# EVALUATING THE RESPONSIVENESS OF CHILDBIRTH SERVICES IN MURANGÁ COUNTY REFERRAL HOSPITAL

ELIZABETH WAMONI MAINA

A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT OF THE DEGREE OF MASTERS OF SCIENCE IN
HEALTH SYSTEMS MANAGEMENT, KENYA METHODIST UNIVERSITY

OCTOBER, 2022

## DECLARATION

This thesis is my original work and has not been presented for the award of a degree in any other University.

Signature  Date: 27/10/2022

Elizabeth Wamoni Maina

**Recommendation:**

This research thesis has been submitted for examination with our approval as university supervisors.

1. Signed ~~*Betty*~~ Date: 27/10/2022

**Dr. Caroline Kawila Kyalo**

**Department of Health Systems Management**

**Kenya Methodist University**

2. Signed  Date: 27/10/2022

**Mr. Fredrick Kimemia**

**Department of Health Systems Management**

**Kenya Methodist University**

## DEDICATION

To my loving husband Dr. A.K Maina and our three sons Ryan, Raul, and Rafael who help me in all things, great and small.

## ACKNOWLEDGEMENT

My sincere and heartfelt gratitude to my supervisors, Dr. Caroline Kawila Kyalo and Mr. Fredrick Kimemia for their invaluable guidance, support, and patience during the development of this thesis.

My deepest appreciation too to student colleagues, family, and friends whose encouragement and support made it possible to complete the thesis.

Thank you all!

## ABSTRACT

Evaluating the quality of healthcare delivery is an important policy and theoretical concern. The expansion of the system's domain and the inclusion of both supply- and demand-side considerations are two examples of the proposed frameworks that aim to make the health system more responsive. Deficiencies in responsiveness are revealed by secondary research in a variety of settings. This study evaluated the responsiveness of childbirth services Murang'a County Referral Hospital (MCRH) to understand why despite the implementation of a free maternity program, uptake of skilled birth attendance remained relatively low. The study looked into both the overall quality of maternal care services and contributing factors. This was done with four research objectives; i) To determine the influence of access factors on responsiveness during childbirth in MCRH ii) To establish the influence of maternal characteristics on responsiveness during childbirth in MCRH iii) To determine the influence of structural factors on responsiveness during childbirth in MCRH iv) To establish the influence of the process of care factors on responsiveness during childbirth in MCRH. Using quantitative data collection techniques, a descriptive approach was taken. Postnatal women who gave birth at MCRH were given a structured questionnaire via systematic random sampling. The data were analyzed using R software, with chi-square used to test for associations and binary logistic regression used for multivariate analysis. Odds ratios, confidence intervals, the total number of respondents, and percentages were used to present the data. 88 (69%) of the 129 participants in the sample provided comprehensive data for both variables. Many of the respondents had less than five children, were single, young, married, and living in rural areas. The domains of dignity, autonomy, and communication were highly rated, with room for improvement in the confidentiality domain. Distance covered to get to the hospital (OR= 0.206 95% CI 0.053-0.801), costs of accessing care OR=0.159 95% CI 0.039-0.639), and the provision of culturally respectful services (OR=0.07 95% CI 0.009-0.545) were found to influence responsiveness. Marital status (OR: 11.958 95% CI 1.178-121.376), commodity availability, adequacy of beds ($P<0.005$), and language use during labor were also significant contributors. Overall, MCRH has responsive childbirth services. However, the low utilization of skilled birth attendance may be attributed to distance to the hospital, care costs, lack of supplies, inadequate beds, and language use during labor. There is need for the county government to invest in the supply-side needs of the health system to promote responsive childbirth services at MCRH.

**TABLE OF CONTENTS**

## LIST OF FIGURES

## LIST OF TABLES

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| GOK | Government of Kenya |
| HF | Health Facility |
| FMP | Free Maternity Program |
| MOH | Ministry of Health |
| MDGs | Millennium Development Goals |
| NACOSTI | National Commission for Science, Technology and Innovation |
| NHIF | National Hospital Insurance Fund |
| QAP | Quality assurance project |
| SDGs | Sustainable Development Goals |
| SPSS | Statistical Package for Social Survey |
| TBA | Traditional Birth Attendant |
| U.S.A | United States of America |
| WHO | World Health Organization |
| HCPs | Health Care Providers |
| MCRH | Murangá County Referral Hospital |

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Maternal health continues to occupy a prominent position on the global policy arena. From its position in the United Nations' Millennium Development Goals (MDGs) and now among the Sustainable Development Goals (SDGs) frameworks, it remains a world focus (Owili et al., 2017). Interventions to defend and build maternal health are numerous, international, and ongoing. These initiatives seek to build both the scale and quality of maternal care. The quality of any health project or program will reflect improvements in three health system goals; improving health; fair financing and responsive care (Vemuri et al.,2019; World Health Organization [WHO], 2000) This study focused on responsiveness in the delivery of a free maternity program.

Quality of care can be assessed from two fronts; the way of providing care when viewed as a technical system and the experiences of care users (Marhamati et al., 2017) as a social construct. Regarding this latter definition of quality, the experience of the users as it relates to legitimate non-clinical expectations is the hallmark of responsiveness. (Mizoerv & Kane, 2017). Measuring quality in a project or program is important as it is one of the key five performance objectives in operations management (Slack & Alistair, 2019)

Health systems responsiveness may reflect specific country, specific context; views of different actors including, service users, service providers and managers (Lodenstein et al., 2016 ; Yakob & Ncama, 2017), public and private sectors (Adesanya et al, 2012), inpatient and outpatient services, specific professional cadres, such as nurses; specific health areas such as mental health, communicable and non-communicable disease or

specific population groups such as ambulatory the elderly, women and children (Peltzer et al., 2012; Röttger et al., 2015).

Responsive maternal care is critical in achieving the sustainable goals' health imperatives. World Health Organization first conceptualized responsiveness in eight domains dichotomized into two dimensions; respect for human beings' domains being dignity, autonomy, confidentiality, and clarity of communication; and client orientation domains being; prompt attention, quality of amenities, choice, and access to social support networks. (Murante et al., 2017).

Care for perinatal women varies greatly across regions and countries, with quality defined similarly, locally. Disrespectful and abusive care during child birth seems commonplace among many countries (Freedman & Kruk, 2014). Globally, in a survey of European patient's views on responsiveness observed that many European patients wanted a real involvement in health care decision-making with 74% indicating a desire for active involvement and need for choice of their doctor. However, the same study in regard to actual experiences, reported that just over half the respondents said that doctors always listened carefully to them, allowed them to ask questions and provided clear explanations (Coulter & Jenkinson, 2005). In a survey of 14 hospitals in Peru, it was observed at least 97% of respondents had experienced some form of abuse during childbirth (Montesinos et al., 2018).

In the African region, Adesanya et al. (2012) noted differences between the performance of public and private hospitals on responsiveness in Nigeria especially in the domains of dignity, waiting times and travel times in which private hospitals generally did better. However, in a more particular study focusing on childbirth,

Okafor et al. (2015) noted that 98% of women reported at least one form of disrespectful and abusive care during their last childbirth. In Zambia, breakdowns in trust have been reported to undermine responsiveness (Topp & Chipukuma, 2015).That the African region is disproportionately affected is demonstrated in a survey of middle income countries including two African countries Ghana and South Africa that found respondents in the South Africa and Ghana were more likely to report a bad health systems responsiveness experience (33.1% and 23.8% respectively). Other counties being surveyed were India (11.2%) Mexico (13.9%) Russia (14.5%) and China (4.3%) (Geldsetzeret et al., 2018).

In Kenya, the constitution speaks to healthcare as a fundamental human right (Government of Kenya [GOK], 2010). In 2013, Kenya joined the rest of the world in the abolition of child delivery fees, through a presidential directive and launched the Free Maternity Program (Ministry of Health [MOH], 2013). This was meant to increase perinatal women's access to resources to secure safe deliveries by skilled health professionals and immediate postnatal care. In this policy, public health facilities are reimbursed through a capitation fund provided by the Ministry of Health. However, studies and anecdotal reports point to a highly uneven picture on health system responsiveness. Abuya et al. (2015) found gaps in responsiveness in Kenya whereby one out of five perinatal women experienced feeling humiliated during labor and delivery.

While the elimination of user fees in Kenya has partially addressed the economic barriers to accessing perinatal services, health systems gaps, quality of health facility delivery services, and social, political, and religious factors that may have an effect on the uptake of health facility deliveries have not been addressed (Obare et al., 2018).

Limited access and inequity in rights to basic quality health care services, distance to the available health facilities, inability to afford healthcare services, and socio-cultural practices may all hinder uptake of facilities and thus the delivery of these services (Kenya National Bureau of Statistics [KNBS], 2010).) Besides, global measures of responsiveness reflect wide variations on the basis of socioeconomic status, resource endowment for the country, and rural-urban divide. The poor countries, rural poor, women, old and disabled persons are already marginalized, but are doubly disadvantaged, through facing most unresponsive interactions with the health system (Vemuri et al., 2019).

This study investigated childbirth services with a view to robustly measure its responsive qualities and identify areas for improvement.

## 1.2 Problem statement

Reduction and elimination of maternal mortality remains a challenge in most low-income countries. Globally, around 830 women die every day from preventable causes connected to pregnancy and delivery, with developing nations accounting for 99 percent of these preventable deaths (WHO, 2018). Unresponsive maternal care has been linked to a variety of negative consequences, including poor pregnancy outcomes and lower demand for services (Kobinsky, 2016; Miller et al., 2016).

In the African region, provision of unresponsive maternal care has been reported in different countries with women likely to report a bad health system responsiveness encounter. In a Nigerian study by Okafar et al. (2015), about 98% of mothers reported some form of disrespect during childbirth. Concerns of being treated with dignity and autonomy were also reported by a study done in Ghana and South Africa and was

linked to women staying away from hospital delivery services (Geldsetzeret et al.,2018).

The maternal mortality rate in Kenya is still rather high, at 362 deaths per 100,000 live births with Murangá County at 110 deaths per 100,000 live births (Kenya Demographic Health Survey [KDHS), 2014). The Millennium Development Goal 5 called for a mortality rate of 147 per 100,000 live births by 2015, but this goal was not met (Owili et al., 2017)

Although skilled birth attendance has increased from 44% in 2008 to 62% in 2014 (KDHS,2014), Murang'a County at 53% still falls short of the national average (County Integrated Development Plan [CIDP], 2018). At least part of the explanation for this relative lack of medical attention during labor appears to be social attitudes. Fear of receiving inhumane treatment was one of the key reasons given by Liambila et al. (2015) for women in western Kenya refusing to give birth in a medical institution. Another research of Kenyan women getting post-natal care found that 20% of them had non-responsive maternal care, such as maltreatment, undignified care, or abandonment (Abuya et al., 2015)

Uneven maternal care indicates flaws in the service delivery pillar of health systems, which aims to provide effective, safe, and high-quality personal and non-personal health interventions (WHO, 2018). With limited information on factors that influence responsive maternal care in MCRH, the findings will help to fill this knowledge gap.

## 1.3 Purpose of the study

This study investigated childbirth services in MCRH with a view to robustly measure its responsive qualities and identify areas for improvement

## 1.4 Research Objectives

### 1.4.1 Main Objective

The main objective of the study was to evaluate the responsiveness of childbirth services in Murangá County Hospital

### 1.4.2 Specific objectives

i. To determine the influence of access factors on responsiveness during childbirth in MCRH
ii. To establish the influence of maternal characteristics on responsiveness during childbirth in MCRH
iii. To determine the influence of structural factors on responsiveness during childbirth in MCRH
iv. To establish the influence of the process of care factors on responsiveness during childbirth in MCRH?

## 1.4 Research Questions

i. How do access factors influence responsiveness during childbirth in MCRH?
ii. What relationship exists between maternal characteristics and responsiveness during childbirth in MCRH?
iii. How do structural factors influence responsiveness during childbirth in MCRH?

iv. How do process-of-care factors influence responsiveness during childbirth in MCRH?

## 1.5 Justification and rationale

This study investigated responsiveness descriptions and factors influencing provision of responsive childbirth services with a view to identify areas gaps and areas for improvement. To ascertain the realization of these domains, WHO recommends measuring responsiveness by asking people about their experiences with the health system (Murante et al., 2017).

Murang'a County hospital is the largest and only referral hospital within the county. It has a large catchment population of clients from diverse socio-economic groups from both rural and urban population. It thus provided a natural setting to recruit women from this populations who were the likely beneficiaries of childbirth services in the public facilities.

Findings from this study were useful in addressing gaps in service provision in the hospital. They were also timely as maternal health is a key indicator of the Sustainable development goal 3 that aims to reduce global maternal mortality to less than 70/100,000 live births by 2030. To this far, there is no study done to investigate responsiveness and contributing factors in Murang'a County. Results will therefore be useful in understanding responsiveness in childbirth services with a view to inform priority action points for quality improvement. It is also timely as delivery of quality health services is key to achieving Universal Health Coverage (UHC) and the health-related SDGs

Finally, the topic is in line with health systems strengthening and particularly the health service delivery and human resource for health pillars that are critical in promoting positive health outcomes.

## 1.6 Limitations

The study was likely to be affected by self-reporting biases which are subject to many sociocultural and contextual dynamics. Language barriers and understanding of the concept of responsiveness was also a limitation to a small segment of the respondents. Some respondents—particularly mothers entering a new stage of life as they welcome a new baby may have experienced systemic recall bias error and general recollection of past events and experiences. Some of these individuals may have given incorrect facts due to their heightened emotional state.

## 1.8 Delimitations

This study was delimited in respondents to only women who accessed childbirth services at the time they received the two-week postnatal care in the child welfare clinic in MCRH.

These limitations were overcome by researcher administering the questionnaire and remaining present to address any concerns or clarify areas of difficulty. Mothers were also encouraged to complete the questionnaire as much as possible.

## 1.9 Significance

The study contributed to a pool of resources that are useful in improving the health system at MCRH. The county and hospital's health management teams can utilize the recommendations to help in improving identified gaps for better service provision. Improved services will be of benefit to the mothers who seek childbirth services in this and other facilities within the county.

From the study findings, other scholars in the same study area may find the content insightful in their work. In addition, this study comes at a good time because achieving Universal Health Coverage (UHC), a topic that has dominated discussions of policy in Kenya, depends on the availability of high-quality health services.

## 1.10 Assumptions

Data was obtained partly through self-reporting by clients. Self-reporting of responsiveness yields an ordered categorical variable that is assumed to reflect some underlying latent responsiveness scale. Individuals are assumed to map the latent scale to response categories in a consistent manner, regardless of their characteristics or circumstances. It is also assumed that the respondents' responses were rational.

## 1.11 Operational definition of terms

**Responsiveness**: Meeting the legitimate non health enhancing expectations of clients

**Responsiveness Descriptions:** Ratings of performance on responsiveness domains

**Autonomy**: The right of clients to be involved in decisions about their medical care

**Dignity:** Treating clients with respect and ensuring privacy during care

**Confidentiality:** The maintaining of client secrets

**Clarity of communication:** Conveying information and developing a mutual understanding

**Prompt care:** Care provided readily or as soon as necessary

**Social support networks**: Access to families and other community support networks during care

**Choice of provider:** The power or opportunity to select health care provider/facility of choice

**Quality of basic amenities**: Extent to which the physical infrastructure of a health facility is welcoming and pleasant

**Hospitals**: All government health facilities in tier three and four levels of service delivery

# CHAPTER TWO: LITERATURE REVIEW

The purpose of the literature review chapter of the thesis is to place the subject in the context of previous research and other works in the field. It allows one to acknowledge other academics while also highlighting novel ideas in their research, focusing the research question, and creating their own research philosophy (Mugenda & Mugenda, 2019). The literature review is arranged according to the researcher's viewpoint and goals of the study.

The first section of the chapter introduces responsiveness and the domains of the 'respect for persons' dimension. It then goes on to discuss four factors that influence responsiveness—maternal, access, structural and process of care factors, before laying out a conceptual framework for how the different variables relate to one another. A summary of the nature and content of the evidence regarding responsive childbirth services offered through the free maternity program concludes the chapter.

## 2.1 Responsiveness of childbirth services

The World Health Organization initially investigated and examined health system responsiveness in an international multi-country survey (World Health Survey) (WHO,2000). In the report, responsiveness was considered one of the intrinsic health system goals along with health outcomes and fairness of financial contributions. It also promoted responsiveness as a useful instrument for evaluating the success of health-care systems (Florian et al., 2018; WHO, 2000). The fact that a process outcome is given such high priority suggests its importance in terms of policy.

Responsiveness refers to a health system's ability to respond to legitimate expectations of its users as they interact with it. Meeting the expectations of the care users includes

the non-medical (social) part of the health system, as well as the (again, social) atmosphere in which they are treated. However, the concept of responsiveness is not self-contained or unqualified. Thus, it is not responsiveness per se that is important in evaluating the health system and its attributes, but responsiveness that is grounded in generally legitimate expectations. Individually defined (possibly arbitrary, unrealistic, or utopian) expectations are replaced with legitimate expectations, which reduces the impact of discrepancies produced by human quirks. Conforming to acknowledged principles or established regulations and standards might be defined as legitimate. Expectations are normalized and relativized as a result of this (Valentine et al., 2014)

The responsiveness of the health-care system is divided into two broad dimensions, each with eight categories. Respect for persons and client-orientation are the two dimensions. The qualitative dimensions of dignity, autonomy, communication, and confidentiality make up the respect for people dimension. Prompt attention, the quality of basic facilities, access to social support networks, and provider selection are all realms of client orientation (Alavi et al., 2019). These domains serve as critical performance measures for perinatal care programs. The study concentrated on the dimension of "respect for persons" and its sub-domains.

The amount of responsiveness of the health system to its population is reflected in the total quality of interactions between end consumers of health care and healthcare practitioners. However, in addition to achieving responsiveness, an examination of its distribution based on social variables is essential. Individual disparities among healthcare seekers could imply that the health-care system reacts differently to distinct subgroups of the population (Campbell et al, 2016). These infected response patterns may generate structural inequity. As a result, individuals who are likely to receive

poorer assessment by the health system are unlikely to seek adequate healthcare and therefore suffer poor outcomes. They are, in access terms, systematically demarketed.

Clinical outcomes and costs have been the most prevalent metrics used to assess the performance of perinatal care systems. However, research on care quality suggests that non-clinical dimensions of quality are also significant and can influence clinical results. According to Jacoba et al. (2014), if patients obtain greater service quality, they are more likely to use health care services and follow treatment recommendations. The dignity, autonomy, confidentiality, and clarity of communication of pregnant women are all impacted as they interact with the physical parts of the health-care system. Their pleasure or dissatisfaction with health care providers is determined by how they feel while being treated. Such research suggests that sensory and emotive relationships may play a role in determining quality.

The domains of the 'respect for persons' component, dignity, confidentiality, autonomy, and communication, as well as their link with access, maternal, structural and process of care characteristics that influence responsiveness, was the subject of this study. They will now be discussed in greater depth.

### 2.1.1 ‘Respect for persons’ dimension of responsiveness

Financial and clinical outcomes are not included under the concept of responsiveness as aspects of care quality. It considers extra-clinical areas that reflect consideration for human dignity (Valentine et al., 2014). The domains and important factors for their delivery are summarized in Table 2.1.

**Table 2.1:**

*Domains of respect for persons*

| Domain | Considerations for delivery of perinatal care |
|---|---|
| Dignity | ● Physical examinations conducted in a way that respects privacy<br>● Health care providers treat patients with respect<br>● Privacy in examination room |
| Autonomy | ● Involvement in decision making regarding examination and treatment<br>● Patients able to refuse examinations or treatment<br>● Permission sought before examinations |
| Communication | ● Relaying information and ensuring it is understood<br>● Clarity of communication<br>● Culturally sensitive |
| Confidentiality | ● Consultations carried out in a manner to guard confidentiality<br>● Confidentiality of information shared<br>● Medical reports kept confidential |

***Source: Author***

### 2.1.2 Dignity

Respect for the right of clients to be regarded as persons rather than as detached items or objects is shown in dignity during healthcare experiences (Sajjadi et al., 2015). It comprises treating people with respect during diagnostic and therapeutic procedures. Rullán et al. (2018) found a link between low dignity assessments and emotional distress. Establishing ethical and legal frameworks, obtaining informed permission, and a mutual understanding between the patient and the care provider are

all practices that inform and are informed by dignity (Hassan et al.,2018; Lin et al.,2013).

