

**ASSESSMENT OF THE QUALITY AND SATISFACTION OF
MATERNITY HEALTH CARE SERVICES AMONG POST-NATAL
MOTHERS, TANGA REGIONAL REFERRAL HOSPITAL, TANZANIA**

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**MSc (Midwifery and Women's Health) Dissertation
The Muhimbili University of Health and Allied Sciences
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Muhimbili University of Health and Allied Sciences
Department of Community Health Nursing



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By

Kondo J. Mahamoud

**A Dissertation Submitted in (partial) Fulfillment of the Requirements for the
Degree of Master of Science (Midwifery and Women's Health) of**

Muhimbili University of Health and Allied Sciences
October, 2017

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled: *“Assessment of the quality and satisfaction of maternity health care services among post-natal mothers, Tanga Regional Referral Hospital, Tanzania”* in (partial) fulfillment of the requirements for the degree of Master of Science (Midwifery and Women’s Health) of Muhimbili University of Health and Allied Sciences.

Dr. Thecla W. Kohi (PhD)

(Supervisor)

Date

DECLARATION AND COPYRIGHT

I, **Kondo Juma Mahamoud**, 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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Lastly, special thanks go to my lovely wife and my family for their genuine moral support and endurance during my study time.

DEDICATION

This work is dedicated to my beloved family, my mentor, and friends; I could not have done this without you.

Thank you for all of your support along the way.

ABSTRACT

Background: Financial risk protection against the cost of unforeseen ill-health has become a global concern, as evidenced by the 2005 World Health Assembly resolution WHA58.33 which called upon all member states to "plan the transition to universal coverage of their citizens". In most African countries maternal and under-five services are officially exempted from user fee payment but in practice, these policies are not implemented. In 2012, the Tanzania National Health Insurance Fund (NHIF) with technical support from Germany began implementing a scheme of health insurance in Mbeya, Mtwara, Lindi, and Tanga regions. The scheme provides free health insurance to women during pregnancy and the post-natal period up to 3 months after delivery.

The broad objective: This study assessed the quality and satisfaction of the maternity health care services provided under KfW scheme among post-natal mothers at Tanga Regional Referral Hospital.

Methodology: A cross-sectional study design was conducted, using quantitative approach. Standardized Structured Likert scale questionnaires were used to collect data. The simple random technique was used to obtain a sample size of 217 participants and all participated in the study during data collection. Collected data were analyzed by Statistical Package for Social Science (SPSS) version 21.

Results: The study found that most of the women who deliver at Tanga Regional Referral Hospital are satisfied with the quality of care received. In addition, the study found that socio-demographic characteristics in association with post-natal mothers' satisfaction of KfW services were statistically significantly associated with the level of education (0.022). But, Age, parity status, the area of residence, occupation and marital status were not found to be associated with satisfaction of KfW services.

Conclusions: Most post-natal mothers who deliver at Tanga Regional Referral Hospital are satisfied with the quality of maternity health care services offered by KfW services, but a more educated woman is moderately satisfied. KfW scheme found to be useful to poor pregnant women to adequate health services due to the fact that most of the drugs and medical supplies are now available.

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LIST OF ABBREVIATIONS

ANC	Antenatal Care
CHE	Catastrophic Healthcare Expenditures
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Federal Enterprise for International Cooperation)
HMT	Health Management Team
KfW	<i>Kreditanstalt Für Wiederaufbau</i> (German Development Bank)
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MUHAS	Muhimbili University of Health and Allied Sciences
NHIF	National Health Insurance Fund
OoP	Out-of-Pocket
RAS	Regional Administrative Secretary
RHMT	Regional Health Management Team
SPSS	Statistical Package for Social Science
WHO	World Health Organization

DEFINITION OF TERMS

Service quality means “perceived service quality”, the literature on service quality has considered evaluating services from customers’ perspective (Padma, Rajendran, & Sai, 2009).

The quality of healthcare is the extent of performance in relation to a defined standard of interventions known to be safe and that have the ability to improve health within available resources (Juma, & Manongi, 2009).

Infrastructure in this study means the tangible features of a service delivery including equipment, appearance of the firm/facility and availability of resources (Padma et al., 2009).

Personnel quality means the quality of all the personnel involved in delivering service (Padma et al., 2009). The personnel offering service is expected to be responsive, reliable, friendly, sincere and competent by the customers.

The process of clinical care means technical quality; treatment process and its outcome, reliability, understanding of illness (Padma et al., 2009).

Administrative procedure means administration of hospital includes the processes of admission, stay and discharge of patients (Padma et al., 2009).

A satisfaction is defined as an evaluative, affective or emotional response (Padma et al., 2009).

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Financing health care costs using the health insurance schemes are a crucial tool for people living in low and middle-income countries to avoid financial barriers to health care and protect individuals from catastrophic health care expenditures (Dixon, Tenkorang, & Luginaah, 2013). In addition, individuals who are covered by insurance are more likely to have access to care and less likely to be burdened by health care costs (Wagner et al., 2011). Globally, It is estimated that about 150 million people face catastrophic health care expenditures (CHE) annually because of direct payments for health care while about 100 million are driven into poverty (WHO, 2008). These people lack prepayment schemes and are required to pay for healthcare at the point of service (Fenny, Enemark, Asante, & Hansen, 2014).

Although maternal and under-five services are officially exempt from user fee payment in most of the countries in Africa for public facilities (Richard & Witter, 2010), in practice exemptions are not always consistently implemented (Kruk, Mbaruku, Rockers, & Galea, 2008), as health facilities generally do not receive financial compensation from those governments for the foregone user fee revenue (Mubyazi, 2004). The Quality of care can often be very poor, especially in lower level rural public facilities. Evidence suggests that quality is an important determinant in household decisions to seek care, especially for birth and pregnancy services (Kruk, Rockers, Mbaruku, Paczkowski, & Galea, 2010).

Most countries in Africa have systems in place to exempt the poor from paying user fees in public facilities. In 2003, the government of Ghana introduced free National Health Insurance Scheme (NHIS) for vulnerable groups including pregnant women (Witter, Garshong, & Ridde, 2013). The NHIS is publicly financed by a national health insurance fund. Nigeria also has an insurance scheme that provides subsidized insurance for pregnant women through National Health Insurance Fund since 2006 (Odeyemi & Nixon, 2013), however, population coverage is very limited. These insurance schemes promote quality through accreditation and are used to expand client service choice. However, the evidence of the quality and outcomes of

programmes offering free health insurance to pregnant women on the African continent is more limited (Witter et al., 2013).

Tanzania, like many other African countries, has been implementing user fee policy in its health sector since the early 1990s. The implementation of various exemptions and targeting programmes protect and ensure equitable access to health care by poorer sections of the population (Maluka, 2013). However, in spite of the Tanzanian policy of free maternal health services at many health facilities patients are required to make out of pocket payments for medicines if these are in short supply (Kruk et al., 2008). This caused great embarrassment to poor women who were unable to pay or had to ask their husband to help them out.

The National Health Insurance Fund (NHIF) in Tanzania was set up as a mandatory insurance scheme for the public health facility 2001. However, in 2012 the Tanzania National Health Insurance Fund (NHIF) with technical support from Germany began implementing a scheme of health insurance in Mbeya and Tanga regions (Borghini et al., 2015). This scheme is funded by the German Development Bank (KfW) and is locally referred to as 'KfW scheme'. The scheme provides free NHIF to women during pregnancy and the post-natal period up to 3 months after delivery. It aims at improving the access of poor pregnant women to adequate health services in order to considerably reduce the maternal and newborn mortality rates.

