Analysis of Factors That Contribute to Utilization Of Health Facilities During Labour, Delivery and Postpartum Period in Zanzibar

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A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

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The thesis Analysis of factors that contribute to utilization of health facility during labour, delivery and postpartum period in Zanzibar.

Signature:

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ABBREVIATIONS

ADB	African Development Bank
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
BEmONC	Basic Emergency Obstetric Care
CEmONC	Comprehensive Emergency Obstetric Care
DANIDA	Danish Development International Agency
DHMT	District Health Management Team
EmONC	Emergency Obstetric Care
FBO	Faith Based Organizations
FCI	Family Care International
FP	Family Planning
GFATM	Global Funds for AIDS, TB and Malaria
GHI	Global Health Initiatives
HBS	Household Budget Survey
HIV	Human Immunodeficiency Virus
HSSP	Health Sector Strategic Plan
ICHD	International Course in Health Development
ICOMP	International Council of Management Population Program
KIT	Royal Tropical Institute
MDG	Millennium Development Goal
MOH	Ministry of Health
MoHSW	Ministry of Health and Social Welfare
NBS	National Bureau of Statistics

NGO	Non-Governmental Organization
PAC	Post Abortion Care
PHC	Primary Health Care
PHCC	Primary Health Care Centre
PHCU	Primary Health Care Unit
PNC	Post Natal Care
RCH	Reproductive and Child Health
RGoZ	Revolution Government of Zanzibar
SBA	Skilled Birth Attendant
TBAs	Traditional Birth Attendants
TDHS	Tanzania Demographic Health Survey
UN	United Nations
UNDP	United Nation Development Program
UNFPA	United Nation Population Fund
URT	United Republic of Tanzania
WHO	World Health Organization
WRA	Women of Reproductive Age
ZHSRSP	Zanzibar Health Sector Reform strategic Plan
ZPRP	Zanzibar Poverty Reduction Plan

DEFINITION OF TERMS

Maternal Mortality Ratio (MMR): is the number maternal death during a given time period per 100,000 live births during the same period (WHO, 2009).

Maternal Death (ICD- 10 definition): "is the death of women while pregnant or within 42 days of termination of pregnancy irrespective from the duration and the site of the pregnancy from any causes related to or aggravated by pregnancy or its management but not from accidental or incidental causes" (WHO, 2009).

Skilled care: "is a quality of care to the women during pregnancy, childbirth and postpartum period and her infant provided by a skilled personnel supported by an enabling environment (necessary equipment, supplies and medicines and infrastructure) and functional referral system" (WHO, 2012).

Skilled health worker/ Skilled Birth Attendant (SBA): "is an accredited health professional such as midwife, doctor or nurse who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postpartum period, and in the identification management and referral or complications in women and newborn" (WHO, 2008).

Traditional Birth attendant (TBA): "traditional, independent (of the health system), none formally trained and community based providers of care during pregnancy, childbirth and the postpartum period. TBAs either trained or not, is excluded from the category of skilled health workers" (WHO, 2004).

Opportunity cost: "is the value of the best alternative which is forgone in order to get or produce more of the commodity under consideration" (Witter *et al*, 2000).

ABSTRACT

Background: Zanzibar is part of United Republic of Tanzania continues to have an unacceptable high level of outside health facility delivery of 50.8% with only 52.1% of delivering assisted by skilled birth attendants and 63.8% not receiving postpartum care. Almost all maternal mortality occurs due to preventable causes related to labour, delivery and postpartum complications.

Objective: Explore the factors contributing to utilization of health facility during labour, delivery and postpartum period, in order to provide strategies that could help to improve the utilization of health facility that will help to reduce maternal and newborn morbidity and mortality in Zanzibar.

Methods: A literature review on maternal health was undertaken. The three delay model is used for both uncomplicated and complicated obstetric care.

Results: All three delays contributed underutilization of health facilities during labour, delivery and postpartum period in Zanzibar. Whereby the major factors were, social-cultural, socioeconomic, lack of knowledge on danger signs, women empowerment and quality of care.

Conclusion: In Zanzibar situation the three delays in utilizing health facility and access the EmONC services are the contributing factors in underutilization of health facility which contributed to maternal and newborn mortality.

