

**WOMEN'S SATISFACTION WITH INTRAPARTUM CARE AND  
ASSOCIATED FACTORS AT MUHIMBILI NATIONAL HOSPITAL  
IN DAR ES SALAAM, TANZANIA**

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**Department of Obstetrics and Gynaecology**



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**By**

**Lucie A. Okonda**

**A Dissertation Submitted in Partial Fulfilment of the Requirements for the  
Degree of Master of Medicine in Obstetrics and Gynaecology of  
Muhimbili University of Health and Allied Sciences.**

**October, 2020**

**CERTIFICATION**

The undersigned certifies that she has read and hereby recommends for acceptance by Muhimbili University of Health and Allied Sciences dissertation entitled “**women’s satisfaction with intrapartum care and associated factors at Muhimbili national hospital in Dar Es Salaam, Tanzania**”, in partial fulfillment of the requirements for the degree of Master of Medicine in Obstetrics and Gynaecology of Muhimbili University of Health and Allied Sciences.

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**DR FURHA AUGUST. MD, Mmed,PhD**

(Supervisor)

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**Date**

## DECLARATION

I, **Lucie Anakete Okonda**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature.....

Date.....

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## **DEDICATION**

This work is dedicated to my beloved parents Dr Daniel Okonda and Mrs. Marie Josee Okonda for their love, prayers and support during my study period.

To my husband Dr Ahmed A Ahmed and children Rania A Ahmed and Raessah A Ahmed for their patience, support and prayers throughout my study period.

## ABSTRACT

**Background:** Satisfaction with intrapartum care is an important determinant of maternal health services return behavior and utilization. Assessing maternal satisfaction with intrapartum care will assist in improving the way health services are delivered to the women.

**Objective:** The aim of this study was to assess the proportion of the women satisfied with intrapartum care and its associated factors among post-delivery women at Muhimbili National Hospital.

**Materials and method:** An analytical cross – sectional study was conducted among women who delivered at Muhimbili National Hospital between October to November 2019. A total of 363 study participants were selected by systematic random sampling method. Data was collected using an interviewer-administered Swahili structured questionnaire in which included the socio-demographic and obstetrics characteristics, questions measuring satisfaction of which the answers were ranked in a 5-likert scale; very satisfied, satisfied, neutral, unsatisfied and very unsatisfied and the last questions on loyalty return behaviours. During analysis the dependent variable was dichotomized into satisfied scoring 1 and unsatisfied scoring 0. Those who scored more than 66.6% of the 17 tools of satisfaction were deemed satisfied. Data was analyzed in descriptive statistics in the form of frequencies and percentages using statistical package for social sciences software version 23. Bivariate and multivariate logistic regression was done to identify factors associated with intrapartum care satisfaction. A p-value <0.05 was considered statistically significant.

**Results:** 73.33% of women who delivered at Muhimbili National Hospital were satisfied with the care during childbirth which was relatively high and more than 80% would return to the facility or recommend the facility to friends and relatives. Among those satisfied, more than 90% were satisfied with most elements of the interpersonal relationship; like reception, respect, support, time spent with the health professionals, on the way the examination was performed, assistance, attention and knowledge while only 75.4% satisfied with the attitude of the health staffs. More than 70% were satisfied with all the elements of physical birth environment; privacy hygiene and the availability of equipment and medical supplies. More than 60% also satisfied with most elements of the information received and decision making like opportunity given to ask questions, opportunity given to express one self and only about

50% were satisfied with the pain management and the decision of not having a companion during labour and delivery. Regression analysis revealed that women who had caesarean section were two times more likely to be satisfied with intrapartum care than those who delivered vaginally (AOR=1.90, 95% CI=1.09-3.30). The multipara were three times more likely to be satisfied with intrapartum care than the primipara (AOR= 2.62, 95% CI=1.20-5.75).

**Conclusion:** The proportion of women satisfied with the intrapartum care services at Muhimbili National Hospital was relatively high (73.33%), with more than 80% of the women would return or recommend the facility to friends and relatives. Most women were satisfied with most elements of satisfaction like in interpersonal relationship more than 90% were satisfied except 75.4% satisfied with the attitude of the health workers, in the physical birth environment more than 70% were satisfied and in the decision making more than 60% were satisfied except in pain management and decision of not having a companion whereby only 50% were satisfied. We also noted that those who delivered by caesarean section and the multipara were more satisfied than their counterpart. Continuous improvement of the intrapartum care services, especially on the attitude of the health workers, training on pain management and modifying the labour wards environment to have the potential to accommodate companion involvement during labour as well as Increasing individualized care, patient centered care, support, proper monitoring, timely interventions and decreasing unnecessary vaginal birth interventions may contribute to improving satisfaction with labour and delivery.



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**LIST OF ABBREVIATIONS**

<b>ANC</b>	Antenatal care
<b>C/S</b>	Caesarean section
<b>IC</b>	Intrapartum care
<b>IUFD</b>	Intrauterine fetal death
<b>MNH</b>	Muhimbili National Hospital
<b>MUHAS</b>	Muhimbili University of Health and Allied Sciences
<b>SPSS.</b>	Statistical package for social sciences
<b>USA</b>	United States of America
<b>WHO</b>	World Health Organization

**DEFINITION OF TERMS**

- Intrapartum:** The period from the beginning of uterine contractions that cause cervical dilatation to first 4 hours after delivery of the newborn and placenta.
- Intrapartum Care:** The care provided to a woman during labor and delivery by health care professionals including psychological support, management of normal labor and delivery, detection and management of complications.
- Interpersonal Relationship.** Relationship between the health worker and the patient, based on mutual trust and respect, the nurturing of faith and hope, being sensitive and assisting with the gratification of our patient's physical, emotional and spiritual needs through our knowledge and skills.
- Mothers Satisfaction:** More than 66.6% satisfaction with intrapartum care obtained from the 5-likert scale questionnaires which are ranked from very satisfied, satisfied, neutral, unsatisfied and very unsatisfied from the questions about intrapartum care.

## **1.0 INTRODUCTION**

### **1.1 Background**

Intrapartum care (IC) refers to the care provided to the women during labour and delivery by the health care professionals including psychological support, management of normal labour and delivery, detecting and managing complications. The goal is to provide professional care to the women in labour so as to recognize early complications to prevent them and assuring that both mother and the baby are healthy as well as providing a positive experience of birth to the women and their families so that they would want to use the health facilities for their future deliveries and recommend the facility to friends and relatives (1). The purpose of intrapartum care is to monitor both the mother and her unborn baby during labour and delivery, detect complications, respond to the women's complaints, making sure that the woman is comfortable, reassuring, providing support and guidance to the woman and her family (2). The care reduces maternal and perinatal mortality and morbidity both directly through detection and treatment of pregnancy related complications and indirectly through identification of women at increased risk of developing complications during labour and delivery (3).

Patient satisfaction with the health care is the measure of the extent to which a patient is content with the health care they received and it is now being recognize as an important outcome of the health care delivery system and currently most of the developing countries are studying patient satisfaction with the health care so as to understand the patient experience of the health care and to obtain information about the quality of care they received in order to identify the problems and improve on them (4). Following the 1994 International Conference on Population and Development, researchers' interest in reproductive health also expanded to include satisfaction with the reproductive and maternal health care as an important component. The World Health Organization (WHO) besides promoting skilled birth attendance at every birth to reduce maternal and perinatal mortality and morbidity, also recommends that women satisfaction be assessed to improve the quality and the effectiveness of the health care (5). WHO also emphasizes that patient satisfaction can be ensured as a mean of secondary prevention of maternal and perinatal mortality and morbidity, since a satisfied woman is more likely to adhere to providers recommendations (6).

