ASSESSMENT OF THE NATIONAL HEALTH POLICY OF 2003: CHALLENGES OF THE REDUCTION OF MATERNAL MORTALITY RATE IN MUSOMA MUNICIPALITY, TANZANIA.

By

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A Dissertation Submitted in partial fulfillment of the requirement for Degree

Of Master of Science in Development Policy (MSc. DP) of Mzumbe University

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by Mzumbe University, a dissertation entitled, **Assessment of the National Health Policy of 2003: Challenges of the reduction of maternal mortality rate in Musoma Municipality** in partial fulfilment of the requirement for the award of the degree of Master of Science in Development Policy of Mzumbe University.

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I, **Mariamu Nyamaira Juma**, declare that this **dissertation on Assessment of the National Health Policy of 2003: Challenges of the reduction of maternal mortality rate in Musoma Municipality** is my own original work and all the sources that I have used or quoted have been indicated or acknowledged by means of complete references and that it has not been presented to any other University for a similar or any other degree award.

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DEDICATION

This thesis is dedicated to the memory of my beloved late father Mr Juma Sai Mambina and my beloved late mother Ms Hawa Ibrahim for their love, care, financial support, and moral guidance which made me the person I am today. May the Almighty Allah rest their souls in eternal peace. Amen.

LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired Immunodeficiency Syndrome
APH	-	Antiparatum Haemorrhage
ANC	-	Antenatal clinic
AMSTL	-	Active Management of Third stage of Labour
CEmOC	-	Comprehensive Emergency Obstetric Care
DMO	-	District medical officer
DP	-	Development Policy
DRCHCo	-	District reproductive and child health coordinator
FANC	-	Focused Antenatal Care
FHI	-	Family Health International
HIV	-	Human Immunodeficiency Virus
ICDP	-	International Conference on Population and Development
ICM	-	International Confederation of Midwives
IDS	-	Institute of Development Studies
IHRDC	-	International Human Resources Development Corporation
JHPIEGO	-	Johns Hopkins for International Education in Gynaecology and Obstetrics
LGA	-	Local Government Authority
MCH	-	Maternal and Child Health
MDGs	-	Millennium Development Goals
MMEIG	-	Maternal Mortality estimation Inter-Agency Group
MMR	-	Maternal Mortality Rate
MOHSW	-	Ministry of Health and Social Welfare

NBS	-	National Bureau of Statistics
NGO	-	Non- Governmental Organisation
NHIF	-	National Health Insurance Fund
NHP	-	National Health Policy
NSGPR	-	National Strategy for Growth and Poverty Reduction
PIH	-	Pregnancy Induced Hypertension
PPH	-	Postpartum Haemorrhage
RAMOS	-	Reproductive Age Mortality Survey
RDHS	-	Rwanda Demographic and Health Survey
SLDHS	-	Sri Lanka Demographic and Health Survey
SPSS	-	Statistical Package for Social Sciences
TBAs	-	Traditional birth attendants
TDHS	-	Tanzania Demographic Health Survey
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children's Fund
URT	-	United Republic of Tanzania
WHO	-	World Health Organization

ABSTRACT

High rate of maternal deaths is one of the major public health concerns in Tanzania. Maternal mortality rate in Tanzania had been on a downward trend from 453 to 200 per 100,000 live births. However from 1990s there has been an increasing trend to 578 per 100,000 live births (TDHS, 2010). Current statistics indicate that maternal mortality ratio dropped slightly in 2010 to 454 per 100,000 live births (TDHS, 2010). Despite a number of efforts made to reduce it, maternal mortality is still high. The objective of this study was to assess the challenges of reducing maternal mortality rate in Musoma Municipality, Tanzania in line with the National Health Policy of 2003. The theoretical perspectives on gender equity, attribution and demographic transition guided the study. Key policy documents, technical reports, publications and available internet information on maternal mortality in Tanzania from 1961 to 2012 were reviewed. The study employed a cross sectional research design. Random and purposeful sampling design techniques were used to obtain the sample of 65 respondents. Data were collected through interviews, questionnaires and documentary review. Data analysis was done by using SPSS version 11.The study found out that health facilities in Musoma municipality, do face a lot of challenges such as old unrepaired equipments, low number of professional health workers, lack of medicine and drugs, high patient influx compared to low number of health workers, low quality health service and poor working environment. Additionally, it was also revealed that there were several factors which made women not to access health facilities such as costs (direct or indirect), health workers attitude, transport facility, lack of support from men, lack of awareness concerning reproductive health issues and distance to health facility and lack of health services at night. Also, even though maternal health services are free, yet there are costs associated with maternal health, things like blankets, polyethylene bags, gloves and pads that are direct cost to pregnant mothers. Therefore the study concluded that poverty that prevails in the community seems to be the main obstacle for women to access quality reproductive health services. Also the implementation of National Health Policy of 2003 is still low due to the fact that people still pay money to access maternal health.

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CHAPTER ONE

INTRODUCTION

1.1 Chapter overview

The International Conference on Population and Development (ICDP), held in Cairo in 1994, gave a new impetus to reducing maternal mortality by bringing the issue of reproductive health in the forefront (Jayaraman, Chandrasekha & Gebreselassie, 2008). The ICDP programme of action called for the provision of information on reproductive health services to promote use of health services for antenatal and delivery care (United Nations, 1995). The objective of the programme was to ensure that by 2015 at least 90 percent of the births worldwide are attended by skilled health personnel (World Health Organization, 2007). The progress towards this objective will help reduce the maternal mortality rate (MMR) which is one among the Millennium Development Goal (MDG) with the target of reducing by an average of 5.4 percent every year over the period 1990 – 2015, but most of Sub – Saharan African countries are not on track for meeting the target (Jayaraman et al, 2008). In the case of Tanzania, despite different initiatives such as revision of the National Health Policy of 2003, the Health Sector Reforms and implementation of the

Health Sector Strategic Plan (2003-2007), formulation of the Reproductive and Child Health Strategy (2005-2010) and the National Road Map Strategic Plan to Accelerate the Reduction of Maternal and Newborn Mortality (2006-2010 and 2008-2015) maternal mortality is still high in some areas, for example, Musoma Municipality.

This dissertation comprises five chapters: an introduction of the study; review of related literature, research methodology, the findings and discussion and lastly summary, conclusion and policy implications. This chapter presents the background of the study, statement of the problem, research questions, research objectives and significance of the study.

1.2 Background to the problem

Maternal mortality rate is a vital indicator of health status and development of a country with the greatest disparity in its reduction between developed and developing countries (World Health Organization, 2001). Reports on trends on maternal mortality rate for the period 1990 to 2010 show that the maternal mortality ratio (MMR) for developing regions is 15 times higher than for the developed regions (WHO, United Nations Children's Fund [UNICEF] and United Nations Population Fund [UNFPA], 2010). The causes of maternal deaths are similar in all countries however the distribution of causes differs somewhat from region to region (AbouZahr & Roayston, 1991). Maternal Mortality is higher in women living in rural areas, among poorer communities and young adolescents have higher risk of complications and death as a result of pregnancy than older women (WHO, 2012; AbouZahr, 2003).

According to World Health Organisation reports deaths from maternal causes represent the leading cause of death among women of reproductive age around the world (WHO et al, 2010). Globally the efforts to reduce maternal death have been less successful in developing countries than in developed countries, where bearing a child remains among the most serious health risks for women (UNICEF, 2009).

The focus of maternal mortality as an important development measures dates back at least to the 1980s , when researchers first highlighted the role of complications related to pregnancy and childbirth in death rates among women of reproductive age and noted the inadequacy of attention paid to addressing these largely preventable deaths (Rosenfield & Maine, 1985). In 1975 the UN declaration of the decade 1976- 1985 was introduced with the aim of raising international attention on health rights and development (Family Health International, 2007). Also in 1987 safe motherhood conference in Nairobi highlighted the worldwide problem of maternal mortality and called for reducing maternal mortality in developing countries by half in one decade (Boerm, 1987).

Furthermore the World Summit for children held in 1989 identified maternal mortality as critical to the health and survival of children and the summit called for a reduction of

maternal mortality (AbouZahr, 2003). Also the international conference on population and development in 1994 called for substantial reduction in maternal mortality rate (UN, 2001). In 2000 the United Nations showed the concern for the limited progress being made in advancing global reproductive health goals (Neiburg, 2012). This limited progress led to World leaders to come up together at the United Nations to establish time bound targets for meeting the needs of the world's poorest people with a deadline of 2015(Neiburg, 2012).

One of the goals was to the Improve Maternal health. This goal has two targets; the first was for each country to achieve a 75% reduction in maternal mortality relative to their 1990 levels (Neiburg, 2012). The second target was to achieve universal access to reproductive health through contraceptive prevalence, adolescent birth rate (birth to women less than 20 years) and women access to family planning information services (Neiburg, 2012). According to available statistics it is estimated that the highest risk of maternal deaths occurs in Africa, with 20% of world births but 40% of the world maternal deaths (WHO et al, 2010). The level of maternal mortality is difficult to assess especially in countries without an adequate vital registration system (WHO, 2007). In that vein, indirect techniques of measuring maternal mortality are attractive and cost effective tools to provide estimate and magnitude of maternal mortality (WHO, 2007). However, maternal mortality is difficult to assess for various reasons (WHO, 2007). First of all, normally a maternal death is a somewhat infrequent event; even in areas with high ratios the absolute number of maternal deaths is relatively low. Secondly, maternal deaths tend to be underreported and/or misclassified due to misclassification of deaths in early pregnancy and abortion (Graham, 2002), and this is the result of the situation that some maternal deaths can occur before the delivery (Moore & Baldisseri, 2005; Anderson, Hogan & Ansbacher, 2004; Moodley, Tunkyl & Moodley, 2003 and Fauveaua, Mamdania, Steinglass & Koblinsky 1993).

Another reason for miscounting is the distance to the health facility whereby most of deaths occur on the way to the health facility or at home (Kyomuhendo, 2003; Gwamaka, 2012 and Waiswa et al, 2012). For example, Bhatia (1993) documented that half of maternal deaths in Anantapur district in India takes place at home or on the way

to health facilities. In those cases counting the maternal death can depend on initiatives and capacity of family to report the death even in countries with a satisfactory vital registration system (AbouZahr, 2000). In most developing countries vital registration systems are incomplete and correct attribution of cause of death is the exception (WHO, UNICEF & UNFPA, 2007). This is due to the fact that most of maternal death occur at home and become challenges to the medical certifiers to attribute correct cause of death and this is influenced by the fact that most women receive delivery assistance from traditional healers, birth attendants or family members (Fikreea, Alib, Durochera & Rahbar 2004; Harrera- Torres et al, 2006). Sometimes death can occur as a result of interconnected events rather than a single factor. In such settings, other approaches are needed to estimate the level of maternal mortality. Due to the absence of complete and accurate civil registration systems maternal mortality rate estimates are based on data from a variety of sources including censuses, household surveys, reproductive age mortality studies and verbal autopsies although each method has limitations in estimating the true levels of maternal mortality (WHO et al, 2010).

The recognized gold standards for estimating maternal mortality are reproductive age mortality surveys (RAMOS) but they are complex and costly to conduct (WHO, 2004). Household surveys using direct estimation require very large sample sizes to provide reliable and representative results, the confidence intervals for estimates are typically wide and maternal mortality indicators are therefore imprecise (WHO et al, 2010). Over the past several decades the world has witnessed some astonishing global health success stories but still there are startling numbers of women who die each year from causes linked to pregnancy and child birth (WHO et al, 2010). According to the most recent consensus estimates which have been provided by the Maternal Mortality estimation Inter-Agency Group (MMEIG) there is a slight improvement in Maternal Mortality rate globally, in some regions and in some countries (WHO et al, 2010).The MMEIG comprises WHO, UNICEF and UNFPA, The United Nations Population Division and The World Bank.

In this regard, globally an estimated maternal mortality rate of 287,000 occurred in 2010, whereby nearly 800 women died each day as a result of pregnancy complications

or child birth around the world (WHO, 2004). This implies that each hour there are 30 women who die due to maternal mortality (WHO, 2004; Conde- Agudelo, Belizan & Lummers, 2004; Patton et al, 2009). Also according to the United Nations consensus document covering the statistics of 2010 for 94 countries with the highest maternal mortality rates (greater than 100) in 1990 have already reached their 2015 maternal mortality reduction goals. Also nine additional countries were judged to be on track to reach their 2015 goals, but 50 other countries including Tanzania are unlikely to achieve their respective 2015 goals but judged to be making progress and 14 out of them were considered to have made insufficient progress (UN, 2010). According to the records, most maternal deaths occurred in Sub Saharan Africa and it is estimated to reach 85% of the whole population whereby the decline range to 3.1% per year which is still far from the annual decline of 5.5% which is required to be reached in order to achieve the MDG5 (WHO, 2010).

Globally around 80 percent of maternal deaths are due to obstetric complications mainly haemorrhage, sepsis, unsafe abortion, pre-eclampsia, and pro-longed or abstructed labour. Complication of unsafe abortions accounts for 13 percent of maternal deaths worldwide and 19 percent of maternal in South America (WHO, 2004; Rogo, Ouch & Mwalali, 2006; AbouZahr, 1995; Urassa, Lindmark & Nystrom, 1995).

Maternal mortality in Sub- Saharan Africa has dropped by 41 percent in 20 years from the 1990 rate of 850 deaths per 100,000 live births to an average of 500 deaths per 100,000 live births in 2010 (WHO et al, 2012). From 1990 to 1995 the maternal death rate dropped slightly from 850 to 820 deaths per 100,000 live births, from 1995 to 2000 the decrease was greater which was 820 to 740 deaths per 100,000 live births (UNFPA, 2012).

From 2000 to 2005, the rate declined by a further 110 per 100,000 live births which was 740 to 630 deaths per 100,000 live births and the biggest drop was recorded from 2005 to 2010 which was 630 to 500 deaths per 100,000 live births (UNFPA, 2012). Despite this improvement the report shows that the maternal mortality ratio (MMR) for developing regions is 15 times higher than developed regions, which means that Sub-

Saharan Africa accounts for 56 per cent of global maternal deaths and this proportion is due to the presences of HIV at 10 percent, poor health facilities which perpetuated with the prevalence of poverty, lack of skilled attendants and other related causes (WHO et al, 2012).

Since her independence in 1961 to 1990 Tanzania's maternal mortality rate has been on a downward trend (Mandara, Kaisi, Mwaluko, Kilama & Macpherson, 1991) but in 1999 the trend reversed to an upward direction (TDHS, 2005). According to the 1999 Tanzania Demographic Health Survey (TDHS) maternal mortality rate was 528 while in 2005 it reached 578 per 100,000 live births (TDHS, 1999, 2005).

Recent reports show that maternal mortality rate has been reduced slightly from 578 in 2004/2005 to 454 in 2010 (THDS, 2010), although this ratio is still viewed as high and puts Tanzania among the countries with the highest maternal mortality in the world. This situation placed Tanzania far behind to reach the Millennium Development Goal five (MDG5) target of 133 by 2015 and the National Strategy for Growth and Reduction of Poverty target of 265 (MOHSW, 2008, URT, 2010). Despite the fact that maternal mortality ratio seems to be higher, records show that the majority of these deaths in Tanzania are due to obstetric complications that can be prevented or minimized (National Bureau of Statistics, 2011). According to the TDHS of 2004/2005 obstetric haemorrhage is the leading cause and it accounts for 28%, while others are abortion complications 19%, pregnancy induced hypertension 17%, and obstructed labour 11%, sepsis 11% and indirect causes account for 14% of MMR (NBS, 2005). This calls for the need of more efforts to attain the MDGs target and the Tanzania NSGPR target by 2015.