### 2.1.3 Autonomy

The principle of patient autonomy is widely acknowledged in bioethics (Jacoba, 2018). Patients have the right to make decisions regarding their own medical care while under the supervision of a health care practitioner, which is known as autonomy during care. This will almost certainly lead to better health results (Vedam et al., 2019). Autonomy represents a client's mental state and can be influenced by suitable knowledge and skills, or a lack thereof, personal goals, myths and misconceptions, and disparities in care providers (Jacoba, 2018; Vedam, 2019). Informed consent is a reflection of a person's level of comprehension and decision-making autonomy. It is necessary for patients to comprehend the context and nature of the proposed intervention in which they are involved (Nicholls et al., 2019)

### 2.1.4 Confidentiality

It is critical to protect the confidentiality of clients' personal information in order to achieve better results. (Bozzo, 2017). It has to do with keeping secrets, the privacy of the environment in which health providers provide care, and privileged communication, in which medical records and information about a patient are kept secret and only shared with other health providers who can potentially contribute to the patient's well-being (Valentine et al, 2014). This compels health providers to not communicate information about a patient with other third parties, such as a woman's spouse, parents, or other family members and friends unless the patient has given their full consent (Khosla et al., 2016). However, confidentiality may be violated for the

public good, when an individual is in danger, or when it is necessary to warn or protect third parties who are in danger (Bozzo, 2017). As a result, this is a qualified right, one that necessitates the use of ethically sound judgment

### 2.2.4 Communication

Communication entails the exchange of messages, ideas or information either verbally or non-verbally. Clarity of communication is achieved by relaying information and ensuring it is well understood. As a domain of the 'respect for persons' dimension of responsiveness, communication entails that provider explain to patients and their families the nature of illness and details of the required treatment and options for patients to seek clarity by asking questions (Valentine et al., 2014). During childbirth it is important that women receive communication on the practice of labor, breathing techniques, pushing and relaxation techniques as well other psychological and physical things to expect. Quality communication should be culturally sensitive and be able to foster interdisciplinary partnerships and evidence-driven decisions (Vermeir et al., 2018).

## 2.2 Access factors and responsiveness of child birth services

All health systems prioritize access to healthcare (Coscarden et al., 2018). It is critical to health system success because it signals an opportunity to better recognize healthcare needs, seek healthcare services, and get or use those services. Access is conceptualized in several ways.

### 2.2.1 Costs of care

The cost of care is one factor that can influence the rate at which pregnant women seek the services of a professional birth attendant. In five African nations, Rosen et al. (2018) conducted direct observation of maternity care. They provide examples of clients whose access to critical drugs was hampered by a lack of funds, resulting in refusal and/or delays in getting uterotonic for postpartum hemorrhage prophylaxis or labor augmentation. They also discovered a case of a woman who needed a referral for a complex delivery but was unable to do so due to financial constraints; fortunately, she and her baby were successfully treated at the Madagascan clinic.

Well-designed health care policies that perform as intended should result to increased access to service use. However, Obare et al. (2018) recognize the difficulties that may arise if user fees are eliminated, such as a scarcity of health care providers, which may cause patients to wait longer and receive care that does not match quality standards. Furthermore, recent experiences in Kenya and elsewhere with the abolition of user fees have shown that there is no influence on service consumption (Valentine et al.,2018). Other studies have found that eliminating user fees is only beneficial for the first year, after which most facilities impose additional fees to cover the costs of restricted supplies and medicines, delayed recovery of cash, and the hire of new staff not covered in the initial allocation (Chuma et al., 2009). In other words, charge cancellation appears to operate better when a pricing structure is employed to provide direction and sufficient resources for the re-calibrated service.

### 2.2.2 Distance to the health facility

The availability of free maternity services does not eliminate all barriers to maternity care access. The inconsistency and unreliability of transportation to the health center

might also be a barrier to service usage. The distance that mothers must travel from their homes to the health institution may contribute to a worse outcome, prompting them to forego trained attendant delivery services. Lack of mobility, can cause patients, particularly those from vulnerable groups, to postpone or avoid obtaining care, thus leading to bad outcomes (Call et al., 2014)

### 2.2.3 Cultural sensitivity

Access, according to Aday and Andersen (1995), is the point of entry into the healthcare system. Patients consider using health care services if they find the culturally appropriate. Service quality, geographical and economic accessibility, organizational, linguistic, and service acceptance were all recognized by Peters et al. (2008). From the standpoint of the patient, access to care has been defined as the process of recognizing a need for treatment, seeking care, obtaining care, and benefiting from the services received.

One strategy for minimizing healthcare disparities is to increase access to health services. Increased provision of free health care services is one strategy to increase access, but other issues that may affect accessibility must also be considered. This encompasses social, economic, cultural, and geographic issues that can affect service

accessibility, as well as emerging techniques to improve health care delivery efficiency and the associated accountability mechanisms (Call et al., 2014; Green & Sav, 2013)

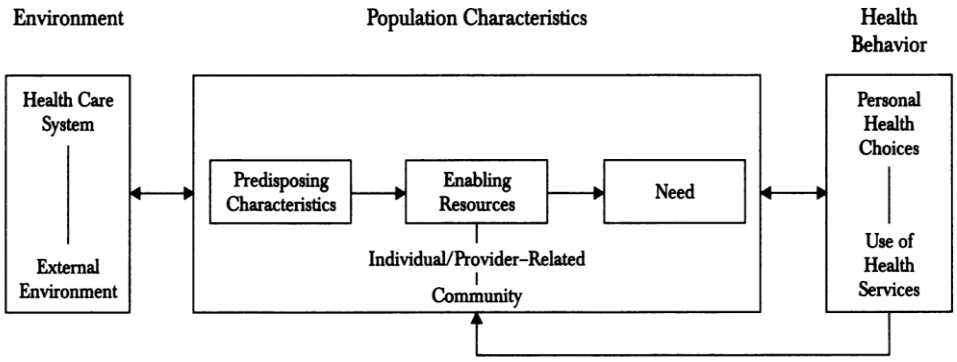
In a literature study, Levesque et al. (2013) defined five dimensions of access encompassing both the supply and demand sides of healthcare. Approachability, acceptability, accommodation availability, and cost are the prerequisites for entry.

### 2.2.4 Service readiness

Readiness of the health system to offer needed services at the required times is a key determinant of access and determines utilization of the services. In Aday and Anderson's paradigm for health care utilization, access dimensions are defined as predisposing factors, enabling factors, and the demand for healthcare. They see environmental variables and provider-related variables as major determinants of health-care utilization. Environmental factors (community characteristics, external environment, and health system features) as well as utilization patterns are of interest to policymakers and researchers. Provider-related variables may include provider characteristics such as gender, which may influence how end consumers perceive health care. In a theoretical model of the access concept, they propose metrics for assessing healthcare access that include system and population characteristics as process indicators and utilization and satisfaction as outcome indicators (Anderson,1995). This framework is depicted graphically in figure 2.1.

**Figure 2.1**

*Health services utilization according to the Aday and Anderson*




*Adapted from R.M Anderson, 1995*

It is well documented that access has an impact on responsiveness. Workload pressure, low patient participation, economic challenges, and a scarcity of resources, on the other hand, obstruct access to high-quality care, as healthcare personnel may experience burn out (Lall et al., 2019). Workplace conditions and health facilities remaining opened equally limit quality care, further hampering access to health services in Kenya (Genberg et al., 2019).

## 2.3 Maternal characteristics and responsiveness of child birth services

Social demographic characteristics like age, religion, education, family size, income, occupation, and parity are all characteristics that may influence pregnant women's use of health care services (Nzioki et al., 2015). As a result, the socio-economic background of women seeking childbirth services influence their chance of seeking experienced attendants for labor. Individual qualities, exposures, and expectations may influence a woman's experience and perceptions of treatment quality.

According to studies conducted in various parts of the world, differences in service provision are dependent on maternal factors. For instance, women with physical impairments and those from lower socio-economic categories in Nepal, report poorer

satisfaction with services (Pandey et al, 2013). In Sweden, there have also been reports that providers do not always treat women from 'lower' social categories with respect during labor and deliveries. Verbal abuse, ambiguous communication about what to expect during labor and delivery, and insufficient pain relief were among the mistreatments endured (Bohren et al., 2015). These findings demonstrate that there is a lack of consistency in the provision of care, which is a violation of human rights.

### 2.3.1 Maternal Age and parity

A woman's age has also been demonstrated to have an impact on how they perceive the care they receive (Jallow et al., 2012). In an Italian study, women of a higher social class who were somewhat older were more satisfied with the care they received throughout pregnancy and delivery than women of a lower social class (Overgaard, 2012). The age of a mother can be interpreted as a proxy for their cumulative knowledge of health services, which determines the use and subsequent experience with treatment. Younger women (under 26 years old) and those who resided far from a health facility were less likely to seek professional delivery services, according to a study conducted in rural Ghana (Christiana, 2019).

Women's parity is also seen to influence the perception of care services and utilization. This is related to the initial expectations of care and the level of knowledge of the care given. In a study in Nigeria and Sri-Lanka, multiparous women were reported to be happier with their treatment than their primigravida counterparts (Okafor et al.,2015)

### 2.3.2 Level of education

Another important factor influencing women's health-care utilization is their level of education which has been noted to shape their expectations and, as a result, their degree

of service satisfaction. Women who are illiterate or have a low socioeconomic status are said to have lower expectations of care quality than educated women. They are, however, more likely to report feeling alone, harassed, or ignored, according to Tung et al. (2009). In a study on Antenatal care (ANC) and delivery, (Sharma et al., 2017) discovered that impoverished women in Kenya were more likely to receive low quality care, with only around 8% of those women receiving the bare minimum of childbirth care. According to the (KDHS,2014), only 25% of women without a secondary education and 31% of those in the lowest quintile delivered in a health facility, compared to 85 percent of women with a secondary education or higher and 93 percent of those in the highest wealth quintile.

### 2.3.4 Income levels and Marital status

The income level of a woman and her family has a significant impact on the use of competent delivery attendants. The amount of money a woman and her husband earn impacts how they spend it, including on healthcare. (Nzioki, 2015). Women in high-income countries are more likely than those in low-income ones to seek expert delivery services. This is in line with findings from a study conducted in Kenya's Kitui County, which found that a pregnant woman and her family's monthly income influenced skillful attendant delivery (Kanini et al., 2013). Furthermore, a woman's autonomy and social standing have a significant impact. Research in India found that women who had no constraints on moving out of their homes were more likely to use antenatal care than those who did (Baral et al.,2010). In a separate study conducted in Nepal, the woman's engagement in decision-making, social status, and autonomy were found to influence her decision to access and use skilled attendant maternity services (Gurung et al., 2021).

### 2.3.5 Place of residence

The area of residence is considered one of the factors that can influence opinions and perception of responsive childbirth services. It also significantly impacts the travel time to where health resources are. For pregnant women, this may translate to accessibility of antenatal care and emergency delivery services, knowledge of the free maternity program, availability of information on danger signs among others. Expectations of care between urban and rural women were found to differ in a study by Liambila et al. (2015)

## 2.4 Structural factors and responsiveness of childbirth services

Structural factors are the attributes of the settings where care is provided. They consist of the actual buildings, the tools, the people, as well as organizational elements like staff development and payment procedures. Structures are among the supply-side factors that affect how responsive the health system is (Mizoerv & Kane, 2017). A good structure should encourage a good process, which should in turn encourage a good outcome (Ameh et al.,2017).

### 2.4.1 Physical infrastructure

Measures of structure examine the organizational and physical resources available to enable the provision of healthcare and, as a result, gauge performance. A crucial element of the organizational resources is the health workforce. According to Kenya Health Sector Strategic and Investment Plan (KHSSP,2014), the term "health workforce" refers to the group of people whose main goal is to promote health. Childbirth being a labor-intensive process necessitates a considerable amount of

support. In order to provide considerate maternity care and foster a relationship based on trust, it is crucial that the staff members are competent and sufficient (Sheferaw et al.,2017). However, too much focus on clinical procedures has been linked to a disdain for the dignity of women in favor of adhering to the clinical standards (Lowe, 2014). Support supervision and ongoing coaching in respectful care for medical personnel are required (Sheferaw et al.,2017).

Physical infrastructural measures also include the assessment and measurement of equipment, operating theatres, adequate space and the availability of functional equipment in use that are easily accessible. These includes the equipment in delivery rooms, radiological ultrasounds. Dopplers and functional laboratory testing capabilities including blood transfusion. Quality maternal health services also require and effective and efficient referral system with necessary logistical support and mechanically sound equipment (Wesson et al.,2013)

### 2.4.2 Availability of beds

Major infrastructure investments are needed to promote facility-based deliveries with trained birth attendants. A clean environment, adequate wards to prevent bed sharing, and the availability of delivery rooms and operating rooms all contribute to high-quality care, affecting responsiveness. The levels of quality provided in the provision of maternity services includes both functional equipment and effective referral systems. There is diversity in the physical environment for care. Women accounting for more than 50% reported having delivered in spaces without visual and auditory privacy, according to surveys done in Tanzania, Kenya, Madagascar, and Rwanda (54, 65, 72, and 77%, respectively). Other studies carried out in Zanzibar and Ethiopia discovered

that most women gave birth in shared childbirth spaces without privacy screens to keep patients apart and without any auditory privacy which decreased responsiveness (Rosen et al., 2015).

### 2.4.3 Availability of commodities

The availability of needed supplies and medicines in a timely manner is an essential component of responsiveness. The financing strategy of the free maternity program may have put a constraint on the health system with delayed fund disbursements, occasioning both revenue and supplies shortage (Chuma et al., 2019). In addition, procurement processes that are lengthy and the subsequent supply of poor-quality medications are seen to interfere with the continuity of needed commodities. Hospitals can adopt some remedies to ensure continuous supplies including having a special purchase arrangement in case of stock out of essential commodities, borrowing from other neighboring hospitals, and writing requests to non-Governmental organizations for support in supplies and commodities (Asefa et al., 2020). These strategic solutions can boost women's confidence in the health system as they seek delivery services. Commodity shortages may also pose a negative influence as it may not only be seen as disrespectful to the mothers but is also a deterrent to the main intention of free maternity services which is to improve service utilization (Afulani, 2019)

## 2.5 Process of care factors and responsiveness of childbirth services

### 2.5.1 Consistency of care

Care processes include both technical elements, such as the delivery of biomedical interventions and treatments, and personal and social aspects, such as how information is shared and care decisions are reached (Rosen et al.,2018) That could translate to

requisite tests and scans performed as needed, promptly, which can improve diagnosis and subsequent management of the mothers, hence better quality and responsive services. It also includes patient flow, customer focus, and consistency of care. Interpersonal interaction shapes the experiences of women in maternity care (WHO,2018).

### 2.5.2 Language use

Lack of good relations in the interaction between patients and health practitioners during perinatal care especially in low-income settings is a barrier to accessing skilled care (Nair et al.,2014). Women and their families have reported a number of responsiveness violations, which include abusive and uncompassionate provider attitudes, invasion of privacy, prejudice against cultural practices, physical abuse, filthy facilities, and delays in receiving care (Bohren et al.,2016). In an analysis conducted by Bowser and Hill (2010), disrespectful and abusive care included non-dignified care, abandonment, non-consented clinical care, care that was not confidential among others. This was found to have a bearing on how women perceived normal delivery versus delivery by caesarian section

Health care providers should aim to provide respectful maternity care as it portrays the respect of women's human rights. Furthermore, the reduction of maternal mortality by uptake of skilled birth attendance will require that services are woman-centered. This includes the way providers address women during labour and delivery, both verbally and non-verbally (Asefa et al.,2015)

### 2.5.3 Emotional support during labor

Studies show a contrasting picture of maternity processes in contexts of responsive care. Empirical evidence in five nations—Kenya, Madagascar, Tanzania, Ethiopia, and Rwanda—showed that delays in care and neglect of laboring women were among the process factors contributing to unresponsive care, as well as inadequate information exchange and communication by providers (Rosen et al.,2018) In the same study, women were subjected to verbal and physical abuse. The most common types of disrespect and abuse mentioned were abandonment and neglect, both of which are procedural problems indicative of inconsistent care.

The theoretical and conceptual frameworks that were used to show the relationship among variables and was used to guide the thesis are introduced in the upcoming sections.

## 2.6 Theoretical framework

This study was guided by the Donabedian framework for assessing quality of health care and the world health organization framework for quality maternal care.

The Donabedian framework was useful because analysis of the degree of health system responsiveness requires assessment against known normative or subjective standards which therefore renders it relevant to quality assessment approaches. Donabedian (1980) considers interpersonal aspects of quality and amenities of care alongside the technical aspects of quality to be the three components of health care quality. The interpersonal component of quality is defined as the quality of interaction between the patient and provider or the responsiveness, friendliness, and attentiveness of the health care provider (Berwick & Fox, 2016). The aspects of personal interactions in quality strongly correlate with issues of respect of persons in health system responsiveness.

Donabedian (1980) conceptualized three quality-of-care dimensions for being structures, processes and outcomes. Structure refers to the attributes of settings where care is delivered; Process reflects whether or not good medical practices are followed while Outcome refers to impact of the care on health status. Structure affects processes and outcomes. Outcomes indicate the combined effects of structure and process (Ameh, 2017)

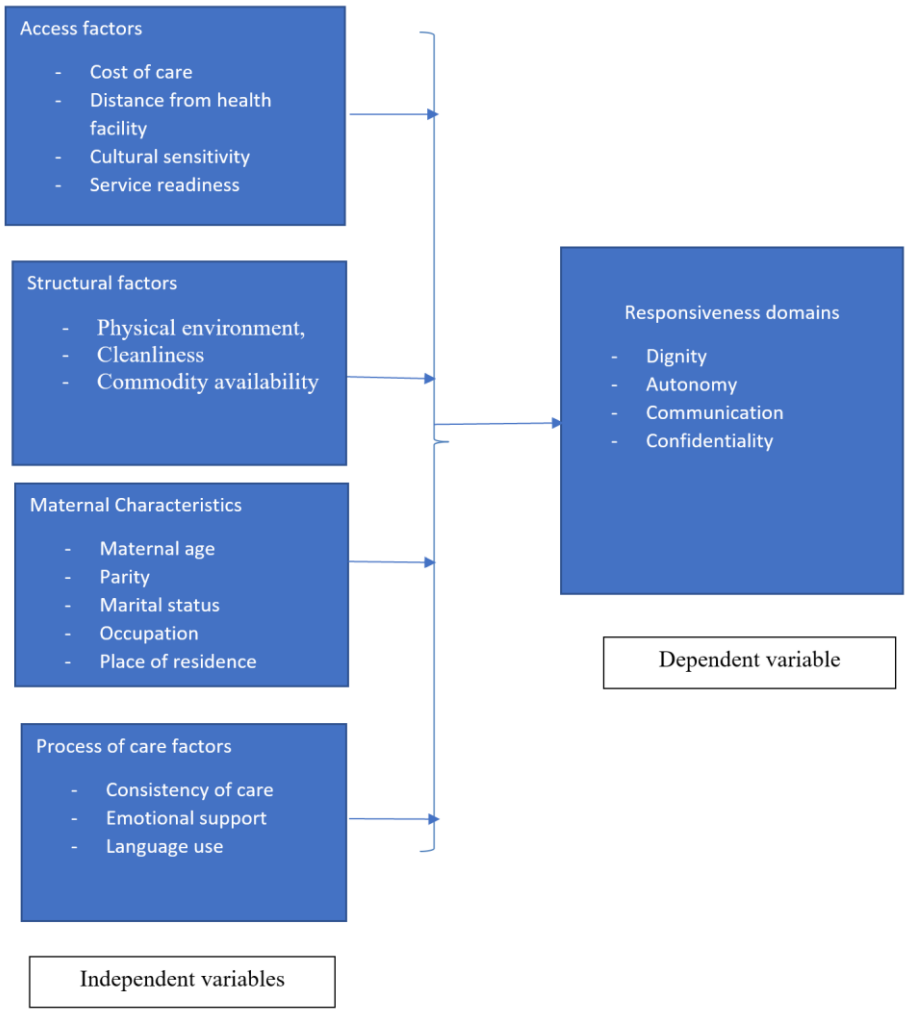
The World Health Organization framework for quality of care during child birth highlights two sides of the quality coin, on the one hand the technical provision and the other the experience of care which reflects responsiveness (WHO, 2018)

## 2.7 Conceptual framework

The body of research reviewed above points to a conceptual framework that links structural, access, maternal, and process of care elements to a list of outcomes (WHO "Respect for person's dimension") as encountered by the perinatal women in the FMP. Figure 2.2 displays a schematic representation of the conceptual framework.