The advantages with this new health insurance, women can be sure that their care and their medicines will be covered and they are free to select an appropriately equipped health facility of their choice. It also reduces women's anxieties about potential health risks associated with pregnancy and childbirth. Moreover, women now know that, with the help of this insurance, they can deliver safely and confidently. The insurance scheme was initially meant to reach 120,000 women between 2012 and 2015. In the meantime, some 450,000 women have enrolled – every single month around 11,500 more joins (KfW development Bank report, 2016). Due to this success, the government of Tanzania decided to extend the scheme to two more regions, Mtwara and Lindi until 2018. However, there is no published evidence of the

quality and satisfaction of services provided under KfW scheme among post-natal mothers at Tanga Regional Referral Hospital.

1.2 Statement of the Problem

For many years, studies have shown that user fees contribute to catastrophic expenses (WHO, 2008). In Tanzania, the Ministry of Health introduced waivers and exemptions in 1994, to ensure access to health services by the poor and vulnerable members of the society including maternal services and under-five children (Maluka, 2013). However, in practice, exemptions for these groups are not systematically implemented (Kruk et al., 2008). The evidence indicates that exemptions policies, while potentially effective in principle, are ineffective in implementation due to shrinking budget for the health sector (Mubyazi, 2004). In 2010 the Tanzania National Health Insurance Fund (NHIF) under the support of German Development Bank (KfW) introduced a programme to give pregnant and post-natal mothers free NHIF services in Mbeya and Tanga regions (Borghi et al., 2015). This will be referred to as the 'KfW scheme'.

The KfW scheme aims to provide free NHIF services to pregnant women during pregnancy and for up to 3 months after delivery (Borghi et al., 2015). At Tanga Regional Referral Hospital this programme has been implemented since 2012. However, through the implementation of the programme, no documented evidence of the quality and satisfaction of services have been provided. Therefore, this study assessed the quality and satisfaction of the maternity health care services provided under KfW scheme among post-natal mothers at Tanga Regional Referral Hospital.

1.3 Rationale of the Study

The results from this study provide information to the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) on the implementation and success of the KfW scheme to pregnant women and children and evidence for further expansion of the programme to other regions in Tanzania. In addition, the results from this study can be used by funders of the programme to determine the effectiveness of the project. Furthermore, the results from this study also provide information to Hospital Management Team (HMT), Regional Hospital Management Team (RHMT) and MoHCDGEC about aspects that can improve maternal health services.

1.4 Research Questions

1. How do post-natal mothers rate the quality of maternity health care services?
2. To what extent are post-natal mothers satisfied with maternity health care services provided under KfW scheme at Tanga Regional Referral Hospital?
3. What are the socio-demographic characteristics that associated with KfW services satisfaction among post-natal mother delivered at Tanga Regional Referral Hospital?

1.5. Research Hypothesis

1. There is an association between socio-demographic characteristics of post-natal mothers and their level of satisfaction with maternity services provided under KfW scheme.

1.5.1. The Broad Objective

The broad objective of this study was to assess the quality and satisfaction of the maternity health care services provided under KfW scheme among post-natal mothers at Tanga Regional Referral Hospital

1.5.2. The Specific Objectives

The specific objectives of this study were:

1. To determine the quality level of the maternity health care services provided under KfW scheme among post-natal mothers at Tanga Regional Referral Hospital
2. To determine the degree of satisfaction of post-natal mothers about the KfW scheme at Tanga Regional Referral Hospital
3. To determine association between post-natal mother's socio-demographic characteristics and satisfaction with KfW scheme at Tanga Regional Referral Hospital.

1.6. Conceptual Framework for Healthcare Service Quality

A conceptual framework for healthcare service quality, based on the literature review provides an overview of the various dimensions of service quality, namely technical quality, personnel quality, infrastructure, administrative and its influence on user's satisfaction. Therefore, availability of drugs and medical supplies, a good relationship between staff and client, punctuality of staff during services and minimizing waiting time to clients seeking services are perceived as a quality of health care services and increase user's satisfaction with health services. However, perceived service quality and satisfaction of the health care services can be influenced by socio-demographic factors of the client like age, marital status and occupation, a number of giving birth, educational level, and area of residence. Figure 1 below presents a simplified overview of the concepts of the perceived service quality and satisfaction of the

healthcare services as influenced by socio-demographic factors, this model is adapted from Padma, Rajendran, & Sai, 2009 but items modified in order to suit the objectives of the study, these items are socio-demographic factors.

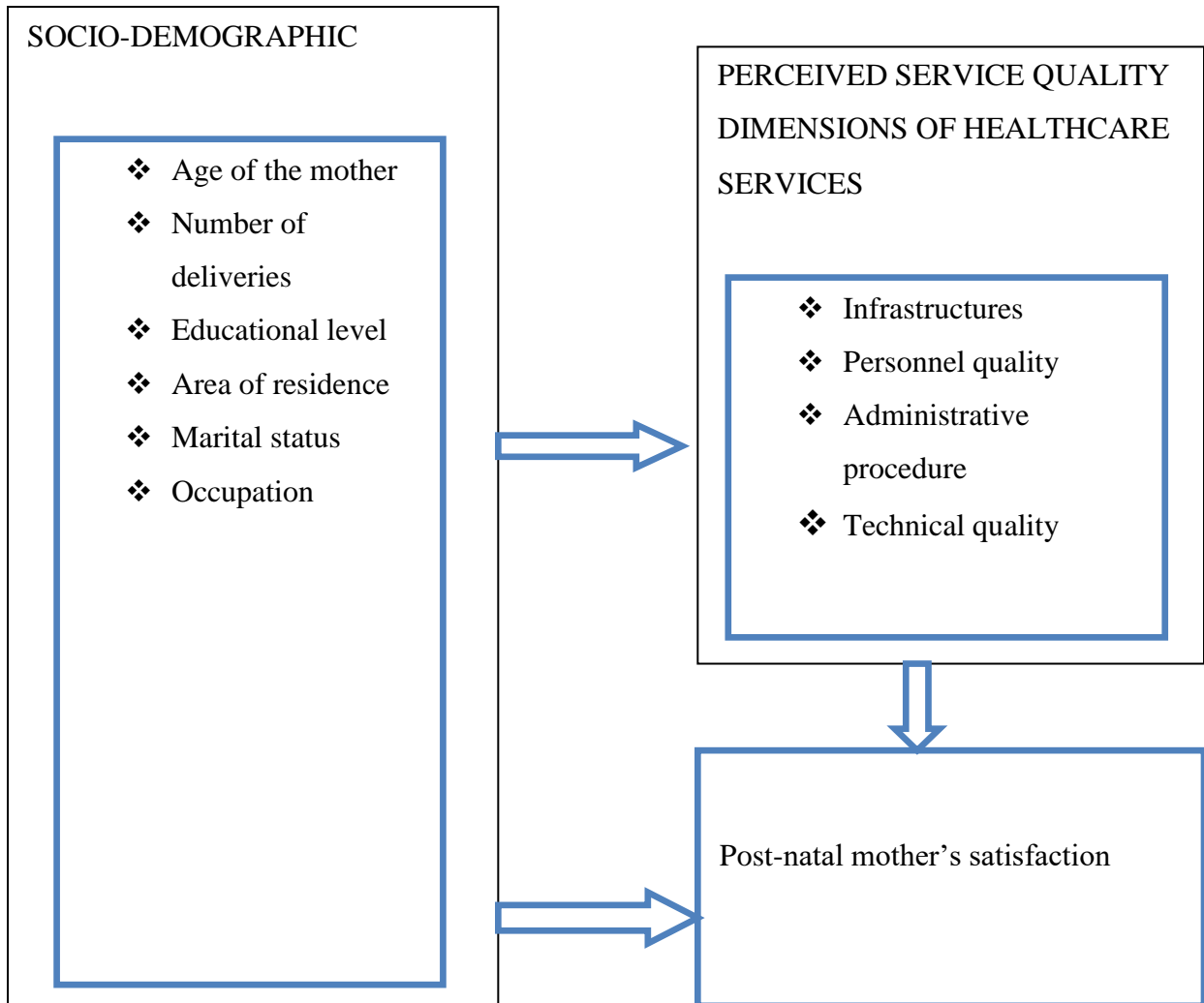


Figure 1: A Modified Conceptual Framework for Healthcare Service Quality

Source: (Padma et al., 2009)

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

As service quality means “perceived service quality”, the literature on service quality has considered evaluating services from customers’ perspective (Padma et al., 2009). In 2000, the World Health Organization identified responsiveness to patient expectations as a key measure of health system performance to achieve better health outcomes, since satisfied patients are more likely to utilize needed services.

