illustrated the relationship between dependent and independent variables.

2.1 Empirical Literature Review:

An empirical literature review focuses on original research, including scientific experiments, surveys, and research studies. Unlike systematic logic-based approaches, empirical studies are grounded in experience and observation, as outlined below:

2.1.1 Motivation of Healthcare Providers in provision of patient centered care:

The motivation and job satisfaction levels among healthcare providers strongly correlate with PCC. A study by Fulop & Ramsay (2023) further supported that healthcare provider motivation and satisfaction contributed to high-quality healthcare services. The study's findings showed that out of the total healthcare workers studied, 67% of them were not only dissatisfied, but also demotivated in their roles, which negatively affected patient satisfaction and outcomes. The researchers also noted that satisfied and motivated healthcare workers tended to rate their care higher, which was associated with a lower likelihood of patient errors and suboptimal care. Another study by Kengia *et al.*, (2023) that had surveyed 2,000 healthcare providers, found that 80% of the healthcare providers desired to improve patient outcomes if only they were motivated.

Moreover, Alkhaibari *et al.,* (2023), in their study on the importance of motivation on PCC, the researchers noted that healthcare providers who were more motivated to deliver PCC were more likely to not only provide patients with more information, involve them in decision-making, and consider their preferences, but would also communicate with the patients in a way they could understand. Additionally, they were more likely to be not just satisfied with their jobs and have lower levels of burnout, but were more likely to recommend their organization to others. Similarly, Birtcher *et al.,* (2023) found that patients receiving care from healthcare providers who were highly motivated to deliver Patient-Centered Care (PCC) were more likely to be satisfied with their care, feel more involved in their treatment, adhere to treatment plans, and experience better health outcomes.

In a study by Lateef & Mhlongo (2022) conducted in South West Nigeria to establish the trends in PCC, a holistic assessment of the nurse's perception of primary healthcare practice found that 80% of the nurses complained of a lack of motivation and workload, leading to a negative attitude towards work ethics. However, another study by Ghorbani Vajargah *et al.,* (2023) identified a lack of holistic view practice of the nurses about PCC. The study found an unsupportive organizational system and lack of motivation as the significant barriers to implementing PCC. Notably, the participants from this study expressed a good understanding of PCC during interviews, which suggested the nurses had a holistic view of PCC but that was poorly demonstrated due to other factors such as lack of motivation, work overload and lack of support from the organization. The study's findings also revealed that most qualified nurses ended up leaving rural primary health care

centers due to lack of motivation, reasonable remuneration and incentive, as well as poor working conditions.

To look into the relationship between the culture within hospitals and healthcare professionals' implementation of PCC, Huang *et al*., (2022) conducted their study in China. Moderated mediation analysis was used in this study to analyze 1,612 healthcare professionals from Hangzhou, China hospitals. The results of analysis showed that hospital culture influenced healthcare professionals' motivation for PCC (indirectly). This could come from the fact that the achievement and drive are at the mercy of self-efficacy, which is why it happened. Consequently, hospital staff serving in patient-centered environments had higher self-efficacy and motivation resulting in a higher PCC provision. This study also revealed that hospital culture moderated the relationship of the organizational support with the PCC delivery by the healthcare professionals with motivation. Thus, institutional culture was overwhelmingly supplantable in the decision to provide PCC by healthcare staff backed with solid corporate support.

Adu *et. al* (2020) found that the major barriers to implementation of PCC and PCHS in Sub-Saharan Africa (SSA) are lack of resources, low political will, lack of knowledge and skills among healthcare workers due to paucity of funding. The study also discovered that the motivation of healthcare providers is a key factor for PCC to be successful. In order to overcome these challenges, the study suggested an increase of resources, obtaining the government support, an intensive training of the medical personnel, increasing the motivation of the medical personnel and a consideration of the cultural barriers.

The researcher notes that the existing literature suggests an important link to be drawn between healthcare provider motivation, satisfaction, and the quality of PCC. However, significant gaps remain, particularly in understanding these dynamics in varied contexts e.g., rural areas like Kerugoya County Referral Hospital, different cultural settings, from the perspective of healthcare providers, and in relation to organizational culture and external factors. There is also limited detailed exploration of the specific reasons behind healthcare providers' dissatisfaction and motivation and how this directly hinders the quality of PCC, particularly in settings with limited resources or high workloads. Addressing these gaps could lead to more targeted and effective strategies for improving PCC across diverse healthcare settings and hence the purpose of this research.

2.1.2 Competency of Healthcare Providers in provision of patient centered care:

According to Kim, M. (2023), competency is defined as possessing the requisite clinical practice and interpersonal skills essential for effective communication, collaboration, and the delivery of Patient-Centered Care (PCC). Ahn and Kim (2021) found that professional nursing skills, interpersonal abilities, empathy, and perceived stress influenced nursing students' PCC competency during practical training. Likewise, Alkayha *et al* (2018) also investigated nursing students' careers value and career choice; (96%) of interviewed nurse affirmed that they successfully listened to their patients' notion and communicate medical information to them.

Poorchangizi *et al.* (2019) in their own separate study evaluated nurses' and students' professional values. This study also revealed that 6 percent of the healthcare personnel did not spend enough time perceiving patients' needs and preferences during the making of care decision. However, 94% of the respondents confirmed considering each patient's

interests, preferences and circumstances when providing care . The study's key finding essentially called for training and education of PCC practices within health care providers. Targeted training in, communication, patient participation, collaborative decision making and cultural competency, can help enhance Healthcare providers' Patient-Centered Care (PCC) abilities (Kengia *et al.*, 2023).

In another study by Wasim *et al.*, (2023) on PCC paradigms, models, and methodologies it was found that by regularly inquiring from patients about their experience of the care they received, PCC could be improved.Therefore, PCC clinicians' use of focus groups, patient satisfaction surveys and also other patient feedback methods would enable them to identify areas of improvement that may require improvement of their skills that may improve PCC competency. Reflective practice and self assessment increased the Patient centered care (PCC) skills by the healthcare personnel, as explained by Ardenghi *et al.*, (2024). Therefore it is advised that healthcare providers improve their PCC skills and competencies by thinking through their patient interactions and seeking and giving feedback from colleagues and evaluating their strengths and weaknesses.

The study by Kassa *et al.* (2018) looked at what health workers in Hawassa, Ethiopia, knew about preconception care. And the researcher found that cultural competence was necessary to offer PCC to different patient groups. Healthcare professionals who knew a lot about different cultures, beliefs and values would be better able to connect with as well as talk to patients from a wide range of backgrounds. Thus, making them better at providing culturally sensitive PCC. Also, 85% of the health professionals surveyed agreed that working together with other health professionals from different fields and specialties could help them improve on PCC as that brings diversity in skills. Hence, healthcare

providers could create a comprehensive and patient-centered approach to care by sharing knowledge, expertise and points of view as well as working together.

Ukoha & Mtshali's (2023) in their study looked at what primary healthcare nurses (PHCNs) in South Africa said, how they were trained and how competent they were in preconception care (PCC). Using quantitative descriptive approach and data from 196 PHCNs these authors found that PHCNs had a favorable view of PCC because they knew how important it was for the health of mothers and children. However, key gaps in knowledge and skills were found including in the 63.3% who said they had PCC training and 94.9% who said they felt competent. Nonetheless, the study emphasized how important it was for PHCNs to get more training and experience in PCC so that they could help people better with chronic diseases, as well as identify women who were at risk of having bad outcomes during pregnancy. All in all, the results showed that PCC could improve in South Africa by using specific training programs and rules.

From this literature review on competency, there is a deficiency in research on PCC competency across various healthcare roles. The majority of existing studies concentrate on nursing students or public health workers and nurses, leaving a gap in the exploration of PCC competency in other healthcare positions, such as doctors, clinical officers, incharges of departments, pharmacists and consultants. Gaining insight into how PCC competency differs among these roles could offer a more comprehensive perspective and hence the purpose of this research.

2.1.3 Attitude of Healthcare Providers in provision of patient centered care:

According to Fouad *et al.,* (2023), healthcare providers' attitudes encompass their beliefs, values, and reactions towards Patient-Centered Care (PCC). The research revealed that a favorable perception of PCC involves prioritizing patients' desires and preferences, actively listening to them and their families, and involving them in care decisions. On the other hand, negative attitudes to PCC are represented by the positions that healthcare practitioners hold that they know what is best for patients and what they expect from patients is for patients to only follow their opinions as healthcare providers.

In another study of Ukoha & Dube (2019), primary healthcare nursing students in KwaZulu-Natal were assessed on their preconception care knowledge and feelings. The study found that health care organization's culture can hugely impact upon how health care providers perceive PCC. In addition, 60 per cent of the nurses interviewed said the organization could influence positivity in its providers if it promoted values through which the patient comes first. However, if the pattern of an organization's culture is directed at efficiency and productivity at the expense of the patient's needs and preferences, the providers will also react differently to PCC.

Kassa *et al.,* (2019) also conducted a study involving the level of views of healthcare providers on implementation of PCC practices and the reasons behind its nonuse in Hawassa, Ethiopia. Fully practicing PCC was not done effectively by 84.7% of the study participants. The researcher also suggested that how the healthcare providers felt about PCC could be affected by their own personal beliefs and values. Thus, if they naturally believed in how important it was for patients to have autonomy, dignity and power, they were more likely to have a favorable view of PCC. Also, 61% of the healthcare workers

who were interviewed said they often did not have enough time or had too much work to do, making it harder for them to provide PCC. Therefore, if healthcare providers were stressed out and felt they had to put tasks ahead of talking to patients, it made them dislike PCC and have negative attitude towards it.

Using a cross-sectional design, Abayneh *et al.,* (2022) conducted a study to look into the knowledge, attitude and practice of preconception care among obstetric care providers (OCPs) in West Shoa Zone, Ethiopia. This study which included 362 OCPs, found that OCP generally supported PCC and understood its importance for enhancing mother as well as child health in childbearing women. In addition, more PCC training, facilities, education, age and female gender improved PCC attitudes. The study also found that although OCPs in the West Shoa Zone enjoyed PCC, however better training and PCC in all healthcare facilities may improve problems. Furthermore, according to the same study, custom training and healthcare institution integration improved PCC procedures.

From this literature review on attitude, there is a lack of research on how attitudes toward Patient-Centered Care (PCC) differ across various healthcare roles. The studies mainly concentrate on specific groups like nursing students and obstetric care providers, without much attention to how other roles, such as doctors, clinical officers, nurses, orthopedic technologists and in charges of department, may perceive PCC. Additionally, these studies often focus on particular regions, such as KwaZulu-Natal and Hawassa, Ethiopia, with limited investigation into how the findings apply to other geographical areas or different healthcare systems, especially in rural or resource-limited settings

2.1.4 Patient-Centered Care (PCC) Among Healthcare Providers at KCRH,Kirinyaga County,Kenya

According to Liu *et al.,* (2020), Patient-Centered Care (PCC) is defined as an approach that prioritizes the needs of patients, caregivers, relatives, and families. The authors emphasize that PCC is sensitive, customized, and attentive to patient choices and values, acknowledging that each patient has unique care needs, preferences, and values. Birtcher *et al.,* (2023) emphasized PCC in the United States of America (USA) healthcare , the NCQA-recommended Patient-Centered Medical Home concept, it is stressed throughout the paper, emphasizing the critical role that PCC practices plays in patient outcome and satisfaction. These paradigm applies PCC principles to primary care, emphasizing care coordination, accessibility and patient-provider interactions. The authors say this method matches the USA healthcare paradigm changes from fee-for-service to value-based care. It was noted that excellent treatment and outstanding patient outcomes make PCC a leader in this shifting climate.

According to Grover *et al.,* (2022), patient satisfaction and experience are increasingly considered in the evaluation of healthcare professionals. The authors illustrate this trend using the HCAHPS survey, which measures patient-centered care through various dimensions such as communication, responsiveness, and overall hospital experience. Furthermore, Birtcher *et al.,* (2023) highlight the rise of patient-centered care in USA healthcare. The value-based care approach, which increasingly considers patient pleasure and experience when assessing healthcare providers' efficacy, is analyzed theoretically and practically.

In a study by, Ferla *et al.*, (2023) found that EHRs and health I.T. had transformed China's patient-centered care. The authors stated that integration helps healthcare personnel communicate and share information, producing a more united and patient-focused strategy. According to the authors, technology can assist in integrating healthcare and prioritizing patient requirements. The same authors reported that patient empowerment and advocacy were rising. The study concluded that socioeconomic changes had pushed healthcare providers to involve patients in decision-making, thus respecting their autonomy and preferences.

In addition to technological and sociological issues, the authors explored healthcare legislation and laws, including the Affordable Care Act. The article credits the ACA for promoting PCC in China. As such, preventive care, care coordination, and patient outcomes are stressed in the law to improve healthcare quality.

According to the Ferla *et al.*, (2023) study, China is undergoing a radical change of its healthcare landscape. The authors explain how EHRs, patient advocacy movements and other healthcare regulations – such as the ACA – have helped achieve patient-centered treatment. The writers also pointed out how technological developments, social conditions and legislative rules have shaped a healthcare system that meets patients' needs.

In a study by Wachira *et al.*, (2023) recommended that HIV treatment providers in Sub-Saharan Africa (SSA) should promote PCC. The study also found that improving healthcare outcomes meant putting patient's wants and values forward, being active in including patients, and recognizing cultural and socioeconomic factors. The authors therefore underlined the necessity of understanding the various cultural and economic

milieux in which PCC can be used effectively in South Africa. In addition, the study highlighted that cultural sensitivity of healthcare workers should be promoted, increased communication, integration with local communities, education and empowerment of patients, efficient use of technology, and policy and system support were critical in providing patient centered care. As acknowledged by Mugo and Uimbia (2021) healthcare providers' professional development and patient feedback platforms are very important for continual improvement. In this study, the authors contend that a patient centered healthcare system should be developed by South Africa's healthcare professionals, legislators and the community in order to enhance HIV care in Sub-Saharan Africa (SSA).

Kipkoech and Keino (2023) noted that Kenyan health care providers were more aware of the need for patient engagement. Further, they concluded that patient empowerment entails a realization of the value of being informed and giving patients the information they need to make decisions regarding their well being. The authors, however, identified barriers to patient empowerment in Kenya. These included cultural constraints, limited health literacy and insufficient resources which were significant obstacles. Consequently, healthcare workers were urged to communicate better, overcome cultural barriers and innovate to meet resource constraints.

The study by Kipkoech & Keino, (2023) stressed collaborative decision-making for PCC. Therefore, the hierarchical structures and communication issues in healthcare should be addressed to make this transformation successful. The authors also emphasized post-treatment care, especially in rural areas with limited resources. Thus, telemedicine and community health worker programs were suggested to improve healthcare access in these locations.

A study by Ishikawa (2018) , a longitudinal one, was conducted of resident physicians' patient centeredness and confidence in patient conversations. The study looked at resident physicians' patient centered attitudes and confidence in patient conversation over two years, the resident physician's patient centeredness and trust in patient conversation increased over time. However, the training was more effective in improving the performance of 65% of resident physicians who received patient centered communication training. The study also found that training in patient centered communication improves resident physicians' attitudes and confidence in being patient centered.