Recommendations: Government through MOH has to review reproductive health policy for better implementation, conduct research to identify gaps, increase skilled birth attendants, improve working conditions and quality of care. Ensure availability of resources to the existing health facilities including EmONC services..

Key words: Three delay model, maternal mortality in Tanzania, home deliveries in Zanzibar, utilization of health facility, skilled birth attendants.

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INTRODUCTION

I am a nurse midwife at the College of Health Sciences under the Ministry of Health (MOH) Zanzibar where I have worked in the Reproductive and Child Health (RCH) department for the last six years. Not only have I worked in Zanzibar but I also live there. During that period of work I have observed a high number of women delivering without the assistance of skilled birth attendants and with low utilization of health facilities.

Reproductive and child health care is among the priority interventions of the Ministry of Health in its Health Sector Reform Strategic Plan II (2006-2011). They have the purpose of meeting the Millennium Development Goals 4 and 5 for reducing child mortality and improving maternal health by 2015. The priority is to improve access and availability of maternal and child health including emergency obstetric care, in order to improve the health of women and children so as to reduce maternal and newborn morbidity and mortality (MOH, 2008). The cause maternal and newborn morbidity and mortality can be preventable by utilization of skilled birth attendants and quality emergency obstetric care services to all women (WHO, 2012).

In Zanzibar the problem is underutilization of health facilities during labour, delivery and postpartum period. The general objective of this thesis is to explore the factors contributing to utilization of health facilities by pregnant women during labour, delivery and postpartum period in Zanzibar. The results will recommend strategies that could help to improve the use of health facilities during labour, delivery and postpartum period, thus help to reduce maternal and newborn morbidity and mortality in Zanzibar.

CHAPTER ONE: BACKGROUD INFORMATION

1.1 Introduction

The United Republic of Tanzania (URT) is made up of Tanzania Mainland and Zanzibar. The health care is not a Union Government matter, but there is collaboration between Zanzibar and Mainland on health issues (RGoZ, 2007). (See map of URT in the annex 1, page 44).

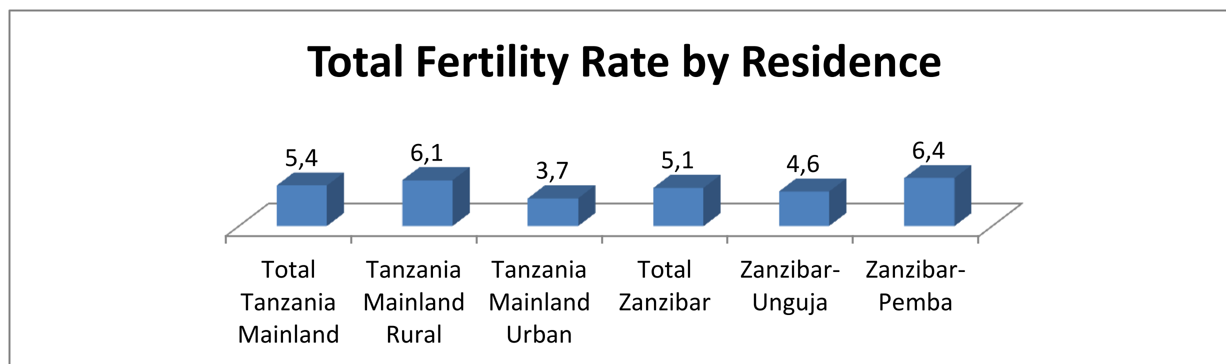
1.2 Geography

Zanzibar is made up of two Islands, Unguja and Pemba and other few small populated Islands like Tumbatu and Uzi (Unguja) and Kojani and Fundo (Pemba). The Zanzibar Islands are situated off the eastern coast of the Tanzanian Mainland with an area of 2,654 square kilometres (MOH, 2011). (See map of Zanzibar in the annex 2, page 45).

1.3 Demographic data

Based on the 2002 census, the population of Zanzibar was projected to 1,232,589 in 2009 of which 752,758 are in Unguja and 479,831 in Pemba. There will be another census September this year with projection of population growth. Zanzibar has the fertility rate of 5.1 children per women which is higher in Pemba with 6.4 children per women and Unguja with 4.6 children per women (NBS, 2011). On the Tanzania Mainland women have an average of 5.3 children, with a higher fertility rate in rural areas (6.1) compared to urban areas (3.7) (NBS, 2011). Figure 1 below shows the total fertility rate by place of residence.