2.2 Quality of Healthcare Services

There is a limited literature linking health insurance and the quality of care. A study in Ghana on the implementation of the free NHIS coverage for pregnant women concluded that health insurance scheme improves the quality of care (Witter et al., 2013). Perez, Ang, & Vega (2009) in the United States assessed the effects of health insurance on perceived quality of care received and the role of insurance among a national Latino population sample. Overall, those who were insured gave significantly higher ratings of excellent/good (81 % vs. 71 %) compared to those who were uninsured. In addition, Jehu-Appiah, Aryeetey, Agyepong, Spaan, & Baltussen (2012) in Ghana found that both insured and uninsured households had positively perceived the quality of the care, but were negative about providers’ attitudes (interpersonal quality of care). The attitude of staff towards insured patients also differs, even in the same health facility.

In Tanzania, also several studies have shown an improvement in the provision of and access to health care services after the introduction of CHF. For example, Kamuzora & Gilson (2007) revealed that the CHF fund was used to purchase microscopes, reduce drug stock-out, and improves the availability of equipment and supplies in various hospitals. However, other studies suggest that health insurance tends to have a negative influence on the quality of care. For instance, in a study of Ghana’s Dangme West District, Bruce, K., Narh-Bana, S., & Agyepong (2008) reported dissatisfaction of insured members who perceive they are given the

poorer quality of care and tend to wait longer, more verbal abuse, compared with those making out-of-pocket payments (Ekman, 2004).

In general, perceived quality has been pointed out by several authors and most studies on client perspective of quality service has been conducted to evaluate health facility and only a few report are available for free health insurance

2.3 User's Satisfaction

A user satisfaction has been widely used in the lay measurement of quality of health services. In Ghana, Fenny et al.(2014) conducted the study to explore patients satisfactions between the insured and uninsured, the study revealed that a higher proportion of insured patients are satisfied with the overall quality of care compared to the uninsured. Overall satisfaction was friendliness of staff and satisfaction of the consultation process. Dalinjong & Laar (2012) in Ghana also reported that all insured respondents agreed that the NHIS is very useful. It made access to health care services very easy due to the fact that one was not required to pay for services at the point of consumption. This was reflected in the high attendance by the insured.

Another study done in Malawi, Manthalu, Yi, Farrar, & Nkhoma (2016) reported that user fee exemption led to a 15% ($P < 0.01$) increase in the mean proportion of women who made at least one antenatal care (ANC) visit during pregnancy, a 12% ($P < 0.05$) increase in average ANC visits and an 11% ($P < 0.05$) increase in the mean proportion of pregnant women who delivered at the facilities. The study concluded that user fee exemption is an important policy for increasing maternal health care utilization. In India, Devadasan et al., 2011 assessed patients satisfaction using a focus group discussion with staff at ASHWINI hospital found that whereas some patients complain that the nurses in the hospital reproach them for 'being uninsured', some of the staff rather considered the insured patients as a nuisance.

2.4 Socio-demographic factors and satisfaction with service quality

Some researchers have shown interest in knowing the effect of socio-demographic variables on patient satisfaction. In healthcare industry particularly, patients' needs differ based on age, gender, etc. and the health care seeking behaviors of different patient segments could produce experiences which influence different quality judgments, and hence influence satisfaction

positively or negatively (Padma et al., 2009). A study in German by Yavas, Benkenstein, & Stuhldreier (2004) declared that different aspects of service quality and different consumer characteristics seemed to be associated with different behavioral outcomes. Venn & Fone (2005) in the United Kingdom also reported that patient satisfaction varied with age, gender, employment status and marital status. Therefore, socio-demographic variables have an effect on patient-perceived service quality and satisfaction.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study Design

A descriptive cross-sectional design, a quantitative approach was used. The cross-sectional study involves the collection of data at one point in time (Polit & Beck, 2003).

3.2 Study Area

The study was carried out in Tanga region which is situated at the extreme north-east corner of Tanzania between 4° and 6° degrees below the Equator and 37°-39°10' degrees, east of the Greenwich meridian. The region occupies an area of 27,348 square kilometers, being only 3% of total area of the country. Tanga shares borders with Kenya to the north, Morogoro and Coast regions to the south, Kilimanjaro and coast regions to the south, and Kilimanjaro and Arusha regions to the west. To the east, it is bordered by the Indian Ocean. Mligaji River also forms a large part of the border in the South.

Administratively, the region is divided into 10 districts namely, Lushoto, Korogwe D.C, and Korogwe T.C, Muheza, Handeni, Pangani, Mkinga, Kilindi, Bumbuli and Tanga Municipality. The region has a land area of 27,348 Square Kilometers. As per the 2012 census, it has a population of 2,045,205. The region has 376 functioning health facilities among of them, 10 Hospitals of which 7 are District Hospitals, 40 Health center, and 326 Dispensaries. All district hospitals and Health center provide KfW services. The number maternal death was 67 in 2015 according to Health Management Information of Ministry of Health.

3.3 Study Setting

The study was conducted at Tanga Regional Referral Hospital, Tanga. It has been selected purposefully because of a high number of clients (high volume sites). Also, it serves as District Hospital in Tanga Municipality and Mkinga District. The Hospital has a Department of Obstetrics with an average delivery of 30 per day, average delivery per month is 525 and total delivery in 2015 was 6,301 (Hospital Report, 2015).

3.4 Study Population

The study population was post-natal mothers who registered with KfW scheme at Tanga Regional Referral Hospital.

3.5 Study Period

The data were collected from April to May 2017

3.6 Inclusion Criteria

A Post-natal mother at postnatal ward registered under KfW scheme who delivered a live baby and waiting for discharge.

3.7 Exclusion Criteria

A Post-natal mother at postnatal ward registered under KfW scheme but seriously ill

3.8 Sample Size Calculation

Sample size was estimated by using the following formula (Naing, Winn, & Rusli, 2006)

$$n = \frac{Z^2 P (100 - P)}{d^2}$$

Where,

n= Sample size

Z= Standard normal deviation set at 1.96 (corresponding to confidence level of 95%)

P= Proportion of target population which utilize KfW is unknown, then 50% was used to get the maximum size

d² = Maximum error required to be 7% (No previous studies on Kfw)

Therefore, $= \frac{3.84 \times 50 \times 50}{49}$

49

$= \frac{9600}{49}$

49

$n = 195$

Adjusted for non-response assumed 10%

Adjusted minimum sample size (n') = $n \times$ adjusted factors

But adjusted factors = $\frac{100\%}{100\% - f\%}$

Then $n' = n \times \frac{100\%}{(100\% - f\%)}$

$n = \frac{384 \times 100\%}{100\% - 10\%}$

$= 217$

The adjusted minimum sample size = 217

So, 217 post-natal mothers were recruited in the study

3.9 Sampling procedure

Recruitment and selection of the participants were done every day at the postnatal ward by the principal investigator together with research assistant using simple random sampling. A simple random sample is a subset of a statistical population in which each member of the subset has an equal probability of being chosen. The average number of delivery at Tanga Regional Referral Hospital per day is 30 and only 20 were selected per day. The procedure involved creating sampling frame of 30 post-natal mothers, using lottery method, each woman was assigned a number after which numbers are selected at random and those selected 1 to 20 were recruited in the study on that day.

