

**Factors affecting satisfaction with antenatal care services among pregnant women attending Mafiga health center in Morogoro municipality-Tanzania: evidence from a cross sectional study**

**Amina Shabani Shomari, RN**

**MSc (Midwifery and Women's Health) Dissertation  
Muhimbili University of Health and Allied Sciences  
October, 2018  
Muhimbili University of Health and Allied Sciences**

**Department of Community Health Nursing**



**FACTORS AFFECTING SATISFACTION WITH ANTENATAL CARE  
SERVICES AMONG PREGNANT WOMEN ATTENDING MAFIGA  
HEALTH CENTER IN MOROGORO MUNICIPALITY-TANZANIA:  
EVIDENCE FROM A CROSS SECTIONAL STUDY**

**By**

**Amina Shabani Shomari**

**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, 2018**

**CERTIFICATION**

The undersigned certify that she has read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled “*Factors affecting satisfaction with antenatal care services among pregnant women attending Mafiga Health Center in Morogoro municipality – Tanzania: evidence from a cross sectional study*”, in (partial) fulfillment of the requirement for the degree of Master of Science (Midwifery and Women’s Health) of Muhimbili University of Health and Allied Sciences.

---

**Dr. Lillian T. Mselle (PhD, RN)**

(Supervisor)

---

**Date**

**DECLARATION ANDCOPYRIGHT**

I, **Amina Shabani Shomari**, 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:** .....

This dissertation is copyright material protected under Berne Convention, the copy right Act 1999 and other International and National enactments, in that behalf, on intellectual property. It may not be reproduced by any means, in full or in part, except for short extracts in fair dealing, for research or private study, critical scholarly review or disclosure with an acknowledgement, without the written permission of Directorate of Postgraduate Studies on behalf of both the author and the Muhimbili University of Health and Allied Sciences.

### **ACKNOWLEDGEMENT**

This work would not be effectively accomplished without the help and blessings from the Almighty God. I have the honor to praise him for the mercy and blessings. My special gratitude is expressed to my supervisor, Dr. Lillian T. Mselle whose tireless efforts and support, patience, dedication and professional guidance during the design, implementation and writing of this dissertation can never go unnoticed. I thank her for her contribution and constructive criticism which made this work the way it appears.

So many thanks to the Department of Community Health Nursing for accepting this work to be done as part of fulfillment of my MSc. program. I also appreciate the assistance from all members of staff at School of Nursing, who directly or indirectly supported me academically and materially.

I appreciate the moral support and assistance from my colleagues in the Midwifery and Women's Health program.

I also extend my gratitude to Morogoro Council Health Management Team specifically the DMO, Dr. Barakaeli Moshi, Hospital Matron Sr. Sharifa khamis Rashid and the entire Municipal and hospital management team for their support during proposal writing and data collection.

## **DEDICATION**

I dedicate this dissertation work to my family. A special feeling and gratitude thanks to my loving mother and sisters, for their supportive words of encouragement at all time in my study.

I dedicate this work and give special thanks to my lovely husband Juma Hashimu Matumla and my terrific kids Aisha and Abdulkarim for being patient when I was not there for them throughout the entire Master program.

## **ABSTRACT**

**Background:** Antenatal care (ANC) is the care a pregnant woman received during her pregnancy through a series of consultations with trained health care workers such as midwives and sometimes a doctor who specializes in pregnancy and birth. The importance of ANC is to ensure optimal health outcomes for the mother and her unborn baby. Pregnant women's concerns, desires and views of health care services need to be explored carefully because of their potential impact on the utilization and satisfaction of ANC services. Information through pregnant women's reviews has proven to be a successful way of strategic evaluation and improving the quality of health services. Recently pregnant women's perceptions, views, and satisfaction with ANC services, in addition to the professional judgment, became recognized measures of the quality and innermost element of quality assurance programs.

This study intended to assess factors affecting satisfaction with antenatal care services among pregnant women attending Mafiga health centre in Morogoro Municipality.

**Method:** The study was descriptive cross – sectional study design using quantitative approach. This study included a total of 262 pregnant women attending ANC clinic at Mafiga health centre in Morogoro Municipal. A semi structured questionnaire consisting of open and closed ended questions was used to collect data. The Statistical Package for Social Sciences (SPSS) version 21 was used to analyze data. Multivariate logistic regression was used to determine the association of independent and the dependent variables. A p-value less than 0.05 were considered statistically significant.

**Results:** A total of 232(88.6%) were satisfied and 30 (11.4%) were dissatisfied with antenatal services. The logistic regression was used to assess socio-demographic factors associated with satisfaction on antenatal service. The age group 20-34years was almost four times likely to be satisfied with antenatal service provided OR 3.83(1.35-10.87) as compared to younger women of age group 17-19 years. On education level, mothers who attended primary, secondary or higher education had higher odds of satisfaction with antenatal service provided OR 5.62(1.74-18.14) P-value<0.01, 7.92(2.25-27.91) P-value<0.01and 3.33(0.53-20.91) P-

value=0.20 respectively as compared to mothers who had no formal education. The study showed that, a few number 11.4% of antenatal mothers were not satisfied with care.

Moreover, mother completed primary education 50.4% had higher odds of dissatisfaction compared to those of secondary education 39.3%.

**Conclusion:** The study conclude that on factors assessed, the level of education and age showed significant relationship with satisfaction on antenatal care while others were not statistically significant. Therefore, this study concludes that mothers with no formal education were more likely to report satisfaction with antenatal care service compared to the mothers with higher education level. On recommendation, the Government in collaboration with District Medical Office should establish a good and service user friendly arrangement so as to facilitate the antenatal service accessibility.



## TABLE OF CONTENTS

CERTIFICATION .....	i
DECLARATION ANDCOPYRIGHT .....	ii
ACKNOWLEDGEMENT .....	iii
DEDICATION .....	iv
ABSTRACT .....	v
TABLE OF CONTENTS .....	vii
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
LIST OF ABBREVIATIONS .....	xii
DEFINITION OF TERMS: .....	xiii
CHAPTER ONE.....	1
1.0 INTRODUCTION AND BACKGROUND.....	1
1.1 Introduction.....	1
1. 2 Background Information.....	1
1.3 Problem statement.....	3
1.4 Significance of the study.....	3
1.5 Conceptual model .....	4
1.6 Research Questions.....	5
1.7 Objectives of the study .....	5
1.7.1 General Objective.....	5
1.7.2 Specific Objectives.....	5
CHAPTER TWO.....	6
2.0 LITERATURE REVIEW .....	6
2.1 Introduction.....	6
2.2 Women’s satisfaction with ANC services .....	6
2.3 Social demographic factors.....	7
2.4 Health facility related factors.....	7
2.5 Literature review summary .....	9

CHAPTER THREE .....	10
3.0 RESEARCH METHODOLOGY .....	10
3.1 Study Design.....	10
3.2 Setting .....	10
3.3 Population .....	10
3.4 Sample size .....	11
3.5 Variables .....	12
3.5.1 Dependant variable.....	12
3.5.2 Independent variables.....	12
3.6 Inclusion criteria .....	12
3.7 Exclusion criteria .....	12
3.8 Data collection tools .....	12
3.9 Validity .....	13
3.10 Reliability of the instrument .....	13
3.11 Sampling procedure .....	13
3.12 Data collection procedure .....	14
3.13 Data analysis .....	14
3.14 Ethical considerations .....	14
3.15 Dissemination .....	15
3.16 Limitation and mitigation .....	15
CHAPTER FOUR .....	16
4.0 RESULTS .....	16
4.1 Social demographic characteristics of study participants .....	16
4.2 Women’s response about the physical environment of ANC clinic .....	18
4.3 Clinic flow and waiting time .....	19
4.4 Laboratory services at ANC .....	20
4.5 Care given at antenatal clinic by health care providers .....	21
4.6 Communication with mothers during antenatal care service and preferred health care workers.....	22

4.7 Level of satisfaction with antenatal care.....	23
4.8 Factors associated with satisfaction on antenatal services.....	25
CHAPTER FIVE .....	27
5.0 DISCUSSION.....	27
5.1 Socio-demographic characteristics of women attending antenatal care services .....	27
5.2 Factors associated with satisfaction on antenatal care services .....	27
5.3 Level of satisfaction with antenatal care.....	29
5.4 Limitation of the study.....	29
CHAPTER SIX .....	30
6.0 CONCLUSION AND RECOMMENDATIONS .....	30
6.1 Conclusion .....	30
6.2 Recommendations.....	31
REFERENCES .....	32
APPENDICES .....	37
Appendix I: Questionnaire – English Version.....	37
Appendix II: Dodoso – Toleo La Kiswahili .....	42
Appendix III: Informed Consent Form.....	47
Appendix IV: Fomu Ya Kuridhia Kushiriki Katika Utafiti – Toleo La Kiswahili.....	49
Appendix V: Letter of Clearance.....	51
Appendix VI: Letter for Permission .....	52

**LIST OF TABLES**

Table 1. Social demographic characteristics of study participants (n=262).....	17
Table 2: Response of women about the physical environment of ANC clinic.....	18
Table 3: Response of women on laboratory services provided as part of the antenatal care received.....	20
Table 4. Response of participants on various items related to care given at antenatal clinic at Mafiga health center in Morogoro Municipality.....	21
Table 5: Distribution of level of satisfaction on the quality of antenatal care among women attending Mafiga health center in Morogoro Municipality May-June 2018.....	24
Table 6: Logistic regression analysis of factors associated with satisfaction on antenatal care (n=262).....	26

**LIST OF FIGURES**

Figure 1: Conceptual model .....4  
Figure 2: Response on waiting time for ANC services .....19  
Figure 3. Response of mothers on the way health care workers communicate during antenatal care visits and preferred health care worker. ....22  
Figure 4. Reason of respondents to prefer male/female health provider on ANC services .....23

**LIST OF ABBREVIATIONS**

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
DEMM	Director Executive, Morogoro Municipal
MHIS	Municipal Health Information System
MOMM	Medical Officer, Morogoro Municipal
HIV	Human Immune Virus
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly & Children
MUHAS	Muhimbili University of Health and Allied Sciences
PI	Principle Investigator
QIT	Quality Improvement Team
RA	Research Assistant
SP	Sulfadoxine pyrimethamine
SPSS	Statistical Package for Social Sciences
TT	Tetanus Toxoid Vaccine
VDRL	Veneral Disease Research Laboratory
WHO	World Health Organization

**DEFINITION OF TERMS:**

**Conceptual definitions**

Pregnancy: - is a normal physiological process associated with certain risks to health of the woman and the unborn baby (Yabo et al., 2015).

Satisfaction: - refer to the women's opinion about the quality of services given and the extent to which specific needs are met (Nwaeze et al., 2013).