Mara region is one of the regions which were identified by the Government of Tanzania to be among the areas which needed a technical analysis to improve the expenditure on health sector during April 1998 under a project called ***support to maternal mortality reduction*** (URT, 2006). The project focused on assessing the coordination and cooperation of Local government Authority on delivering quality and accessible services as well as to empower local communities (URT, 2006). Maternal mortality as

one of the MDGs is used as the entry point to improve the standard of living of the concerned community (Mvula, Muchenje, Geister & Hashi, 2006). The main objective of the project was to identify the reasons why some districts were performing better than others when it came to cooperation on maternal health. It was funded by the African Development Bank Group (Mvula et al, 2006).

According to the Tanzania Demographic health survey (TDHS, 2004), Tanzania poverty and human development report (TPHD, 2005) and Technical review of District health service delivery in Tanzania (DHSD, 2006) some health indicators have shown improvement except maternal mortality rate (URT, 2006). Current data show that Mara region has a maternal mortality rate of 150 per 100,000 (URT, 2010) which still puts the region among those with high maternal mortality with reference to the 2010 UN consensus document. According to this document, a maternal mortality rate above 100 per 100,000 live births is high maternal mortality rate (WHO, 2010).

Musoma urban is among the districts of Mara Region which alone has a maternal mortality ratio of 257 per 100,000 (Warioba, 2007, URT, 2010). This situation places the district among the districts with high maternal mortality rate in the region. The high MMR is influenced by a lot of factors such as attendance at antenatal clinics whereby only 2% of women are attending the antenatal clinics (URT, 2010). This situation suggests that Musoma urban does not respond to the initiatives and strategies which have been put forward by the Government of Tanzania and by different development partners.

1.3 Statement of the problem

Reducing maternal mortality status around the world has been one of the development issues to most of the development practitioners since 1975 when the UN declaration of the decade (1976-1985) was introduced with the focus on raising international attention on the health, rights and development priorities of women (FHI, 2007).

According to the WHO et al, (2012), Tanzania had the eighth highest number of maternal deaths in the world. Furthermore, women in Tanzania have a one in twenty

three lifetime risk of dying from a pregnancy related cause (WHO, 2010). Besides, the 2010 Tanzania Demographic and Health Survey which puts the maternal mortality ratio at 454 maternal deaths per 100,000 live births which still show that most deaths among women are due to pregnancy related causes which can be controlled (TDHS, 2010).

In order to reduce high MMR in Tanzania, many initiatives have been taken since independence. In 1974 the TANU National Executive Committee declared its support for the family planning association (UMATI) which plays three major roles which were to motivate, educate and inform general public on the need of the child spacing and in addition to distribute the contraceptive to women(Commonwealth Secretariat, 2008). Also in 1996 the government established Community health fund and in 2001 National health Insurance Fund (NHIF) was established in order to help improve access to high facility without selling their asset to get money for treatment (Mtei, Mulligan, Ally, Palmer & Mills, 2007). Despite these initiatives the 2009/10 TDHS results show that there is no significant change on maternal mortality rate (URT, 2010).

Other measures include the National Road Map Strategic Plan on reduction of Maternal Mortality (2008/2015) which stipulates various strategies to guide stakeholders for maternal health, the National Health Policy (revised in 2003), the Health Sector Reforms and the Health Sector Strategic Plan (2003-2007), the Reproductive and Child Health Strategy (2005-2010) and the National Road Map Strategic Plan to Accelerate the Reduction of Maternal and Newborn Mortality (2006-2010 & 2008-2015) were also formulated to respond to these but the response towards these strategies is still low (URT, 2008). However, only a modest progress has been recorded in the area of maternal health (URT, 2008).

Also several studies (Urassa et al, 1997; IHRDC, 1999; WHO, 2007; and Bjorg, 2008) have been done on maternal mortality especially on assessment of risk factors for maternal deaths in Tanzania, the studies come up with the results suggesting that poor access to reproductive services increased the risk of getting unwanted pregnancies leading to unsafe abortion, malaria, HIV/AIDS and anaemia. Also Khan, Pillay, Moodley and Connolly (2001), documented on the causes of maternal mortality and

according to them maternal deaths are caused by indirect causes such as anaemia, HIV, malaria and tuberculosis which are normally associated with poverty. Moreover Gwamaka, 2012; Mandi, Kabakyenga (2012) and Danso (2007) documented on the factors that affecting the utilization of health facilities during delivery to women. But the problem still persists. So this study assesses the National Health Policy of 2003 with regard to challenges of the reduction of maternal mortality rate in Musoma Municipality.

1.4 Research questions

The study was guided by the following questions;

1.4.1 Major research question

The major research question of this study was: What are the challenges encountered by different officials in reducing maternal mortality rate in Musoma Municipality, Tanzania in line with National Health Policy of 2003, despite many initiatives which have been in place to address the problem?

1.4.2 Specific research questions

The following specific research questions were formulated to answer the major research question.

i. What are the factors for the persistence of high maternal mortality rate in Musoma municipality?
ii. What is the quality of maternal care services in Musoma municipality?
iii. What is the awareness of the risk factors of maternal mortality?
iv. What is the profile of personnel or staff maternal care services?
v. What is the extent of freedom women have to seek, receive and impart information concerning health issues?
vi. What factors limit women to access reproductive health care services?

1.5 Objectives of the study

The study was guided by the following objectives;

1.5.1 General objective

The general objective of the study was to find out the challenges encountered in reducing maternal mortality rate in Musoma Municipality, Tanzania in line with National Health policy of 2003.

1.5.2 Specific objectives

The specific objectives were as follows:

i. To identify factors for the persistence of high maternal mortality rate in Musoma municipality.
ii. To assess the quality of maternal care in Musoma Municipality.
iii. To determine pregnant mothers' awareness of risk factors for maternal mortality.
iv. To assess the profile of personnel at maternal care services.
v. To explore the freedom of women to seek, receive and impart information concerning health issues.
vi. To find out factors limiting women from accessing reproductive health care services.

1.6 Significance of the study

This study is significant in various ways.

The study explores one important aspect of MDG, high maternal mortality rate in developing countries like Tanzania. Findings of this study are likely to be of interest to planners, policy makers and other development practitioners to come up with practical initiatives on how to reduce the maternal mortality rate. Furthermore results of the study can be used by central, local authorities as well as hospital administrators to adopt changes in clinical practices especially maternal health services.

The study also responds to why we do have high maternal mortality rate despite of all initiatives taken by the Government, nongovernmental organization and donor community on reducing the maternal mortality. Furthermore, the study came up with reasons as to why some districts have high mortality than others.

1.7. Limitations of the Study

The study encountered several limitations as follows; Some respondents were reluctant to give information due to social cultural belief, little knowledge and lack of information about the matter. Difficulties in accessing literature materials in the Tanzanian context and medical records as they are confidential and some officials were not willing to provide documents especially health records. Access of respondents during the day also became challenging because most of them were out of their homes to work. All the limitations were overcome through the following measures.

Education on the intention of study was provided to the concerned population and the issue of confidentiality was assured which made easier for respondents to participate in the study. For example, in case of availability of respondents I chose to conduct interviews early in the morning, late evening or get them on the road or while performing their duties like attending patients. Permits from the RMO and DMO cleared access to health workers and official documents.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter represents the literature related to the study and it is divided into two sections. The first section deals with theoretical literature review. It includes definitions of key concepts and theories framing the study. The second part is on empirical literature review. The conceptual framework is also given.

2.2 Theoretical literature Review

The theoretical literature review includes definitions of key terms and theories which guide the study.

2.2.1. Definitions of key concepts

The major concepts defined include: maternal health, maternal death, maternal mortality, maternal mortality rate, maternal mortality ratio, haemorrhage, postpartum haemorrhage, maternal morbidity, life time risk of maternal death and postpartum care consider including other concepts used.

2.2.2 Maternal health, maternal death, maternal mortality, maternal mortality rate, maternal mortality ratio, maternal morbidity, life time risk of maternal death

Maternal in general meaning is used to describe feelings or actions which are typical of those of a kind a mother feels towards her child. According to World Health Organization *maternal* is associated with or typical of a mother, or is related through the mother's side of the family (WHO, 1992). Maternal health refers to health of women during pregnancy, childbirth and the postpartum period (WHO, 1992). While motherhood is often a positive and fulfilling experience, but for many women it is associated with suffering, ill-health and even death (WHO, 2001).

The World Health Organization (WHO) defines a maternal death as the death of woman while pregnant or within 42 days of termination of pregnancy, irrespective of

the duration and site of pregnancy, from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental causes (WHO et al, 2012). The major direct causes of maternal morbidity and mortality include haemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labour (WHO, 2001). Maternal death is from an epidemiological perspective, a relatively and rare event (WHO, 2004).

Direct obstetric deaths are maternal deaths resulting from obstetric complications of the pregnant state (pregnancy, labour, and puerperium); interventions, omissions, or incorrect treatment; or a chain of events resulting from any of the above (WHO, 2000). Indirect obstetric deaths are maternal deaths resulting from previous existing disease or disease that developed during pregnancy, which was not due to direct obstetric causes, but which was aggravated by the physiologic effects of pregnancy (WHO, 2000). Incidental deaths are deaths due to conditions occurring during pregnancy, where the pregnancy is unlikely to have contributed significantly to the death, although it is possible to postulate a distant association (WHO, 2000). Late maternal deaths are deaths of women from direct or indirect obstetric causes occurring between 42 days and one year after termination of pregnancy (WHO, 2000).

Maternal morbidity is complex with multiple causes' duration ranging from acute to chronic, severity ranging transient to permanent and with a range of diagnosis and treatment options (National research council, 2000). Also maternal morbidity can be defined as physical and psychological condition1`s that results from or aggravated by pregnancy and have an adverse effect on a woman's health and normally the most sever complication of pregnancy is referred as severe morbidity (CDC, 2012). Obstetric morbidity is defined as morbidity in a woman who has been pregnant (regardless of the site or duration of pregnancy) from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes and normally this is the subset of reproductive morbidity (WHO, 2000).

Maternal mortality rate (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year (WHO, 1992).

According to World Health Organization (WHO, 1992) maternal mortality ratio is the number of maternal deaths during a given period of time per 100,000 live births during the same time period. This expresses the risk of death associated with each pregnancy. WHO (2004), comments that maternal mortality is difficult to measure accurately especially in low income countries such as Tanzania which have no or little data and modelling such as vital registration, health service records, household survey and census normally used to obtain the national estimates.

Life time risk of maternal death is the risk a woman has of dying during her reproductive years given current rate of fertility and the risk of maternal mortality. Given the length of the reproductive period (about 35 years) the lifetime risk is calculated as [1-(1-maternal mortality rate) 35] (AbouZahr & Wardlaw, 2003).

2.2.3 Haemorrhage, Postpartum Haemorrhage (PPH) and postpartum care

Haemorrhage is profuse bleeding from ruptured blood vessels (International Confederation of Midwives [ICM], 2003). Haemorrhage means excessive bleeding that is difficult to stop (Palliative care service; 2009). Haemorrhage is viewed as the leading cause of maternal mortality which accounts for 25 percent of all maternal deaths worldwide (International Confederation of Midwives [ICM], 2003). According to Khan et al, (2006), worldwide the percentage of death caused by Haemorrhage is even higher than previously thought from 30 to 39 percent.

Postpartum haemorrhage is generally defined as blood loss greater than or equal to 500ml within 24 hours after birth while severe condition is blood loss greater than or equal to 1000ml within 24hours (ICM, 2003). Most cases of morbidity and mortality due to PPH occur in the first 24 hours following delivery and these are regarded as

primary whereas any abnormal or excessive bleeding from the birth canal occurring between 24 hours and 12 weeks post natal is regarded as secondary PPH (ICM, 2003).

Postpartum care is the care which is provided to a woman right after the delivery and normally it lasts eight weeks after the delivery (Krucck, 2013). This is important since after a woman has given birth her body normally goes through huge changes; problems can happen during the process and it is advisable to know how to have a healthy postpartum phase (Krucck, 2013).

2.3. Theories framing the study

The study was guided by three theories namely Gender equity theory, Demographic transition theory and Attribution theory;

2.3.1 Gender equity theory

Gender equity theory is rooted in the pursuit of justice and equality between genders, in health, social, nutrition, economic, and power relationships between males and females (Walton, 2012). The concept of equality is divided into formal (de jure) equality and substantive (de facto) equality, which is grounded in the law (Walton, 2012). De jure equality has roots in John Locke's philosophy of liberal individualism and may provide "gender-neutrality" and "sameness of diagnosis and treatment" (Walton, 2012). However, it does not take into consideration that discrimination may still occur based upon the substantive or de facto equality notions and does little to address the social and economic disparities among vulnerable populations, which are linked to allocations of resources and power (Walton, 2012). Substantive equality is result-oriented and identifies and considers circumstances, need and disadvantaged groups (Walton, 2012). Health equity has been an ongoing goal for several decades within developing countries (Ostlin, Sen & George, 2004).

Although there has been some growth in the social, educational, and health sector regarding gender equity in most countries, there continues to be a large health disparity, particularly with maternal health and particularly among the rural and poor communities whereby women are still left behind when it comes to decision-making concerning particular families or communities (Sidney, 2002). The study employed the

theory in order to assess whether gender disparity in health can be one among the challenges for reducing maternal mortality rate in Tanzania especially Musoma Municipality. This is because literature shows that husband' perceptions and attitudes towards reproductive health reflects their tastes and preferences for maternal health care utilization by pregnant women (Gwamaka, Bicego et al, Shankwaya and Wangle et al).

2.3.2. Demographic transition theory

The demographic transition theory describes the transition from high birth and death rates to low birth and death rates that occurs as part of the economic development of a country (Thompson, 1929). As countries industrialize, they undergo a transition during which death rates fall but birth rates remain high, consequently, population grows rapidly (John, 2006). The theory was introduced in the 1940s to provide a description and explanation of the main lines of European and American population history (John, 2006). It is the theory which believes that societies progress from a pre-modern regime of high fertility and high mortality to a postmodern regime of low fertility and low mortality (John, 2006).

According to the demographic transition theory fertility is an important predictor of maternal mortality, so societies with high fertility rates are normally associated with high maternal mortality rate (Shen & Williamson, 1999). Proponents of the theory assert that prior to modernization societies are characterized by high mortality and fertility levels while with improvement in health and living conditions, mortality rates decline first and, as development continues fertility level follows. This is explained by reduced need for larger families as sources of labour or social support (Kibirige, 1997).

Also the use of contraceptives, fertility preferences, education levels of women, women's status, and age structure of the society are the most important determinants of maternal mortality rate in the community. (Angeles et al, 2004; Hakim, 2003; Klepinger et al, 1995; Mamdani et al, 1993; Zafar et al, 1995; Bulatao & Ross, 2003; Midhet et al, 1998). In addition to their impact on maternal mortality through reducing fertility, women's status in the society and education were shown to significantly affect in maternal mortality (Mousa & Madi 2004; Shen & Williamson, 1999; Bongaarts,

2003). So the study will test this theory with respect to fertility rate as one of the challenges of reducing maternal mortality rate in Tanzania.