Figure 1: Total fertility rate by residence



Source: NBS, 2011

The table shows a higher fertility rate in rural Tanzania Mainland and Zanzibar- Pemba then other part of the country. In URT the fertility varies due to womens' education and economical status (NBS, 2011). In Zanzibar

the higher fertility rate is been also associated with low women's education and low economic status, which combined with low contraceptive use among women, increases the risk of maternal mortality (MOH, 2009).

1.4 Socio-cultural and Religion

The Zanzibar population inherited cultural traditions from different parts of the world including Middle East, Europe, Asia and other parts of Africa. Islamic culture plays an important role in shaping the people mode of life in Zanzibar. Ninety nine per cent of the population are Muslim, with Christians and Hindus forming the remainder. Polygamy is common in Zanzibar with 29% of women in polygamous marriages which are part of religious norms for Muslims. In Tanzania mainland 21% women are in polygamy marriage (NBS, 2005 and NBS, 2011).

1.5 Socioeconomic

In Zanzibar the agriculture sector is dominant for the economy followed by fishing and rearing livestock that contribute much to the economy. Tourism and trade also add to the economic growth. Women are more engaged in agriculture, rearing livestock and small business (RGoZ, 2007). It is estimated that, 49% of people in Zanzibar live below the basic needs poverty line and 13% live below the food poverty line (HBS, 2005). The districts with the worst poverty are North B in Unguja and Micheweni in Pemba (MOH, 2011).

1.6 Education

Generally, in URT at least 50% of women and 49% of men have primary education. In Zanzibar men are more educated by 94.4% than 84.4% of women (NBS, 2011). (See the table showing the difference between education in men and women in Unguja and Pemba, in annex 5 page 47).

1.7 Health care system

The Zanzibar health system is organized by public and private sectors with the majority owned by government. It is categorized in three levels; primary level with health care units (PHCU, PHCU+) and health care centers (PHCCs), secondary level with district hospitals and tertiary level (one referral hospital and two specialized hospitals; maternity hospital and mental hospital). The PHCUs provide primary health care services; the PHCU+ and PHCCs facilities provide primary health care with EmONC services; District hospitals provide second line referral services and BEmONC service ; one tertiary hospital (Mnazi Mmoja Hospital) provide 24 hours CEmONC services (MOH, 2010). (The hierarchy of health service provision in Zanzibar can be

found in the in annex 4 page 43 and the level of operation of staff provide maternity services in annex 6, page 48).

1.8 Health care system policy

Maternal and child health in Zanzibar has recently received political attention, which is reflected in the important of utilization of health services as a key strategy of the MOH (MOH, 2011). The MOH identified the maternal and child health challenges by adapting the Safe Motherhood initiatives with aim of reducing maternal, newborn and child mortality. In addition, it developed the Child Policy, Women Protection and Development Policy, the Health Sector Reform Strategic Plan and the Zanzibar Reproductive and Child Health Strategy (2006-2010).

The MOH also put the priority of maternal and child health care in the Zanzibar vision 2020 and the Zanzibar Poverty Reduction Plan (ZPRP-MKUZA 2002).The aim is to improve the health of the women, children and vulnerable groups and to reduce maternal, newborn and children morbidity and mortality. In order to achieve better goals and effective implementation, the MOH established the Reproductive and Child Health Program under the Directorate of Preventive Services. Although the policy received political attention and well started priorities, but still the implementations in utilizing health facilities is not well achieved (MOH, 2009). Thus, make the need for reviewing so as to identify the gaps in its implementation.

1.9 Financial in reproductive health care

One of the challenges facing the MOH Zanzibar is limited funds for Reproductive and Child Health (RCH) services. The MOH Zanzibar gets funds from government revenues, donors, user fee (out of pocket) and the private sector. The MOH gets a total budget expenditure of 9% from government which is lower than 15% of Abuja Declaration. There is no clear information on the amount of money spent on RCH services. Moreover, the role of donor support in the implementation of RCH priorities areas (MOH, 2011). The MOH Zanzibar established a cost sharing in 2004 in reproductive health services for the purpose of improving the services. In 2006 complaints of cost sharing rose by health facilities that are the services are underutilized, but still now cost sharing is implemented unofficial. In addition, an exemption is also practiced informally in all public health facilities, without explanation of whom and what services are exempted. There is no National Health Insurance in Zanzibar (MOH, 2007).

CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES AND METHODOLOGY

2.1. Problem statement

The utilization of skilled birth attendants during labour, delivery and postpartum period is very important to save women and children live (WHO, 2012). Global maternal mortality due to complications during pregnancy and childbirth was reduced by 50% from 1990 to 2010. Every year 358,000 women still die from pregnancy related problems. Most of these deaths occur within 48 hours of delivery with many within the first hour. Each year also 7.6 million children under the age of five die. (WHO, 2012).

Although some countries are progressing towards MDGs 4 for reduction of child mortality and 5 for the improvement of maternal health, low income countries in Sub Saharan Africa and Southern Asia have the highest rates of maternal, neonatal and child mortality. Maternal mortality in low income countries occurs highly in rural areas where the poor people are less educated. These deaths can be prevented through quality routine skilled and emergency care. The coverage of skilled birth attendants during delivery in Africa is less than 50%. Forty per cent of women deliver without skilled birth attendants and more than 70% delivering at home do not receive postpartum care for themselves and their babies (WHO, 2012).

In United Republic of Tanzania (including Tanzania Mainland and Zanzibar) the utilization of skilled birth attendant during delivery is only 49% (WHO, 2012). Maternal mortality has shown moderate reduction since 2005. Maternal mortality is estimated now 454 / 100 000 live births which is in an improvement from 578 / 100,000 live birth in 2005 (NBS, 2011). Tanzania Mainland is improving with the use of skilled birth attendants by 51% and health facility delivery by 50% in 2010 (UNDP, 2010).

Even though, there has been improvement in the utilization of skilled birth attendants globally and in most African countries, including Tanzania mainland, have shown. In Zanzibar half of all deliveries are still conducted outside the health facilities and without skilled birth attendants. This may contribute to maternal and child mortality. Zanzibar has a maternal mortality ratio of 362 / 100,000 live births (Lund, et al, 2007), with very little reduction from 377/ 100,000 of 2005 (NBS, 2005).

More than sixty per cent of mothers delivering do not receive postpartum care. Whereby, the infant mortality rate is estimated to be 61 per 1,000 live birth and neonatal mortality is 29/1000 live birth (MOH, 2010 and NBS, 2011).

The MOH Zanzibar recommends that pregnant women deliver at health facilities with assistance of skilled birth attendants. But only 49.2% of deliveries are conducted at health facilities with 52.1% assisted by skilled birth attendants and 47.8% assisted by either TBAs, relatives or with no assistance at all (MOH, 2010 and NBS, 2011). See table below.

Table 1 : Place of delivery

Place of delivery	ZANZIBAR (%)	UNGUJA (%)	PEMBA (%)
Home	50.4	38.8	67.1
Public health facilities	47.2	57.7	32.0
Private health facilities	1.4	2.3	0.0
Voluntary/Religious health facility	0.6	1.0	0.0
Other/missing	0.5	0.2	1.0

Source: NBS, 2011

The difference between Unguja and Pemba huge (67.1% versus 38.8%) and more are assisted by TBAs (60.5% versus 26.8%) as shown in the table above. The reasons are not clear because nobody has reported or done the research.

2.2 Justification

More than half of deliveries in Zanzibar are conducted outside the health facility and only assisted by Traditional Birth Attendants (TBAs) or relatives. Most maternal mortality occurs during labour, delivery and postpartum period. Access to a health facility and assistance from a trained midwife during pregnancy, childbirth and the first month after delivery is the key to save the mother's life and her child's (WHO, 2007, and 2012). Mothers are important for the growth and development of their children and also for the future generation of the nation. WHO addressed the importance of meeting MDG 4 for reduction of child mortality and 5 of improvement of maternal health by 2015. In order to achieve that, women must have access health facilities with skilled birth attendants during labour, delivery and postpartum period (WHO, 2007).