## **CHAPTER ONE**

### **1.0 INTRODUCTION AND BACKGROUND**

#### **1.1 Introduction**

This part covers the introductory part which includes the background information of the study, statement of the problem, general objective, specific objectives and research questions.

#### **1.2 Background Information**

Antenatal care (ANC) is the care a pregnant woman receives during her pregnancy through a series of consultations with trained health care workers such as midwives and sometimes a doctor who specializes in pregnancy and birth. The importance of ANC is to ensure optimal health outcomes for the mother and her unborn baby. Proper care throughout pregnancy is essential for the health of the mother and the growth of the unborn baby, promotion of healthy behaviors and parenting skills, and provision of links for the woman and her family with the formal health system (Fagbamigbe, &Idemudia, 2017).

Pregnant women's concerns, desires and views of health care services need to be explored carefully because of their potential impact on the utilization and satisfactions of ANC services. Information through pregnant women's reviews has proven to be a successful way of strategic evaluation and improving the quality of health services. Recently pregnant women's perceptions, views, and satisfaction with ANC services, in addition to the professional judgment, became recognized measures of the quality and innermost element of quality assurance programs (Al Johara, 2010).

ANC has added advantages of early detection of complications and timely treatment, prevention of diseases through immunization and micronutrient supplementation, birth preparedness and complication readiness, and health promotion and disease prevention through health messages and counseling for pregnant women (Singh et al., 2017).

ANC is the key entry point of pregnant women to receive wide range of health education and preventive services that are useful for improvement of mother and her unborn baby health. Satisfaction of care by pregnant women is a chief and an essential component for quality of



ANC. It often determines willingness of the pregnant women to subscribe, comply and continue with the services.

Some studies have reported that pregnant women become satisfied with the care receive, interpersonal relationship of the health care providers and also, the infrastructures for providing the care. (Fagbamigbe et al., 2013).

It is evident that meeting pregnant women's needs and satisfaction with ANC services will affect their behavior in terms of better compliance, fewer broken appointments and less pain and anxiety. Other studies have reported that dissatisfaction with quality and fees; have been associated with generally poor compliance with ANC recommendations, low utilization, or termination of ANC services. In order to plan for a suitable ANC services among pregnant women, it is important to have information about their concerns, views and utilization of and satisfaction with the ANC delivery services. (Al Johara, 2010)

Previous studies demonstrate that pregnant women's dissatisfaction with healthcare service influences their further use of that healthcare system. Dissatisfied pregnant women are more likely not to take part in the decision making process and not to complete ANC services schedule. One of the important determinants of dissatisfaction is un-fulfillment of expectations (Galle et al., 2015).

Tanzanian health care delivery system is comprised of a network of facilities providing a variety of Health services. A recent review of Tanzanians' health shows improvement, recent estimated that there are 556 maternal deaths per 100,000 live births<sup>1</sup> in Tanzania. Complications of pregnancy and childbirth are among the leading causes of morbidity and mortality among women in Tanzania.

ANC client's perceptions of the quality of the services they received the day of the visit few clients reported negatively on the quality of care that they received. 17% of interviewed ANC clients reported a long wait time to see a provider as a major problem for them on the day of the visit, while one ANC client in ten reported non-availability of medicines at the facility as a major problem for them, 13% of interviewed ANC clients reported a long wait time to see a provider as a major problem (TSPA, 2014-2015).

### **1.3 Problem statement**

Antenatal care is a key entry point for many women into the health system for maternal services. According to WHO, four ANC visits are mandatory for women with non-complicated pregnancy and more than four ANC visits are advisable for complicated pregnancy. The first visit should occur within 12 weeks of pregnancy; the second visit should be between 24 and 26 weeks of pregnancy; the third visit is at 32 weeks; and the fourth at 36 - 38 weeks of pregnancy (Villar et al., 2001; Andrew et al., 2014).

ANC visits have benefit for proper pregnancy information sharing, pregnancy monitoring, early detection and treatment of complications of pregnancy and make a proper management at delivery and post-delivery. Preventive services that are offered include iron supplements, provision of Tetanus Toxoid, hemoglobin estimation, syphilis screening, blood pressure measurement, urine test for protein, SP for prophylaxis of malaria and also information on signs of pregnancy complication (Mwakyusa, D. 2008).

Although more than 98% of pregnant women attend ANC clinic for antenatal services in Tanzania, still some have reported not to be satisfied by the services offered (TDHS 2008/2015). The report from the Morogoro hospital quality improvement Team has reported that 67% of pregnant women were not satisfied with ANC services (QIT 2016).

However, this report did not include the reasons for ANC services dissatisfaction by pregnant women attended ANC clinic in Morogoro Municipal. Therefore this study was aimed at assessing factors affecting satisfaction with ANC services among pregnant women at Morogoro Municipal.

### **1.4 Significance of the study**

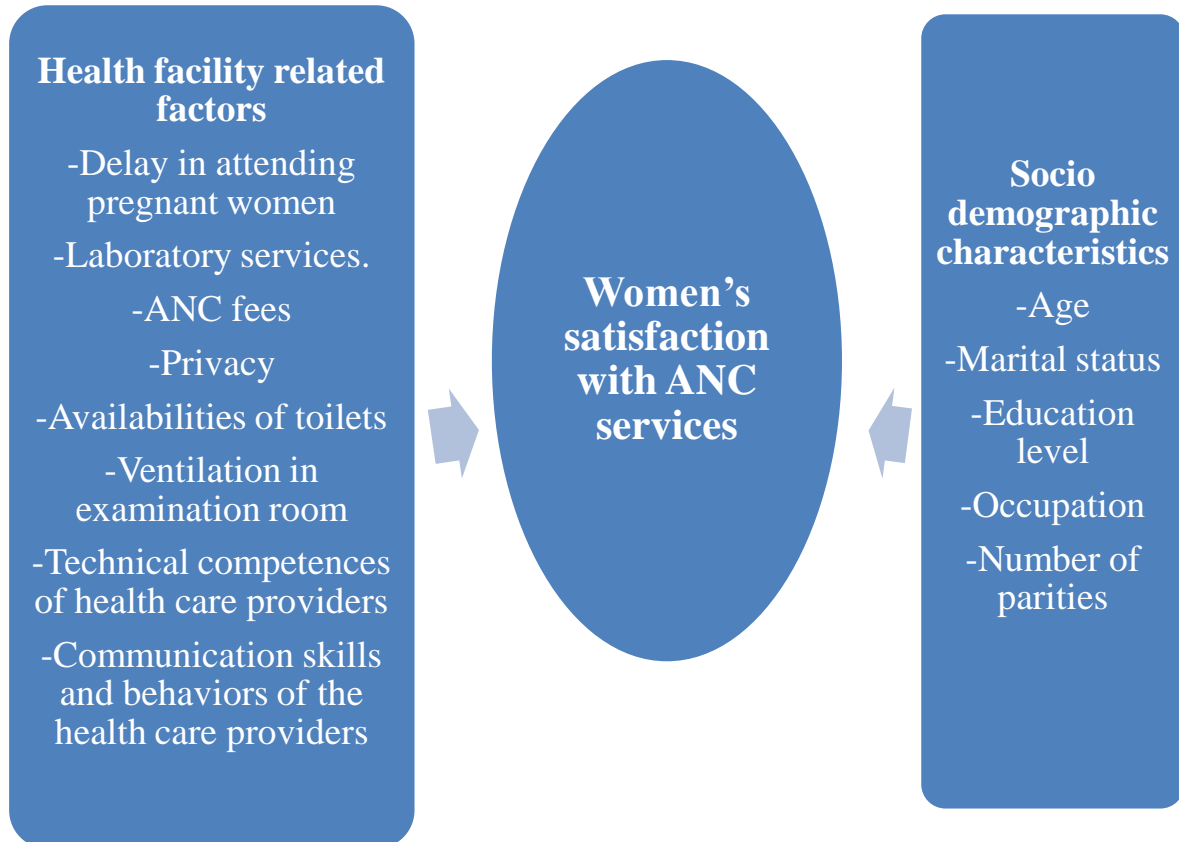
The findings of this study will support Morogoro Municipal council and other stakeholders in designing strategic intervention and policies which will promote ANC services satisfaction. The findings will provide baseline information on factors affecting satisfaction with ANC service among pregnant women for further research since limited studies have been conducted in the Municipality (QIT 2016). In addition, the results of this study will be useful to providing

an evidence based gaps for relevant stakeholders in the course of improving quality of ANC services.

### 1.5 Conceptual model

The model will be used in definitions of variables, formulating research questions, objectives as well as formulating questionnaire. This model was developed by the researcher after reading previous studies.

**Figure 1: Conceptual model**



## **1.6 Research Questions**

This study was conducted to answer the following research questions:

1. What are the social demographic characteristics of pregnant women's attending at Mafiga Health Centre ANC clinic in Morogoro Municipal?
2. What are the factors affecting satisfaction with ANC service among pregnant women's at Mafiga Health Centre ANC clinic in Morogoro Municipal?

## **1.7 Objectives of the study**

This section of objectives cover the research study objectives both general and specific based on the research study

### **1.7.1 General Objective**

To assess factors affecting satisfaction with antenatal care services among pregnant women attending Mafiga health centre in Morogoro Municipality

### **1.7.2 Specific Objectives**

This study was guided by the following specific research objectives:

1. To determine socio-demographic characteristics of women attending antenatal care services at Mafiga health center in Morogoro Municipality.
2. To identify factors affecting satisfaction with antenatal care among pregnant women attending Mafiga health centre in Morogoro Municipality

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

Literature review is guided by conceptual model through satisfaction with ANC service, Social demographic characteristics and health facility related factors.

#### 2.2 Women's satisfaction with ANC services

Global this study has been done in different countries for instance, the study conducted in South west Ethiopia show that majority of the participant were satisfied with the service that they received, were satisfied with interpersonal aspects, organization of health care aspect and the technical quality aspect and mostly were not satisfied with physical environment aspect, technical competences of health care providers, particularly on physical examinations since the large part of physical examinations were performed by students who tended to spend a very short time with clients, (Chemir et al., 2014). Another study done in Ghent reveal that, General satisfaction with antenatal care was high. Women were satisfied with their relationship with the healthcare worker, however; they evaluated the information received during the consultation and the organizational aspects of antenatal care as less satisfactory (Galle et al., 2015). A study done in Southern Ethiopia on maternal antenatal care service satisfaction revealed that overall Antenatal Care satisfaction was low. The likelihood of maternal ANC service satisfaction was lower among women secondary and above educational level (Tesfaye et al., 2017)

In Tanzania, a study conducted in South-eastern by Gross et al., (2012) pregnant women were not satisfied with ANC services due to the situation of paying for ANC cards and preventive drugs such as Mebendazole, SP and ferrous sulfate. A study done in Bukinafaso, Ghana and Tanzania on Quality of antenatal and childbirth care revealed that Mostly of the participants were satisfied with the care to all six districts in all countries. Laboratory investigations were often not performed; examination and monitoring of mother are inadequate (Duysburgh et al 2013). The study done in Tanzania by Bintabara et al 2018 revealed that majority of the

participants were satisfied with the services received and mostly reported not being satisfied with the services.

