

**KAIRUKI UNIVERSITY**

**DEPARTMENT OF COMMUNITY HEALTH**



UPTAKE OF FAMILY PLANNING AMONG POSTPARTUM WOMEN AT MWANANYAMALA  
REGIONAL REFERRAL HOSPITAL IN DAR ES SALAAM, TANZANIA

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN PUBLIC HEALTH

NOVEMBER 2024

**CERTIFICATION**

It is hereby certified that the undersigned has read and hereby recommends acceptance by Kairuki University, a dissertation titled: "Uptake of family planning among postpartum women at Mwananyamala Regional Referral Hospital in Dar es Salaam Tanzania" in partial fulfillment of the requirement for the degree of Master of Science in public health.

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## **ACKNOWLEDGEMENT AND DEDICATION**

I would like to express my gratitude to all the individuals who supported me throughout the course of this study. First and foremost, I am thankful to the Almighty God for granting me the strength and grace needed to navigate the challenges of this journey.

I extend my deepest appreciation to my supervisors, Prof. Ntabaye, Prof. Godwin Ndossi, Prof. Innocent Semali, Prof. Kabalimu and Dr. Optat Kajuna, for their support, invaluable suggestions, and expert guidance during my research process. Your dedication and commitment have been instrumental in shaping this study, and I cannot thank you enough for your tireless efforts.

I also wish to acknowledge my mother for her endless prayers, my sisters and friends for their encouragement and belief in my abilities, which kept me motivated during this endeavour.

Special appreciations goes to my husband Jofrey Rugimbana, my lovely children Jayneviva, Jayline, Johnson and Jancy, they made this academic adventure possible. Their love kept me tough even in the longest and most solitary moment.

To all who contributed, directly or indirectly, your support has made this achievement possible, and I am eternally grateful.

## **DEDICATION**

This work is dedicated to my late father **XAVIER MNYOE KESSY** for his day-to-day encouragement. He laid the foundation of my education.

## **ABSTRACT**

**Background:** Effective family planning is crucial for improving maternal and child health outcomes, especially in regions experiencing rapid population growth like Tanzania. Despite global efforts, immediate postpartum modern family planning uptake remains a challenge in resource-constrained countries like Tanzania. Identifying local barriers and determinants is essential for developing targeted interventions to enhance family planning utilization among postpartum women.

**Objective:** The broad objective of the study was to determine uptake and the factors influencing modern family planning utilization among postpartum women at Mwananyamala Regional Referral Hospital in Dar es Salaam, Tanzania.

**Methodology:** The study included postpartum women at postnatal care unit in Mwananyamala Regional Referral Hospital. A sample size of 363 participants was obtained using simple random sampling. Data was collected through structured questionnaires and medical record reviews. Data analysis was conducted using Stata 18. Statistical analyses included descriptive statistics to summarize data, chi-square tests, bivariate, and multivariate logistic regression to determine independent factors associated with PFP uptake, with significance set at  $p < 0.05$  and 95% confidence intervals. Findings were presented using tables and figures.

**Results:** The study included 363 participants in the final data analysis. The mean age of participants was 30 years ( $SD=7$ ) and the uptake of immediate family planning was found to be 26%. The significant variables associated with positive influence on uptake of family planning included previous use of family planning (AOR: 32.67, 95% CI: 2.25-

474.63, p-value =0.011) and prior discussion on family planning with partners (AOR: 26.19, 95% CI: 1.30-527.29, p-value =0.033). Concerns about side-effects had a significant negative influence adjusted OR of 40.67 (95% CI: 7.03-235.12, p-value <0.001), indicating that if these concerns were appropriately addressed the uptake of family might have been boosted.

**Conclusions:** The study highlights that a significant proportion of postpartum women in the study site are not utilizing family planning PFP services immediately after childbirth. Key factors having positive influence on uptake includes prior use of family planning and having had prior discussions with partner regarding family planning services; while concerns about side-effects of modern family planning methods had a negative influence on uptake of family planning.

**Recommendations:** To enhance uptake of family planning among postpartum women targeted educational interventions should focus on promoting male partner involvement in all matters pertaining to Reproductive and Maternal Health including uptake of family planning to facilitate informed decision making regarding utilization of services. Furthermore addressing concerns about side-effects of modern family planning methods potentially might boost uptake of family planning.

**Key words:** *Immediate postpartum family planning, contraceptive uptake, postpartum women*

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## **ABBREVIATIONS AND ACRONYMS**

IUCD	Intra Uterine Contraceptive Device
KU	Kairuki University
LMICs	Low- and middle-income countries
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MPH	Masters in Public Health
MRRH	Mwananyamala Regional Referral hospital
PPFP	Postpartum Family Planning
TDHS	Tanzania Demographic Health Survey
WHO	World Health Organization

## **DEFINITION OF TERMS**

**Family planning (FP):** Is the information, means and methods that allow individuals to decide if and when to have children. It allows people to attain their desired number of children, if any, and to determine the spacing of their pregnancies (WHO). It illustrates the significance of decision-making and autonomy for postpartum family planning in relation to their reproductive capacity.

**Postpartum family planning (PPFP):** Is defined as the prevention of unintended pregnancies and closely spaced pregnancies through the first 12 months after childbirth, but it can apply to an "extended" postpartum period up to two years following childbirth (WHO 2018). It aids in the identification of the determinants that impact the decision of postpartum women regarding the adoption of the practices (1).

**Postpartum:** Postpartum refers to the period following childbirth, typically within the first 12 months after delivery. It specifies the postpartum timeframe (up to 12 months) and it clarifies the participants regarding family planning practices.

**Modern contraceptive uptake:** Refers to the adoption and use of contemporary, medically approved contraceptive methods by postpartum women. It will help to assess the occurrence and factors influencing the utilization of modern contraceptive methods in postpartum women.

These methods may include hormonal contraceptives, intrauterine devices (IUDs), condoms, sterilization, and other modern family planning options. The use of immediate postpartum modern family planning was ascertained through self-reporting, medical

records, or other reliable sources. It may be measured as a binary outcome (use or non-use) or categorized based on specific contraceptive methods.

Postpartum Family planning may be provided in three phases:

- Immediately postpartum (IPFP) – within 48 hours
- During early postpartum (EPPFP) – 48 hours up to 6 weeks
- Extended postpartum period (EPPFP) – 6 weeks to one year after delivery

This intervention has been shown to effectively support programs in integrating PFP at both the facility and community level (WHO 2018).

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background**

The global population is growing rapidly, straining resources (2). By 2050, the world's population projected to reach 9.8 billion, with Africa contributing substantially to this increase (3). To address this, global health organizations advocate for expanded access to reproductive health services, including family planning, which can help reduce fertility rates and maternal deaths (4, 8, 9). Studies have shown that family planning can effectively lower fertility rates, decrease birth rates, and reduce maternal mortality (10). There has been a growing focus on maternal and child health worldwide, especially on the uptake of postpartum modern family planning (11). High-income countries often have better access to contraceptives and family planning services, leading to lower fertility rates and improved outcomes in maternal and child health (12, 15).

Every day, about 810 women die from complications related to pregnancy and childbirth, with the majority of these deaths occurring in low- and middle-income countries (5, 6). This rapid population growth is largely driven by high fertility rates, particularly in Africa, where the average woman has 4.7 children (3). According to the World Health Organization (WHO), LMICs face significant challenges in providing comprehensive reproductive health services, including family planning, due to resource constraints (7, 8).

Postpartum modern contraceptive uptake is a critical aspect of reproductive health that affects both high-income as well as and low- and middle-income countries (20). Despite

advancements in healthcare, the uptake of immediate postpartum modern family planning remains a significant challenge, especially in LMICs like Tanzania (9, 14). In Tanzania, the maternal mortality rate is 104 deaths per 100,000 live births.

The Tanzania Demographic and Health Survey (TDHS) 2022 provides important insights into contraceptive use (15, 16). Among married women, 38% use contraceptives, with 31% opting for modern methods and 7% for traditional methods. Implants (14%) are the most prevalent method, followed by injectables (9%). Among sexually active, unmarried women, the overall contraceptive use is 45%, with 36% using modern methods and 8% using traditional methods (16). Although there has been progress, Tanzania's contraceptive use remains low compared to other countries in the East African Community (17,18). The TDHS 2022 also indicates that one in five women in Tanzania aged 15-49 wants to delay or stop having children but is not using any contraceptive method (16). However, due to improvements in availability and accessibility, the unmet need has decreased from 28% to 22.9% (19).

Resource-constrained countries like Tanzania face significant challenges in achieving optimal postpartum modern family planning utilization (18, 20, 21). These challenges include limited access to healthcare services, socio-cultural norms, economic constraints, and lack of awareness (11). Addressing these barriers is crucial for enhancing maternal and child health outcomes in LMICs, where healthcare resources are often overstretched (14,21).

The consequences of inadequate postpartum modern contraceptive uptake are severe, leading to unplanned pregnancies, increased maternal and infant mortality, and strained healthcare systems (9,22). Effective family planning is crucial in reducing

maternal and child mortality rates and is a significant public health problem globally (23). Strategies to address these challenges include community education, improvements in healthcare infrastructure, and policy initiatives to promote family planning (13, 22). However, the success of these strategies varies, and context-specific research is necessary to tailor interventions to the unique challenges faced by resource-constrained regions.

Various strategies have been proposed to address these issues, including community-based health education programs, improved access to family planning services, and the integration of contraceptive services into maternal and child health programs (24). Initiating postpartum family planning uptake through group antenatal care has also been suggested (13). However, the effectiveness of these strategies can vary, and their implementation may face obstacles.

Despite efforts to address these challenges, gaps remain in our understanding of the predictors and barriers to postpartum modern contraceptive uptake in specific areas like Mwananyamala in Dar es Salaam, Tanzania. Focused research is needed to identify and address the factors contributing to the suboptimal use of postpartum modern family planning in this setting. Identifying these factors is crucial for developing targeted interventions to improve contraceptive uptake and, consequently, maternal and child health outcomes.

## **1.2 Problem Statement**

The sub-optimal uptake of immediate postpartum modern family planning remains serious problem in resource constrained hospitals like in Tanzania (11,22). Within the

Tanzanian context, the magnitude of this problem remains a pressing concern, with adverse implications for maternal and child health (20). Existing knowledge indicates that barriers to postpartum modern family planning uptake include limited knowledge on contraceptive use, side-effects of contraceptive methods, limited access to healthcare, and misconceptions about contraceptive methods (25). To address this issue, various interventions and programs have been implemented, including community health education initiatives and improved accessibility to family planning services and established postpartum modern family planning services at antenatal care facilities (13,24). Many hospitals have been enabled to provide postpartum modern family planning services in Tanzanian context, still the uptake remains low (26). Moreover, critical gaps exist in understanding the predictors of postpartum modern family planning use.

The study aim to determine the uptake of immediate postpartum modern contraceptive at Mwananyamala Regional Referral Hospital. By doing so, the research seeks to fill existing knowledge gaps, inform evidence-based interventions, and contribute to the broader discourse on improving maternal and child health in Tanzania.

### **1.3 Study objectives**

#### **1.3.1 Broad objective**

The broad objective of this study is to determine the uptake of immediate postpartum modern family planning among postpartum women at Mwananyamala Regional Referral Hospital.

### **1.3.2 Specific objectives**

1.3.2.1 To determine the proportion uptake of immediate postpartum modern family planning among women during postpartum period at Mwananyamala Regional Referral Hospital.