According to Huang *et al.*, (2022), not only did healthcare providers work to optimize PCC, but also enhanced patient satisfaction and treatment adherence. Furthermore, healthcare professional competence was associated with his/her ability to participate in collaborative decision making, to provide individualized care and adjusts to industry changes. The study showed that PCC increases patient happiness by building trust, engagement and empathy, and putting patients in the driver's seat when it comes to decision making.

This literature review reveals that analyzing the patient centered care (PCC) level at Kerugoya County Referral Hospital (KCRH) is important in improving patient satisfaction and outcomes with the patient needs and preferences being of paramount importance. This aligns KCRH with global trends in value based care; encourages patient empowerment; and should help determine ways to utilize technology and patient feedback to better the care. In addition, it points to the necessity of targeted staff training to conquer motivation,competence,attitudinal barriers as well as resource constraints to enable healthcare providers to give unabridged care while being personally involved.

2.2 Theoretical Framework

In this research, the researcher utilized the Person-Centered Care Theory to help understand PCC better.

2.2.1 Person-Centered Care Theory

According to Liao (2023), it was Carl Rogers who founded the Person-Centered Care Theory. This philosophy advocated a transition from a disease-centered approach to prioritizing each patient's needs, values and goals. Therefore, as PCC puts the patient first, emphasizing their autonomy and individuality, this research theory was found to be the most relevant for this study. Essentially, this research theory also encourages the involvement of the patients in making decisions about their health and provides pertinent information as well as steadfast support. Moreover, the theory underscores the crucial role of addressing patients' emotional needs, which should prompt healthcare workers to exhibit not only empathy, but also compassion and emotional support to the patient as part of PCC. All these is geared towards fostering therapeutic as well as trust-based patient-provider relationships, thus improving not just the patient's experiences, but also the treatment outcomes, as well. Additionally, motivation, competency, and attitude are key factors influencing healthcare providers' ability to deliver effective patient-centered care as described by Patient centered care Theory.

2.3 Conceptual framework

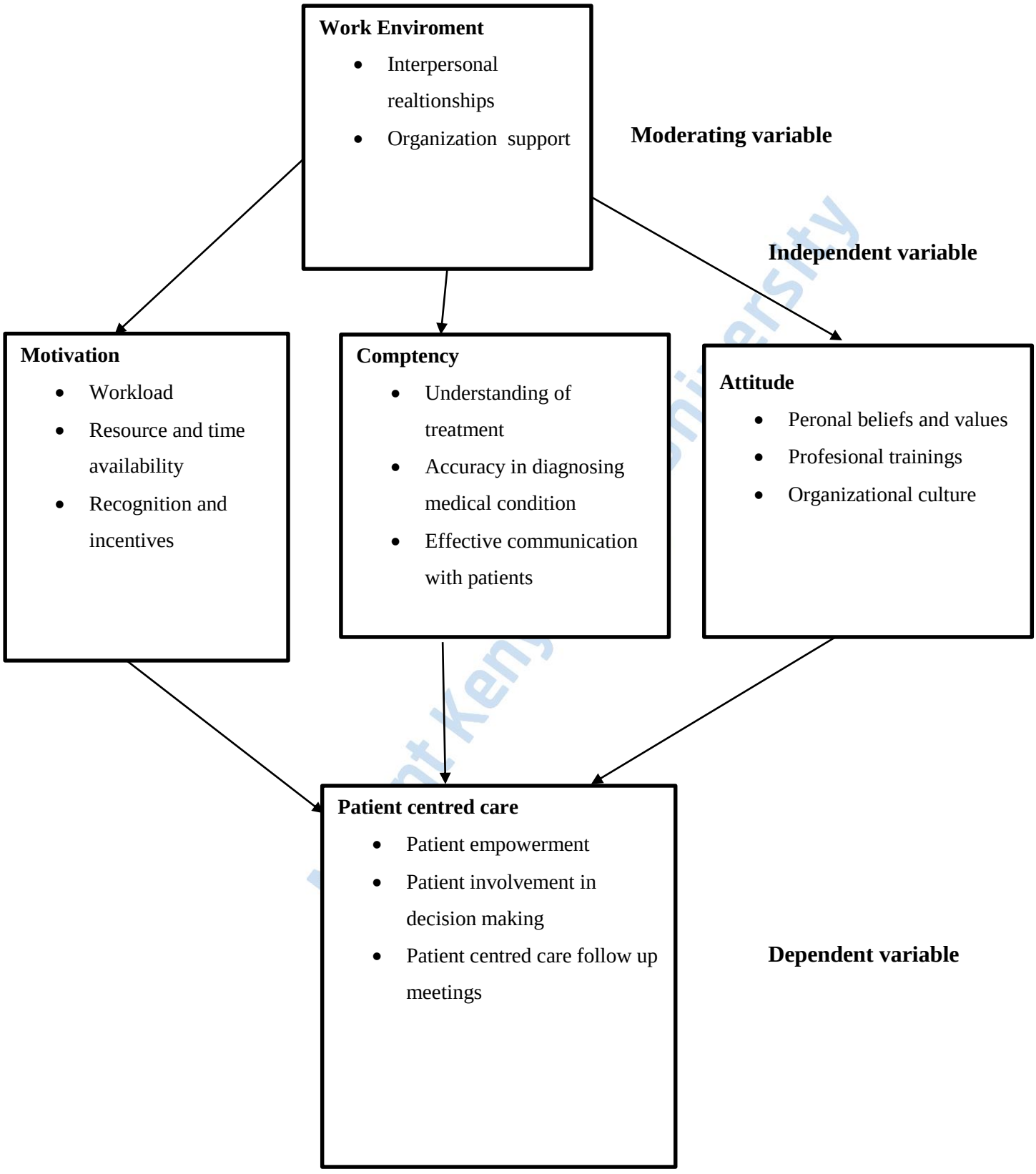

Figure 2.1 The Conceptual Framework

The figure 2.1 or the Conceptual framework summarizes the key variables identified and established for this study as well as how they relate and/or influence each other.

According to Van (2020), a conceptual framework refers to "a set of concepts, definitions and propositions that gives a systematic picture of a phenomenon by defining the links between variables, concepts, or theoretical constructions." In this study, PCC was identified as the dependent variable (DV), while the motivation, competence, and attitude of the healthcare providers were the independent variables (IVs). The literature review established the working environment such as the interpersonal relationships and the availability as well as extent of organizational support as important mediating variables for this study. These variables and their relationship are summarized and shown in Figure 2.1

2.4 Recap of Literature Review and Key Research Gap

The goal of this study was to identify determinants of patient-centered care (PCC) among healthcare providers at Kerugoya County Referral Hospital (KCRH) in Kirinyaga County, Kenya. Through a detailed review of the existing literature on PCC and its determinants, the study aimed to gain a deeper understanding of how healthcare provider training, resource allocation, and organizational practices impact the responsiveness of care to patients' needs and preferences, ultimately contributing to improved patient satisfaction and health outcomes.. According to literature review, PCC is defined as care that focuses on the needs of the patients and the needs of the caregivers, relatives and families. It was described as a type of care that is respectful, individualized and responsive to patient preferences as well as values. Additionally, each patient was recognized as having unique

healthcare requirements, preferences and values. Therefore, PCC results in improved patient outcomes, satisfaction and overall well-being. However, healthcare providers face numerous challenges while offering PCC (Liu *et al.,* 2020), which have not been clearly delineated in the majority, if not all the reviewed literature. Likewise, the findings of the previous research and published literature applies to specific settings and may not represent every health care worker or settings, given the uniqueness of patient's requirements and or needs. This calls for consideration of the existing literature on their own merits.

A notable key research gap in the existing literature is the few studies conducted in the Kenyan context and in particular in resource-limited settings which have not only its own challenges, but unique patient's needs. Hence, the research evidence on how the unique challenges of this specific settings is either totally lacking or inadequate. Thus, more studies focusing on this kind of unique settings and patient's needs are required. In Kenya, for instance, the ability of healthcare providers to respect patient preferences and promote their active participation in clinical decision-making to an extent where patients feel comfortable and willing to participate in the treatment plan needed to be examined. Additionally, meaningful discussions about patient preferences were essential to make patients aware of all available options and prioritize them in making the final decisions about their treatment (Wanjiru & Njoroge, 2018). However, the review of the existing literature found not a single study on the levels of PCC and its determinants among the healthcare providers at KCRH, which motivated the development and implementation of this research to try and address this gap. This research therefore, sought to close the gap by first determining the level of PCC among the healthcare providers at KCRH and then exploring the various factors influencing the provision of PCC.

CHAPTER THREE : RESEARCH METHODOLOGY

3.0 Introduction

This chapter provides a comprehensive description of the research design, methods and the overall methodology in terms of the instruments and methods used to collect the required data analysis, interpretation and presentation of both the quantitative and qualitative data. In addition to the procedures and steps employed to collect, analyze, tabulate, and present data, the populations, study site, eligibility criteria, ethical considerations, sampling method and technique, sample size calculation were included in the methodology. Furthermore, the chapter include other sections such as, instrumentation and data collection tools, study validity, testing of the validity and reliability of the study tool and data analysis.

3.1 Study Design

Analytical cross-sectional studies was used for this study to identify the determinants of PCC among health care providers at KCRH, Kirinyaga County, in Kenya.

3.2 Location of the Study

The research was carried out at KCRH, which is a Level 5 hospital in Kirinyaga County, as indicated in Appendix 8. Being a “Typical” County referral hospital sharing numerous similarities with other County Referral Hospitals in Kenya and the considerable number of healthcare providers present at the facility were some of the factors which influenced its selection for the study. The diversity of healthcare providers available within the facility increased the likelihood of patients being attended to by various healthcare professionals.

These healthcare settings offered a readily accessible and suitable environment for conducting the research. Kirinyaga County covers an area of 1,478.1 square kilometers and is situated to the South-East of Nyeri County, North-East of Murang'a County, and to the West of Embu County.

The population of Kirinyaga County is 610,411, and the region experiences an equatorial rainfall pattern with temperatures ranging from 8.1 degrees Celsius to 30.3 degrees Celsius. The county's landscape is characterized by valleys and peaks due to its mountainous terrain. The primary economic activities in the county are agriculture and livestock farming. The county hosts a total of 202 health facilities, with 109 being public health facilities. The distribution of public facilities includes 1 Level 5 facility, 3 Level 4 hospitals, 10 Level 3 hospitals, 45 Level 2 facilities, and 50 Level 1, as outlined in the County Integrated Development Plan (CIDP) of 2018 during the time of the research study. In summary, the research was conducted at KCRH, a Level 5 hospital in Kirinyaga County, because it represents a typical County Referral Hospital in Kenya, with a diverse range of healthcare providers. This made it an ideal and accessible setting for studying patient interactions and healthcare delivery.

3.3 Target Population

The target population was drawn from health care providers working at KCRH, as shown in Table 3.1.The total health care workers at the facility is two hundred and fifty-eight (258), which formed the target population for this Study. The selection of healthcare providers at KCRH as the target population was appropriate because the facility's 258

healthcare workers offered a comprehensive and varied sample, allowing for an in-depth analysis of Patient-Centered Care practices within a representative healthcare environment.

3.4 Sampling Procedures and Technique

3.4.1 Sample population

The sample size for this study was calculated using the Yamane's Taro (1967) formula (Adam, 2020), which is a standard formula specifically used when the target population is finite and known (in this case 258). The formula is as shown;

$n = N/(1+N(e)^2$.

where;

n = The study's sample size

N = The total target population size

e = The level of precision required or the acceptable margin of error

1 = A constant.

Subsequently, the study's sample size was calculated by substituting the variables of target population (258) and acceptable margin of error of 5% or 0.05 in the Yamane Taro's formula: $n = N/(1+N(e)^2$, as follows:

n = 258 / (1 + 258 * (0.05^2))

n = 258 / (1 + 258 * 0.0025)

n = 258 / (1 + 0.645)

n = 258 / 1.645

Sample size ≈ 157

Table 3.1: Sample size calculation

Cadre	**Targeted population**	**Proportional to Sample Size**	**Rounded Sample Size**
Nurses	155	155 / 258 x 157 = 94.5	95
Registered Clinical Officers	30	30 / 258 x 157 = 18.5	19
Medical Officers	15	15 / 258 x 157 = 9.1	9
Registered Clinical Officers (Anesthetist)	10	10 / 258 x 157 = 6.1	6
Physiotherapists	7	7 / 258 x 157 = 4.2	4
Orthopedic Trauma Specialists	6	6 / 258 x 157 = 3.5	4
General Surgeons	4	4 / 258 x 157 = 2.2	2
Gynecologists	4	4 / 258 x 157 = 2.2	2
Dentists	4	4 / 258 x 157 = 2.2	2
Medical Social Workers	4	4 / 258 x 157 = 2.2	2
Pediatricians	4	4 / 258 x 157 = 2.2	2
Ophthalmologist	1	1 / 258 x 157 = 0.61	1
Oncologist	1	1 / 258 x 157 = 0.61	1
Family Medicine Doctor	1	1 / 258 x 157 = 0.61	1
Pharmacists	12	12 / 258 x 157 = 7.20	7
Total	**258**	----------	**157**

3.4.2 The Sampling Procedure

The healthcare providers of KCRH were divided into cadres or subgroups using proportional stratification. From each of the stratum identified (cadres), a simple random sampling was used to select the "weighted" stratum-specific sample size**.**

The formula Sample Size for Subgroup = (Subgroup Count / Total Population) x Total Sample Size) helped calculate the sample sizes for subgroups by considering their number and the target population size and since the cadres of healthcare workers were different, this sampling methods and techniques were used to make the study more accurate and reliable.

The sample size and the stratified random sampling was intended to ensure not only a large enough sample to minimize random errors, role of chance, but also to be sufficiently representative of the target population to enable generalization, as well as to show the range of healthcare workers from different social classes.

3.4.3 The Sampling Technique

The study was carried out at Kerugoya County Referral Hospital in Kirinyaga County due to the high number of healthcare workers present at this facility who are involved in direct patient care within the hospital setting and actively engaged in health care delivery, responsible for implementing patient centered care practices. KCRH is the only referral hospital in the County and receives patients from the neighboring Counties of Embu to the East and South, Murang'a to the West and Nyeri to the north west. Given the heterogeneity of the target population, this study used stratified random sampling to select the 157 healthcare providers as the participants, from the accessible targeted population and in

order to select healthcare providers based on the size of the different cadres as shown in Table 3.1, the proportional stratification sampling was used as indicated in Table 3.2, where the sample size for subgroup = (Subgroup Count / Total Population) x Total Sample Size) was used.

After proportional stratification sampling was used to calculate the study population a random sampling technique was used to select the health care providers for Quantitive data collection.

Given the small sample size required for the qualitative phase of the study and the associated in-depth analysis of the qualitative data, a purposeful sampling method was used to select the 10 key informants to whom the interview schedule was administered. The key informants were selected from the hospital administrators and departmental heads or in charges, who were thought to not only be knowledgeable, adequately experienced about PCC, but also willing to provide the required information.

3.4.4 Inclusion Criteria

All the healthcare providers working at KCRH, directly involved with the patients medical care and treatment at the hospital and who were accessible, available for the study and willing to partake in the study by giving their consent were included**.** Consequently, one hundred and fifty-seven (n = 157) healthcare professionals from the various cadres and departments of the KCRH took part in the study.