Regionally, study done in morogoro revealed that, there is dissatisfactions of ANC services due to the fact that there is inadequate health system supports for routine services, particularly related to the availability of tests, that may not only discourage women from attending ANC, but also reduces the effectiveness of ANC visits and endangers the health of women and babies result to poor outcome of pregnancy (Callaghan et al 2016). Another study showed that there were no important laboratory tests done to pregnant women which could enable early detection for signs and symptoms of complications during pregnancy (Kayombo, (2011).

### **2.3 Social demographic factors**

The study done in Southern Ethiopia on maternal antenatal care service satisfaction revealed that majority of pregnant women 84.1% age range of 20 to 34 years whose education level was secondary and above were less satisfied with ANC services compared to those with lower Education level. (Tesfaye et al., 2017). Another study conducted in Ghent on expectations and satisfaction with antenatal care among pregnant women, revealed that there was significantly lower expectations among women without higher education, with low income and younger than 26 years (Galle et al., 2015).

### **2.4 Health facility related factors**

The study conducted in Ethiopia by Yabo et al., (2015) demonstrated that 42 (16%) of the pregnant women were not satisfied with privacy provided during antenatal care services. The findings were similar to those of a study conducted in Egypt whereby 12.8% of pregnant women claimed that privacy was maintained only to some extent (Montasser et al., 2012.)

Regarding the cleanliness of the health facility, (10%) of the pregnant women who participated in the study was not satisfied and 14% of them were not satisfied with cleanliness of the toilet (Montasser et al., 2012).

Regarding waiting time, 78 (30%) of the pregnant women who participated in the study were not satisfied with long waiting time (they were waiting for more than 30 minutes) (Yabo et al., 2015). Another study conducted in South Africa by Worku & Woldesenbet (2016) stated that some pregnant women were not satisfied with ANC services due to the fact that they were waiting for long time to get services.

With respect to ANC fees, pregnant women who participated in the study conducted in South-eastern Tanzania by Gross et al., (2012) were not satisfied with ANC services due to the situation of paying for ANC cards and preventive drugs such as Mebendazole, SP and ferrous sulfate. A related study conducted by Dulla et al., (2017) also reported that different ANC services were charged: 10.7% of pregnant women claimed that they were paying for ANC consultation, 82.1% of pregnant women claimed that they were paying for obstetric ultrasound and 60.7% were paying for drugs. Another study conducted by Kparu (2016) in Ghana reported that most of the pregnant women (91.1%) were paying for ANC services.

Regarding the laboratory services, most of the pregnant women (89.5%) claimed that some of laboratory investigations such as ABO grouping and RH typing were not performed, and 87% of them claimed that blood sugar was not performed and 82.2% of pregnant women reported that stool analysis was not performed (Montasser et al., 2012).

A study conducted in Ethiopia which involved pregnant women reported that they were not satisfied 32 (11%) with technical competences on physical examination which were provided by health care providers (Yabo et al., 2015). In a study conducted by Babalola . & Fatusi. (2009) in Nigeria it was pointed out that most of the pregnant women claimed that the care which was provided in health facility was of low quality compared with the care provided by traditional health attendants. Most of the women were therefore receiving care from traditional health attendants. Moreover, a study conducted in South West Ethiopia revealed that 194(49.9%) of pregnant women were dissatisfied with technical competences of health care providers, particularly on physical examinations since the large part of physical examinations were performed by students who tended to spend a very short time with clients, (Chemir et al., 2014). A study conducted in Pakistan by Majrooh et al., 2014 it was revealed that 32% of pregnant women were not satisfied with ANC services. It was shown that 49% of pregnant

women were not satisfied with health education programs, 57.6% of them were not satisfied with breast care education and 60.5% were not satisfied with proper clothing during pregnancy and individual birth preparedness education (Montasser et al., 2012).

A study conducted in Nigeria reported that most of pregnant women who participated in the study were not satisfied with antenatal care services provided by health care providers particularly on interpersonal communication and relationships (Babalola & Fatusi 2009).

In a study conducted in south-eastern Tanzania by Gross et al., (2012), pregnant women were dissatisfied with ANC services due to bad attitude of health care providers particularly when they enrolled in ANC services earlier (two weeks period of pregnancy).

Similarly, 17% of pregnant women who participated in a study conducted by Montasser et al., (2012) in Egypt: reported that they were not satisfied with the language used by nurses and other health facility staffs (they were using harsh and unprofessional language).

In addition, most of the pregnant women 112 (62.2%) who volunteered in the study claimed that attitudes of health care providers were poor, and the majority of them (71.1%) reported that health care providers were not using encouragement words when attending to them (Kparu, 2016).

In a global systematic review study conducted by Mannava et al., 2015, it was reported that 56% of health care providers had negative attitude and behavior towards pregnant women.

## **2.5 Literature review summary**

According to the literature, majority were satisfied with the ANC service, on social demographic, majority were satisfied and their age range between 20-34, and those with secondary educational level and above were less satisfied with ANC services compared to those with lower Education level. Based on health related factors, majority were not satisfied with the care given like privacy, waiting time, cleanliness, missing investigation and paying ANC fees, and is not similar to the current study because it reveal that majority were satisfied with the care provided at ANC clinic. Current study can contribute on the quality of ANC service.



## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Study Design**

A descriptive cross-sectional study design using quantitative approach was used in data collection. Cross-sectional studies are carried out at one time point or over a short period. They are usually conducted to estimate the prevalence of the outcome of interest for a given population, commonly for the purposes of public health planning. Data can also be collected on individual characteristics (Levin, 2006). A cross section design was selected because it enabled a researcher be to collect data at one point of time to assess factors affecting satisfaction with antenatal care services among pregnant women's attending Mafiga health centre in Morogoro Municipality.

#### **3.2 Setting**

The study was conducted at Mafiga health centre in Morogoro Municipal, Morogoro region in Tanzania. Morogoro municipal is one among seven administrative districts in Morogoro region, has an area of 73,039km<sup>2</sup> and an estimated population of 602,114 (National Census, 2012). It is bordered by Morogoro rural districts to the east and south by the Kilombero and Kilosa to the west and north by Mvomero district. Morogoro urban district has six administrative divisions and nineteen wards. Specifically this study was conducted in Morogoro Municipal Council (MMC) at Mafiga health centre ANC clinic. Mafiga ANC clinic catchment area has a total population of 79112 women of reproductive age (MHIS 2017). ANC attendance at Mafiga ANC clinic ranges between 35-40 per day, 175-200 per week, 770-880 per month and 9240-10560 per year.

#### **3.3 Population**

The study population comprised all pregnant women who attended ANC clinic more than one time at Mafiga health centre ANC clinic in Morogoro Municipal for receiving services during pregnant such as checking blood pressure, measuring body weight, measuring height, blood

screening for HIV, blood screening for VDRL, hemoglobin level, blood grouping, rhesus factor, urine analysis, stool analysis checking blood sugar, confirmation of pregnancy and expected date of delivery, assessment of maternal and fetal well being, treatment and preventive measures like iron and folate supplements, tetanus toxoid vaccine (TT) and sulfadoxine pyrimethamine (SP) and development of birth and emergency plan.

### 3.4 Sample size

The sample size was calculated based on the prevalence of 19% of pregnant women who were not satisfied with ANC services in Nigeria (Nwaeze et al., 2013).

The sample size was estimated by using Cochran's formula (1975) as follows:

$$n = \frac{Z^2 p (1-p)}{e^2}$$

Where n= is the desired sample size

z= standard normal deviation = 1.96

p= proportion of pregnant women who were not satisfied with ANC services was 19% = 0.19

d = degree of accuracy desired = 5% = 0.05

$$n = \frac{1.96^2 \times 0.19 (1-0.19)}{0.05^2} = 236$$

$$\frac{1.96^2 \times 0.19 (1-0.19)}{0.05^2} = 236$$

Therefore the sample size was 236 respondents

To adjust for non response was 10% .The formula for calculating adjusted sample size was

$$N = n * (100\% / 100\% - 10\%) = 236 (100/90)$$

$$= 262$$

Therefore adjusted sample size was 262

### **3.5 Variables**

#### **3.5.1 Dependant variable**

- Women's satisfaction with ANC services

#### **3.5.2 Independent variables**

- Social demographic characteristics (age, tribe, education, marital status, employment, number of pregnancies, number of deliveries, occupation, religion)
- Health facility related factors (privacy, availability of toilet, ventilation in examination rooms, delay in attending to clients, ANC fees, Laboratory services, technical competences of health care providers), Health care providers – pregnant women communication (Communication skill and behaviors of the health care providers.

### **3.6 Inclusion criteria**

- Pregnant women with experience of attended ANC clinic three times and more at any ANC clinic in Morogoro Municipal.

### **3.7 Exclusion criteria**

- Sick pregnant women who were not able to participate during the study
- Pregnant women with less than two ANC visits.

### **3.8 Data collection tools**

Self-administered semi structured questionnaire (Swahili version) was used to obtain primary data for assessing factors affecting satisfaction with ANC service among pregnant women attending Mafiga health centre in Morogoro Municipality (Appendix ii). The questionnaire was developed and structured by the principal Investigator (P.I). The questionnaire included both open and close ended questions. Open ended questions gave participants a chance to explain additional information which was not included in the options.

### **3.9 Validity**

Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Golafshani, 2003). Content validity of the research tool was checked by the researcher's supervisor and Health care providers with research experiences especially those with good experience in quantitative research method. The experts were asked to review each question to determine if would address the research objectives. The feedback from each expert was analyzed and compared to determine the degree of content validity for each question. Any modification suggested was considered before pre-testing and data collection.

### **3.10 Reliability of the instrument**

An instrument can be said to be reliable if its measures accurately reflect the true measures of the attribute under investigation (Golafshani, 2003). Pre-test to check reliability of the tool was done with respondents with similar criteria as the study sample and appropriate modifications were made. The data collection tool was pre-tested at Sabasaba health center with a small number of pregnant women (10% of the sample size which was 26 pregnant women). For easy understanding of pregnant women, Swahili version questionnaires were used in pre-testing. The purpose of pre-testing was to verify the adequate collection of desired information as well as ensuring consistence of the questions. On pre-testing process, minor corrections were made before conducting the study.

### **3.11 Sampling procedure**

A simple random sampling method using a rotary method was used to select pregnant women who were present at ANC clinic during the study. All pregnant women meeting inclusion criteria were gathered at a certain place. Piece of papers written YES and No was kept in the box. Then gathered pregnant women were requested to pick a piece of paper from the box. For those who selected a piece of paper written YES was recruited and included in the study and for those who selected NO were not included in the study. The sampling process continued on daily basis to cover the required sample size.