1.3.2.2 To determine the individual factors associated with uptake of immediate postpartum modern family planning among women delivered at Mwananyamala Regional Referral Hospital.

1.3.2.3 To assess health system-related factors associated with uptake of immediate postpartum modern family planning among women delivered at Mwananyamala Regional Referral Hospital.

### **1.4 Rationale of the study**

The results of this study provide critical insights for shaping local healthcare policies related to postpartum family planning. Policymakers can use these findings to develop strategies that increase access to and utilization of modern contraceptives among postpartum women. Understanding the unique barriers and facilitators within Mwananyamala RRH will allow for the creation of policies that address these specific challenges, leading to more effective family planning programs. These policies can support sustainable healthcare improvements and align with broader national and global health goals.

## **1.5 Research questions**

- 1) What is the proportion uptake of immediate postpartum modern family planning among women during postpartum at Mwananyamala Regional Referral Hospital?
- 2) What are the individual factors associated with uptake of immediate postpartum modern family planning among postnatal women at Mwananyamala Regional Referral Hospital?
- 3) What are the health system-related factors associated with uptake of immediate postpartum modern family planning among postnatal women at Mwananyamala Regional Referral Hospital?

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Empiric review of utilization of family planning**

The search strategy involved utilizing electronic databases such as PubMed, Google Scholar, and other relevant online repositories. The search terms included combinations of keywords such as "postpartum family planning," "contraception," "uptake," and "associated factors". Additionally, manual searches conducted through reference lists of relevant articles and grey literature to identify any additional studies that may not be captured through electronic databases. The search was limited to studies published in English from inception to the present. Articles identified through the search process were screened based on their relevance to the objectives of this review. Studies that provide insights into the proportion of postpartum family planning uptake, and factors associated with family planning uptake.

### **2.2 Proportion of modern contraceptive uptake during postpartum**

In high-income countries, studies consistently report a high proportion of postpartum modern contraceptive uptake(27,28). A comprehensive systematic review and meta-analysis encompassing 35 publications from East Africa, West Africa, and South Asia/South East Asia, and spanning low- and middle-income countries, revealed a consolidated prevalence of contraceptive uptake during the postpartum period at 41.2% (95% CI: 15.7–69.1%) across all regions. Notably, West Africa exhibited a comparatively lower pooled prevalence at 36.3% (95% CI: 27.0–45.5%). The analysis also identified an overall pooled prevalence of unmet need for contraceptives at 48.5%

(95% CI: 19.1–78.0%) across all regions, with the highest prevalence observed in South Asia/South East Asia at 59.4% (95% CI: 53.4–65.4%) (29).

In resource constrained countries uptake of family planning is varied. While some nations, like Nigeria, Ethiopia, and China, exhibit a relatively low postpartum modern family planning uptake at 8-38% (22,30–32).

In a descriptive cross-sectional study conducted among postpartum mothers attending Maternal and Child Health clinics in Nigeria found out only 17.8% of the respondents were utilizing postpartum modern family planning methods (30). In urban centres such as Addis Ababa, Ethiopia, a study revealed a postpartum modern contraceptive uptake of 34.3% (31). Another study in Kenya, the prevalence was reported at 38.3% (32), and in Ethiopia's Durame region, it stood at 36.7% (33). In Tanzania, a community-based study on a predominantly rural population in Bukombe district Geita region focused on long-acting contraceptive uptake post-delivery found a prevalence of 10.4% (34). Little has been documented on postpartum modern family planning uptake and its predictors among postpartum women in Tanzania. This is a gap for further studies.

### **2.3 Individual determinants of postpartum modern contraceptive uptake**

In a comprehensive analysis spanning low- and middle-income nations, the belief that the risk of pregnancy is low during breastfeeding and postpartum amenorrhea was frequently linked to non-utilization of contraceptives. The common practice among those not using contraception included relying on male condoms, withdrawal, and abstaining from sexual activity. Additionally, women who refrained from contraception

were less inclined to access Maternal and Child Health services, tended to reside in rural areas, harboured concerns about contraceptive side-effects, and receive inadequate family planning (FP) counseling. In contrast, women who received FP counseling during antenatal and/or postnatal care were more inclined to adopt postpartum family planning (29).

A study done in Nigeria further identified several socio-demographic factors that significantly influenced the adoption of immediate postpartum modern family planning among postpartum women, including age, level of education, religion, and parity. Notably, women with higher educational attainment, increased parity, and those who received sufficient information from healthcare providers were found to be more inclined to use at least one form of modern contraceptive during the postpartum period (30).

In Tanzania, study in Zanzibar revealed inadequate knowledge about contraceptive methods and their mode of action, insufficient quality of family planning services, and belief in traditional and natural medicine for family planning as the prevailing determinants of postpartum modern family planning uptake (25). The literature review on the predictors of postpartum modern family planning uptake, as illuminated by a community-based study in Bukombe District, Geita Region, Tanzania, revealed three key factors significantly linked to heightened postpartum modern family planning utilization. These were urban residence, indicating that women residing in urban areas were more likely to adopt postpartum contraception, a strong correlation was established between formal employment and increased postpartum modern family planning use, highlighting the impact of economic stability on family planning decisions

and lastly, the provision of family planning counseling demonstrated a significant association with heightened postpartum modern family planning uptake, emphasizing the pivotal role of informational support in influencing reproductive choices among postpartum women in the region (34).

## **2.4 Health system determinants of postpartum modern family planning uptake**

Postpartum modern family planning uptake is a critical aspect of maternal healthcare, impacting the well-being of mothers and contributing to family planning efforts. The utilization of contraceptives during the postpartum period is influenced by various health system determinants that operate at different levels, from high-income countries to lower-middle income countries and local settings. The health system's role in postpartum modern family planning uptake is significant across all income levels. In high-income countries, well-established healthcare systems provide comprehensive family planning services, ensuring accessibility and affordability (37). In contrast, low- and middle-income countries face challenges related to infrastructure, resource constraints, and inadequate training of healthcare providers (38).

The regulatory environment significantly influences postpartum modern family planning services (25). Contraceptive use has been shown to be associated with the level of demand created and its availability, the roles which are related with provider skills. For example, a study conducted in Australia by Garrett et al revealed that, low level of skills on insertion and use of contraceptives among health care workers resulted to the lower uptake (39). Similarly the study conducted in Ethiopia reported that family planning providers' lack of counseling skills, work load, clients' misunderstanding about

contraceptive of client choices were major reasons for low uptake of contraceptives (40). On the other hand, accessibility of some contraceptives of client choices is another crucial aspect that facilitates the uptake. For example, poor accessibility of IUCDs influenced the use of IUCD among Pakistani an women and was mainly contributed by inadequate supervision of health workers, financial problem, lack of trained staff, and insufficient utilization of contraceptive guideline (15,38).

Evidence shows that anticipatory counselling regarding side-effects and bleeding profile can help in improving acceptability and continuation rate and should be offered upon initiation of contraceptive method (41). Fear of side-effects was among the key themes for barrier to postpartum modern family planning use and thus client counselling about contraceptive side-effect profile helped to reduce fear in the community with ultimate increase in postpartum modern family planning utilization (42).

The mode of delivery and obstetric events also influence postpartum modern family planning choices. In the Bukombe district study, women who underwent caesarean delivery were more likely to use contraceptives compared to those with spontaneous vaginal delivery (34). This aligns with the notion that women experiencing major obstetric events may prefer effective contraception to ensure full recovery before considering another pregnancy (34). Interestingly, this finding contradicts a study in rural China, which indicated a higher likelihood of postpartum modern family planning use among those with spontaneous vaginal delivery (43). Additionally, a study in the USA, where vaginal delivery was significantly associated with postpartum modern family planning use (44).

Despite the various factors on the predictors of postpartum modern contraceptive uptake, prevalence remains low with little known about factors that limit the uptake. This is crucial for informing targeted interventions. Insights gained from the literature review have guided the study design, selection of study population, and was helpful for interpretation of the study's findings for possible development of effective strategies to improve postpartum modern family planning uptake at the study site.

## **2.5 Conceptual framework for the study**

A conceptual framework is a comprehensive and systematic structure that helps to organize, guide, and inform a study (45). It serves as a roadmap for understanding the relationships between different variables and concepts under investigation. The conceptual framework outlined for this study on postpartum modern contraceptive uptake provides a structured approach to understanding the various factors that influence this outcome. It outlines both dependent and independent variables, and illustrates the relationships between them.

The conceptual framework illustrates the relationships between these independent variables (socio-demographic characteristics, obstetric history, religious beliefs, access to healthcare services, quality of counseling, etc.) and the dependent variable (uptake of postpartum family planning).

One notable aspect of this conceptual framework is its recognition of the significance of religious beliefs as an independent variable. By including religious beliefs as an independent variable, the conceptual framework acknowledges the potential impact of religious teachings, values, and norms on individuals' attitudes and decisions regarding

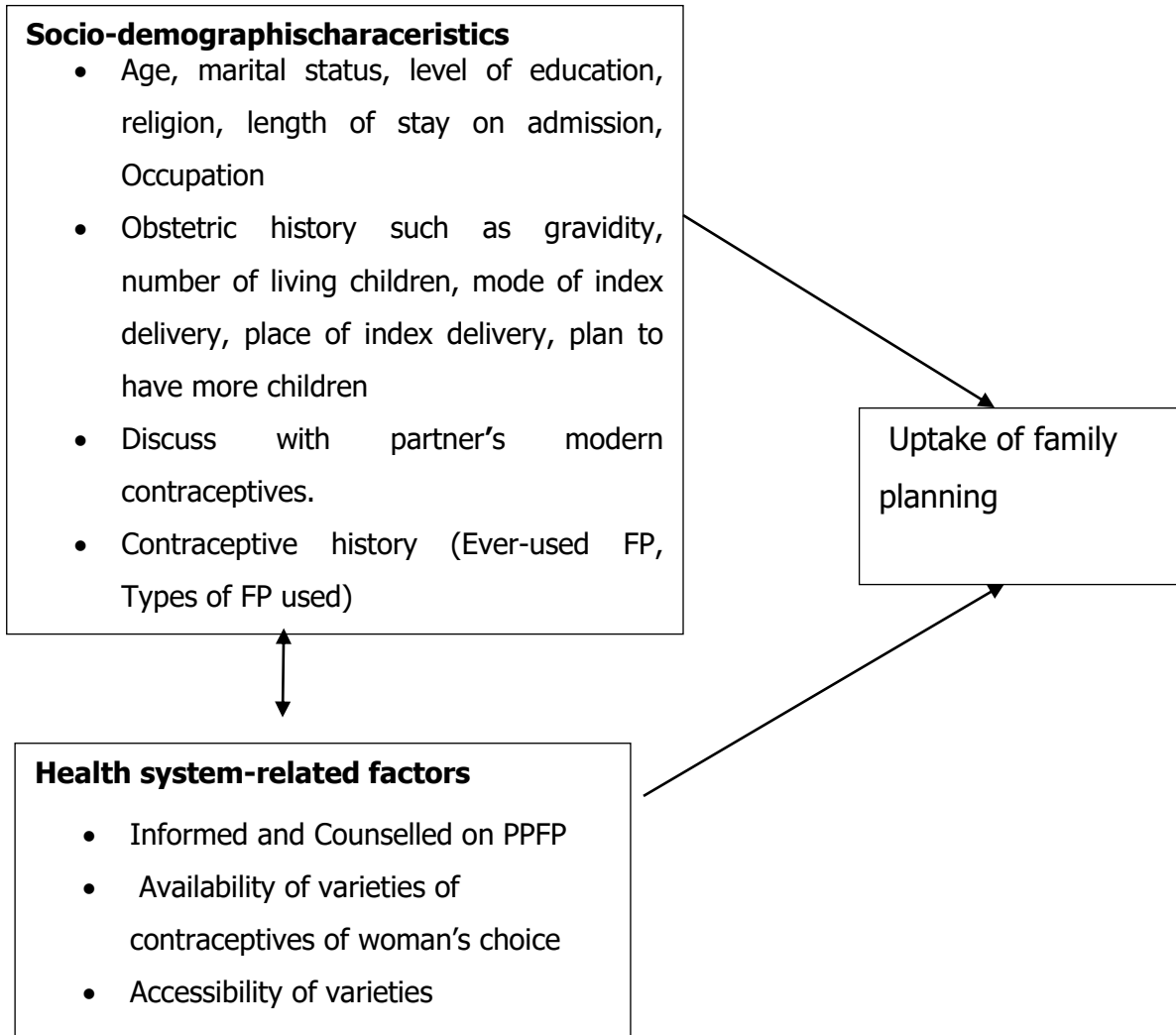
family planning. This suggests a recognition of the need to explore how religious factors may shape contraceptive beliefs and practices among postpartum women. Furthermore, by positioning religious beliefs alongside other independent variables such as socio-demographic characteristics, obstetric history, and access to healthcare services, the conceptual framework acknowledges religion as a multifaceted aspect of individuals' lives that interacts with various other factors to influence contraceptive uptake.