3.10 Selection of Participants

New post-natal mothers enrolled with KfW scheme that met inclusion criteria and selected at random sampling were included in the study until the required sample size was reached.

3.11. Variables

Dependent variable: The dependent variables were

- Postnatal mothers satisfaction with KfW scheme
- Perceived service quality of KfW scheme

Independent variables: The independent variables assessed were:

- Age of the Mother
- Level of education
- Marital status
- Area of residence
- Number of delivery
- Occupation

3.12 Data Collection Procedure

Data were collected by using the pre-tested Swahili standardized structured Likert scale questionnaires (Appendix B) which were translated from English language (Appendix A) adapted from Abuosi, Domfeh, Abor, & Nketiah-Amponsah, (2016). The questions were administered by the principal investigator and two trained research assistants. The purpose of the study was explained in details to every post-natal mother who agreed to participate and was asked to provide a written consent (Appendix D) to confirm her participation before starting to fill the questionnaire. Data variables included Socio-demographic information of the mother; perceived service quality and satisfaction of healthcare services were collected.

3.13 Validity of the Instrument

Validity refers to how well a tool measures what it is intended to measure (Polit & Beck, 2003). To ensure the construct validity, a tool was pre-tested using small sample size and data was collected and analyzed to assess the accuracy of an instrument. Also, the tool was reviewed by three experts on the study content.

3.14 Reliability of the Instrument

Reliability is the degree to which an assessment tool produces stable and consistent results (Polit & Beck, 2003). To ensure the reliability of the tool involved test-retest over a period of time with a small sample size. The Cronbach's alpha coefficient scale test was 0.71. This describes the extent to which all the items in a tool measured the same concept when retested later with the same participants (Tavakol & Dennick, 2011).

3.15 Pre-testing of Study Instrument

Before the data collection, the tool was pre-tested by using 10% of the sample size (22 post-natal mothers) at Ngamiani Health Center, one of the health facilities in Tanga region utilizing KfW services in order to measure the validity and reliability of the data collection tool. The tool was found to be consistent among the questions by seventy percent (70%) of these 22 post-natal mothers were satisfied with the quality of care. The tool also was reviewed by three experts and checked for duration and clarity where questions found not clear were collected.

3.16 Training of Research Assistants

Research assistants were trained on study objectives, sampling procedure, and data quality issues. Data collection team had meetings daily to review the daily activities, share experience and allocate next day work. The questionnaire was cross-checked for completeness and consistency of the responses before releasing the interviewee to avoid errors and to yield efficient results during data collection.

3.17 Data Analysis

The data collected was entered, cleaned and analyzed using Statistical Package for Social Science (SPSS) version 21. The univariate and bivariate analysis was used to analyze the variables whereby p-value less than 0.05 were considered statistically significant. Univariate analysis was used to examine the background characteristics using frequency distribution. While bivariate analysis especially crosstabs was used to determine the association between categorical variables. The study further used a regression analysis to examine the association.

3.18 Ethical Consideration

The purpose of the study was explained to the participants and the mother provided written consent. To ensure confidentiality, numbers were used to identify a participant instead of real a name and the document placed in a secure place and locked, which could be only accessed with the principal investigator and researcher assistants. The electronic data protected by a password. Ethical clearance (Appendix E) obtained from the Muhimbili University of Health and Allied Sciences (MUHAS) Ethical Clearance Committee. Request letter for permission to conduct the study was sent to Hospital Medical Officer In charge (Appendix F) and permission to conduct the study obtained from Regional Medical Officer at Tanga Regional Referral Hospital (Appendix G).

3.19 Dissemination of Findings

Following completion of the study copy will be submitted to Muhimbili University of Health and Allied Sciences, Muhimbili School of Nursing, Publication in peer review journal, and Regional Medical Officer and Medical Officer In charge of Tanga Regional Referral Hospital.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

This section represents the results of the study objectives; the quality level of maternity health care services provided under KfW scheme among postnatal mothers, the degree of satisfaction of postnatal mothers about KfW scheme and the association between postnatal mothers' socio-demographic characteristics and satisfaction with KfW services at Tanga Regional Referral Hospital. The analysis based on the specific study objectives as stipulated below:-

4.2 Socio-demographic characteristics of the participants

A total number of 217 post-natal mothers responded to the questionnaires, making a response rate of 100%. Participant's age, parity status, the area of residence, level of education, occupation and marital status religion were considered in the analysis. The study showed that 16.6% of post-natal mothers were younger women ranging between 11-19 years, 59.5% were between 20-29years and 1.8% of these were old age women ranging between 40-49 years. Most of these women (60.8%) had one delivery and only 9.7% had five deliveries and above.

In addition, 77.9% of post-natal mothers were staying at Tanga city, 14.7% were from Tanga urban and 7.4% were from outside Tanga region. Fifty point seven percent (50.7%) of these post-natal mothers had primary education and only 6.0% had never been to school. Moreover, 48.4% were unemployed, 41.9% were self-employed and only 9.7% were employed. Furthermore, among 71.4% of post-natal mothers were married, 18.9% were single and only 1.4% were divorced (Table 1).

Table 1: Socio-demographic characteristics of the study participants

Socio-demographic characteristics		
	Frequency n-217	Percent
Participant's age		
11-19	36	16.6
20-29	129	59.4
30-39	48	22.1
40-49	4	1.8
Total	217	100
Participant's number of delivery		
1	132	60.8
2	37	17.1
3	15	6.9
4	12	5.5
5 and above	21	9.7
Total	217	100
Participant's level of education		
Never been to school	13	6.0
Primary level	110	50.7
Secondary level	77	35.5
University/ College	17	7.8
Total	217	100
Participant's occupation		
Self employed	91	41.9
Employed	21	9.7
Unemployed	105	48.4
Total	217	100
Participant's area of residence		
Tanga city	169	77.9
Tanga Urban	32	14.7
Outside Tanga region	16	7.4
Total	217	100
Marital status		
Single	41	18.9
Married	155	71.4
Cohabiting	17	7.8
Divorced	3	1.4
Separated	1	0.5
Total	217	100

Objective 1: The quality level of maternity health care services provided under KfW scheme

Based on the 5-point Likert scale which is 1=strongly agree, 2=Agree, 3=Neutral 4=Disagree and 5=strongly disagree were used to determine the quality level of KfW services (n=217). The data analysis on the adequacy of resources and surrounding cleanliness showed that 72.8% of post-natal mothers strongly agreed that doctors were enough to provide treatment to them while 0.9% disagreed and 0.5% strongly disagreed. Sixty-five point four percent (65.4%) of post-natal mothers strongly agreed that nurses were enough to provide care to them while 3.2% disagreed and 0.5% strongly disagreed.

In addition, 59.2% of post-natal mothers strongly agreed that all medications required were available and given freely while 5.5% disagreed and 3.7% strongly disagreed. Fifty-six point two percent (56.2%) of post-natal mothers strongly agreed that all medical supplies were available and given freely while 5.1% disagreed and 6.5% strongly disagreed. Moreover, 60.8% of post-natal mothers strongly agreed that Ward and toilet were kept clean while 5.5% disagreed and 2.3% strongly disagreed (Table 2).