### **3.12 Data collection procedure**

Information was given to the participants on how to fill the questionnaire and clarification on important issues concerning filling of questionnaire was provided. The questionnaire was filled by study participants but those who were not able to fill by themselves; the questionnaire was filled by principal investigator or research assistant. All questionnaires filled by pregnant women, were coded by numbers instead of participant's name and were stored in the locked cabinet to maintain confidentiality. Only PI and RAs had access to it.

### **3.13 Data analysis**

Data analysis was conducted using statistical package for social science (SPSS) version 21. The coded data were entered in the SPSS and cleaned. The analysis involved descriptive statistics to describe the sample population and relevant proportions, in frequency table and cross tabulations between independent and dependent variables; and chi-square test for showing association between study variables during statistical analysis. Continuous variables were represented by means and standard deviations and categorical data by whole numbers and percentages. Odds ratios determined association between pregnant adolescents and factors for its use. P-value of  $< 0.05$  was considered statistically significant. Multivariate logistic regression was used to determine the association of independent variables and pregnant women's. All the analysis was based on the stated study objectives.

### **3.14 Ethical considerations**

The ethical approval for this study was obtained from Muhimbili University of Health and Allied Sciences (MUHAS) Senate, Research and Publications Ref. No DA.287/298/01.A/ (Appendix v) A letter to seek permission to conduct the study was presented to the Executive Director of Morogoro Municipal/ Medical Officer of Morogoro Municipal and permission to conduct the study was obtained from the Morogoro Municipal Medical Officer (Appendix vi). Participants were asked to provide written informed consent before self-administered interview, English version translated into Swahili version was used to meet participant's language. For those who could not read or write, the researcher, research assistants or the

relative or partner (witnesses) read the consent for them; if they agreed to participate in the study they put a thumb print. No penalty or mistreatment was applied on the participants who refused to participate or who decided to withdraw somewhere in the middle of the study. The consent form contained full explanation about the benefits and risks of the study to participants and assurance of voluntary participation (participants can refuse to participate at any time during the interview) and provided assurance of confidentiality by maintaining anonymous (Appendix iii).

### **3.15 Dissemination**

The final report of this study will be disseminated to Director of Post Graduate Studies, MUHAS. Also relevant copies of the report will be disseminated to Dean School of Nursing, at MUHAS, Director of Library at MUHAS, Medical Officer at Morogoro Municipal, MOHCDGEC and Midwifery academic journal for publication as partial fulfillment for the award of degree of masters of Midwifery and women's health.

### **3.16 Limitation and mitigation**

Recall bias-the collection of primary data largely depend on the respondent's ability to recall and respond on past events. It is expected some pregnant women's may fail to give some responses due to failure to recall and language barrier; in this case PI and RA were involved for clarity whenever necessary.

This study was done with only pregnant women's. Further studies are needed to determine factors for paternal side point of view.

## **CHAPTER FOUR**

### **4.0 RESULTS**

This chapter reports results of factors affecting satisfaction of women with antenatal care at Mafiga health center in Morogoro municipal. The 262 participants were interviewed with response rate of 100%. The chapter will further describe the socio-demographic characteristics of respondents, health facility related factors, health care providers and pregnant women communication during ANC services and factors associated with satisfaction with antenatal care provided.

#### **4.1 Social demographic characteristics of study participants**

A total of 262 respondents participated in the study had the mean age 26.18 and SD  $\pm 5.084$  years, a median age of 26 years (IQR 22-39 years) with a minimum and maximum age of 17 and 40 respectively. Most of the participants (86%) were at the 20-34 age group brackets. The many (72.9%) were married; 90% had education beyond Primary level. Forty-two percent (n=110) of the participants had given birth to two to four children (See Table).

**Table 1: Social demographic characteristics of study participants (n=262)**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age (years)</b>		
17-19	22	8.4
20-34	224	85.5
35+	16	6.1
Median age (Interquartile range (IQR)) <b>26 (22-29)</b>		
<b>Marital status</b>		
Single	67	25.6
Married	191	72.9
Separated	3	1.2
Divorced	1	0.3
<b>Level of education</b>		
No formal education	15	5.7
Primary	132	50.4
Secondary	103	39.3
Higher education	12	4.6
<b>Occupation</b>		
Employed	22	8.4
Self employed	46	17.6
Business woman	59	22.5
Peasant	37	14.1
House wife	98	37.4
<b>Number of Parities</b>		
0	89	34.0
1	59	22.5
2-4	110	42.0
5+	4	1.5



#### 4.2 Women's response about the physical environment of ANC clinic

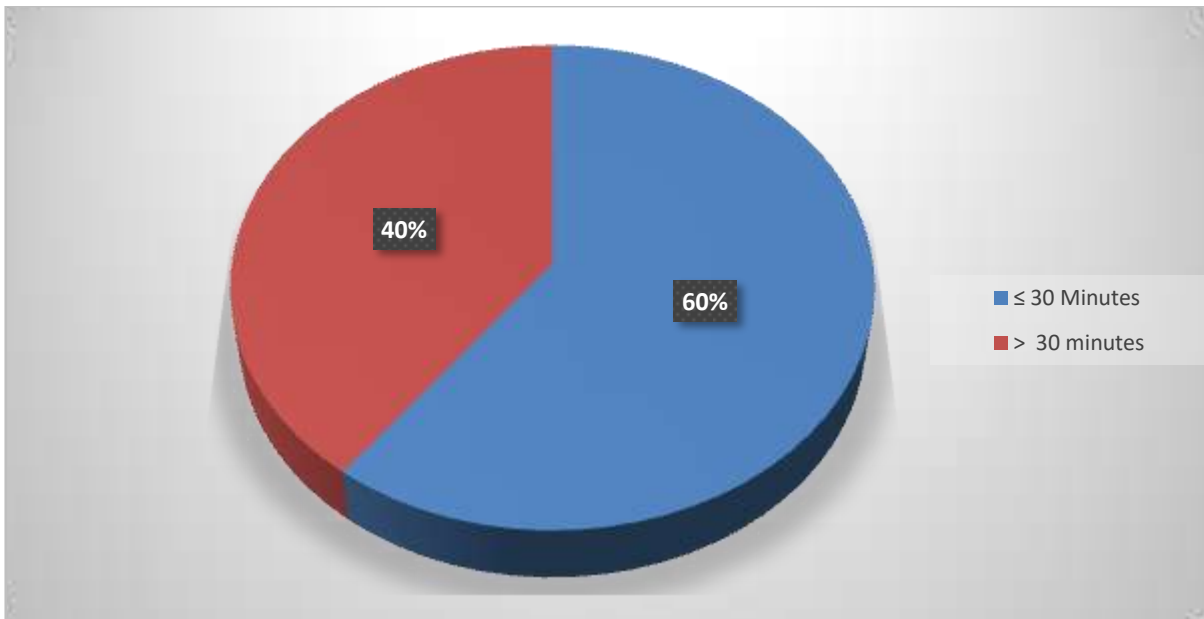
Majority (81%) of the participants mentioned that privacy at ANC clinic was not observed. Also 98% reported that ANC rooms were well ventilated. All women reported that there was a special toilet at the clinic; however, 28% thought that the toilet was not clean (see Table 2).

**Table 2: Response of women about the physical environment of ANC clinic**

<b>Variables</b>	<b>Number</b>	<b>Percent</b>
<b>Privacy</b>		
Yes	213	81.3
No	49	18.7
<b>Availability of toilet at the antenatal clinic</b>		
Yes	262	100.0
No	0	0
<b>Ventilation in examination room</b>		
Good	256	97.7
Poor	6	2.3
<b>Cleanness of ANC</b>		
Very good	9	3.4
Good	251	95.8
Poor	2	0.8
<b>Cleanness of ANC toilet</b>		
Very good	4	1.5
Good	186	71.0
Poor	72	27.5

### 4.3 Clinic flow and waiting time

Much as 60% (n=158) of respondents were satisfied with the arrangement and the workflow of the ANC clinic, 40% (n=104) were not satisfied with the organization of the clinic. The major reason for this was waiting for longer time before they could receive care, whereby 40% had to wait for more than 30 minutes (see Figure 2)



**Figure 2: Response on waiting time for ANC services**

#### 4.4 Laboratory services at ANC

It was noted that only 4.2% paid to receive some of the services at the antenatal care clinic and this payment was for investigations. 19.8% of the participants were concerned with the missing laboratory results during their ANC visit (See Table 3)

**Table 3: Response of women on laboratory services provided as part of the antenatal care received.**

<b>Response</b>	<b>Number</b>	<b>Percent</b>
<b>Paid for ANC services</b>		
Yes	11	4.2
No	251	95.8
<b>Paid for</b>		
Investigation	11	4.2
ANC card	0	0
Vaccine	0	0
Didn't pay	251	95.8
<b>Missed laboratory investigation during ANC visit</b>		
Yes	52	19.8
No	210	80.2

#### 4.5 Care given at antenatal clinic by health care providers

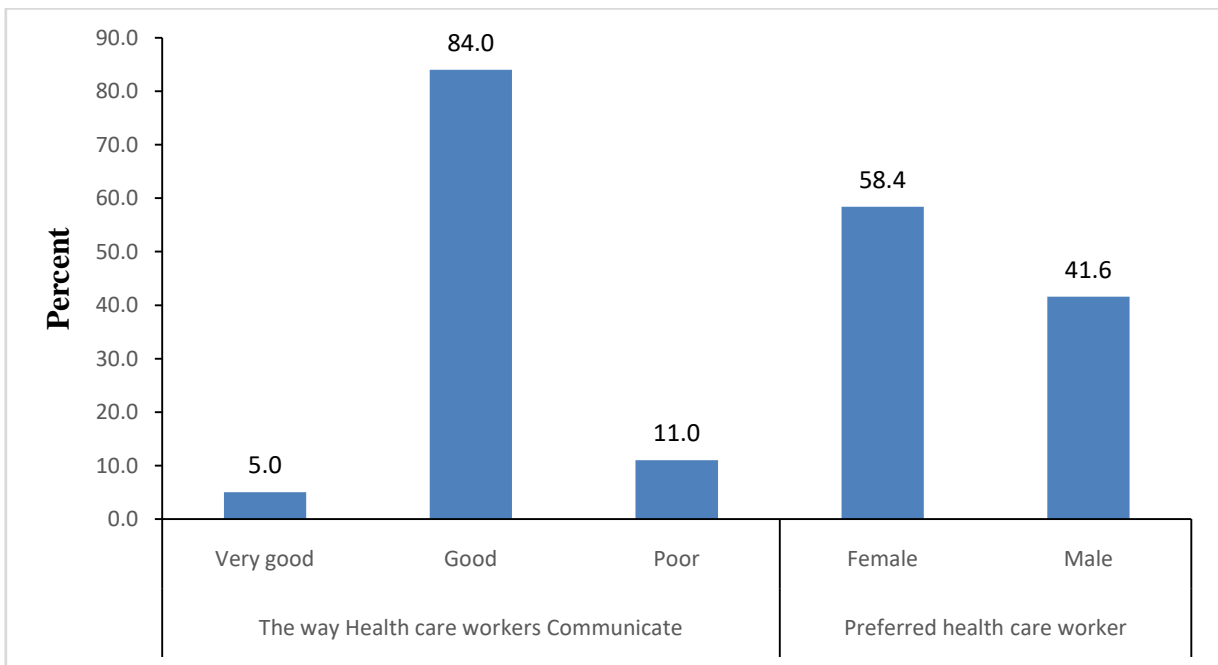
The study revealed that 3% of respondents reported that health providers were not attentive and responsive to participants concerns during ANC visits. Health care providers were unable to provide explanations about the investigations taken (3%), and investigation results (3%). Further, 10% of respondents had concerns with the way health care providers conducted physical assessment. For example, 7% reported that physical examination was not comprehensively done in each visit, 2% reported that their blood pressure was not taken in each visit and 0.4% of the participants body weight was not measured in each visit (see Table 4).