The inclusion of religion as a significant factor within the conceptual framework demonstrates a commitment to conducting analysis of postpartum modern contraceptive uptake, considering the diverse range of factors that may influence this outcome.

Moreover, a woman's reproductive history plays a significant role in her decision to adopt immediate postpartum family planning (IPPF) methods. Women with a higher number of existing children might be more likely to consider IPPF to space future pregnancies and improve the well-being of their current family. Conversely, women who desire a larger family might be less likely to use IPPF methods immediately after childbirth.

**Independent variables**

**Dependent variable**



**Figure 1: Conceptual framework for the study showing factors associated with postpartum uptake of immediate postpartum modern family planning**

## **CHAPTER THREE:                    METHODOLOGY**

### **3.1 Study area and population**

The study was conducted at postnatal care in Mwananyamala Regional Referral Hospital in Dar es Salaam, Tanzania. Mwananyamala Hospital serves as a regional referral centre, admitting an estimated 675 postpartum women per month for postnatal care. This hospital was purposively selected due to its status as a large referral facility that receives a significant number of women from surrounding areas for delivery services and postnatal care. Situated in the Kinondoni municipality, Mwananyamala Hospital also accommodates numerous referrals from district hospitals, health centers, and dispensaries throughout the Dar es Salaam region and neighboring regions, such as Pwani. As Tanzania's major commercial and industrial center, Dar es Salaam is geographically located between latitudes 6.36 degrees and 7.0 degrees south of the equator and longitudes 39.0 and 33.33 degrees east of the Greenwich meridian. The city is bordered by the Indian Ocean to the east and the Coast Region to the west, making Mwananyamala Hospital a critical hub for maternal and child health services in the area.

The study population was postpartum women at Mwananyamala Regional Referral Hospital during the study period. Targeting postpartum women provided an opportunity to assess modern contraceptive uptake during a crucial phase of reproductive health decision-making. This specific population was chosen to gain insights into contraceptive use immediately after childbirth, a time when women are likely to make important decisions about family planning and future pregnancies.

### **3.2 Study design**

This study employed an analytical cross-sectional design, which is particularly suitable for assessing the proportion of postpartum modern contraceptive uptake and identifying associated factors within a defined timeframe. This design facilitates the collection of data at a single point in time, enabling the evaluation of both the primary outcome of interest modern contraceptive uptake and the various individual and health-system-related factors influencing this outcome. By capturing a snapshot of postpartum women's experiences and attitudes towards contraceptive use, the study aims to provide valuable insights that can inform future interventions and health policy decisions.

### **3.3 Sampling methods**

A systematic random sampling method was employed to select postpartum women at Mwananyamala Regional Referral Hospital. To ensure a representative sample, every 2<sup>nd</sup> eligible woman was approached for participation in the study until the required sample size of 363 was achieved. Inclusion criteria required that participants within the immediate postpartum period at postnatal care at the facility during the study period. This sampling approach ensured that the selection was unbiased and reflective of the target population.

### 3.3.1 Sample size estimation

The sample size for this study was determined using Cochran's formula as shown below:

$$n = \frac{Z^2 P (1-P)}{\epsilon^2}$$

Whereby:

n = The minimum required sample size

Z = The confidence level is shown as a percentage point on the normal distribution.

If Z is 1.96 then the degree of significance is 95%.

$\epsilon$  = Maximum likely error/ margin of error i.e. 0.05

P= The estimated proportion of modern contraceptive uptake was 38.3%, based on a previous study (36).

Hence the minimum sample is as follows:

$$n = \frac{1.96 \times 1.96 \times 0.383 (1-0.383)}{0.05 \times 0.05}$$

$$n \approx 363 \text{ study participants.}$$

Therefore, a minimum sample size of 363 postpartum women was included in the study, ensuring sufficient statistical power to detect significant findings related to the uptake of modern postpartum family planning.

### **3.4 Data collection procedures**

#### **3.4.1 Data collection tools**

A structured questionnaire was developed based on the study objectives and review of the previous literatures (34,48,49). The questionnaire includes sections on socio-demographic characteristics, contraceptive usage, and factors influencing contraceptive choices. It was pre-tested to ensure its validity and reliability.

#### **3.4.2 Data collection methods**

The data collection procedures involved both medical review and schedule interview using a structured questionnaire to gather comprehensive information on postpartum modern contraceptive uptake and associated factors. Trained research assistants were responsible for data collection to ensure consistency and reliability.

#### **3.4.3 Eligibility criteria**

##### **Inclusion criteria**

The inclusion criteria comprised of postpartum women admitted at postnatal care unit who granted informed consent to participate in the study

##### **Exclusion criteria**

Postpartum women admitted at postnatal care unit who were deemed medically unfit to participate in the study and those who decline to provide consent.

### **3.4.4 Study variables**

#### **Dependent variable**

The dependent variable of interest is the uptake of immediate postpartum modern family planning. This variable was measured by assessing the number of postpartum women who opted for contraceptive methods immediately following childbirth.

#### **Independent variables**

There are various independent variables:

Socio-demographic characteristics such as age, marital status and level of education, religion, length of stay on admission, women's occupation, partner's level of education, and partner's occupation was reviewed.

Obstetric characteristics - gravidity, number of living children, mode of delivery of index child, place of index delivery, planning to have more children, counseling on postpartum family planning and discussion with partners regarding immediate postpartum modern family planning

Contraceptive history was assessed by determining whether participants have ever used family planning methods. Data on contraceptive history were collected through self-reporting during interviews and cross-checked by review of medical records.

Gestational age at delivery was assessed using obstetric records to determine the timing of childbirth relative to the gestational age of the newborn.

Pre- and postpartum family planning counseling was measured by assessing whether participants received counseling on family planning before and after childbirth. This was determined through self-reporting and review of medical records.

Support from partners for modern family planning use was assessed to understand the influence of partner support on contraceptive use decision-making. This was assessed through self-reporting during interviews and exploring participants' perceptions of partner involvement in family planning decisions.

### **3.4.5 Ethical considerations**

Ethical clearance for this study was obtained from the Institutional Research Ethics Committee of Kairuki University, ensuring full compliance with established ethical standards and guidelines. In addition, permission to conduct the research was granted by the administration of Mwananyamala Regional Referral Hospital, securing institutional support for the study.

Before participation, all potential participants were thoroughly informed about the study's objectives, procedures, and potential benefits. They were provided with comprehensive details to enable informed decision-making. Written consent was then obtained voluntarily from each participant, ensuring their participation was fully voluntary and based on informed understanding.

Confidentiality was rigorously safeguarded throughout the study. Each participant was assigned an identification number for documentation purposes, with only authorized study personnel having access to this information. This measure was put in place to protect the privacy and personal data of participants.

### **3.4.6 Reliability and validity of data collection tools**

Reliability means that the results should be consistent each time the test is administered or when different investigators obtain similar responses from participants. Validity refers to how accurately an idea is measured and whether the instrument covers all relevant content. Data collection method was standardized together with clear interview guides and questionnaires with consistent wording and answer options. Interviewers were trained properly to ensure consistent data collection. To maintain consistency throughout the data collection process, standardized procedures were implemented. Clear and well-structured interview guides and questionnaires were developed, with consistent wording and answer options for each question. Additionally, all interviewers underwent thorough training to ensure uniformity in administering the questions, thereby enhancing the reliability of the data collected.

## **3.5 Data management**

### **3.5.1 Data coding and cleaning**

Every day after data collection session, filled questionnaires were reviewed by the Principal Investigator for completeness and accuracy to identify and rectify any encountered errors. Data were directly entered into Kobo tool box and then exported to excel spread sheet which was then reviewed for completeness before exported to Stata for analysis.

### **3.5.2 Data analysis**

Data analysis was done using Stata for Windows (Version 18), applying appropriate statistical methods tailored to each specific objective to ensure robust and reliable results.

#### **Socio-demographic characteristics , fertility and reproductive characteristics**

Numerical variables (such as age) were summarized using mean and standard deviation (SD) to capture central tendencies and variability. Categorical variables (such as level of education, marital status, and parity) were summarized using frequencies and proportions, providing a detailed overview of participants' demographics and reproductive profiles. The results were presented as frequency distribution table for clarity.

#### **Uptake of immediate postpartum family planning**

Descriptive statistics were employed to calculate the frequency and percentage of uptake among participants. This analysis helped in understanding the prevalence of immediate postpartum family planning uptake and results were displayed using a pie chart for clear visual representation.

#### **Factors associated with postpartum family planning uptake**

Chi-square tests were conducted to identify associations between variables, followed by bivariate and multivariate logistic regression analyses. Variables with a p-value < 0.2 were included in the multivariate analysis to control for confounding factors and assess

the adjusted odds ratios. This approach ensured a thorough investigation of individual-level predictors, with results displayed in a two-way table.

### **Health system-related factors associated with postpartum family planning**

A 5-point Likert scale was used to gauge participants' agreement with health system-related statements. Descriptive statistics, including medians and proportions, were used to summarize the levels of agreement, providing insights into the influence of health system-related factors on family planning uptake. These results were presented as frequency tables for clear interpretation.

Statistical significance for all predictors was determined by checking whether the 95% confidence interval excluded the null value or if the p-value was less than 0.05, ensuring the identification of statistically significant associations.

### **3.6 Dissemination of the study findings**

The dissemination of research findings will begin with the submission of the compiled Dissertation to the Department of Community Medicine of Kairuki University fulfilling the University's requirements. In addition, copies of the Dissertation will be made available at Mwananyamala Regional Referral Hospital Administration, the study site in order to provide to feed-back and support informed decision-making for potential improvements in service delivery based on the study's findings.