2.3.3 Attribution theory

The attribution theory emerged in the management literature as a characteristic of organizational behaviour by which individual assessments are formed (Heider, 1958). The theory explains the process whereby people seek to understand the cause of situations (Heider, 1958), assess responsibility for the outcomes (Marlinke & Gardner, 1982) and appraise the personal attributes of the people involved. The attribution theory is synonymous with explanation; placing the discussion of "why did something occur" in the context of leader to member relations (Green & Mitchels, 1979). As health care is delivered in dynamic and complex environment (McDaniel & Driebe, 2001), managers may unknowingly tend to engage in "attribution a like behaviour" to make sense of multifarious situation especially when time is limited (Kelly, 1972).

In many cases these attributions are not purposeful nor are they intended to misrepresent. However attribution normally leads to judgments about a person or situation (Kelly, 1972). Health care managers like any person seek to explain their behaviour and the behaviour of others, so attribution theory explicates how people form judgments (Heider, 1958). These causal associations when focused on clinician behaviour have serious organizational consequences in the health care industry's approach to address performance fallibility (Edmondson, 2004). Attribution theory provides a framework to identify mechanisms that contribute to blame subsequent to non routine harmful patient events whether cognitively assembled or formally conducted, adverse events are followed by both immediate and planned investigations to identify causality (Martinko, 1995). Due to events of causality two types of attribution emerge which are internal and external (Weiner, 1985) whereby internal attribution is the causality factor that falls within an individual's control and it also known as dispositional attribution (Heider, 1958). External attribution, defines the factors residing outside an individual's control also known as situational attribution (Kelley, 1967). Normally both dispositional and situational attributions are described as the silent hands that guide sense making (Weick, 1995) whereby sense making depends

on the availability of information but more importantly speed yields an absence of critical information which can lead to fundamental attribution error (Ross & Nisbett ,1991). Therefore this theory helped the study to analyse the data on why despite all efforts taken by the Government and international agencies with a view to reducing maternal mortality rate and despite its causes and factors being known and can be controlled the problem persists.

2.3.4 Status of maternal mortality from global to local level

According to the United Nations (2000), almost 300,000 women die globally from pregnancy and child birth every year (UN, 2000). For every woman that dies another 20 suffer an injury, illness or disability, often with life-long consequences (UN, 2000). Ninety percent of maternal deaths occur in developing countries with over half of these in Sub-Saharan Africa (WHO, 2005).

According to WHO (2010), levels and trends in maternal mortality for 174 countries assessed, and constructed a database of 2651 observations of maternal mortality for 174 countries from 1980-2008 were assessed and found that there is a decline from 546,000 in 1990 to 358,000 in 2008. The data come from vital registration data, censuses, surveys, and verbal autopsy studies also by using robust analytical methods to generate estimates of maternal deaths and the MMR for each year between 1980 and 2008 (WHO, 2010). It estimated that there were 342- 900 maternal deaths worldwide in 2008, downfall from 526/ 300 in 1980 and the rate continue to decline where in 2010 the statistics shows that maternal mortality stands to 287 per 100,000 live births (WHO, 2010) and this due to the improvements of maternal health services, provision of reproductive education and removal of cost to provision of maternal health services**.**

The maternal mortality in Sub- Saharan Africa has dropped by 41 percent in 20 years from the 1990 rate of 850 deaths per 100,000 live births to average of 500 deaths per 100,000 live births in 2010 (WHO et al, 2012). From 1990 to 1995 the maternal death rate dropped slightly from 850 to 820 deaths per 100,000 live births, from 1995 to 2000 the decrease was greater which was 820 to 740 deaths per 100,000 live births (UNFPA, 2012). From 2000 to 2005, the rate declined by a further 110 per 100,000 live births

which was 740 to 630 deaths per 100,000 live births and the biggest drop was recorded from 2005 to 2010 which was 630 to 500 deaths per 100,000 live births (UNFPA, 2012). In the 2013 the rate continues to decline up to 230 per 100,000 live births (WHO, 2014). This decline was due to presence of global strategy for women's and children health, reduction of health risk, presence of a essential drugs for preventable diseases i.e. Antisepsis, Magnesium, safe blood transfusion, antibiotics and oxytocin improvement in access to health facilities, improvements in nutrition, advance in clinical medicines, improvement in surveillance and monitoring of diseases, increase in education level and improvement in living standards. Despite this improvement the report shows that the maternal mortality ratio (MMR) for developing regions is 15 times higher than for developed regions This means that Sub-Saharan Africa accounts for 56 per cent of global maternal deaths (WHO et al, 2012).

An estimated 13,000 women die each year in Tanzania due to labour and pregnancy-related complications, and more than a quarter million more suffer disabling conditions (WHO, 2007). The country ranks 21st highest maternal mortality rate among African nations (WHO, 2010). Like its neighbour Uganda, Tanzania is one of the world's poorest countries, and 75 percent of its population lives in rural areas (WHO, 2010). Transportation is spotty and health-care facilities are often miles away from local communities, making it extremely difficult for women who experience pregnancy complications such as severe haemorrhage, infections, anaemia and obstructed labour to access skilled health care (WHO, 2010). The World Health Organization reveals that half *a million mothers and 10.6 million children will die each year if governments do not increase their efforts to reduce maternal and child deaths*. *The WHO notes that, four years ago, governments around the world committed themselves to reducing maternal deaths by three-quarters and child mortality by two-thirds by 2015. As maternal mortality remains a major challenge to health systems worldwide, reliable information about the rates and trends in maternal mortality is essential for resource mobilization, and for planning and assessment of progress towards Millennium Development Goal 5 (MDG 5), the target for which is a 75% reduction in the maternal mortality ratio (MMR) from 1990 to 2015*. (WHO et al, 2012).

Mara region is one of the regions which were identified by the Government of Tanzania to be among the areas which needed a technical analysis to improve the expenditure on health sector (URT, 2006). According to the Tanzania Demographic health survey (TDHS, 2004), Tanzania poverty and human development report (TPHD, 2005) and Technical review of District health service delivery in Tanzania (DHSD, 2006) some health indicators have shown improvement except maternal mortality rate (URT, 2006). Current data show that Mara region has a maternal mortality rate of 150 per 100,000 (URT, 2010) which still puts the region among those with high maternal mortality with reference to the 2010 UN consensus document (WHO, 2010). Musoma urban is among the districts of Mara Region which alone has a maternal mortality ratio of 257 per 100,000 (Warioba, 2007, URT, 2010). This situation places the district among the districts with high maternal mortality rate in the region (URT, 2010).

2.3.5 Causes of maternal mortality

The major causes of maternal deaths in Sub-Saharan Africa are mainly haemorrhage (34%); sepsis and infections, including HIV/AIDS (16%);hypertensive disorder of pregnancy (9%), obstructed labour (4%), anaemia (4%), abortion (4%) and other causes which includes ectopic, embolism and other indirect causes (UN, 2007; UNICEF, 2007). According to WHO (2004) complication during pregnancy and child birth are the leading cause of death and disability among women of reproductive age in developing countries. In the same vein maternal mortality are caused by major direct causes and these includes obstetric haemorrhage, obstructed labour, pregnancy induced hypertension, sepsis and abortion complication (Urassa et al,1995; AbouZahr, 1995 and WHO, 2010).

Other causes of maternal deaths are the indirect causes which normally accounts for 20-25 percent of maternal deaths and they includes malaria, HIV/AIDS, hepatitis, diabetes mellitus, anaemia, and heart disease (WHO, 2005; Massawe et al, 1999). Similar to WHO (2005) Nieburg (2012) categories the major causes of maternal mortality and into three namely direct causes, indirect and other possible contributory causes.

According to Nieburg (2012) the major direct causes which account for 75 to 80 percent of maternal deaths are eclampsia/ high blood pressure, postpartum haemorrhage, infection or sepsis, unsafe abortion, prolonged/ obstructed labour. The indirect causes which account for 20 to 25 percent of maternal deaths are malaria (including Anaemia), HIV/ AIDS, malnutrition, severe anaemia from other causes such as (hookworm infection, vitamin A deficiency and blood loss from prior pregnancies), hepatitis and diabetes. Other contributory causes in poor resources countries are low subordinate/ social status of some women and some families, lack of access to modern family planning resulting in high fertility with unplanned pregnancies, poverty at family and or community level and child (young adolescent) marriage (Nieburg, 2012).

The report come with the conclusion that, In Tanzania where 75 percent of the population live in rural areas still encounter different challenges which led to downfall of maternal mortality to be slow. These factors are like low social status of women (lack of autonomy) in decision making about important family issues including their own health, wide spread of poverty, frequency of unplanned pregnancies, lack of essential drugs, poor infrastructures, lack skilled health worker, environmental constraints, distances to reach health facilities and women reluctance in ability to plan facility based deliveries (Neiburg, 2012).

2.3.6 Initiatives in place to reduce maternal mortality in Tanzania

According to the United Nations (UN), Millennium Development Goal (MDG) 5 calls for a 75 percent reduction in maternal mortality rate by 2015. At the current rate of progress, Tanzania is not on track to reach Millennium Development Goal 5 (UN, 2010) despite the fact that efforts have been put to overcome the problem.

Since independence, Tanzania has been giving priority to reduction of maternal mortality rate in the country by formulating different strategies, policy and program (URT, 2003). These strategies include National Development Vision 2025, the national strategy for growth and poverty reduction, , Tanzania road map strategic plan to accelerate reduction of maternal, new born and child death in Tanzania (2008- 2015). Also the government introduced reproductive and child health coordinators in each

region, health sector reforms and the reproductive and child health strategy (2005/ 2010). National health policy and the primary health service program. As for Mara Region, it developed a strategic plan called Mara Regional strategic plan to accelerate reduction of maternal and new born deaths 2013 – 2016. This strategy helps to improve the ANC attendance, increase number of health facility delivery, reduction of maternal mortality rate. Despite of these achievements it still faces some challenges such as lack of skilled professionals, lack of essential drugs, and lack of maternal wards in most of health facilities, health workers altitudes and poor labour tools.

In summary the theoretical reviews of different aspects of maternal health reveal that maternal deaths are influenced by different factors such as medical, social, economic status, cultural and demographic. Medical factors include haemorrhage, sepsis, infections, HIV/ AIDs, hypertensive disorder of pregnancy, obstructed labour, anaemia, abortion, high blood pressure and postpartum. Other include fertility rate, early marriage, access to modern family planning methods, women lack of autonomy in decision making and power asymmetries between female and male.

2.4 Empirical literature review

This section reviews different studies conducted on maternal mortality around the world both published and unpublished in order to provide a clear picture of the status of maternal mortality.

A study by Ramadhani (2011) on midwives' competency for implementation of active management of third stage of Labour (AMSTL) in Dar es salaam, Tanzania which aimed at assessing knowledge and skills of midwives in conducting AMSTL for preventing primary PPH immediately after delivery showed that the majority of sampled midwives performed well all the three most important components of AMSTL (Ramadhani, 2011). However, 18 steps that comprise a standard AMSTL practice were not completed by most of the midwives (80%) to declare them competent by considering standard observation guide and standard questions set on AMSTL (Ramadhani,2011). The study also found that all midwives who reached satisfactory scores for both knowledge and skills were declared competent on AMSTL and only 10

percent of the sampled midwives were competent (having high knowledge and skills). These results suggest that midwives with high knowledge will also have high skills. More than half of the sampled midwives who accounted for 51.2 percent got their expertise on AMSTL at the midwifery/ nursing school. Therefore the study concluded that knowledge and skills among midwives towards AMSTL use as most recommended tool to reduce maternal deaths from PPH is essential for the strategies towards reduction of maternal mortality rate in the country (Ramadhani, 2011).

Aram (2009) conducted a study in Babati, Tanzania on maternal care and mortality to investigate what makes maternal care result in high mortality and if under registration of deaths could affect it somehow. The aim of the study was to get an understanding of high maternal mortality; how mothers experienced maternal care; and to study under registration of maternal mortality (Aram, 2009). The study found that most of the maternal deaths in Babati were caused by severe malaria, severe anaemia, fat embolism, ruptured uterus, meningitis and HIV. It also found that there were different rates of maternal mortality in urban and rural areas whereby villages in Babati accounted for 578/100,000 live births while urban areas accounted for 253/ 100,000 live births mainly due to the quality of the health services provided (Aram, 2009).

Furthermore, the study found that it was common to deliver the first born at hospital and the following children at home with or without supervision despite the fact that most of the women in Babati were satisfied with the health services provided in their areas (Aram, 2009). Aram (2009) also points out that evidence shows that there was no difference in health seeking behaviour according to the level of education a person had.

Aram (2009) concluded that a possible solution to the high ratio of maternal mortality was for women to seek antenatal services and the empowerment of women in decision making due to the fact that ANC visits may help to identify the pregnancy complication in early stage when the thorough investigation is done. In the case of women empowerment in decision making will facilitate the use of health facility for delivery. Besides, the two solutions should go hand in hand with the improvement of maternal care services in terms of education and equipment.

Swedo (2002) conducted a study in Mapti, Mali on technical and perceived quality of care and their association with maternal health determinant. The aim of the study was to analyse association between quality of care and maternal health up take specifically in Bandiagara and Bankas (Swedo, 2002). The study found that different outcomes of maternal health are influenced by a variety of factors such as socio- economic and quality of health care (Swedo, 2002). It also found that there is parity between education, cohabitation with one's mother in- law, accessibility of facilities, quality of care and employment outside the home with maternal health service uptake (Swedo, 2002). Furthermore the study found that women consider a variety of factors when considering where to receive antenatal care and deliver their child, and to them both technical and perceived quality of care are important determinant of utilization of the maternal health services (Swedo, 2002). Swedo (2002) points out that woman in Mali area frequently only report to Centre de Santé Communautaine (CS- COM) or hospitals to delivery if they experience complications during the delivery.

Swedo (2002) concluded that women's perceived quality of care at their local health care institutions influences their choice to utilize maternal health services, therefore efforts should be made to improve maternal health services and this should include provision for better technical quality of care and outreach services to the community which intends to improve perceive quality of care.

Gwamaka (2012) conducted a study on utilization and factors affecting delivery in health facility among recent delivered women in Nkasi District Tanzania. The aim of the study was to determine factors that affect delivery in health facility among recent delivery women. The study found that factors such as education status, availability and accessibility of health facilities, attendance at antenatal clinics influenced to deliver at hospitals (Gwamaka, 2012). Gwamaka (2012) points out the evidence that the majority (98.6%) of women attend antenatal care but only 44% deliver in health facilities. According to the findings this is influenced by number of antenatal clinic visits where by those who attended more than four times were more likely to deliver in health facility compared to those who attended less than that. Furthermore the study reveals that women with secondary education were six times more likely to deliver in health

facilities compared to those with no education (Gwamaka, 2012). Gwamaka (2012) concluded that the community needed to be continuously sensitised about maternal health services so that the number of pregnant women who delivered in health facilities increases to reduce maternal morbidity and mortality in order to attain the national target.