Majorities of the studies on people's satisfaction are based on fulfillment and discrepancy theories. The fulfillment theories which state that a person's satisfaction is determined by the outcome of what they experienced during their intrapartum care period. The discrepancy theory which state the differences between the kind of intrapartum care services the women expected and to the actual intrapartum care services they received that made them satisfied with the services (7). There are different views in regards to the concept of satisfaction, one researcher described individual satisfaction with health care as a personal evaluation of the health care service and provider comprising of multiple evaluations of distinct aspect of health care, which are usually determined by the individual's perception, attitude and comparison process. This is what highlights the multidimensional nature of satisfaction.

To evaluate patient's satisfaction of the health care is an accurate instrument so that we can be able to deliver perfect care that meets the expectation of the patients and offer a standard of care throughout the health care system. Patient's satisfaction is a distinctive and a dynamic awareness of the extent to which the anticipated health care was provided (8). The interest in the patients satisfaction is not only based on a desire to deliver more responsive care and ensure the views of the service users are considered, but to develop humanized health care and positively influence health care experiences of consumers (7).

Understanding maternal satisfaction with the intrapartum care services provided is a necessity, as a satisfactory child birth experience has a contribution toward a woman's sense of achievement and has led to anticipations for future positive child birth (9). Maternal satisfaction with intrapartum care helps in the provision of a more responsive and acceptable care, which can lead to an increase in the service utilization and better outcome (2).

Satisfaction can be looked at in relation to various dimension of care such as satisfaction with interpersonal factors like effective communication between the women and care providers during labor and birth, being able to choose among different treatments option (10). Secondly satisfaction with intrapartum care can be linked to information giving and participating in the decision-making and lastly the physical environment in which care is provided (11).



Women, who are satisfied with the intrapartum care services are more likely to return in the future, adhere to health provider's recommendations and recommend the institution to their friends and relatives (12). This will help in reducing the number of home birth deliveries, mothers will have a positive attitude to return back to the health care facility for future delivery thus complications such as postpartum haemorrhage, hypertensive disorders in pregnancy, antepartum haemorrhage and other pregnancy related complications can be well managed to prevent maternal and perinatal mortality and morbidity (3).

A mother's satisfaction of the intrapartum care will make her more co-operative to the health care providers' instruction during and after birth. This will help reduce the complications such as assisted delivery (vacuum or forceps), caesarean section, unnecessary episiotomy and postpartum infections. She will be able to abide to the breastfeeding practices thus promoting the health of her baby (13). It is believed that intrapartum care will contribute to the improvement of the following outcomes: maternal mortality and morbidity, neonatal mortality and morbidity, positive experience of care, health improvement, treating and caring for people in a safe environment and protecting them from avoidable harm (14).

## 1.2 Literature review

There is wide variation regarding the proportion of women satisfied with the intrapartum care services worldwide. A study done in Ethiopia, Gondar teaching hospital revealed 31.3% of women satisfied with the intrapartum care services (15) which was low compared to countries like the United State of America, Australia, Sweden, Iraq, Kenya and Mozambique (16–21). These variations could be due to different in the quality of services provided and the socio-economic characteristics of the population. Countries with highest satisfaction have more trained health professionals and better infrastructure (22). Studies have described that dissatisfaction is usually seen due to the physical characteristics of the facility, the technical aspect of care, the poor care giver and client's interactions, inadequate pain control during labour and the outcome of labour (23). Dissatisfaction with the intrapartum period usually results in post-partum period complications, which results in abnormal puerperium (3).

Most of the studies conducted on satisfaction with intrapartum care has revealed that the quality of patient provider relationship is very important for a positive experience of women during labour and delivery care, these were described by a systematic review done in Canada and a quantitative study done in the United State of America (24). In Ethiopia 86.87% of women were satisfied by having a professional by their side during labour and delivery (25). It has also been noted from other studies that women need to feel respected, secured, compassionate and cared, for them to feel satisfied with the maternal health service and have the will to return to the institution for future deliveries and this helps to decrease maternal morbidity and mortality (15). When women feel that professionals are attentive to them, they become more motivated to attend the hospital for their deliveries (3).

Studies have also revealed that it is very difficult to get a negative statement when asking a patient about a satisfaction of care because of the patients gratitude, loyalty, confident in the health care and also they need to be exposed to the very poorest quality of care before they can express dissatisfaction(18). Yet from the case reports collected in maternity care systems from the wealthiest to the poorest nations worldwide shows high proportion of women being disrespected and abused while seeking maternity care becoming an urgent problem (20). Meaning these women really experienced the poorest quality of care that made them express dissatisfaction.

Some of the studies conducted in the east and southern African countries observed that women frequently experienced abandonment and neglects by the hands of the professionals (15). However, this was not the case in Addis Ababa where 88.6% of the women reported to have received respectful care, this was higher than in Malawi, Kenya and Jordan (26). Most researchers have tried to explain this disrespectful behavior happening as a result of the busy maternity wards and lack of staff, thus the health providers become less concerned with regards to caring which affects the women's psychology (27). All in all, researchers have concluded that every woman has the right to a dignified, respectful and compassionate intrapartum care (27).

Apart from a good interpersonal relationship between the health professionals and the patient contributing to satisfaction with the intrapartum care, the physical birth environment also plays an important role in women's satisfaction with the intrapartum care. According to a study done in Ethiopia, only 53.3% of the women were satisfied with the privacy of care during the pelvic examination and delivery, which affected the overall satisfaction and this was seen to be worse than the findings of the study conducted in Uganda (25). When a woman feels like she was not provided with enough privacy during labour and delivery, she is most likely not to return to the health facility (14). A study done in Ghana also revealed that women were more satisfied with the intrapartum care if there was enough space for movements, availability of clean toilets, showers and water, also a constant supply of electricity (28). This is not usually the case found in the Sub-Saharan African countries as revealed by the national representatives' surveys in Ethiopia, Kenya, Rwanda and Tanzania which reported no electricity in most of the health facilities (11).

Continuous support and care during labour and delivery, whether by a family member or doula, has a positive effect with the women's satisfaction with the intrapartum care because labour is a period full of anxiety, fear and uncertainties (29). According to the study done in Japan, it showed that institutional regulations of not having a birth companion during labour and delivery negatively affected women's satisfaction with the intrapartum care, because continuous labour support had appeared to provide impressive benefits and no harm to the women and newborn, especially when provided by someone in a doula role (30). This was seen to be an important practice especially if one wished to improve the quality, outcome and experience of intrapartum care (3). This continuous support during labour and delivery

by family member or doula, not only helps to improve satisfaction with intrapartum care but also helps to reduce the use of analgesia and operative deliveries (31). Another review concluded that, the amount of support from the care giver, the quality of the care giver-patient relationship and involvement in the decision making were the most important aspect of intrapartum care, medical intervention and the physical birth environment were less important (18).

Satisfaction with intrapartum care is a multidimensional concept as most researchers have reported (3). Multiple factors contribute towards women satisfaction with intrapartum care and these factors are not usually similar in different studies, for example one study in Addis Ababa noted that women who were coming from far places were more satisfied with the intrapartum care than those who were living nearby but in Ghana women who had to travel long distances before reaching the health facilities were less satisfied with the intrapartum care services (32). This was explained by the fact that women who travelled long distances to the hospital while suffering from labour pain and complications could be more satisfied if the pain was relieved (32). In a study comparing Jordan and Brazil showed that, in Jordan women were not satisfied with the practice of episiotomy as compared to vacuum and forceps, but in Brazil they were more satisfied with the episiotomy because instrumental delivery was more traumatic and painful ending into significant perinatal complications when compared with the episiotomy assisted delivery (1).