**Table 4. Response of participants on various items related to care given at antenatal clinic at Mafiga health center in Morogoro Municipality.**

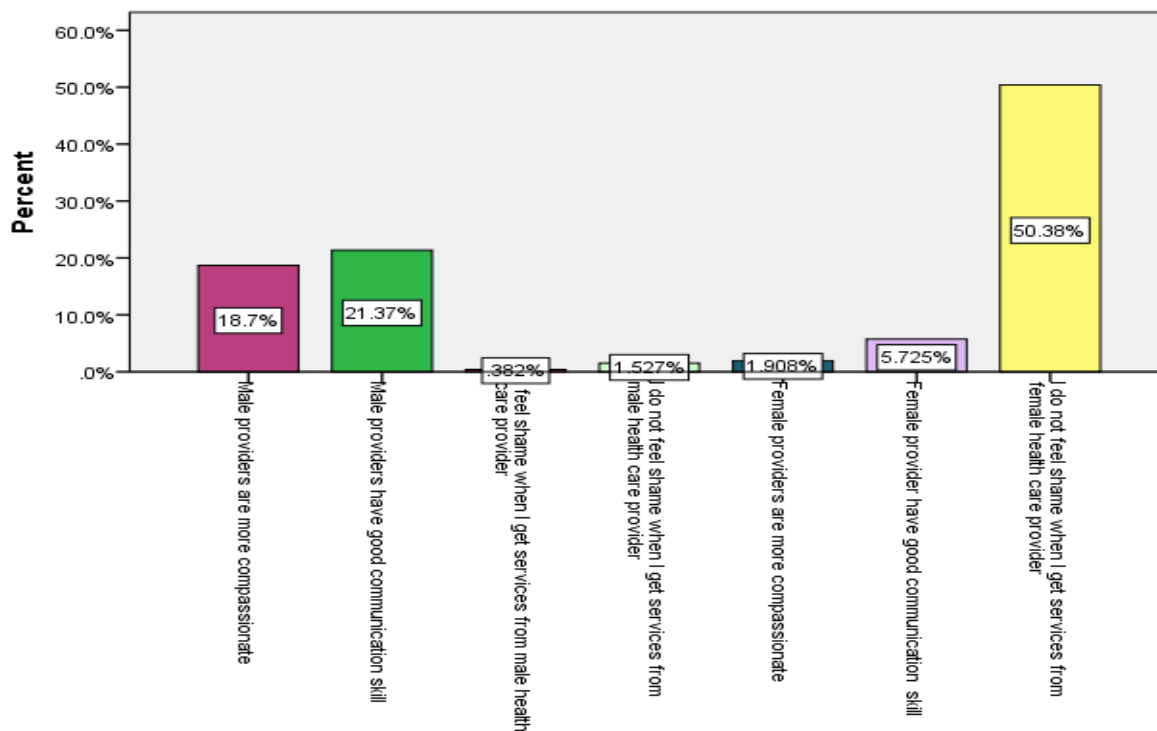
<b>Variables</b>	<b>Number (%)</b>
<b>Health providers took time to listen to feelings and complains of pregnant mothers</b>	
Yes	254 (96.9)
No	8 (3.1)
<b>Giving explanation of rationale for investigation to pregnant mother</b>	
Yes	253 (96.6)
No	9 (3.4)
<b>Giving explanation of results of investigation to pregnant mother</b>	
Yes	254 (96.9)
No	8 (3.1)
<b>Provision of comprehensive physical examination every visit</b>	
Yes	242 (92.4)
No	20 (7.6)
<b>Measure of pregnant mother's BP every visit</b>	
Yes	258 (98.5)
No	4 (1.5)
<b>Measure of pregnant mother's body weight every visit</b>	
Yes	261 (99.6)
No	1 (0.4)

#### 4.6 Communication with mothers during antenatal care service and preferred health care workers

Of the 232 participants in this study, 84% reported that they were satisfied with the way health care workers addressed them during ANC visit while 11% were not. We also looked at women's preferences on health care workers. We saw that 58.4% preferred to be attended by female health care workers (see Figure 3), among the reasons that were reported by women for the preference of female health care providers were, being comfortable (50%), female providers had good communication skills (6%) and more compassionate (2%). On other hand 42% of respondents who preferred services from male health care providers was due to, male providers being compassionate (19%), having good communication skills (21%) and 2% because they were not ashamed receiving services from male health care providers (see figure 4).



**Figure3: Response of mothers on the way health care workers communicate during antenatal care visits and preferred health care worker.**



**Figure 4: Reason of respondents to prefer male/female health provider on ANC services**

#### **4.7 Level of satisfaction with antenatal care**

The level of satisfaction with antenatal care services in this study was rated following response of women on various questions asked. The questions asked were about physical environment at antenatal clinic, clinic flow and waiting time, Laboratory services, care given at antenatal clinic by health care providers and the way health care workers addressed women during their visits. The investigator reviewed all the answers of participants and rated them in three groups. Those who scored below 50% were grouped as the group that was not satisfied with the quality of the antenatal care provided. Those scored between 50%-80% were considered to have average satisfaction and those scored above 80% were regarded as highly satisfied with the service received.

Of the 232 participants 30 (11.5%) were not satisfied with antenatal care service, while majority 190(72.5%) had average satisfaction and 42 (16.0%) were highly satisfied. Distribution of level of satisfaction on the quality of antenatal care among women attending

Mafiga health center in Morogoro Municipality based on different socio-demographic characteristics is as shown in (See Table 5).

**Table 5: Distribution of level of satisfaction on the quality of antenatal care among women attending Mafiga health center in Morogoro Municipality May-June 2018**

Variable	Level of satisfaction n (%)			Total
	Not satisfied (Score below 50%)	Average satisfied (Score 50-80)	Highly satisfied (Score > 80%)	
<b>Total</b>	<b>30(11.5)</b>	<b>190(72.5)</b>	<b>42(16.0)</b>	<b>262</b>
<b>Age (years)</b>				
17-19	6(27.3)	11(50.0)	5(22.7)	22
20-34	20(8.9)	168(75.0)	36(16.1)	224
35+	4(25.0)	11(68.8)	1(6.2)	16
<b>Marital status</b>				
Single	8(11.9)	49(73.1)	10(14.9)	67
Married	19(9.9)	140(73.3)	32(16.8)	191
Separated	2(66.7)	1(33.3)	0	3
Divorced	1(100.0)	0	0	1
<b>Education level</b>				
No formal education	6(40.0)	8(53.3)	1(6.7)	15
Primary	14(10.6)	100(75.8)	18(13.6)	132
Secondary	8(7.8)	74(71.8)	21(20.4)	103
Higher education	2(16.7)	8(66.7)	2(16.7)	12
<b>Occupation</b>				
Employed	4(18.2)	13(59.1)	5(22.7)	22
Self employed	6(13.0)	35(76.1)	5(10.9)	46
Business woman	2(3.4)	47(79.7)	10(16.9)	59
Peasant	4(10.8)	29(78.4)	4(10.8)	37
House wife	14(14.3)	66(67.4)	18(18.4)	98
<b>Number of parities</b>				
0	11(12.4)	59(66.3)	19(21.3)	89
1	9(15.3)	37(62.7)	13(22.0)	59
2-4	10(9.1)	92(83.6)	8(7.3)	110
5+	0	2(50.0)	2(50.0)	4

#### **4.8 Factors associated with satisfaction on antenatal services**

The two level of satisfaction on antenatal services as seen in Table 4.5 (average satisfied and highly satisfied) were put together and created a variable satisfaction with antenatal care (Yes/No), whereby a total of 232(88.6%) were satisfied and 30 (11.4%) were dissatisfied with antenatal services. Then we did logistic regression to assess socio-demographic factors associated with satisfaction on antenatal service provided. Of all factors assessed some categories in education level, age and occupation showed significant relationship with satisfaction on antenatal care while others were not statistically significant. Looking at age groups, those in age groups 20-34 were almost four times likely to be satisfied with antenatal service provided OR 3.83(1.35-10.87) as compared to younger women of age group 17-19 years. On education level, mothers who attended primary, secondary or higher education had higher odds of satisfaction with antenatal service provided OR 5.62(1.74-18.14) P-value<0.01, 7.92(2.25-27.91) P-value<0.01and 3.33(0.53-20.91) P-value=0.20 respectively as compared to mothers who had no formal education. All education level categories were statistically significant associated with satisfaction with antenatal care provided except those with higher education as compared to mothers with had no formal education (Table6).



**Table 6: Logistic regression analysis of factors associated with satisfaction on antenatal care (n=262)**

Variable	Satisfied with antenatal care		Odds ratio (95% CI)	P- value
	Yes (%)	No (%)		
<b>Total</b>	<b>232(88.6)</b> <b>(95%CI:84.1%-92.1%)</b>	<b>30 (11.4)</b>		
<b>Age (years)</b>				
17-19	16(72.7)	6(27.3)	ref	
20-34	204(91.1)	20(8.9)	3.83(1.35-10.87)	0.01
35+	12(75.0)	4(25.0)	1.13(0.26-4.89)	0.88
<b>Marital status</b>				
Single	59(88.1)	8(11.9)	ref	
Married	172(90.1)	19(9.9)	1.23(0.51-2.95)	0.65
Separated	1(33.3)	2(66.7)	0.07(0.01-0.84)	0.04
Divorced	0	1(100.0)	-	-
<b>Education level</b>				
No formal education	9(60.0)	6(40.0)	ref	
Primary	118(89.4)	14(10.6)	5.62(1.74-18.14)	< 0.01
Secondary	95(92.2)	8(7.8)	7.92(2.25-27.91)	< 0.01
Higher education	10(83.3)	2(16.7)	3.33(0.53-20.91)	0.20
<b>Occupation</b>				
Employed	18(81.8)	4(18.2)	ref	
Self employed	40(87.0)	6(13.0)	1.48(0.37-5.90)	0.58
Business woman	57(96.6)	2(3.4)	6.33(1.07-37.49)	0.04
Peasant	33(89.2)	4(10.8)	1.83(0.41-8.22)	0.43
House wife	84(85.7)	14(14.3)	1.33(0.39-4.53)	0.65
<b>Number of parities</b>				
0	78(87.6)	11(12.4)	ref	
1	50(84.8)	9(15.2)	0.78(0.30-2.03)	0.62
2-4	100(90.9)	10(9.1)	1.41(0.57-3.49)	0.46
5+	4(100.0)	0	-	-

## CHAPTER FIVE

### 5.0 DISCUSSION

This chapter presents the discussion of findings. The chapter strives to discover the meaning of findings and relate them to the available literatures.