Despite the effort of the MOH Zanzibar to improve access to primary health care services to all population, they are still facing the challenge of underutilization of health facility during labour, delivery and postpartum period. The main factors identified by the MOH included shortage of human

and non-human resources, sociocultural and socioeconomic barriers (MOH, 2009). Due to limited research done in Zanzibar and little knowledge of the perceptions of women regarding the utilization of health facility, there is a need to explore the factors contributing to utilization of health facility during delivery, labour and postpartum period. The results of this study will help the MOH and the community to make a plan in order to increase the awareness and acceptance of utilizing health facility during labour, delivery and the postpartum period for the purpose of reduce maternal and newborn morbidity and mortality in Zanzibar. This motivated me to conduct a literature review to identify and analyse the factors that contribute to the utilization of health facilities during labour, delivery and postpartum period in Zanzibar.

2.3 Objectives

2.3.1 General objective

Explore the factors contributing to utilization of health facility during labour, delivery and postpartum period, in order to provide strategies that could help to improve the utilization of health facility that will help to reduce maternal and newborn morbidity and mortality in Zanzibar.

2.3.2 Specific objectives

a) To describe the psychosocial/cultural factors as well as knowledge and perception of women relating to pregnancy and child birth and identifying the place of delivery.

b) To explore the factors relating to accessibility, availability and affordability that contribute to utilization of health facility during labour, delivery and postpartum period.

c) To examine the quality of care factors relating to utilization of health facilities during labour, delivery and postpartum period.

d) To identify best practices to improve utilization of health facility during labour, delivery and postpartum period.

e) To make recommendations to the MOH to plan the appropriate interventions in increasing the utilization of health facility during labour, delivery and postpartum period that will help to reduce maternal and newborn morbidity and mortality.

2.4 Methodology

This is a literature review that is based on a review of articles on factors contributing to low utilization of health facility labour, delivery and postpartum period in Zanzibar, Tanzania and globally. The review will examine the factors and evidence base relating to the problem of this thesis.

2.4.1 Search strategy

The documents review has been conducted through an Internet search with a combination of the PubMed and Google scholar search engine, the KIT library data base (Scopus), and WHO, UNFPA, UNICEF, MOH and TDHS websites that search electronic medical journals, articles, books and reports. The review will use the studies are done in Zanzibar, Tanzania and other countries which from 2000 to 2012. The conceptual framework analysis adapted for this thesis was from 1994.

2.4.2 Key words

The combination of these words were used; maternal mortality, maternal health, EmONC, skilled birth attendant, hospital, home delivery, three delay model, reproductive health, Sub-Saharan Africa, Tanzania, Zanzibar, Emergency obstetric care, socio-cultural, socioeconomic, accessibility, affordability, availability, perceived cost, quality of care, health system, budget expenditure

2.4.3 Limitations

The thesis reviews the available literature, but due to limited literature from the study area specific to Zanzibar, I have used literature from other countries to analyse the thesis objectives. There was not much literature for Zanzibar specifically, only three studies that relate to maternal health. In general there is little literature on policy and financial factors in Zanzibar and this limited my thesis objectives. Primary data could explore more on actual and perceived factors as well as reflecting on the current and real situation relating to the problem but this was not available.

2.5 Conceptual framework- Three Delay Model

The Three Delay Model was developed by Thaddeus and Maine (1994) to conceptualize the factors that influence obstetric care utilization and health outcomes. They identified a number of factors (utilization and outcomes) related to the three delays that contribute to maternal mortality. But the model has focused on factors applying between the start of having obstetric complications until the time women receives necessary adequate and appropriate care as a results of getting better outcome.

They examined how these factors caused delays in decision making, identify and reaching medical care and receiving adequate and appropriate treatment. However, the original model is still widely used today, it misses the component of policy and financing to the health system.