Table 2: Adequacy of resources and surrounding cleanliness

Adequacy of resources and surrounding cleanliness		
	Frequency n-217	Percent
Doctors were enough		
Strongly agreed	158	72.8
Agreed	44	20.3
Neutral	12	5.5
Disagreed	2	0.9
Strongly disagreed	1	0.5
Total	217	100
Nurses were enough		
Strongly agreed	142	65.4
Agreed	53	24.4
Neutral	14	6.5
Disagreed	7	3.2
Strongly disagreed	1	0.5
Total	217	100
All medications were available		
Strongly agreed	128	59.0
Agreed	40	18.4
Neutral	29	13.4
Disagreed	12	5.5
Strongly disagreed	8	3.7
Total	217	100
All medical supplies were available		
Strongly agreed	112	56.2
Agreed	42	19.4
Neutral	28	12.9
Disagreed	11	5.1
Strongly disagreed	14	6.5
Total	217	100
Ward and toilet were kept clean		
Strongly agreed	132	60.8
Agreed	41	18.9
Neutral	27	12.4
Disagreed	12	5.5
Strongly disagreed	5	2.3
Total	217	100

The quality level of maternity health services in the process of clinical care. The data analysis showed that 75.1% of post-natal mothers strongly agreed that were physically examined and only 1.8% disagreed. Sixty-three point six percent (63.6%) of postnatal mothers also strongly agreed that reason for physical examination was explained before and 4.1% disagreed. However, 52.5% of post-natal mothers disagreed that were waiting too long for emergency care. In addition, 61.3% of post-natal mothers also disagreed that staff was hurried during provision services (Table 3).

Table 3: Process of clinical care during health services

Process of clinical care during health services		
	Frequency n-217	Percent
Were physically examined		
Strongly agreed	163	75.1
Agreed	40	18.4
Neutral	10	4.6
Disagreed	4	1.8
Total	217	100
Reason for physical examination was explained		
Strongly agreed	138	63.6
Agreed	53	24.4
Neutral	17	7.8
Disagreed	9	4.1
Total	217	100
Waiting too long for emergency treatment		
Strongly agreed	11	5.1
Agreed	23	10.6
Neutral	28	12.9
Disagreed	114	52.5
Strongly disagreed	41	18.9
Total	217	100
Staff hurried too much during treatment		
Strongly agreed	14	6.5
Agreed	16	7.5
Neutral	22	10.1
Disagreed	133	61.3
Strongly disagreed	32	14.7
Total	217	100

The quality of level of maternity health services on interpersonal relationship between staff and client. The data analysis showed that 65.0% of post-natal mothers strongly agreed that staff showed compassion and support during provision of care, 5% disagreed and only 0.5% strongly disagreed. Sixty-one point six percent (61.6%) of post-natal mothers strongly agreed that staff was polite and respectful during provision of care, 1.4% disagreed and 1.8% strongly disagreed. Sixty-two point seven percent (62.7%) of post-natal mothers strongly agreed that staff was maintaining confidentiality during provision of care, 2.3% disagreed and only 0.5% strongly disagreed. In addition, 62.2% of post-natal mothers strongly agreed that staff was treating them very friendly, 4.1% disagreed and only 0.5% strongly agreed (Table 4).

Table 4: Interpersonal relationship between staff and client/ patient

Interpersonal relationship between staff and client/ patient during health care services		
	Frequency n-217	Percent
Staff showed compassion and support		
Strongly agreed	141	65.0
Agreed	53	24.0
Neutral	17	7.8
Disagreed	5	2.3
Strongly disagreed	1	0.5
Total	217	100
Staff were polite and respectful		
Strongly agreed	133	61.6
Agreed	52	24.0
Neutral	25	11.5
Disagreed	3	1.4
Strongly disagreed	4	1.8
Total	217	100
Staff were maintaining confidentiality		
Strongly agreed	136	62.7
Agreed	60	27.6
Neutral	15	6.9
Disagreed	5	2.3
Strongly disagreed	1	0.5
Total	217	100
Staff treated very friendly and courteous manner		
Strongly agreed	135	62.2
Agreed	54	24.9
Neutral	18	8.3
Disagreed	9	4.1
Strongly disagreed	1	0.5
Total	217	100

Objective 2: The degree of satisfaction of postnatal mothers about KfW scheme

Based on the 5-point Likert scale which is 1=strongly agree, 2=Agree, 3=Neutral 4=Disagree and 5=strongly disagree were also used to determine the degree of satisfaction of KfW services (n=217). The data analysis showed that 69.6% of post-natal mothers strongly agreed that they feel confident with medical care without being set back financially while 2.3% disagreed and 0.9% strongly disagreed. Fifty-nine point nine percent (59.9%) of post-natal mothers strongly agreed that they were satisfied with health services provided under KfW scheme while 7.4% disagreed and 3.7% strongly disagreed.

Sixteen point one percent (16.1%) strongly agreed and 18.0% agreed that some things about health services could be done better. However, 52.5% of post-natal mothers strongly disagreed. In addition, some health services mentioned by clients that can be improved were increasing bed capacity (2.8%), availability of drugs (5.5%), availability of medical supplies (5.5%) and meeting client demand for more attention and support (6.5%) (Table 5).

Table 5: Post-natal mother's satisfaction with health services provided with KfW scheme

The degree of satisfaction of post-natal mothers		
	Frequency n-217	Percent
Feel confident with medical care without being set back financially		
Strongly agreed	151	69.6
Agreed	45	20.7
Neutral	14	6.5
Disagreed	5	2.3
Strongly disagreed	2	0.9
Total	217	100
Satisfied with health services		
Strongly agreed	38	17.5
Agreed	130	59.9
Neutral	25	11.5
Disagreed	16	7.4
Strongly disagreed	8	3.7
Total	217	100
Things about medical care could be better		
Strongly agreed	35	16.1
Agreed	39	18.0
Neutral	25	11.5
Disagreed	114	52.5
Strongly disagreed	4	1.8
Total	217	100
Some medical care mentioned which can be improved are:-		
None	173	79.7
Availability of drugs	12	5.5
Availability of medical supplies	12	5.5
Increasing bed capacity	6	2.8
Staff should have to provide more attention & support	14	6.5
Total	217	100

Objective 3: The association of post-natal mothers demographic characteristics and satisfaction of KfW services

The association between post-natal mothers' demographic characteristics and satisfaction of KfW services was examined and the analysis showed that level of education of post-natal mothers was found to be positively associated with satisfaction of KfW services. Women's satisfaction was found to be high in women never attended to school and those having primary and secondary education level. Lower satisfaction in KfW services was found in an educated woman with college/university education (p-value 0.022). However, Age, parity status, the area of residence, occupation and marital status were not found to be associated with satisfaction of KfW services. Beyond evaluating differences in satisfaction and socio-demographic characteristics, the study further used regression analysis to examine the association (Table 6).

Table 6: Linear regression on association of women's socio-demographic characteristics and satisfaction of KfW services

	Un standardized coefficients		Standardized coefficients	P-value	95% confidence interval for B	
	B	Standard error	Beta		Lower Bound	Upper Bound
(Constant)	1.355	.324		.000	.717	1.993
Age of the mother	.010	.098	.010	.915	-.183	.204
Number of delivery	.032	.053	.059	.543	-.072	.136
Area of residence	.064	.082	.053	.440	-.099	.226
Level of education	.171	.074	.172	.022	.024	.317
Occupation	-.104	.076	-.093	.177	-.254	.047
Marital status	-.113	.083	-.094	.173	-.275	.050

- a. Predictors: (constant), Age group, number of delivery, Area of residence, Level of education, Occupation and Marital status
- b. Dependent variable: satisfied with medical care
- c. P-value less than 0.05 statistically significant

Overall, post-natal mothers were satisfied with the maternity health care services given at Tanga Regional Referral Hospital. Most of the drugs and medical supplies now are available due presence of kfw scheme. The nurses are generally polite, respectful and treating client friendly. However, satisfaction is high in women never attended to school and also having primary and secondary education, those who are more educated were moderately satisfied.