A study done Iraq, Australia and Egypt noted that the younger women, educated and the primipara were more likely to be satisfied with the intrapartum care as compared to the their counterpart (17,19,33), however this study was different with study that was done in Sri Lanka whereby the older women and multipara were more satisfied with the intrapartum care (34). When mode of delivery was concerned, different studies had different results for an example a study that was done in in Jordan, Ethiopia had revealed that women who had emergency caesarean section were more likely to be satisfied than those who had vaginal delivery because they felt gratitude that the intervention was taken to save life (1)

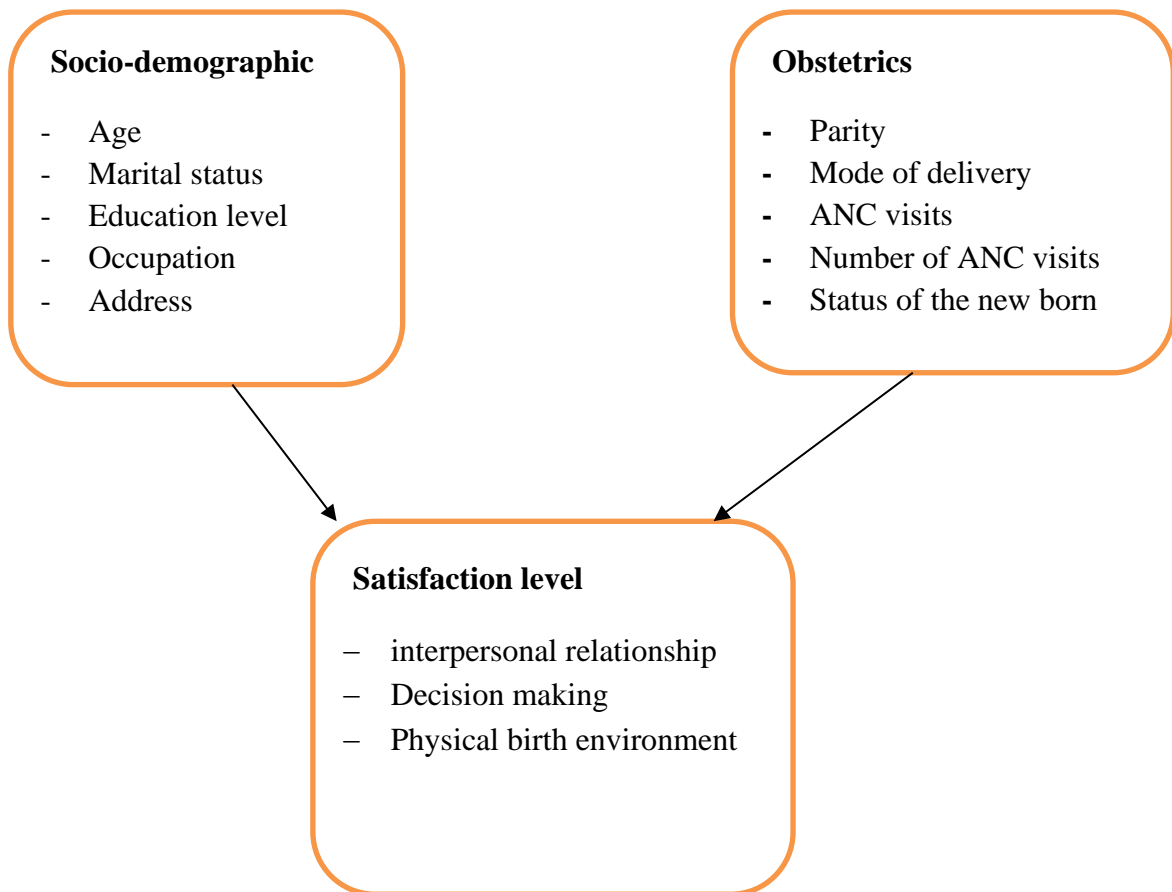
### 1.3 Conceptual framework

Women's satisfaction with the IC is associated with a number of factors. Within this study, factors considered were maternal age, marital status, education level, occupation, address, parity, mode of delivery, ANC attendance, number of ANC visits, and status of the new born.

From the diagram below, social demographic factors and obstetrics factors affects the women satisfaction with intrapartum care.

The independent variables are expected to influence maternal satisfaction with the IC.

The dependent variable will be dichotomized to either being satisfied or unsatisfied with the IC.



**Figure 1: Conceptual framework**

#### **1.4 Problem statement**

Despite the government of Tanzania trying to improve the number of health services deliveries, there is still about 40% of the women who do not utilize the health facilities for deliveries (35). Tanzania is a country that contributes to the to the global burden of maternal and neonatal mortality and morbidity, ranking fourth in the highest number of maternal deaths in sub-Saharan Africa and sixth in highest in the world with a maternal mortality rate of 556 per 100000 livebirths and 25 per 1000 birth neonatal death (36,37).

Most of the deaths as observed occurs during the intrapartum period. Among the barriers that prevents most women accessing the maternity services for deliveries dissatisfaction with intrapartum care services is one of them because a dissatisfied woman is not likely to return to the health services for future deliveries or recommend the services to friends or relatives as also noted by WHO and recommends that satisfaction with intrapartum care be a secondary measure for prevention of maternal and neonatal mortality and morbidity because a satisfied women is likely to return to the facilities for future deliveries (5).

There are little researches done on maternal satisfaction with intrapartum care globally as well as in Tanzania. Most of the studies conducted are mostly on respectful maternity care and quality of intrapartum care looking on the health workers perspective but not on maternal point of view. Therefore, the findings from this study will be very useful, as it will help to guide us to what area of intrapartum care services needs improvement to ensure that continuous quality of care is provided so as to increase the proportion of women delivering in the health facilities.

#### **1.5 Rationale of the study**

The high proportion of maternal and neonatal morbidity and mortality occurs mostly during the intrapartum period, assessing women satisfaction with the intrapartum care is important in order to get an overview of which aspect of care cause women and their partner concerns and it will also provide more valuable information for improvement of care and increase patient satisfaction and utilization of the maternity services.

## **1.6 Research question**

### **1.6.1 Main research questions**

- i. What is the proportion of women satisfied with the intrapartum care at MNH in Dar es Salaam, Tanzania?
- ii. What are the factors associated with satisfaction with intrapartum care among women who delivered at MNH in Dar es Salaam, Tanzania?

## **1.7 Objectives**

### **1.7.1 Broad objectives**

To determine the proportion of women satisfied with the intrapartum care and the factors associated with intrapartum care satisfaction among the women who delivered at MNH in Dar es Salaam, from 1<sup>st</sup> October to 30<sup>th</sup> November 2019.

### **1.7.2 Specific objectives**

- i. To determine the proportion of women satisfied with the intrapartum care at MNH in Dar es Salaam, Tanzania.
- ii. To assess factors associated with intrapartum care satisfaction among post-delivery mothers at MNH in Dar es salaam, Tanzania.

## **2.0 METHODOLOGY**

### **2.1 Study design**

This study design was a hospital based analytical cross-sectional study.

### **2.2 Study duration**

Data was collected from 1<sup>st</sup> October to 30<sup>th</sup> November 2019

### **2.3 Study setting**

The study was conducted at MNH, Department of Obstetrics and Gynaecology. Muhimbili National Hospital is the largest teaching and referral hospital in the United Republic of Tanzania. It is located in Ilala Municipality, Dar es Salaam. The Department of Obstetrics and Gynaecology of Muhimbili National Hospital is one of the largest among the clinical departments. It is composed of two maternity blocks. The first block (old block) consists of two neonatal wards, a labour ward, an obstetric intensive care unit (together with the high dependency unit) and four obstetric wards (wards 32, 33, 38, and 39). The second block (new block) consists of antenatal clinics and two obstetric wards for mothers who have been previously assessed and are stable (wards 40, 42) as well as an obstetric ward for post-delivery mothers admitted for Kangaroo Mother Care (ward 41). The average bed compacity in the labour is about 22 beds. The average deliveries per day is about 20.