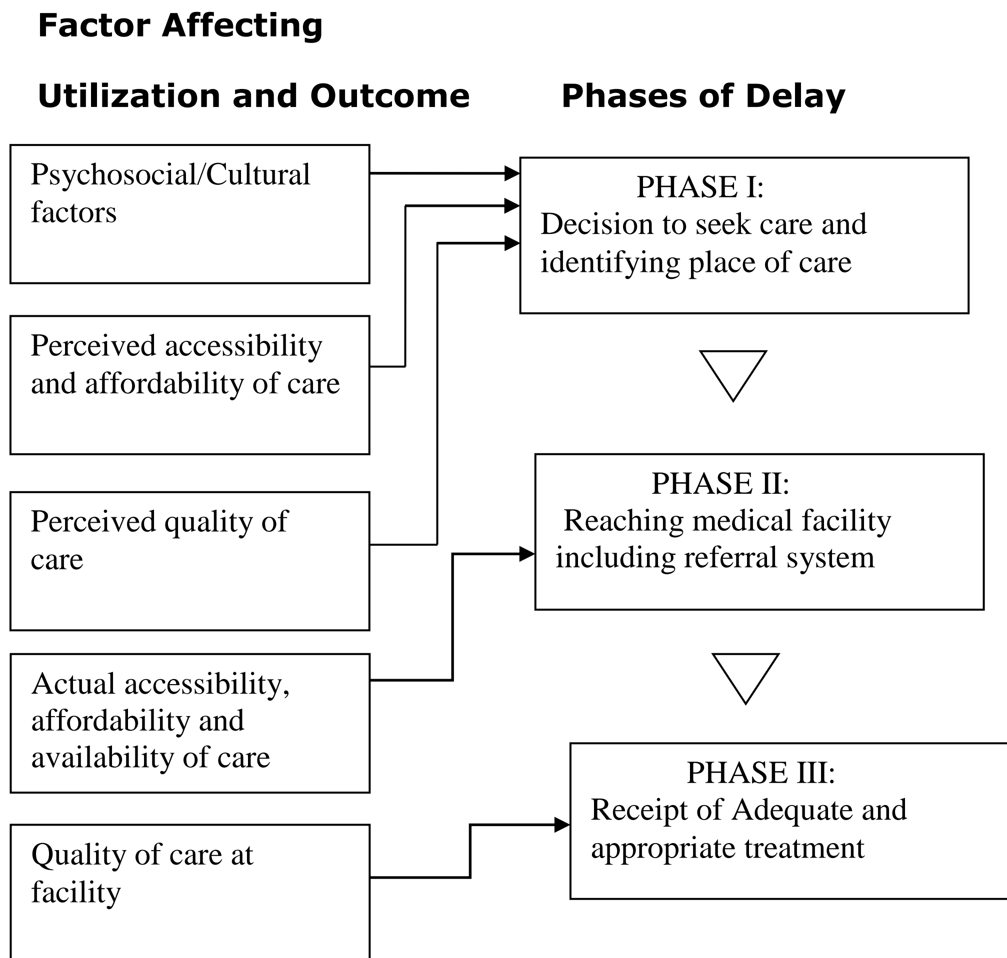
For the purpose of the thesis I have adapted it as model to use in uncomplicated care and emergency obstetric care. This is because I want to explore more on women's perception and barriers in the utilization of health facility during labour, delivery and postpartum period. Furthermore, it will examine the maternal health services in Zanzibar because births are still occurring outside the health facility. Therefore, the model will explore more factors relating to utilization of health facilities during labour, delivery and the postpartum periods. The factors identified in phase one in the original model have been split out to explore more in depth the delay in decision making to seek care. Additional components added to the framework represent the contextual factors that contribute to the delays.

According to Thaddeus and Maine (1994) the first phase indicates the large number of factors with numerous barriers that affect the utilization of services. In factors affecting utilization and outcomes has three main factors (socioeconomic/cultural factors, perceived accessibility and perceived quality of care) with main and sub barriers in each factor. For example in socioeconomic/cultural factors has illness factors: (recognition of complications, perceived severity, preserved etiology); sociolegal issues (illegal abortion, sanction on infidelity); women status: (access to money, restricted mobility, value of women's health); education status: (positive/ negative association) and economic status. I modified the first factor to be psychosocial/ cultural factors and added another two: perceived accessibility and affordability of care; and perceived quality of care. In addition in the phase of delay of decision to seek care, I included the identification of care which was in phase II in the 1994 model. Here is when women and family have to decide where they can go for delivery either to the health facility or traditional birth attendants.

In the original model the phase II for delay in identifying and reaching medical care focus on actual accessibility with the factors include the distribution and location of health facilities, travel distances and transportation including costs. I modified the phase II to be contextualized on reaching medical facility including referral system focus on factors of actual accessibility, affordability and availability of care. There is no change made in phase three for delay receiving adequate and appropriate treatment which based on quality of care at health facility.

Based on the above explanation the figure below is adapted the three delay model that will guide my literature review on both uncomplicated care and emergency obstetric care. (The original model will be find in annex 3, page 46).