CHAPTER FIVE

5.0 DISCUSSION

A significant reduction in maternal mortality has been and continues to be the prime concern of the MoHCDGEC in Tanzania. This can be achieved if the quality of healthcare provided to the people is successful through an effective and efficient delivery of care to the satisfaction of patients (Duggirala et al., 2001). This study assessed the quality and satisfaction of maternity health care services provided under German development bank (kfw) among post-natal mothers, within the quality level three dimensions were assessed including infrastructure, personnel quality and administrative/technical quality. In addition, the degree of satisfaction and association between demographic characteristics and satisfaction were analyzed.

The quality level of maternity health services on adequacy resources and hospital surrounding cleanliness study revealed ratings of participants on enough doctors, enough nurses and hospital environment cleanliness. This is consistent with the previous study done in the United Kingdom (Hardy, West, & Hill, 1996) where the cleanliness of the hospital environment emerged as a strong factor influencing patient satisfaction with the quality of care. The study suggests that, since hospitals exist as healing institutions, a very tidy environment is necessary not only as a primary measure to control disease outbreak but also to provide some form of psychological relief to the patient's condition. Another study by Changole et al., 2010 in Malawi also supported findings of this study on enough doctors and nurses by 65% of the participants as indicators influencing patient satisfaction with the quality of care.

This study also revealed that 59.2% and 56.2% of insured post-natal mothers strongly agreed with the availability of all medication and medical supplies respectively. The reason for this fair percentage could be due to the facts that some women were told to buy delivery kits during Antenatal clinic as part of emergency preparedness, so when attending health facility for delivery they go with Kits. The results of quality levels within the process of clinical care also revealed strong positive ratings on physical examination done (93.5%) and the reason for physical examination explained before (88.0%).

However, the study revealed 71.4% negative ratings with waiting too long for emergency treatment and 76% staff hurried when providing services. This is consistent with the previous study by Changole et al., 2010 in Malawi where 88.1% of participants responded that they received prompt attention with a waiting time of less than an hour after arrival. However, this is inconsistent with the previous study done by Dalinjong and Laar (2012) on client and provider perceptions study under the NHIS in two districts in the northern part of Ghana using cross-sectional data. Where the major complaint by the insured patients in their study was the long waiting times they faced while receiving services.

The findings of quality levels within an interpersonal relationship between staffs and clients also revealed strong positive ratings on staff showed compassion and support (89%), polite and respectful (85.6%), staff maintaining confidentiality (90.3%) as well as treating clients very friendly (87.1%) This concurs with the study done by Aldana, Piechulek, & Al-sabir (2001) conducted study on client satisfaction and quality of health care in rural Bangladesh and revealed the importance of politeness, friendliness and respectful attitudes of health staff to overall satisfaction with care.

Moreover, on the association between socio-demographic characteristics and satisfaction of KfW services the study reported a statistically significant association with level of education (p-value 0.009). Women's satisfaction was found to be high in women never attended to school as well those having primary and secondary education level and moderate satisfaction was reported by the educated woman with college/university education. However, Age, parity status, the area of residence, occupation and marital status were not found to be associated with satisfaction of KfW services. This is inconsistent with the study on socio-demographic factors with an expression of satisfaction done in the United Kingdom by Venn & Fone (2005) reported that satisfaction varied with age, gender, employment status and marital status.

The conceptual framework of this study which was adapted from Padma et al., 2009 showed perceived service quality and satisfaction of the health care services can be influenced by socio-demographic factors. However, the study found that only the level of education has an influence on KfW service quality satisfaction. Contrary to this study, Iii & Adams (2001)

determined that provider performance and access both affected the satisfaction. But, the demographic variables such as age, gender, education and marital status did not have any moderating effect on satisfaction. In addition, Baldwin (2003) attempted to include age, gender and location as moderating variables between quality and satisfaction. But findings did not show any influence.

This study has shown that what makes up patient satisfaction at Tanga Regional Referral Hospital are consistent with findings elsewhere in the world. These results can contribute to our understanding of how patients perceive certain aspects of quality of care and feedback from surveys of this nature can be of significance.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Most postnatal mothers who delivered at Tanga Regional Referral Hospital were satisfied with the quality of maternity health care services offered by KfW services, but more educated women were moderately satisfied. KfW scheme was found to be useful to poor pregnant women to adequate health services due to the fact that most of the drugs and medical supplies are now available. Women now know that, with the help of this insurance, they can deliver safely and confidently without being required to make out of pocket payments for medicines and medical supplies. In addition, satisfaction is also due to caring given by nurses and doctors as well as a good interpersonal relationship between client and staff. However, there are some things which can be improved including increasing bed capacity and staff need to increase more attention and support to the client. Therefore, health managers can use these findings to improve service delivery.

6.2 Recommendations

The study focused only at Tanga Regional Referral Hospital, without involving District Hospitals or Health Center. Generalizations may, therefore, be done with caution, since the perceived quality of care and satisfaction may differ markedly due to the different expectations of care. A further study is required to assess the quality and satisfaction of the maternity health care services provided under KfW scheme among post-natal mothers within the context of the implementation of the KfW health insurance scheme in Tanga region. MoHCDGEC should also request a further expansion of the programme to more regions in Tanzania due to the facts that it improves access to poor pregnant women to adequate health services and improve maternal health.

6.3 Limitation of the study

It should also be pointed out that cross-sectional data are only snapshots of events during the time of the study and therefore the material does not usually allow for establishing causal relationships. Hence, this study can only contribute with descriptive analyses of levels of quality, the degree of satisfaction and the statistical associations in question. In addition, the study also did not have a comparison group of non-insured because all post-natal mothers are insured at Tanga Regional Referral hospital and Tanga region in general. Hence results measured only one part of an overall quality evaluation effort.

Moreover, differences between postnatal mothers freedom to give out a point of view where also the limitation of the study. Some questions in the questionnaire involved asking mothers' issues about health providers made them feel worried. To overcome this limitation the confidentiality was addressed to women. Also, no woman was allowed to write the name in the questionnaire and participant's rights were strictly observed.

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APPENDICES

Appendix A: Questionnaire (English version)

Assessment of the quality and satisfaction of maternity health care services provided under Kfw scheme: free health insurance among post-natal mothers

PART A: Socio-demographic

Fill the correct answer in the space provided and circle the correct later

1. What is your age?
2. What is your parity status?
3. Area of residence
 - a) Tanga city
 - b) Outside Tanga city
 - c) Outside Tanga region
4. Level of education of the caregiver
 - a) Nil
 - b) Primary education
 - c) Secondary education
 - d) College/ University
5. Occupation of the mother
 - a) Employed
 - b) Unemployed
 - c) Self-employed
6. Marital status of the mother
 - a) Single
 - b) Married
 - c) Cohabiting
 - d) Divorced
 - e) Separated

PART. B: Perceived quality service under KfW scheme

How strongly do you **agree or disagree** with each of the following statements

INSTRUCTION: Circle one number on each line

Scale: 1 = strongly agree, 2 = Agree, 3= Neutral, 4 = Disagree, 5 = strongly disagree

1. Adequacy of resources and surrounding cleanliness during health services

INSTRUCTION: Circle one number on each line

Scale: 1 = Strongly agree, 2 = Agree, 3= Neutral, 4 = Disagree, 5 = Strongly disagree

Doctors were enough to take care of me	1	2	3	4	5
Nurses were enough to take care of me	1	2	3	4	5
All medications needed for me were available	1	2	3	4	5
All medical supplies needed for me were available	1	2	3	4	5
Ward and toilet were kept clean	1	2	3	4	5

2. Process of clinical care during health services

INSTRUCTION: Circle one number on each line

Scale: 1 = strongly agree, 2 = agree, 3= Neutral, 4 = Disagree, 5 = strongly disagree

During hospital stay, I was physically examined	1	2	3	4	5
During hospital stay, doctors were good about explaining the reason for medical tests	1	2	3	4	5
When I arrived for medical care, people were having to wait too long for emergency treatment	1	2	3	4	5
Staff who provided my medical care sometimes hurried too much when they treated me	1	2	3	4	5