Jayaraman et al, (2008) conducted a study on factors affecting maternal health care seeking behaviour in Rwanda. The aim of the study was to analyse the factors affecting maternal health care seeking behaviour to women in Rwanda. The study was a desk review by using three rounds of Rwanda demographic and health survey (RDHS) data of 1992, 2000 and 2005 (Jayaraman et al, 2008). The study found that women maternal health seeking behaviour is influenced by area, access and availability of health facilities, socio ecomic status of household, quality of services and number of visits to antenatal care services (Jayaraman et al, 2008). These findings are similar to those by Swedo (2002) and Gwamaka (2012).

Jayaraman et al, (2008) points the evidence that women who gave birth in the five years preceding the 2000 and 2005 RDHS are less likely to deliver in a health institution than those who gave birth in the five years preceding the 1992 RDHS due to the quality of services provided and the health workers altitude. Also the study reveals that women are more likely to deliver at home with professional assistance in 2000- 2005 compared to 1992 and this is due to the fact that the proportion of women seeking antenatal care is low due to health workers altitudes, distance to reach health facilities and quality of services provided (Jayaraman et al, 2008).

The study also found that women living in urban areas are more likely to deliver at a health facility than at home without assistance because of better access and availability of health facilities (Jayaraman et al, 2008). Furthermore the study found that the sex of household head can influence health seeking behaviour whereby most female headed households are less likely to deliver in a health facility compared to male headed households (Jayaraman et al, 2008). Jayaraman et al, (2008) concluded that women's behaviour of seeking health services is influenced by different factors such as education

status, class level, number of visits to antenatal care, availability of health facilities, quality services and economic status. In this regard, what should be done is to increase budgetary allocation for reproductive health care and provision of education to communities.

Hanson (2013) also conducted a study on the epidemiology of maternal in southern Tanzania basing on secondary data analysis. The aim of the study was to describe and analyse the causes and determinants of maternal mortality in southern Tanzania. Another objective was to explore the relationship between mortality rate and access to maternal care (Hanson, 2013). The findings were similar to those by Gwamaka (2012), Swedo (2002) and Jayaraman et al, (2008) that the health seeking behaviour has been influenced by factors such as education level, wealth status, geographical position, accessibility of services, quality of care, attendance in antenatal care, and availability of resources (Hanson, 2013).

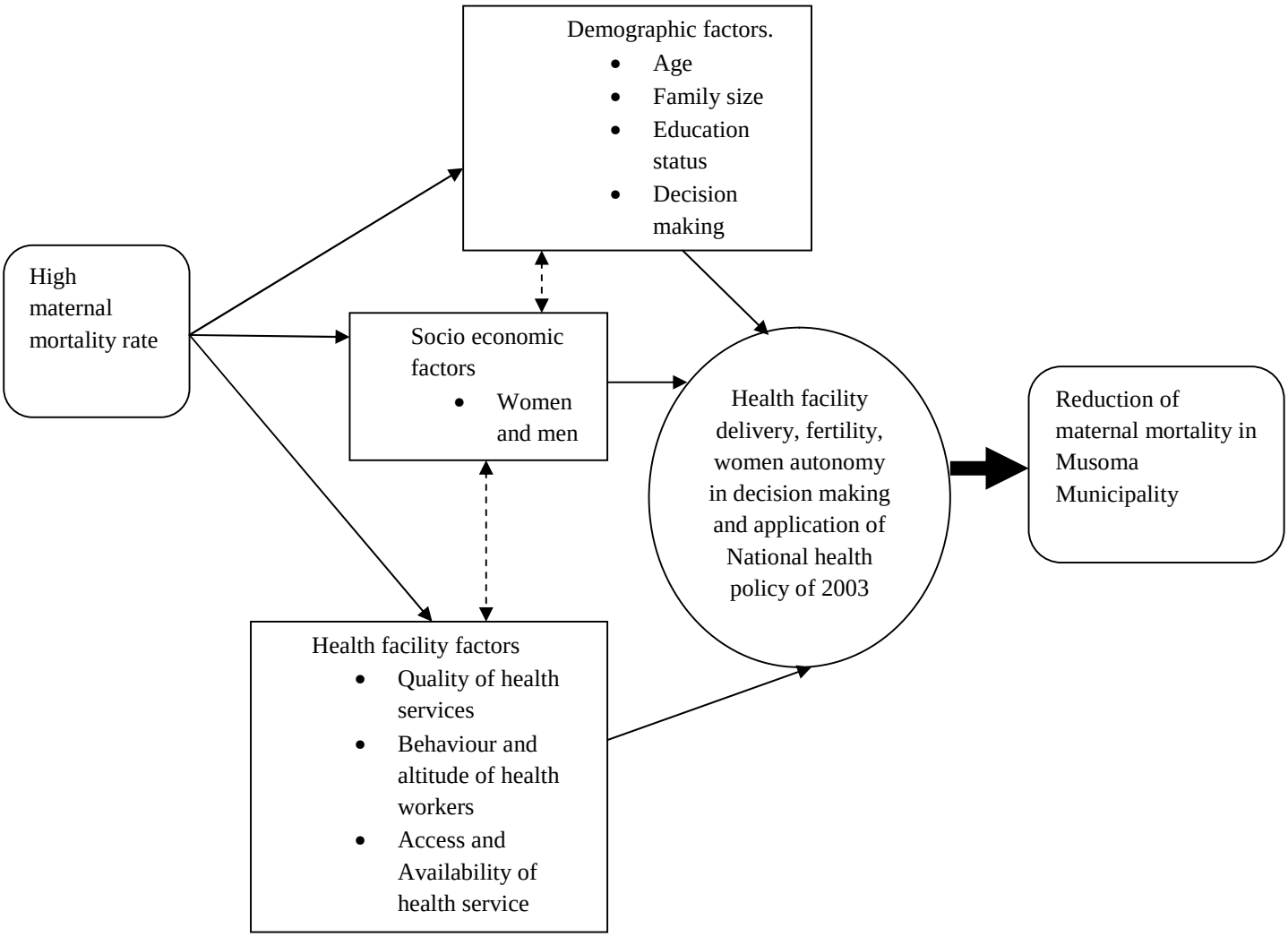
Hanson (2013) also found similar causes and determinants of pregnancy related mortality to those by Aram (2009) whereby the indirect causes such as malaria, anaemia, AIDs and tuberculosis are the main causes of maternal deaths in Southern Tanzania. Hanson (2013) concluded that provision of preventive measures to control the situation and the construction of health facilities are needed to provide maternal health care.

In summary the studies show different causes, factors and determinants of maternal deaths occurrence in different parts of the world. These include social demographic factors, socio-economic factors, cultural factors and health facility factors. These factors influence women's maternal health seeking behaviour. These underlying causes show how maternal death is still a serious problem in the world despite the causes, factors and determinants being known. Therefore this study was conducted in order to explore the challenges being faced in reducing maternal mortality rate in Musoma municipality, Tanzania.

2.5 Conceptual framework

Figure 2.1 represents the conceptual framework of the study. The framework is guided by the theory of demographic transition and gender equity theory. The framework shows that maternal mortality rate is influenced by different factors and these factors can be categorised into social demographic (age, family size, head of house hold and education status); socio economic (women occupation); cultural factors (belief, cohabitation, mother in law relationship) and health facility factors (availability of health facility, distance to health facility, behaviour and altitude of health workers and quality of services provided).The framework suggests that if the factors which influence women's decision to seek health services will be taken care of automatically the number of women delivering in health facilities will increase and this will help in taking care of different pregnancy complications this in turn will reduce occurrence of maternal death. Besides, women's fertility rate and autonomy in decision making can influence the reduction of maternal mortality rate in the respective area.

Figure 2.1: Conceptual framework of the study



Key

1. Influence each other
2. Direct influence
3. Output

Source: Author's construct (2014)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents methods and techniques that were employed in conducting the study. It is divided in the following subsections: study area, research design, target population, sample size, sampling techniques, methods of data collection, and data processing, analysis and presentation. Validity and reliability issues are also discussed Figure 2.1 represents the conceptual framework of the study. The framework is guided by the theory of demographic transition and gender equity theory.

3.2 Research Design

The study employed a cross sectional design due to the fact that normally cross-sectional studies aim at determining the frequency (or level) of a particular attribute such as specific exposure, disease or any other health related event in defined population at a particular point in time (Levin, 2006). These studies normally estimate the prevalence of a certain condition. In some instances cross- sectional surveys attempt to go further than just providing information on the frequency (or level) of the attribute of interest in the study rather than study the population by collecting information on the both the attribute of interest and potential risk factors (Levin, 2006). It is also possible to collect data on potential risk factors for condition such as socioeconomic status (Levin, 2006).

Cross- sectional surveys were also used in assessing practices, altitude, knowledge and beliefs of a population in relation to a particular health related event (Levin, 2006). The results from these studies normally do not only give an indication of the magnitude of the problem in a particular population at a particular point in time but also provide a basis for designing appropriate health measures example health education campaigns (Levin, 2006). Cross sectional studies are also carried out one time or over a short period of time and analysed and are usually conducted to estimate the prevalence of the outcomes of interest for a given population and commonly for the purpose of public health planning (Levin, 2006). Another reason for choosing this design was that data

can be collected on individual characteristics including exposure to risk factors alongside information about outcomes (Levin, 2006).

3.3 Study Area

The study was conducted in Mara region specifically in Musoma Municipality because the district is still having a high maternal mortality rate which makes it to be out of track to reach the national target of 2015.

Musoma District is among the seven local authorities of Mara Region, others are Bunda, Tarime, Rorya, Musoma rural, Butiama and Serengeti. Musoma Municipal is located to east of Mara region whereby the municipality is the headquarters of Mara Region. The Municipality covers 4910 km sq whereby about km sq 300 are covered by Lake Victoria water. However the Municipality comprises scattered hills located in the west and south. The municipality's landscape is also characterized by a beautiful peninsula and a bay. The district enjoys two rain seasons. Short rains fall in September - December and long rains in February – May. The average rainfall is between 900mm-1200mm (URT, 2010). The temperatures are warm and range from 24 centigrade and 32 centigrade (URT, 2013). Administratively the Municipality comprises 13wards and 57 hamlets (URT, 2013). The major ethnic groups living in Musoma Municipality includes Kwaya, while the minority groups are Jita, Kurya and Luo (URT, 2013). The population of the district by the year 2012 was 134,327 (URT, 2013).

Musoma Municipality is one of the districts which still have high maternal mortality in Tanzania. It is the second leading district where 257 women are dying due to maternal cases out of 100, 000 live births compared to Serengeti which accounts for 115 per 100,000 live birth and Musoma rural with 120 per 100,000 per live births (Warioba, 2007).

Also by looking on the indicators for maternal mortality such as Antenatal care, number of hospitals and health centres, number of skilled birth attendants and midwives and contraceptive use. With regard to maternal mortality indicators only 40 percent of pregnant women are attending Antenatal care, while number of hospitals are two, 36 health centres while dispensaries are 53 (Regional hospital report, 2012). Furthermore

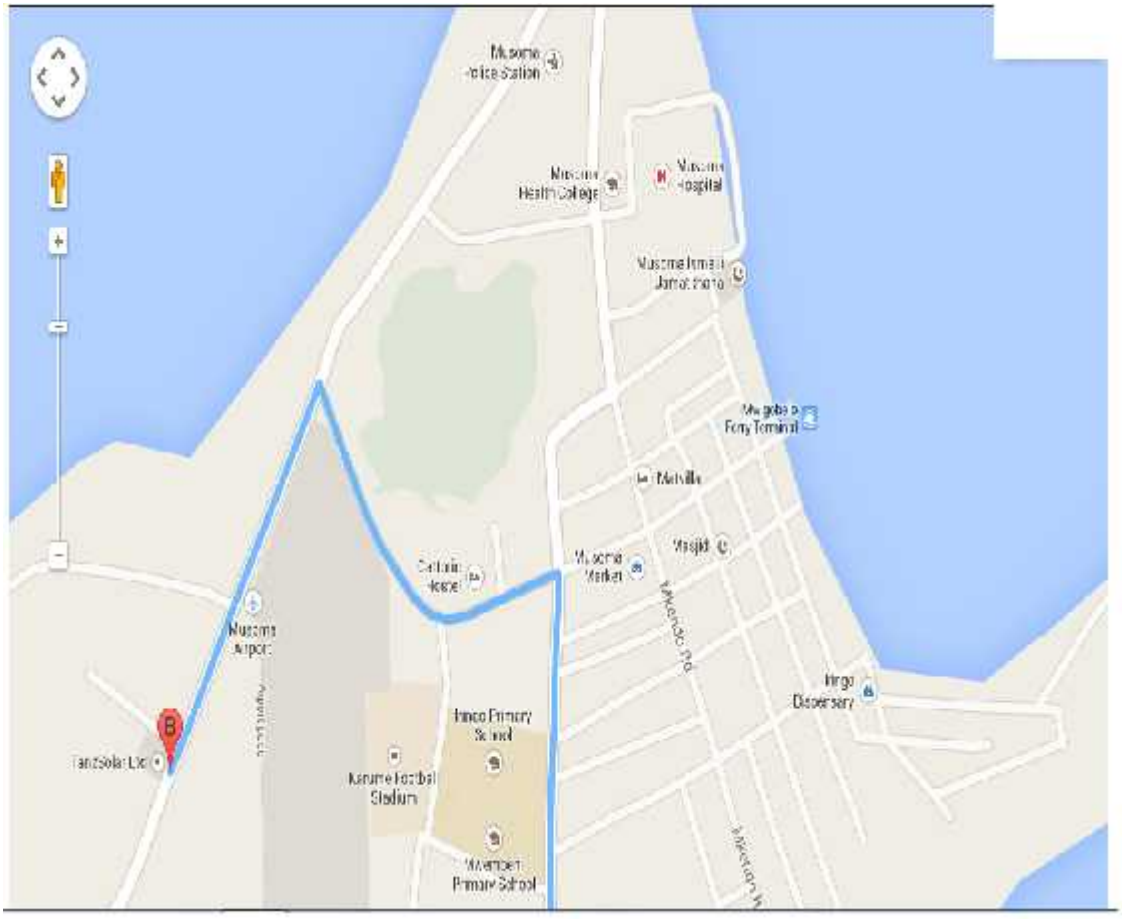
number of skilled birth attendants are 30 percent compared to 2 hospital, 40 health centre and 62 dispensaries in Serengeti (TDHS, 2010).

Another issue is the use of contraceptive is only five percent of people in reproductive age are trying to use contraceptive methods (Regional Hospital Annual Report, 2012). All these factors influenced the choice of Musoma municipality as a study the area.

Figure 3.1: Map of Musoma Municipality

Since it was difficult to get an official map, the study used Google Maps to show different places in study area.

The maps below show the areas of Musoma Municipality.



Source: Google Map (2012).

Figure 3.2: Represents different health service centres in Musoma Municipality

Source: Google Map (2012).

3.4 Target population, sample size and sampling techniques

The target population for this study comprised the community living in Musoma municipality and health workers of hospitals and health centres in Musoma municipality from Municipality, ward and street/village levels. In other words, the target population comprised women and men who were in reproductive age and health workers as key informants.