Figure 2: Conceptual Framework - The adapted The Three Delay Model



The following chapter of findings/results will analyse the literature review in relation to the three delays. The first objective of my dissertation will be discussed in phase one, the second objective will be discussed under phase two, objective three will be discussed in phase three, objectives four and five will be discussed in the findings and recommendations.

CHAPER THREE: STUDY RESULTS/FINDINGS

This section will explain specific literature that will provide evidence that addresses the thesis objectives. The analysis will be guided by the adapted conceptual framework of the three delay model. The results/findings will be presented in specifically from Zanzibar, Tanzania mainland as well as from global. However, there are limited study done in Zanzibar but, there are quite number of study done in Tanzania mainland and other countries relating to reproductive health which has similar characteristics to Zanzibar.

3.1 First delay

There are multiple factors at this phase, where women interact before deciding whether or not to seek health care. Psychosocial / cultural factors play a significant role in influencing the perception of women's health care seeking decisions. This associated with cultural beliefs, knowledge on the risk of pregnancy and empowerment of the women and perceived quality of care. Thaddeus and Maine (1994) explained that the individual perception on labour, delivery and postpartum period as normal or natural event is influenced the delay to make decisions in seeking care.

3.1.1 Psychosocial/Cultural factors

Culture and beliefs play a major role in women's decision to seek health care. However, a study done by Mwisongo and Njau (2008) in Zanzibar found that socio-cultural characteristics is not the main factors can hinder women from seeking care, exception for Family Planning (FP) services that have strong influence. This need more study to conclude that, because from my experiences, majority of people in Zanzibar are influenced by socio-cultural life style especially women in rural areas.

As study in the highlands of rural northern Tanzania by Mrisho et al. (2007) found cultural beliefs influencing home delivery. Women deliver secretly at home due to fear of prolonged labour that is perceived to be the result of having affairs outside marriage during pregnancy. If she is not delivering in private the women would have to mention the name(s) of the man or men she slept with during pregnancy and if she cannot deliver, then she would have to go to hospital. In the Ngorongoro district in Tanzania, home delivery is a cultural norm for normal pregnancy. Women, husbands, TBAs and the elderly perceived that only women with obstetric complications should deliver at health facility with assistance of skilled birth attendant (Magoma et al. 2010). Another study of Sorensen et al. (2011) in rural Tanzania, health workers mentioned cultural in other perspectives of women used to take local medicine to stimulate contractions. Due to repeated and strong contractions may result with rupture of uterus which probably the cause of

maternal and newborn death. Even though women are been educated during ANC visits not to take local medicine but still they used as culturally norm.

A study in Bukina Faso done by Some et al. (2011) found sociocultural is strongly influenced the place of delivery. Cultural and traditional practices are opposed modern care and women to deliver at health facility. For those who use health facility considered as modernized women. Another study in rural Gambia done by Cham et al. (2005) noted that during labour women have to seek advice from elderly women whom they believed have the experience. She have to decide at what time and where to go for delivery.

In rural Bangladesh a study identified that health care use is the last option, only for use after traditional approaches fail to treat the illness. They used to treat the illness with traditional ways, untrained traditional birth attendants or ignore the illness according to their perception (Killewo et al. 2006). A study in rural Vietnam found the socio-cultural factors hinder the young couple to make decision and control their own life. The system of extended family living together and the in-laws are the head of the family and control over finical resources. This limit the women power in decision making to seek care (Duong et al. 2004).

3.1.2 Knowledge and identification of danger signs

Education is very important in analyzing the decision of where to seek care at health facility or not. Lack of knowledge of the recognition of danger signs and complications and less perceived severity of problems are among the factors that can extend the time to make decision in seeking health care (Mpembeni et al. 2007). In Zanzibar more than sixty per cent of women have been given the knowledge on danger signs during ANC visits (NBS, 2011). However, there is no study found in relation to their decision making in seeking care.