3. Interpersonal relationship between staff and client/ patient during health care services

INSTRUCTION: Circle one number on each line

Scale: 1 = strongly agree, 2 = Agree, 3= Neutral, 4 = Disagree, 5 = strongly disagree

While I was receiving medical care the staff showed compassion and support	1	2	3	4	5
While I was receiving medical care the medical care staff were polite and respectful	1	2	3	4	5
While I was receiving medical care the staff maintained confidentiality	1	2	3	4	5
While I was receiving the medical care staff treated me in a very friendly and courteous manner	1	2	3	4	5

PART C: Postnatal mother's satisfaction with health services provided with KfW scheme

How strongly do you **agree or disagree** with each of the following statements

INSTRUCTION: Circle one number on each line

Scale: 1 = strongly agree, 2 = Agree, 3= Uncertain, 4 = Disagree, 5 = strongly disagree

I feel confident that I can get the medical care I need without being set back financially	1	2	3	4	5
I am very satisfied with the medical care I received	1	2	3	4	5
Some medical care which can be improved are:-					
There are some things about the medical care I received that could be better	1	2	3	4	5

Appendix B: Dodoso (Swahili Version)**SEHEMU A****Jaza nafsi iliyoachwa wazi na zungushia mduara kwenye herufi ya jibu sahihi**

1. Una miaka mingapi?
2. Umezaa mara ngapi?
3. Unaishi wapi?
 - a) Tanga mjini
 - b) Wilayani
 - c) Nje ya mkoa wa Tanga
4. Kiwango cha elimu ulichosoma?
 - a) Sijasoma
 - b) Msingi
 - c) Sekondari
 - d) Chuo
5. Aina ya ajira uliyonayo?
 - a) Mwajiriwa
 - b) Siyo mwajiriwa
 - c) Nimejiajiri
6. Hali ya ndoa?
 - a) Sijaolewa
 - b) Nimeolewa
 - c) Ninaishi na mwanaume bila ndoa
 - d) Mtalikiwa
 - e) Tumetengana

SEHEMU B. Kipengele cha ubora wa huduma zinazotolewa na bima ya afya ya mama wajawazito (KfW)

MAELEKEZO: Zungusha mdwara kwenye namba sahihi kila mstari

Kiwango: 1= Nakubali kabisa, 2 = Nakubali, 3= Wastani, 4 = Sikubali 5= Sikubali kabisa

1. Uwepo wa raslimali watu na vifaa tiba pamoja na usafi wa wodi

Madaktari wa kutosha walikuwepo kunihudumia	1	2	3	4	5
Wauguzi wa kutosha walikuwepo kunihudumia	1	2	3	4	5
Dawa zote zilizohitajika nilipata	1	2	3	4	5
Vifaa tiba vyote vilivyohitajika nilipata	1	2	3	4	5
Mazingira ya wodi na vyoo ni safi	1	2	3	4	5

MAELEKEZO: Zungusha mdwara kwenye namba sahihi kila mstari

Kiwango: 1= Nakubali kabisa, 2 = Nakubali, 3= Wastani, 4 = Sikubali 5= Sikubali kabisa

2. Wakati wa utoaji huduma

Kipindi nikiwa hapa hospitali nimepimwa na kuchunguzwa vizuri	1	2	3	4	5
Kipindi nikiwa hapa hospitali madaktari wamenieleza vizuri sababu za kufanyiwa vipimo	1	2	3	4	5
Wakati nimefika hospitali kupatiwa huduma nilichukua muda mrefu kupata huduma ya dharura	1	2	3	4	5
Watoa huduma walionipa huduma za matibabu walikuwa na haraka sana wakati wa kunipa huduma	1	2	3	4	5

MAELEKEZO: Zungusha mduara kwenye namba sahihi kila mstari

Kiwango: 1= Nakubali kabisa, 2 = Nakubali, 3= Wastani, 4 = Sikubali 5= Sikubali kabisa

3. Mahusiano kati ya watoa huduma na mama wakati wa matibabu/huduma

Wakati napata huduma za matibabu watoa huduma walinihudumia kwa huruma na kunipa msaada nilipohitaji	1	2	3	4	5
Wakati napata huduma za matibabu watoa huduma walinihudumia kwa upole na heshima	1	2	3	4	5
Wakati napata huduma za matibabu watoa huduma walizingatia usiri	1	2	3	4	5
Wakati napata huduma za matibabu watoa huduma walinihudumia kwa urafiki na upendo	1	2	3	4	5

SEHEMU C: Mama kurithika kwa huduma zinazotolewa na Bima ya mama wajawazito

Kiwango: 1= Nakubali kabisa, 2 = Nakubali, 3= Wastani, 4 = Sikubali 5= Sikubali kabisa

1. Najisikia kwamba bima hii imenipa nguvu ya kupata huduma za matibabu bila kufikiria gharama za matibabu	1	2	3	4	5
2. Nimeridhika sana na huduma za matibabu za bima hii nilizopatiwa	1	2	3	4	5
3. Baadhi ya matibabu yanayoweza kuboreshwa zaidi ni-					
4. Kuna vitu katika huduma ya matibabu niliyopatiwa vinaweza kuboreshwa zaidi	1	2	3	4	5

Appendix C: Informed Consent (English version)

The Muhimbili University of Health and Allied Sciences - Directorate of Research & Publications

ID-NO: /...../.....

Consent to participate in this study

A greeting, my name is **Kondo Juma Mahamoud** from the Muhimbili University of Health and Allied Sciences, Dar Es Salaam. At the moment, we are carrying out a study to assess the quality and satisfaction of the health services provided under German Development Bank (KfW scheme): free health insurance among post-natal mothers at Tanga Regional Referral Hospital.

Purpose of the study

This study aims to collect information associated with satisfaction of services provided under KfW scheme. We should be grateful if you are willing to participate by answering questions from the study.

What participation involves

If you agree to participate in this study the following will occur

1. You will be given questionnaire by a trained researcher and you will be required to answer a question that has been prepared for the study in order to obtain the intended information to inform Ministry of Health Community Development, Gender, Elderly and Children on how to improve health care services.
2. No identifying information such as name will be collected from this questionnaire.

Confidentiality

I assure you that all the information collected from you will be kept confidential. Only people working in this research study will have the access to the information. We will ensure that any information included in your report does not identify you as respondent as we will not put your name or other identifying information on the records of the information you provide.

Risks

No, any risk is foreseen in this study. But at any moment if the question makes you feel uncomfortable you may refuse to answer any particular question and may stop the interview at any time.

Rights to withdraw and alternatives

Your participation in this study is completely voluntary. If you choose not to participate in the study or if you decide to stop participating in the study you will not get any harm. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdraw from the study will not involve loss of any benefit to which you otherwise entitled.

Benefits

The information you provide to us is extremely important and valuable. It will help funders of the project and other health officials at every level to improve service. There is no direct benefit, however; individual benefit it will be obtained through intervention programs which can be conducted in this particular area.

In case of injury

We are not anticipating that any harm will occur as the result of your participation in this study

Compensation

There will be no compensation for time spent during the interview; however, your participation is highly appreciated.

Who to contact

If you ever have questions about this study, you should contact the **Principal Investigator, Mr. Kondo Mahamoud**- The Muhimbili University of Health and Allied Science (MUHAS), P. O. Box 65001, Dar es Salaam, Tel. no 0713822100. If you have questions about your rights as a participant and need further clarification you may call **Director of Research and Publication Dr. Joyce Masalu**, Muhimbili University of Health and Allied Science (MUHAS), P. O. Box 65001, Dar es Salaam, Tel. no 2150302-6.