#### 5.1 Socio-demographic characteristics of women attending antenatal care services

This study showed that, a few number 11.4% of antenatal mothers were not satisfied with care. Furthermore it was revealed that, antenatal mothers with age groups 20-34 years show highly satisfied with antenatal service provided OR 3.83(1.35-10.87) as compared to younger women of age group 17-19 years. In addition, primary education mothers 50.4% had higher odds of dissatisfaction compared to secondary education 39.3%. The findings of the current study oppose those of the study done in Southern Ethiopia on maternal antenatal care service satisfaction which revealed that the majority of pregnant women 84.1% age range of 20 to 34 years whose education level was secondary and above were less likely satisfied with ANC services compared to those whose education level was lower as those who could read and write (Tesfaye et al., 2017).

#### 5.2 Factors associated with satisfaction on antenatal care services

The study revealed that, more than three quarter of participants were satisfied with antenatal clinic privacy. A finding of this study was in agreement with the study done by Yabo et al., 2015, but was not in agreement with the study done in Egypt by Ismail and Essa 2017 whereby less than half of respondents reported there was violation of privacy in the antenatal clinic.

Furthermore, the study done in Nigeria on perception and satisfaction with quality of antenatal care services found that about 28% of respondents were not satisfied with cleanliness of ANC toilet. This is due to the fact that there was no cleaner at ANC clinic and also on observation there was a shortage of staff which made it difficult to allocate one for cleanliness (Nwaeze et al., 2013). Additionally, the current study findings reported that, more than half of respondents

were satisfied with organization and workflow of ANC clinic. This is due to the fact that they were waiting only within 30 minutes before they received the service. This finding corresponds that of study done in South West Ethiopia on Satisfaction with focused antenatal care service (Chemir et al., 2014). In addition in the study done by Yabo et al., 2015 on assessment of quality of ANC service it reported that more than two third of the respondents were satisfied with ANC services due to the fact that they were waiting only 30 minutes (Yabo et al., 2015).

It was noted that 4% of antenatal mother paid to receive some of the services at the antenatal care clinic. This study findings supported by the study done by Dulla et al., 2017 whereby 5.8% of participants were charged for services related to ANC. However, this finding was much lower compared with the study done in Egypt whereby about 34% of respondents were unsatisfied because they were charged for ANC services (Ismail & Essa, 2017). In contrast, the study done in Ethiopia reported that all of the respondents were satisfied with ANC services due to the fact that they were not charged for any ANC service (Yabo et al., 2015).

This study revealed that some of the respondents complained of missing laboratory services during their ANC visit. The finding of this study corresponds with that of a study done in Bursa rural health centers, whereby women were complaining due to absence of some laboratory tests for pregnancy related cases (Tesfaye et al., 2017).

More than half of respondents preferred to be attended by female health care providers. This is because of biological the same as they were not feeling shame when they were receiving ANC services from female health care providers. The result of this study is in agreement with study of Yabo et al., 2015 but was high compared with the study done in Jordan whereby less than half of respondents preferred female health care provider than male (Ahmad & Alasad, 2014)

The study revealed that most of the respondents preferred ANC services from male health care providers due to the fact that they seem to show much compassion compared to female health care providers. This result was supported by study done in Liverpool by Ross, 2017.

Almost all of the respondents accepted that, health care providers took time to listen their feelings and complains. Similar findings were reported in a study done by Yabo et al., 2015 which showed that, nearly three quarters of respondents said that health providers were attentively listening to their feelings and complaints during ANC services.

### **5.3 Level of satisfaction with antenatal care**

In the level of satisfaction, the study revealed that few respondents 11.5% were not satisfied with ANC service while the majority 72.5% of respondents were satisfied with the care and 16.0% was highly satisfied. Those who were not satisfied mainly of the age group 20-34 years, and were married and had primary education level. Conversely, this finding of the current study oppose those of study done in Egypt by Ismail and Essa, 2017 which showed that more than half 58.9 % of respondents were unsatisfied with the overall antenatal care services while more than one quarter of them 26.9% were moderately satisfied and only 14.2% were highly satisfied. Furthermore, the current findings were relatively similar to those of study of Arafat, 2015 done in Alexandria, Egypt on pregnant women's expectations regarding care delivered during the initial antenatal visit which showed that only 30.1% of respondents were highly satisfied with the care they received. The former study indicated that nearly two-thirds 88.5% of the respondents were satisfied with the overall antenatal care services.

### **5.4 Limitation of the study**

Recall bias may have been introduced by participants as they have to report their experiences of prevision attendance to antenatal clinic for antenatal services. However, the random sample obtained might have minimized the effect of recall bias.

## **CHAPTER SIX**

### **6.0 CONCLUSION AND RECOMMENDATIONS**

This chapter generalizes findings and establishes the conclusion as well as the recommendations of the study.

#### **6.1 Conclusion**

Based on findings and discussion the study concludes that though most of participants reported that they were satisfied with antenatal care services at Mafiga health center. However, there is a need of improvement in some areas like physical environment especially toilet facilities whereby some of respondents complained of poor sanitation in the toilet, furthermore the study conclude that the laboratory services presented challenges for pregnant women as some of the respondents reported that they missed some of important services of laboratory investigation such as blood group and hemoglobin level as these are key investigation for pregnant women during the entire process of gestations.

In addition, the current study conclude that on factors assessed, the level of education, age and occupation showed significant relationship with satisfaction on antenatal care while others were not statistically significant. Further the age group 20-34 years was almost four times satisfied with antenatal care service provided compared to younger women of age group 17-19 years. Additionally the study concluded that mothers who had attended primary, secondary or higher education were most satisfied with antenatal care service compared to mothers with no formal education. Therefore, this study concludes that absence of formal education was highly significantly associated with satisfaction with antenatal care service compared to the with higher education level.

Lastly this study showed that some of pregnant mothers paid for the services of antenatal care even though these services were free of charge. Some of participants were therefore not satisfied with antenatal services in Mafiga health centre as most of pregnant mother were housewives who could not afford to pay for services. Some women could therefore miss

important services like laboratory investigations that help to detect deviation from normal and facilitate proper action for the mother.

## **6.2 Recommendations**

1. The Government in collaboration with District Medical Office should establish a good and service user friendly arrangement so as to facilitate the antenatal service accessibility.
2. The administrative management of Mafiga health centre through Council Health Management Team (CHMT) should make sure that the laboratory services at ANC are accessible and sustainable at for all pregnant women.
3. The administrative office of Mafiga health centre should enforce the health policy that said ANC Services are free for all pregnant women.
4. Lastly, there is need for maintaining the cleanliness of environment at all especially private area like toilets.

**REFERENCES**

Ahmad, M., & Alasad, J. (2014) that is preferred more in Jordan: Male or female nurses. *International journal of nursing practice*, 13(4), 1- 11.

Al Johara, A. (2010). Factors affecting utilization of dental health services and satisfaction among adolescent females in Riyadh City. *The Saudi dental journal*, 22(1), 19-25.

Ali, A.O, (2014-2015). Tanzania Service Provision Assessment Survey. Major Problems Perceived by Clients on ANC Services.

Andrew, E. V. W., Pell, C., Angwin, A., Auwun, A., & Daniels, J. (2014). Factors Affecting Attendance at and Timing of Formal Antenatal Care: *Results from a Qualitative Study in Madang, Papua New Guinea*, 9 (5), 1 – 14

Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria- looking beyond individual and household factors. *BMC pregnancy and childbirth*, 9(1), 1-13.

Bintabara, D., Ntwenya, J., Maro, I. I., Kibusi, S., Gunda, D. W., & Mpondo, B. C. (2018). Client satisfaction with family planning services in the area of high unmet need: evidence from Tanzania Service Provision Assessment Survey, 2014-2015. *Reproductive health*, 15(1), 127.

Callaghan-Koru, J. A., McMahon, S. A., Chebet, J. J., Kilewo, C., Frumence, G., Gupta, S., ... & Winch, P. J. (2016). A qualitative exploration of health workers' and clients' perceptions of barriers to completing four antenatal care visits in Morogoro Region, Tanzania. *Health policy and planning*, 31(8), 1039-1049.

Chemir, F., Alemseged, F., & Workneh, D. (2014). Satisfaction with focused antenatal care service and associated factors among pregnant women attending focused antenatal care at health centers in Jimma town, Jimma zone, South West Ethiopia; a facility based cross-sectional study triangulated with qualitative study. *BMC research notes*, 7(1), 1-8.

Dulla, D., Daka, D., & Wakgari, N. (2017). Antenatal Care Utilization and Its Associated Factors among Pregnant Women in Boricha District, Southern Ethiopia. *Diversity & Equality in Health and Care*, 14(2)76-84.

Duysburgh, E., Zhang, W. H., Ye, M., Williams, A., Massawe, S., Sié, A., ...& Temmerman, M. (2013). Quality of antenatal and childbirth care in selected rural health facilities in Burkina Faso, Ghana and Tanzania: similar finding. *Tropical medicine & international health*, 18(5), 534-547.

Edie, G. E. H. E., Obinchemti, T. E., Tamufor, E. N., Njie, M. M., Njamen, T. N., & Achidi, E. A. (2015). Perceptions of antenatal care services by pregnant women attending government health centres in the Buea Health District, Cameroon: a cross sectional study. *Pan African Medical Journal*, 21(1), 1-9.

Fagbamigbe, A. F., & Idemudia, E. S. (2017). Wealth and antenatal care utilization in Nigeria: Policy implications. *Health care for women international*, 38(1), 17-37.

Fagbamigbe, A. F., Akanbiemu, F. A., Adebowlw, A. S., Olumide, A. M., & Korter, G. (2013). Practice, knowledge and perceptions of antenatal care services among pregnant women and nursing mothers in Southwest Nigeria. *IJMCH*, 1(3), 7-16.