3.4.5 Exclusion Criteria

All the non-healthcare providers working at KCRH, thus not directly involved with the patients medical care and treatment and those among them (Health Care Providers) who

were not accessible during the duration of the study due to reasons such as being ill or on leave, were excluded.

3.5 Data Collection Instruments

Since both quantitative data and qualitative data was collected for this study various instruments were aligned for the purpose. While the required, relevant quantitative data was gathered using a Structured Questionnaire and Patient-Centered Care Assessment Tool (P-CAT), Appendix 2, conversely, the qualitative data was collected using the Key Informants Interview Guide,Appendix 3.

3.5.1 The Structured Questionnaire

To study and determine what influences PCC among the healthcare providers at KCRH Kirinyaga County, in Kenya, a structured questionnaire was designed and pretested for reliability and validity. Based on and guided by the study's main and specific objectives, the questionnaire was structured into four sections: (A) socioeconomic demographics, (B) motivation, (C) competency, and (D) attitudes regarding PCC among healthcare personnel at KCRH Kirinyaga County, in Kenya . This is included here as appendix 2**.**

3.5.2 The Key Informants Interview Guide

In order to obtain the relevant qualitative data required, the study included the hospital administrator, section heads of the different cadres/departments as critical personnel who were deemed to be not only informed on the PCC among the healthcare providers at the facility, but also willing to provide the necessary information, as the key informants. The KII guide was used to obtain an in-depth understanding of how motivation, competency, and attitude affected PCC among the healthcare providers,as attached in Appendix 3.

3.5.3 The Person-centered Care Assessment Tool (P-CAT).

In order to assess PCC among the healthcare providers at the facility, the self-reporting Person-Centered Care Assessment Tool (P-CAT) was used. The P-CAT is an already validated tool in form of a questionnaire that featured 13, 5-point Likert scale questions. Subsequently, the tool was administered to the healthcare workers who participated in this session of questionnaire, and were required to provide their responses which were used to evaluate and measure the level at which PCC practices were observed at the study facility. Attached at Appendix 2,Section E.

3.6 Validity and Reliability

3.6.1 Validity

To validate the study and the instrument, the structured questionnaire, was given to an expert in the field of health sciences. The expert was required to read the questionnaire items or the questions, establish if they were well captured, presented in understandable grammar, in chronological arrangement, their longevity and readability. The feedback from the expert were used by the researcher to edit and update the instrument items as appropriate. The P-CAT consists typically of 13 items rated on a five-point scale ranging from 1 ('disagree completely/Strongly Disagree') to 5 ('agree completely/Strongly Agree'). P-CAT scores ranged from 13 to 65, where a higher score indicated a higher degree of PCC practice. It is an established validated tool by a team of researchers at La Trobe University in Australia.

3.6.2 Reliability

To ascertain the reliability of the tools/instruments, specifically their internal consistency, the Cronbach's Alpha Coefficient test was employed. The overall result for the 31 items was 0.85, indicating that the instruments were reliable for the study.

3.6.3 Pre-Test and Previewing of Key Informant Interview Questions

To pre-test the study instruments, a pre-test study was conducted at Embu County Referral Hospital before the actual study at KCRH. Embu County Referral Hospital is a similar Level 5 public health facility in a neighboring county. For the pre-test study, a sample of 20 healthcare workers was used to ensure the reliability and validity of the questionnaires before the main study. The selected healthcare workers were chosen randomly based on their availability for the pre-test study. The responses and feedback from the participants of the pre-test study were used to revise and update the instruments. This approach allowed the researcher to refine the study instruments, ensuring they were well-suited for the actual study at KCRH. Notably, the data gathered during the pre-test phase was excluded from the final analysis to maintain the integrity of the main study data.

3.7 Data Collection Procedure

3.7.1 Structured Questionnaires

Structured questionnaires were used to collect data from the healthcare workers. The questionnaires were administered by trained research assistants. A total of 157 healthcare workers at KCRH were targeted to fill out the questionnaire in obtaining quantitative data. The questionnaire were distributed in person, consent sought, (Appendix 1), clear instructions on how to complete and return the questionnaire were given which included

details on the expected time to complete it and the deadline for submission. Reminder were sent to participants who were yet to complete the questionnaire as the aim was to get a high response rate. The questionnaire addressed issues of motivation, competency, and attitudes in relation to Patient-Centered Care as well as Patient Centered Care Assessment Tool. These structured questionnaires assisted in collecting quantitative data, they are in Appendix 2.

3.7.2 Key Informant Guide Interview

A key informant interview guide or pre-specified, previewed questions were used to collect qualitative information from the key informants. In total, 10 hospital administrators/incharges were purposefully selected from various departments including: Surgical, Medical, Pediatrics, Reproductive Health, Outpatient Special Clinic, Integrated Management of Childhood Illness, Comprehensive Care Clinic, Hospital in Charge, Continuous Medical Education Coordinator and the Nursing Officer in Charge. Arrangement of convenient time and location for the interview was sought ensuring privacy and comfortability of the Key informant was ensured within the hospital. They were made to understand their rights including the right to decline to any question or to withdraw from the interview at any time. Informed consent was obtained. The interview began with general questions and gradually moving to the more specific topics. Open ended questions to encourage detailed responses and allow the informant to speak freely was applied. With the informant consent, the interview was recorded for accuracy and summary of key points discussed and asking if the informant had anything additional to add. Broadly, the interview guide included themes such as the influence of motivation, the

significance of competency, and the influence of attitude toward the provision of patient-centered care, as attached in Appendix 3.

Table 3.2: Key Informants

Department	Number of Key informants
Surgical department C1	1
Medical department C2	1
Pediatrics department C3	1
Reproductive health department C4	1
Outpatient special clinic C5	1
Integrated management of childhood illness C6	1
Comprehensive Care Clinic C7	1
Hospital in charge C8	1
Continues Medical Education coordinator C9	1
Nursing officer in charge C10	1
TOTAL	**10**

3.8 Data Analysis

The Quantitative data were extracted from the returned questionnaires, organized into a grid format of rows and columns, entered and analyzed using the IBM statistical package for social sciences (SPSS) software version 28. To describe the sample characteristics, Descriptive statistics such as percentages and frequencies were used and the results summarized and presented in tables and figures. The Inferential Statistics using Correlation analysis and Multinomial Logistic Regression Analysis (MLRA) was used to determine significant associations between the variables in the study. To build and test the "Model fitness" of the MLRA model, inclusion of the "Intercept", "main effect" as the model type,

as the criteria to select variables for the model and the –2 log-likelihood differences between the final and null/intercept only models, were used. The regression coefficients and their statistical significance were used to interpret the results of the MLRA.

For the qualitative section of the study, the data collected from the key informants was extracted from the researcher's notebook and organized into a tabular format (rows and columns). The qualitative data was analyzed using thematic analysis, which involved labeling, coding the information, identifying and categorizing the individual respondents' direct quotes into themes and subthemes. Based on the study objectives, the content of the data was analyzed to recognize relationships patterns between the direct quotes and interpreting their underlying deeper meaning alongside the quantitative data. The results of the qualitative analysis were interpreted using narrative approaches of give a voice to the respondents by including their direct quotations as an art of the interpretation. Consequent to this, the most representative original, individual "direct quotes" of the key informant interviewees (KII) were objectively chosen and presented as part of the interpretation alongside the quantitative findings of the study findings.

3.9 Ethical Considerations

Ethical considerations are crucial in safeguarding the well-being and rights of participants and upholding the integrity of the research process. The research adhered to rigorous ethical standards throughout its execution. Ethical clearance, Appendix 4, (Approval by Ethics Review Committee by MKU) was obtained from both the Institutional Review Board (IRB) at Mount Kenya University and the National Commission for Science and Technology and Innovation (NACOSTI), Appendix 6 . This involved submitting the

research proposal, approval letters, and introductory letter, Appendix 4, documents to the respective ethical review committees. Additionally, approval was sought from the Ethics Review Committee in Kirinyaga County and the research study department at Kerugoya County Referral Hospital (KCRH), as attached in Appendix 7, Data Collection Approval.

In line with APA standards for human subjects' research, the researcher ensured that the study was beneficial, non-destructive, and conducted with loyalty and responsibility. Confidentiality of information was maintained, and participants' rights and dignity were respected throughout the study. Informed consent, as attached in Appendix 1, was obtained from all participants, who were assured of their freedom to withdraw from the study at any point. Everyone included in the study were made aware before it began, that taking part was completely optional and that they could stop at any moment without penalty. The participants were also informed that there was neither foreseen risk nor tangible benefits for taking part in the study. Additionally, participants were informed that their data would be utilized just for research purposes and not for any other purpose. The participants were also informed of any potential benefits or drawbacks of taking part in the study.

The information that participants in the study gave was kept confidential. To protect their privacy, it was made very clear to the participants that they did not have to give their names or any information that could positively identify them. Instead, each participant questionnaire was given a unique code to find the study documents. Once they were finished, sealed containers were used to move the surveys safely from the study area to the researcher's office. Then, they were kept in a steel box that could be locked for the whole time the data was being collected, which was expected to last no more than four weeks. It

was only the researcher and a study assistant who had access to the information and who could only fill out the questionnaires and keep them safe.

CHAPTER FOUR : RESEARCH FINDINGS AND DISCUSSIONS

Introduction

This chapter presents the results of both the quantitative and qualitative data analysis, their interrelation and discussions of the study's findings derived from a comprehensive exploration of PCC at KCRH. The examination begins by exploring the KCRH healthcare providers' demographics, motivation, competencies, attitudes and institutional framework supporting PCC.

4.1 Reliability Analysis on quantitative data

This study conducts a reliability analysis on the quantitative data to assess the internal consistency and reliability of the measurement instruments used. Cronbach's alpha is computed to figure out how the survey or questionnaire items measure the same construct. The reliability analysis is designed to make sure the data gathered will be reliable and reliable enough to be trusted, to build upon the credibility of the study's findings as shown in Table 4.1 while Appendix 11 explains in details.

Table 4.1: Reliability Analysis on quantitative data

Variable	No of items	Cronchbar
Motivation	5	0.825
Competency	7	0.959
Attitude	6	0.930
P-CAT	13	0.755

Overall Scale	31	0.854

Reliability is the degree to which one obtains the same outcomes from a test or scale. The internal consistency and reliability of questionnaire items was tested using Cronbach's alpha. A high Cronbach's alpha signifies that the response values for each participant across a set of questions are highly consistent. In contrast, low scores suggest that the set of items does not consistently measure the same underlying concept. Subsequently, analysts commonly employ the value of 0.7 as a benchmark for Cronbach's alpha. At this level and beyond, the items exhibit enough consistency to suggest that the measure is not just dependable, but also reliable. From the Table 4.6, it can be seen that each of the four dimensions or questions had an alpha value greater than the threshold value of 0.7. The overall alpha scale (0.854) shows that the survey instrument was reliable.

4.2 The Respondents Demographic Information and Analysis

The study sought to explore the demographic characteristics of the participants, including factors such as age, gender, and length of service, to better understand how these elements may influence their perspectives and experiences related to the study.

Table 4.2: The Study Participants Demographic Information

	Count	**Percent**
Gender		
Female	83	52.9
Male	74	47.1
Total	**157**	**100.0**
Length of service		

Below 1 year	9	5.7
1 year to below 10 years	84	53.5
10 years to below 20 years	49	31.2
20 years to below 30years	13	8.3
30 years -Above	2	1.3
Total	**157**	**100.0**
Age		
20-29	43	27.4
30-39	74	47.1
40-49	29	18.5
50-59	11	7.0
Total	**157**	**100.0**
Designation		
Dentist	2	1.3
Family Medicine Doctor	1	.6
General Surgeon	2	1.3
Gynecologist	2	1.3
Medical officer	9	5.8
Medical Social Worker	2	1.3
Nurse	95	60.5
Oncologist	1	.6
Ophthalmologist	1	.6
Orthopedic Trauma Specialist	4	2.5
Pediatrician	2	1.3
Pharmacist	7	4.5
Physiotherapist	4	2.5
Registered Clinical Officer	19	12.1
Registered Clinical Officer (Anesthetist)	6	3.8
Total	**157**	**100.0**

The result in the table reveals that, most responders to the patient-centered care study were female (52.9%) with male representation of 47.1%. Additionally, the length of service analysis revealed that most respondents, (53.5%), ranged from 1 year to below 10 years. However, about 31.2% of the respondents had served between 10 and 20 years, whereas 8.3% fell within the 20 to below 30 years' category. Participants varied significantly in terms of service tenure, with only 5.7% reporting less than one year of experience, while 1.3% had served for 30 years or more. Additionally, a predominant portion of participants, totaling 47.1%, fell within the age range of 30 to 39 years. Among the participants, 18.5% fell within the age range of 40 to 49 years, while 27.4% were aged between 20 and 29 years. Conversely, only 7.0% were in the 50 to 59 age brackets. Notably, the diverse age distribution among participants ensured a broad spectrum of perspectives, incorporating insights from healthcare professionals at different career stages. Regarding the cadres, most of the respondents were nurses, comprising 60.5%, stressing the pivotal role of nursing professionals in delivering PCC. Coming second to the Nurses were the Registered clinical officers who constituted 12.1% of the respondents. Other designations, such as medical officers (5.8%), pharmacists (4.5%), Registerd Clinical Officers Anaesthetists were 3.8% ,Orthopedic trauma specialists and Physiotherapists (2.5%), followed in that order, respectively.

4. 2.1 The Key Informants

Table 4.3: The Key Informants

Department	Number of Key informants
Surgical department C1	1
Medical department C2	1
Pediatrics department C3	1
Reproductive health department C4	1
Outpatient special clinic C5	1
Integrated management of childhood illness C6	1
Comprehensive Care Clinic C7	1
Hospital in charge C8	1
Continues Medical Education coordinator C9	1
Nursing officer in charge C10	1
TOTAL	**10**

For the qualitative section of the study, data collected from key informants were extracted from the researcher's notebook and organized into a tabular format (rows and columns). This qualitative data was analyzed using thematic analysis, which involved labeling and

coding the information, and identifying and categorizing the respondents' direct quotes into themes and subthemes. Based on the study objectives, the content was analyzed to recognize patterns and relationships between the direct quotes, interpreting their deeper meanings alongside the quantitative data. The results of the qualitative analysis were interpreted using narrative approaches to give a voice to the respondents by including their direct quotations as part of the interpretation. Consequently, the most representative original direct quotes from the key informant interviews (KII) were objectively chosen and presented alongside the quantitative findings, as shown in Appendix 10.

4.3 Quantitative and qualiatitative Data Analysis

4.3.1 Influence of Motivation on Patient Centered Care among Health Care Providers at KCRH, Kirinyaga County, in Kenya

The study examines the influence of motivation on the delivery of Patient-Centered Care (PCC) among healthcare providers at Kerugoya County Referral Hospital (KCRH). By investigating various motivational factors such as job satisfaction, recognition, professional growth opportunities, and organizational support, the study seeks to understand how these elements impact healthcare providers' commitment to delivering high-quality, patient-centered care.