The sample included 65 respondents; 40 women, 10 men, and 15 maternal health provider (1reproductive and child health coordinator, 1District medical officer, 3 local government workers and the rest was midwife and doctors), which make a sample size of 65 respondents. This research sample was representative due to the following

reasons. Health workers and local government officials were involved in this study since they were the main implementers of all government strategies concerning reproductive health. Communities within Musoma municipality were potential respondents because they were directly and indirectly involved in reproductive health strategies. Representativeness was also ensured by obtaining 10% of the total population as a sample (Kothari, 2004).

Table 3.1: Composition of the sample

Category Respondents	**Frequency**
Women	40
Men	10
Maternal health provider	15
Total	**65**

Source: Field work (2013)

Sampling Techniques

The study used both random and purposive sampling since the reproductive health phenomenon is a cross-cutting issue involving different factors such as socio-economic, socio-demographic, cultural beliefs, health facility availability and accessibility and quality of services provided. Random sampling was used to get women and men in reproductive age while the purposive sampling was used to get maternal health providers.

3.5 Types of data

The study used both primary and secondary data. Primary data were collected by using questionnaires, interviews and observation. Secondary data were collected by reviewing office records and documentation concerning maternal health as well as publications on the subject.

3.6: Data collection methods, processing and analysis

Table 3.2: Summary of Data collection methods, processing and analysis

Research Question	Type of data	Source of data	Methods of data collection	Data processing techniques	Data analysis techniques
What are the factors for the persistence of high Maternal Mortality Rate?	Names of factors for persistence of maternal mortality rate.	Health workers dealing with reproductive health, Women and men of reproductive age and Annual district medical reports.	Questionnaires, interviews and documentary review	classification in groups, categories, themes,	content analysis, frequencies

Research question	Type of data	Source of data	Methods of data collection	Data processing techniques	Data analysis techniques
What is the quality of maternal care services in Musoma municipality	Selected indicators of quality	District reproductive and child coordinator, District medical officer, Women of reproductive age and Annual medical reports.	Interviews, observation and documentary reviews.	classification in groups, categories, themes,	content analysis, frequencies

Research question	Type of data	Source of data	Methods of data Collection	Data processing Techniques	Data analysis techniques
What is the awareness of the risk factors of maternal mortality?	Knowledge of maternal risk factors.	Women of reproductive age	Interviews and Questionnaires.	classification in groups, categories, themes,	content analysis, frequencies

Research question	Type of data	Source of data	Methods of data collection	Data processing techniques	Data analysis techniques
What is the education profile of personnel to staff maternal care services?	level of education and professional ranks	District reproductive and child coordinator, District medical officer and Annual medical reports.	Interview, questioner and documentary review	classification in groups, categories, themes,	content analysis, frequencies

Research question	Type of data	Source of data	Methods of data Collection	Data processing Techniques	data analysis techniques
What is the extent of freedom women have to seek, receive and impart information concerning health issues?	Extent of Women autonomy in decision making concerning reproductive health	Women and Men in reproductive age	Questionnaires and Interviews.	classification in groups, categories, themes,	content analysis, frequencies

Research question	Type of data	Source of data	Methods of data Collection	Data processing techniques	Data analysis technique
What factors limiting women to access reproductive health care?	Factors limiting women to access reproductive health care	Women and Men in reproductive age and health workers	Questionnaires and Interviews.	classification in groups, categories, themes,	content analysis, frequencies

Source: Researcher (2013)

This study employed four methods of data collection namely interviews, questionnaires, participant observation and documentary review. Interviews were used for illiterate respondents and for those, who were very busy and did not have time to fill questionnaires. Questionnaires were semi-structured in order to collect both quantitative and qualitative data. A checklist was used to capture data through

observation method. Maternal health documents were used to extract information about the trends and statistics on maternal mortality rate in the concerned area.

3.7 Reliability and Validity issues

Validity: A cording to Robinson (2002), Validity is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Validity in this study was ensured by objective questions included in the questionnaires and interview guide.

This was achieved by pre-testing of the research instrument to identify and change any ambiguous, awkward, or "offensive" questions and technique.

Also assistance from research supervisor and requested to comment on the representativeness and suitability of questions and provide suggestions of corrections to be made to the structure of the research instruments hence this helps student to have validity of the data that was collected.

Reliability: On the other hand refers to a measure of the degree to which research instruments yield consistent results (Mugenda & Mugenda, 2003).

In this study, reliability was ensured by pre-testing of the questionnaires guide and interview guide with a selected sample from community members living in the study area.

CHAPTER FOUR

THE FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the findings and discussion of the research. The study shows why despite all initiatives which have been put forward globally and nationally, the reduction of maternal mortality rate is still slow. Also the study reveals the successes and challenges faced by the *Mara Regional Strategic Plan for accelerated reduction of maternal and new born deaths 2013- 2016* in line with the Tanzania National Health Policy of 2003 .

The chapter is organised in accordance with the specific research questions and objectives. After the descriptive statistics, the chapter looks at the factors for the persistence of maternal mortality rate, then the quality of maternal care services provided in Musoma Municipality. Also respondent's awareness of maternal risk factors and the profile of maternal care service personnel will be discussed. Then the freedom of women to seek, receive and impart information concerning health issues will be presented and lastly factors limiting women to access reproductive health's will also be presented.

4.2: Descriptive statistics

The study was conducted in Musoma Municipality from December, 2013 to February, 2014 interviewing a total of 65 adult respondents in reproductive age. Women, men and health workers as key stake holders in maternal health participated in the study.

Table 4.1: Respondents by age, level of education and occupation

Parameters	Category			
		Women	**Men**	**Health worker**
		Number (%)	Number (%)	Number (%)
Age groups	18 – 28	17(42.5%)	2(20%)	3(20%)
	29- 39	17(42.5%)	2(20%)	6(40%)
	40 – 50	1(2.5%)	3(30%)	60(40%)
	50*	5(12.5%)	3(30%)	-
	Sub total	**40**	**10**	**15**
Level of education	Primary	28 (70%)	4 (40%)	3 (20%)
	Secondary	5 (12.5%)	3 (30%)	1 (6.6%)
	College	4 (10%)	1 (10%)	10 (66.8%)
	University	3 (7.5%)	2 (20%)	1 (6.6%)
	Sub total	**40**	**10**	**15**
Marital Status	Married	34 (85%)	9 (90%)	
	Widowed	1 (2.5%)	-	
	Divorced	5 (12.5%)	1 (10%)	
	Sub total	**40**	**10**	
Occupation	House wife	14 (35%)	-	
	Self- employed*	23 (57.5%)	4 (40%)	
	Civil Servant	3 (7.5%)	6 (60%)	
	Sub total	**40**	**10**	

Source: Survey data (2014)

*Self-employed used in the table comprises fishing, farming, pastoralist, petty trading, food vendors, small hand craft industries like sewing and embroidering.

Table 4.1 shows that the study involved respondents aged 18 years and above. The table shows that 22(34%) respondents were aged between 18– 28 years, while 25(38.7%) respondents were aged between 29- 39 years, 10(15.3%) respondents were aged between 40-50 years and the rest 8(12%) respondents were aged above 50 years. These results suggest that most of the respondents involved were adults in reproductive age. Furthermore the results show that the majority of the respondents were aged between 18- 40 which according to scientific evidence are still in reproductive stage (HBS, 2010). According to the Tanzania Demographic Household Budget Survey high fertility rate happens in the age of 20- 39 while low fertility rate happens between 40-49 years. Awareness campaign about maternal health should focus on these age groups of women and men.

Also Table 4.1 shows that 35(53.8 %) respondents had primary education, while 9(13.8%) respondents had secondary school education, while 15(23.1%) respondents had college level, and the rest, 6(9.2%) had university education. These results show that the study involved respondents who were literate, capable of thinking and making correct judgement regarding their health status. A study conducted in Nepal found that the higher the level of education among women and men expecting new-borns the more likely it was for them to seek delivery assistance at a health facility or at home with professional assistance (Anujajayaraman & Chandrasekhar, 2008).

Furthermore Table 4.1 shows that 34(85%) women respondents were married, 5(12.5%) respondents were divorced and 1(2.5%) respondent was a widow. Table 4.1 shows also that 9(90%) male respondents were married and 1(10%) was divorced.

Table 4.1 also shows that 14(35%) women respondents were housewives, 23(57%) women were self-employed and only 3(7.5%) were civil servants. As for men, Table 4.1 shows that 6(60%) were employed by private or governmental organizations while the remaining 4(40%) reported to be self-employed. It was observed that the majority of respondents, both male and female, who reported to be self-employed, were small scale farmers, pastoralists and fishers. Yet others were food vendors, tailors, embroiders and petty traders. These results suggest that the majority of the respondents were coming from low income class. This implies that they could not manage hospital expenses when they are high. Gwamaka (2012) also noted that occupation of mother or father is among the determinant of safe delivery in the sense that women who working and earning money may save and decide to spent it on facility for delivery. Furthermore Addai pointed out that farming women are less likely to have skilled attendance at delivery than women in other occupation (Addai, 2000). Also WHO et al, (2014), on trend of maternal mortality rate in countries noted that the halved improvement in Bangladesh was influenced by improvement of standard of living, education levels, socio- economic status and avoiding unnecessary pregnancy.

Therefore to reduce maternal mortality in Musoma municipality we should focus also in empowering women to have a secure income and maternal health education should

be cheap. Furthermore, the municipality should encourage husbands to attend clinics to receive maternal health education so that they can be able to support and taking care of their pregnant women.

4.3. Factors for the persistence of high maternal mortality rate

The first research question was: What are the factors for the persistence of high maternal mortality rate in Musoma municipality? The factors were explored in two dimensions namely utilization of health facility and ANC, and accessibility and availability of reproductive services.

4.3.1 Utilization of health facility and ANC

In this sub-section the study examines women attendance at ANC since it is believed that safe delivery is influenced by good attendance at antenatal clinics (ANC) and utilization of health facility.

Table 4.2: Attendance at ANCs

Number of visits to ANC	2	3	4	5	6	7	8
Frequency	2(5%)	17(42.5%)	8(20%)	8(20%)	1(2.5%)	3(7.5%)	1(2.5%)

Source: Survey data (2014)

Table 4.2 shows that 42.5% of the women said they attended ANC 3 times, while 8 (20%) respondents attended 4 times, 8(20%) 5 times, 1(2.5%) 6 times, 3(7.5%) 7 times and 1(2.5%) 8 times, while 2(5%) attended 2 times during their pregnancy. These results suggest that 100% of the women attended ANC at least twice when pregnant. These results are not consistent with those by NBS (2011) and Mrisho, (2007) who reported that in Mara region 88% of women visit ANC at least once in their pregnancy. The results also show that the majority of women attended ANCs less than four times as recommended by WHO (WHO, 2010). Similarly in Tanzania women are advised to visit ANCs 3 to 4 times when pregnant (URT, 2002), (NHP, 2003). Antenatal care promotes birth preparedness, use of skilled birth attendants as well as health behaviour such as early initiation to breast feeding and early postnatal care (NBS, 2011).

When health workers were asked about this low attendance at ANCs, they confirmed the findings. They also added that non-attendance made women to lack important information provided during ANC visits. The information relates to the development of healthy pregnancy and safe delivery. Also according to them ANC can influence safe delivery. This is consistent to what was documented by Yanagisiwa et al, (2006) that ANC is a positive determinant of health facility delivery especially for women who attend four times or more. In this regard, ANC attendance and utilization can influence the reduction of maternal mortality rate in the study area. This is in line with UNFPA's (1994) assertion that slow progress in reducing maternal mortality rate in developing countries has been attributed partly to poor utilization of services even when they are available.

4.3.2: Accessibility and availability of reproductive services

In this subsection the study examines the accessibility and availability of reproductive services at health facilities in the study area.

Table 4.3: Distance to the nearest health facility

Distance to the nearest maternal care centre	**Frequency**
0-1 kilometre	30(60%)
2- 3 kilometres	14(28%)
More than 4 kilometres	6(12%)
Total	**50(100%)**

Source: Survey data (2014)

Table 4.3 shows that 30(60%) respondents walked 0 - 1 kilometre to a health centre and 14(28%) walked 2-3 kilometres to reach a health centre, while 6(12%) respondents walked more than 4 kilometres to the nearest health centre with reproductive health services. These results shows that still there are women who fail to access the health due to long distance to reach a heath facility. These results are similar to those by Gwamaka (2012) in Nkasi district where 29.6% of women walk more than five kilometres to and from health facilities. It is important to note that Wangle et al, (2004) pointed out that women living more than one hour away from health facility are eight times less likely to use health facility due to distance.

Furthermore when women were asked to explain why they did not visit health facilities they replied that health facilities were located far from their homes. They also said that they could not afford transport expenses. Others went further to say that *"most of nearby health facilities do not provide services at night so it becomes challenging to us to access the services since onset of labour is unpredictable*". These findings are in line with what is documented by Keneth & Downe (2013) that pregnant women in sub-Saharan Africa fail to attend health facilities due to distance which they are supposed to work to reach the health facilities. In the same vein, Bicego et al, (1995) documented that most women deliver at home due to long distance to reach a health facility.

In summary the accessibility and availability of health facilities can be among the factors which can reduce maternal mortality in Musoma Municipality as the results suggest that still the there is a large number of women who walk long distances to reach health facilities which made accessibility to be challenging to them thus reducing maternal mortality still a challenge. Therefore in order for the plan of maternal mortality reduction to be successful the government should make sure that health facilities are within easy reach. Bangladesh succeeded to have massive decline in the maternal mortality rate by ensuring the availability of health facilities around the country (WHO, 2014).

4.4 Quality of maternal care services in Musoma municipality

The second research question was: what is the quality of maternal care services provided in Musoma Municipality? The study aimed at finding out if the quality of the services influenced women's decision to attend the health facility and why.

Parameters used to evaluate the quality of services include availability of equipments, quality of maternal care provided, reasons limiting women to access reproductive health services and health workers working environment.

4.4.1 Availability of equipments in health facility attended

In this subsection, the study aimed at examining available equipment in health facilities attended.

Table 4.4: Status of equipments in attended health facilities by women

Equipment in health facility attended	Frequency
Well equipped	27(67.5%)
Not well equipped	13(32.5%)
Total	**40(100)**

Source: Survey data (2014)

Table 4.4 shows that 27(67.5%) respondents reported that maternal health section was well equipped while 13(32.5%) respondents reported that health facilities were not well equipped. These results suggest that the quality of services provided in most health facilities were good since they had equipments. This is not consistent to the health workers who claimed that health facilities are not well equipped and most of equipments are outdated.

Table 4.5: Status of health facility by health workers

Status of health facilities	Frequency
Well equipped	3(20%)
Not well equipped	12(80%)
Total	**15(100)**

Source: Survey data (2014)

Table 4.5 shows that majority of health workers which accounts for 12(80%) the health facilities are not well equipped, while 3(20%) said that the health facilities are well equipped. These results suggest that most of health facilities are not well equipped and that is why women do not have the plan to visit the health facilities when they are pregnant. This is consistent to what noted by Gwamaka, (2012) in his study at Nkasi district whereby 62.5% of women were not satisfied with the service at health facilities due to shortage of medical equipments, drugs and supplies. Also study done by Mrisho in southern Tanzania documented that some women ended up delivering at home due to inadequate essential drugs and supplies in public health facilities (Mrisho, 2007). Furthermore study done in Uganda pointed out that inadequate drugs, medical equipments and supplies hinders health facility use (Kyomuhendo, 2003).