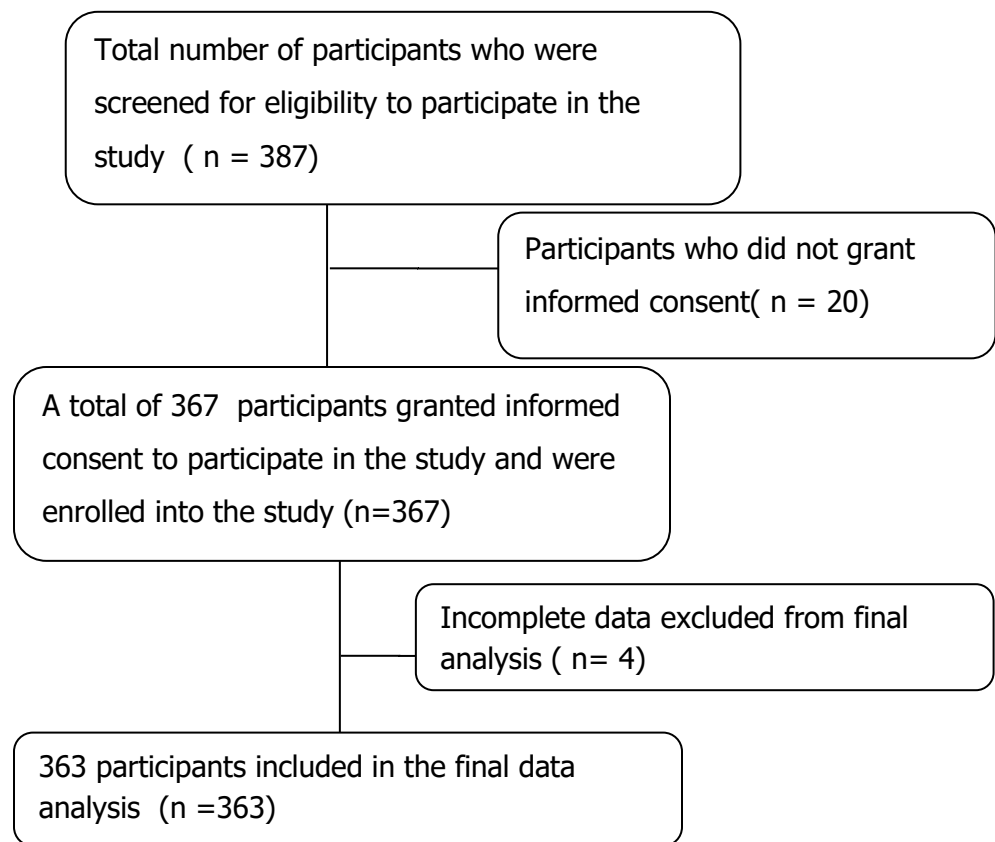
To further extend the impact of the study, a draft manuscript will be prepared and submitted to peer-reviewed journals for potential publication. Furthermore whenever possible the PI will present the findings of the study at scientific conference. This

approach aims to share valuable insights with the broader scientific community, contribute to the existing body of knowledge, and inform future policies and practices in postpartum family planning and maternal health.

## CHAPTER FOUR: RESULT

### 4.1 Enrollment/ Screening log of study participants

During the study period, a total of 387 participants were screened for eligibility to participate in the study. Out of this number 20 did not grant informed consent and were excluded. Hence 367 participants who granted informed consent to participate in the study were enrolled into the study. Among this number of study 4 had missing data and were excluded. Hence 363 participants were included in the final data analysis. This is shown in the Figure 1 (Enrollment flow chart of study participants) below:



**Figure 2: Enrollment flow chart of the study participants**

## **4.2 Baseline characteristics of study participants**

### **4.2.1 Baseline socio-demographic characteristics of study participants**

A total of 363 study participants were included in the final data analysis. The mean age of participants was 30 years (SD=7), with the largest group falling in the 25-34 age range 45.5% (n=165), followed by those aged 35-44 years 27.5% (n=100) and 15-24 years 27.0%(n=98). The majority were married 78.2%(n=284). In terms of level of education, a higher proportion of women had attained College or University education 40.5% (n=147), followed closely by those with secondary education (39.9%) (n=145), while a smaller percentage had primary education or below 19.6%(n=71). Religious affiliation was nearly evenly split, with 53.4% (n=194) of women identifying as Christians and 46.6% (n=169) were Muslim. Employment status showed that the majority of the participants were unemployed 79.1%(n=287), while 20.9%(n=76) were employed. Regarding their partners' education levels, of 351; the majority had higher education 55.8% (n=196), followed by secondary education 37.3%(n=131), with a smaller number having primary education 6.8%(n=24). This is shown in Table 1 below

**Table 1: Baseline socio-demographic characteristics of participants (n=363)**

<b>Variables</b>	<b>Categories</b>	<b>Frequency</b>	<b>Percentage</b>
	[Mean; SD]	[30; 7]	
<b>Age group in years</b>	15-24	98	27.0
	25-34	165	45.5
	35-44	100	27.5
<b>Marital status</b>	Married	284	78.2
	Unmarried	79	21.8
<b>Level of education</b>	Primary/below	71	19.6
	Secondary	145	39.9
	College/University	147	40.5
<b>Religion</b>	Christian	194	53.4
	Islam	169	46.6
<b>Occupation</b>	Unemployed	287	79.1
	Employed	76	20.9
<b>Partner's education (n=351)</b>	Primary	24	6.8
	Secondary	131	37.3
	Higher education	196	55.8

**4.2.2 Fertility and reproductive characteristics of participants**

The fertility and reproductive characteristics of the 363 postpartum women show that the majority had a normal delivery 69.4%, (n=252), while 30.6% (n=111) underwent cesarean sections. Most women had 1-2 children 44.4%, (n=161), followed by those

with 5 or more children 32.2%, (n=117), and 23.4% (n=85) had 3-4 children. Nearly half of the participants had 1-2 living children 47.1%, (n=171), with 27.0% (n=98) having 3-4 children, and 25.9% (n=94) having 5 or more living children. A history of pregnancy loss was reported by 38.8% (n=141), while 61.2% (n=222) had not experienced pregnancy loss. Similarly, 24.5% (n=89) reported a history of child loss, with 75.5% (n=274) having no child loss. Among 264 women. Counseling on postpartum family planning (PPFP) was received by 71.9% (n=261), while 28.1% (n=102) were not counseled. Furthermore, 82.8% (n=275) of the women discussed PPFP with their partners, compared to 17.2% (n=57) who had not. This is shown in Table 2 below:

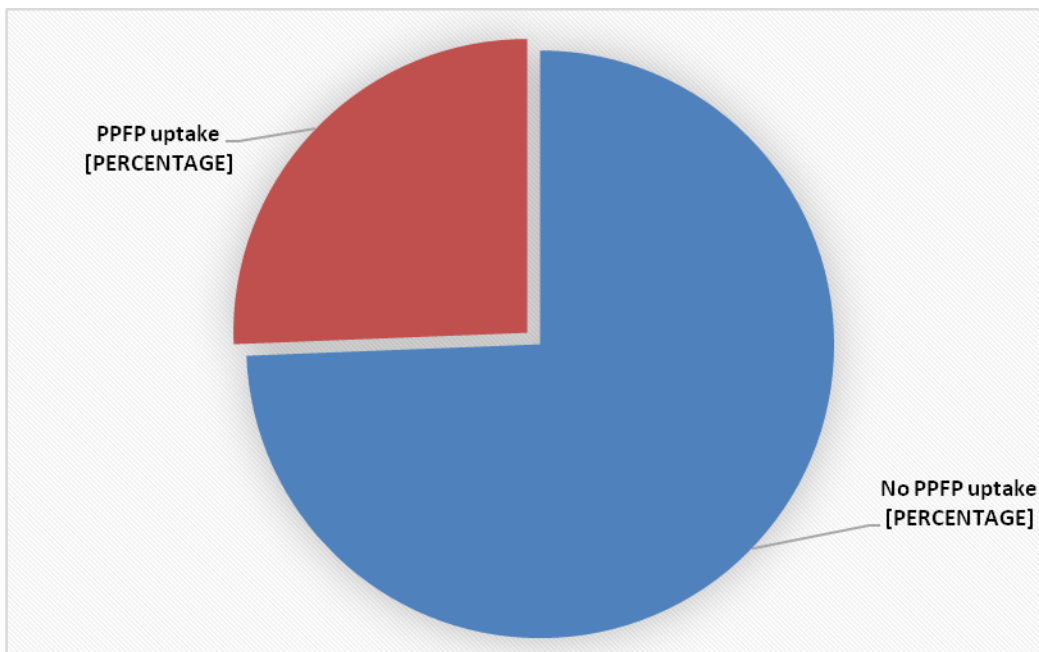
**Table 2: Fertility and reproductive characteristics of participants (n=363)**

<b>Variables</b>	<b>Categories</b>	<b>Frequency</b>	<b>Percentage</b>
Mode of delivery	Normal	252	69.4
	Cesarean	111	30.6
Parity	1-2	161	44.4
	3-4	85	23.4
	5+	117	32.2
Number of living children	1-2	171	47.1
	3-4	98	27.0
	5+	94	25.9
History of pregnancy loss	No	222	61.2
	Yes	141	38.8
History of child loss	No	274	75.5
	Yes	89	24.5
Counselled on PFP	No	102	28.1
	Yes	261	71.9
Discussed PFP with partner (n=332)	No	57	17.2
	Yes	275	82.8

### **4.3 Uptake of immediate postpartum modern family planning**

Out of the 363 postpartum women, 26% (n=93) reported uptake of postpartum immediate family planning (PFP), while the majority, 74% (n=270), did not. The

confidence interval for the uptake of PPFp was found to be between 21.5% and 30.0%, indicating that we can be 95% confident that the true percentage of women who have adopted PPFp in the larger population lies within this range. These findings highlight a relatively low uptake of PPFp among the women surveyed, suggesting potential areas for improvement in family planning services and education. This is shown in Figure 3 below:



**Figure 3: The uptake of immediate postpartum modern family planning (n=363)**

#### **4.4 Factors associated with uptake of immediate postpartum modern family planning**

The analysis of factors influencing the uptake of immediate postpartum modern family planning highlights significant variables affecting women's choices. Women aged 35-44 years exhibited the highest uptake at 34.0%, while uptake was lower among younger

age groups (21.4% for 15-24 and 23.0% for 25-34, p-value =0.075). Marital status significantly impacted uptake, with married women showing 28.9% compared to 13.9% of unmarried women (p-value =0.007). Employment status also played a critical role, as employed women had a 39.5% uptake versus 21.9% for unemployed women (p-value =0.002). Furthermore, women who had cesarean section deliveries had a higher uptake (33.3%) compared to women who had spontaneous vaginal deliveries -22.2%, (p-value =0.025). Engaging in partner discussions about PFP strongly correlated with higher uptake (29.8% vs. 5.3%, p-value <0.001). Previous use of PFP was a strong predictor, with 78.3% of prior users opting for it again (p-value <0.001), emphasizing the multifaceted influences on family planning decisions. This is shown in Table 3.