Table 4.4: Health Care Providers motivation in providing patient centered care at KCRH, Kirinyaga County, in Kenya

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel motivated to provide patient-centered care in my daily work depending on the workload that I have.	3 (1.9%)	0 (0.0%)	11 (7.0%)	46 (29.3%)	97 (61.8%)
Recognition and appreciation from my supervisors and colleagues determine my motivation in providing patient centered care.	14 (8.9%)	16 (10.2%)	13 (8.3%)	44 (28.0%)	70 (44.6%)
Adequate salary and benefits motivate me to provide patient centered care.	8 (5.1%)	3 (1.9%)	20 (12.8%)	39 (24.8%)	87 (55.4%)
Opportunities for professional growth and development determines my motivation to provide patient centered care.	6 (3.8%)	2 (1.3%)	13 (8.3%)	33 (21.0%)	103 (65.6%)
Supportive work environment with the necessary resources determines my motivation in providing patient centered care.	4 (2.5%)	2 (1.3%)	15 (9.6%)	49 (31.2%)	87 (55.4%)

Results in Table 4.4 show that 61.8% of healthcare providers Strongly Agreed to feel motivated to provide PCC based on their workload. This shows that when healthcare providers have manageable workloads, they are more likely to prioritize PCC in their

everyday responsibilities. Healthcare providers expressed that high motivation enables them to be more empathetic and proactive in care. As Interviewees shared, "*When healthcare providers are highly motivated, they are more likely to be empathetic, responsive, dedicated to meeting the needs and preferences of their patients*" (C1, C3). Another stated, "*Motivated health care providers are able to deliver timely services that are patient-centered*" (C9), highlighting the link between manageable workloads and positive patient experiences.

Recognition and gratitude from superiors or supervisors as well as coworkers emerged as another powerful motivator for healthcare providers to give PCC. As such, 44.6% of the respondents Strongly Agreed and believed that recognition and gratitude were essential in motivating them. This, emphasize the importance of positive feedback and recognition from not only peers, but also superiors in building a culture of PCC care. Another study finding was that 55.4% of the healthcare providers at KCRH Strogly Agreed and believed that financial incentives influenced motivation. This, observation implies that a competitive and equitable remuneration could improve healthcare providers' commitment to PCC.

Healthcare providers emphasized the importance of recognition, sharing that appreciation initiatives foster motivation and engagement. For example, "*Targeted initiatives that aim to motivate HCP such as recognition and appreciation of health care providers can foster motivation among health care providers to deliver patient-centered care*" (C3, C7). This aligns with the importance of establishing a culture of acknowledgment and validation for PCC efforts.

Referring to motivation as a factor for PCC provision, 65.6% of respondents who Strongly Agreed mentioned that their motivation to provide PCC was closely linked to the opportunity for professional career advancement. This observation emphasizes the necessity of providing opportunities for continual learning, training and professional advancement to not only motivate, but also encourage the healthcare providers to prioritize PCC and hence, identifying the particular factors that influenced this perspective is critical for a better understanding of healthcare provider's motivation and for developing new and effective ways to increase motivation for PCC. Providers identified training and career advancement as vital motivators, linking professional growth with enhanced PCC. For instance, "*Engaging health care providers in training programs that significantly boost their morale and motivation to deliver patient-centered care influences health care providers to provide patient-centered care*" (C2, C8). Such programs cultivate skills and confidence, reinforcing providers' dedication to PCC.

Taking into consideration the identified mediating variable for this study, as indicated in Figure 2.1 Conceptual Framework in Chapter 2, 55.4% of healthcare providers Strongly Agreed the significance of a supportive, positive work environment. Importantly, this observation stresses that a collaborative and resourceful workplace with good cooperation boosts healthcare workers' motivation to prioritize PCC. Providers stressed the impact of working in a culture that supports patient-centered values. As one provider expressed, "*Being in a hospital that promotes values that are considered to promote patient-centered care influences one's motivation to provide patient-centered care*" (C4, C9). In such environments, providers feel empowered and motivated, facilitating higher-quality PCC delivery

4.3.2 Role of Competency on Patient Centered Care among Healthcare providers at KCRH, Kirinyaga County,Kenya

This study explores the role of competency in the delivery of Patient-Centered Care (PCC) among healthcare providers at Kerugoya County Referral Hospital (KCRH). It examines how factors such as clinical knowledge, technical skills, communication abilities, and decision-making influence healthcare providers' capacity to deliver care that is attuned to the needs and preferences of patients.

Table 4.5: Healthcare providers competency in providing patient centered care at KCRH, Kirinyaga County,Kenya

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe that having the necessary skills and knowledge is essential for providing patient-centered care.	8 (5.1%)	0 (0.0%)	1 (0.6%)	43 (27.4%)	105 (66.9%)
Being confident in one's ability to assess and address individual needs and preferences of patients is important in delivering patient centered care.	8 (5.2%)	0 (0.0%)	1 (0.6%)	50 (31.8%)	98 (62.4%)
I believe that continuous professional development and training are crucial for training	8 (5.0%)	0 (0.0%)	7 (4.5%)	35 (22.3%)	107 (68.2%)

and delivering patient-centered care.					
Prioritizing effective communication to ensure that the patient understand their diagnosis, treatment options, and care plan is essential in providing patient centered care.	1 (0.6%)	8 (5.1%)	5 (3.2%)	37 (23.6%)	106 (67.5%)
Creating a supportive and empathetic environment that respects patients' dignity and cultural beliefs is essential in providing patient centered care.	10 (6.4%)	0 (0.0%)	8 (5.1%)	50 (31.8%)	89 (56.7%)
Seeking feedback from patients to improve the quality of care and address their concerns is essential in providing patient centered care.	5 (3.2%)	0 (0.0%)	8 (5.1%)	48 (30.6%)	96 (61.1%)
I believe that competent health care providers contribute significantly to positive patient outcomes and satisfaction in provision of patient centered care.	8 (5.1%)	1 (0.6%)	10 (6.4%)	49 (30.6%)	89()57.3%)

Results in Table 4.5 show that, majority (66.9%) of the respondents strongly agreed that having the requisite skills and expertise was critical for providing PCC. This broad consensus shows that healthcare providers see competence as the cornerstone of delivering effective PCC. The emphasis on knowledge and abilities demonstrates a dedication of the healthcare providers to providing exceptional treatment tailored to patients' particular requirements and preferences, which is commendable.

The qualitative results provide deeper insights into how competency influences PCC. Healthcare providers highlighted that competency enables accurate diagnoses, effective treatment plans, and favorable health outcomes. As respondent put it, *"Healthcare providers who demonstrate competence possess the essential skills, knowledge, and expertise to make informed decisions in patient-centered care" (C8).* Another noted, *"Competent healthcare providers can offer precise diagnoses and administer effective treatments" (C4). This competency instills confidence in both providers and patients, enhancing trust and overall satisfaction with care, which positively impacts patient outcomes and healthcare experiences (C10).*

Further, 62.4% of the respondents strongly agreed that being confident in one's ability to assess and address individual needs and preferences of patients was important in delivering PCC., This, was noted to be key in meeting unique patient requirements and preferences.

Similarly, 68.2% of the respondents strongly agreed on the significance of ongoing professional growth and training in PCC. Remarkably, this suggest that healthcare providers understand that being up to date and staying current with innovations as well as honing their abilities was critical to sustaining high standards of patient care.

As far as Communication was considered, 67.5% of the study participants strongly agreed that effective communication was critical issue in PCC. This, includes ensuring patients understand their diagnosis, treatment options, and care plans. Crucially, the emphasis on communication is consistent with recognized concepts of PCC, which emphasize informed decision-making and patient involvement in their healthcare journey.

In the context of working environment, 56.7% of healthcare practitioners strongly agreed and believed PCC requires creating a supportive and empathic environment, including respecting patients' dignity and cultural values. Hence, recognizing the socio-cultural components of treatment demonstrates a comprehensive grasp of patients with distinct histories and needs. Therefore, strengthening cultural competence and fostering a patient-centered, compassionate workplace could improve the patient experience.

Qualitative responses expanded on how empathy and compassion are integral to a competent, patient-centered approach. As respondents shared, "*Empathy demonstrated by acknowledging patients' fears and concerns and validating their emotions during challenging conditions enhances patient satisfaction and fosters a positive emotional experience*" (C5). Another emphasized that being "*competent in compassion addresses both the physical and emotional needs of patients, contributing to a more positive healthcare journey*" (C6).

Moreover, a notable quantitative finding was the 61.1% of healthcare practitioners who Strongly agreed that seeking input from patients was critical to providing PCC. This feedback loop was essential for continual improvement and is consistent with the PCC philosophy, which emphasizes responsiveness to patients' concerns and wishes. For that

reason, encouraging and institutionalizing systems for regular patient feedback could create a more dynamic, patient-centered healthcare environment.This feedback loop allows healthcare providers to adjust care approaches based on patient needs and preferences, fostering continuous improvement and adherence to PCC principles. As interviewee highlighted, "*Competent healthcare providers contribute significantly to improved patient outcomes and satisfaction by responding to patient feedback and continually enhancing care delivery*."(C3)

In addition, 57.3% of healthcare providers strongly agreed and believed that competent healthcare providers significantly contributed to improved patient outcomes and satisfaction in delivering PCC. This, emphasizes the precise relationship between competency and total patient experience, thus underlining healthcare workers' critical role in influencing beneficial health outcomes.

4.3.3 Influence of Attitude on patient centered care among Health Care Providers at KCRH,Kirinyaga County,Kenya

This study investigates the influence of healthcare providers' attitudes on the delivery of Patient-Centered Care (PCC) at Kerugoya County Referral Hospital (KCRH). It focuses on how factors such as empathy, professionalism, respect, and openness impact healthcare providers' interactions with patients and, ultimately, the quality of care provided.

Table 4.6: Health Care Providers attitude in providing patient centered care at KCRH,Kirinyaga County,Kenya

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Prioritizing and actively involving patients in their health care decision is key in providing patient centered care.	19 (12.1%)	1 (0.7%)	3 (1.9%)	41 (26.1%)	93 (59.2%)
Having a positive attitude towards patient centered care positively impacts the provision of patient centered care and improves patient satisfaction.	18 (11.5%)	1 (0.6%)	5 (3.2%)	52 (33.1%)	81 (51.6%)
Caring and empathetic attitude are essential for delivering patient-centered care.	19 (12.1%)	2 (1.3%)	6 (3.8%)	56 (35.7%)	74 (47.1%)
Healthcare providers personal beliefs and values influence their ability to provide patient centered care.	18 (11.4%)	3 (1.9%)	1 (0.5%)	54 (34.4%)	81 (51.8%)
Professional trainings play a role on having a positive attitude towards patient centered care.	16 (10.2%)	1 (0.6%)	21 (13.4%)	55 (35.0%)	64 (40.8%)
In my experience positive attitude towards patient centered care plays a role in provision of patient centered care.	8 (5.1%)	0 (0.0%)	6 (3.8%)	42 (26.8%)	101 (64.3%)

Results in Table 4.6 show that PCC was overwhelmingly supported, with 59.2% of health care providers strongly agreeing that actively involving patients in their healthcare

decisions is key in providing patient centered care. This, indicated that there should be a strong commitment to promoting collaborative decision-making, stressing patients' critical involvement in creating their healthcare journeys. The results show a correlation between having a positive attitude and providing PCC. This positive connection fosters collaboration and partnership, which ultimately leads to better health outcomes. As stated by respondents, "*When healthcare providers approach patients with respect, kindness, and a genuine desire to address their needs, it fosters an environment where patients feel valued, heard, and supported"* (KII C7). These insights emphasize the need for a strong commitment to promoting collaborative decision-making, with patients actively shaping their healthcare journeys.

Indeed, 51.6% of the study participants strongly agreed that keeping a positive attitude towards PCC improves its delivery and increases patient satisfaction. Additionally, the results validated that a positive attitude towards PCC and having a patient-centered mindset among healthcare professionals contributes to a better patient experience. Providers further explained that a positive, empathetic attitude fosters trust, allowing patients to feel comfortable sharing concerns and participating in their care.Some provider noted, "*A positive attitude enhances patients' engagement and trust, leading to better treatment adherence and health outcomes*" (KII C5). Another stated, "*Approaching patients with empathy is essential for PCC, as it enhances the overall patient experience*" (KII C1). This highlights how a caring attitude enhances patient-provider communication and contributes to improved healthcare experiences

Similarly, 47.1% of the respondents, strongly agreed on the significance of having a caring and empathetic attitude when providing PCC, not only underlining the critical importance

of empathy in healthcare interactions, but also recognizing patients as individuals with distinct needs, feelings, and vulnerabilities. Therefore, cultivating and nurturing this compassionate perspective should be incorporated into training programs, producing a healthcare culture that values patient well-being. Providers stressed that empathy and understanding allow patients to feel recognized as unique individuals with specific needs, emotions, and vulnerabilities. This theme is reinforced by providers who shared that empathy leads to better communication, as it "*encourages patients to share their concerns fully and adhere to recommended treatments*" (KII C8). Other providers emphasized the role of empathy in respecting patient autonomy: "*A respectful attitude goes hand in hand with acknowledging and valuing the autonomy of the patient*" (KII C9). Incorporating this compassionate perspective into training can cultivate a healthcare culture that prioritizes patient well-being

Furthermore, 51.8% of respondents Strongly agreed on the necessity of health care providers personal beliefs and values as they can lead to conscious or unconscious biases in their clinical decision making. Health care providers might unintentionally guide conversation with patients in a way that aligns with their beliefs rather than the patient preferences. Providers reflected that personal beliefs can shape conversations and decisions, sometimes leading discussions to align more closely with provider perspectives than patient preferences. This points to the need for training that encourages providers to recognize and manage personal biases to ensure patient-centered interactions.

About 40.8% of healthcare providers strongly agreed that professional training helps foster a favorable attitude toward PCC. This emphasized the significance of continual education and development programs that impart clinical proficiency and the attitudes and

values required for patient-centered care. Consequently, recognizing this relationship might help healthcare institutions plan targeted training initiatives to improve their practitioners' patient-centric approach attitude. Providers discussed the importance of continuous training programs in developing essential interpersonal skills such as empathy, compassion, and communication. For example, some providers noted, "*Regular empathy training workshops, peer mentoring, and recognizing compassionate care would effectively instill a positive attitude towards PCC*" (KII C8). Recognizing this link, healthcare institutions can design training initiatives that instill the values required for patient-centered care, promoting a culture that values both clinical competence and compassionate care.

According to their experience, 64.3 % of healthcare providers strongly agreed that a good attitude toward PCC made it easier to provide such treatment. The fact that healthcare providers are conscious of themselves stresses the basic relationship between the two – mentality and the behavior. This supports a reflective approach, building good attitudes within health care providers who consciously strive to better the quality of the patient centered care they give. Providers highlighted that, additional initiatives including feedback sessions, acknowledgment programs, rewarding compassionate care and other means to bolster good attitudes were important.Key informant interviewee noted that, "*Encouraging healthcare providers to share meaningful patient interactions would reinforce a positive attitude towards PCC*" (KII C3). Such initiatives create a reflective approach in which healthcare providers cultivate positive attitudes intentionally, enhancing the quality of PCC.

4.3.4 Healthcare providers Level of PCC at KCRH, Kirinyaga County, in Kenya

This study examines the level of Patient-Centered Care (PCC) provided by healthcare providers at Kerugoya County Referral Hospital (KCRH). It aims to assess how consistently healthcare providers apply patient-centered practices, such as effective communication, empathy, respect for patient preferences, and involvement in decision-making.