In summary having a good policy and efforts/ strategies without medical equipment, drugs and supplies cannot reduce maternal mortality so the government should make sure the health facilities are occupied with necessary equipments which can influence the use of health facilities and reduce the problem.

4.4.2 Quality of maternal services provided

Table 4.6: Quality of maternal care provided

Quality of maternal care provided	**Frequency**
Good	6(15%)
Bad	4(10%)
Moderate	30(75%)
Total	**40(100)**

Source: Survey data (2014)

*Good represents availability of all necessary equipments, good customer care service, service is provided for free and thorough checking.

*moderate represents lack of necessary equipments, payments of some services provided and no thorough checking.

*Bad represents absence of necessary equipments, lack of customer care (provoking words used), lack of beds in maternal room and limited time in provision of services.

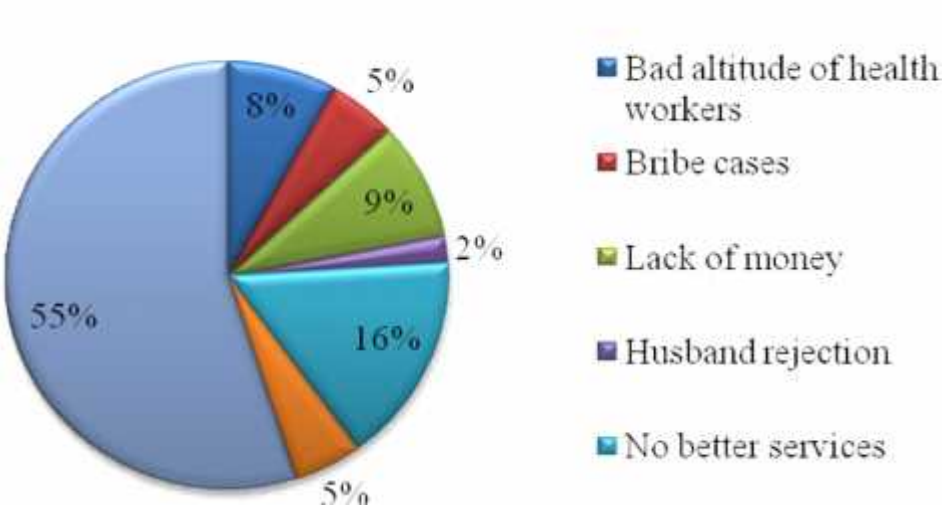
Table 4.6 shows that 30(75%) respondents reported that the quality of the services at the health facility attended was moderate, while 6(15%) said it was good and only 4(10%) said it was bad. These results suggest that maternal care services provided in the health facilities were satisfactory and should have influenced the people to access them which in turn should reduce maternal mortality rate. This is relating to what pointed out by Gwamaka (2012) that some women were not satisfied with service provided in health facilities.

In summary, quality of maternal care service at the health centre is a major factor that affects maternal health directly in the sense that it can influence the accessibility.

4.4.3: Reasons for not accessing reproductive health services by women

In this subsection the study presents the reasons which made women not to go to health facilities.

Figure 4.1: Reason for not accessing reproductive health



Source: Survey data (2014)

Figure 4.1 shows that 22 (55%) women did not have any reason for not accessing reproductive health services, 3 (8%) experienced problems associated with bad attitudes of health workers, 2 (5%) reported bribery as a cause, while 4 (9%) said they lacked money, At the same time, 1 (2%) respondent never accessed health services due to husband's rejection while 6(16%) reported lack of better services, and the remaining 2(5%) said transport service was the cause. With regard to these findings the information found from the interviews on why some women do not have any reasons to not access the services indicates that some of respondents engage themselves in different activities which help them in income generating, this may justifies why other respondents do not have any reasons not to access the health facility.

These findings suggest that the most of women encounter various challenges which prevented them from going to health facilities during the reproduction process. When women were asked to elaborate about health workers' bad attitude they replied that

some of the health workers used provocative words and never admitted their shortcomings. One woman said *"I stopped going to the hospital for ANC services because wherever I went to the hospital the nurses tended to provoke me"*. This is consistence to what documented by Mrisho et al, (2007): Magoma, (2010) and Zulfiqur et al, (2009). Other women complained that health workers were more after money than offering services.

Generally, quality of services in some health facilities and other challenges which women face denied most of the pregnant women to access reproductive health services when needed. This is consistent with what noted by Keneth & Downe (2013) on why women are not using the health facilities in most of Sub- Saharan Africa. According to him most of women complain on availability of resources to the health facilities visited "*one woman reported that I do not attend health facility because it does not have enough medical equipment and when we have problems they normally refer us to referral hospitals"*.

Also according to Gwamaka (2012) factors which can hinder women access of health facility skilled human resources, drugs, medical equipments negative attitude of health workers, lack of privacy and long waiting time. Furthermore the study done in Uganda noted that despite of good health policy women do not use health facility due to inadequate drugs, medical equipments and supplies(Kyomuhendo, 2003).

In summary women face different challenges which cause them not to be able to access health facilities and due to that reducing maternal mortality rate become challenging subject if these challenges cannot be reduced or eradicated completely.

4.4.4 Bribes in maternal care services

The study examined the prevalence of bribes in health services in the study area.

Table 4.7: Bribes in maternal care services

Ever given a bribe?	Frequency
Yes	32(80%)
No	8(20%)
Total	40(100%)

Source: Survey data (2014)

Table 4.7 shows that 32(80%) of interviewees gave bribes to health workers in order to receive good maternal services, while only 8(20%) said they had never offered bribes so as to be attended. This is similar to what found by Mrisho in his qualitative study " *one women during group discussion said that I heard in the radio that delivery service are free of charge but when I went to the health facility I was asked some money in order to get the service"* (Mrisho, 2007).

These results suggest that bribe cases were one of the factors hindering provision of quality services thus reducing maternal mortality become challenging.

4.4.5: Health workers' working environment

In this subsection the study makes an assessment of the working environment of health workers.

Table 4.8: Health workers' working environment

Status of working environment	Frequency
Insufficient staffs	8(53%)
Poor facilities	5(35%)
No staff motivation	2(12%)
Total	**15(100%)**

Source: Survey data (2014)

Table 4.8 shows that 8(53%) health workers said that the number of staff was insufficient, 5(35%) respondents reported that working facilities were poor, while 2(12%) reported of lack of motivations. These findings suggest that although health facilities in the study area had qualified personnel, their numbers were outweighed by the number of patients. The findings also suggest that health workers morale could be low due lack of incentives by government. This is because health workers had to attend

more patients than the standard number. This similar to what noted by Gwamaka (2012) that human resource for health facility is still challenging in Tanzania where by only 35% of required health workers are in place with deficit of 65% of health staff.

Data from interviews showed that there was an "*influx of patients in maternal wards but the number of beds remained the same thereby leading to sharing of one bed by more than two mothers with their infants"*. This situation made some women not to plan to give birth at hospitals or health facilities. This finding is consistent with what was noted by Hamson (2013) that due to lack of medical equipment in health facilities attended women found themselves not having plans to go back. Furthermore Shankwaya documented that some of women in Zambia would not deliver in health facility because of shortage of staff (Shankwaya, 2008).

In summary the findings suggest that the quality of services provided was moderate with high prevalence of bribery, lack of equipments and the number of qualified personnel. This situation made some of the women not to go to health facilities for reproductive health services thereby making the reduction of maternal mortality to be slow.

4.5 Respondents' awareness of issues concerning maternal health

The third research question was about the respondents' awareness of maternal health. The purpose was to explore the knowledge respondents had about maternal health. The awareness was examined through understanding of the meaning, and factors for maternal death.

4.5.1: Meaning of maternal death

Table 4.9: Respondents' understanding of the meaning of maternal death

Maternal death meaning	**Women frequency**	**Men frequency**
Death during pregnancy or delivery	1(2.5%)	2(20.0%)
Death of women while pregnant	6(15.0%)	-
Death during delivery	9(22.5%)	2(20.0%)
Don't know	24(60.0%)	6(60.0%)
Total	**40 (100.0)**	**10(100.0)**

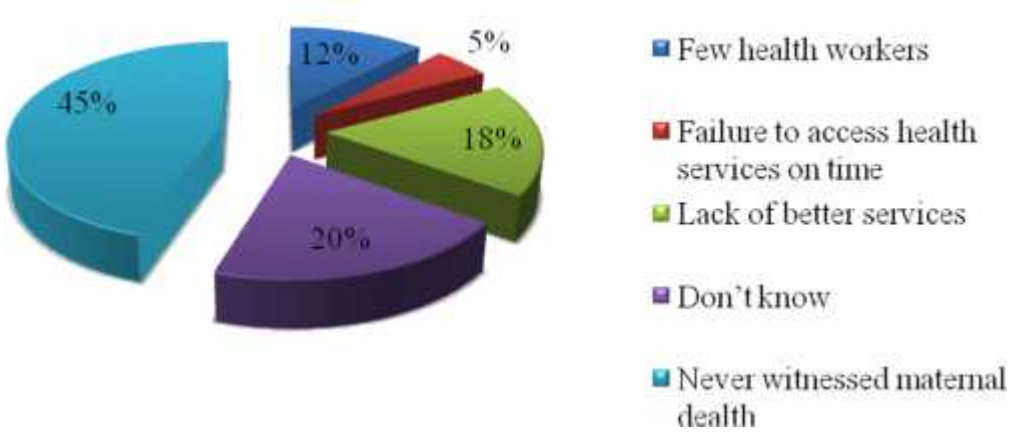
Source: Survey data (2014)

Table 4.10 shows that 24(60%) women respondents did not know the meaning, 9(22.5%) defined it as death during delivery, 6(15%) said it is death of women while pregnant and the rest 1(2.5%) said is death during pregnancy or delivery. As for men 6(60%) did not know the meaning, while 2(20%) defined it as death during delivery and the rest 2(20%) said it is death during pregnancy or delivery. These results suggest that the majority (60%) of respondents were not aware of what maternal death means. This finding implies that the knowledge of maternal issues was still low among the community. Being ignorant of maternal death, men and women generally tend to explain deaths of pregnant women, infants or both by factors associated with traditional beliefs mainly witchcraft (Survey data, 2014). Lack of consensus about how to define maternal mortality hinders efforts to understand and address the problem (Goodrum, 2001).

4.5.2: Factors for maternal deaths according to women and men respondents

Respondents were asked about the causes of maternal deaths.

Figure 4.2: Identified causes of maternal deaths



Source: Survey data (2014)

Figure 4.2 shows that 22(45%) said that they had never witnessed the matter so they did not know if it existed, 10(20%) respondents lacked specific reason to its occurrence and 6(12%) said maternal death tends to occur due to few health workers, 9(18%)

respondents said lack of better services, while 3(5%) said maternal deaths were said to occur as a result of failure to access health service. These findings suggest that most of the respondents were not aware of maternal deaths. These results imply that there is still a need of sensitization about maternal health knowledge to the concerning community if the government wants to reduce maternal mortality as also pointed out by Danso (2007) and Gwamaka (2012).

4.6 Awareness of maternal risk factors

The fourth research question was about the respondents' knowledge on risk factors for the occurrence of maternal mortality.

4.6.1: Awareness of factors for to maternal death

Table 4.10 presents factors contributing to maternal death according to women respondents.

Table 4.10: Factors for maternal mortality by women respondents

Factors for maternal mortality	**Frequency**
Lack of medical care	12 (30%)
Absence of transport services	4 (10.0%)
Don't know	16 (40.0%)
Poor belief	1 (2.5%)
Poor nutrition to expecting mothers	2 (5.0%)
Poor services	5 (12.5%)
Total	**40 (100.0%)**

Source: Survey data (2014)

Table 4.10 shows that 12(30%) respondents said lack of medical care was a factor, 4(10%) mentioned absence of transport services, 16(40%) said they did not know the factors, 1(2.5%)mentioned poor belief while 2(5%) said poor nutrition to expecting mother and the remaining 5(12.5%) said poor health services. These results suggest that knowledge of maternal death among women was still low due to the fact that they mentioned socio- economic factors which are just contribution factors to the main factors. These results are similar to what was noted by Keneth & Downe (2013). All

these factors are restricting women from going to health facilities to get reproduction health services.

As for health workers Table 4.10 shows their replies to the main causes of maternal mortality.

Table 4.11: Maternal risk factors causing death by health workers

Risk factors causing death	**Frequency**
Anaemia, pregnancy induced hypertension. sepsis, PPH	3 (20.0%)
Anaemia, hypertension, sepsis, home delivery	1 (6.7%)
Anemia.APH, PHH	2 (13.3%)
APH,PPH,PIH, eclampsia and ruptured uterus	4 (26.7%)
PPH, Home delivery	1 (6.7%)
PPH, delay of referrals	1 (6.7%)
PPH, delay to attend antenatal clinic	3 (20.0%)
Total	**15 (100.0%)**

Source: Survey data (2014)

Table 4.11 shows that 3(20%) health workers respondents said risk factors to be Anaemia, pregnancy induced hypertension, sepsis and PPH, 1(6.7%) said Anaemia, hypertension, sepsis, home delivery, 2(13.3%) said Anaemia, APH, PHH, 4(26.7%) reported on APH, PPH, PIH, eclampsia and ruptured uterus , while 1(6.7%) replied PPH, Home delivery, and 1(6.7%) reported on PPH, delay of referrals and the remaining 3(20%) mentioned PPH, delay to attend antenatal clinic.

Comparing the results from women in reproductive age and those from health workers, it appears that pregnant women in the study area do not die from health related factors only but also from others factors such as those mentioned by health workers. These findings, therefore, show that there are no universal factors for maternal death. Instead, they vary depending on the person, place and situation as asserted by AbouZahr (2003).

Overall, the findings suggest that the respondents' knowledge on the factors for maternal mortality was low. This explains why reducing (high) maternal mortality rate in Musoma Municipality is a challenge.

4.7 Profile of personnel dealing with maternal care

The fifth research question was: What is the profile of personnel for maternal care services? The assessment was done by examining the qualifications to see if they were in line with what is stipulated in the National Health policy of 2003 and link them with factors for maternal death.

4.7.1 Health workers professional qualification

Health workers were asked about their professional qualifications.

Figure 4.3: The level of education of health workers

Source: Survey data (2014)

Figure 4.3 shows that 11(66.8%) health workers respondents had college education, while 1(6.6%) was a university graduates and the 3(20%) had primary education. With regard to cadres, the majority 9(60%) health workers said they were enrolled nurse midwife and 5(33.3%) were registered nurse midwife and the 1(6%) was a medical doctor.