**Table 3: Factors associated with uptake of family planning (n=363)**

Variables		n	Uptake of PFP		p-value
			Yes -n (%)	No -n (%)	
Age group in years	15-24	98	21 (21.4)	77 (78.6)	0.075
	25-34	165	38 (23.0)	127 (77.0)	
	35-44	100	34 (34.0)	66 (66.0)	
Marital status	Married	284	82(28.9)	202 (71.1)	0.007
	Unmarried	79	11(13.9)	68 (86.1)	
Level of education	Primary/below	71	14 (19.7)	57 (80.3)	0.423
	Secondary	145	38 (26.2)	107 (73.8)	
	College/University	147	41 (27.9)	106 (72.1)	
Occupation	Unemployed	287	63 (21.9)	224 (78.1)	0.002
	Employed	76	30 (39.5)	46 (60.5)	
Parity	1-2	161	34 (21.1)	127 (78.9)	0.035
	3-4	85	19 (22.4)	66 (77.6)	
	5+	117	40 (34.2)	77 (65.8)	
Number of living children	1-2	171	37 (21.6)	134 (78.4)	0.129
	3-4	98	25 (25.5)	73 (74.5)	
	5+	94	31 (33.0)	63 (67.0)	
Mode of delivery	SVD	252	56 (22.2)	196 (77.8)	0.025
	Cesarean	111	37 (33.3)	74 (66.7)	
Counselled on PFP	No	102	23 (22.6)	79 (77.4)	0.402

p-value = 0.402		Yes	261	70 (26.8)	191 (73.2)	
Variables	Uptake of PPF					
			n	Yes n (%)	No n (%)	p-value
Partner discussion on PPF	No	57	3 (5.3)	54 (94.7)	< 0.001	
Partner discussion on PPF	Yes	275	82 (29.8)	193 (70.2)		
Previous use of PPF	No	317	57 (18.0)	260 (82.0)	<0.001	
Previous use of PPF	Yes	46	36 (78.3)	10 (21.7)		
Partner discussion on modern PPF	No	117	13 (11.1)	104 (88.9)	<0.001	
Partner discussion on modern PPF	Yes	246	80 (32.5)	166 (67.5)		
Side-effects concerns	No	67	57 (85.1)	10 (14.9)	<0.001	
Side-effects concerns	Yes	296	36 (12.2)	260 (87.8)		
Religious beliefs	No	98	44 (44.9)	54 (55.1)	<0.001	
Religious beliefs	Yes	265	49 (18.5)	216 (81.5)		
Plan to have more children	No	212	78 (36.8)	134 (63.2)	<0.001	
Plan to have more children	Yes	151	15 (9.9)	136 (90.1)		

#### **4.5 Bivariate and multivariate logistic regression analysis for the factors associated with PPF uptake**

Bivariate analysis revealed several factors significantly associated with the uptake of immediate postpartum modern family planning (PPF). Women aged 35-44 years had a crude odds ratio (OR) of 1.89 (95% CI: 1.00-3.57, p-value =0.050). Marital status was significant, with married women showing a higher uptake (OR: 2.51, 95% CI: 1.26-4.99, p-value =0.009). Employment status also emerged as critical; employed women

had a crude OR of 2.32 (95% CI: 1.35-3.97, p-value =0.002). Notably, women with five or more children exhibited a significant uptake (OR: 1.94, 95% CI: 1.13-3.32, p-value =0.016). Partner discussions about PPFp were strongly associated with higher uptake (OR: 7.65, 95% CI: 2.32-25.16, p-value=0.001), as was previous use of PPFp (OR: 16.42, 95% CI: 7.70-35.01, p-value <0.001).

On multivariate analysis, significant variables included previous use of PPFp (AOR: 32.67, 95% CI: 2.25-474.63, p-value =0.011), partner discussions (AOR: 26.19, 95% CI: 1.30-527.29, p-value =0.033). Concerns about side-effects had a significant adjusted OR of 40.67 (95% CI: 7.03-235.12, p-value <0.001), indicating that the absence of these concerns strongly promotes uptake. Other factors, such as level of education, parity, mode of delivery, counseling on PPFp, and religious beliefs, showed apparent associations but were not significant after controlling for possible confounder and thus could be explained by other variables. For example, while higher education levels may correlate with increased uptake, this could be due to other socioeconomic factors such as income level and occupation rather than education itself. Similarly, the relationship between parity and PPFp uptake might be confounded by the woman's age or prior experiences. Such factors illustrate the complexities of establishing direct causal links in the context of PPFp uptake. This is shown in Table 4.

**Table 4: Bivariate and multivariate logistic regression analysis of factors associated with uptake of immediate postpartum family planning (n=363)**

<b>Variables</b>		<b>Crude OR (95% CI)</b>	<b>p-value</b>	<b>Adjusted OR (95% CI)</b>	<b>p-value</b>
Age group in years	15-24	1			
	25-34	1.10 (0.60-2.01)	0.763	0.35 (0.08-1.56)	0.170
	35-44	1.89 (1.00-3.57)	0.050	1.01 (0.22-4.53)	0.994
Marital status	Married	2.51(1.26-4.99)	0.009	2.82 (0.28-27.95)	0.376
	Unmarried	1			
Level of education	Primary/below	1			
	Secondary	1.45 (0.72-2.89)	0.296	0.29 (0.02-5.06)	0.399
	College/University	1.57 (0.79-3.13)	0.195	2.93 (0.31-27.64)	0.348
Occupation	Unemployed	1			
	Employed	2.32(1.35-3.97)	0.002	0.20(0.02-1.98)	0.168
Parity	1-2	1			
	3-4	1.08 (0.57-2.03)	0.823	0.95 (0.25-3.64)	0.937
	5+	1.94 (1.13-3.32)	0.016	5.90 (1.46-23.76)	0.013
Mode of delivery	SVD	1			
	Cesarean	1.75 (1.07-2.87)	0.026	1.31(0.40-4.34)	0.656
Counselled on PFP	No	1			
	Yes	1.26 (0.73-2.16)	0.403	4.11(0.85-19.88)	0.079

Variables		Crude OR (95% CI)	p-value	Adjusted OR (95% CI)	p-value
Partner discussion on PFP	No	1			
	Yes	7.65 (2.32-25.16)	0.001	26.19 (1.30-527.29)	0.033
Previous use of PFP	No	1			
	Yes	16.42 (7.70-35.01)	<0.001	32.67 (2.25-474.63)	0.011
Concerns on side- effects of PFP	Yes	41.17 (19.31-87.76)	<0.001	40.67 (7.03-235.12)	<0.001
	No	1			
Plans to have more children	No	5.28 (2.89-9.63)	<0.001	51.50 (2.95-900.59)	0.007
	Yes	1			

#### **4.6 Health system-related factors associated with uptake of immediate postpartum modern family planning**

Health system-related factors significantly impact the uptake of immediate postpartum modern family planning. The most agreed-upon statement was that counseling provided in the hospital is clear and comprehensive, with 89.5% of respondents affirming this, accompanied by a median rating of 4 (range 3-5). Furthermore, 95.9% of participants indicated that healthcare providers respect their choices regarding family planning, showcasing strong provider-patient relationships. Regarding the availability of informational materials, 83.7% of respondents agreed, with a median rating of 4 (range 3-5), and 78.0% noted that PFP services are easily accessible. Trust in healthcare providers was also high, with 90.1% expressing confidence in the information provided. Additionally, 97.2% felt supported in using modern family planning methods, and

91.2% were satisfied with service quality. Overall, these findings emphasize the vital role of a supportive health system in promoting PFP uptake among postpartum women as shown in Table 5.

**Table 5: Health system - related factors associated with uptake of FP**

<b>Variables</b>	<b>Disagreed/ Neutral n (%)</b>	<b>Agreed n (%)</b>	<b>Median (range)</b>
Counseling provided in the hospital on modern postpartum family planning is clear and comprehensive.	38 (10.5)	325 (89.5)	4 (3-5)
Do you feel that healthcare providers respect your choice regarding modern postpartum family planning?	15 (4.1)	348 (95.9)	4 (3-5)
The hospital provides adequate information materials (e.g. brochures, posters) on modern postpartum FP	59 (16.3)	304 (83.7)	4 (3-5)
Modern postpartum family planning services are easily accessible in this hospital	80 (22.0)	283 (78.0)	4 (3-5)
Do you trust the information provided by healthcare providers in this hospital on modern postpartum FP?	36 (9.9)	327 (90.1)	4 (3-5)
Hospital staff provide support and encouragement for the use of modern postpartum family planning	10 (2.8)	353 (97.2)	4 (3-5)
The hospital offers a variety of modern postpartum family planning methods to choose from	47 (12.9)	316 (87.1)	4 (3-5)
Are you satisfied with the quality of healthcare provided on modern postpartum FP services in this hospital?	32 (8.8)	331 (91.2)	4 (3-5)
Healthcare providers in this hospital take the time to understand your personal needs regarding modern postpartum family planning.	5 (1.4)	358 (98.6)	4 (3-5)
The hospital environment is conducive to discussing sensitive topics like modern postpartum family planning	33 (9.1)	330 (90.9)	4 (2-5)
The hospital effectively integrates modern postpartum family planning education with other postpartum services	10 (2.8)	353 (97.2)	4 (3-5)

## **CHAPTER FIVE: DISCUSSION**

### **5.1 Discussion**

The uptake of immediate postpartum family planning was found to be 26%. Key individual factors associated with this uptake included prior use of PFP, discussions with partners, not planning to have more children in the near future, and women who had no concerns about side effects were more likely to utilize these services. Health-system determinants also played a crucial role in influencing PFP uptake, with a large majority of participants affirming the clarity of counseling, respect for their choices, and availability of informational materials. The high levels of trust in healthcare providers and satisfaction with service quality further highlight the importance of a supportive health system in promoting the use of modern family planning methods among postpartum women

#### **5.1.1 The uptake of immediate postpartum family planning**

The uptake of immediate postpartum family planning in the study was found to be 26%, highlighting the persistent challenges in promoting contraceptive use among postpartum women in Tanzania. This figure is similar to other studies in low-resource settings, such as Nigeria, where only 17.8% of postpartum women used modern contraceptives (30), and in Ethiopia, where uptake ranged from 34.3% in Addis Ababa to 36.7% in Durame (31,33). These results suggest that cultural beliefs, limited awareness, and healthcare accessibility issues may be key barriers to higher PFP uptake. By comparison, studies from high-income countries and regions such as South Asia and Southeast Asia reported higher PFP uptake, with a consolidated prevalence of 41.2% (29), indicating that LMICs face distinct challenges.

In East Africa, postpartum contraceptive use remains low, despite global efforts to improve family planning. A study in Kenya reported a similar prevalence of 38.3% (32), while in Tanzania's rural Bukombe district, only 10.4% of women adopted long-acting contraceptives post-delivery (34). The findings in this study align with these trends, showing that while some progress has been made, postpartum family planning uptake still lags behind. Individual factors, such as previous contraceptive use, partner discussions, and lack of concerns about side effects, significantly influenced uptake in this study. Women who engaged in discussions with their partners or had no concerns about side effects were much more likely to use PFP, underlining the importance of partner involvement and clear communication on the safety of contraceptive methods.