Table 4.7: Healthcare providers Level of PCC at KCRH, Kirinyaga County, in Kenya

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
We often discuss how to give patient -centered care.	13 (8.3%)	1 (0.7%)	23 (14.6%)	71 (45.2%)	49 (31.2%)
We have formal team meetings to discuss patient' care and how to provide patient centered care.	13 (8.3%)	0 (0.0%)	45 (28.7%)	52 (33.1%)	47 (29.9%)
The life history of the patient is formally used in the care plan that we use in managing our patients and hence assisting in providing patient centered care.	0 (0.0%)	1 (0.6%)	15 (9.6%)	75 (47.8%)	66 (42.0%)
The quality of the interaction between staff and patients is more important than tasks in our hospital in line with providing patient centered care.	5 (3.2%)	13 (8.3%)	22 (14.0%)	31 (19.7%)	86 (54.8%)

We are free to alter work routines based on patients' preferences in order to provide patient centered care.	3 (2.0%)	6 (3.8%)	47 (29.9%)	57 (36.3%)	44 (28.0%)
Patients are offered the opportunity to be involved in individualized everyday activities.	3 (1.9%)	17 (10.8%)	40 (25.5%)	59 (37.6%)	38 (24.2%)
I simply do not have the time to provide patient -centered care.	93 (59.2%)	12 (7.6%)	9 (5.7%)	11 (7.1%)	32 (20.4%)
The environment feels non-supportive for providing patient centered care.	52 (33.1%)	27 (17.2%)	19 (12.1%)	25 (15.9%)	34 (21.7%)
We have to get the work done before we can worry about patient involvement in decision making of their management.	39 (24.8%)	15 (9.6%)	28 (17.8%)	30 (19.1%)	45 (28.7%)
This organization prevents me from providing patient -centered care.	95 (60.5%)	23 (14.6%)	3 (1.9%)	9 (5.7%)	27 (17.3%)
Assessment of patient' needs is undertaken on a daily basis.	9 (5.7%)	18 (11.5%)	33 (21.0%)	48 (30.6%)	49 (31.2%)
It is hard for patients and family in this facility to be involved in patient care plan.	54 (34.4%)	45 (28.7%)	27 (17.2%)	11 (7.0%)	20 (12.7%)

Patients are able to access their medical history and treatment plan in this hospital.	3 (1.9%)	11 (7.0%)	53 (33.8%)	35 (22.3%)	55 (35.0%)

Results in Table 4.7 show that 45.2% of the respondents agreed and stated that they often discuss how to offer patient-centered care. For the second statement, 33.1% of respondents agreed that there were formal team meetings to discuss patient care and how to deliver patient-centered care, pointing evidence of formal collaboration among healthcare practitioners, which may improve the creation of coordinated and patient-centered treatment initiatives. The findings revealed that 47.8 % of respondents agreed that the patient's life history is formally included in care plans showing that there is still potential for improvement in completely incorporating patients' life histories into care plans to increase patient-centeredness. In another statement 54.8% Strongly Agreed that the quality of interaction takes precedence over tasks, highlighting the significance of communication and rapport-building in the healthcare setting. Furthermore 36.3 % of the respondents agreed that they were free to alter work routines based on patients' preferences in order to provide patient centered care. Notably, 29.9% were neutral regarding this assertion while 37.6% of the participants agreed that patients were given an opportunity to participate in tailored activities, indicating that patient-centered care techniques were implemented in the institution. The study also revealed that 59.2% of respondents strongly disagreed that they do not have time to provide patient-centered care. Furthermore, 33.1% of respondents strongly disagreed on whether the environment is unsupportive of patient-centered care,while 21.7% Strongly Agreed that the environment felt unsupportive for provision of patient centered care. Additionally, 28.7% of respondents strongly agreed that

work must be finished before focusing on patient engagement in decision-making while 24.8% Strongly Disagreed with the statement, representing conflicting objectives and difficulties in combining chores with patient-centered care goals. Moreover, 60.5% of the respondents Strongly Disagreed on whether the organization prevents them from providing patient centered care. However, 31.2% strongly agreed with the assertion that patient requirements are examined on a daily basis. Furthermore,34.4% Strongly Disagreed with the assertion that it is difficult for patients and families to participate in care plans while 28.7% disagreed with the assertion. Moreover, 35.0 % strongly agreed that patients may access their medical history and treatment plans.

4.4 Correlation Analysis

This study employed correlation analysis to examine the relationships between variables associated with Patient-Centered Care (PCC) among healthcare providers at KCRH. Correlation is a statistical technique that measures the degree of association between two variables and indicates the nature of their relationship. The correlation coefficient ranges from +1 to -1, reflecting the strength of the association. A value of ±1 indicates a perfect correlation between the two variables. As the correlation coefficient approaches 0, the association between the variables becomes weaker. The sign of the coefficient indicates the direction of the relationship; a positive sign denotes a positive relationship, while a negative sign denotes a negative one. The results of the correlation analysis are summarized in Table 4.8 below.

Table 4.8: The Correlation Analysis of PCC Related Variables

Correlations					
		P_CAT	**Attitude**	**Competency**	**Motivation**
P_CAT	**Pearson Correlation**	1	.226**	.604**	.208**
	Sig. (2-tailed)		.005	.000	.009
	N	157	157	157	157
Attitude	**Pearson Correlation**	.226**	1	.088	.189*
	Sig. (2-tailed)	.005		.272	.018
	N	157	157	157	157
Competency	**Pearson Correlation**	.604**	.088	1	.404**
	Sig. (2-tailed)	.000	.272		.000
	N	157	157	157	157
Motivation	**Pearson Correlation**	.208**	.189*	.404**	1
	Sig. (2-tailed)	.009	.018	.000	
	N	157	157	157	157
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

According to the correlation matrix data in Table 4.8, it presents the correlation analysis of variables related to Patient Centered Care (PCC), including Attitude, Competency, and Motivation. The Pearson Correlation coefficients reveal the strength and direction of the linear relationships between these variables. The correlation between PCC and Attitude is 0.226, which is statistically significant at the 0.01 level ($p = 0.005$), indicating a positive but modest relationship. Similarly, PCC shows a strong positive correlation with

Competency, with a coefficient of 0.604, also significant at the 0.01 level (p = 0.000). This suggests that higher competency is strongly associated with higher PCC. The correlation between PCC and Motivation is 0.208, significant at the 0.01 level (p = 0.009), indicating a positive relationship, though weaker compared to Competency.

4.5 Multinomial Logistic Regression Analysis (MLRA)

This study utilized MLRA to examine and assess the associations between the dependent variable (P_CAT) and the independent variables (Motivation, Attitude, and Competency). The MLRA is a type of linear regression analysis which is carried out when the dependent variable is categorical and has more than two levels. It is used to categorize data and to show the correlation between one dependent nominal variable and one or more continuous-level (interval or ratio scale) independent variables. The nominal variable can be defined as a variable that does not have an inherent ordering.

Table 4.9: The MLRA Model Fitting Information

Model Fitting Information					
Model		**Model Fitting Criteria**	**Likelihood Ratio Tests**		
		-2 Log Likelihood	**Chi-Square**	**df**	**Sig.**
Intercept Only		914.656			
Final		763.613	151.043	99	.001

The model fitting information shown in the Table 4.10 offers insights into the adequacy of the "fit" for the MLRA model employed. The -2 Log Likelihood method was used to show the "best fit" of the model to fit the data. In particular, it quantifies the degree to which the model aligns with the data, where a smaller number suggests a stronger alignment. Subsequently, the intercept only model that was used here had a -2 Log Likelihood of 914.656, which serves as a baseline for comparison. The inclusion of independent

variables in the final model resulted in a notable enhancement in the accuracy, as seen by a decrease in the -2 Log Likelihood to 763.613. The Chi-Square value of 151.043 with 99 degrees of freedom is extremely significant ($p < 0.001$), indicating that the final model was a much superior fit compared to the "Intercept Only" model. This, highlighted the effectiveness of the approach in elucidating the differences in healthcare providers' views on PCC.

Table 4.10: The Goodness of Fit of the Model

Goodness-of-Fit			
	Chi-Square	**df**	**Sig.**
Pearson	2492.941	3564	1.000
Deviance	716.133	3564	1.000

The goodness-of-fit statistics in the Table 4.11, specifically the Pearson and Deviance Chi-square tests, provide a critical assessment of how well the MLRA model fits the observed data. A high p-value implies a good fit. For the Pearson Chi-square test, the obtained statistic was 2492.941 with 3564 degrees of freedom, yielding a p-value of 1.000. Similarly, the Deviance Chi-square test produced a statistic of 716.133, 3564 degrees of freedom, and a p-value of 1.000. Both tests showed no statistically significant difference between the observed and projected values, implying that the model well represented the heterogeneity in healthcare practitioners' perceptions of PCC. Additionally, this demonstrated the MLRA model's dependability and appropriateness in describing the links between independent variables and various levels of PCC perceptions.

Table 4.11: The Measures of Variability

Pseudo R-Square	
Cox and Snell	.618
Nagelkerke	.619
McFadden	.153

The pseudo-R-Square values in the Table 4.12 show the MLRA model's ability to explain variation in healthcare providers' perceptions of PCC. The Cox and Snell pseudo-R-Square of 0.618 and the Nagelkerke pseudo-R-Square of 0.619 indicates that the model's independent variables could explain 61.8% of the variance in the dependent variable. The McFadden pseudo-R-Square (0.153) shows the proportionate reduction in the model's log-likelihood relative to a null model, implying that the included variables account for about 15.3% of the variation in the result.

Table 4.12: The Likelihood Ratio Test

Likelihood Ratio Tests				
	Model Fitting Criteria	**Likelihood Ratio Tests**		
Effect	**-2 Log Likelihood of Reduced Model**	**Chi-Square**	**df**	**Sig.**
Intercept	834.781	71.168	33	.000
Motivation	807.168[a]	52.555	33	.003
Competency	821.342[a]	57.730	33	.005
Attitude	808.356	54.743	33	.033

The Likelihood Ratio Test (LRT) is a pivotal statistical method utilized to evaluate the significance of predictors within a logistic regression model. Table 4.13 presents the LRT results, focusing on three key factors: Motivation, Competency, and Attitude. This test assesses whether the inclusion of each factor significantly enhances patient centered care by comparing the full model against reduced models that exclude each predictor in turn. The -2 Log Likelihood values for the models excluding Motivation, Competency, and Attitude are 807.168, 821.342, and 808.356, respectively, compared to the baseline model with an intercept-only value of 834.781. The Chi-Square statistics for these comparisons are 52.555 for Motivation, 57.730 for Competency, and 54.743 for Attitude, all with 33 degrees of freedom. The significance levels (p-values) are .003, .005, and .033, respectively, indicating that all three factors significantly improve patient centered care. Specifically, the significant p-values for Motivation, Competency, and Attitude underscore their critical roles as predictors in patient centered care. The results demonstrate that

excluding any of these factors would lead to a substantial reduction in patient centered care, thereby validating their importance in explaining patient centered care. This analysis provides robust evidence for the inclusion of Motivation, Competency, and Attitude in the logistic regression model, significantly contributing to the overall explanation of patient centered care.

4.6 Discussion

4.6.1 Motivation of Healthcare providers in provision of Patient-Centered Care at KCRH, Kirinyaga County, in Kenya

From the study results motivation and self-perceived PCC practices revealed a significant association among the health care providers at KCRH. The correlation between PCC and motivation (0.208) is significant with a p-value of 0.009, revealing a positive relationship. This means that higher motivation is associated with somewhat better PCC practices. Although the effect size is modest compared to competency, the significant p-value confirms that the association is real and not a result of random chance. This observation agrees with Kengia *et al.*, (2023) literature on motivation explaining how health professionals treat patients. Furthermore, motivation was not all about the external factors that arose from financial rewards and policies of an organization. It was an internal drive and commitment to PCC. Hence, interventions to enhance motivation should include extrinsic incentives and intrinsic incentives to foster providers motivation. The findings were in a disagreement with Kohnen, (2023) results whom asserted that internal incentives predominantly shape motivation in healthcare settings.

The findings also demonstrate that motivation-enhancing interventions can serve as source of positive cultural change in health care institutions; this is consistent with (Lateef & Mhlongo, 2022) whom highlighted that interventions that promote motivation would create a culture of dedicated and committed healthcare workers in providing patient centered care. The research further, revealed that health care providers could be driven by a patient-centered approach if they were motivated. Thereby, creating an environment where patient needs, preferences and values dictate the delivery of care; this is consistent with Ghorbani Vajargah *et al*. (2023) that patient-focused care is a central aspect of quality in healthcare.

4.6.2 Competency of Health care providers in provision of Patient Centered care at KCRH, Kirinyaga County, In Kenya

The study revealed a highly significant strong positive correlation of 0.604 between PCC and competency, with a p-value of 0.000. This robust relationship indicates that higher competency among healthcare providers is strongly associated with improved PCC practices. The high significance level confirms that this association is genuine and not due to random variation, aligning with Wasim *et al.,* (2023), which found that healthcare workers with greater competency are more likely to provide PCC.

Furthermore, the results of the study stress that competency-enhancing interventions should be tailored to address the specific needs of health care providers; this is also supported by Kim, M. (2023) whom stated that health care providers with necessary skills and knowledge are able to cater for the need and preferences of patient in patient centered care.

The findings underscore the interdependence of competency on variables such as motivation and attitude. This resonates with the perspective of Poorchangizi *et al*., (2019),

who emphasized that competency cannot operate in isolation but is intertwined with other factors.

4.6.3 Attitude of Health Care providers in provision of Patient Centered Care at KCRH, Kirinyaga County, In Kenya

The study identified a statistically significant correlation between PCC and attitude (0.226), with a p-value of 0.005, indicating a positive but modest relationship. This means that PCC practices can be expected to also improve along with healthcare providers' attitudes. This is consistent with Fouad *et al.*, (2023), that showed that provider attitudes matter for patient outcomes and experiences.

Healthcare providers with positive attitude influence a shift of focus on communication, show respect and encourage participation of patients in decision making as key components of patient centered care. The study's finding is opposite to research by Ardenghi, *et al.* (2024) that, while positive attitudes are vital, they may not always lead directly to better outcomes of patient centered care.

4.8.4 Healthcare providers Level of PCC at KCRH, Kirinyaga County, in Kenya

The results shows that all three PCC correlations against the variables of Attitude, Competency, and Motivation are statistically significant at $p < 0.01$ and cannot be attributed to random chance. Positive correlation coefficients indicate that improvements in both Attitude, Competency, and Motivation are correlated with positive PCC. Of these, Competency had the most influence on PCC (0.000), Motivation (0.009) and Attitude (0.005). This means that while all three factors increase PCC, Competency has the most impact on PCC. Fouad *et, al.*, (2020) corroborated this statement by claiming that

improving the skill of the healthcare providers has a great positive impact on the outcomes of patient centered care.