Patients are usually received at the main reception located at the maternity block. This includes patients from the antenatal clinics, referral from other health facilities and some come directly from home. Those who are in labour are escorted directly to the labour ward by the hospital attendant. At the labour ward patients' particulars are cross checked and allocated a bed to lie down while her belongings are kept safe by the labour ward staffs. Vital signs and a short history are taken by the nurses on duty while awaiting the team on call consisting of a specialist, two resident or registrars and a medical intern to review the women and plan for management. After delivery patients are observed for about 1 to 2 hours if no complications transferred to the postnatal ward escorted by the labour ward nurse.



On arrival to the post-natal ward the patient's particulars are entered in the transfer in books. In the post-natal ward, the patient is observed for about 24 hours, if she has no complications, she is discharged home after the decision is made during the ward round and entered into the discharged book. Those who had caesarean section are observed for two to three days then discharged if they have no complications.

The labour ward is a restricted area where friends and relatives are not allowed. Privacy is maintained by provision of curtains separating patient from patient. Pain management is not routinely practiced at the labour ward unless the patients has intrauterine fetal death, abruptio placenta, patient with medical conditions like sickle cell disease, anemia in failure and those who are unable to tolerate labour pain. Cleanness in the labour ward is done by a hired company that is constantly supervised by the nurse in charge. Under each bed there is a dustbin and a sharp-disposal container which are emptied when full. The labour ward attendants also gives a quick orientation of the labour ward and where the toilet is located and how to maintain cleanness. Electricity and water are always available in the labour ward. The nursing and the supporting staffs operate in 12 hours shift, consisting of about 6 registered nurses, three nursing interns and two hospital attendant per shift. There are also two pharmacy personnel working in a 12 hours shift making sure of the constant availability of medical supplies and equipment.

## **2.4 Study population**

The study population comprised of all women who delivered at MNH from 1<sup>st</sup> October to 30<sup>th</sup> November 2019

## **2.5 study sample**

All women who delivered at MNH labour ward.

## **2.6 Inclusion and exclusion criteria**

### **2.6.1 Inclusion criteria**

Discharged post-delivery women who delivered at MNH labour ward.

### **2.6.2 Exclusion criteria**

Women who had elective caesarean section.

## 2.7 Study sample

According to a study done in Ethiopia (15) the sample size was calculated using the formula:

$$n = Z^2 * P (1 - P)/E^2$$

Where;

P = 0.313 Proportional of women who were satisfied with intrapartum care according (15).

Z = Confidence level (Z = 1.96 for 95% CI)

E = Margin of error 5% (0.05)

$$n = 1.96^2 * 0.313(1 - 0.313)/0.05^2$$

$$\therefore n = 330$$

Considering non-response rate of 10%: 33+330

Therefore n = 363

Therefore, the sample size required was 363.

## 2.8 Training of research assistants

There was one medical student from MUHAS who was trained by the principle investigator for one day on the purpose of the study at MNH maternity block. The training was on the objective of the study, how to recruits participants, meaning of every question in the questionnaire, professional conduct in approaching women recruited for the study.

## 2.9 Sampling technique

Systematic random sampling was used in recruiting discharged post-delivery women who delivered at MNH Dar es salaam. The entry point was going through the transfer in books as well as discharge books in each postnatal ward (32,33,38,39 and 42), to get the list of women who delivered at MNH labour ward and discharged on that particular day. From the list, the first participant was picked randomly by lottery method and to get the next participants, every third name on the list was picked. To get the interval of every third name, we had an estimate of 1000 deliveries conducted in two months so we divided the 1000 deliveries by the total sample size which was 363 then we got 2.7 which we rounded off to 3 to get the interval. After identifying the selected participants, we introduced ourselves and explained the purpose and the importance of the study. After agreeing to participate in the

study, they were given a consent form to sign, those who could not sign thumb print was used and the participants were included in the study. We used one of the side rooms by the wards to conduct the interview because it had enough privacy.

### **2.10 Data collection procedure**

The data was collected using an interviewer-administered Swahili structured questionnaire from WHO intrapartum care satisfaction tool from 1<sup>st</sup> October to 30<sup>th</sup> November 2019. From the original questionnaire we added two questions which were asking women if they were satisfied with the pain-relieving management and with the decision of not having a companion, this were added because of the current intrapartum care recommendation by WHO concerning companion and pain management during labour and delivery (38) we wanted to see the effect pain management and companion have on women satisfaction during labour and delivery so that we can advise the hospital management, the stakeholder and the policy maker if possible to incorporate it into the intrapartum care management as per the WHO recommendation (38).

The questionnaire was pre-tested in the same facility before data collection. The questionnaire had three parts, first part was on socio-demographic and obstetrics factors of the participants which included age, level of education, marital status, occupation, address, antenatal care attendance, number of antenatal cares attended, mode of delivery, status of the new born and parity. The second part consisted of three subscales questions about intrapartum care satisfaction which the answers were ranked in a 5-likert scale ranging from the very unsatisfied scored 1 to very satisfied scored 5. The first subscale questions were on Interpersonal relationship which had questions on satisfaction with reception, respect, support, time spent with the health worker, the way clinical examination was performed, assistance, attention, knowledge and attitude of the health staff.

The second subscale questions consisted of questions pertaining to the physical birth environment which had questions on satisfaction with privacy, hygiene, availability of medical supply, with drugs and equipment, and the last subscale question consisted of questions enquiring about the information received and involvement in decision making questions like information received by health worker during labour and delivery, opportunity to ask questions, opportunity received to express their concern, satisfaction with the decision of not having a partner or family member during labour and delivery, with what was done to relieve your pain during labour and delivery.

The last part concerned questions on the loyalty returning behavior. The questionnaire had an English and a Swahili version already translated by WHO. We only translated the two questions that were added with the help of a translator. Data was collected from 2pm after the ward round so as to catch participants who were discharged before they left the hospital.

## **2.11 Description of variables**

### **Dependent variable**

The five-point Likert scale satisfaction tool responses were transformed to satisfied scoring 1 and unsatisfied scoring 0 accordingly, the responses of very satisfied and satisfied were merged as satisfied and the responses of very unsatisfied, unsatisfied and neutral were transformed in unsatisfied. Neutral responses were classified as dissatisfied considering that respondents might represent a fearful way of expressing dissatisfaction. To compute the overall proportion of women satisfied, women who scored greater than 66.6% of the 17 tools were considered satisfied. For the subscale score likewise, women who scored greater than 66.6% of the 9 tools of interpersonal relationship, 3 tools of physical birth environment and 5 tools of involvement in decision making and the information received were also considered satisfied.

### **Independent variable**

Some independent variables were also recoded as follows during analysis; marital status to ever married and never married, parity to primipara and multipara and mode of delivery to vaginal delivery and caesarean section, occupation to employed and unemployed, age to less than 35 years and more or equal to 35 years, number of ANC visits to less than 4 and more or equal to 4, education level to no/low level, secondary and college, new born status to good health and dead.

## **2.12 Data analysis**

Data were checked visually by the investigator and were coded, entered and cleaned using SPSS version 23 for analysis. Descriptive statistics such as simple frequencies, measures of central tendency used to describe the participants characteristics and the overall women's satisfaction with respect to the intrapartum care. Information was then presented using frequencies, summary measures and tables. Simple binary logistic regression model was

fitted for each independent variable. Variables with a p-value less than or equal to 0.20 in the simple binary logistic regression were selected for the multiple binary logistic regression. An adjusted odds ratio (AOR) was reported as a measure of association and all variables with a p-value less than 0.05 were considered as statistically significant factors associated with intrapartum care satisfaction.