#### **5.1.2 Individual factors associated with the uptake of PFP**

In the study, prior use of contraceptives have found to be significantly associated with higher uptake of postpartum family planning. Women who had previously used modern contraceptive methods were more likely to continue their use after delivery, indicating the importance of past experiences in shaping reproductive health behaviors. This finding aligns with studies conducted in Nigeria and other low- and middle-income countries, where prior contraceptive use was a consistent predictor of PFP uptake (30). The implication is that prior exposure to contraceptive methods enhances women's familiarity and comfort, making them more likely to adopt PFP. This highlights the importance of sustained contraceptive counseling during antenatal and postnatal care to ensure continuity of use postpartum. Partner discussions also emerged as a significant factor influencing PFP uptake, reinforcing the role of communication in reproductive health decision-making. Women who had discussions

with their partners were more likely to use contraceptives postpartum. This is consistent with findings from studies in other African countries, such as Ethiopia, where partner support and communication have identified as critical enablers of contraceptive use (31). The implication is that promoting spousal involvement in family planning discussions could significantly increase PFP uptake. Interventions that encourage partner communication and support could lead to more informed and mutually agreed upon decisions regarding contraceptive use.

The decision not to have more children in the near future was another key factor associated with higher PFP uptake. This finding is similar to studies in Zanzibar and other regions of Tanzania, where women who expressed a desire to limit or space births were more likely to adopt modern contraceptives (25). The implication of this is that women's reproductive intentions strongly influence their family planning decisions, and addressing these intentions through targeted counseling could further improve contraceptive uptake. Moreover, addressing concerns about contraceptive side effects, which was a significant barrier to uptake in the current study, could lead to higher adoption rates, as noted in studies from Nigeria and Ethiopia where fear of side effects hindered family planning use (30, 32). Comprehensive counseling that addresses misconceptions and alleviates fears is essential in overcoming this barrier.

Women with no concerns about side effects were also more likely to adopt PFP, highlighting the crucial role that perceptions of contraceptive safety play in decision-making. Concerns about side effects have been widely documented as a barrier to contraceptive uptake in multiple studies. For instance, a study in Nigeria found that fears of adverse effects were a major deterrent to PFP adoption (30). Similarly, a

study conducted in Ethiopia echoed these concerns, with women reporting reluctance to use contraceptives due to perceived health risks associated with them (31). Addressing these misconceptions through comprehensive, evidence-based counseling could be a key strategy to enhance PFP uptake. Educating women about the safety and benefits of contraceptives, while addressing their specific fears, is essential to reducing this barrier and promoting wider acceptance and use of family planning services.

### **5.1.3 Health system-related determinants for the uptake of PFP**

In the study, health system-related factors were crucial in influencing the uptake of postpartum family planning (PFP). A key finding was the importance of clear and comprehensive counseling at healthcare facilities, which directly contributed to informed decision-making. This aligns with previous studies indicating that high-quality counseling enhances PFP uptake, particularly when healthcare providers respect patient autonomy and provide accurate, tailored information (38). Effective communication between healthcare providers and patients builds trust, fostering a supportive environment conducive to PFP adoption. This finding emphasizes the need for continuous training of healthcare workers to ensure they are equipped with the skills necessary to provide accurate and relevant reproductive health information, which is essential for increasing contraceptive acceptance and reducing postpartum unmet needs. Furthermore, the availability of informational materials has highlighted as another critical aspect influencing PFP uptake. In contexts where women are equipped with sufficient knowledge about family planning options, uptake rates tend to increase. Studies from Ethiopia and Pakistan have similarly underscored the importance of

accessible family planning information and the role of skilled healthcare providers in guiding women through their contraceptive choices (40, 15). However, a common barrier in low-resource settings is the inadequate supply of informational materials and trained personnel, which can negatively influence the quality of care and limit women's ability to make informed decisions (39). Addressing these gaps by ensuring the availability of resources and continuous provider education is crucial to improving maternal health outcomes and supporting women's reproductive autonomy.

In the study it was also noted that, confidence and trust of healthcare providers and satisfaction with the quality of services were significant factors contributing to PFP uptake in the current study. Similar findings observed in other settings, where the quality of care and provider-client interactions greatly influenced contraceptive use (42). However, in contrast to high-income countries where healthcare systems are well established and family planning services are more accessible, many low- and middle-income countries face systemic challenges such as resource constraints and poor infrastructure (37). Inadequate training, lack of supervision, and limited access to certain contraceptives, such as intrauterine contraceptive devices (IUCDs), reported as barriers in several studies (38, 15). Improving healthcare infrastructure and enhancing provider competency through targeted interventions could significantly improve PFP uptake and reproductive health outcomes, particularly in resource-constrained settings.

## **5.2 Strengths and limitation of the study**

### **Strengths**

The uptake of postpartum family planning is essential for enhancing maternal and child health outcomes, and this study found that various individual and health-system factors

significantly influence this uptake. Understanding these determinants is crucial for developing targeted interventions aimed at increasing contraceptive use among postpartum women. Specifically, the findings indicate that prior contraceptive use, effective partner communication, and healthcare provider support play vital roles in promoting informed decision-making and empowerment in reproductive health choices. By providing a comprehensive view of both individual and systemic influences, this research underscores the importance of fostering an environment conducive to informed family planning decisions, thereby enhancing the effectiveness of public health initiatives aimed at improving access to and acceptance of family planning services.

Despite its strengths, the study has notable limitations that warrant consideration. A key limitation is the cross-sectional design, which captures data at a single point in time, thereby limiting the ability to establish causal relationships between the identified factors and the uptake of PFP. The reliance on self-reported data further introduces the risk of bias, as participants may underreport or overreport their contraceptive use and experiences, which could affect the accuracy of the findings. Additionally, potential confounding variables that have not fully accounted for may influence the observed associations, complicating the interpretation of the results. Finally, conducting the research in a single regional referral hospital restricts the generalizability of the findings; the results may not accurately reflect the experiences of all postpartum women in different contexts or regions. Future studies should aim to address these limitations by utilizing longitudinal designs, diversifying participant populations, and employing more objective measures of contraceptive use to enhance the understanding of PFP uptake and inform effective public health strategies.

### **5.3 Conclusions**

The findings revealed that only 26% of the participants utilized PFP services, highlighting a significant gap in access and acceptance. Key individual factors associated with higher uptake included prior experience with PFP, discussions with partners, the intention not to have more children in the near future, and the absence of concerns regarding side effects. Additionally, health-system determinants such as effective counseling, respect for patient choices, availability of informational resources, and a high level of trust in healthcare providers found to be significantly influence the decision to adopt modern family planning methods. These insights underscore the importance of addressing both personal and systemic factors to enhance PFP uptake among postpartum women.

### **5.4 Recommendations**

Based on the findings of the study, several recommendations are made to improve the uptake of postpartum family planning services as follows:

**Enhance Counseling Services:** Healthcare providers should prioritize comprehensive and clear counseling regarding PFP options. This can include tailored information sessions for postpartum women to address their specific needs and concerns.

**Promote Partner Involvement:** Encouraging discussions between women and their partners about family planning could lead to increased uptake. Community-based programs could facilitate workshops or health education sessions on family planning that include partners in the conversation.

**Address concerns about side-effects:** Educational initiatives should focus on alleviating fears regarding potential side-effects of contraceptive methods. Providing evidence-based information can empower women to make informed decisions without undue anxiety.

**Increase accessibility of PFP services:** Efforts should be made to ensure that PFP services are readily accessible in all healthcare facilities, particularly in regional and community hospitals. This includes making informational materials widely available and ensuring that healthcare providers are trained to support women in utilizing these services.

**Integrated PFP services:** Integrate postpartum family planning services into routine maternal healthcare. Healthcare providers should ensure that discussions about contraceptive options occur during prenatal, delivery, and postnatal visits. This integration can normalize conversations around family planning, making it a standard part of care and potentially increasing the uptake of PFP services.

**Further studies:** Additional studies should be conducted to explore the long-term trends in PFP uptake and the effectiveness of interventions designed to improve access and utilization of FP. Research across different regions and settings would also contribute to a more comprehensive understanding of the barriers and facilitators of PFP uptake.

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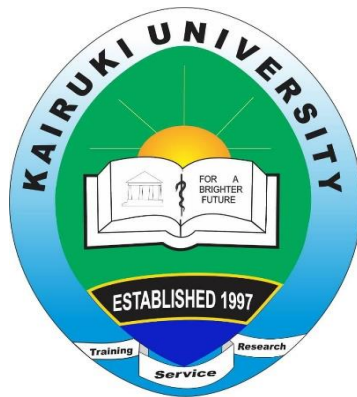
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## APPENDICES

### APPENDIX I: INFORMED CONSENT ENGLISH VERSION

#### KAIRUKI UNIVERSITY



#### RESERCH PARTICIPANT'S INFORMED CONSENT FORM

**Introduction:** Greetings. You are invited to participate in a research study conducted by Ancila Xavier Kessy, an MScPH student at Kairuki University. The purpose of this study is to investigate the Uptake of Immediate postpartum family planning of postpartum modern contraceptive uptake at Mwananyamala Regional Referral Hospital in Dar es Salaam, Tanzania.

**Study Procedures:** If you agree to participate, you will be asked questions to participate in interview schedule to fill in questionnaire

**Risks and Benefits:** There are minimal risks associated with this study, including potential discomfort or inconvenience when answering personal questions. The benefits of participating include contributing valuable information that could enhance our understanding of postpartum modern family planning uptake, potentially leading to improved healthcare services.

**Confidentiality:** Your privacy is of utmost importance. All information collected will be kept confidential and will only be accessible to the research team. Data will be anonymized, and no identifiable information will be disclosed in any publication or presentation.

**Voluntary Participation:** Participation in this study is entirely voluntary, and you have the right to withdraw at any time without consequences. Your decision will not affect your relationship with Kairuki University or Mwananyamala Regional Referral Hospital.

**Contact Information:** If you have any questions or concerns about the study, please feel free to contact Ancila Xavier Kessy at +255759526204; **Email:** [akessy60@gmail.com](mailto:akessy60@gmail.com).

**Consent:** I have read and understood the information provided above. I voluntarily agree to participate in this study, acknowledging my right to withdraw at any time.

Participant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's (assistant) Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **APPENDIX II: FOMU YA RIDHAA KWA KISWAHILI**

### **CHUO KIKUU CHA KAIRUKI**



### **FOMU YA RIDHAA YA MSHIRIKI**

#### **Salamu:**

Unaalikwa kushiriki katika utafiti unaofanywa na Ancila Xavier Kessy, mwanafunzi wa MScPH katika Chuo Kikuu cha Kairuki. Madhumuni ya utafiti huu ni kuchunguza matumizi ya Upangaji uzazi kwa njia za kisasa mara baada ya kujifungua katika Hospitali ya Rufaa ya Mkoa ya Mwananyamala jijini Dar es Salaam, Tanzania.

#### **Taratibu za Masomo:**

Ikiwa unakubali kushiriki, utaulizwa maswali ili kushiriki katika ratiba ya mahojiano kwa ajili ya kujaza dodoso.

**Hatari na Manufaa:** Kuna athari ndogo zinazohusiana na utafiti huu, ikijumuisha usumbufu utakaojitokeza pale utakapokua unajibu maswali ya kibinafsi.

Manufaa ya kushiriki ni pamoja na kuchangia taarifa muhimu ambazo zinaweza kuimarisha uelewa wetu wa utumiaji wa kisasa wa upangaji uzazi baada ya kujifungua, na hivyo kusababisha kuboreshwa kwa huduma za afya.

**Usiri:**

Faragha yako ni ya muhimu sana. Taarifa zote zitakazokusanywa zitawekwa siri na zitapatikana kwa watu wa utafiti pekee. Taarifa itabakia kuwa siri, na hakuna maelezo yoyote yanayotambulika yatafichuliwa katika uchapishaji au wasilisho lolote.