Galle, A., Van Parys, A. S., Roelens, K., & Keygnaert, I. (2015). Expectations and satisfaction with antenatal care among pregnant women with a focus on vulnerable groups: a descriptive study in Ghent. *BMC women's health*, 15(1), 1-12.



Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606.

Gross, K., Alba, S., Glass, T. R., Schellenberg, J. A., & Obrist, B. (2012). Timing of antenatal care for adolescent and adult pregnant women in south-eastern Tanzania. *BMC pregnancy and childbirth*, 12(1), 1-12.

Kayombo, A. J. (2011). *Role of quality obstetric care services on reducing maternal mortality in Mvomero district, Morogoro region Tanzania* (Doctoral dissertation, Sokoine University of Agriculture).

Kparu, Felix. (2016). Factors Influencing Adolescent Utilization of Antenatal Care Services in Amenfi West District of the Western Region (Doctoral dissertation, University of Ghana).

Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-based dentistry*, 7(1), 24-25.

Majrooh, M. A., Hasnain, S., Akram, J., Siddiqui, A., & Memon, Z. A. (2014). Coverage and quality of antenatal care provided at primary health care facilities in the 'Punjab' province of 'Pakistan'. *Plos one*, 9(11), 1-8.

Mannava, P., Durrant, K., Fisher, J., Chersich, M., & Luchters, S. (2015). Attitudes and behaviours of maternal health care providers in interactions with clients: a systematic review. *Globalization and health*, 11(1), 1-17.

Montasser, N. A. E. H., Helal, R. M., Megahed, W. M., Amin, S. K., Saad, A. M., Ibrahim, T. R., & Elmoneem, H. M. A. (2012). *Egyptian Women's Satisfaction and Perception of Antenatal Care*, 2(2), 145-156.

Mwakyusa, D. (2008). The national road map strategic plan to accelerate reduction of maternal, newborn and child deaths in Tanzania 2008–2015. *Dar es Salaam, Tanzania: Annual Summit of MoHSW*, 1-13.

Nwaeze, I. L., Enabor, O. O., Oluwasola, T. A. O., & Aimakhu, C. O. (2013). Perception and satisfaction with quality of antenatal care services among pregnant women at the university college hospital, Ibadan, Nigeria. *Annals of Ibadan postgraduate medicine*, 11(1), 22-28.

Nyange, T. M., Lyimo-Macha, J. G., & Sikira, A. N. (2017). Legal Aid Service Interventions and Women Empowerment: A Case of Morogoro Rural and Kongwa Districts, Tanzania. *International Journal of Asian Social Science*, 7(7), 570-583.

Ross, D. (2017) Challenges for Men in a Female Dominated Environment. *Links to Health and Social Care*, 2 (1), 4 -20

Singh, N., Ponna, S. N., Upadrasta, V. P., Dudala, S. R., & Sadasivuni, R. (2017). Determinants of utilization of antenatal and postnatal care services in Telangana. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 6(8), 3352-3361.

Tesfaye, D. T., Mekonnen, A. H., & Negesa, B. L. (2017). Maternal Antenatal Care Service Satisfaction and Factors Associated with Rural Health Centers, Bursa District, Sidama Zone, Southern Ethiopia: A Cross-sectional Study. *J Women's Health Care*, 6(363), 1 - 5.

Villar, J., Ba'aqeel, H., Piaggio, G., Lumbiganon, P., Belizán, J. M., Farnot, U., ...& Langer, A. (2001). WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care. *The Lancet*, 357(9268), 1551-1564.

Worku, E. B., & Woldesenbet, S. A. (2016). Factors that Influence Teenage Antenatal Care Utilization in John Taolo Gaetsewe (JTG) District of Northern Cape Province, South Africa:

Underscoring the Need for Tackling Social Determinants of Health. *International Journal of MCH and AIDS*, 5(2), 134-145.

Yabo, A. N., Gebremicheal, M. A., & Chaka, E. E. (2015). Assessment of Quality of Antenatal Care (ANC) service provision among pregnant women in Ambo Town Public Health Institution, Ambo, Ethiopia, 2013. *American Journal of Nursing Science*, 4(3), 57-62.

## APPENDICES

### Appendix I: Questionnaire – English Version

**The aim of this questionnaire is to obtain information from pregnant women on reasons for dissatisfaction of Antenatal Care (ANC) services.**

Number of questionnaire.....

Residence .....

Date.....

### INSTRUCTIONS

1. Please you are requested to give the honest answer as much as you can
2. Your answers will be kept in high confidentiality
3. Don't write your name
4. Put the mark V in the box to the correct answer

#### Section A: Demographic information

1. Age .....
2. What is your education level: .....
 

i. No formal education	
ii. Primary education	
iii. Secondary education	
iv. Above secondary education	
3. What is your occupation.....
 

i. Wage employed	
ii. Self employed	
iii. Business	
iv. Peasant	
v. House wife	

4. What is your marital status.....
- i. Married
  - ii. Single
  - iii. Separated
  - iv. Divorced
  - v. Widow
5. Gravidity
- i. Prime gravid
  - ii. 2<sup>nd</sup> to 4<sup>th</sup> gravid
  - iii. 4<sup>th</sup> and above gravid
6. Parity
- i. Para 1
  - ii. Para 2 to 4
  - iii. Para 4 and above
  - iv. Nullpara

**Section B: Health facility related factors**

7. Is privacy well maintained during ANC services?
- i. Yes
  - ii. No
8. How clean the ANC clinic is?
- i. Very good
  - ii. Good
  - iii. Poor
9. Is there ANC toilet for pregnant women use?
- i. Yes
  - ii. No

10. How clean the toilet of the ANC clinic is?

- i. Very good
- ii. Good
- iii. Poor
- iii. Poor

11. Is the room of ANC examination well ventilated?

- i. Yes
- ii. No

12. How long do you take waiting for ANC services?

- i.  $\leq 30$  minutes
- ii. More than 30 minutes

13. Have you ever paid for antenatal care clinic?

- i. Yes
- ii. No

14. If yes question number 13 above; what did you pay for?

.....  
.....  
.....

15. Have you ever missed any laboratory investigation?

- i. Yes
- ii. No

16. If yes, question number 15 above; Mention the laboratory investigations which you had missed

.....  
.....

NO.	QUESTIONS	YES	NO
17	Do health care providers attentively spend time to listen your feeling complain?	1	2
18	Do health care providers give explanation of rationale for investigations	1	2
19	Do health care providers give explanation of results of investigations	1	2
20	Do health care providers give comprehensive medical examination follow up measure every visit	1	2
21	Do health care providers measure blood pressure of pregnant women?	1	2
22	Do health care providers Measure body weight of pregnant women?	1	2

### Section C: Health care provider – pregnant women communication

23. What are the communication skills of health care providers?

- i. Very good       iii. Poor   
 ii. Good

24. Which sex of ANC provider do you prefer mostly to receive care from?

- i. Male       ii. Female

25. What make you to prefer mostly male/female health care provider?

- i. Male providers are more compassionate   
 ii. Male providers have good communication skill   
 iii. I feel shame when I get services from male health care provider

- iv. I do not feel shame when I get services from male health care provider
- v. Female providers are more compassionate
- vi. Female provider have good communication skill
- vii. I feel shame when I get services from female health care provider
- viii. I do not feel shame when I get services from female health care provider



## Appendix II: DODOSO – Toleo La Kiswahili

Lengo la dodoso hili ni kupata taarifa kuhusiana na kutambua sababu zinazochangia akina mama wajawazito kutoridhika na huduma ya mama na mtoto aliopo tumboni

Namba ya dodoso .....

Mahali Unapoishi .....

Tarehe.....

### MAELEKEZO

1. Unaombwa kujibu maswali yote kwa usahihi
2. Majibu yako yote yatatunzwa kwa usiri
3. Usiandike jina lako
4. Weka alama ya vema (V) katika kisanduku ulichopewa na maswali mengine unatakiwa kujaza katika nafasi zilizoachwa wazi

### Kipengele A: Taarifa binafsi

1. Umri wako .....

2. Kiwango chako cha elimu .....

i. Huja soma kabisa

ii. Elimu ya shule ya msingi

iii. Elimu ya sekondari

iv. Zaidi ya sekondari

3. Unafanya kazi gani?

i. Umejiriwa

ii. Umejijiri

iii. Mfanya biashara

iv. Mkulima

v. Mama wa nyumbani

4. Hali ya ndoa .....

- |                     |                      |
|---------------------|----------------------|
| i. Umeolewa         | <input type="text"/> |
| ii. Hujaolewa       | <input type="text"/> |
| iii. Umepewa talaka | <input type="text"/> |
| iv. Mmetengana      | <input type="text"/> |
| v. Mjane            | <input type="text"/> |

5. Huu ni ujauzito wangapi?

- |                             |                      |
|-----------------------------|----------------------|
| i. Ujauzito wa kwanza       | <input type="text"/> |
| ii. Ujauzito wa 2 – 4       | <input type="text"/> |
| iii. Zaidi ya ujauzito wa 4 | <input type="text"/> |

6. Umezaa mara ngapi?

- |                      |                      |
|----------------------|----------------------|
| i. Mara moja         | <input type="text"/> |
| ii. Mara 2 mpaka 4   | <input type="text"/> |
| iii. Zaidi ya mara 4 | <input type="text"/> |
| iv. Sijazaa          | <input type="text"/> |

**Kipengele B: Mambo yanayohusiana na kliniki ya kutolea huduma ya akina mama wajawazito**

7. Je! Kuna faragha wakati wa kuhudumiwa?

- |         |                      |            |                      |
|---------|----------------------|------------|----------------------|
| i. Ndio | <input type="text"/> | ii. Hapana | <input type="text"/> |
|---------|----------------------|------------|----------------------|

8. Hali ya usafi wa kliniki ya kutolea huduma ya akina mama wajawazito ipoje?

- |              |                      |                  |                      |
|--------------|----------------------|------------------|----------------------|
| i. Safi sana | <input type="text"/> | iii. Hairidhishi | <input type="text"/> |
| ii. Safi     | <input type="text"/> |                  |                      |

9. Je! Kuna choo eneo la kliniki kwa ajili ya akina mama wajawazito?

i. Ndio

ii. Hapana

10. Kama choo kipo, je! Hali ya usafi ipoje?

i. Safi sana

iii. Hairidhishi

ii. Safi

11. Je! chumba cha kufanyia uchunguzi akina mama wajawazito kina hewa ya kutosha?

i. Ndio

ii. Hapana

12. Kwa muda ngapi unakaa kusubiri huduma za kliniki?

i. Dakika 30 au chini ya hapo

ii. Zaidi ya dakika 30

13. Je! Umewahi kutoa malipo yoyote kwa ajili ya huduma ya kliniki?

i. Ndio

ii. Hapana

14. Kama ndio, swali namba 13 hapo juu; ulilipa kwa ajili ya nini?

.....  
.....