**Figure 2.2**

*Conceptual framework*




*Source: Author*

It was anticipated that the Kenyan government's commitment to offer free childbirth services would lead to an increase in the number of expectant women seeking formalized support in institutionalized health-care facilities, resulting in a decrease in the rates of maternal deaths and morbidity. The study looked at how responsiveness is perceived by expectant mothers seeking hospital childbirth services, as well as the levels of responsiveness in MCRH and the potential influence of access factors, maternal characteristics, and process of care factors.

## 2.8 Conclusion

According to the literature review, the health system's primary goal in supporting pregnancy and childbirth should be to be responsive to the present and future needs of mothers seeking childbirth services. Since the expectations are based on legitimate standards by the people who interact with the health system, the research goes far beyond quality and satisfaction with care, making it a useful indicator of the effectiveness of the health system (Valentine et al, 2014).

The researcher has not only highlighted previous research on responsiveness and the impact of access factors, maternal characteristics, structural and process of care factors on end users' perceptions of the responsiveness of the care they received, but has also provided a conceptual framework to illustrate how the independent and dependent variables interact. The study assessed how responsive childbirth services were in MCRH. The methodology used to find answers to the research questions is discussed in the following chapter.

# CHAPTER THREE: METHODOLOGY

## 3.1 Introduction

In chapter two, a broad understanding of responsiveness and its dimensions was highlighted. The review further narrowed down to responsiveness domains of the dimension respect for persons. This research explored responsiveness to understand why rates of childbirth overseen by skilled birth attendants at Murangá County Referral Hospital, remain relatively low despite the implementation of the free maternity program. To this end, the chapter studies various research methods from which the methodology to guide the study was selected. A quantitative approach was selected, with interviews using a questionnaire and a data analysis plan adopted. Further, a step-by-step analytical approach is presented to secure credible and ethically sound results. The chapter concludes with an analysis of considerations for ethics, reliability, and validity of data collected

## 3.2 Research design

This was a descriptive cross-sectional survey utilizing a quantitative approach. A quantitative approach was employed in gathering data about responsiveness through a structured questionnaire on responsiveness descriptions, and the determinants being access, maternal, structural, and process of care factors. The survey approach is useful because of the need to obtain the clients' perceptions and experiences pertaining to the responsiveness elements (Creswell & Plano, 2018).

Research design was deemed the overall strategy and framework for how the research was conducted. The choice of research strategy can be influenced by three factors (Ying, 2009). These are the type of research questions that are asked, how much control the researcher has over the behavior event, and how much emphasis is placed on historical or current world events. According to Saunders et al. (2012), the type of research objectives, prior knowledge, and resources available to the researcher all had an impact on the research design selection for this study. This study's objectives were met through the use of a survey.

## 3.3 Target Population

The investigation included all mothers who came to seek maternal and childbirth care at MCRH. Like the majority of social studies, the confidence level for this study was 95%. According to the Kenya Health Information System [KHIS], the average number of women who visited the hospital per month was 273 from July 2020 to July 2021.

### 3.3.1 Inclusion criteria

1. Postnatal mothers who had delivered at MCRH
2. Postnatal mothers who had agreed to give informed consent

### 3.3.2 Exclusion criteria

1. Postnatal mothers who had delivered elsewhere before coming to MCRH
2. Postnatal mothers with mental incapacitation
3. Postnatal mothers who had declined to give informed consent Mothers who delivered via ceasarian section

## 3.4 Sampling procedure

Two hundred and seventy-three women was the average number of women who had sought childbirth services in MCRH per month. Determination of size of the sample was done using Fishers et al. formula by Mugenda and Mugenda (2019).

**$n=z^2pq/d^2$**

Where;

n= is the sample size (when the population is more than 10,000)

z =is the standard normal deviate at the required confidence level

p= is the proportion in the target population estimated to have characteristics being measured

q=1-p

d=the level of statistical significance set

The margin of error adopted is 5 percent at 95 percent confidence (alpha level of 0.05), as commonly applied in educational and social surveys (Krejcie & Morgan, 1970).

Studies reveal that about 20% of women experience some form of abuse during childbirth (Abuya et al, 2015). Thus, the proportion of unresponsive care is estimated at 20%, (0.2) is used as the value for 'p' as recommended by Fisher et al (Mugenda & Mugenda, 2019, Kothari, 2004).

Therefore;

$=1.96^2*0.2*0.8/0.5^2=246$

Since the target population was less than 10,000, the sample size was adjusted again using the Fisher et al formula.

$n_f = n/ 1+ (n-1)/N$

Where:

$n_f$ = the desired sample size when the population is less than 10,000

n= The estimated sample size (when the population is more than 10,000)

N= The estimated target population

246/ (1+ 245/273) = 129

The study targeted one hundred and twenty- nine women.

## 3.5 Sampling technique

To obtain individual respondents, systematic random sampling was used, with every $K^{th}$ mother ($3^{rd}$ mother) receiving the first two-week's post-natal care in the Child Welfare Clinic being selected. The list of names was carefully obtained from the reception desk where all mothers registered their details as they came in and were allocated numbers on first come first serve basis.

## 3.6 Instrumentation

### 3.6.1 Questionnaire

Through the use of a questionnaire, data on responsiveness and the factors that contribute to it were gathered at the Murang'a County Referral Hospital. A clear picture of hospital responsiveness was obtained by administering the questionnaire to postnatal mothers who had used the hospital's free maternity program for childbirth services. In the second chapter, we established a working definition of responsiveness and identified four factors that contribute to responsiveness. These include maternal characteristics, as well as structural, access, and process factors. The survey questionnaire was developed with the help of these variables.

Mothers in the child welfare clinic were given the questionnaire alongside an accompanying cover letter that explained the study's objectives. Maternal characteristics are asked about in questions 1-7, including age, parity, residence, employment, and religion. Questions 8–20 in the second and third sections of the questionnaire dealt with levels of responsiveness, access, structural, and process

factors of care, and were scored on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree).

Pre-testing of the questionnaire was done at the referral hospital in Kiambu County which was not involved in the main investigation. Twenty women attending the CWC two weeks post-partum were asked to fill in the questionnaire. Cronbach's alpha was calculated at 0.7 threshold and margin of error established at 95% confidence interval. The only modification made was to shift the question about respondents' ages from "year of birth" to "age in completed years," which helped clear things up when people were filling out the survey.

### 3.6.2 Validity and Reliability

Validity is the capacity of a construct to measure truthfully that which it is intended to measure in order for results to be correctly applied and interpreted (Creswell & Plano, 2018). To eliminate selection bias, this was done by randomly choosing samples from the sample frame.

Reliability is the capacity of different researchers to come to the same conclusions using the same research design or study participants and consistently producing the same measurement (Saunders et al.,2012). To achieve this, uniform data collection methods were used with the right respondents. The questionnaire was carefully examined and cross-checked to ensure that the reporting was accurate and comprehensive. Reliability of test scores was assessed using Cronbach's alpha coefficient.

## 3.7 Methods of Data Collection

The data were gathered using a survey method. When conducting surveys, respondents' information is directly gathered through interviews, in-person meetings, or questionnaires (Creswell & Plano, 2018). Data for this study were gathered by giving all participants a structured questionnaire with response options.

Following informed consent, postnatal mothers who used MCRH childbirth services between July and August 2021 were issued with the printed questionnaires. The researcher administered the questionnaire to every third woman and was present to clarify any areas of difficulties. Mothers were encouraged to complete and return the questionnaires immediately.

## 3.8 Ethical considerations

The National Commission for Science, Technology, and Innovation (NACOSTI) and the Kenya Methodist University Ethical Approval Board gave their approval for the conduct of the study. Additionally, Chief Executive Officer in-charge of MCRH and the nurse in charge of reproductive health services at the hospital gave their verbal consent to conduct the study. All participants gave their written informed consent with the knowledge that they could leave the study at any time. A password-protected device was used to store all data collected from respondents in digital formats that had been properly de-identified and handled with utmost confidentiality. Additionally, all paper questionnaires will be destroyed three years after data collection in accordance with research guidelines.

### 3.9 Study variables

The dependent variable was considered to be responsiveness where respect for person dimensions of responsiveness was considered. These are dignity, autonomy, confidentiality, and communication. The independent variables evaluated the influence of access, structure, the process of care factors, and maternal characteristics as experienced during childbirth services in MCRH.

Access factors variables included the cost of care, distance from the health facility, cultural sensitivity, and service readiness. Variables to measure maternal characteristics included maternal age, parity, income levels, marital status, and place of residence while those that measured process of care factors included consistency of care, emotional support, and language use. Structural factors were measured using physical infrastructure, adequacy of beds, and availability of commodities.

### 3.10 Methods of data analysis

The R software system was used for all data handling and analysis. Binary logistic regression was used in the multivariate analysis, and the significance level was set at 0.05 with Chi-square used to test associations. The analysis didn't include any of the missing data. Strongly disagree, disagree, neutral, agree, and strongly agree were combined to represent those who gave poor scores in the various questions, and strongly agree and agree were combined to represent those who gave good scores/responses to the questions asked. The data, which was measured on a Likert scale (strongly disagree, disagree, neutral, agree, and strongly agree), was converted

to binary. Odds ratios, confidence intervals, the total number of respondents, and percentages were used to present the data.

The findings and discussion of the findings are presented in the next chapter.

# CHAPTER FOUR: FINDINGS AND DISCUSSION

The study aimed to assess the responsiveness of childbirth services provided by Murangá County Referral Hospital (MCRH) under the free maternity care program. This account sought to understand why, despite the implementation of the free maternity program, the number of deliveries supervised by trained birth attendants remained comparatively low. The chapter will present the outcome of the inquiry that was carried out in accordance with the stated goals and objectives. It will connect the individual findings from each goal to phenomenological findings and further synthesize into a discussion of the study's various variables.

Secondary sources have highlighted the importance of the responsiveness levels reported by mothers seeking childbirth services. Responsiveness is defined by the user's experience in relation to reasonable, non-clinical expectations (Mirzoev & Kane, 2017). Access factors, structural factors, maternal characteristics, and process of care factors all influence responsiveness. These are discussed extensively.

## 4.1 Pre-test results

Internal consistency of any instrument of measure is critical in the validation of end results (Creswell & Plano, 2018). Therefore, investigating the internal consistency of the measurement tool prior to implementation was vital. To do this, a pre-test involving twenty participants was conducted in Kiambu County Referral hospital. Cronbach's Alpha, a statistic used to quantify the strength of the internal consistency, was obtained from the responses of the pre-test. Cronbach's alpha was found to be 0.74 (95% CI :0.62,0.81). According to Creswell and Plano, 2018, a Cronbach's alpha of 0.65 or more indicates acceptable internal consistency of the measurement tool, therefore, the questionnaire used had acceptable internal consistency

## 4.2 Socio-demographic characteristics

Demographic information of the study sample is detailed in Table 4.1. Only 88 (69%) of the 129 participants in this study provided complete data for both independent and dependent variables. According to demographic data, the majority of these participants—45 (51%)—were between the ages of 21 and 30. The smallest cohort—3 (3%)—was over 40. Regarding place of residence, 27 (31%) identified as an urban resident, while 61 (69%) identified as a rural resident. Area of residence significantly impacts expectations and travel time to health resources. Out of the respondents 38 (43%) of the participants had no income, 27 (30%) make less than 5,000 Kenya shillings per month, 12 (14%) make between 5,000 and 10,000 Kenya shillings per month, and the smallest cohort, 11 (13%) make more than 100,000 Kenya shillings per month. This distribution is in contrast to Kenya's average national poverty rate, which stands at 35.6% of the population (World Bank, 2018). The sample's occupation status, with 39 (44%) respondents who were unemployed, 36 (41%) who were self-employed,

9 (10%) who were students, and only 4 (5%) who were salaried, can also help to explain the high number of those without income (Kenya National Bureau of statistics [KNBS], 2021).

Regarding marital status, 21 (24%) of respondents were single, 66 (75%) of respondents were married, and 1 (1%) of respondents identified as belonging to the "other categories" category and withheld information.

Most respondents 43, (49%) had less than five kids, 39 (44%), had their first pregnancy, and 6, or 7% had more than five kids. These results are in line with Kenya's Total Fertility Rate (TFR), which is 3.37, indicating that a Kenyan woman likely to have four children during her childbearing life. (United Nations Family Population Fund [UNFPA],2020)

**Table 4.1:**

*Demographic Characteristics of the respondents*

| Variable | Number | Percentage (%) |
|---|---|---|
| **Age of the participants** | | |
| Less than 20 years | 21 | 24 |
| 21 to 30 | 45 | 51 |
| 31 to 40 | 19 | 22 |
| 41 to 50 | 3 | 3 |
| **Usual Residence** | | |
| Urban | 27 | 31 |
| Rural | 61 | 69 |
| **Household Income** | | |
| None | 38 | 43 |

| | | |
|---|---|---|
| Less 5000 | 27 | 30 |
| 5000 to 10000 | 12 | 14 |
| Above 10000 | 11 | 13 |
| **Religion** | | |
| Catholic | 35 | 40 |
| Protestant | 48 | 55 |
| Muslim | 1 | 1 |
| Traditionalist | 3 | 3 |
| Other | 1 | 1 |
| **Marital status** | | |
| Single | 21 | 24 |
| Married | 66 | 75 |
| Other | 1 | 1 |
| **Occupation** | | |
| student | 9 | 10 |
| unemployment | 39 | 44 |
| self-employed | 36 | 41 |
| salaried | 4 | 5 |
| **Parity** | | |
| First pregnancy | 39 | 44 |
| Less than 5 children birthed | 43 | 49 |
| 5 and above children | 6 | 7 |

## 4.3 Murangá County Hospital's levels of responsiveness during childbirth

Two categories were created from the responsiveness levels. These were categorized as poor (strongly disagreed, disagreed, and neutral), and good (agreed and strongly agreed) as shown in table 4.2. Overall, 80 (90.9%) of respondents said they felt their

dignity (being treated with respect by medical staff in the hospital) was protected; 18 (20.5%) of them gave the level of confidentiality displayed by medical staff a poor rating, while 70 (79.5%) gave it a good one (done in a private place, none could overhear). Communication was rated as having the highest responsiveness levels of all the factors. 93.2% of respondents (n=82) thought the health facility's communication was good. Only 5.7% (n=5) of respondents felt the exchange was done poorly. When asked how they felt about their autonomy—the capacity to participate in making decisions about their care or treatment—71 (80.7%) said it was good, while 17 (19.3%) said they had no say in the matter.

Mothers who are married received better respectful treatment at the health facility than single women; 71.6% (n=63) of married mothers reported receiving dignified treatment, compared to 18.2% (n=16) of single women. 64.8% (n=57) of women in who indicated being treated with respect lived in the rural areas.

**Table 4.2**

*Murangá County Hospital's levels of responsiveness during childbirth*

| Variable | Dignity | | Communication | | Autonomy | | Confidentiality | |
|---|---|---|---|---|---|---|---|---|
| | Poor | Good | Poor | Good | Poor | Good | Poor | Good |
| **Age** | | | | | | | | |
| Less than 20 | 4 (4.5%) | 17 (19.3%) | 2 (2.3%) | 19 (21.6%) | 5 (5.7%) | 16 (18.2%) | 3 (3.4%) | 18 (20.5%) |
| 21 to 30 | 3 (3.4%) | 42 (47.7%) | 2 (2.3%) | 43 (48.9%) | 6 (6.8%) | 39 (44.3%) | 12 (13.6%) | 33 (37.5%) |
| 31 to 40 | 1 (1.1%) | 18 (20.5%) | - | 18 (20.5%) | 5 (5.7%) | 14 (15.9%) | 3 (3.4%) | 16 (18.2%) |
| 41 to 50 | - | 3 (3.4%) | 1 (1.1%) | 2 (2.3%) | 1 (1.1%) | 2 (2.3%) | - | 3 (3.4%) |
| **Usual Residence** | | | | | | | | |
| Urban | 4 (4.5%) | 23 (26.1%) | 3 (3.4%) | 23 (26.1%) | 6 (6.8%) | 21 (23.9%) | 6 (6.8%) | 21 (23.9%) |
| Rural | 4 (4.5%) | 57 (64.8%) | 2 (2.3%) | 59 (67.0%) | 11 (12.5%) | 50 (56.8%) | 12 (13.6%) | 49 (55.7%) |
| **Household Income** | | | | | | | | |
| None | 3 (3.4%) | 35 (39.8%) | 3 (3.4%) | 35 (39.8%) | 5 (5.7%) | 33 (37.5%) | 7 (8.0%) | 31 (35.2%) |
| Less 5000 | 1 (1.1%) | 26 (29.5%) | 1 (1.1%) | 26 (29.5%) | 6 (6.8%) | 21 (23.9%) | 6 (6.8%) | 21 (23.9%) |
| 5000 to 10000 | 3 (3.4%) | 9 (10.2%) | - | 12 (13.6%) | 3 (3.4%) | 9 (10.2%) | 3 (3.4%) | 9 (10.2%) |
| Above 10000 | 1 (1.1%) | 10 (11.4%) | 1 (1.1%) | 9 (10.2%) | 3 (3.4%) | 8 (9.1%) | 2 (2.3%) | 9 (10.2%) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Religion** | | | | | | | | |
| Catholic | 3 (3.4%) | 32 (36.4%) | 1 (1.1%) | 34 (38.6%) | 7 (8.0%) | 28 (31.8%) | 9 (10.2%) | 26 (29.5%) |
| Protestant | 3 (3.4%) | 45 (51.1%) | 2 (2.3%) | 45 (51.1%) | 8 (9.1%) | 40 (45.5%) | 7 (8.0%) | 41 (46.6%) |
| Muslim | 1 (1.1%) | - | - | 1 (1.1%) | - | 1 (1.1%) | - | 1 (1.1%) |
| Traditionalist | - | 3 (3.4%) | 2 (2.3%) | 1 (1.1%) | 1 (1.1%) | 2 (2.3%) | 2 (2.3%) | 1 (1.1%) |
| Other | 1 (1.1%) | | - | 1 (1.1%) | 1 (1.1%) | - | - | 1 (1.1%) |
| **Marital status** | | | | | | | | |
| single | 5 (5.7%) | 16 (18.2%) | 2 (2.3%) | 19 (21.6%) | 5 (5.7%) | 16 (18.2%) | 4 (4.5%) | 17 (19.3%) |
| Married | 3 (3.4%) | 63 (71.6%) | 3 (3.4%) | 62 (70.5%) | 12 (13.6%) | 54 (61.4%) | 13 (14.8%) | 53 (60.2%) |
| Other | - | 1 (1.1%) | - | 1 (1.1%) | - | 1 (1.1%) | 1 (1.1%) | - |
| **Occupation** | | | | | | | | |
| student | 3 (3.4%) | 6 (6.8%) | 2 (2.3%) | 7 (8.0%) | 2 (2.3%) | 7 (8.0%) | 1 (1.1%) | 8 (9.1%) |
| unemployment | 2 (2.3%) | 37 (42.0%) | 3 (3.4%) | 36 (40.9%) | 6 (6.8%) | 33 (37.5%) | 8 (9.1%) | 31 (35.2%) |
| self-employed | 1 (1.1%) | 35 (39.8%) | - | 35 (39.8%) | 6 (6.8%) | 30 (34.1%) | 7 (8.0%) | 29 (33.0%) |
| salaried | 2 (2.3%) | 2 (2.3%) | - | 4 (4.5%) | 3 (3.4%) | 1 (1.1%) | 2 (2.3%) | 2 (2.3%) |
| **Parity** | | | | | | | | |
| First pregnancy | 5 (5.7%) | 34 (38.6%) | 3 (3.4%) | 36 (40.9%) | 8 (9.1%) | 31 (35.2%) | 6 (6.8%) | 33 (37.5%) |
| Less than 5 | 3 (3.4%) | 40 (45.5%) | 1 (1.1%) | 41 (46.6%) | 9 (10.2%) | 34 (38.6%) | 12 (13.6%) | 31 (35.2%) |
| 5 and above | - | 6 (6.8%) | 1 (1.1%) | 5 (5.7%) | - | 6 (6.8%) | - | 6 (6.8%) |
| **Overall** | **8 (8.1%)** | **80 (90.9%)** | **5 (5.7%)** | **82 (93.2%)** | **17 (19.3%)** | **71 (80.7%)** | **18 (20.5%)** | **70 (79.5%)** |

According to the results, MCRH provides excellent care for expectant mothers in terms of respect for their individuality and organization, as well as open and honest communication and protection of their privacy and confidentiality. The high rating in these domains can be linked to the fact that a health care provider's performance in these areas can be modified more easily through training and practice. This credible standard contrasts with changes in care organization that require extensive coordination and may take a long time to affect. Furthermore, the majority of health care providers regard these domains as very important, so they are given more attention (Jacoba et al., 2017).