This study uses the Person-Centered Care Assessment Tool (P-CAT) which provides a structured measure of the degree to which patient centered care (PCC) is provided by healthcare providers in Kerugoya County Referral Hospital, Kirinyaga County, Kenya. The items used in this tool are those that encompass different dimensions of patient centeredness, including empathy, communication, respect for patient preferences and involvement in care decisions. The scoring system of the P-CAT categorizes participants into three levels based on their total scores: medium PCC, high PCC, and low PCC. Those who score 26-39 are scored as exhibiting low patient centered care scores, while scores between 40 and 52 are considered medium patient centered care scores and finally scores between 53-65 are indicative of high patient centered care scores. The analysis is based on the average percentage of respondents that agreed with the 13 Items of the PCC that is intended in P-CAT tool. An assessment of the PCC amongst healthcare providers in KCRH, Krinyaga County scored 43.75, "Medium PCC" category. Results showed that the principles of PCC are only moderately followed by healthcare providers under scrutiny. This results suggests that the PCC practices in the studied healthcare environment has been implemented evenly. The score indicates room for improvement and yet shows a large compliance with PCC principles by the healthcare providers at KCRH.

CHAPTER FIVE : SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This study was essentially aimed at critically dissecting the factors of PCC among the healthcare services providers at KCRH, Kirinyaga County, Kenya. In this study, influence and effects of patient centeredness of healthcare providers' motivation, competence, attitude, and the overall level of patient centeredness of the healthcare providers were examined in this healthcare context.

5.1 Summary of the results Findings

A modest, though positive, link between PCC and the delivery is found between healthcare providers' attitudes. An empathetic attitude enables the establishment of a supportive and valued environment for patients helping optimize their satisfaction and consequently participation in care decision making. This research informs the PCC adoption at KCRH in relation to the factors affecting the degree of PCC implementation which is based on attitudes, competency, and motivation in the healthcare setting.

A positive significant correlation was also found between PCC and motivation of healthcare providers. Inspired providers described themselves as active contributors to patient centered care, reflecting previous research by Huang *et al.* (2022), where intrinsic and extrinsic motivation play a role in shaping behavior. Future efforts to reinforce PCC could target other motivational drivers that could be addressed in targeted interventions, regardless of whether they are addressed in actual patient-centered practices.

The most influential factor in PCC delivery was found to be competency. Skills, knowledge and continuous learning of providers greatly improve care quality and build patients trust and engagement. This research highlighted competency's multiplicity of roles, demonstrating that it makes a higher skilled health care provider better able to offer patient centered care. These findings underscore the need for on going professional development to maintain high standards of PCC's, and patient outcomes.

Although less significant than competency, motivation is nonetheless a key catalyst of PCC, as lack of motivation means that providers will not prioritize the needs of the patients nor will they engage in excellent communication. Additionally the analysis confirmed the importance of developing positive attitudes, empathy and cultural sensitivity among healthcare providers that can help improve PCC. The final assessment of the PCC score at KCRH placed it in a "Medium" bracket, suggesting that while providers are inclined towards PCC, there remains room for improvement to fully integrate patient-centered practices across the organization.In summary all the set-out objectives of the study were achieved.

5.2 Conclusion

The study assessed the determinants of PCC among health care providers of KCRH, Kirinyaga County, in Kenya. Specific objectives were analyzed in depth by uncovering the complex factors shaping PCC delivery in this healthcare environment.

5.2.1 Motivation of Healthcare providers in provision of Patient-Centered Care at KCRH, Kirinyaga County, in Kenya

Regarding the influence of motivation on patients'-centered care practices the results proved a positive correlation. Inspired healthcare providers showed a better probability of perceiving patient-centered care as something that they were actively contributing toward. Thus, such interventions may improve the practices of patient-centered care.

5.2.2 Competency of Health care providers in provision of Patient Centered care at KCRH, Kirinyaga County, In Kenya

The second specific objective concentrated on the role of competency on patient-centered care. Towards this end, the research established a particular relation which led to the conclusion about the crucial part of skills, knowledge and life-long learning. As such healthcare providers with a higher level of competency were more likely to deliver patient-centered care, which emphasized the multidimensional structure of competency in molding PCC techniques.

5.2.3 Attitude of Health Care providers in provision of Patient Centered Care at KCRH, Kirinyaga County, In Kenya

The third objective focused on how attitude affects PCC with a significant relationship of a positive attitude and provider's perception of providing patient-centered care. This confirms the significance of creating positive mindsets, empathy, and cultural sensitivity in health caregivers to promote patient-centered care.

5.2.4 Healthcare providers Level of PCC at KCRH, Kirinyaga County, in Kenya

The last objective "assessing the level of patient-centeredness care (PCC) score" resulted in a "Medium PCC" score bracket. This implies that healthcare providers at KCRH were

slightly inclined towards PCC philosophy thereby depicting moderation and a room for improvement.

5.3 Recommendations

The study arrived at the following recommendations based on the aforementioned findings and conclusions:

5.3.1 Motivation of Healthcare providers in provision of Patient-Centered Care at KCRH, Kirinyaga County, in Kenya

To enhance Patient-Centered Care (PCC), implementing initiatives that increase healthcare providers' motivation is essential. Potential strategies include offering incentives, recognizing achievements, and providing career advancement opportunities. Hospital administrators should lead the development and implementation of these motivational programs within their institutions. Additionally, county and national governments can support these efforts by allocating resources and establishing supportive policies to facilitate motivation-enhancing programs.

5.3.2 Competency of Health care providers in provision of Patient Centered care at KCRH, Kirinyaga County, In Kenya

Improving PCC greatly relies on healthcare providers' competency development. Both can be achieved by the use of targeted training programs and ongoing professional development. These programs are meant to help healthcare workers to refine their skills, so they should get involved actively in these programs. The importance of implementation of these programs depends on hospital administrators, policymakers, as well as researchers who would evaluate the effects of training programs on PCC which can later bring advices to further improve PCC.

5.3.3 Attitude of Health Care providers in provision of Patient Centered Care at KCRH, Kirinyaga County, In Kenya

Improving PCC is based on fostering positive attitudes among healthcare providers. It can be achieved by creating a supportive work culture, having appropriate programs, and leading at high levels and modeling and encouraging good behavior. For hospital administrators, such a work environment should be cultivated and for policymakers, PCC should be supported by policies promoting the growth of professional and a positive attitude toward PCC.

5.3.4 Healthcare providers Level of PCC at KCRH, Kirinyaga County, in Kenya

PCC levels are subject to ongoing evaluation and improvement. Therefore an implementation of feedback mechanisms, regular training and analysis of patient satisfaction survey is required. Hospital administrators should oversee these evaluation processes, ensuring continuous improvement based on the feedback gathered. Researchers can leverage these evaluations to further investigate effective PCC practices and interventions, guiding future advancements in patient-centered care.

5.4 Recommendations for Future Research

The results from this study provide avenues and directions for future research in which the determinants of PCC and how they interact with each other can be better understood. Thus, new hypotheses may be generated and previously untapped research paths can be opened. The given recommendations are expected to serve as guidelines for scholars and

researchers looking forward to developing the current as well as future discourse on PCC in the following areas,

1. Impact of PCC on clinical outcomes, patient experiences, satisfaction and medication compliance.
2. Role of competency in PCC: Exploration of specific skills and competency domains required for implementing more effective patient focused care.

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APPENDICES

Appendix 1: CONSENT FORM

I am Brian Murigi, currently enrolled as a Master's student at Mount Kenya University, Kenya, pursuing a Master's degree in Health System Management with registration number MHSM/2022/58801.

The purpose of my research is to determine determinants of patient-centered care among healthcare providers at Kerugoya County Referral Hospital, Kirinyaga County, Kenya.

I kindly request your permission to participate in this research, which will involve your completion of survey forms. The estimated time required for this task is approximately 20 to 25 minutes.

Please be assured that there are no expected risks associated with your participation as a research participant, and there are no financial or material incentives involved. Your identity will be kept confidential, and your privacy will be rigorously protected. Your participation in this study is entirely voluntary, and you have the right to withdraw from the study at any point for any reason.

In order to participate in this study, your written consent is required. Rest assured that this research will be conducted with the utmost professionalism and confidentiality.

Your willingness to take part in this study is greatly appreciated. By signing below, you provide your consent to participate in the research.

Signature of Participant……. Date…….

Signature of the Researcher…… Date……

Appendix 2: STRUCTURED QUESTIONNAIRE

SECTION A

Socio-Demographic Questionnaire

Please tick the correct answer and/or enter the response in the space provided

1) GENDER: Male Female Other

2) AGE

1) 20-29
2) 30-39
3) 40-49
4) 50-59
5) 60-ABOVE

3) Length of Service

1) Below 1 year
2) 1 year to below 10 years
3) 10 years to below 20 years
4) 20 years to below 30 years
5) 30 years-Above

4) Kindly indicate your designation

	Designation	**TICK HERE**
1	Nurse	
2	Registered Clinical Officer	

3	Medical officer	
4	Registered Clinical Officer (Anesthetist)	
5	Physiotherapist	
6	Orthopedic Trauma	
7	General Surgeon	
8	Gynecologist	
9	Dentist	
10	Medical Social Worker	
11	Pediatrician	
12	Ophthalmologist	
13	Oncologist	
14	Family Medicine Doctor	
15	Pharmacist	

SECTION: B Motivation on the provision of patient-centered care

Please indicate your level of agreement with the following statements by selecting the number that best represents your feelings. Use the scale below, where "1" indicates strong disagreement, "3" represents neutrality, and "5" signifies strong agreement.

	Statement	**1 Strongly disagree**	**2 Disagree**	**3 Neutral**	**4 Agree**	**5 Strongly agree**
1.	I feel motivated to provide patient-centered care in my daily work depending on the workload that I have.					

2.	Recognition and appreciation from my supervisors and colleagues would determine my motivation in providing patient centered care.					
3.	Adequate salary and benefits would motivate me to provide patient centered care.					
4.	Opportunities for professional growth and development would determine my motivation to provide patient centered care.					
5.	Supportive work environment with the necessary resources determine my motivation in providing patient centered care.					

SECTION C Competency

Please indicate your level of agreement with the following statements by selecting the number that best represents your feelings. Use the scale below, where "1" indicates strong disagreement, "3" represents neutrality, and "5" signifies strong agreement.

	Statement	**1 Strongly disagree**	**2 Disagree**	**3 Neutral**	**4 Agree**	**5 Strongly Agree**
1.	I believe that having the necessary skills and knowledge is essential for providing patient-centered care.					
2.	Being confident in one's ability to assess and address individual needs and preferences of patients is important in delivering patient centered care.					
3.	I believe that continuous professional development and training are crucial for training and delivering patient-centered care.					
4.	Prioritizing effective communication to ensure that the patient understand their diagnosis, treatment options, and care plan is essential in providing patient centered care.					

5.	Creating a supportive and empathetic environment that respects patients' dignity and cultural beliefs is essential in providing patient centered care.					
6.	Seeking feedback from patients to improve the quality of care and address their concerns is essential in providing patient centered care.					
7.	I believe that competent health care providers contribute significantly to positive patient outcomes and satisfaction in provision of patient centered care.					

Section D: Attitude on the provision of patient-centered

Please indicate your level of agreement with the following statements by selecting the number that best represents your feelings. Use the scale below, where "1" indicates strong disagreement, "3" represents neutrality, and "5" signifies strong agreement.

	Statement	**1 Strongly disagree**	**2 Disagree**	**3 Neutral**	**4 Agree**	**5 Strongly Agree**
1.	Prioritizing and actively involving patients in their health care decision is key in providing patient centered care.					

2.	Having a positive attitude towards patient centered care positively impacts the provision of patient centered care and improves patient satisfaction.					
3.	Caring and empathetic attitude are essential for delivering patient-centered care.					
4.	Healthcare providers personal beliefs and values influence their ability to provide patient centered care.					
5.	Professional trainings play a role on having a positive attitude towards patient centered care.					
6.	In my experience positive attitude towards patient centered care plays a role in provision of patient centered care.					

Section E: Patient -Centered Care Assessment Tool (P-CAT) Questionnaire

Please read the following statements. Mark below the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, click "1". If you are neutral, click "3", and if you strongly agree, click "5", etc.

	Statement	**1.Strongly disagree**	**2.Disagree**	**3.Neutral**	**4.Agree**	**5.Strongly Agree**
1.	We often discuss how to give patient -centered care.					
2.	We have formal team meetings to discuss patient' care and how to provide patient centered					
3.	The life history of the patient is formally used in the care plan that we use in managing our patients and hence assisting in providing patient					
4.	The quality of the interaction between staff and patients is more important than tasks in our hospital in line with providing patient centered					
5.	We are free to alter work routines based on patients' preferences in order to provide patient					
6.	Patients are offered the opportunity to be involved in individualized everyday activities.					
7.	I simply do not have the time to provide patient -centered care.					
8.	The environment feels non-supportive for providing patient centered care.					

9.	We have to get the work done before we can worry about patient involvement in decision making of their management.					
10.	This organization prevents me from providing patient -centered care.					
11.	Assessment of patient' needs is undertaken on a daily basis.					
12.	It is hard for patients and family in this facility to be involved in patient care plan.					
13.	Patients are able to access their medical history and treatment plan in this hospital.					

Appendix 3: KEY INFORMANT GUIDE INTERVIEW QUESTIONS

Section A: Motivation on the Provision of Patient-Centered Care Interview Questions

1) In your opinion, how does the motivation level of healthcare providers impact their ability to provide patient-centered care?
2) Can you share any specific examples of how motivated healthcare providers have positively influenced patient-centered care delivery?
3) Can you identify any challenges or barriers that may affect the motivation of healthcare providers in delivering patient-centered care?

Section B: Competency on the provision of Patient centered care Interview Questions

4) From your perspective, how important is competency among healthcare providers in delivering patient-centered care?
5) What mechanisms or training programs do you think should be put in place to ensure that healthcare providers possess the necessary skills and knowledge to provide patient-centered care?
6) How can continuous professional development and learning be enhanced to promote competency in patient-centered care?
7) Are there any specific competencies or skills that you believe are crucial for healthcare providers to deliver effective patient-centered care?
8) Can you provide examples of how competency of healthcare providers has contributed to improved patient experiences or outcomes?

Section C: Attitude on the Provision of Patient-Centered Care Interview Questions

9) How does the attitude of healthcare providers towards patients impact the overall culture of patient-centered care?
10) What specific initiatives or policies do you think should be looked at in fostering a positive attitude among healthcare providers to provide patient-centered care?

11) In your view, how can a caring and empathetic attitude be cultivated and reinforced among healthcare providers in order to provide patient centered care?
12) Do you believe that healthcare providers actively involving patients in their healthcare decisions is influenced by their attitude towards patient engagement?

Appendix 4 Ethics Review Committee Certificate

Mount Kenya University

REF: **MKU/ISERC/3207** Date: 29 September 2023
TO: **BRIAN MURIGI WAIRIMU**
REG: **MHSM/2022/58801**

Dear Sir/Madam,

RE: DETERMINANTS OF PATIENT CENTRED CARE AMONG HEALTH CARE PROVIDERS IN KERUGOYA COUNTY REFERRAL HOSPITAL, KIRINYAGA COUNTY, KENYA.