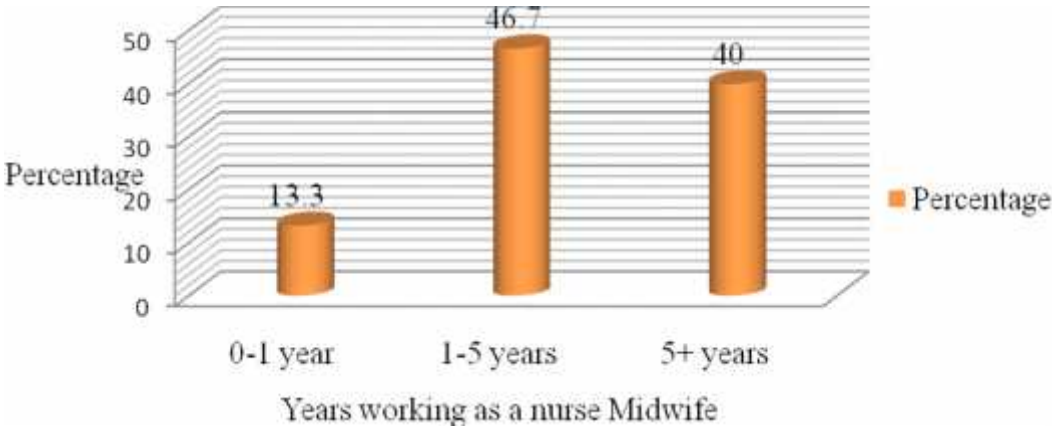
These results suggest that the sampled health workers were qualified. This implies that they were expected to provide good health services. This is similar to what noted by Gwamaka (2012) in adequate knowledge and skills for health workers on management of obstetric cases can be the barrier for utilization of health facilities. Study done by Shankwaya, (2008) found out that due to lack of knowledge health workers tend to

unnecessary refer pregnant mother to higher level because they do not know the use of pictogram which monitor the progress of labour and the women end up deliver normal this can cause a woman never come back to that facility due to unnecessary referral to other health facility.

4.7.2: Health workers' years of experience

Health workers were asked about their working experience.

Figure: 4.4: Health workers' years of experience



Source: Survey data (2014)

Figure 4.4 shows that 2(13.3%) health workers had 0 - 1 year of working experience, 7(46.7%) had 1-5 years of working experience, while 6(40%) had more than five years of working experience. These findings suggest that slightly more than three quarters of having health workers had a lot of experience dealing with maternal issues. However, the reduction of maternal mortality in the study area was still low. This implies that there are other factors which contribute to the persistence of the problem (Survey data, 2014).

4.7.3 Reasons for maternal deaths despite qualified and experienced personnel

Health workers as key informants were asked to explain why maternal deaths occurred despite the presence of qualified and experienced staff.

Table 4.12: Reasons for maternal deaths despite qualified and experienced personnel

Reasons for maternal deaths despite qualified and experienced personnel	Frequency
Delay to reach health facility	9 (60.0%)
Out of date facilities	5 (33.3%)
Postpartum Haemorrhage(PPH)	1 (6.7%)
Total	**15 (100.0%)**

Source: Survey data (2014)

Table 4.12 shows that 9(60%) health workers cited delay to reach health facility as a cause, 5(33.3%) replied that out of date facilities were a and 1(6.7%) said that PPH was a cause of maternal deaths despite qualified and experienced personnel. These findings suggest that having unqualified and inexperienced staffs cannot be the reason which causes maternal death to persist. According to health workers majority of women in the study area dies due to failure to reach to the health facility during labour onset. Similar to what pointed by URT, (2010) as Unwillingness of some women or families to attend ANC or to deliver in health facilities or with assistance from skilled birth attendant.

In summary the findings suggest that reducing maternal mortality rate in the area requires addressing multiple factors and not to focus on health worker qualifications and experience only. This is in line with what noted by Gwamaka (2012) that competent staff cannot use their skills without medical supplies and equipments.

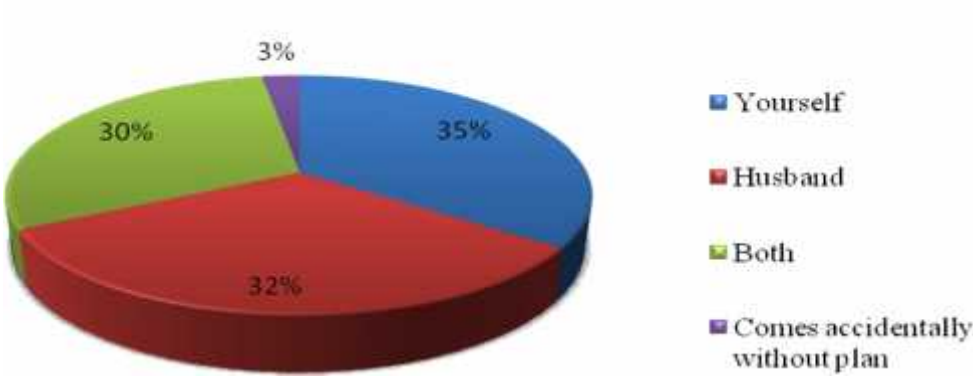
4.8 Women's freedom to seek and receive knowledge and factors limiting them to access reproductive health services

The sixth research question was: What is the extent of freedom women have to seek, receive information concerning health issues? The assessment was done by examining women's power in decision making on use of reproductive health services, men attending ANC with their wives and to review the application of the mission of the National Health Policy (2003). The health policy wants to ensure the provision of gender sensitive equitable, quality and affordable basic health services. Also the subsection went far and looks on factors which limit women to access reproductive services.

4.8.1 Women's decision making on the use of reproductive health services

Women were asked about their power concerning the decision to use reproductive health services. The answers are shown in Figure 4.5.

Figure 4.5: women's decisions making on the use of reproductive health services



Source: Survey data (2014)

Figure 4.5 shows that 14(35%) women respondents decided on their own to use reproductive health services, while 13(32%) did not have power to make such a decision (except their husband do you want to say husbands made such decisions? If so, put it directly), 12(30%) respondents said that decisions were made by both husbands and wives, while 1(3%) said that decision making by women was accidental, not planned. These results suggest that the majority of women did not possess the power of deciding on the use of reproductive health services. These results are in line with those by Kkabakyenga et al, (2012) that in Sub-Saharan countries men are generally decision makers regarding the place at which their spouses should go to get reproductive health services

4.8.2 Men attending ANC with their wives

Respondents were asked how common it was for men to attend ANC with their wives. The results presented in Table 4.12.

Table 4.13: Men attending ANC with their wives

How common men attend ANC with their wives	Frequency
By women respondents	
Not common	35(87.5%)
Common	5(12.5%)
Total	40(100)
By men respondents	
Not common	8(80.0%)
Common	2(20.0%)
Total	10(100)
By health workers	
Not common	12(80.0%)
Common	3(20.0%)
Total	15(100)

Source: Survey data (2014)

Table 4.13 shows that 35(87.5%) women respondents said that it was not common for men to attend ANC with their wives while 5(12.5%) said it was common for men to attend ANC. The table also shows that 8(80%) men respondents said it was not common for them to attend ANC while 2(20%) said it was common for them to attend ANC. Furthermore the table shows that 12(80%) health worker respondents said it was not common for men to attend ANC while 3(20%) health workers said it common for men to attend ANC. These results overwhelmingly suggest that it was not common for men to accompany their wives to ANCs. This implies that it becomes difficult for women to get support for family planning methods, pregnancy nurturing and care as well as to allow women to decide on where to deliver. These results are consistent with those by Singh et al, (2014).

When men were asked to explain why they never involved themselves in maternal health issues one of them replied by saying; "*this are women issues, what concerned me is to provide money only*". Another man said: "*according to our culture and responsibility as head of households we do not have time to deal with such matters*". These interview results are in line with those by Singh et al, (2014) in Uganda. Men in Uganda believed that issues related to pregnancy care and child birth were the domain

of women. Men's involvement tends to be confined to traditional gender roles as providers of funds.

In summary the findings suggest that still traditional beliefs hinder men not to support their wife during pregnancy. This implies that the reduction of maternal mortality rate is a challenge. Therefore women empowerment and men involvement in maternal issues is very important to reduce it as affirmed by the ICDP (1994). According to ICDP (1994) women empowerment in decision making and men's involvement in reproductive issues may impact on the reduction of maternal mortality rate.

4.8.3: Factors limiting women to access reproductive health services

The assessment was done by looking at payment for maternal health services and availability of transport.

4.8.3.1: Payment for maternal health services

In this subsection the study examines the application of the National Health Policy (2003) whose goal is the provision of affordable basic health services which are gender sensitive and free maternal health services to all. Respondents were asked if maternal health services were free of charge.

Table 4.14: Payment of maternal health services

Is maternal health service given for free	**Frequency**
Yes	14(35%)
No	26(65%)
Total	**40(100)**

Source: Survey data (2014)

Table 4.14 shows that 33(65%) respondents said maternal health services were not provided free of charge, while 17(35%) said maternal services were provided for free. These findings show that the majority of health facilities charged for maternal health services contrary to the provisions of the National Health Policy (2003).

When women were interviewed about being charged for maternal services, the majority of women which accounts for 65% did not know if they were not supposed to pay for

maternal services. Furthermore, they added that even if the services were free, they were required to have their own materials (labour gears) for delivery when going to deliver. These interview data are similar to what was noted by Keneth & Downe (2013) that for countries which offer free ANC services, the unanticipated cost of paying for drugs, tests and medical cards was viewed as restricting factors for women access to ANC services.

4.8.3.2: Why maternal care services are said not to be free

Respondents were asked why maternal health services are said to be not free.

Figure 4.6: Why maternal health service is not free

Source: Survey data (2014)

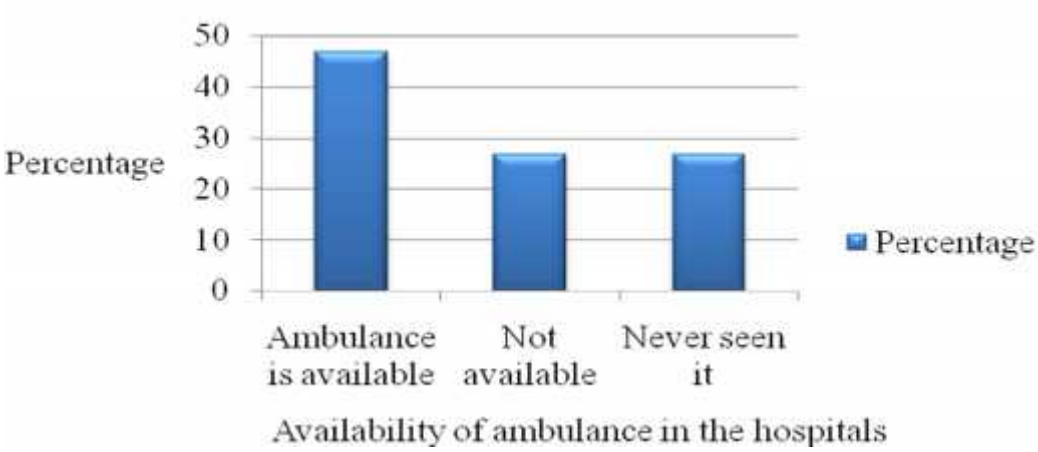
Figure 4.6 shows that 1(2.5%) respondent said she had to give a bribe to the nurses to get maternal health services, 4(10%) said they bought labour gears for delivery, 23(58%) said they paid cash in order to receive good services, while 11(27.5%) respondents reported to have received free maternal health services, and only 1(2.5%) respondent never attended health facility. These results show that pregnant women felt that the so-called free maternal care services were indeed not free and contrary to the national policy which provides for free services (URT, 2003). These results are in line with what documented by Mrisho (2007) that "*one woman during group discussion said that I heard in the radio that the maternal services are free of charge but when I went to deliver at health facility (X) I was asked to buy everything*". Also this similar to

assertion by Keneth & Downe (2013) that both direct and indirect cost is a significant restriction to women's access to services.

4.8.3.3: Availability of transport facility at health facilities

Respondents were asked about the availability of transport in health facilities.

Figure 4.7: Provision transport services in health facilities.



Source: Survey data (2014)

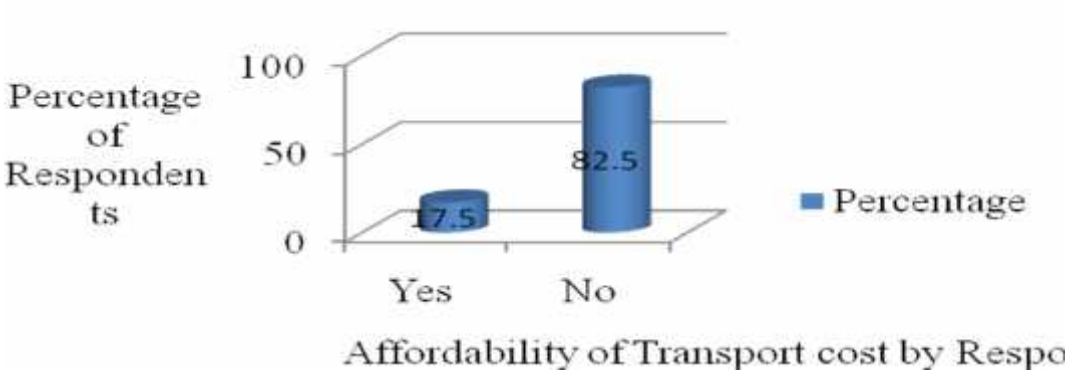
Figure 4.7 shows that more than 8(53.4 %) interviewed health workers respondents confirmed that health facilities did not have emergency transport for patients when needed and 7(46.7%) respondents replied that there was a hospital ambulance for emergencies but patients were supposed to contribute for fuel**.** T hese results show that the health facilities lacked transport for their patients. In case the health centres had transport, patients were required to contribute in terms of fuel. In this regard, data from interviews show that 28(70%) respondents were required to pay for the ambulance while 12(30%) said they were provided with transport services without charge. This reality and practice discouraged women from going to health centres to deliver as pointed out by one woman interviewee who said: *"I don't visit the health centre for maternal service because the health centre is not well equipped. When complications occur they refer us to referral hospital and I cannot afford the cost".*

These findings are similar to what was documented by Keneth & Downe (2013) that most women fail to attend health facilities because of indirect costs such as transport cost. Also Bolam et al, (1998) and Bicego et al, (1995) documented that women who planned to deliver in health facility end up deliver at home due to lack of transport.

4.8.4 Affordability of transport cost to health facilities

Women were asked if they could afford to pay for transport to deliver

Figure 4.8: Affordability of transport cost



Source: Survey data (2014)

Figure 4.8 shows that 33(82.5%) women replied that they could not afford, while 7(17.5%) said they could afford to pay transport expenses to a referral hospital or to any other hospital for better health services. This is consistence to what documented by (Gwamaka, 2012: Mrisho et al, 2008; Magoma, 2010; WHO, 2007; TDHs, 2010 and Bolam et al, 1998) that women fail to attend in health facility due to not affording transportation cost.

Generally URT (2010) mentions the challenge which they face in reducing the matter are weak health system which is includes emergency transport gap, facility location, capacity and equipment and staff quality, quantity and attitude.

In summary the study find out that reducing maternal mortality rate and implication of National Health policy of 2003 still encounter different challenges despite of the factors for maternal death to be known thus is why its reduction become slow till know,

therefore efforts should be done to tackle the challenges so that to be able to pave the way to smooth reduction of maternal mortality rate in the concerned area and national in the general.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

5.1 Summary and conclusions

The main objective of the study was to find out the challenges encountered in reducing maternal mortality rate in Musoma Municipality, Tanzania in line with National Health policy of 2003, despite many initiatives in place to address the problem. The specific objectives were to identify factors for the persistence of high maternal mortality rate in Musoma Municipality, to assess the quality of maternal care in Musoma Municipality, to determine pregnant mothers' awareness of risk factors for maternal mortality, to assess the profile of personnel at maternal care services, to explore the freedom of women to seek, receive and impart information concerning health issues, to find out factors limiting women from accessing reproductive health care services.