### **2.13 Ethical clearance**

Ethical clearance was obtained from the research and publications committee for Muhimbili University of Health and Allied Sciences and permission to conduct the study was obtained from the executive director of Muhimbili National Hospital and head of department of obstetrics and gynecology.

### **2.14 Ethical consideration**

Written informed consent was obtained from the participant after being informed the purposes of the study, benefits, risks and that participants had right to withdraw from study any time she could wish to do so and would not affect subsequent care in the hospital. We kept assuring the participants about confidentiality and privacy and that the information given was for study purpose and it will help to improve the quality of care of the hospital. The participants who had lost a baby during the interview, we sympathized with them, they were given counselling and reassurance. Then we informed them that they could withdraw from the study if they so wish and that it was not a must for them to continue with the interview.

### 3.0 RESULTS

During the study period from 1<sup>st</sup> October to 30<sup>th</sup> November. They were 1071 deliveries with 585 vaginal deliveries and 486 caesarean sections of which 95 were elective caesarean sections and 391 emergency caesarean section. A total of 363 women were included into the study. Among the 363, we excluded 3 questionnaires (incompletely filled questionnaires) thus remaining with 360 participants who were analyzed.

**Table 1: Socio-demographic and obstetrics characteristics of the participants N=360**

<b>Respondent characteristic</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Age</b>		
< 20years	25	6.94
20-34 years	279	77.50
35-49 years	56	15.56
<b>Mode of delivery</b>		
Normal vaginal delivery	282	78.33
Emergency CS	78	21.67
<b>Marital status</b>		
Single	151	41.94
Married	189	52.50
Divorced	19	5.28
Widowed	1	0.28
<b>Occupation status</b>		
Employed	275	76.40
Unemployed	85	23.60
<b>New born status</b>		
In good health	345	95.83
Dead	15	4.17
<b>Number antenatal care*</b>		
≥ 4	256	74.42
< 4	88	25.58
<b>Education level</b>		
No formal education	22	6.11
Primary level	162	45.00
Secondary level	112	31.11
College	64	17.78
<b>Parity</b>		
Multipara	253	70.28
Primipara	107	29.72

\*N=344

The participants were aged 15-42 years with a mean age 28 (SD ± 5.8). majority of the participants were married 189(52.50%). More than seventy percent had attended ≥ 4 ANC visits. Most of the participants at least attended primary school level 162(45%).

### The proportion of the women's satisfaction with the intrapartum care

The study revealed that 264 (73.33%) participants were satisfied with IC services they received, whereby 92.78% were satisfied with the interpersonal relationship, 83.89% with the physical birth environment and 69.44% with the information received and decision making.

**Table 2: Post-delivery women satisfaction score per category of care N=360**

characteristics	frequency	Percentage (%)
Total cut off score >66.6%		
The overall satisfaction	264	73.33%
<b>Subscale 1: interpersonal relationship</b>		
Subscale score total	334	92.78
Satisfied with reception	349	96.90
Satisfied with respect	346	96.10
Satisfied with support	347	96.30
Satisfied with time	336	93.30
Satisfied with examination	350	97.20
Satisfied with assistance	348	96.70
Satisfied with attention	342	95.00
Satisfied with knowledge	342	95.00
Satisfied with attitude	272	75.60
<b>Subscale 2: The physical birth environment</b>		
Subscale score total	302	83.89
Satisfied with privacy	272	75.50
Satisfied with hygiene	256	71.10
Satisfied with medical supplies	310	86.10
<b>Subscale 3: information and decision making</b>		
Subscale score total	250	69.44
Satisfied with information	322	89.40
Satisfied with opportunity to ask	273	75.00
Satisfied with to express	283	78.60
Satisfied to have partner	197	54.70
Satisfied with pain relief	183	50.80
Would return to the facility	289	80.27
Would recommend the facility	304	84.44

More than 90% of the women were satisfied with most elements of interpersonal relationship, except 75.60% who were satisfied with the attitude of the health worker. More than 70% were satisfied with the physical birth environment. Only about 50% of the women were satisfied with the pain management and the decision of not having a companion.

**Table 3: Bivariate analysis of factors associated with intra-partum care among post-delivery women at MNH. N=360**

<b>Variable</b>	<b>Satisfied N (%)</b>	<b>unsatisfied N (%)</b>	<b>P Value</b>
<b>Marital status</b>			
Ever married	150(71.77)	59(28.23)	0.45
Never married (single)	101(66.89)	50(33.11)	
<b>Parity</b>			
Multipara	237(93.68)	16(6.32)	0.02
Primipara	92(85.98)	15 (14.02)	
<b>Education level</b>			
No/low level	169(91.85)	15(8.15)	0.81
Secondary	103(91.96)	9(8.04)	
college	57(89.06)	7(10.94)	
<b>Number of ANC*</b>			
≥4	201(78.52)	55(21.48)	0.73
<4	65(73.86)	23(26.14)	
<b>Occupation</b>			
Employed	215(78.18)	60(21.82)	0.15
Unemployed	60(70.59)	25(29.41)	
<b>Age</b>			
≤ 35	279(91.78)	25(8.22)	0.40
> 35	49(87.50)	7(12.50)	
<b>Mode of delivery</b>			
Emergency CS	55(71)	23(29)	0.03
Vaginal delivery	161(57)	121(43)	
<b>Newborn status</b>			
In good health	209(60.58)	136(39.42)	0.60
Dead	8(53.33)	7(46.67)	

\*N=344

Majority of the women who had a previous experience of childbirth were more satisfied than those who were delivering for the first time and those who delivered by emergency caesarean section were more satisfied than those who had vaginal delivery.



**Table 4: Logistic regression analysis of factors associated with intrapartum care satisfaction among post-delivery mothers N=360**

<b>Variable</b>	<b>COR (95%CI)</b>	<b>AOR (95%CI)</b>
<b>Mode of delivery</b>		
Vaginal delivery	Ref	Ref
Emergency CS	1.79(1.05-3.09)	1.90(1.09-3.30)
<b>Parity</b>		
Primipara	Ref	Ref
multipara	2.41(1.15-5.08)	2.62(1.20-5.75)

After applying the backward elimination method, we noted that those who delivered by caesarean section were about two times more likely to be satisfied than those who delivered by vaginal birth and the multipara were three times more likely to be satisfied than the primipara.

#### 4.0 DISCUSSION

This study observed that more than two third of the women were satisfied with the intrapartum care services they received at MNH labour ward, which is in consistence with a study done in Mekelle hospital, Ethiopia (39) which also noted more than two third of the women being satisfied with intrapartum care received. However, the proportion of women satisfied in this study was seven times more than in Nigeria (40) and two times more than in Iraq (19) The differences could be because in Nigeria they looked at the aspect of cost of which most people could not afford and in Iraq they recruited women from 14 different hospitals, had a larger sample size and they looked at the aspect of bribery which made most women less satisfied. However, the proportion of women satisfied with IC in our study is lower than Mozambique (21) and Harar hospital in Ethiopia (41) where they found more than 80% of the women satisfied with IC. The difference in the proportion may be because they studied both public and private hospital in which they found most women being satisfied with the private hospital than the public hospital.

with the elements of satisfaction, we found that majority 90% of the women who delivered at MNH were satisfied with the interpersonal relation between them and the health staff. This study was in consistency with the study that was done in Gondar teaching hospital in Ethiopia (15) whereby about 90% of the women were satisfied with the interpersonal relationship. However, in contrast with a study done in Jordan Ethiopia (1) whereby women were found to be five times less satisfied with interpersonal relationship than in our study. The differences could be explained by the poor infrastructure and lack of human resources.