Respondents gave high ratings to the domain of dignity, indicating that their dignity was protected by examinations that respected their privacy. Previous research in Kenya has also supported this finding (Olouch-Aridi, 2021; Valentine et al.,2014). Medical

and office staff should treat patients with dignity, according to Sajjadi et al. (2015). This is due to the fact that treating patients with dignity enhances customer experience and is thought to increase patients' feelings of calm and assurance, both of which reduce the recovery period. These are purely instrumental motives, but there are several moral cases for maintaining patient dignity as a stand-alone objective.

The vast majority of respondents were pleased with how doctors, nurses, and other healthcare practitioners clearly and simply explained information to them. Of the domains, it had the best rating. One of the most crucial elements in determining patient satisfaction and the usefulness of a service has always been considered to be communication between patients and providers. In a European study, patients said that doctors were very good at communicating with them because they listened to them carefully and gave them clear explanations (Coulter & Jenkinson, 2005). However, nations, like the Netherlands and Taiwan, have reported having poor listening skills (Lin et al., 2011). Contrary to childbirth research in Nigeria (Okafor et al., 2015), which found that most women reported receiving at least one form of disrespectful and abusive care during the delivery of their most recent child, these findings are different from those of that study. The MCRH women's encouraging results suggest a responsive healthcare system.

The lowest score was given to confidentiality, with about 20% of respondents thinking that consultations were not held in a private space where no one could overhear them. These results highlight the necessity of making some adjustments to the settings of consultations, such as the use of privacy screens or examination rooms where mothers seeking childbirth services can consult with doctors, nurses, and other healthcare professionals without feeling as though their confidentiality is violated. Raising

awareness among medical professionals of the value of treating every pregnant woman discreetly is another adjustment that might be made. Comparatively, Valentine et al. (2018) and Petek et al. (2011) found that patients who were unhappy with confidentiality felt awkward discussing their health issues or scheduling appointment times, which led to patients not receiving adequate care. Despite the fact that MCRH offers free maternity services, some mothers opt to give birth elsewhere.

Majority of respondents felt that they were treated with autonomy. However, a sizable minority felt their as though they did autonomy was insufficient, which made them feel less involved in the care and treatment they received during labor.

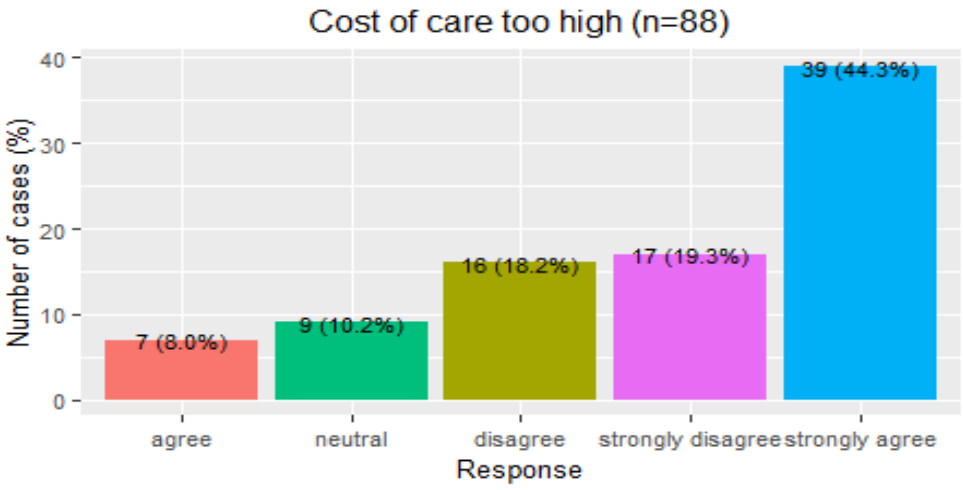
## 4.4 Influence of access factors on responsiveness

The respondents were then questioned about costs, the readiness of services readiness and availability of culturally appropriate services, as well as the distance they journeyed from their homes to MCRH. Figures 4.1 and 4.2 illustrate whether the healthcare costs and the travel time to the medical facility are unaffordable. Figures 5 and 6 illustrate whether the facility is available around-the-clock for visitors' convenience and whether services are rendered in a way that respects the culture of women.

i. **Access to health care costs**: The majority of respondents (46(52.3%)) agreed or strongly agreed that the cost of accessing care at MCRH was high. The responses are depicted in Figure 3. The cost of care is regarded as a major barrier to access to care.

**Figure 4.1**

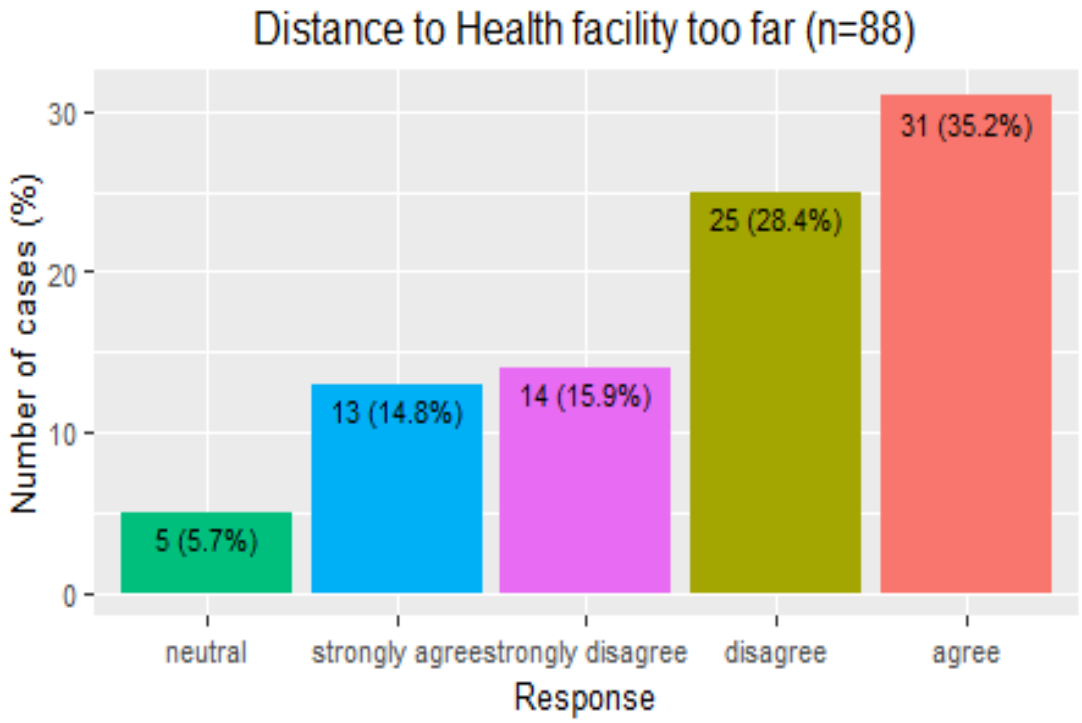
*Costs of care too high*



**ii. The distance to the hospital**: According to figure 4.2, the majority of respondents (44, or 50%) agreed or strongly agreed that it was too far to travel to the medical facility.

**Figure 4.2**

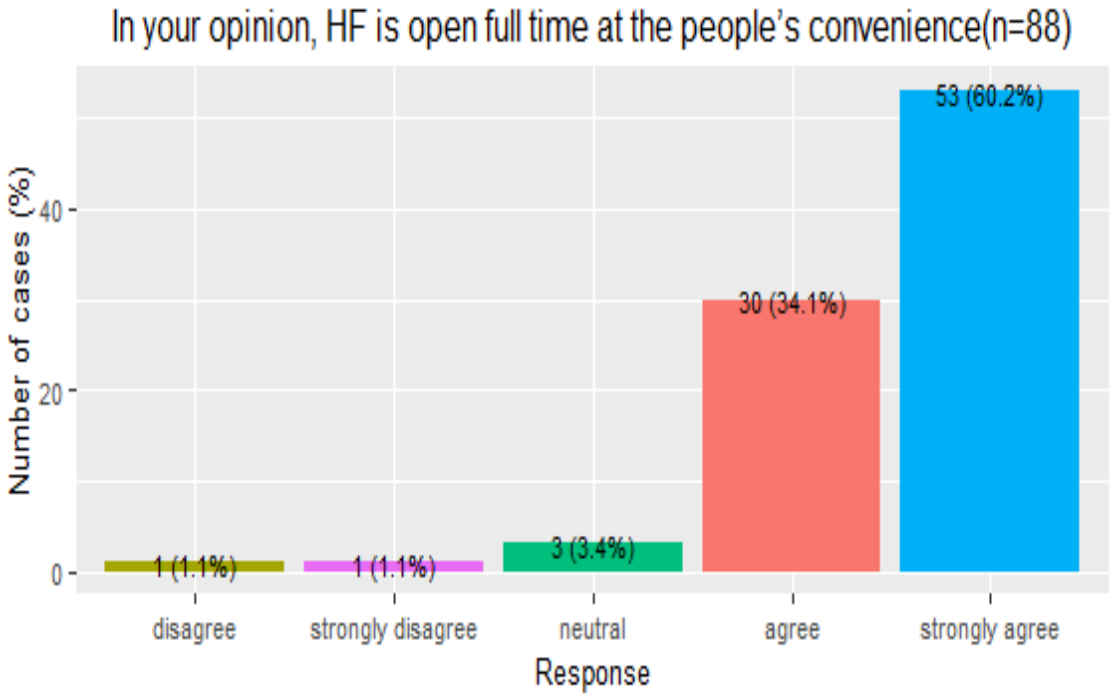
*Distance to the medical facility*




**iii. Hospital is accessible 24/7 when needed**; it is impressive to note that the facility is always open 24/7 and can be accessed at any time, as evidenced by the 83 (94%) respondents who agreed with this statement, as shown in figure 4.3.

**Figure 4.3**

*Hospital is open at all times*




**iv. Culturally respectful services:** A large majority of these respondents - 79 (90%) – indicated their belief in provision of culturally appropriate services during childbirth as shown in figure 4.4

**Figure 4.4**

*Services offered reflect respect for culture*

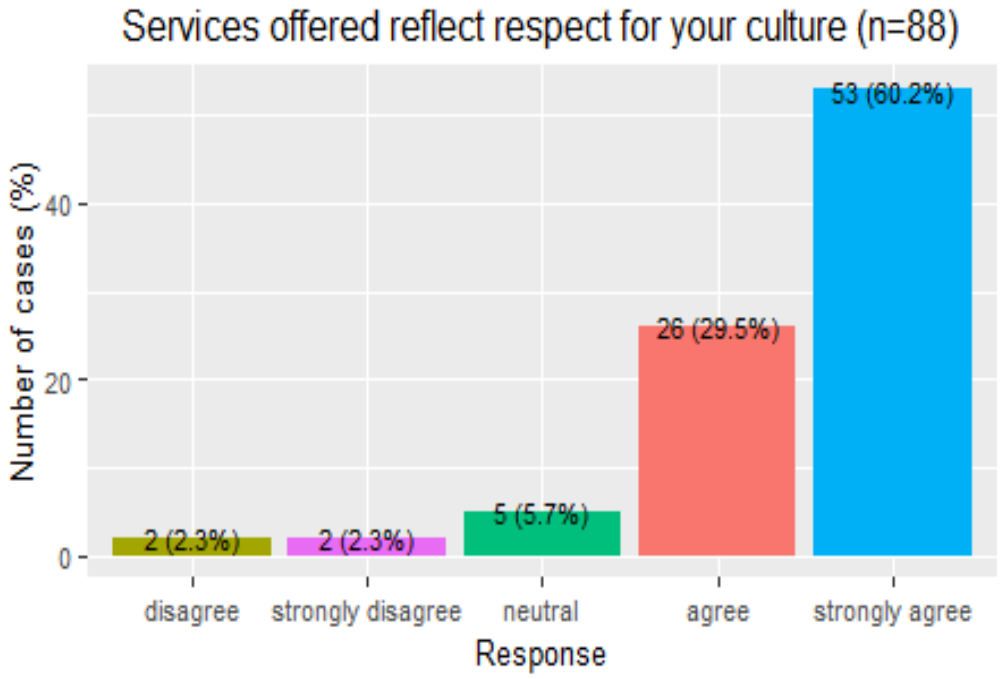



Table 4.3 shows the relationship between access factors and responsiveness .

**Table 4.3**

*Association between accessibility factors and responsiveness*

| | | Dignity | | Autonomy | | Communication | | Confidentiality | |
|---|---|---|---|---|---|---|---|---|---|
| **Variable** | **Response** | **Number** | **P value** | **Number** | **P value** | **Number** | **P value** | **Number** | **P value** |
| Distance to HF is far | Disagree | 44 | 0.643 | 44 | 0.103 | 44 | 0.360 | 44 | 0.792 |
| | Agree | 44 | | 44 | | 43 | | 44 | |
| Cost of maternal care is too high | Disagree | 42 | 0.025 | 42 | 0.000 | 42 | 0.192 | 42 | 0.001 |
| | Agree | 46 | | 46 | | 45 | | 46 | |
| Services offered respect our culture | Disagree | 9 | 0.000 | 9 | 0.012 | 9 | 0.429 | 9 | 0.016 |
| | Agree | 79 | | 79 | | 78 | | 79 | |
| HF is open for access at any time | Disagree | 5 | 0.005 | 5 | 0.246 | 5 | 0.262 | 5 | 0.270 |
| | Agree | 83 | | 85 | | 82 | | 83 | |

Using the chi-square, the cost of maternal care (P=0.025), services provided with cultural respect (P=0.000), and the health facility being open and accessible at all times (P=0.005) had significant association (P<0.05, indicating a relationship with the participant's dignity.

The level of involvement in care and provision of confidential services were associated with cost of perinatal care (P=0.000 & P=0.001) and the service offered to respect the culture (P=0.012 & P=0.016) respectively. None of the responsiveness domains were related to the distance to the medical facility (confidentiality, autonomy, communication, and dignity.) This finding can be explained by research from Green & Stan (2013), that indicated no direct correlation between geographic access and perceived service quality. Instead, it is believed that more significant factors that affect the perception of quality of services are a focus on newer methods to improve the

delivery of health care services in more effective and accountable ways. Binary logistic regression was deemed appropriate in examining the how access factors influenced responsiveness (Tranmer & Elliott, 2008)

**Table 4.4**

*Binary logistic regression on responsiveness and access factors*

| | Responsiveness | | | |
|---|---|---|---|---|
| | **Confidentiality** | **Autonomy** | **Communication** | **Dignity** |
| **Access factors** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** |
| Cost of care too high | 0.159 (0.039 - 0.639) | 0.083 (0.016 - 0.436) | 0.224 (0.021 - 2.375) | 0.44 (0.035 - 5.473) |
| HF facility open for access | 1.316 (0.155 - 11.17) | 2.027 (0.191 - 21.478) | 0.386 (0.021 - 7.184) | 0.148 (0.012 - 1.79) |
| Services offered reflect respect for culture | 0.324 (0.063 - 1.661) | 0.228 (0.038 - 1.374) | 1.107 (0.064 - 19.054) | 0.07 (0.009 - 0.545) |
| Distance to HF is very far | 1.218 (0.389 - 3.82) | 0.206 (0.053 - 0.801) | 0.221 (0.023 - 2.14) | 0.995 (0.157 - 6.3) |

The results in table 4.4 showed that the high health-care costs (OR=0.083, 95% CI: 0.016 - 0.436) and the distance to the medical facility (OR= 0.206, 95% CI: 0.053 - 0.801) had an impact on patients' decisions regarding their care or treatment. Patients' chances of rating their involvement in making decisions about their care were reduced by 79.4% and 91.7%, respectively when they agreed that the distance to the medical facility was very far and that the cost of care was high.

Only perceived high cost of care was linked to confidentiality elements (private conversations with healthcare practitioners) (OR= 0.159, 95% CI: 0.039 - 0.639). None of the access factors were associated with physicians, midwives, and other Health care workers providing information in a manner that patients could understand or in a manner that was clearly explained (There were insignificant 95% CI values).

Services offered reflecting cultural respect were the only significant predictors of patient dignity (OR= 0.07, 95% CI: 0.009 - 0.545). All of the others, on the other hand, were insignificant, indicating that there weren't any of the factors that had a relationship on the women's dignity. There was 93% lower chance of women reporting whether they were treated with dignity if they had agreed to having received culturally appropriate services.

The majority of respondents in the survey believed that their home was far from the medical facility. Distance hinders women's willingness and ability to seek professional healthcare, especially when suitable transportation is difficult to find, communication is challenging, and the terrain and climate are harsh (Syed et al.,2013). The majority of Kenyans, according to reports, live within 5 kilometers of a health facility (National Council for Population and Development [NCPD], 2015), but findings in this study show that women seeking childbirth services at MCRH think that travel time to the health facility is long. A study in Kenya by Veronica et al. (2018) may shed light on why most women chose not to use their local health facilities for delivery and childbirth services. They found that 2/3 of people preferred a public hospital instead of the closest medical facility for childbirth services. The results might also have been affected by a strike by medical professionals in a nearby county, which might have led to an upsurge of mothers from those counties at this county referral hospital. On the other hand, there was no statistically significant difference (P>0.005) between the ratings of dignity, autonomy, communication, and confidentiality depending on the distance from home to the healthcare facility.

According to a small majority of respondents, accessing healthcare in this facility is too expensive, classifying cost as a care barrier. But given that the survey was carried

out after the Free Maternity Program had done away with mothers' delivery fees, this is an interesting finding. However, the study's findings are in line with those of a study carried out in Kenyan public hospitals, where services were seen as being unwelcoming to low-income patients and unaffordable when additional service and equipment fees were taken into account (Valentine et al., 2018). The costs associated with obtaining care were found to have an impact on patients' perceptions of receiving treatment with dignity, autonomy, and confidentiality. This theory could be backed up by findings from several studies carried out in Kenya, which found that the elimination of user fees may present some difficulties, including delayed care, fewer health providers, and thus longer waiting times, as well as occasionally the introduction of other compensatory fees to account for delayed reimbursements of funds, inadequate supplies, and other flaws in the health system (Chuma, 2019; Obare et al., 2009) Investigating any differences between perceived and actual costs might be beneficial in addition to adjusting the prices charged.