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2251.** The approval period is **29/09/2023 - 28/09/2024.**

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 **Mount Kenya University**
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 **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 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 **Mount Kenya University**

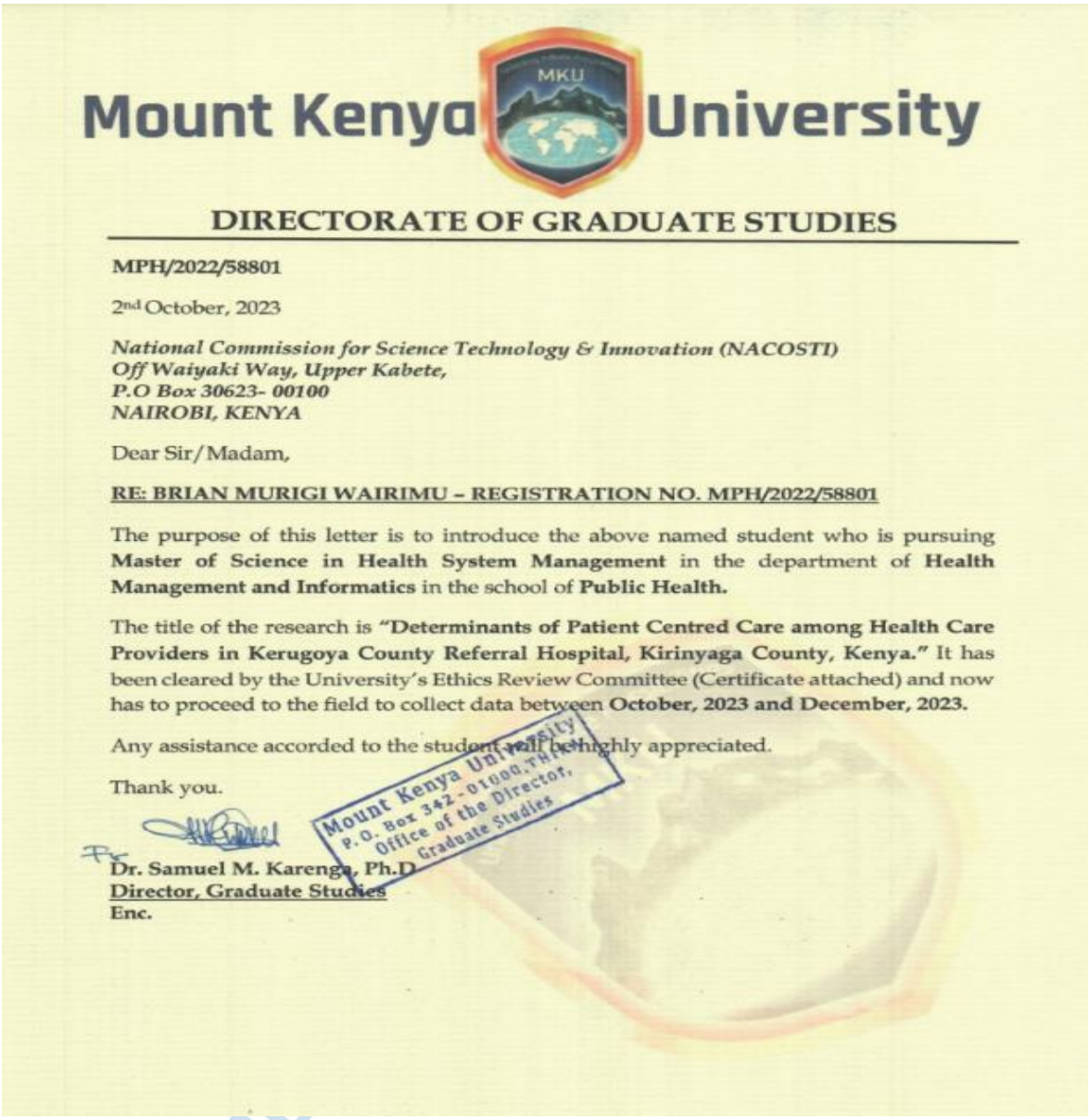
Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Appendix 5: Introduction letter from MKU



Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MPH/2022/58801

2nd October, 2023

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: BRIAN MURIGI WAIRIMU – REGISTRATION NO. MPH/2022/58801

The purpose of this letter is to introduce the above named student who is pursuing **Master of Science in Health System Management** in the department of **Health Management and Informatics** in the school of **Public Health.**

The title of the research is **"Determinants of Patient Centred Care among Health Care Providers in Kerugoya County Referral Hospital, Kirinyaga County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **October, 2023 and December, 2023.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P.O. Box 342-01000, THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

Appendix 6 NACOSTI Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **539812**

Date of Issue: **04/October/2024**

RESEARCH LICENSE

This is to Certify that Mr.. Brian Murigi Wairimu of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kirinyaga on the topic: DETERMINANTS OF PATIENT CENTERED CARE AMONG HEALTH CARE PROVIDERS IN KERUGOYA COUNTY REFERRAL HOSPITAL, KIRINYAGA COUNTY, KENYA\. for the period ending : 04/October/2025.

License No: **NACOSTI/P/24/30350**

539812

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
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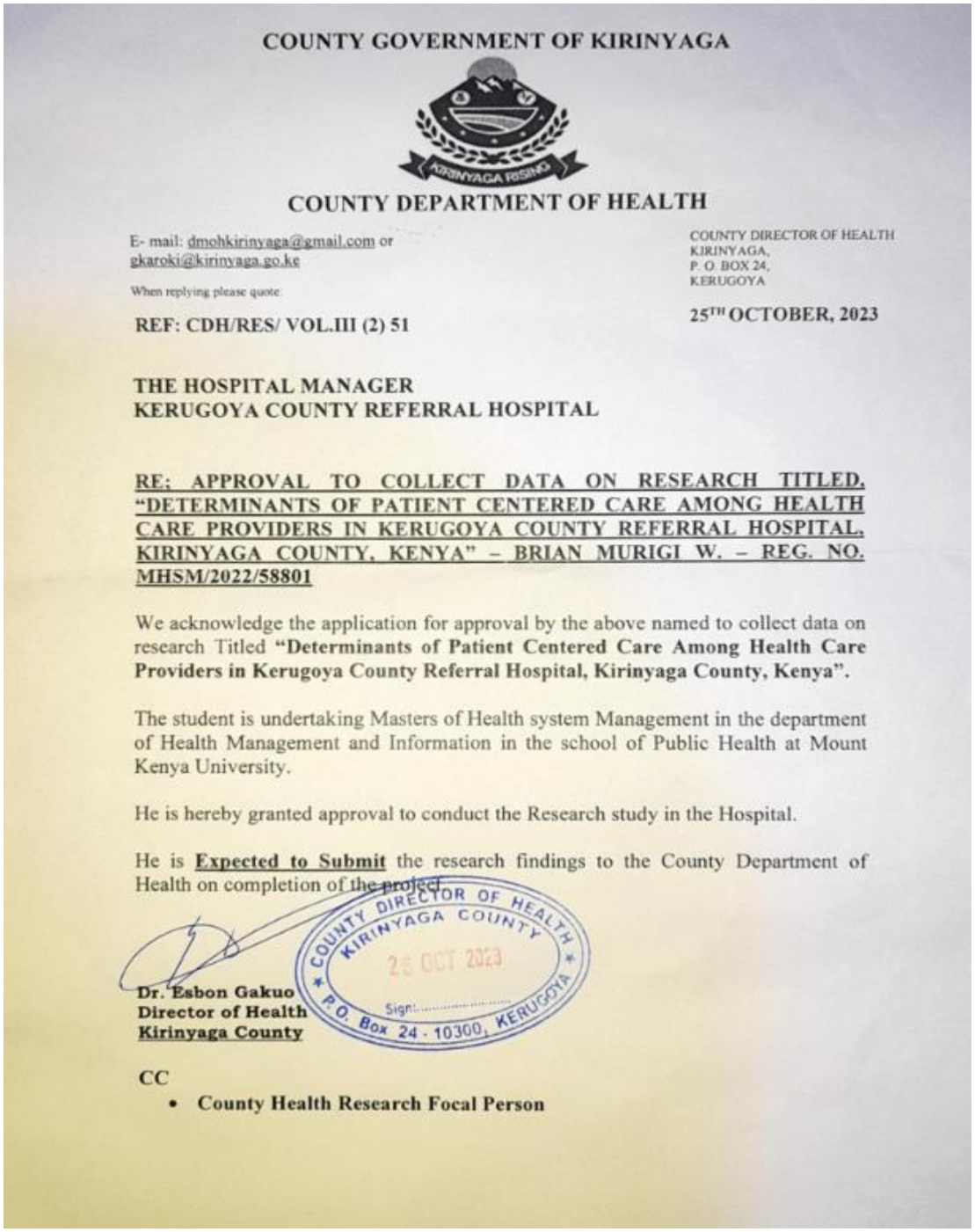
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke

Appendix 7: Data Collection Authorization



COUNTY GOVERNMENT OF KIRINYAGA

COUNTY DEPARTMENT OF HEALTH

E- mail: dmohkirinyaga@gmail.com or
gkaroki@kirinyaga.go.ke

When replying please quote

COUNTY DIRECTOR OF HEALTH
KIRINYAGA,
P. O. BOX 24,
KERUGOYA

REF: CDH/RES/ VOL.III (2) 51

25TH OCTOBER, 2023

THE HOSPITAL MANAGER
KERUGOYA COUNTY REFERRAL HOSPITAL

RE; APPROVAL TO COLLECT DATA ON RESEARCH TITLED, "DETERMINANTS OF PATIENT CENTERED CARE AMONG HEALTH CARE PROVIDERS IN KERUGOYA COUNTY REFERRAL HOSPITAL, KIRINYAGA COUNTY, KENYA" – BRIAN MURIGI W. – REG. NO. MHSM/2022/58801

We acknowledge the application for approval by the above named to collect data on research Titled **"Determinants of Patient Centered Care Among Health Care Providers in Kerugoya County Referral Hospital, Kirinyaga County, Kenya".**

The student is undertaking Masters of Health system Management in the department of Health Management and Information in the school of Public Health at Mount Kenya University.

He is hereby granted approval to conduct the Research study in the Hospital.

He is **Expected to Submit** the research findings to the County Department of Health on completion of the project.

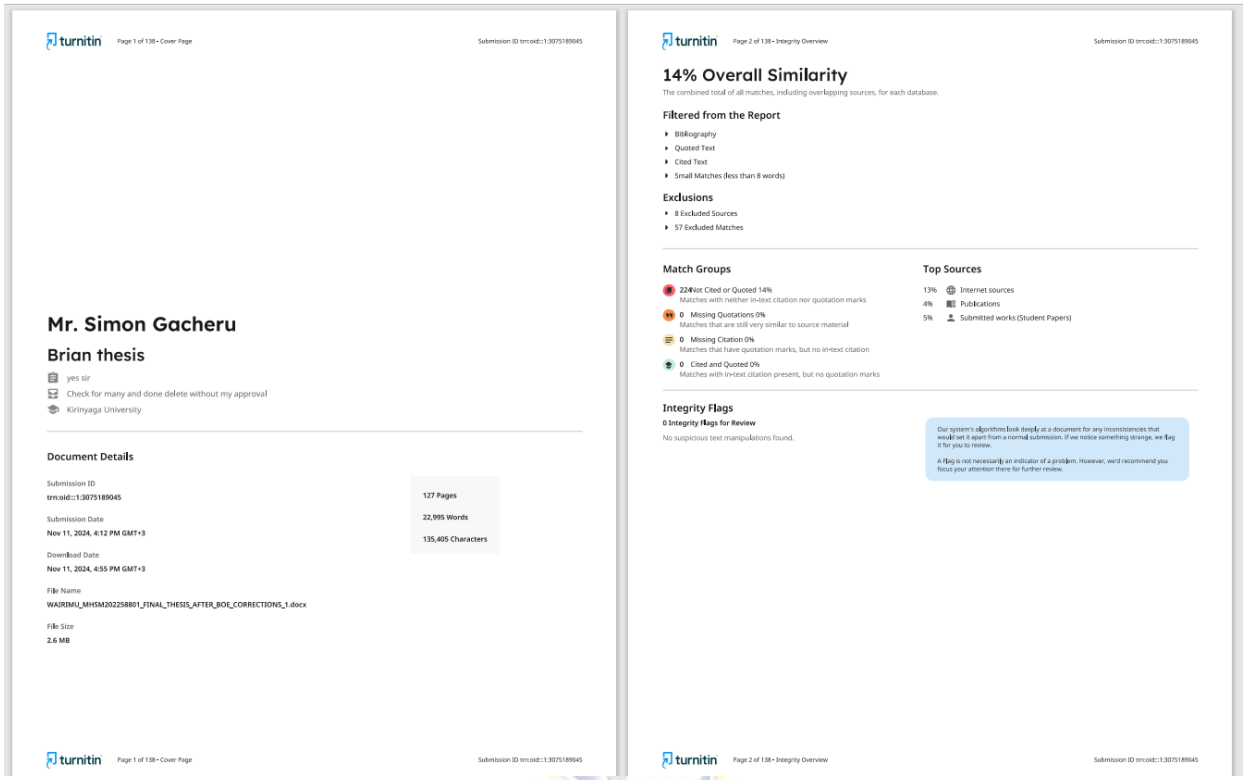
COUNTY DIRECTOR OF HEALTH
KIRINYAGA COUNTY
26 OCT 2023
Sign:.....
P.O. Box 24 - 10300, KERUGOYA