**Kushiriki kwa Hiari:**

Kushiriki katika utafiti huu ni kwa hiari kabisa, na una haki ya kujiondoa wakati wowote bila madhara yoyote. Uamuzi wako hautaathiri uhusiano wako na Chuo Kikuu cha Kumbukumbu ya Hubert Kairuki au Hospitali ya Rufaa ya Mkoa ya Mwananyamala

**Maelezo ya Mawasiliano:**

Ikiwa una maswali au wasiwasi wowote kuhusu utafiti, tafadhali jisikie huru kuwasiliana na Ancila Xavier Kessy kwa nambari +255759526204.

Barua pepe: akessy60@gmail.com.

**Ridhaa:**

Nimesoma na kuelewa maelezo yaliyotolewa hapo juu. Ninakubali kwa hiari kushiriki katika utafiti huu, nakukubaliana na haki yangu ya kujiondoa wakati wowote.

Sahihi ya Mshiriki: \_\_\_\_\_ Tarehe: \_\_\_\_\_

Sahihi ya Mtafiti (msaidizi): \_\_\_\_\_ Tarehe: \_\_\_\_\_

### APPENDIX III: QUESTIONNAIRES ENGLISH VERSION

#### Section I: Socio-demographic Characteristics

No.	Question	Response
1.1	What is your age?	..... years
1.2	What is your marital status?	1. Single 2. Married 3. Divorced 4. Widowed
1.3	What is your level of education?	1. No formal education 2. Primary 3. Secondary 4. Higher education
1.4	What is your religion?	1. Christianity 2. Islam 3. Others
1.5	What is your occupation?	_____
1.6	Partner's level of education	1. No formal education 2. Primary 3. Secondary 4. Higher education

## Section II: Obstetric and Reproductive History

No.	Question	Response Options
2.1	How many times have you been pregnant?	_____ times
2.2	How many living children do you have?	_____ children
2.3	What was the mode of delivery?	1. Vaginal 2. Cesarean 3 Other
2.4	Where did you deliver your last child?	1. Hospital 2. Clinic 3. Home
2.5	Do you plan to have more children?	1. Yes 2. No
2.8	How long has it been since delivery?	1. One day to five days 2. One week and above
2.9	Were you counseled on postpartum family planning?	1. Yes 2. No
2.10	Did you discuss immediate postpartum modern family planning with your partner?	1. Yes 2. No

### Section III: The Uptake of Immediate Postpartum Modern Family Planning

Question	Categories
1. Have you received any family planning counseling during your postpartum stay at this hospital?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, who provided the family planning counseling?	<input type="checkbox"/> Doctor <input type="checkbox"/> Nurse/Midwife <input type="checkbox"/> Community Health Worker <input type="checkbox"/> Other (specify): _____
3. Were you informed about the availability of immediate postpartum modern family planning methods?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Which modern family planning methods were you informed about? (Select all that apply)	<input type="checkbox"/> Pills <input type="checkbox"/> Intrauterine Device (IUD) <input type="checkbox"/> Implants <input type="checkbox"/> Injectable <input type="checkbox"/> Condoms <input type="checkbox"/> Other (specify): _____
5. Have you decided to use any modern family planning method during this postpartum period?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. If yes, which method have you chosen?	<input type="checkbox"/> Pills <input type="checkbox"/> Intrauterine Device (IUD) <input type="checkbox"/> Implants <input type="checkbox"/> Injectable <input type="checkbox"/> Condoms <input type="checkbox"/> Other (specify): _____
7. What influenced your decision to	<input type="checkbox"/> Counseling session <input type="checkbox"/> Previous use <input type="checkbox"/>

choose this method? (Select all that apply)	Partner's preference <input type="checkbox"/> Convenience <input type="checkbox"/> Side effects <input type="checkbox"/> Other: _____
8. If no, why have you decided not to use any modern family planning method during this period?	<input type="checkbox"/> Lack of information <input type="checkbox"/> Fear of side effects <input type="checkbox"/> Partner's disapproval <input type="checkbox"/> Religious/cultural beliefs <input type="checkbox"/> Other: _____
9. Will you receive the family planning method of your choice before discharge?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. If no, what is the reason for not receiving the method?	<input type="checkbox"/> Method not available <input type="checkbox"/> Lack of time <input type="checkbox"/> Health condition <input type="checkbox"/> Other (specify): _____

**Section IV: Individual determinants for the Immediate Postpartum Modern Family Planninguptake**

No.	Question	YES	NO	DK
	<b>Knowledge about Postpartum Modern Family Planning</b>			
4.1	Were you aware of postpartum modern family planning before this delivery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Do you know that postpartum modern family planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	methods can be initiated immediately after childbirth?			
4.3	Are you aware of different postpartum modern family planning methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Do you feel that you lack sufficient information about postpartum modern family planning methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Do you know where to obtain postpartum modern family planning services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Perceived Benefits of Postpartum Modern Family Planning</b>			
4.6	Do you think postpartum modern family planning can improve maternal and child health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7	Do you agree that postpartum modern family planning can help you achieve your desired family size?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8	Do you believe that postpartum modern family planning can reduce the risk of unplanned pregnancies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.9	Do you think that using postpartum modern family planning can contribute to better family financial planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.10	Do you believe that using postpartum modern family planning is important for your health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<b>Attitudes Towards Postpartum Modern Family Planning</b>			
4.11	Do you have confidence in the safety and effectiveness of the postpartum modern family planning methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.12	Do you discuss postpartum modern family planning with your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.13	Does your partner support the use of postpartum modern family planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.14	Do your friends or family members influence your decision on postpartum modern family planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.15	Do you feel comfortable discussing postpartum modern family planning with healthcare providers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.16	Do you feel comfortable asking questions about postpartum modern family planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Perceived Barriers to Postpartum Modern Family Planning</b>			
4.18	Are you concerned about potential side effects of postpartum modern family planning methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.19	Do you feel that there are cultural or traditional beliefs in your community that discourage the use of postpartum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	modern family planning methods?			
4.20	Do you believe that religious beliefs affect your decision to use postpartum modern family planning methods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.21	Are you allergic to any components of the postpartum modern family planning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.22	Are you planning to have more children in near future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section V: Health System-Related Determinants/Predictors for Postpartum Modern Family Planning Uptake**

Instructions: For each question, please select the response that best represents your opinion, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

No.	Question	1	2	3	4	5
5.1	The counseling provided at this hospital regarding postpartum modern family planning is clear and comprehensive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	You believe that the healthcare providers respect your choices regarding postpartum modern family planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	The hospital provides adequate information materials (e.g.,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	brochures, posters) about postpartum modern family planning.					
5.4	The postpartum modern family planning services are easily accessible at this hospital.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	You trust the information provided by the healthcare providers at this hospital about postpartum modern family planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6	The hospital staff are supportive and encouraging about using postpartum modern family planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.7	The hospital offers a variety of postpartum modern family planning methods to choose from.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.8	You are satisfied with the quality of health care providers to provide postpartum modern family planning services at this hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.9	The hospital actively involves partners in counseling sessions about postpartum modern family planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.10	The healthcare providers at this hospital take time to understand my individual needs regarding postpartum modern family planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.11	The hospital's environment is conducive for discussing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	sensitive topics like postpartum modern family planning.					
5.12	The hospital integrates postpartum modern family planning education with other postnatal care services effectively.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## APPENDIX IV: DODOSO KWA KISWAHILI

### Kipengele I: Taarifa binafsi

Na.	Maswali	Majibu
1.1	Una miaka mingapi?	Miaka .....
1.2	Je, hali yako ya ndoa ikoje?	1. Sijaolewa 2. Nimeolewa 3. Tumetengana 4. Mjane
1.3	Je, una kiwango gani cha elimu?	1. Sijasoma 2. Msingi 3. Secondary 4. Elimu ya juu
1.4	Dini yako ni ipi?	1. Mkristu 2. Muislam 3. Nyingine
1.5	Unafanya kazi gani?	_____
1.6	Kiwango cha elimu cha mwenza wako ni kipi?	1. Hajasoma 2. Msingi 3. Sekondari 4. Elimu ya juu

## Kipengele II: Historia ya Uzazi na Kujifungua

Na.	Maswali	Majibu
2.1	Umekuwa mjamzito mara ngapi?	Mara _____
2.2	Una watoto wangapi walio hai?	Watoto _____
2.3	Je, ulijifungua kwa njia gani?	1. Kawaida 2. Upasuaji 3. Nyingine
2.4	Mtoto wa mwisho ulijifungulia wapi?	1. Hospitali 2. Zahanati 3. Nyumbani
2.5	Una mpango wa kuzaa watoto wengine?	1. Ndio 2. Hapana
2.6	Baada ya kujifungua mzunguko wa hedhi unarudi baada ya muda gani?	1. Wiki 6 2. chini ya wiki sita 3. Zaidi ya wiki 6
2.7	Baada ya kujifungua unachukua muda gani kushiriki tendo la ndoa?	1. Wiki 6 2. Chini ya wiki 6 3. Zaidi ya wiki 6
2.8	Je, ni muda gani umepita tangu umejifungua?	1. Siku 1 hadi 3 2. Wiki 1 hadi 6 3. Miezi 2 na zaidi

2.9	Je, ulipewa elimu kuhusu huduma ya uzazi wa mpango mara baada ya kujifungua?	1. Ndio 2. Hapana
2.10	Je, ulijadiliana na mwenza wako kuhusu upangaji wa uzazi kwa njia za kisasa baada ya kujifungua?	1. Ndio 2. Hapana

**Sehemu ya III: Utekelezaji wa Kutumia njia za Uzazi wa mpango za Kisasa Mar Baada ya Kujifungua**

<b>Maswali</b>	<b>Machaguo</b>
1. Je, umepata ushauri wowote kuhusu upangaji uzazi wakati wa kipindi cha ujauzito na baada ya kujifungua katika hospitali hii?	<input type="checkbox"/> Ndiyo <input type="checkbox"/> Hapana
2. Kama ndiyo, ni nani aliyetoa ushauri kuhusu upangaji uzazi?	<input type="checkbox"/> Daktari <input type="checkbox"/> Muuguzi/Mzazi Msaidizi <input type="checkbox"/> Mfanyakazi wa Afya ya Jamii <input type="checkbox"/> Mwingine (eleza): _____
3. Je, ulipewa taarifa kuhusu upatikanaji wa njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/> Ndiyo <input type="checkbox"/> Hapana