According to the study's findings, respondents indicated that services reflected respect for their culture. Lack of culturally appropriate care and services that are disrespectful and inhumane may deter mothers from seeking childbirth services. According to a study done in Ghana, a sizable minority of women preferred having their babies at home with Traditional Birth Assistants (TBA) because the medical care offered in hospitals was not culturally appropriate. This included, among other things, supplying culturally appropriate foods, getting rid of the placenta, and TBA witnessing a female give birth (Adatara, 2019). The current findings revealed a strong correlation between respondents' autonomy and confidentiality and culturally respectful services. Cultural

considerations are thought to be crucial for the accessibility of medical services (Call et al., 2014)

A vast majority of respondents indicated that the facility was open all the time and at the convenience of the public, indicating satisfaction with the facility's hours of operation and service availability. They were also found to have statistical significance in how mothers rated the dignity of care received, which makes sense given that childbirth occurs at crucial biological moments that are typically not induced by human beings. This suggests that women can give birth whenever they need to using these facilities. If hospitals stay open, patients may have more faith in the healthcare system (Robone et al., 2011). Additionally, maternal and childbirth services must be accessible and available for those who are most needy for universal health coverage.

## 4.5 Influence of maternal characteristics on responsiveness

This section will use regression analysis to demonstrate the relationship between maternal characteristics and responsiveness.

**Table 4.5**

*Influence of maternal characteristics on responsiveness*

| Variable | Responsiveness | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Dignity | | Autonomy | | Communication | | Confidentiality | |
| | P-value | OR (95% CI) | P value | OR (95% CI) | P value | OR (95% CI) | P value | OR (95% CI) |
| Religion | 0.076 | 0.436 (0.174 - 1.091) | 0.454 | 0.768 (0.384 - 1.534) | 0.940 | - | 0.968 | 0.968 (0.485 - 1.933) |
| Marital status | 0.036 | 11.958 (1.178 - 121.376) | 0.302 | 2.058 (0.528 - 8.071) | 0.990 | - | 0.458 | 0.458 (0.158 - 1.329) |
| Parity | 0.796 | 0.725 (0.064 - 8.276) | 0.155 | 2.588 (0.698 - 9.591) | 0.940 | - | 0.782 | 0.782 (0.239 - 2.558) |
| Occupation | 0.794 | 0.837 (0.219 - 3.192) | 0.408 | 0.668 (0.258 - 1.733) | 0.960 | - | 0.532 | 0.532 (0.192 - 1.474) |
| Income | 0.614 | 0.783 (0.302 - 2.027) | 0.560 | 0.838 (0.448 - 1.547) | 0.942 | - | 1.158 | 1.158 (0.603 - 2.223) |
| Residence | 0.167 | 4.448 (0.537 - 36.858) | 0.740 | 1.228 (0.368 - 4.145) | 0.940 | - | 0.949 | 0.949 (0.275 - 3.279) |
| Age | 0.411 | 2.332 (0.31 - 17.543) | 0.246 | 0.548 (0.198 - 1.522) | 0.961 | - | 1.95 | 1.95 (0.695 - 5.473) |

Only marital status (OR=11.958; 95% CI: 1.178 - 121.376; P=0.036) was significant in the regression analysis, implying that marital status has some association with a respondent asserting that their dignity was well cared for in the hospital. All other variables, including parity (OR=0.725; 95% CI: 0.064 - 8.276), occupation (OR= 0.837; 95% CI: 0.219 - 3.192), income (OR= 0.783; 95% CI: 0.302 - 2.027), residence (OR= 4.448, 95% CI: 0.537 - 36.858), and age (OR = 2.332; 95% CI: 0.31 - 17.543) did not have any association with patients reporting treatment with dignity. Same case with communication, confidentiality, and autonomy, implying that religion, marital status, parity, occupation, income, place of residence, and age are not associated with a patient's perceptions of whether they were given clear communication, whether their confidentiality was protected, and finally involvement in making decisions about their care or treatment. The intriguing null results could be attributed to the study population being interviewed during a time when they were extremely preoccupied with the

demands of a new life as a result of their immediate postpartum situation, which could have resulted in imprecise responses.

Residents of rural areas were four times more likely not to know if they were treated with dignity, 22.8% more likely not to make decisions about their care or treatment, and 5.1% less likely not to know if their confidentiality was protected, implying something about patient rights knowledge/awareness and ignorance about the nature of medical interventions. In terms of age, those over the age of 20 were twice as likely to be unaware of whether their dignity was protected, 45.2% less likely to be unaware of whether their autonomy was observed, and 95% less likely to be aware that their confidentiality was protected.

The only maternal characteristic found to be significant in its effect on perceived respect for dignity was marital status, as mothers reported how they were treated at the health facility. Furthermore, married women were twice as likely as single women to report how they were treated at the facility. This may be explained by the levels of autonomy that married women have in their households, as noted by Baral et al. (2010), who found that a woman's decision to access and use skilled attendants was influenced by the their involvement in decision making in their homes.

Maternal age has been shown to influence pregnant women's perceptions of care received, as it is viewed as a proxy for their accumulated knowledge of health services. The existing base of experience appears to influence care utilization and experiences. It's less clear how past experiences and their trajectory, if repeated, might shape attitudes and expectations, though there's probably some path dependency here. In terms of age, those between the ages of 21 and 30 were twice as likely to be unaware

of whether their dignity was protected, less likely to be unaware that their autonomy was respected, and much more likely to be unaware that their confidentiality was protected. These findings are similar to those of an Italian study, which found that relatively older women from a higher socioeconomic class were more satisfied with pregnancy and childbirth services (Overgaad, 2012).

Rural residents were more likely than urban residents to avoid rating the health provider in terms of their involvement in discussing treatment; they were also four times more likely than urban residents to not score dignity (how they were treated in the health facility), but less likely to not score communication and confidentiality. This is consistent with the findings of Liambila et al. (2014), who found that rural and urban women have different expectations of the care they receive when seeking maternity services, with rural women having lower expectations. Because the majority of respondents were from rural areas, a significant minority indicated their residence to be urban, which may explain the high rating of the domains.

Other maternal characteristics had no effect on how women reported confidentiality, communication, and autonomy domains. However, secondary research findings on these variables differ. Education levels have been found to be important in women's patterns of seeking skilled birth attendant services. Less educated and poor women were less likely to seek dedicated professional medical assistance. According to the Kenya Demographic Health Survey (KDHS), 25% of women with no education and 31% in the lowest wealth quintile gave birth in a health facility, compared to 85% of women with secondary education or higher and 93% in the highest wealth quintile (KDHS, 2014). Furthermore, Overgaad (2012) discovered that illiterate women and

those with low socioeconomic status have lower expectations of care quality than their educated counterparts.

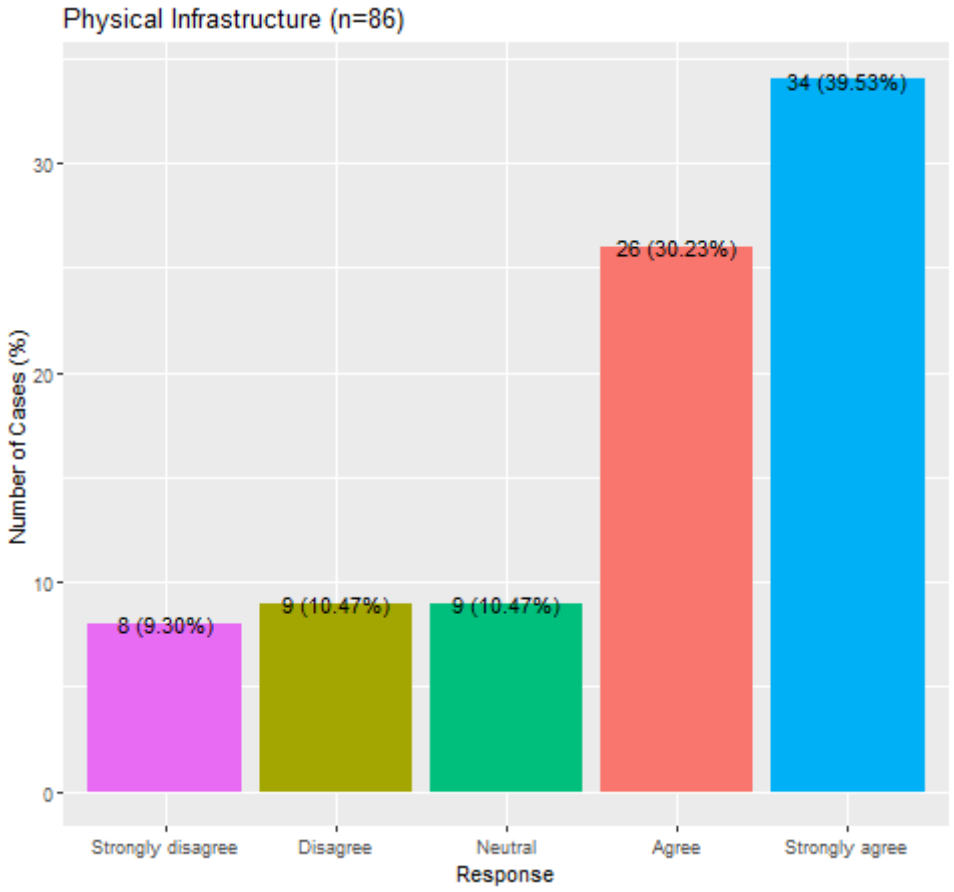
## 4.6 Influence of structural factors on responsiveness

In this section, respondents were asked to rate the aspects of the structure as they interacted with the health system. This included whether the physical infrastructure as measured by the adequacy of delivery rooms, adequacy of beds, and availability of quality medications in a timely manner. Figures 4.5-4.7 show results for physical infrastructure, whether beds were enough, and the availability of drugs from the responses.

i. **Physical Infrastructure** The majority of respondents (70%) agreed and strongly agreed to delivery rooms being available and adequate for childbirth at the facility as shown in figure 4.5 . Having delivery rooms available is important as it maintains privacy and promotes a mother's positive birth experience.

**Figure 4.5**

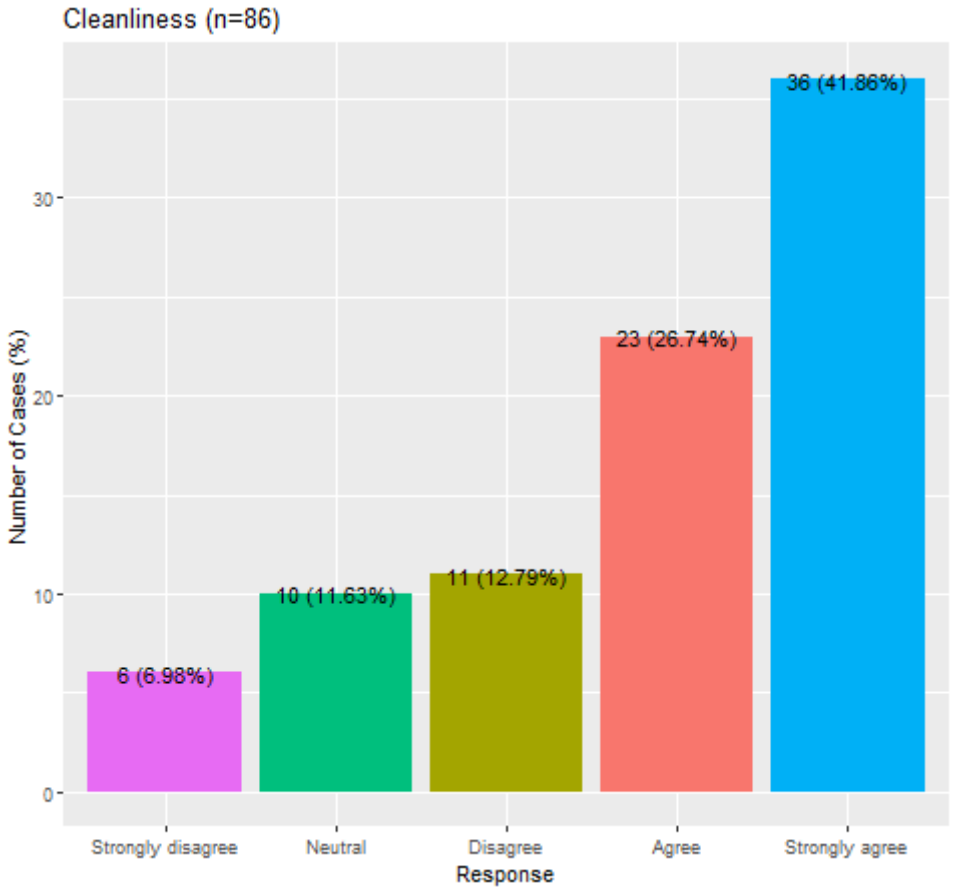
*Physical infrastructure*




**ii.** **Adequacy of beds** Figure 4.6 shows a high proportion of the respondents (68.6%) satisfied with the number of available beds in the health facility with about a third (31.4%) in disagreement. The reported dissatisfaction with the availability of beds may be explained by some of the health facilities that experienced an influx of mothers due to a health workers' strike in a neighboring county. Some of those had mothers sharing beds after delivery as observed during this study.

**Figure 4.6**

*Adequacy of beds*




### iii. Commodity Availability

Figure 4.7 shows that the majority of women indicated that quality drugs were available in a timely manner when they needed them. This accounted for a 79% proportion of those interviewed 34.9% agreed and 44.2% strongly agreed. Only a small percentage of mothers (20.93%) disagreed with the availability of quality drugs. The presence of essential drugs like uterotonics, pain relief medication, and antibiotics is critical in a childbirth unit.

**Figure 4.7**

*Commodity availability*

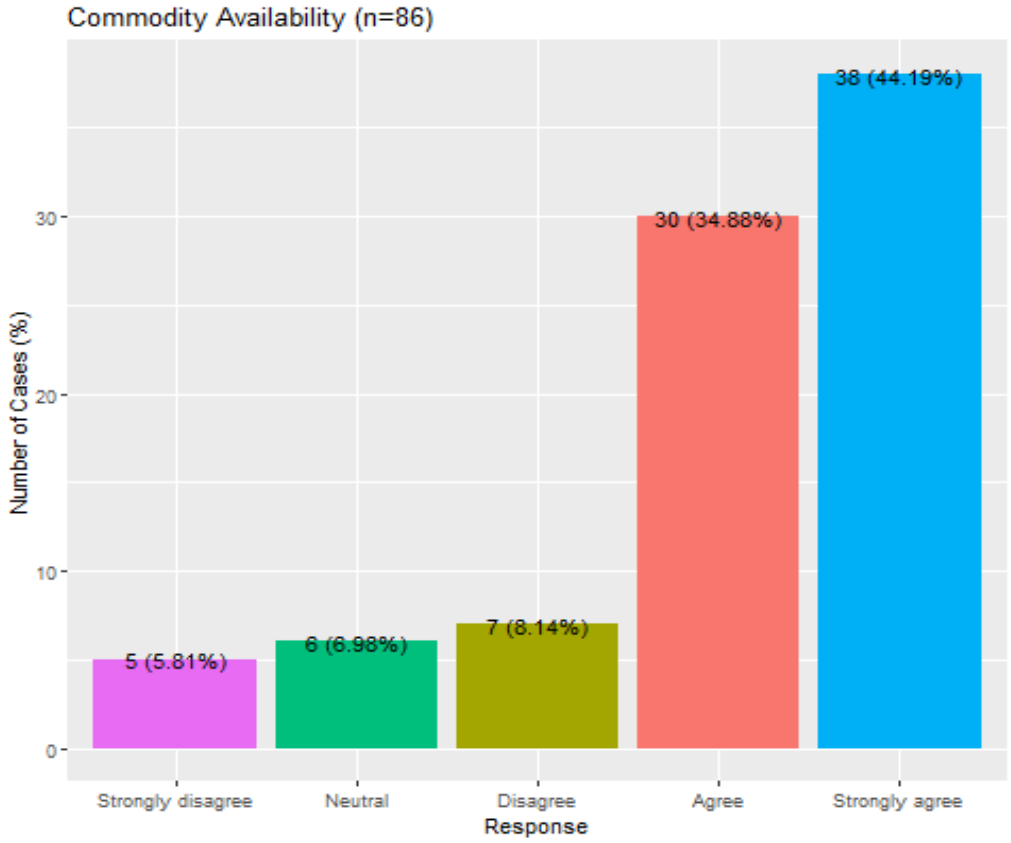


**Table 4.6**

*Association between structural factors and responsiveness*

| | | Dignity | | Autonomy | | Communication | | Confidentiality | |
|---|---|---|---|---|---|---|---|---|---|
| Variable | Response | Number | P value | Number | P value | Number | P value | Number | P value |
| Physical Infrastructure | Disagree | 26 | 0.013 | 26 | 0.092 | 26 | 0.718 | 26 | 0.004 |
| | Agree | 60 | | 60 | | 60 | | 60 | |
| Adequacy of beds | Disagree | 27 | 0.017 | 27 | 0.007 | 27 | 0.730 | 27 | 0.007 |
| | Agree | 59 | | 59 | | 59 | | 59 | |
| Commodity Availability | Disagree | 18 | 0.001 | 18 | 0.337 | 18 | 0.078 | 18 | 0.003 |
| | Agree | 68 | | 68 | | 68 | | 68 | |

Using the Chi-square test, physical infrastructure (P=0.013), cleanliness (P=0.017), and commodity availability (P=0.001) showed significance (P <0.05), an indication that it was associated with the dignity of women. Cleanliness (adequacy of beds) was also found to have an association with whether women felt involved in their treatment. (P=0.007). Conversely, no associations were found between physical infrastructure, cleanliness, and commodity availability with communication. Women during childbirth perceive communication by health care providers as an issue of their attitudes and socialization (Oluoch-Aridi, 2021). Confidentiality was found to have an association with all three variables; physical infrastructure (P=0.004), cleanliness (P=0.007), & commodity availability (P=0.003).

Additionally, an analysis using regression model was used on the obtained data to determine impact on structural factors on health system's responsiveness.

**Table 4.7**

*Binary logistic regression, responsiveness and structural factors*

| | Responsiveness | | | |
|---|---|---|---|---|
| | **Confidentiality** | **Autonomy** | **Communication** | **Dignity** |
| **Access factors** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** |
| Physical Infrastructure | 0.473 (0.123 – 1.809) | 0.878 (0.229 – 3.517) | 1.376 (0.156 – 14.043) | 0.423 (0.050 – 2.769) |
| Adequacy of beds | 0.382 (0.102 – 1.413) | **0.255 (0.066 – 0.928)** | 0.940 (0.119 – 8.890) | 0.277 (0.033 – 1.721) |
| Commodity Availability | **0.276 (0.078 – 0.972)** | 0.788 (0.219 – 3.120) | 0.136 (0.014 – 1.038) | **0.115 (0.015 – 0.650)** |

From the results on table 4.7, commodity availability (patients can easily obtain good quality drugs in a timely manner) (OR = 0.276, 95% CI 0.078 – 0.972) had an impact on confidentiality as well as on dignity (OR 0.115 95% CI 0.015-0.650). Those who agreed to commodity availability had a 72.4% less chance of rating whether their confidentiality was respected during care while those who agreed to commodity availability had an 88.5% chance of reporting being treated with dignity.

The availability of sufficient beds had an impact on the mother's autonomy (OR=0.255 95% CI 0.066-0.928). Mothers' likelihood of rating whether their autonomy was respected was reduced by 74.5% if they agreed to commodity availability.

For the delivery of high-quality care, basic inputs like supplies, medications, and equipment must be readily available. They create an environment that allows medical facilities to deliver services successfully. The prompt availability of high-quality medications at Murang'a County Referral Hospital had an impact on how women felt they were treated with respect and confidentiality. Women may perceive the lack of necessities in the FMP as providing substandard care and showing disrespect because

they expect all services to be provided for free throughout the continuum (Asefa et al., 2020). In addition, women might be compelled to solicit the assistance of friends and family members in order to purchase necessary medications if hospitals lack those supplies. According to McPake et al. (2011), the majority of women felt that was a breach of their confidentiality. The results are also in line with a study conducted in urban hospitals in Tamale, Ghana, which found that the delivery of perinatal services was hampered by inadequate supplies and other necessities (Bachari et al., 2014). Due to a lack of funding and supplies after the FMP was implemented, some supplies, including medications, had to be purchased by women, which is against the free maternity policy.