More than seventy percent of the women were also satisfied with the physical birth environment during their labour and delivery at MNH. This was lower than the study in Mozambique and Egypt (21,42) which revealed more than ninety percent of the women satisfied with the physical birth environment but higher in Ethiopia (9) were less than half of the women were satisfaction with the physical birth environment. The reason could be explained due to the differences in the study setting.

The proportion of the women satisfied with the information received and the decision making was more than sixty percent, which was in line with the study done in Mozambique (21), but in contrast with the study that was done in Ethiopia and Iraq(40,3) that had less than half of the women satisfied with the information received and decision making due to shortage of staff and less time to spend with the women.

This study reports high proportion of women satisfied with the intrapartum care services possible because the study area was in a tertiary, referral and specialized teaching hospital located at the city center with good infrastructure and more trained health professionals and training students who are always ready to provide professional care including psychological support, managing normal labour and delivery as well as detecting and managing complications. Another possible reason could be that the women in the study are employed, (76.40%) educated (93.89%), married (52%), have previous experience of birth (70.28%) and also are above 20 years (93.06%) so they are able to discuss their condition with the health professionals and follow instructions from the health professionals. Cleanness is done by a hired company that is constantly supervised by the nurse in charge as well privacy is well provided by partitions of curtains. Women are informed about their conditions and a way forward. They are involved in the decision making concerning their health. The study area has no available space to accommodate a companion and also pain management is not routinely done only in special cases like sickle cell anemia, women who cannot tolerate labour pains, abruptio placenta and intrauterine fetal death that could be the reason why only about 50% of women were satisfied with these aspects of intrapartum care.

Although there were multiple factors associated with the women satisfaction with the intrapartum care services provided at MNH. We found that mode of delivery and parity contributed to the way the women felt satisfied with their child birth experience. Women who had a previous experience of birth were three times more likely to be satisfied than those who were delivering for the first time, this study was in accordance with the study done in Northern Italy (17), the satisfaction of the multipara could probably be because they have a shorter labour interval, have a previous childbirth experience and know what is expected. They are also able to follow instructions and well prepared psychologically.

Women who delivered by emergency caesarean section were about two times more satisfied than those who delivered by vaginal birth. This was in accordance with study done in Jordanian, Ethiopia (1), but different from the one of in Italy (17), due to the socio-cultural differences. The differences in the findings may be because of the socio-cultural belief whereby in the other part women believing that caesarean section was an intervention to save lives while other believe that vaginal birth is the natural event of birth. Being a referral hospital MNH receives patients from different parts of the country with pregnancy related complications and most women have been in labour for quite some hours before referral to MNH so when they arrive at MNH and a decision for an emergency caesarean is decided upon and performed, the women feels relief and satisfied that the decision made saved their lives.

### **Study limitations**

The study was done within the hospital premises and some women may have felt a sense of loyalty to the hospital and not being able to express their true satisfaction.

The interview was conducted by health personnel's, some women could fear expressing their true satisfaction resulting to information bias.

### **Strength of the study**

The study was conducted among post-delivery women who have just delivered so they have a fresh memory of the childbirth services they received therefore no recall bias.

This study could be the basis for other studies to measure the quality of services that we provide to the women in labour and delivery.

Most women attending MNH are financially stable not poor, so they can freely express their satisfaction with intrapartum care.

## **5.0 CONCLUSION AND RECOMMENDATIONS**

### **5.1 conclusion**

The proportion of women satisfied with the intrapartum care services in this study 73.3% which is relatively high, more than 90% of the women were satisfied with most elements of the interpersonal relationship except for the attitude of the health worker 75.60%, more than 70% were satisfied with the physical birth environment. The high proportion could be possibly due to the study area being in the center of the city with better infrastructure, good physical environment and more trained health professionals. About 50% of the women were satisfied with the pain management and the decision of not having a companion during labour and delivery, the low proportion could be possibly due lack of routine practice for pain managements and the labour wards not accommodating companion. The multipara and those who had emergency caesarean section were more satisfied than their counterpart, probably because the multiparas have a previous birth experience and able to follow instructions well. Those who had emergency caesarean section might be more satisfied because they feel that the operation was done to avert complications and save their lives.

### **5.2 Recommendations**

Continuous improvement of the intrapartum care services, especially on the attitude of the health workers, training on pain management and modifying the labour wards environment to have the potential to accommodate companion involvement during labour. Increasing individualized care, patient centered care, support, proper monitoring, timely interventions and decreasing unnecessary vaginal birth interventions may contribute to improving satisfaction with labour and delivery.

The hospital managers, the stakeholder and the hospital research team to keep tract of the women's satisfaction during their childbirth so as to improve in the area of dissatisfaction. Future study on women's satisfaction with intrapartum care to consider doing a mixed study both qualitative and quantitative.

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**APPENDICES****Appendix I:** Dodoso kwa ajili ya kina mama katika lugha ya kiswahili

DODOSO LA UTAFITI: KUFHAMU KIWANGO CHA KURIDHIKA KWA KINA  
MAMA WAKATI WA UZAZI KATIKA HOSPITALI YA TAIFA YA MUHIMBILI

Namba ya dodoso: \_\_\_\_\_

Wodi \_\_\_\_\_

Tarehe ya mahojiano \_\_\_\_\_

HABARI ZA KIUTAWALA			MSIMBO
<b>TAARIFA YA KITUO</b>			
1	JINA LA KITUO CHA AFYA		
2	JINA LA WILAYA		
<b>TAARIFA KUHUSU ANAEHOJI</b>			
3	Jina la anaehoji		
4	Tarehe ya mahojiano	.....	
5	Muda mahojiano yalipoanza		
<b>Taarifa kuhusu mwanamke aliehojiwa</b>			
6	Umri		
7	Hali ya ndoa	1. Nimeolewa 2. Sijaolewa 3. Nimepewataraka 4. Mjane	
8	Anuani		
9	Umejifungua mara ngapi?		

10	Njia ya kujifungua	<ol style="list-style-type: none"> <li>1. Nimejifungua kawaida bila msaada</li> <li>2. Nimefanyiwa kwa upasuaji kwa dharura</li> <li>3. Nimejifungua kwa ukena si kwamsaada</li> </ol>	
11	Umehudhuria kliniki wakati waujauzito	<ol style="list-style-type: none"> <li>1. Ndio</li> <li>2. Hapana</li> </ol>	
12	Kama jibu ni ndio, marangapi?		
13	Kiwango cha elimu	<ol style="list-style-type: none"> <li>1. Sijawahi kwenda shule</li> <li>2. Sijamaliza elimu ya msingi</li> <li>3. Nimemaliza elimu ya msingi</li> <li>4. Sijamaliza mafunzo ya ufundi</li> <li>5. Nimemaliza mafunzo ya ufundi</li> <li>6. Sijamaliza elimu ya sekondari</li> <li>7. Nimemaliza elimu ya sekondari</li> <li>8. Sijamaliza elimu ya juu</li> <li>9. Nimemaliza elimu ya juu</li> </ol>	
14	Kazi	<ol style="list-style-type: none"> <li>1. Nimeajiriwa</li> <li>2. Siomwajiriwa</li> </ol>	
15	Taarifa kuhusu mtoto mchanga	<ol style="list-style-type: none"> <li>1. Ana afya nzuri wakati wa mahojiano</li> <li>2. Amezaliwa na matatizo ya ki afya</li> <li>3. Mtoto amefariki</li> </ol>	
Taarifa kuhusu kujifungua			
<p><b>Mgonjwa anapaswa kufahamu kuwa:</b></p> <p>Mafunzohaya ni kwa ajili ya kuangalia wamama wanajiofungua</p> <p>Hakuna mtumwingine atakaeona taarifa hizi</p> <p>Usiandike jina lako kwenye karatasi hii</p> <p>Hulazimishiwi kujibu maswali yote</p> <p>Mahojiano haya yatachukua dakika 15</p> <p>Sasa, nitakuuliza maswali kuhusu ulivyojifungua katika kituo cha afya</p>			