<p>4. Ni njia zipi za kisasa za upangaji uzazi ulizoambiwa? (Chagua zote zinazotumika)</p>	<p><input type="checkbox"/> Vidonge <input type="checkbox"/> Kifaa cha Kuingiza Mwilini (IUD) <input type="checkbox"/> Vipandikizi <input type="checkbox"/> Sindano <input type="checkbox"/> Kondomu <input type="checkbox"/> Mwingine (eleza): _____</p>
<p>5. Je, umeamua kutumia njia yoyote ya kisasa ya upangaji uzazi katika kipindi hiki cha baada ya kujifungua?</p>	<p><input type="checkbox"/> Ndiyo <input type="checkbox"/> Hapana</p>
<p>6. Kama ndiyo, ni njia gani umechagua?</p>	<p><input type="checkbox"/> Vidonge <input type="checkbox"/> Kifaa cha Kuingiza Mwilini (IUD) <input type="checkbox"/> Vipandikizi <input type="checkbox"/> Sindano <input type="checkbox"/> Kondomu <input type="checkbox"/> Mwingine (eleza): _____</p>
<p>7. Nini kilichokuchochea kuchagua njia hiyo? (Chagua zote zinazotumika)</p>	<p><input type="checkbox"/> Kikao cha ushauri <input type="checkbox"/> Matumizi ya awali <input type="checkbox"/> Upendeleo wa mwenza <input type="checkbox"/> Urahisi <input type="checkbox"/> Madhara <input type="checkbox"/> Mwingine (eleza): _____</p>
<p>8. Kama hapana, kwa nini umeamua kutotumia njia yoyote ya kisasa ya upangaji uzazi katika kipindi hiki?</p>	<p><input type="checkbox"/> Ukosefu wa taarifa <input type="checkbox"/> Hofu ya madhara <input type="checkbox"/> Kukataliwa na mwenza <input type="checkbox"/> Imani za kidini/kijamii <input type="checkbox"/> Mwingine (eleza): _____</p>
<p>9. Je, utapokea njia ya upangaji uzazi</p>	<p><input type="checkbox"/> Ndiyo <input type="checkbox"/> Hapana</p>

unayopendelea kabla ya kuruhusiwa kutoka hospitalini?	
10. Kama hapana, ni nini sababu ya kutopokea njia hiyo?	<input type="checkbox"/> Njia haipatikani <input type="checkbox"/> Ukosefu wa muda <input type="checkbox"/> Hali ya kiafya <input type="checkbox"/> Mwingine (eleza): <hr/>

**Sehemu ya IV: Uamuzi binafsi kuhusu kutumia njia za uzazi wa mpango za Kisasa Mara Baada ya Kujifungua**

No.	Maswali	NDIYO	HAPANA	SIJUI
	<b>Uelewa Kuhusu Upatikanaji wa njia za upangaji Uzazi Mara Baada ya Kujifungua</b>			
4.1	Je, ulikuwa unafahamu kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua kabla ya kujifungua katika hospital hii?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Je, unajua kwamba njia za kisasa za upangaji uzazi wa mara baada ya kujifungua zinaweza kuanzishwa mara moja baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Je, unafahamu njia tofauti za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.4	Je, unahisi kwamba huna taarifa za kutosha kuhusu njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Je, unajua mahali pa kupata huduma za upangaji uzazi wa kisasa wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Faida Zinazotarajiwa za Upangaji Uzazi wa Mara Baada ya Kujifungua			
4.6	Je, unadhani upangaji uzazi wa kisasa wa mara baada ya kujifungua unaweza kuboresha afya ya mama na mtoto?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7	Je, unakubali kwamba upangaji uzazi wa kisasa wa mara baada ya kujifungua unaweza kukusaidia kufikia idadi ya watoto unaotaka?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8	Je, unaamini kwamba upangaji uzazi wa kisasa wa mara baada ya kujifungua unaweza kupunguza hatari ya mimba zisizotarajiwa?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.9	Je, unadhani kwamba kutumia upangaji uzazi wa kisasa wa mara baada ya kujifungua kunaweza kuchangia mpango bora wa kifedha wa familia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.10	Je, unaamini kwamba kutumia upangaji uzazi wa kisasa wa mara baada ya kujifungua ni muhimu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	kwa afya yako?			
	<b>Mitazamo Kuhusu Upangaji Uzazi wa Mara Baada ya Kujifungua</b>			
4.11	Una imani na usalama na ufanisi wa njia za kisasa za upangaji uzazi wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.12	Je, unajadili upangaji uzazi wa kisasa wa mara baada ya kujifungua na mwenzi wako?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.13	Je, mwenzi wako anaunga mkono matumizi ya upangaji uzazi wa kisasa wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.14	Je, marafiki zako au wanafamilia wanaathiri uamuzi wako kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.15	Je, unahisi vizuri kujadili upangaji uzazi wa kisasa wa mara baada ya kujifungua na watoa huduma za afya?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.16	Unahisi vizuri kuuliza maswali kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua wakati wa ziara zangu hospitalini.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Vikwazo Vinavyohisiwa Kuhusu Upangaji</b>			

	<b>Uzazi wa Mara Baada ya Kujifungua</b>			
4.18	Je, una wasiwasi kuhusu madhara yanayoweza kutokea kutokana na matumizi ya njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.19	Je, unahisi kwamba kuna imani za kitamaduni au za kijamii katika jamii yako zinazozuia matumizi ya njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.20	Je, unaamini kwamba imani za kidini zinaathiri uamuzi wako wa kutumia njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.21	Je, una mzio na vipengele vyovyote vya njia za kisasa za upangaji uzazi wa mara baada ya kujifungua?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.22	Je, unapanga kupata watoto zaidi katika siku za usoni?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Sehemu ya V: Sababu za Mfumo wa Afya katika Utekelezaji wa kutoa huduma za uzazi wa mpango za Kisasa Mara Baada ya Kujifungua**

**Maelekezo:** Kwa kila swali, tafadhali chagua jibu linalowakilisha maoni yako kwa usahihi, ambapo 1 = Sikubaliani Kabisa, 2 = Sikubaliani, 3 = Siko Nao, 4 = Nakubaliana, na 5 = Nakubaliana Kabisa.

No.	Maswali	1	2	3	4	5
5.1	Ushauri unaotolewa katika hospitali hii kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua ni wazi na wa kina.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Unahisi kwamba watoa huduma za afya wanaheshimu chaguo lako kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Hospitali inatoa vifaa vya kutosha vya taarifa (mfano, vijitabu, mabango) kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Huduma za upangaji uzazi wa kisasa wa mara baada ya kujifungua zinapatikana kwa urahisi katika hospitali hii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Unaziamini taarifa zinazotolewa na watoa huduma za afya katika hospitali hii kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6	Wafanyakazi wa hospitali wanatoa msaada na kuhamasisha kuhusu matumizi ya upangaji uzazi wa kisasa wa mara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	baada ya kujifungua.					
5.7	Hospitali inatoa aina mbalimbali za njia za upangaji uzazi wa kisasa wa mara baada ya kujifungua za kuchagua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.8	Unaridhishwa na ubora wa watoa huduma za afya katika kutoa huduma za upangaji uzazi wa kisasa wa mara baada ya kujifungua katika hospitali hii.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.9	Hospitali inawashirikisha wenza katika vikao vya ushauri kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.10	Watoa huduma za afya katika hospitali hii wanachukua muda kuelewa mahitaji binafsi kuhusu upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.11	Mazingira ya hospitali ni rafiki kwa kujadili mada nyeti kama upangaji uzazi wa kisasa wa mara baada ya kujifungua.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.12	Hospitali inaunganisha elimu ya upangaji uzazi wa kisasa wa mara baada ya kujifungua na huduma nyingine za baada ya kujifungua kwa ufanisi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## APPENDIX V: ETHICAL CLEARANCE LETTER

### KAIRUKI UNIVERSITY (KU)

70 Chwaku Street,  
Mikocheni,  
P.O BOX 65300,  
Dar es Salaam,  
Tanzania.



Tel: +255-22-2700021/4  
Fax: +255-22-2775591  
Email: irec@ku.ac.tz  
Website: www.ku.ac.tz

Ref. No. KU/IREC/27.10/458

1<sup>st</sup> July 2024

Dr. Ancila Xavier Kessy,  
Kairuki University,  
Box 65300,  
Dar es Salaam, Tanzania.

#### RE: ETHICAL CLEARANCE CERTIFICATE FOR CONDUCTING HEALTH RESEARCH.

I am pleased to inform you that the research titled: **Uptake of Immediate Postpartum Modern Family Planning Among Women Attending Mwananyamala Regional Referral Hospital In Dar Es Salaam Tanzania (Kessy A. X., 2024)** has been granted ethical approval.

This approval is in effect for one year from the above date. Any changes in the procedures should be reported to the Institutional Research Ethics Committee. Significant changes will require the submission of a revised request for ethical approval. You will be required to submit **study a progress report** every six months.

Permission to publish your findings should be sought from the National Institute for Medical Research (NIMR) before submission to a ~~publisher and~~ not concurrently.

#### CHAIR PERSON

Name: Prof. Fredrick Kaljage

Signature: 



Name: Prof. Columba Mbekenga

Signature: 

## APPENDIX VI: INTRODUCTION LETTER

# KAIRUKI UNIVERSITY (KU)

70 Chwaku Street  
Regent Estate – Mikocheni  
P.O. Box 65300,  
Dar es Salaam  
Tanzania



Tel: +255-22-2700021/4  
Email: [secvc@ku.ac.tz](mailto:secvc@ku.ac.tz)  
Website: [www.ku.ac.tz](http://www.ku.ac.tz)

REF: KU/PT/30.5/484

8<sup>th</sup> July 2024

Medical Officer In-charge,  
Mwananyamala Regional Referral Hospital,  
Dar es Salaam.

**Re: Letter of introduction Ms. ANCILA KESSY (MScPH – Public Health)**

The above named is a MScPH postgraduate student taking Master of Science in Public Health. As part of fulfilling her master's degree programme, she plans to undertake a study titled **"UPTAKE OF IMMEDIATE POSTPARTUM MODERN FAMILY PLANNING AMONG POSTNATAL WOMEN ATTENDING MWANANYAMALA REGIONAL REFERRAL HOSPITAL IN DAR ES SALAAM, TANZANIA."**

This study was reviewed and has been granted with an ethics approval No. **KU/IREC/27.10/458** by the KU Institutional Research Ethics Committee that will be valid for one year with effect from 1<sup>st</sup> July 2024.

This letter serves to introduce **Ms. ANCILA KESSY** who will be conducting her study in Dar es Salaam, please accord her with the needed support.

Thank you for your support and cooperation in developing human resources for health in our country.

Regards,

  
Professor Columba Mbekenga, PhD

**Director Postgraduate Studies & Research Institute**



c. c. Prof. Titus Kabalimu, Chairperson, School of Public Health, KU.

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+255 659 371 234

## APPENDIX VII: PERMISSION LETTER

THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF HEALTH

Telephone Address:  
Telephone: 022-2760500



Mwananyamala Regional  
Referral Hospital,  
P.O. Box 61665  
Dar es Salaam.

RE: NO: MA. 59/240/01/37

DATE: 25th July, 2024

Director,  
Hurbert Kairuki Memorial University,  
P.O. BOX 65300,  
DAR ES SALAAM.

RE: MS. ANCILA KESSY- TO CONDUCT HER RESEARCH IN MWANANYAMALA  
REGIONAL REFERRAL HOSPITAL

The captioned subject refers

2. May you be informed that your request to research Titled "*Uptake of immediate postpartum modern family planning among postnatal women attending Mwananyamala Regional Referral Hospital - in Dar es Salaam, Tanzania*" Start to 22<sup>th</sup> July, 2024, to 22<sup>th</sup> August, 2024 is asserted.

3. The Institution charges 50,000/= as Research fee as per student spent. The payments are to be made upon reporting.

4. May she report to the Administration and HR department head for further instruction.

Thanks.

Atugonza Kyaruzi  
RESEARCH COORDINATOR  
FOR: MEDICAL OFFICER INCHARGE  
MWANANYAMALA REGIONAL REFERRAL HOSPITAL



COPY:  
Head of OBGY Department -

MWANANYAMALA REGIONAL  
REFERRAL HOSPITAL