15. Umewahi kukosa kipimo chochote cha maabara?

ii.

Ndio

ii. Hapana

16. Kama ndio, swali namba 15 hapo juu; Taja vipimo vya maabara ambavyo uliwahi kukosa

.....  
.....  
.....

NA.	MASWALI	NDIO	HAPANA
17	Je! Watoa huduma wanatumia muda wa kutosha kusikiliza matatizo yako vizuri?	1	2
18	Je! Watoa huduma wanatoa maelezo kuhusiana na uchunguzi unaofanyika?	1	2
19	Je! Watoa huduma wanatoa majibu ya uchunguzi?	1	2
20	Je! Watoa huduma wanafuatilia uchunguzi wa kitabibu kwa kina katika kila hudhulio?	1	2
21	Je! Watoa huduma wanapima msukumo wa damu wa akina mama wajawazito?	1	2
22	Je! Watoa huduma wanapima uzito wa akina mama wajawazito?	1	2

**Kipengele C: Mawasiliano kati ya watoa huduma na akina mama wajawazito.**

23. Kauli ya watoa huduma ipoje?

i. Nzuri sana  iii. Hairidhishi

ii. Nzuri

24. Je! Unapenda zaidi kuhudumiwa na mtoa huduma wa jinsi gani?

i. Mwanaume  ii. Mwanamke

25. Kitu gani kinakupelekea wewe upende zaidi kuhudumiwa na mtoa huduma

Mwanaume/Mwanamke

i. Mtoa huduma Mwanaume anahuruma sana

ii. Mtoa huduma Mwanaumeana kauli nzuri

iii. Nikihudumiwa na mtoa huduma mwanaume naona aibu

- iv. Nikihudumiwa na mtoa huduma mwanaume sioni aibu
- v. Mtoa huduma Mwanamke anahuruma sana
- vi. Mtoa huduma Mwanamke ana kauli nzuri
- vii. Nikihudumiwa na mtoa huduma mwanamke naona aibu
- viii. Nikihudumiwa na mtoa huduma mwanamke sioni aibu

### Appendix III: Informed Consent Form

CODE NO.

--	--	--

#### Consent to participant in a research study

Greetings! My name is **Shomari, Amina Shabani**; I am a second year post graduate student, pursuing a MSc. of midwifery and women health. Currently I am conducting a study on **assessing reasons for dissatisfaction with antenatal care services among pregnant women at Mafiga Health Centre Antenatal Care clinic in Morogoro Municipal.**

**Purpose:** To assess reasons for dissatisfaction with antenatal care services among pregnant women attending Mafiga Health Centre Antenatal Care Clinic at Morogoro municipal.

**Sponsor:** Ministry of Health, Community Development, Gender, Elderly and Children

#### Involved Participants

This study will involve all pregnant women who attending antenatal clinic. The participation in the study will be voluntary. You are free to decide either to participate in the study or not. If you will participate, I will request you to answer questions in relation to dissatisfaction with antenatal care services.

**Risk:** The study will not harm you in any way. Time taken will be about 15-20 minutes

**Benefit:** This study will help to provide information about reasons for dissatisfaction with antenatal care services among pregnant women attending at Antenatal care clinic. So that the researcher will be able to recommend appropriate strategies which will help the CHMT to provide strategies which makes the health care providers to provide the proper care to pregnant women's in order to make them satisfied and prevent pregnancy related complications and/or maternal and perinatal death which could be prevented.

**Confidentiality:** All information which will be collected from you will remain confidential and it will be used for study purpose only. This will be anonymous where by codes will be used instead of names. If the results of the study will be published or presented in a scientific meeting, no information that might identify you as a participant will be used.

**Compensation:** There will be no reimbursement of any kind in participation.

**The right to participate/Refuse participation:** You have the right to agree or refuse to participate or withdraw from the study at any time.

**Questions/Problems:** In case of any problem/questions please feel free to contact the principle investigator (P.I); Shomari, Amina Shabani, Muhimbili University of Health and Allied Sciences, School of Nursing, Box 95001, Dar-es-salaam, Tanzania. Phone number (0714-771188). You're free to ask any question before, during and after the interview. If you ever have questions about your rights as a respondent, you may call **Dr. Bruno Sagala**, Chairperson of the Senate Research and Publications Committee, P. O. Box 65001, Dar-es-salaam. Tel: 2150302-6

**Consent:** I have read and understood this consent form. I have no further questions and I understand that by signing this form below I am approving to participate in this study. I have signed this form pair and I have my copy of the consent to keep.

Signature of the participant .....Date.....

Code number of the participant .....

Signature of Researcher ..... Date.....

## Appendix IV: Fomu Ya Kuridhia Kushiriki Katika Utafiti – Toleo La Kiswahili

**Namba Ya Dodoso.**

--	--	--

**Ridhaa ya kushiriki katika mafunzo ya utafiti**

Salam! Naitwa Shomari, Amina Shabani, mwanafunzi wa shahada ya uzamili wa Ukunga na afya ya akina mama. Kwa sasa nafanya Utafiti kuhusu sababu zinazopelekea akina mama wajawazito kutoridhishwa na huduma wanazozipata katika kliniki ya akina mama wajawazito katika kituo cha Afya Mafiga halmashauri ya Manispaa ya Morogoro.

**Mfadhili:** Wizara ya Afya Maendeleo ya jamii jinsia, wazee na watoto.

**Washiriki/Mwenendo:** Utafiti huu una wahuu akina mama wajawazito wote ambao wanahudhuria kliniki yao hapa. Ushiriki katika utafiti huu ni hiyari ya mtu. Upo huru kushiriki katika utafiti au kutoshiriki. Endapo utashiriki, nitakuomba ushirikiano wako katika kujibu maswali yangu yanayohusiana nakutambua sababu zinazochangia akina mama wajawazito kuridhishwa au kutoridhishwa na huduma zitolewazo katika kliniki ya akina mama wajawazito katika halmashauri ya Manispaa ya Morogoro.

**Muda:** Utafiti huu utachukua muda wa dakika kumi na tano hadi ishirini tu. Pole kwa usumbufu.

**Madhara:** Hakutakuwa na madhara yoyote yale katika utafiti huu.

**Faida:** Utafiti huu utakusaidia kutambua sababu zinazochangia akina mama wajawazito kuridhishwa au kutoridhishwa na huduma zitolewazo kliniki ya akina mama wajawazito.

Hivyo itamwezesha mtafiti kushauri mikakati stahiki ya kuwafanya watoa huduma watoe huduma itakayowaridhisha akina mama wajawazito wafikapo kliniki ili kuzuia madhara yatokanayo na ujauzito ikiwa ni pamoja na vifo vya akina mama na watoto wachanga.



**Usiri:** Taarifa zote utakazotoa zitabaki kuwa ni siri na zitatumika kwa madhumuni ya utafiti tu. Usiri utazingatiwa kwa kutumia namba ya dodoso na sio jina la mtu. Endapo matokeo ya utafiti huu yatatolewa katika mkutano wa kisayansi, hakuna taarifa ambayo itaweza kutambua wewe kama mshiriki.

**Fidia:** Sitaweza kukupa kitu chochote kile kama malipo kabla, wakati au baada ya utafiti.

**Haki ya kushiriki/kukataa ushiriki katika utafiti:** Una hakiya kukubali au kukataa kushiriki au kujiondoa katika utafiti muda wowote ule.

**Maswali/wasiwasi:** Endapo utakuwa na swali au wasiwasi wowote ule wasiliana na mtafiti mkuu, Shomari, Amina Shabani, sanduku la posta 95001, Dar-es-salaam, Tanzania au simu namba: 0714-771188.

Kama utakuwa na maswali/wasiwasi yoyote kuhusu ushiriki wako unaweza kupiga simu kwa mwenyekiti wa Kamati ya Chuo ya Utafiti na Machapisho **Dr. Bruno Sagala**, S.L.P 65001 Dar es Salaam, namba ya simu: 2150302-6

**Ridhaa:** Nimesoma vizuri na nimeelewa taarifa zote zilizoandikwa katika fomu hii. Nakubali kushiriki katika utafiti huu kwa kuweka saini yangu na kupata nakala yangu.

Saini ya mshiriki..... Tarehe.....

Namba ya utambulisho wa mshiriki.....

Saini ya mtafiti.....Tarehe.....

**Appendix V: Letter of 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)



Tel G/Line: +255-22-2150302/6 Ext. 1015  
Direct Line: +255-22-2151378  
Telefax: 255-22-2150465  
E-mail: [dpps@muhas.ac.tz](mailto:dpps@muhas.ac.tz)

Ref. No. DA.287/298/01A/

27th April, 2018

Ms. Amina Shomari  
MSc. Midwifery and Women's Health  
MUIIAS

**RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED:  
"ASSESSING REASONS FOR DISATISFACTION WITH ANTENATAL CARE  
AMONG PREGNANT WOMEN AT MAFIGA HEALTH CENTRE IN  
MOROGORO MUNICIPAL"**

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 25th April, 2018 to 24th April, 2019. In case you do not complete data analysis and dissertation report writing by 24th April, 2019, you will have to apply for renewal of ethical clearance prior to the expiry date.

Dr. Emmanuel Balandya  
**ACTING: DIRECTOR OF POSTGRADUATE STUDIES**

cc: Director of Research and Publications  
cc: Dean, School of Nursing

**Appendix VI: Letter for Permission**

**MOROGORO MUNICIPAL DIRECTOR**

Tel/Fax No: 025 - 2614727  
E-Mail: [info@mrogoro.go.tz](mailto:info@mrogoro.go.tz)  
Website: [www.mrogoro.go.tz](http://www.mrogoro.go.tz)  
In Reference, Please Quote:



Municipal Director's Office,  
P.O. Box 166  
MOROGORO,  
TANZANIA.

Ref. No. ....

Date: 08.06.2018

AMITIMBILI UNIVERSITY  
Director of Post Graduate  
P.O. Box 65201  
Morogoro - P.O. SALAMA

**RE REQUEST CONDUCTING RESEARCH AT MAFIGA  
UIC BY AMINA SHABANI ATOMAZI**

Reference is made to the above captioned subject, also to your letter dated 02.07.2018 with Ref No. 42/MUH/11253/2018/04287/2018 regarding request for conducting research in our institution for your student mentioned above who pursues *M.Sc. Midwifery & Women Health*

I am glad to inform you that, your request has been considered and accepted for attachment of your student as a place for his/her case study which will commence from 09.07.2018 to 09.08.2018. Therefore I look forward to receive him/her and offer extreme cooperation.

With regards,

*[Signature]*  
For: MUNICIPAL DIRECTOR  
MOROGORO  
\* MUNICIPAL DIRECTOR  
MOROGORO

Copy: *vc*  
*Morgan H1*

(Attach and support him/her accordingly)

P.O. Box 166