<b>Uhusia wa kibinadamu</b>		
16	Uliridhika na mapokezi uliopata wakati wa uchungu nakujifungua? (weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Nimeridhika</li> <li>3. Wastani</li> <li>4. Sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>
17	Uliridhika na heshima uliopewa na wafanyakazi wakituo cha afya wakati wa uchungu na kujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. wastani</li> <li>4. Sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>
18	Uliridhika na kiwango cha msaada uliopata wakati wa uchungu na kujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>
19	Uliridhika na muda ambao wafanyakazi wa afya wametumika kwako wakati wauchungu nakujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>
20	Uliridhika na jinsi ulivyofanyiwa uchunguzi wakiafya wakati wa uchungu nakujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>
21	Uliridhika na msaada uliopokea kutoka kwa wafanyakazi waafya wakati wauchungu nakujifungua? (Weka tiki paliposahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sjaridhika</li> <li>5. Sjaridhika kabisa</li> </ol>

22	Uliridhika na kiwango cha utunzaji nauangalifu uliopewa wakati na baada ya kujifungua? (Weka tiki paliposahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
23	Uliridhikanakiwango cha ujuzi cha wafanyakazi wakati wa chungu na kuji fungua? (Weka tiki paliposahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
24	Uliridhika na tabia za wafanyakazi wakati wa chungu na kuji fungua? (Weka tiki paliposahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
<b>Muonekanowamazingira</b>			
25	Uliridhika na kiwango cha faragha uliopewa wakati wauwepo wako na wakati wakuji fungua katika kituo cha afya? (Weka tiki paliposahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
26	Uliridhika nakiwango cha usafi katika kituo cha afya wakati wa chungu na kuji fungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	

27	Uliridhika naupatikanaji wa vifaa vya matibabu na madawa katika kituo cha afya wakati wa uchungu nakujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
<b>Habari kuhusu ufanyaji wamaamuzi</b>			
28	Uliridhika na habari uliopokea kwa wafanyakazi wakituo cha afya wakati wauchungu, kujifungua na baada ya kujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
29	Uliridhikana fursa uliopewa kuuliza maswali wakati wauchugu nakujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
30	Uliridhika na fursa uliopewa kujieleza wakati wauchungu nakujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	
31	Uliridhika na maamuzi ya kutokuwepo namwanafamilia au ndugu wakati wauchungu na kujifungua? (Weka tiki palipo sahihi)	<ol style="list-style-type: none"> <li>1. Niliridhika sana</li> <li>2. Niliridhika</li> <li>3. Wastani</li> <li>4. Sijaridhika</li> <li>5. Sijaridhika kabisa</li> </ol>	

32	Uliridhika na njia zilizotumika kutuliza maumivu wakati wauchungu nawakatiwakujifungua? (Weka tiki palipo sahihi)	1. Niliridhika sana 2. Niliridhika 3. Wastani 4. Sijaridhika 5. Sijaridhika kabisa	
<b>Mwisho, maswalimawilikwaujumla</b>			
33	Kama utajifungua tena je utarudi tena katika kituohiki cha afya?	1= NDIO 2= HAPANA	
34`	Utamshauri ndugu au Rafiki yako ajekujifungua katika kituohiki cha afya?	1= NDIO 2= HAPANA	

ASANTE KWA KUJIBU MASWALI



**Appendix II:** English version questionnaire for mothers

Questionnaire to determine the level satisfaction with intrapartum care among women delivered at Muhimbili National Hospital.

Questionnaire No \_\_\_\_\_

Ward \_\_\_\_\_

Date of interview \_\_\_\_\_

<b>ADMINISTRATIVE INFORMATION</b>			<b>Code</b>
Facility information			
1	Name of the health facility		
2	Name of the district		
Information about the interviewer			
3	Name of the interviewer		
4	Date of the interview	.....	
5	Time the interview started		
<b>Information about the interviewed woman</b>			
6	Age		
7	Marital status (tick appropriate answer)	1. Married 2. Single 3. Divorced 4. Widow	
8	Residential area		
9	Number of deliveries (including this delivery)		

10	Mode of delivery	4. Spontaneous vertex delivery 5. Caesarean section 6. Assisted vaginal delivery	
11	Attended antenatal clinic	1. YES                      2.NO	
12	If YES how many times		
13	Education level (tick appropriate answer)	2. Never attended school 3. Primary school started 4. Primary school finished 5. Vocational training started 6. Vocational training finished 7. Secondary school started 8. Secondary school finished 9. Higher education started 10. Higher education finished	
14	Occupation	1. Employed 2. Unemployed 3. Self employed	
15	Status of the new born at the time interview	1. In good health 2. Health problem 3. Dead	
<p><b>Inform patient that:</b> the study looks at the management during delivery. The study is completely confidential No name is written on this questionnaire She can refuse to answer the individual questions if they wish The interview will take less than 15 minutes She should tick on the appropriate answer</p>			
Now I am going to ask you some questions about your delivery in the health			

facility			
<b>Interpersonal relationship</b>			
16	Are you satisfied with the reception you received at the labour ward? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
15	Are you satisfied with the level of respect you received from the health workers during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
18	Are you satisfied with the level of support you received from the health workers during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
19	Are you satisfied with the time the health worker(s) spent with you during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neural</li> <li>4. Good unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
20	Are you satisfied with the way the clinical examination was performed by the health worker(s) during labour and after the delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	

21	Are you satisfied with the level of assistance provided by the health worker(s) during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
22	Are you satisfied with the level of attention and care given to you during and after labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
23	Are you satisfied with the level of knowledge of the health worker(s) during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
24	Are you satisfied with the attitude of the health worker(s) during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
<b>The physical birth environment</b>			
25	Are you satisfied with the level of privacy provided during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	

26	<p>Are you satisfied with the hygiene at the health facility during labour and delivery?</p> <p>(Tick appropriate answer)</p>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
27	<p>Are you satisfied with the availability of medical supplies, drugs and equipment during labour delivery?</p> <p>(Tick appropriate answer)</p>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
<b>Information about decision making</b>			
28	<p>Are you satisfied with the information you received from the health worker(s) during labour, delivery, and after the delivery?</p> <p>(Tick appropriate answer)</p>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
29	<p>Are you satisfied with the opportunity you received to ask questions?</p> <p>(Tick appropriate answer)</p>	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	

30	Are you satisfied with the opportunity you received to express your concern? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very unsatisfied</li> </ol>	
31	Are you satisfied with the decision of not having you partner or family member during the labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very satisfied</li> </ol>	
32	Are you satisfied with what was done to relieve your pain during labour and delivery? (Tick appropriate answer)	<ol style="list-style-type: none"> <li>1. Very satisfied</li> <li>2. Satisfied</li> <li>3. Neutral</li> <li>4. Unsatisfied</li> <li>5. Very satisfied</li> </ol>	
<b>Finally, two questions to sum up</b>			
33	If you have to deliver again was you come back to this health facility?	<ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>	
34	Would you recommend this health facility to a relative or friend for them deliver?	<ol style="list-style-type: none"> <li>1. YES</li> <li>2. NO</li> </ol>	

THANK YOU FOR ANSWERING THE QUESTIONS

**DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY  
MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES (MUHAS)**

**CONSENT TO PARTICIPATE IN THE STUDY  
LEVEL OF SATISFACTION WITH INTRAPARTUM CARE AMONG WOMEN  
DELIVERED AT MUHIMBILI NATIONAL HOSPITAL IN DAR ES SALAAM,  
TANZANIA**

**Investigator:** Lucie Anakete Okonda

You are asked to participate in a research study. Participation in the study is entirely voluntary. You may decide not to participate or may withdraw from the study at any time. The investigators will maintain confidentiality of information concerning participants. The investigators will be available during the study at all times should you have any problems or questions about the study.