Health system problems have been linked to the growing issue of unresponsive care in low- and middle-income countries. There have been reports of overcrowding in healthcare facilities where women in the labor ward are forced to share a bed with others perinatal mothers before and after childbirth in the majority of resource-constrained settings. Women have also mentioned having babies in the same delivery room without privacy screens or any other form of confidentiality in some cases (Bohren et al., 2015). This might be a result of the insufficient personnel, resources, and infrastructure. In MCRH, about one-third of the women disagreed that the beds were adequate, so some mothers might have been sharing beds. It was discovered that this was associated to their dignity, autonomy, and confidentiality. Their impact on respectability and confidentiality was revealed by further investigation. Minimal privacy within the wards has been noted as an example of disrespectful maternal care. In a study by Oluoch-Aridi (2021), women recommended bed partitions as well as the outlawing of bed-sharing in Kenya.

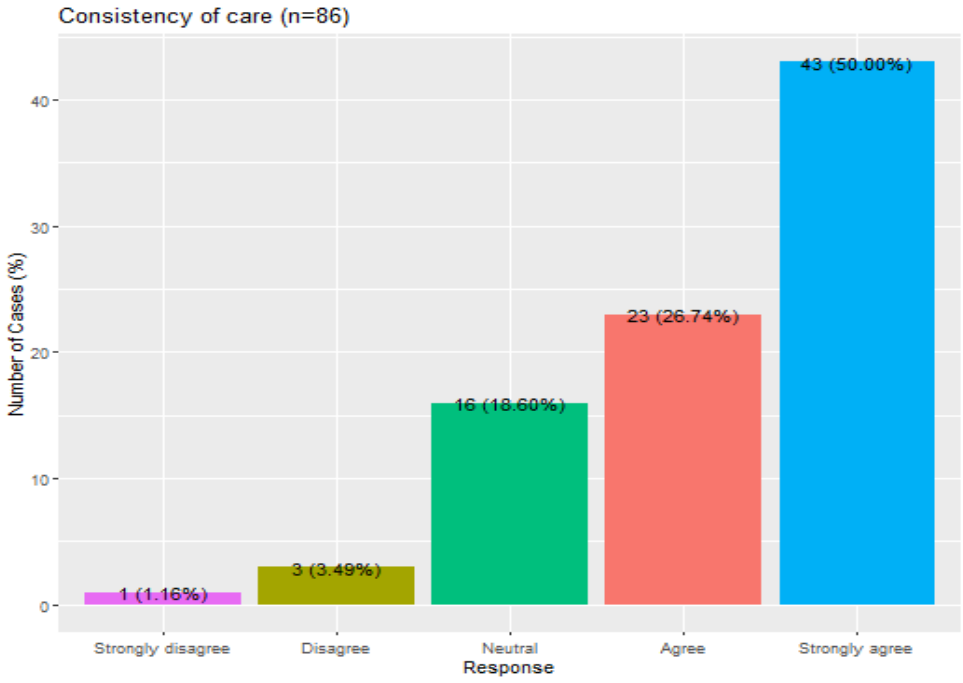
## 4.7 Influence of process of care factors on responsiveness

In this section, respondents rated how process of care aspects influenced their responsiveness as they interacted with the health system. This included whether examination tests were performed as prescribed, whether they received emotional support from the midwife during labor and if health care providers used kind language while speaking to them. Figures 7-9 show results for consistency of care, emotional support, and language use from the responses.

i. **Consistency of care**: Figure 4.8 shows about 20 (23.3 %) of the respondents disagreed, strongly disagreed, and were neutral about having complete examination tests (laboratory and scans) done as prescribed. Having tests performed as prescribed can boost a mother's confidence that the management they receive conforms to standards.

**Figure 4.8**

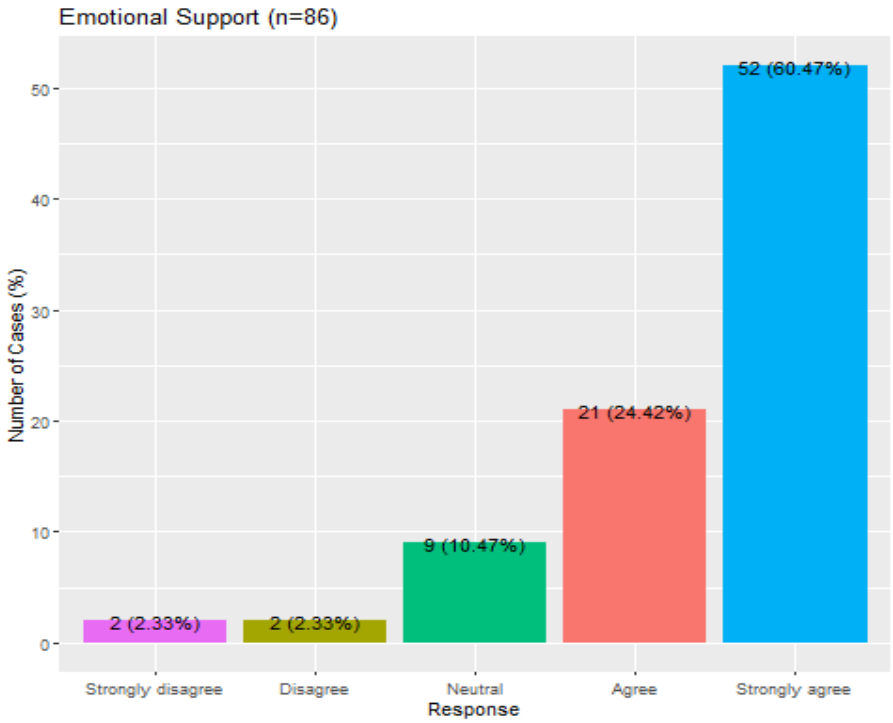
*Complete examination tests were performed as prescribed*




ii. **Emotional support**: About 73 (85%) of mothers were impressed at how midwives accorded them emotional support during labor by encouraging them. Only about 4% disagreed with this, while 10% percent were neutral as shown in figure 4.9.

**Figure 4.9**

*Emotional support*




iii. **Language Use:** A small proportion of mothers – about 10% reported displeasure with the language used by doctors, nurses and other health care providers. 88.3% agreed and strongly agreed to health care providers using kind words to them as shown in figure 4.10.

**Figure 4.10**

*Health care providers used kind language*

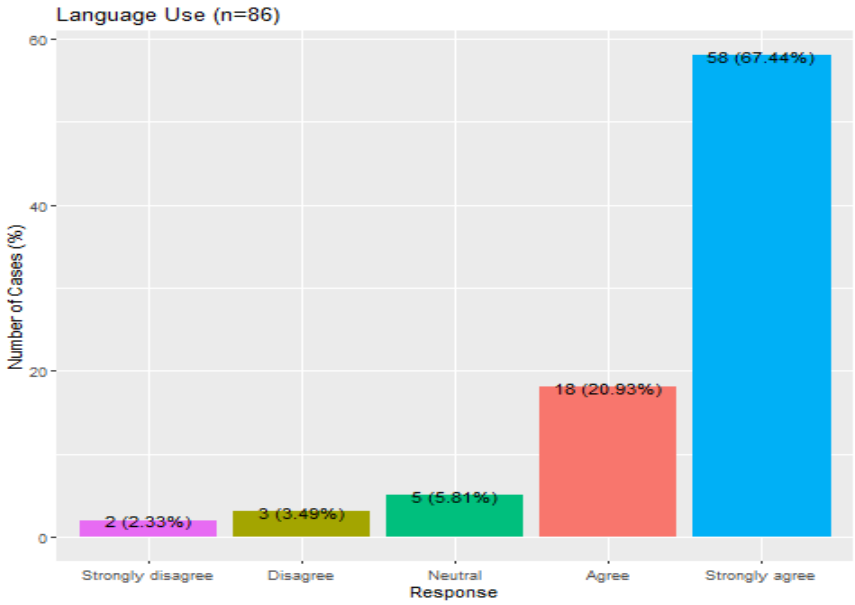


**Table 4.8**

*Association between responsiveness and process factors*

| | | Dignity | | Autonomy | | Communication | | Confidentiality | |
|---|---|---|---|---|---|---|---|---|---|
| Variable | Response | Number | P value | Number | P value | Number | P value | Number | P value |
| Consistency of Care | Disagree | 20 | 0.200 | 20 | 0.402 | 20 | 0.842 | 20 | 0.401 |
| | Agree | 66 | | 66 | | 65 | | 66 | |
| Emotional Support | Disagree | 13 | 0.033 | 13 | 0.221 | 13 | 0.563 | 13 | 0.046 |
| | Agree | 73 | | 73 | | 72 | | 73 | |
| Language Use | Disagree | 10 | 0.000 | 10 | 0.325 | 10 | 0.785 | 10 | 0.904 |
| | Agree | 76 | | 76 | | 75 | | 76 | |

Using the Chi-square test, emotional support (P=0.033) and language use (P=0.000) were significant (P <0.05) showing an association with women reporting being treated with respect. There was also an association between emotional support (P=0.046) and the domain of confidentiality, while no associations were found with the consistency of care, and all the domains of responsiveness (dignity, autonomy, confidentiality, and communication). Mothers who receive dignified care (kind, respectful and confidential care) describe the HCPs as humane professionals and make them feel safe under their care (Oluoch-Aridi et al., 2021). Conversely, no associations were found between the process of care factors and the domains of autonomy and communication.

Using the binary logistics regression model, the effect of process of care factors on responsiveness was established.

**Table 4.9**

*Binary logistic regression, responsiveness and process of care factors*

| | Responsiveness | | | |
|---|---|---|---|---|
| | **Confidentiality** | **Autonomy** | **Communication** | **Dignity** |
| **Access factors** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** | **OR (95% CI)** |
| Consistency of Care | 0.635 (0.182 – 2.460) | 0.702 (0.207 – 2.689) | 1.462 (0.185 – 31.526) | 0.749 (0.122 – 5.782) |
| Emotional Support | 0.245 (0.057 – 1.053) | 0.531 (0.129 – 2.526) | NA | 0.503 (0.075 – 4.212) |
| Language Use | 2.018 (0.347 – 18.481) | 0.695 (0.142 – 4.252) | 0.448 (0.051 – 9.775) | 0.087 (0.012 – 0.595) |

From the results in tbale 4.9, language use (doctors nurses and other health care providers used kind language while speaking to you) (OR = 0.087, 95% CI 0.012 – 0.595) had an impact on dignity. Those who agreed to the use of kind words had a 91.3% chance of rating whether they were treated with respect. There were insignificant findings on all other processes of care factors i.e., consistency of care and language use on whether the mother's confidentiality, autonomy, and communication were protected.

For communication, emotional support had entries only in the category of "disagree" and thus was excluded from the logistic regression.

Survey findings indicate that consistency of care where laboratory and scans were performed as prescribed was rated the lowest among the process of care factors by about 23 percent of the respondents. The findings may resonate with a study conducted in 2016 that suggested increased chances of delivery of poor-quality services whereby only 46% of facilities in Kenya had signal functions for obstetrics and emergency newborn care and delivery services (Smith et al., 2016). The failure to conduct

necessary tests and scans on women during labor may lead to negative outcomes of both the mother and baby.

A majority of women were impressed at the emotional support offered to them during labor by the midwife. From the findings, emotional support was also found to have associations with the dignity of the women and confidentiality aspects of responsiveness. The high ratings of this factor is different from findings of other studies in the Kenya and Africa region that had neglect and abandonment as common forms of maltreatment during childbirth (Abuya et al., 2015; WHO, 2016). Neglecting and abandoning women during labor and childbirth violates WHO quality care standards, which require facilities to have minimum levels of care aimed at promoting continuous support during labor and delivery (Afulani et al., 2019).

Women were satisfied with how health care providers used kind language on them during childbirth. In addition, language use was found to have an association with how the woman's dignity was protected. In an earlier study by Oluoch-Aridi et al. (2021), women were more attracted to health facilities where HCPs spoke to them in a friendly and respectful way. They made their decision about where to give birth based on how HCPS interacted with them as well as their knowledge of their friends' experiences. Undignified care has been described as care where women have been verbally and physically abused (Abuya et al., 2015). The good rating of language use in MCRH indicates a positive finding that could encourage more women, their friends, and relatives to seek care at MCRH. Moreover, high-volume facilities have been shown to provide better quality care (Chuma, 2019).

The thesis is concluded in the subsequent chapter, which offers a formal response to the inquiries raised in Chapter 1 and suggestions for childbirth services reflecting responsiveness in MCRH's free maternity program.

# CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

## 5.1 Introduction

The main goal for the study was to fully understand responsiveness levels and comprehend why, despite the establishment of a free maternity program in MCRH, rates of childbirth attended by professional birth attendants remained comparatively low. Based on secondary research, characteristics of service quality is significant. In order to assess levels of responsiveness and, in particular, four of its predictors, access factors, structural factors, process factors, and maternal characteristics—a comprehensive examination was carried out.

The investigation had a number of strengths. It was possible to interview a sizable catchment population from both rural and urban areas, with a variety of socioeconomic status, parity, and age, at MCRH, the county's largest referral hospital. Since the data were segmented, it is safe to extrapolate the conclusions to include women in Murangá County who are seeking for perinatal services. Last but not least, mothers were interviewed at appropriate interval after giving birth because women interviewed two weeks after giving birth tend to be critical in their information (Teijingen, 2003).

## 5.2 Summary

Overall, the Murangá County Referral Hospital’s health system offers responsive childbirth services. Mothers rated the domains of dignity, autonomy, communication as good with room for improvement in the confidentiality domain.

In-terms of maternal characteristics, marital status was seen to influence the perception of responsiveness. These disparities based on socioeconomic determinants of health might exacerbate existing barriers to childbirth care, resulting to poor health outcomes. Responsiveness, like other health-care delivery strategies, must be addressed from an equitable standpoint (Valentine et al., 2018). Pregnant moms seeking delivery services, regardless of their age, parity, social class, or location, want services that are aware of and sensitive to their dignity, autonomy, confidentiality, and proper communication. Furthermore, socio-demographic variables are considered a critical determinant of prenatal service usage and might be a barrier to care (Florian et al., 2019).

Access to the FMP in MCRH was hampered by a lack of proximity to health services and the high cost of care from the findings. This demonstrates that eliminating user costs for maternal care may not result in an increase in skilled birth attendance, as found in MCRH. Both Gilson and Malntyre (2005) and McPake et al (2011) believe that user fee systems should be supplemented by supply-side expenditures to guarantee that health facilities have appropriate infrastructure, resources, and staff.

Neglecting supply-side needs places unnecessary strain on the health system and can often result in unintended consequences, such as dissatisfaction among treatment recipients (Mcpake et al, 2011). The expenses of care that perinatal mothers bear in MCRH may be 'hidden or compensatory costs' applied to account for inefficiencies in the health system. Patients having to buy their medicine (analgesics, antibiotics), laboratory and radiology tests done in other private facilities, food costs as a result of inadequate or poor-quality food, and some patients and service users even having to tip some healthcare and non-healthcare providers are some of the hidden costs experienced in the free maternal programs (Chuma, 2019). This may pose a threat to

women, particularly those from lower socioeconomic backgrounds, who may seek out more accessible and economical delivery options outside of the hospital. Women's perceptions of their treated with dignity, autonomy, and confidentiality were found to be influenced by the total expenses of getting care. To further understand the perceived and actual costs applied, this contamination of access costs spilling over into other subjectively framed quality costs should be investigated further.

For structural factors, the shortage of infrastructure and supplies in the free maternity program has an effect on the manner in which women perceive responsiveness during childbirth in MCRH. The diminished autonomy from bed sharing can be seen especially when women are undergoing vaginal examination which violates principles of respectful maternal care. Asefa et al. (2020) suggests some of the innovative ways to improve the space challenges is the use of privacy screens. This can be placed in delivery rooms or in the wards such that women can enjoy some privacy during examination and delivery. Commodity shortages were also seen to influence the responsiveness of services given. These may also pose a negative influence as it may not only be seen as disrespectful to the mothers but is also a deterrent to the main intention of free maternity services which is to improve service utilization (Afulani, 2019)

Process of care factors were rated satisfactorily with room for improvement on the language used to mothers during labour and delivery. The health system should be designed in a manner that that emotional support during labor is encouraged and provided. Women should be educated during ANC on the need for emotional support and its role in positive outcomes. Providers too should be keen on offering proper

emotional support to the mothers within the confines of the women's choices of privacy and respect (Hill & Bowser, 2010).

The following section discusses the investigation's conclusions.

## 5.3 Conclusions

MCRH postnatal women rate responsiveness as good, giving it high ratings for dignity, communication, and autonomy. In the area of confidentiality, however, there is space for improvement. To meet this demand, health care personnel may need to be educated on how to deal with individual mothers discreetly, as well as obtain settings that respect privacy, among other things. The responsiveness of health systems to women seeking birthing services is a significant component of their overall experience and a factor of where they seek childbirth services. Perinatal programs must consequently concentrate on monitoring health treatments and related impediments to service utilization. To increase service quality and ensure uniformity of care, corresponding activities aiming at boosting responsiveness of services should be included in policies and programs. Despite good ratings for responsiveness, it's still unclear if MCRH's low uptake of skilled birth attendance birth attendant services is due to user or provider-driven behaviors.

Finally, responsiveness appears to be the least studied of all the components of healthcare quality. There doesn't seem to be any additional research on the MCRH's responsiveness or on wider-ranging responsiveness factors in the area. This investigation produced some new knowledge and explanations that point to particular barriers in the use of services as a result of the triangulation of the data gathered and secondary research. Overall, access, structural, and process factors, — particularly

travel time, cost of care, commodity availability, lack of adequate beds, and poor language use, are the main contributors of Murangá County's obviously low uptake of childbirth by skilled attendants.

## 5.4 Recommendations

From the research findings, the researcher makes the following recommendations;

1) Health care managers in MCRH need to devise continuous motivation strategies for the health care providers to continue offering responsive childbirth services in the facility.
2) The county government of Murangá needs to invest on physical infrastructure in-order to provide adequate delivery rooms, beds and space to promote responsive childbirth services
3) County Government of Murangá needs to invest on supply side access needs of mothers. This includes availability of drugs and other supplies needed during delivery to avoid the hidden costs of care
4) There is need for support supervision and ongoing coaching in respectful maternal care for health care providers in MCRH.

## 5.5 Recommendations for further research

1. It may be desirable to conduct additional qualitative research on responsiveness in MCRH. Further exploration using the qualitative approach can bring a deeper understanding of the phenomena.
2. Examining the "client- orientation domains" of responsiveness may result in a more thorough knowledge and evaluation of responsiveness in MCRH.