Dr. Esbon Gakuo
Director of Health
Kirinyaga County

CC

- **County Health Research Focal Person**

Appendix 8: Turnitin Report



turnitin Page 1 of 138 - Cover Page Submission ID trn:oid:::1:3075189045

Mr. Simon Gacheru

Brian thesis

yes sir

Check for many and done delete without my approval

Kirinyaga University

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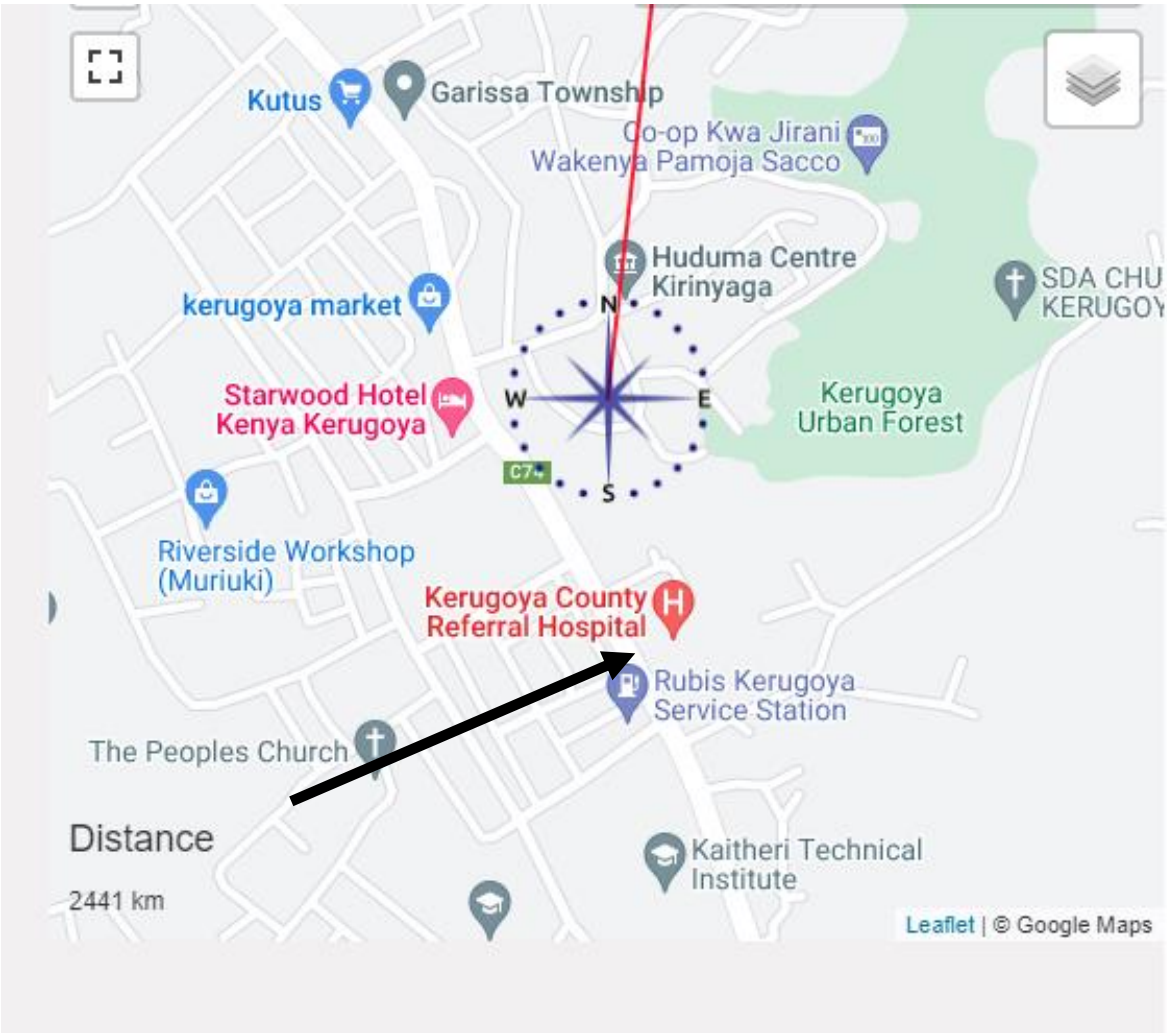
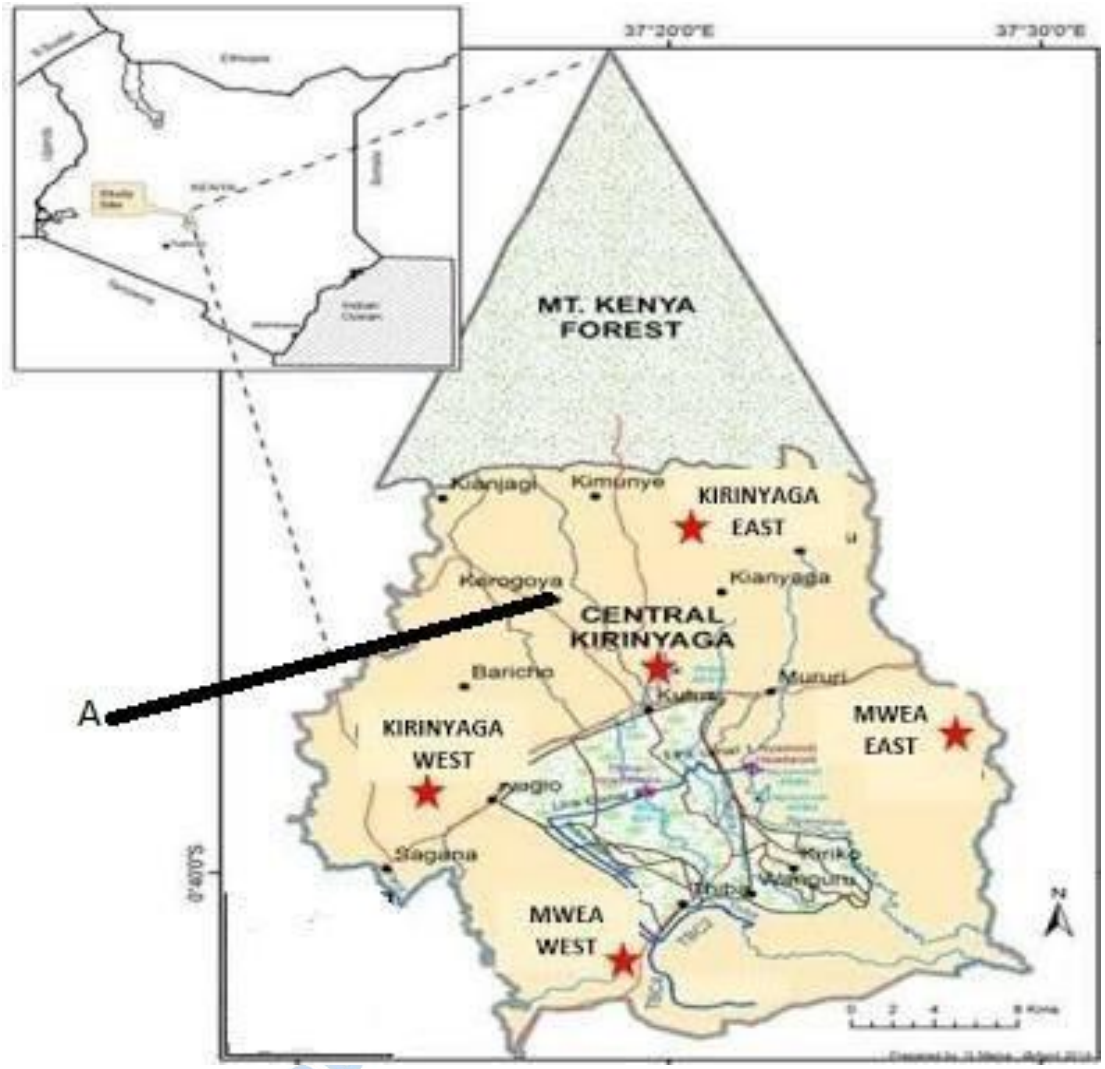
Appendix 9:Research Site Maps

Map of Kerugoya County Referral Hospital



Note: Image shows the location of Kerugoya County referral hospital. Image may be subject to copyright. Uploaded from https://www.qiblafinder.org/KE/KE-15/2156790/kerugoya-qibla-locator.html

: Kirinyaga County



Note: The study area is Kerugoya town within Kirinyaga central in Kiringaya County.

Image may be subject to copyright. Uploaded from

https://www.researchgate.net/figure/Kirinyaga-County-map-showing-the-five-sub-counties-with -stars-Map_fig1_332802943

Appendix 10: Table 4. 1: Themes and Subthemes

Theme	Subthemes	Direct quotes
Role of Motivation on PCC among HCP.	- Empathy and responsiveness. -Dedication to meeting patient needs. -Benefits to patients and healthcare environment. -Proactiveness in addressing patient needs. -Improved communication and compassionate care	When health care providers are highly motivated, they are more likely to be empathetic, responsive, dedicated to meeting the needs and preferences of their patients (C1, C3). Highly motivated health care providers bring benefits to both patients and health care environment due to their genuine enthusiasm to make a positive impact in managing patient conditions in an individualized manner (C2). Health care providers who are highly motivated manifest improved communication with patients and have a more compassionate approach to patient care that is patient centered (C5). Motivated health care providers are able to deliver timely services that are patient centered (C9).

		Motivated health care providers actively seek feedback and make continuous improvements to ensure a superior healthcare experience for patient (C10).
Factors Influencing Motivation among HCP in provision of PCC.	-Organizational values and culture. - Recognition and appreciation initiatives. -Comprehensive training and education. -Targeted initiatives (e.g., rewards). - Positive work environment and resource availability.	Being in a hospital that promotes values that are considered to promote patient centered care influence one's motivation to provide patient centered care (C4, C9). When patient care is embedded within the organization culture, Health care providers are more likely to feel empowered and motivated to prioritize patient centered care. (C5, C10). When health care providers receive comprehensive training and ongoing education in patient centered care, equipping them with the confidence to deliver patient centered care effectively, it enhances their motivation to provide patient centered care (C1, C6).

		Engaging health care providers in training programs that significantly boost their morale and motivation to deliver patient centered care influences health care providers to provide patient centered care. (C2, C8). Targeted initiatives that aim to motivate HCP such as recognition and appreciation of health care providers can foster motivation among health care providers to deliver patient centered care especially when an organization prioritize and reward patient centered care practices since the providers will feel valued and empowered to continue with their efforts to provide patient centered care (C3, C7).
Challenges and Opportunities for Improvement among HCP to provide PCC.	- Delayed payments and heavy workloads leading to burnout. - Impact of age-related differences and political influence on motivation.	Shortage of staff that lead to overwhelming workloads that prevents the health care providers from taking the necessary breaks affect the motivation of health care providers to provide patient centered care (C6, C2).

	-Unsupportive work environments and resource shortages. - Limited growth opportunities. - Strategies to address challenges through training, recognition, and supportive policies.	Delayed salary payments with huge workload may lead to burnout affecting health care providers motivation and would be a challenge in providing patient centered care (C5, C7). Age related differences between health care providers and the patient especially among young female nurses and older male counterparts as well as political influence affects motivation negatively for health care providers to provide patient centered care" (C3).
Role of Competency in PCC among HCP.	- Informed decision-making. - Precise diagnosis and treatment administration. -Cultural competency and effective communication skills. - Empathy and compassion.	Health care providers who are able to demonstrate competence do possess the essential skills, knowledge and expertise that are necessary to make informed decisions in patient centered care.(C8). Competent health care providers are able to offer precise diagnoses as to effectively administer effective treatments (C4).

Competency plays a role in instilling confidence among both the healthcare professionals and the patient the health care provider is serving. (C10).

Competent health care providers who are armed with effective communication skills are able to successfully convey medical information in a clear and understandable manner to patients, this ensures that patients understand their diagnoses, treatment options, follow up care, fostering treatment adherence and ultimately leading to improved patient outcomes (C1).

Empathy that is demonstrated through acknowledging patients fears and concerns and validating patient emotions during challenging medical conditions increases patient's satisfaction and contribute to a more positive emotional experience (C5).

Being competent in compassion not only address the physical needs but also emotional and

		psychological wellbeing of the patient (C6). Being competent in offering support and understanding fosters a sense of security, reduced stress and contributes to the overall positive patient experiences (C2).
Role of Attitude on Patient Engagement in provision of PCC among HCP.	- Foster supportive environments. - Enhance patient experiences. - Influence patient engagement and trust. - Empower patients through respect.	Attitude significantly influence the ability of health care providers to deliver patient centered care. This is because health care providers with a positive, empathetic attitude are more likely to express compassion, understanding towards patients which creates a supportive and respectful environment and hence enhance the overall patient experiences (C4, C10). When health care providers approach patients with a positive attitude, they approach patient with respect, kindness and a genuine desire to address patients' needs which fosters an environment where patients feel

		valued, heard and supported. (C7). A positive attitude enhances patients' engagement and trust which leads to better treatment adherence and hence improved health outcomes. (C5). Approaching patients with empathetic attitude is essential for patient centered care, as it enhances the overall patient experience. (C1). Positive attitude encourages patients to share their concern fully and even adhere to recommended treatments. (C8). A respectful attitude goes hand in hand with acknowledging and valuing the autonomy of the patient. (C9).
Initiatives to Foster Positive Attitudes among HCP to provide PCC.	- Training in communication skills, empathy, and active listening. - Recognition of compassionate care.	Having initiatives that recognize and reward compassionate care for example acknowledgment programs would improve attitude of HCP to provide patient centered care(C2).

- Recognition programs and feedback review policies. - Continuous training and workshops on empathy and communication. - Open communication channels and regular feedback sessions.	Recognizing and rewarding health care workers who consistently demonstrate empathy and deliver patient centered care would be key in promoting patient centered care among HCP. (C2, C6). Regular empathy training workshops, peer mentoring programs, recognizing and celebrating compassionate care would be effective in instilling positive attitude towards patient centered care in health care providers (C8). Encouraging health care providers to share their experiences and stories of meaningful patient interactions would be key in reinforcing a positive attitude among health care providers towards a patient centered care. (C3). Establishing regular feedback sessions involving all the health care providers would be key in

ensuring that all health care providers feel that their grievances are adequately aired and hence promote a positive attitude towards them (C10).

Having patient feedback review Policy which allows health care providers to receive constructive feedback would be key in ensuring that health care providers are aware of areas that need improvement on, in their patient's interactions (C9).

Promoting continuous training on empathy and active listening in order to foster a supportive work environment among health care providers and patients would be key in promoting patient centered care (C4).

Appendix 11: Table 4. 9: Reliability Analysis on quantitative data

Reliability Analysis on quantitative data

	List of Items	Number of Items	Cronbach's Alpha
Motivation	I feel motivated to provide patient-centered care in my daily work depending on the workload that I have. Recognition and appreciation from my supervisors and colleagues determine my motivation in providing patient centered care. Adequate salary and benefits motivate me to provide patient centered care. Opportunities for professional growth and development determines my motivation to provide patient centered care. Supportive work environment with the necessary resources and time flexibility and teamwork determines my motivation in providing patient centered care. I believe that having the necessary skills and knowledge is essential for providing patient-centered care. Being confident in one's ability to assess and address individual needs and preferences of patients is important in delivering patient centered care.	5	0.825

	I believe that continuous professional development and training are crucial for training and delivering patient-centered care.		
Competency	Prioritizing effective communication to ensure that the patient understand their diagnosis, treatment options, and care plan is essential in providing patient centered care.		
	Creating a supportive and empathetic environment that respects patients' dignity and cultural beliefs is essential in providing patient centered care.		
	Seeking feedback from patients to improve the quality of care and address their concerns is essential in providing patient centered care.		
	I believe that competent health care providers contribute significantly to positive patient outcomes and satisfaction in provision of patient centered care.	7	0.959
	Healthcare providers should prioritize patient-centered care and actively involve patients in their healthcare decision.		
	Prioritizing and actively involving patients in their health care decision is key in providing patient centered care.		
Attitude	Caring and empathetic attitude are essential for delivering patient-centered care.	6	0.930
	Healthcare providers personal beliefs and values influence their ability to provide patient centered care.		

	Professional trainings play a role on having a positive attitude towards patient centered care.		
	In my experience positive attitude towards patient centered care plays a role in provision of patient centered care.		
	We often discuss how to give patient -centered care.		
	We have formal team meetings to discuss patient' care and how to provide patient centered care.		
	The life history of the patient is formally used in the care plan that we use in managing our patients and hence assisting in providing patient centered care.		
	The quality of the interaction between staff and patients is more important than tasks in our hospital in line with providing patient centered care.		
	We are free to alter work routines based on patients' preferences in order to provide patient centered care.		
	Patients are offered the opportunity to be involved in individualized everyday activities.		
P-CAT	I simply do not have the time to provide patient -centered care.	13	0.755
	The environment feels non-supportive for providing patient centered care.		
	We have to get the work done before we can worry about patient involvement in decision making of their management.		

	This organization prevents me from providing patient -centered care.		
	Assessment of patient' needs is undertaken on a daily basis.		
	It is hard for patients and family in this facility to be involved in patient care plan.		
	Patients are able to access their medical history and treatment plan in this hospital.		
Overall Scale		**31**	**0.854**