Also this study was guided by gender equity theory, demographic transition theory and attribution theory. Theoretical and empirical literatures were extensively done where key concepts such as maternal health, maternal mortality, maternal mortality rate, maternal mortality ratio, haemorrhage, postpartum haemorrhage and postpartum care were defined.

The study was conducted in Musoma Municipality. In order to understand the phenomenon, cross-sectional study design was employed because it aim at determining the frequency (or level) of a particular attribute such as specific exposure, disease or any other health related event in defined population at a particular point in time e.g. maternal mortality. Furthermore the design is also useful in assessing practices, attitude, knowledge and beliefs of a population in relation to a particular health related event. Random and purposeful sampling techniques were used. The sample comprised 65 respondents from main stakeholders of maternal health, 40 respondents being women, 10 being men and 15 respondents being health workers (key informants).Both primary and secondary data were collected. Data collection was done using questionnaires, structured interview, observation and documentary review. The

collected data where electronically entered, cleaned, processed and analysed using SPSS version 11.0. Operationalisation of variables was done to show how the selected variables were measured.

The study found out that health facilities in Musoma municipality, do face a lot of challenges such as old unrepaired equipments, low number of professional health workers, lack of medicine and drugs, high patient influx compared to low number of health workers, low quality health service and poor working environment. Additionally, it was also revealed that there are several factors which prevent women from going to health facilities. The factors include costs (direct or indirect), health workers' attitudes, lack of transport facility, men's refusal to support women, lack of awareness concerning reproductive health issues and distance to health facility. All these factors exist despite maternal health services being free.

Furthermore, the study found that most health facilities did not provide services at night despite the fact that the onset of labour is unpredictable. In the same vein, it was found that most health facilities did not have inpatient services, which are wards. The study also found that women's decision to attend and utilise reproductive health services was low. It also found that there was low involvement of men (husbands) in maternal matters and decisions.

Furthermore, the study found that, poor understanding of maternal health among men and women respondents was a major factor for persistence of maternal mortality. This is led by poor participation of men in maternal health including ANC. There is significant relationship between ANC attendances with birth preparedness.

It was found out that health workers' working environment was poor and hard in most health facilities. This was partly due to poor ratio between patients' influx and the number of health workers. At the same time, it was revealed that the majority of health workers have bad attitude and were corrupt.

The study found that delay to attend ANC, lack of transport, delay of referral and delay of pregnant women to go to health centres for delivery as well as low knowledge

concerning reproductive health in the community were main causes of maternal mortality.

5.2. Policy implications

From the findings and conclusions we have noted that reduction of maternal mortality rate should not only be regarded as an issue of improving health facilities like construction of maternity wards, and hiring of more health workers but other factors discussed should be brought on board. More focus is needed on evidence based platform for reducing maternal mortality rate in Musoma Municipality and the Ministry of Health and Social Welfare as the overall policy formulation organ.

Due to low literacy rates prevailing in the district, there is a need of developing reproductive health programme that lead to closer and more community involvement with the health workers in order to sensitize the community and give correct information and messages to guide women in decision making processes.

Also public awareness campaign on maternal health including risk factors that lead to maternal mortality should be given a priority. Furthermore outdoor campaigns are highly needed to increase community awareness on direct factors that contribute to maternal death. The government through its local administration should encourage and make sure there is conducive environment for women to attend ANC and deliver at the established health facility or at home with professional assistances.

I was found that some women did not attend ANC at health centre for check up due to limited financial resources. Women with many children increase their chances of floating in the vicious cycle of poverty. Therefore family planning methods should be done and widely rather than at health centres only through various appropriate media.

Furthermore and more importantly is for Tanzania government to improve working environment of health workers, and motivate them whenever necessary and have a strict code of conduct for health workers as their effect has direct relation to people's lives.

Relevant organs in the health sector should prepare periodic training related to customer/ patient care, code of conduct, and hygiene and sanitation. In line with this efforts should be made to improve the image of health workers in the eyes of the public by initiating or programmes that continuously monitor health workers' professional conduct, with mechanisms to address identified inefficiencies.

The health information management system should be reviewed and revised in order to capture data from private health service providers. This would give a true picture of service delivery and strengthen public-private partnership.

5.3: Areas for further study

The findings of this study raise the need for further study in order for Tanzania to be in track of MDG five expectations. In this regard the following areas are recommended for further study

- A study shows that most of health workers are unethical and unprofessional. In this respect a study should be conducted to explore the causes of unethical and unprofessional behaviours of trained health workers in public health facilities, in order to get appropriate ways and means of effectively dealing with these unethical and unprofessional behaviours.
- The study has shown the limited involvement of men in reproductive health programme. In this respect a study is needed to explore the reasons why men do not want to be involved in reproductive health programme.
- Furthermore the study shows that the implementation of the National Health Policy of 2003 is still low so there is a need to conduct a research on reasons for its impediment.

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APPENDICES

APPENDIX I:

QUESTIONNAERS FOR HEALTH WORKERS

AN ASSESSMENT OF THE CHALLENGES OF REDUCING MATERNAL MORTALITY RATE IN MUSOMA MUNICIPALITY, TANZANIA

By

Mariamu N. Juma

Masters Student from Institute of Development studies

Mzumbe University

Introduction

The purpose of this questionnaire is to collect data that will enable the researcher to find out the challenges faced by different officials on reducing maternal mortality rate despites many initiatives which have been in place to address the problem. The research is purely for academic purpose. You are selected to participate in this research due to the potential you have on providing the relevant information concerning the subject. Rest insured that the information which you will be given will be treated as confidential and will be used for the purpose of this study only. Moreover study report and publication will never reveals the names of respondents. Please kindly choose the letter of the statement that answer the question best, also provide the explanation to the space provided.

I request for your cooperation in order to make this study come up with intended out come.

A; respondent's profile

1. Age……..
2. Sex…….. F/M

3. Highest level of education

(a) Primary

(b) Secondary (O-Level) [ ]

(c) Secondary (A- Level)

(d) College

(e) University

(f) Other (Please specify)……

4. Highest level of midwifery Education

(a) Certificate

(b) Diploma [ ]

(c) Advanced Diploma

(d) Degree

(e) Other (Please specify)……

5. Profile (Please mark only one)

(a) Registered nurse-midwife

(b) Enrolled nurse midwife [ ]

(c) Other (Please specify)……

6. For how long have you been practicing Clinical midwifery?

Years…….

7. What is your current function?.....

B: Factors and status of maternal mortality

8. What are the risk factors for maternal death to occur?

.....

.....

9. Is it common for women to die during pregnancy or delivery in this hospital?

Yes/ No.....

If Yes/ No please give reasons.....

10. What is the status of maternal mortality rate in your work station/hospital?

High/ Low.....

If High/ Low accounts for how many? .....

11. Generally, from which social group are the women who give birth at this hospital?

a) High

b) Middle [ ]

c) Lower

C; Quality of maternal care services provided

12. Do you feel that there are enough labour facilities in this hospital?

Yes/ No.....

If Yes/No how many are available? .....

.....

13. Does this hospital have enough staff for the maternity section? Please explain your answer

Yes/ No.....

If Yes / No why?.....

.....

14. How do you experience the quality of maternal care in your work station?

a) Good

b) Bad [ ]

c) Moderate

d) Others (please specify)

15. How many women are attending antenatal clinics? .....

16. What factors which can influence a woman not to attend antenatal clinics?

a) Education level

b) Economic status

c) Perception of family members towards reproductive health

d) Behaviour and altitude of health workers

e) Others please specify.....

17. Do you conduct any awareness raising programmes concerning reproductive health?

Yes/ No.....

If Yes how many per year? .....

If No why? .....

THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX II :

QUESTIONNAERS FOR WOMEN

AN ASSESSMENT OF THE CHALLENGES OF REDUCING MATERNAL MORTALITY RATE IN MUSOMA MUNICIPALITY, TANZANIA

By

Mariamu N. Juma

Masters student from Institute of Development studies

Mzumbe University

Introduction

The purpose of this questionnaire is to collect data that will enable the researcher to find out the challenges faced by different officials on reducing maternal mortality rate despites many initiatives which have been in place to address the problem. The research is purely for academic purpose. You are selected to participate in this research due to the potential you have on providing the relevant information concerning the subject. Rest insured that the information which you will be given will be treated as confidential and will be used for the purpose of this study only. Moreover report and publication of this study will not reveals names of respondents. Please kindly choose the letter of the statement that answer the question best, also provide the explanation to the space provided.

I request your cooperation in order to make this study come up with intended out come.

A: Respondent's profile

1. How old are you? .....

2. Highest level of education

(a) Primary

(b) Secondary (O-Level) [ ]

(c) Secondary (A- Level)

(d) College

(e) University

3. What is your marital status?

a) Single

b) Married

c) Divorce

d) Widow

e) Separated

4. What is your occupation?

a) House wife

b) Peasant

c) Pastoralist

d) Self employed

e) Employed by Government

f) Other specify…….

5. What is your husband's Occupation?

a) Peasant

b) Pastoralist

c) Self employed

d) Employed by Government

e) Other specify ……

6. Who is the head of the house hold?

a) Yourself

b) Your husband

c) Other specify ……..

B: **Factors that can lead to occurrence of maternal mortality**

7. How many children did you give birth? ……

8. Where did you given birth? .....

9. Who decide on access to reproductive health?

a) Yourself

b) Your husband [ ]

c) Other specify……

10. Have you ever wanted to visit a medical facility but you were not able to do so?

Yes/ No.....

If yes please give reasons.....

11. Did you ever attend Antenatal clinic in your last pregnancy?

a) Yes [ ]

b) No (If no skip to question 8)

12. If yes, how many times did you attended in the last pregnancy? ……

If no, why?

a) I didn't see any importance of antenatal clinic

b) Long distance to health facility from home.

c) High cost of services. [ ]

d) Bad behaviour of health workers

e) Other specify …….

13. Where would you prefer to deliver (if you had money and time)?

Why at home / at the hospital?.....

14. Where did you deliver your last baby?

a) Own home

b) TBA's home [ ]

c) Health facility

d) Other specify …….

15. Was that the place you intended to deliver?

a) Yes (if yes skip to question number 14)

b) No

16. If no where did you intended to deliver?

a) Own home

b) TBA's home

c) Health facility

d) Other specify ……

17. What are the reasons that made you to deliver at the place you had delivered?

a) Lack of transport to health facility

b) Long distance to health facility

c) Sudden onset of labour [ ]

d) Bad behaviour of health workers

e) Poor belief to modern medicine

f) Other specify …….

18. Is there any maternal care centre nearer to the one you choose to go?

Yes/ No.....

If yes, why did you choose to go to that one (please give reasons).....

.....

C: Awareness to the risk factors contributing maternal mortality

19. Do you know factors contributing to maternal death?

Yes/ No.....

If yes what are they?.....

20. Do you have freedom to seek, receive and impart information concerning health issues? Yes/ No.....Please explain your answer.....

.....

21. Did you attend any awareness raising session concerning reproductive health?

.....

22. Is there any cultural constraint for you to access reproductive health services?

Yes/ No

If Yes what are they? .....

D: Quality of maternal care services provided

23. Did you encounter any problems while accessing reproductive health services?

Yes/ No.....

If yes please provide them.....

24. How do you experience the quality of maternal care in the hospital you attended?

a) Good

b) Bad [ ]

c) Moderate

d) Others specify.....

25. Have you notice any changes in the maternal health services between your first and last pregnancy?

Yes/ No .....

If yes please provide those changes.....

26. Have you ever had to pay or use bribes in order to get the maternal care services?

Yes/ No.....

27. Is it common for women to die during pregnancy or delivery in the place your living?

Yes/ No.....

If yes/ No (please provide reasons) .....

28. What is the distance to the nearest skilled maternal care centre? .....

THANK YOU FOR YOUR COOPERATION

APPENDIX: III

QUESTIONNAIRE MEN

AN ASSESSMENT OF THE CHALLENGES OF REDUCING MATERNAL MORTALITY RATE IN MUSOMA MUNICIPALITY, TANZANIA

By

Mariamu N. Juma

Masters student from Institute of Development studies

Mzumbe University

Introduction

The purpose of this questionnaire is to collect data that will enable the researcher to find out the challenges faced by different officials on reducing maternal mortality rate despites many initiatives which have been in place to address the problem. The research is purely for academic purpose. You are selected to participate in this research due to the potential you have on providing the relevant information concerning the subject. Rest insured that the information which you will be given will be treated as confidential and will be used for the purpose of this study only. Please kindly choose the letter of the statement that answer the question best, also provide the explanation to the space provided.

I request your cooperation in order to make this study come up with intended out come.

A: Respondent's profile

1. How old are you?.....

2. Highest level of education

(a) Primary

(b) Secondary (O-Level) [ ]

(c) Secondary (A- Level)

(d) College

(e) University

3. What is your marital status?

a) Single

b) Married

c) Divorce [ ]

d) Widow

e) Separated

4. What is your occupation?

a) Peasant

b) Pastoralist [ ]

c) Self employed

d) Employed by Government

e) Other specify……

5. What is your spouse's occupation? (If married)

a) Employed

b) Peasant/ farmer

c) Business woman [ ]

d) Retired

e) Others please specify.....

B: Factors that contribute to maternal mortality

6. Where do you prefer your wife to deliver?

a) Health facility

b) Home

c) TBA's home [ ]

d) Other specify.....

– What are the reasons?.....

7. Where did your last baby being delivered?

a) Own home

b) TBA's home [ ]

c) Health facility

d) Other specify …….

8. Was that the place you intended to be delivered?

a) Yes (if yes skip to question number 14)

b) No

9. If no where did you intended for him/ her to be delivered?

a) Own home

b) TBA's home

c) Health facility

d) Other specify ……

10. What are the reasons that made your spouse to deliver at the place she had delivered?

a) Lack of transport to health facility

b) Long distance to health facility

c) Sudden onset of labour [ ]

d) Bad behaviour of health workers

e) Poor belief to modern medicine

f) Other specify …….

11. Who decides on the use of reproductive health services?

a) You

b) Your wife

c) Both

d) Other specify .....

12. Do you attend clinics with your wife when she is pregnant?

Yes/ No

If Yes/ No why? .....

13. Have you ever wanted to visit a medical facility but you were not able to do so?

Yes/ No.....

If yes please give reasons.....

14. Is there any cultural constraint for you to access reproductive health services?

Yes/ No

If yes what are they? .....

15. What is the distance to the nearest skilled maternal care centre? .....

C: Quality of maternal care services provided

16. Is it common for women to die during pregnancy or delivery in the place your living?

Yes/ No.....

If yes/ No (please provide reasons).....

17. Have you ever had to pay or use bribes in order to get the maternal care services?

Yes/ No.....

18. How do you experience the quality of maternal care in the hospital you attended?

a) Good

b) Bad [ ]

c) Moderate

d) Others specify.....

13. Did you encounter any problems while accessing reproductive health services?

Yes/ No.....

If yes please provide them.....

D: Awareness on factors contributing maternal mortality

19. Do you know factors contributing to maternal death?

Yes/ No.....

If yes what are they? .....

20. Do you have freedom to seek, receive and impart information concerning health issues? Yes/ No.....Please explain your answer.....

.....

THANK YOU FOR YOUR COOPERATION