Signature

CONSENT

I have read the content in this form, my questions have been answered and I agree to participate in this study

Signature of Participant/thumbprint

Signature of Research assistant.....

Date of signed consent.....

Appendix D: Informed Consent (Swahili Version)

Chuo Kikuu cha Sayansi za Afya Muhimbili - Kurugenzi ya Utafiti na Machapisho

Namba ya Utambulisho...../...../.....

Ridhaa ya kushiriki katika utafiti huu

Habari! Jina langu naitwa **Kondo Juma Mahamoud** natoka Chuo Kikuu cha Sayansi za Afya Muhimbili, Dar es salaam. Tunafanya utafiti kuangalia ubora wa huduma zinazotolewa chini ya bima ya mama wajawazito na jinsi gani mnaridhishwa na huduma hizo katika Hospital ya Mkoa wa Tanga (Bombo).

Malengo ya utafiti

Utafiti huu una lengo la kukusanya taarifa zitakazoelezea kwa kiwango gani mnaridhishwa na huduma zinazotolewa na bima hii ya mama wajawazito na pia taarifa hizo kusaidia wathamini wa mradi huu pamoja na ngazi mbalimbali za afya katika kuboresha huduma za mama wajawazito. Hivyo unaombwa kushiriki katika utafiti huu ukiwa miongoni mwa jamii inayokaa katika mkoa huu.

Ushiriki unahusisha nini?

Ukikubali kushiriki katika utafiti huu yafuatayo yatatokea

1. Utapewa karatasi ya maswali na kujibu maswali yahasuyo mtazamo wako kuhusu huduma zinazotolewa na bima ya mama wajawazito na jinsi gani unavyoridhika nazo.
2. Hakuna taarifa zozote za utambulisho zitakazokusanywa wakati wa usahili isipokuwa umri na kiwango cha elimu.

Usiri

Nakuakikishia kwamba taarifa zote zitakazokusanywa kutoka kwako zitakuwa ni siri, ni watu wanaofanya kazi katika utafiti huu tu ndio wanaweza kuziona taarifa hizi. Tunakuakikishia ya kwamba taarifa zitakazojumuishwa kwenye ripoti yetu hazitakuwa zinatoa utambulisho wako.

Hatutaweka jina lako au taarifa yoyote ya utambulisho kwenye kumbukumbu ya taarifa utakazotupatia.

Madhara

Hamna madhara yeyote yanayotegemewa kutokana na kujumuika kwako katika utafiti huu. Baadhi ya maswali yanaweza kukufanya usijisikie vizuri hivyo unaweza kukataa kujibu swali lolote na unaweza kusimamisha usaili wakati wowote.

Haki ya kujitoa na mbadala wowote

Ushiriki wako katika utafiti huu ni wa hiari. Kama utachagua kutoshiriki au utaamua kusimamisha ushiriki wako hautapata madhara yoyote. Unaweza kusimamisha ushiriki katika muda wowote hata kama ulisharidhia kushiriki. Kukataa kushiriki au kujitoa katika utafiti hakukufanyi upoteze stahili yoyote unayotakiwa kupata.

Faida

Taarifa utakayotupatia ni muhimu sana nayenye thamani kwa kuwa itasaadia wizara ya afya na wathamini wa mradi katika kuboresha huduma za mama wajawazito

Endapo utaumia

Hatutegemei madhara yoyote kutokea kwa kushiriki kwako katika utafiti huu

Fidia ya muda

Hakutakuwa na fidia ya muda uliotumika wakati wa kufanya mahojiano au majadiliano katika utafiti huu, ijapokuwa ushiriki wako katika utafiti huu utashukuriwa na kutathiminiwa.

Watu wa kuwasiliana nao

Kama kuna swali kuhusiana na utafiti huu unaweza kuwasiliana na **Mtafiti Mkuu, ndugu Kondo Mahamoud**- Chuo Kikuu cha Afya na Sayansi ya Tiba Muhimbili, S.L.P. 65001 DSM. Simu namba 0713822100. Kama una maswali zaidi unaweza kuwasiliana na **Mkurugenzi wa Utafiti na Uchapishaji, Dr. Joyce Masalu**- Chuo Kikuu cha Afya na Sayansi ya Tiba Muhimbili, S.L.P. 65001 DSM. Simu namba 2150302-6

RIDHAA.

Nimesoma maelezo ya fomu hii, maswali yangu yamejibiwa na nimeridhika. Nakubali kushiriki katika utafiti huu.

Sahihi ya Mshiriki/Dole gumba.....

Sahihi ya Mtafiti msaidizi.....

Tarehe ya kutia sahihi ya kushiriki.....

Appendix E: 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



Tel G/Line: +255-22-2150302/6 Ext. 1015
Direct Line: +255-22-2151378
Telefax: +255-22-2150465
E-mail: dpgs@muhas.ac.tz

Ref. No. MU/PGS/SAEC/Vol. IX/58

20th March, 2017

Mr. Kondo J. Mahmoud,
MSc. Midwifery and Women's Health,
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "ASSESSMENT OF THE QUALITY AND SATISFACTION OF HEALTH CARE SERVICES PROVIDED UNDER GERMAN DEVELOPMENT BANK (KFW SCHEME): FREE HEALTH INSURANCE AMONG POST-NATAL MOTHERS AT TANGA REGIONAL REFERRAL HOSPITAL, 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 21st March, 2017 to 20th March, 2018. In case you do not complete data analysis and dissertation report writing by 20th March, 2018, you will have to apply for renewal of ethical clearance prior to the expiry date.

Prof. Andrea B. Pembe
DIRECTOR OF POSTGRADUATE STUDIES

Cc: Director of Research and Publication
cc: Dean, School of Nursing

Appendix F: Requesting letter to conduct study

Muhimbili University of Health and Allied Sciences

P.O Box 65001

DAR-ES-SALAAM

03/04/2017

Medical Officer Incharge
Tanga Regional Referral Hospital
P.O Box 452,

TANGA

RE: REQUEST TO CONDUCT RESEARCH STUDY

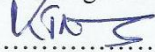
Refer the above heading

Iam Kondo Juma Mahamoud, student at Muhimbili University of Health and Allied Sciences (MUHAS), undertaking Masters of Science in Midwifery and Women's Health

I request a permission to conduct research at Tanga Regional Referral Hospital with a title **“Assessment of the Quality and satisfactions of the maternal health care services provided under German Development Bank (KfW) among Post-natal mothers”**. The results from this study will provide information to Hospital Management Team, Regional Hospital Management Team and Ministry of Health, Community Development, Gender, Elderly and Children about aspects that can improve maternal health services. The period of data collection will be for one (1) month.

Kindly find attached copy of introducing letter and ethical clearance from Muhimbili University

Kindest regards


.....

Kondo J. Mahamoud

Postgraduate Student-MUHAS

Appendix G: Permission letter to conduct study

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS

Tel: 2642997/ 2646683/84
Fax: 2647314 RMO
Fax: 2647360 GIZ



Regional Medical Office,
P.O. Box 452
TANGA

In Reply Please Quote

Ref. No. RM/R.20/1 VOL.I/47

15th MAY, 2017

Mahamoud J. Kondo,
Postgraduate Student - MUHAS,
P.O. Box 65001,
Dar es Salaam.

Ref: PERMISSION FOR CONDUCT RESEARCH STUDY

Refer to the above heading.

Reference is made as per your letter dated 03/04/2017 concern the above heading.

The permission is granted for you to conduct research study on "Assessment of the Quality and Satisfactions of the maternal health can services provided under Germany Development Bank (Kfw) among postnatal mothers" in Tanga Regional Referral Hospital for the period of one month.

Regard.

A handwritten signature in blue ink, appearing to read 'Adam Lyatuu'.

Adam Lyatuu
For: REGIONAL MEDICAL OFFICER
TANGA