## REFERENCES


Abuya, T., Warren, C. E., Miller, N., Njuki, R., Ndwiga, C., Maranga, A., Mbehero, F., Njeru, A., & Bellows, B. (2015). Exploring the Prevalence of Disrespect and Abuse during Childbirth in Kenya. *PLOS ONE*, *10*(4), e0123606. https://doi.org/10.1371/journal.pone.0123606

Adatara, P., Strumpher, J., & Ricks, E. (2019). A qualitative study on rural women's experiences relating to the utilization of birth care provided by skilled birth attendants in the rural areas of Bongo District in the Upper East Region of Ghana. *BMC Pregnancy and Childbirth*, *19*(1), 195. https://doi.org/10.1186/s12884-019-2337-0

Aday, L. A., & Andersen, R. (1974). A Framework for the Study of Access to Medical Care. *Health Services Research*, *9*(3), 208–220. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071804/pdf/hsresearch00560-0030.pdf

Adesanya, T., Gbolahan, O., Ghannam, O., Miraldo, M., Patel, B., Verma, R., & Wong, H. (2012). Exploring the Responsiveness of Public and Private Hospitals in Lagos, Nigeria. *Journal of Public Health Research*, *1*(1), 2–6. https://doi.org/10.4081/jphr.2012.e2

Afulani PA,& Moyer CA.(2019) Accountability for respectful maternity care. Lancet. 394(10210),1692–3. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)32258-5/fulltext

Alavi, M., Moradi-Lakeh, M., Forouzan, A. S., Sajjadi, H., Shati, M., & Ardakani, M. R. K. (2019). Predictors of poor responsiveness in physical rehabilitation centers in Tehran. *Medical journal of the Islamic Republic of Iran*, 33 (18), 1-159 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6662541/

Ameh, S., Gómez-Olivé, F. X., Kahn, K., Tollman, S. M., &Klipstein-Grobusch, K. (2017). Relationships between structure, process and outcome to assess quality of integrated chronic disease management in a rural South African setting:

applying a structural equation model. *BMC health services research*, 17(1), 229. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5363044/

Andel, C., Davidow, S. L., Hollander, M., & Moreno, D. A. (2012). The economics of health care quality and medical errors. *Journal of Health Care Finance*, *39*(1), 39–50. https://pubmed.ncbi.nlm.nih.gov/23155743/

Asefa, A., McPake, B., Langer, A., Bohren, M. A., & Morgan, A. (2020). Imagining maternity care as a complex adaptive system: understanding health system constraints to the promotion of respectful maternity care. *Sexual and reproductive health matters*, *28*(1), e1854153. https://doi.org/10.1080/26410397.2020.1854153

Baral, Y. R., Lyons, K., Skinner, J., & van Teijlingen, E. R. (2010). Determinants of skilled birth attendants for delivery in Nepal. *Kathmandu University medical journal (KUMJ)*, *8*(31), 325–332. https://doi.org/10.3126/kumj.v8i3.6223 https://pubmed.ncbi.nlm.nih.gov/22610739/

Berwick, D., & Fox, D. M. (2016). "Evaluating the Quality of Medical Care": Donabedian's Classic Article 50 Years Later. *The Milbank quarterly*, 94(2), 237–241. https://doi.org/10.1111/1468-0009.12189

Bhattacharyya, S., Srivastava, A., & Avan, B. I. (2013). Delivery should happen soon and my pain will be reduced: understanding women's perception of good delivery care in India. *Global health action*, *6*(1), 22635. http://europepmc.org/articles/3838967

Bhutta, Z. A., Das, J. K., Bahl, R., Lawn, J. E., Salam, R. A., Paul, V. K., ... & Walker, N. (2014). Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost?. *The Lancet*, 384(9940), 347-370. https://pubmed.ncbi.nlm.nih.gov/24853604/

Bohren, M. A., Hunter, E. C., Munthe-Kaas, H. M., Souza, J. P., Vogel, J. P., & Gülmezoglu, A. M. (2014). Facilitators and barriers to facility-based delivery in low-and middle-income countries: A qualitative evidence synthesis. *Reproductive health*, *11*(1),71. https://pubmed.ncbi.nlm.nih.gov/25238684/

Bozzo A. (2018). A challenge to unqualified medical confidentiality. *Journal of medical ethics*, *44*(4), 248–252. https://doi.org/10.1136/medethics-2017-104359

Bramesfeld, A., Klippel, U., Seidel, G., Schwartz, F. W., &Dierks, M. L. (2007). How do patients expect the mental health service system to act? Testing the WHO responsiveness concept for its appropriateness in mental health care.*Social science & medicine*, *65*(5), 880-889. https://ideas.repec.org/a/eee/socmed/v65y2007i5p880-889.html

Choi, L., & Lotz, S. L. (2018). Exploring antecedents of customer citizenship behaviors in services. *The Service Industries Journal*, *38*(9–10), 607–628. https://doi.org/10.1080/02642069.2017.1414194

Chuma, J., Musimbi, J., Okungu, V., Goodman, C., & Molyneux, C. (2009). Reducing user fees for primary health care in Kenya: Policy on paper or policy in practice? *International Journal for Equity in Health*, 8,15 https://doi.org/10.1186/1475-9276-8-15

Cleary, S. M., Molyneux, S., & Gilson, L. (2013). Resources, attitudes, and culture: an understanding of the factors that influence the functioning of accountability mechanisms in primary health care settings. *BMC health services research*, 13(1), 320. https://pubmed.ncbi.nlm.nih.gov/23953492/

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Sage http://www.drbrambedkarcollege.ac.in/sites/default/files/E%20Book%20Research%20Design%20Cressweell%202014.pdf

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE. https://us.sagepub.com/en-us/nam/designing-and-conducting-mixed-methods-research/book241842

Coulter, A., & Jenkinson, C. (2005). European patients' views on the responsiveness of health systems and healthcare providers. *European Journal of Public Health*, *15*(4), 355–360. https://doi.org/10.1093/eurpub/cki004

Donabedion, A. (1980). *Explorations in quality assesment and monitoring*. Health administration press. https://psnet.ahrq.gov/issue/definition-quality-and-approaches-its-assessment-vol-1-explorations-quality-assessment-and

Farahbakhsh, M., Bazargani, H. S., Saadati, M., Tabrizi, J. S., Golestani, M., & Zakery, A. (2019). Health services utilisation and responsiveness profiles in Iran: A provincial household study. *Family Medicine and Community Health*, *7*(1), e000007. https://doi.org/10.1136/fmch-2018-000007

Flanagan, P., Johnston, R., & Talbot, D. (2005). Customer confidence: the development of a "preexperience" concept. *International Journal of Service Industry Management*, 16(4),373-384 https://www.researchgate.net/publication/235281892_Customer_confidence_The_development_of_a_pre-experience_concept

Florentini, G., Robone, S., &Verzulli, R. (2018). How do hospitalspecialty characteristics influence health system responsiveness? An empirical evaluation of inpatient care in the Italian region of EmiliaRomagna.*Health economics*, 27(2), 266-281. https://pubmed.ncbi.nlm.nih.gov/28660624/

Forouzan, A. S., Ghazinour, M., Dejman, M., Rafeiey, H., & San Sebastian, M. (2011).Testing the WHO responsiveness concept in the Iranian mental healthcare system: a qualitative study of service users. *BMC health services research*, *11*(1), 325. https://pubmed.ncbi.nlm.nih.gov/22115499/

Freedman, L. P., & Kruk, M. E. (2014). Disrespect and abuse of women in childbirth: challenging the global quality and accountability agendas. *The Lancet*, 384(9948), e42-e44. https://afar.info/id=2622/en

Geldsetzer, P., Haakenstad, A., James, E. K., & Atun, R. (2018). Non-technical health care quality and health system responsiveness in middle-income countries: a cross-sectional study in China, Ghana, India, Mexico, Russia, and South Africa. *Journal of global health*, 8(2), 020417.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6189548/

Greene E, & Stanback J.(2012) Old barriers need not apply opening doors for new contraceptives in the developing world. *Contraception.* 85(1),11–14 https://www.researchgate.net/publication/51783758_Old_barriers_need_not_apply_Opening_doors_for_new_contraceptives_in_the_developing_world

Gurung, R., Ruysen, H., Sunny, A. K., Day, L. T., Penn-Kekana, L., Målqvist, M., … Kc, A. (2021). Respectful maternal and newborn care: measurement in one EN-BIRTH study hospital in Nepal. BMC *Pregnancy and Childbirth*, 21(1), 228-232. https://doi.org/10.1186/s12884-020-03516-4

Honikman, S., Fawcus, S., & Meintjes, I. (2015). Abuse in South African maternity settings is a disgrace: Potential solutions to the problem. *SAMJ: South African Medical Journal*, *105*(4), 284-286. https://pubmed.ncbi.nlm.nih.gov/26294871/

Kenya National Bureau of Statistics and ICF Macro (2010). *Kenya demographic and health survey 2008-09*. KNBS and ICF Macro. https://dhsprogram.com/pubs/pdf/fr229/fr229.pdf

Kenya National Bureau of Statistics and ICF Macro (2017). *Kenya demographic and health survey 2014*. KNBS and ICF Macro. http://dhsprogram.com/pubs/pdf/OD71/OD71.pdf.

Kenya National Bureau of Statistics (2021). *Economic survey, 2021*. KNBS. https://www.knbs.or.ke/wp-content/uploads/2021/09/Economic-Survey-2021.pdf

Kirigia, J. M., &Kirigia, D. G. (2011). The essence of governance in health development. International archives of medicine, 4(1), 11. https://apps.who.int/iris/bitstream/handle/10665/326429/9789289002745-eng.pdf

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International. https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.aspx?ReferenceID=1285422

Khosla, R., Zampas, C., Vogel, J. P., Bohren, M. A., Roseman, M., & Erdman, J. N. (2016). International human rights and the mistreatment of women during childbirth. *Health and human rights*, 18(2), 131. https://pubmed.ncbi.nlm.nih.gov/28559681/

Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and

populations. *International Journal for Equity in Health*, *12*(1), 18. https://doi.org/10.1186/1475-9276-12-18

Liambila, W. N., & Kuria, S. N. (2014). Birth attendance and magnitude of obstetric complications in Western Kenya: A retrospective case–control study. *BMC Pregnancy and Childbirth*, *14*(1), 311. https://doi.org/10.1186/1471-2393-14-311

Lin, Y.-P., Watson, R., & Tsai, Y.-F. (2013). Dignity in care in the clinical setting: A narrative review. *Nursing Ethics*, *20*(2), 168–177. https://doi.org/10.1177/0969733012458609

Lodenstein, E., Dieleman, M., Gerretsen, B., &Broerse, J. E. (2016). Health provider responsiveness to social accountability initiatives in low-and middle-income countries: a realist review. *Health policy and planning*, 32(1), 125-140. https://research.vu.nl/en/publications/health-provider-responsiveness-to-social-accountability-initiativ

Lowe, N. K. (2014). Dignity in childbirth. Journal of Obstetric, Gynecologic & *Neonatal Nursing*, 43(2), 137-138. https://socialwork.rutgers.edu/file/3550/download

Lyberg, A., & Severinsson, E. (2010). Fear of childbirth: mothers' experiences of team-midwifery care - A follow-up study. *Journal of nursing management*, *18*(4), 383–390. https://doi.org/10.1111/j.1365-2834.2010.01103.x

Marhamati, T., Torkzahrani, S., Nasiri, M., & Lotfi, R. (2017). The examination of quality of pregnancy care based on the World Health Organization's "Responsiveness" model of selected pregnant women in Tehran. *Electronic Physician*, *9*(2), 3720–3727. https://doi.org/10.19082/3720

Mbiti, I., & Serra, D. (2018). *Health Workers' Behavior, Patient Reporting and Reputational Concerns: Lab-in-the-Field Experimental Evidence from Kenya*. https://ideas.repec.org/p/iza/izadps/dp11352.html

McPake, B., Brikci, N., Cometto, G., Schmidt, A., & Araújo, E.C. (2011). Removing user fees: learning from international experience to support the process. *Health policy and planning*, *2(2)*104-117 .

https://www.researchgate.net/publication/221700023_Removing_user_fees_Learning_from_international_experience_to_support_the_process

Ministry of Health [Kenya]. (2018). *Free maternity services. Government circular reference ACC/FMHS/1/28A.Nairobi* https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-018-0774-4

Mirzoev, T., & Kane, S. (2017). What is health systems responsiveness? Review of existing knowledge and proposed conceptual framework. *BMJ global health*, 2(4), e000486. https://gh.bmj.com/content/bmjgh/2/4/e000486.full.pdf

Montesinos, R., Urrunaga, D., Mendoza G., Taype-Rondan, Á., Helguero, L.M., Martinez F., Centeno, D., Jiméne, Y., Taminche, R., Paucar, L., & Villamonte W. (2018). Disrespect and abuse during childbirth in fourteen hospitals in nine cities of Peru. *International Journal of Gynecology & Obstetrics, 140*(2), 184-190 https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1002/ijgo.12353

Mugenda, O.M., &Mugenda, A.G. (2003). *Research Methods: Quantitative and Qualitative Approaches* (Rev ed). African Centre for Technology Studies (ACTS) https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1917785

Murang'a County Intergrated Development plan (2018). *County Government of Murangá* , CIDP 2018-2022 http://10.0.0.19/handle/123456789/155

Murante, A. M., Seghieri, C., Vainieri, M., & Schäfer, W. L. A. (2017). Patient-perceived responsiveness of primary care systems across Europe and the relationship with the health expenditure and remuneration systems of primary care doctors. *Social Science & Medicine*, *186*(1), 139–147. https://doi.org/10.1016/j.socscimed.2017.06.005

Murray, C. J., & Frenk, J. (2000). framework for assessing the performance of health systems. *Bulletin of the World Health Organization*, *78*(6), 717–731. https://www.ncbi.nlm.nih.gov/pmc/articles/pmid/10916909/

Nahar, S., & Costello, A. (1998). The hidden cost of 'free' maternity care in Dhaka, Bangladesh. *Health policy and planning*, 13(4), 417–422. https://doi.org/10.1093/heapol/13.4.417

Naik, A. D., Dyer, C. B., Kunik, M. E., & McCullough, L. B. (2009). Patient autonomy for the management of chronic conditions: Atwo-component re-conceptualization. *The American Journal of Bioethics*, 9(2), 23-30. https://philpapers.org/rec/NAIPAF

Nair, M., Yoshida, S., Lambrechts, T., Boschi-Pinto, C., Bose, K., Mason, E. M., & Mathai, M. (2014). Facilitators and barriers to quality of care in maternal, newborn and child health: a global situational analysis through metareview. *BMJ open*, 4(5), e004749. https://bmjopen.bmj.com/content/4/5/e004749

Nelson, K. L., & Purtle, J. (2018). Perceptions of patient-provider communication and receipt of mental health treatment among older adults with depressive symptoms.*Aging & mental health*, 4,485-490 https://pubmed.ncbi.nlm.nih.gov/29338318/

Nicholls, J., David, A. L., Iskaros, J., & Lanceley, A. (2019). Consent in pregnancy: A qualitative study of the views and experiences of women and their healthcare professionals. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, *238*, 132-137. https://www.semanticscholar.org/paper/Consent-in-pregnancy%3A-A-qualitative-study-of-the-of-Nicholls-David/eb2ee5202d0c197dd18ec2c1116aa0ba61d5ea3c

Nzioki, J. M., Onyango, R. O., & Ombaka, J. H. (2015). Efficiency and factors influencing efficiency of Community Health Strategy in providing Maternal and Child Health services in Mwingi District, Kenya: An expert opinion perspective. *The Pan African medical journal*, 20, Article 88 https://doi.org/10.11604/pamj.2015.20.88.4711

Obare, F., Abuya, T., Matanda, D., & Bellows, B. (2018). Assessing the community-level impact of a decade of user fee policy shifts on health facility deliveries in

Kenya, 2003-2014. *International journal for equity in health*, *17*(1), 65. https://doi.org/10.1186/s12939-018-0774-4

Oladapo, O. T., & Osiberu, M. O. (2009). Do sociodemographic characteristics of pregnant women determine their perception of antenatal care quality? *Maternal and child health journal*, *13*(4), 505–511. https://doi.org/10.1007/s10995-008-0389-2

Oluoch-Aridi, J., Afulani, P. A., Guzman, D. B., Makanga, C., & Miller-Graff, L. (2021). Exploring women's childbirth experiences and perceptions of delivery care in peri-urban settings in Nairobi, Kenya. *Reproductive health*, *18*(1), 83. https://doi.org/10.1186/s12978-021-01129-4

Orth, M., Averina, M., Chatzipanagiotou, S., Faure, G., Haushofer, A., Kusec, V., ... & Twomey, P. J. (2019). Opinion: redefining the role of the physician in laboratory medicine in the context of emerging technologies, personalised medicine and patient autonomy ('4P medicine'). *Journal of clinical pathology*, 72(3), 191-197. https://jcp.bmj.com/content/72/3/191

Osborn, R., Squires, D., Doty, M. M., Sarnak, D. O., & Schneider, E. C. (2016). In new survey of eleven countries, US adults still struggle with access to and affordability of healthcare. *Health Affairs*, 35(12),2327-2336. https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.1088

Overgaard, C., Fenger-Grøn, M., & Sandall, J. (2012). The impact of birthplace on women's birth experiences and perceptions of care. *Social science & medicine*, *74*(7), 973–981. https://doi.org/10.1016/j.socscimed.2011.12.023

Owili, P. O., Muga, M. A., Mendez, B. R., & Chen, B. (2017). Quality of maternity care and its determinants along the continuum in Kenya: A structural equation modeling analysis. *PloS one*, 12(5), e0177756 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0177756

Palikhey, E., Sthapit, S. R., Gautam, S., Gauchan, D., Bhandari, B., Joshi, B. K., &Sthapit, B. R. (2016). *Baseline Survey Report III. Hanku, Jumla. Integrating Traditional Crop Genetic Diversity into Technology: Using a Biodiversity Portfolio Approach to Buffer against Unpredictable Environmental Change in the Nepal Himalayas*. LI-BIRD, NARC and Bioversity International, Pokhara, Nepal..

Pan, X., Chen, M., Hao, Z., & Bi, W. (2018). The Effects of Organizational Justice on Positive Organizational Behavior: Evidence from a Large-Sample Survey and a Situational Experiment. *Frontiers in psychology*, *8*(2315), 1078- 1664 https://doi.org/10.3389/fpsyg.2017.02315

Peltzer, K., & Phaswana-Mafuya, N. (2012). Patient experiences and health system responsiveness among older adults in South Africa. *Global health action*, 5(1), 18545 https://www.frontiersin.org/articles/10.3389/fpsyg.2017.02315/full

Penn, C., &Watermeyer, J. (2018). *Communicating Across Cultures and Languages intheHealthCareSetting.* https://www.perlego.com/book/3487934/communicating-across-cultures-and-languages-in-the-health-care-setting-voices-of-care-pdf

Petek, D., Künzi, B., Kersnik, J., Szecsenyi, J., & Wensing, M. (2011). Patients' evaluations of European general practice—Revisited after 11 years.*: Journal of the International Society for Quality in Health Care*, *23*(6), 621–628. https://doi.org/10.1093/intqhc/mzr052

Philipsen NC. (2010) Confidentiality in childbirth education. *The Journal of Perinatal Education*, 19(2), 48-49. DOI: 10.1624/105812410x495541.

Reach G. (2013). Patient autonomy in chronic care: solving a paradox. *Patient preference and adherence*, *8*, 15–24. https://doi.org/10.2147/PPA.S55022

Republic of Kenya (2010) *The constitution of Kenya 2010*. https://www.constituteproject.org/constitution/Kenya_2010.pdf

Rieselbach, R. E., Crouse, B. J., & Frohna, J. G. (2010). Teaching primary care in community health centers: Addressing the workforce crisis for the underserved. *Annals of Internal Medicine*, *152*(2), 118–122. https://doi.org/10.7326/0003-4819-152-2-201001190-00186

Robone, S., Rice, N., & Smith, P. C. (2011). Health Systems' Responsiveness and Its Characteristics: A Cross-Country Comparative Analysis. *Health Services Research*, *46*(6 Pt 2), 2079–2100. https://doi.org/10.1111/j.1475-6773.2011.01291.x

Rosen, H. E., Lynam, P. F., Carr, C., Reis, V., Ricca, J., Bazant, E. S., & Bartlett, L. A. (2015). Direct observation of respectful maternity care in five countries: a

cross-sectional study of health facilities in East and Southern Africa. *BMC pregnancy and childbirth*, *15*(1), 306. https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-015-0728-4

Röttger, J., Blümel, M., Fuchs, S., &Busse, R. (2014). Assessing the responsiveness of chronic disease care-Is the World Health Organization's concept of health system responsiveness applicable?. *Social Science & Medicine*, 113, 87-94. https://ideas.repec.org/a/eee/socmed/v113y2014icp87-94.html

Röttger, J., Blümel, M., Engel, S., Grenz-Farenholtz, B., Fuchs, S., Linder, R., ...&Busse, R. (2015). Exploring health system responsiveness in ambulatory care and disease management and its relation to other dimensions of health system performance (RAC)–study design and methodology. *International journal of health policy and management*, 4(7), 431. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4493583/

Rullán, M., Arantzamendi, M., Carvajal, A., Martínez, M., de Ormijana, A. S., &Centeno, C. (2018). The Patient Dignity Inventory: Just another evaluation tool? Experiences with advanced cancer patients.*Palliative & supportive care*, *16*(1), 73-79. https://dadun.unav.edu/handle/10171/51767

Sajjadi, F., Moradi-Lakeh, M., Nojomi, M., Baradaran, H. R., & Azizi, F. (2015). Health system responsiveness for outpatient care in people with diabetes Mellitus in Tehran. *Medical Journal of the Islamic Republic of Iran*, *29*(1), 293-106. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4764286/pdf/MJIRI-29-293.pdf

Shakibazadeh, E., Namadian, M., Bohren, M. A., Vogel, J. P., Rashidian, A., Nogueira Pileggi, V. ... & Souza, J. P. (2018). Respectful care during childbirth in health facilities globally: A qualitative evidence synthesis. BJOG: *An International Journal of Obstetrics & Gynaecology*, 125(8), 932-942. https://obgyn.onlinelibrary.wiley.com/doi/10.1111/1471-0528.15015

Sharma, J., Leslie, H,H., Kundu, F,& Kruk. M.E..(2018). Poor Quality for Poor Women Inequities in the Quality of Antenatal and Delivery Care in Kenya.