**Purpose of the research study:**

This study intends to determine the level of satisfaction with intrapartum care among women delivered at Muhimbili national hospital in Dar es salaam, Tanzania.

The findings from this study will be important, as it will help to improve the quality of care provided to the women while in labour.

**What will be done?**

This will require that I administer to you a questionnaire while you are being discharged.

The research study does not offer you any financial benefit. However, you will be provided with any health information that you request. Your participation in the study is voluntary and there are no consequences in case you decline participation.

**Confidentiality/Access to medical records:**

All information will be kept confidential. No records bearing your name will be provided to anyone other than the research team in this study. You will not be identified in publications in any manner.

**Liability Statement:**

Your signature on this form indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigators, sponsors or the institution from their legal and professional responsibilities.

\_\_\_\_\_  
(Signature of participants)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Signature of investigator

\_\_\_\_\_  
(Date)

If you ever have questions about this study, your rights as a participant, you should contact the principal investigator Lucie A Okonda, Department of Obstetrics and Gynaecology, Muhimbili University of Health and Allied Sciences, through Mobile 0718789741 or e-mail address: okondalucy@gmail.com

Or contact chairperson of Research and Publications Committee, Dr Bruno Sunguya, P.O. Box 65001, Dar es Salaam. Tel: 022 2152489.



## **FOMU YA KUKUBALI KUWA MSHIRIKI WA UTAFITI**

UTANGULIZI: Mimi LUCIE ANAKETE OKONDA ninafanya utafiti kuhusiana na kuridhika na huduma wakati wa mama kujinfugua. Nakualika kuwa sehemu ya utafiti huu baada ya kukufafanulia, halafu nitafanya mahojiano nawewe kasha nitajaza dodoso langu.

Dhumuni la utafiti; Utafiti huu unatarajia kuamua kiwango cha kuridhika na matibabu wakati wa kujifungua kwa kina wa mama katika hospital ya Muhimbili, Dar es salaam, Tanzania.

Matokeo ya utafiti huu yatakuwa muhimu, kwani itasaidia kuboresha ubora wa huduma zinatolewa kwa wanawake wakati wakujifungua.

Ushiriki unahusisha; utafiti huu unahusisha wa kina mama muda mchache tu baada ya kujifungua.

Ushiriki wa hiari; ushiriki wako katika utafiti huu ni wa hiari bila kushurutishwa, utahojiwa ili kupata taarifa muhimu. Endapo utataka kuto kuhojiwa au kutokuendelea na mahojiano unaruhusiwa.

### **Faida na athari**

Utafiti huu hauna athari yoyote kwa mshiriki. Mshiriki ataelimishwa kuhusu utafiti .

### **Usiri wa taarifa**

Taarifa tutakazochukua zitatumika kwa usiri. Taarifa hizo zitatumika tu kwa ajili ya utafiti huu.

### **Gharama ya kushiriki katika utafiti huu**

Mshiriki hataingia gharama yoyote ili kushiriki katika utafiti huu.

**Taarifa ya dhima**

Saini yako kwenye fomu hii inaonyesha kuwa umeelewa kwa kuridhika taarifa kuhusu ushiriki wako katika mradi wa utafiti na kukubali kushiriki kama somo. Kwa namna yoyote hii haina haki yako ya kisheria wala kutolewa kwa uchunguzi, kufadhiliwa au taasisi kutoka kwa wajibu wao wa kisheria na waki taalulma.

Saini ya mshiriki ..... tarehe .....

Sianiya uchunguzi ..... tarehe .....

Ikiwa una maswali yoyote kuhusu utafiti huu tafadhali wasiliana na uchunguzi mkuu LUCIE ANAKETE OKONDA, idara ya magonjwa na ujinsia hospitali ya Muhimbili kupitia simu 0718789741 au anwani ya barua pepe okondalucy@gmail.com.

Au wasiliana na mwenyekiti wa kamati ya utafiti, Dr Bruno Sunguya, P.O BOX 65001, Dar es salaam, Tanzania. Tel 0222152848

**Appendix III: ETHICAL CLEARANCE**

**MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES**  
**OFFICE OF THE DIRECTOR OF POSTGRADUATE STUDIES**

P.O. Box 65001  
 DAR ES SALAAM  
 TANZANIA  
 Web: [www.muhas.ac.tz](http://www.muhas.ac.tz)



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 E-mail: [dpgs@muhas.ac.tz](mailto:dpgs@muhas.ac.tz)

Ref. No. MU/PGS/SAEC/Vol. IX

29<sup>th</sup> August, 2019

Dr. Lucie Anakete Okonda  
 MMed. Obstetrics and Gynaecology  
MUHAS.

**RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "LEVEL OF SATISFACTION WITH INTRAPARTUM CARE AMONG WOMEN DELIVERED AT MUHIMBILI NATIONAL HOSPITAL IN DAR ES SALAAM TANZANIA."**

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from **27<sup>th</sup> August, 2019 to 26<sup>th</sup> August, 2020**. In case you do not complete data analysis and dissertation report writing by **26<sup>th</sup> August 2020**, you will have to apply for renewal of ethical clearance prior to the expiry date.

Dr. Emmanule Balandya  
**AG. DIRECTOR OF POSTGRADUATE STUDIES**

cc: Director of Research and Publication  
 cc: Dean, School of Medicine

**Appendix IV: PERMISSION TO COLLECT DATA AT MNH****MUHIMBILI NATIONAL HOSPITAL**

Cables: MUHIMBILI"  
 Telephones: +255-22-2151367-9  
 FAX: +255-22-2150534  
 Web: [www.mnh.or.tz](http://www.mnh.or.tz)



Postal Address:  
 P.O. Box 65000  
 DAR ES SALAAM  
 Tanzania

In reply please quote:

MNH/TRCU/Permission/ 2019/186

25<sup>th</sup> September, 2019

Head of Department  
 Obstetrics and Gynaecology  
 Muhimbili National Hospital

**RE: PERMISSION TO COLLECT DATA AT MNH.**

<b>Name of Student</b>	<b>Dr. Lucie Akende Okonda</b>
<b>Title</b>	<b>" LEVEL OF SATISFACTION WITH INTRAPARTUM CARE AMONG WOMEN DELIVERED AT MUHIMBILI NATIONAL HOSPITAL IN DAR ES SALAAM, TANZANIA".</b>
<b>Institution</b>	Muhimbili University of Health and Allied Sciences
<b>Supervisor</b>	<b>Dr. Furaha August Dr. Matilda Ngarina</b>
<b>Period</b>	25 <sup>th</sup> September 2019 to 30 <sup>th</sup> March, 2020

Approval has been granted to the above mentioned student to collect data at MNH.

Named MNH based supervisor must ensure that the student abide to the ethical principles and other conditions of the research approval.

Sincerely,

**Dr. Faraja Chiwanga**

**Head of Teaching, Research and Consultancy Unit**

c.c DSS  
 c. c Dr. Lucie Akende Okonda  
 c.c Dr. Matilda Ngarina ✓



*All correspondence to be addressed to the Executive Director*