*PLOS ONE*, 12(1), e0171236. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0171236

Sheferaw, E. D., Bazant, E., Gibson, H., Fenta, H. B., Ayalew, F., Belay, T. B., ... & Van Den Akker, T. (2017). Respectful maternity care in Ethiopian public health facilities. *Reproductive health*, *14*(1), 60. https://d-nb.info/1208762087/34

Sheikh, K., Gilson, L., Agyepong, I. A., Hanson, K., Ssengooba, F., & Bennett, S. (2011). Building the field of health policy and systems research: framing the questions. PLoS medicine, 8(8), e1001073. https://open.uct.ac.za/handle/11427/16078

Siddiqi, S., Masud, T. I., Nishtar, S., Peters, D. H., Sabri, B., Bile, K. M., &Jama, M. A. (2009). Framework for assessing governance of the health system in developing countries: Gateway to good governance. *Health policy*, *90*(1), 13-25. https://www.healthresearchweb.org/files/Frameworkforassessinggovernanceofthehealthsystemin.pdf

Silva, A. D. (2000). *A Framework for Measuring Responsiveness*. World Health Organization. https://file.qums.ac.ir/repository/vct/parastari

Smith N, Sudhinaraset, M,,& Montagu, D. (2016) Clinical and perceived quality of care for maternal, neonatal and antenatal care in Kenya and Namibia: The service provision assessment. *Reproductive Health,* 13(92), 16-18 https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-016-0208-y

Starfield, B. (2011). The hidden inequity in health care. *International journal for equity in health*, 10, (1), 1-3. https://equityhealthj.biomedcentral.com/articles/10.1186/1475-9276-10-15

Srivastava, A., Avan, B. I., Rajbangshi, P., & Bhattacharyya, S. (2015). Determinants of women's satisfaction with maternal health care: A review of literature from developing countries. *BMC pregnancy and childbirth*, 15(1), 97. https://www.tandfonline.com/doi/full/10.1080/16549716.2017.1386932

Topp, S. M., & Chipukuma, J. M. (2015). A qualitative study of the role of workplace and interpersonal trust in shaping service quality and responsiveness in

Zambian primary health centres. *Health policy and planning*, 31(2), 192-204. https://pubmed.ncbi.nlm.nih.gov/25999586/

Tranmer M., & Elliot E., (2008), "*Multiple Linear Regression," The Cathie Marsh Centre for Census and Survey Research (CCSR*) https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=451144

Tehrani,T., Seyed, S., Fallahi, A., Mohammadi, F., Gillespie, M. (2018). Respecting the privacy of hospitalized patients: An integrative review. *Nursing Ethics*. doi:10.1177/0969733018759832

Valentine, N., De Silva, A., & Murray, C. (2000). Estimating responsiveness level and distribution for 191 countries: methods and results. Geneva: World Health Organization. from the developing world. *Burns, 44*(1), 168-174. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.172.2124&rep=rep1&type=pdf

Valentine, N., Prasad, A., Rice, N., Robone, S., & Chatterji, S. (2010). Health systems responsiveness: A measure of the acceptability of health-care processes and systems from the user's perspective. In P. C. Smith, E. Mossialos, I. Papanicolas, & S. Leatherman (Eds.), *Performance Measurement for Health System Improvement* (1st ed., pp. 138–186). Cambridge University Press. https://doi.org/10.1017/CBO9780511711800.007

Valentine, N. B., & Bonsel, G. J. (2016). Exploring models for the roles of health systems' responsiveness and social determinants in explaining universal health coverage and health outcomes. *Global Health Action, 9*(1), e 26942516. https://doi.org/10.3402/gha.v9.29329

Valentine, N. B., de Silva, A., Kawabata, K., Darby, C., Murray, C. J., & Evans, D. B. (2018). Health system responsiveness: concepts, domains and operationalization. In O. Fekri, E. R. Macarayan, & N. Klazinga, *Health systems performance assessment: Debates, methods and empiricism* (pp 573-96). World Health Organization. https://apps.who.int/iris/handle/10665/42735

Van der Kooy, J., Valentine, N. B., Birnie, E., Vujkovic, M., de Graaf, J. P., Denktaş, S., Steegers, E. A., & Bonsel, G. J. (2014). Validity of a questionnaire

measuring the world health organization concept of health system responsiveness with respect to perinatal services in the Dutch obstetric care system. *BMC health services research*, *14*, 622. https://doi.org/10.1186/s12913-014-0622-1

Van Teijlingen, E. (2003) 'The Qualitative Researcher's Companion', *Sociological Research Online*, 8(1), 113–114. doi: 10.1177/136078040300800106 https://journals.sagepub.com/doi/10.1177/136078040300800106

Vaughn, V. M., Saint, S., Krein, S. L., Forman, J. H., Meddings, J., Ameling, J., ...& Chopra, V. (2019). Characteristics of healthcare organisations struggling to improve quality: Results from a systematic review of qualitative studies. *British Medical Journal*, 28(1), 74-84. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6373545/

Vemuri, J. L. N., Kiranmai, B., Cheedarla, V., & Laxmi, S. B. (2019). A community based cross-sectional study on the health system responsiveness in the urban field practicing area of tertiary health care centre, Hyderabad. *International Journal of Community Medicine and Public Health*, *6*(2), 860–864. https://doi.org/10.18203/2394-6040.ijcmph20190220

Vedam, S., Stoll, K., McRae, D. N., Korchinski, M., Velasquez, R., Wang, J., ... & CCinBC Steering Committee. (2019). Patient-led decision making: Measuring autonomy and respect in Canadian maternity care. *Patient education and counseling*, *1*02(3), 586-594. https://pubmed.ncbi.nlm.nih.gov/30448044/

Vermeir, P., Downs, C., Degroote, S., Vandijck, D., Tobback, E., Delesie, L., Mariman, A., De Veugele, M., Verhaeghe, R., Cambré, B., & Vogelaers, D. (2018). Intraorganizational Communication and Job Satisfaction Among Flemish Hospital Nurses: An Exploratory Multicenter Study. *Workplace health & safety*, *66*(1), 16–23. https://doi.org/10.1177/2165079917703411

Walsh, K., &Kowanko, I. (2002).Nurses' and patients' perceptions of dignity. *International Journal of Nursing Practice*, 8(3), 143-151. https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.aspx?ReferenceID=140318

World Health Organization. (2000). *The World health report: 2000: health systems: improving performance*. World Health Organization. https://apps.who.int/iris/handle/10665/42281

World Health Organization. (2006). *The world health report 2006: working together for health.* World Health Organization. https://apps.who.int/iris/handle/10665/43432

World Health Organization. (2007*). People at the centre of health care: harmonizing mind and body, people and systems*. https://apps.who.int/iris/handle/10665/205628

World Health Organization (2008). *World Health Report 2008 "Primary Health Care: Now More Than Ever*." Geneva: WHO Press, https://apps.who.int/iris/handle/10665/43949

World Health Organization. (2016). *Department of maternal, newborn, child and adolescent health (MCA): progress report 2014–15*. World Health Organization. https://apps.who.int/iris/handle/10665/205631

World Health Organization. (2018). *WHO recommendations: intrapartum care for a positive childbirth experience*. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf

Yakob, B., &Ncama, B. P. (2017) Measuring health system responsiveness at facility level in Ethiopia: Performance, correlates and implications. *BMC health services research,* 17(1), 263. https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2224-1

Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA network open,* 3(3), e203976. https://doi.org/10.1001/jamanetworkopen.2020.3976

## APPENDIX 1: INFORMED CONSENT

**Evaluating the responsiveness of childbirth services in Murangá County Referral Hospital.**

Sponsor: Self

Elizabeth Wamoni Maina

Kenya Methodist University,

P.O. Box 51894-00200, Nairobi

Tel: +254 720 757166:

E-mail: wamoni38@gmail.com

### 1. Introduction

This Consent Form contains information about the research named above. In order to be sure that you are informed about being in this research, we are asking you to read (or have read to you) this Consent Form. You will also be asked to sign it (or make your mark in front of a witness). We will give you a copy of this form. This consent form might contain some words that are unfamiliar to you. Please ask us to explain anything you may not understand.

### 2. Reason for the Research

You are being asked to take part in research to understand why there are low rates of deliveries by skilled birth attendants in Murangá County despite the availability of free maternity services. This will to identify areas of improvement or better services.

### 3. General Information about Research

Post-natal mothers receiving care two weeks after delivery in this hospital will be interviewed. Data will be collected using self-administered structured questionnaires

**4. Your Part in the Research**

If you agree to be in the research, you will be asked to fill in a questionnaire containing 20 questions.Your part in the research will last about 20 minutes. About 129 women from Murangá County Referral Hospital will take part in this research.

**5. Possible Risks**

The study will not involve any physical or psychological harm.

**6. Possible Benefits**

There will be no direct benefit from participating in this study. Findings from this study will be useful in improving gaps in service provision for mothers accessing childbirth services. The study therefore will be of benefit to the mothers who seek childbirth services in this facility, the hospital managers, and county teams who will have to work on improving identified gaps for better service provision. It will also benefit other scholars who may be interested in the same study area

**7. If You Decide Not to Be in the Research**

You are free to decide if you want to be in this research. Your decision will not affect the health care you would normally receive.

**8. Confidentiality**

We will protect information about you and your taking part in this research to the best of our ability. You will not be named in any reports. However, the staff of nurses,

doctors and other health care providers providing perinatal services may sometimes look at your research records. Someone from the IRB might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

**9. Compensation**

You will not be paid, since you do not have to take part in this research.

**10. Staying in the Research**

If you decide to take part in this research, we ask you to use only the fill in the questionnaire provided.

**11. Alternatives to Participation**

You do not have to participate in the research in order to receive services

Alternatives include:

- Other contraceptive methods.
- Receiving services without taking part in the research.
- Etc.

**12. Leaving the Research**

You may leave the research at any time. If you choose to take part, you can change your mind at any time and withdraw.

Also, you may be asked to leave the research if :

- the principal investigator feels it is best for you, or
- you are not able to fill in the questionnaire

- the research is stopped.

**13. If You Have Other Questions**

Please call Elizabeth 0720757166 or come back to the clinic right away.

**14. Your rights as a Participant**

This research has been reviewed and approved by the NACOSTI and KEMU SERC. An IRB is a committee that reviews research studies in order to help protect participants. If you have any questions about your rights as a research participant you may contact KEMU SERC Tel. 254-064-30301.

**VOLUNTEER AGREEMENT**

The above document describing the benefits, risks and procedures for the research titled (name of research) has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date_____ Signature or mark of volunteer_____

**If volunteers cannot read the form themselves, a witness must sign here:**

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date_____ Signature of Witness _____

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date _____ Signature of Person Who Obtained Consent _____

## APPENDIX 2: QUESTIONNAIRE

**Evaluating the responsiveness of childbirth services in Murangá County Referral Hospital.**

Survey:|_____|Start time:|_____| End time: |_____|

**Section A: Socio-demographic characteristics**

1. Age (in completed year) _____

2. Parity (Total number of pregnancies that ended in a live or still birth)
   - First pregnancy
   - 2-5
   - 5 and above
3. Marital status
   - Single
   - Married
   - Divorced/separated
   - Widowed
4. What is your occupation?
   - Student
   - Unemployed
   - Employed
5. What is your total household income per month in Kenya Shillings?
   - None
   - 1-5,000
   - 5000-10,000
   - Above 10,000
6. Place of usual residence
   - Rural

Urban

**Section B, C & D: Responsiveness domains, access, and process of care factors**

Each of the domains of 'respect for persons' dimension and access factors are rated on a five-point Likert's scale where 1 corresponds with strongly agree, 2- agree, 3-Neutral, 4-Disagree, 5-Strongly disagree. Instructions: For each of the aspects, please tick the appropriate rating in the corresponding box on the right

| | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| **B** | **Responsiveness domains** | **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly agree** |
| 7 | **Dignity:**<br>During your current childbirth, doctors, nurses, and other health care providers (HCPs) treated you with respect | | | | | |
| 8 | **Confidentiality:**<br>In your opinion, talks with Doctors, Nurses, and other HCPs were done in private so that other people you did not want could not overhear? | | | | | |
| 9 | **Autonomy:**<br>In your opinion, you were involved in making decisions about your care or treatment all the time | | | | | |
| 10 | **Communication:**<br>In your opinion, doctors, nurses, and other HCPs explained clearly giving information in a way you could understand | | | | | |

| C | **Access factors** | **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly agree** |
|---|---|---|---|---|---|---|
| 11 | Distance from your home to the health facility is very far | | | | | |
| 12 | In your opinion, HF is open full time at the people's convenience | | | | | |
| 13 | Costs of accessing maternal care in this HF are too high | | | | | |
| 14 | Services offered to reflect respect for your culture | | | | | |
| **D** | **Process of care factors** | **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
| 15. | In your opinion, complete examination tests (laboratory and scans) were performed on you as prescribed | | | | | |
| 16 | The midwife encouraged you during labor | | | | | |
| 17 | In your opinion, doctors, Nurses and other health care providers used kind words while speaking to you | | | | | |
| **E** | **Structural factors** | **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly Agree** |
| 18 | In your opinion, delivery rooms are enough in the HF | | | | | |
| 19 | In your opinion, beds are enough in the HF | | | | | |
| 20 | In your opinion, patients can easily obtain good quality drugs in a timely manner | | | | | |

## APPENDIX 3: LETTER OF INTRODUCTION

**RE: DATA COLLECTION**

I am a Master of Science student in The Kenya Methodist University. I am carrying out research titled**. "Evaluating responsiveness of childbirth services in Murangá County Referral Hospital"**

This is a prerequisite for the partial fulfillment of the award of a Master of Science degree.

The purpose of this letter is to request your facility to permit me to collect data for this study. I will uphold ethical standards in regard to all interactions with the clients and workers in this facility.

Thank you.

Most sincerely,

Elizabeth Wamoni Maina

# APPENDIX 4: NACOSTI PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **373065**

Date of Issue: **20/September/2020**

## RESEARCH LICENSE

**This is to Certify that Ms.. Elizabeth Wamoni Maina of Kenya Methodist University, has been licensed to conduct research in Muranga on the topic: POSTNATAL MOTHERS' PERSPECTIVES ON FACTORS INFLUENCING RESPONSIVE CHILDBIRTH SERVICES IN MURANG'A COUNTY. for the period ending : 20/September/2021.**

License No: **NACOSTI/P/20/6753**

**373065**

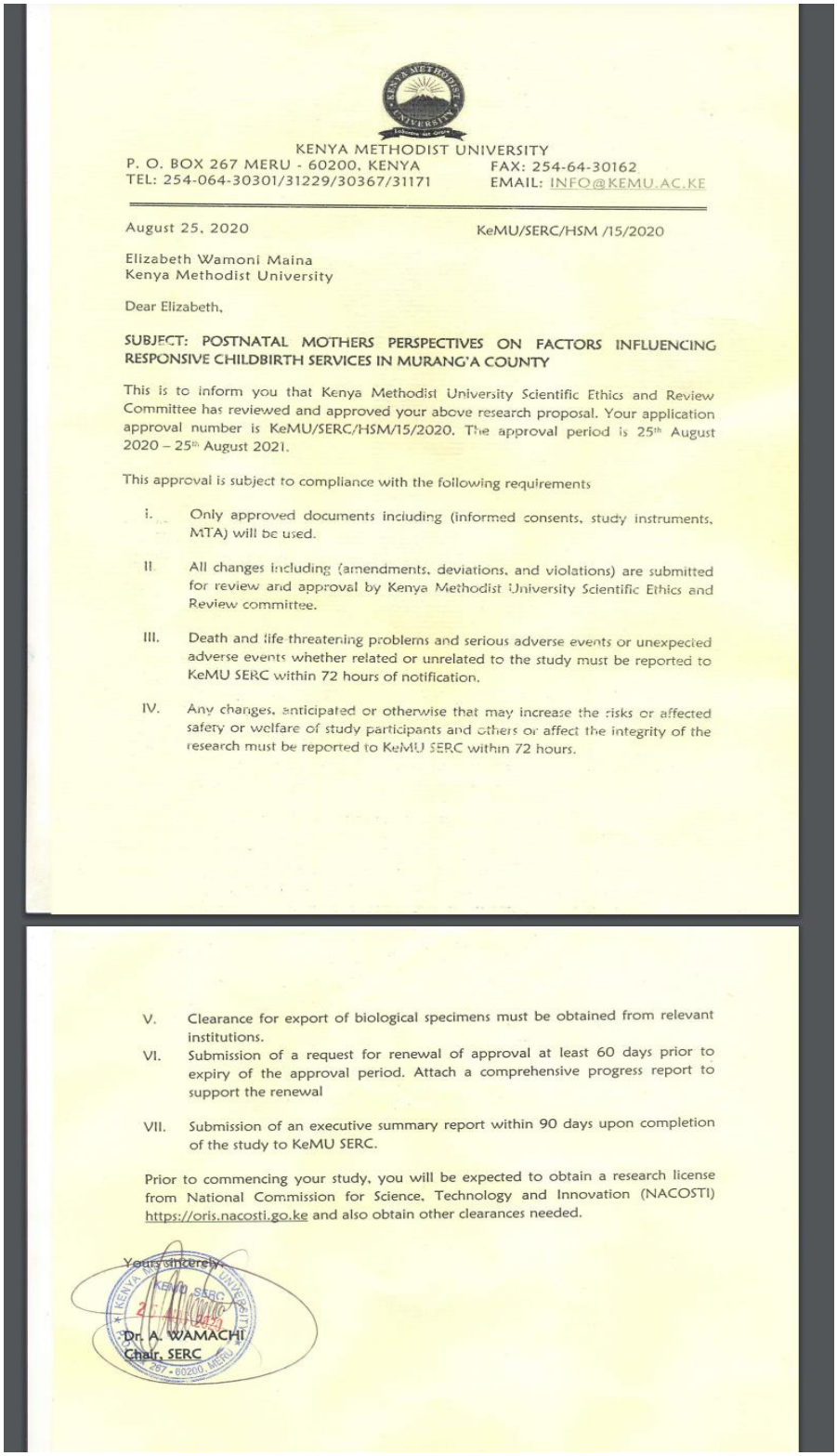
Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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

# APPENDIX 5: KEMU APPROVAL



KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171
FAX: 254-64-30162
EMAIL: INFO@KEMU.AC.KE

August 25, 2020

KeMU/SERC/HSM /15/2020

Elizabeth Wamoni Maina
Kenya Methodist University

Dear Elizabeth,

**SUBJECT: POSTNATAL MOTHERS PERSPECTIVES ON FACTORS INFLUENCING RESPONSIVE CHILDBIRTH SERVICES IN MURANG'A COUNTY**

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU/SERC/HSM/15/2020. The approval period is 25th August 2020 – 25th August 2021.

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 Kenya Methodist University Scientific Ethics and Review committee.

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 KeMU SERC within 72 hours of notification.

IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC 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 KeMU SERC.

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

Yours sincerely,

KeMU SERC

Dr. A. WAMACHI
Chair, SERC