In western Tanzania a perinatal audit using the three delay model noted that even women who were instructed to deliver in hospital they waited at home until the complications occurred (Mbaruku et al. 2009). In southern Tanzania, the more women have knowledge of at least four or more danger signs are the ones who utilize health facility then those who have not knowledge of any danger signs, that more likely to use TBAs or relatives (Mpembeni et al. 2007). A study done by Magoma et al. (2010) in the Ngorongoro district of Tanzania, women perceived that only when they have obstetric complications needs to deliver at health facilities and those with normal pregnancy can deliver at home. However, during the ANC visit women are instructed to deliver at a health facility only when they have a complicated pregnancy and for those with normal pregnancy they can deliver at home. Nevertheless, they were not given enough information during ANC

especially about the importance of expected date of delivery and birth preparedness. As a result the women delay seeking care when labour started before the date they expected.

A study in rural Gambia done by Cham et al. (2005) found that women delay their decision to seeking care due to lack of understanding of seriousness of obstetric complications. In addition, women and their family believe in the experience of previous pregnancy as a tool to determine the decision to seek care. After they realize there is a complication they decide to seek care where the delay varies from two hours to five days. Another study in rural Bangladesh found that the delay in seeking care is mainly associated with lack of knowledge of identifying the danger signs (Killewo et al. 2006). This also mentioned by Duong et al. (2004) in rural Vietnam women with lack of knowledge on childbirth are the ones who delivery at home.

3.1.3 Decision making power

Limited decision making power to go to health facility is another obstacle facing women in delay to seek care. In Zanzibar, women do not have decision making power in matters concerning their reproductive roles including utilization of reproductive health. Majority of women the decision made by husband and very few they make decision together (Mwisongo and Njau. 2008). Men have control over resources and influence over utilization of health services. Women need permission from their husband concerning their reproductive health as well as to seek care to go to the health facility even during an emergency obstetric condition (MOH, 2011). In Zanzibar poor and less educated women are dependent to their husband in financial matters. So they need to obtain permission from their husband to seek care. This probably because to low economic status that they need money for hospital bills and other expenses for treatment (Mwisongo and Njau, 2008). Another study in Zanzibar also has been found where men have the power over women especially in polygamous marriages which limit the women's chance of seeking reproductive health services especially FP (Keele et al. 2005).

A study in the Ngorongoro district of northern Tanzania done by Magoma et al. (2010) noted the two ethnic groups of Masai and Watemi need permission from their husband to seek care. During labour they have to wait for their husband to decide where to go for delivery. However, at the same study women do not need permission to go for ANC services. They are empowered and understand the necessity and importance of pregnancy checkup. Only for few women who married less educated older man need permission for ANC clinic. In this situation most of the time the decision is been made by the husband, mother in law, parents or influential people in the community. Another study of Kruk et al. (2009) in rural Tanzania found

that women need to get permission to access the health facility from their husband or family member, which make them delay in making decision to seek health care. Nevertheless, a study of Sorensen et al. (2011) mentioned in rural Tanzania the decision of where to seek care during delivery is made by husband and wife together. For those husband who concerns and care for their wife and unborn welfare.

In many African countries, men are grasping the power of decision making concerning reproductive health including child bearing and the use of health facilities and skilled birth attendants during labour, delivery and postpartum period, with little communication with their wives or partners. This shows lack of male involvement in all matters of women reproductive health. Instead men are involved only at the time of labour or during obstetric complications (ICOMP, 2002). A study in south-west Uganda done by Kabakyenga et al. (2012) noted that when man are involved in reproductive health matters, the decision to use skilled birth attendants and utilization of health facility is high during childbirth.

3.1.4 Perceived accessibility and affordability of care

The perception of women on accessibility and affordability of health care is very important in making decision to seek health care. In Zanzibar few women who live in remote areas and small islands perceived distance as an obstacle for them to make decision to seek care (Mwisongo and Njau, 2008). Although there is no study done for those women who lives remote areas and in small islands Zanzibar and there is no 24 hours EmONC service, is difficult to access health care. For my experience, women perceived accessibility and affordability is a barrier for them to seek care due to a long distance and time spend to find boat for transportation.

In rural Tanzania women are more concerned by the time spend in hospital when they wait for delivery. They need to continue with their daily activities like household work and childcare soon as after delivery. This contributes to the decision for home delivery (Magoma et al, 2010). In Rural Nepal women perceive many factors that discourage them from seeking care at health facilities such as the health facility being too far away (Dhaka et al. 2011).

Cost is perceived as an obstacle in many ways including hiring a vehicle and driver, fuel expenses, and the opportunity cost of people who escort the women to the health facility who may lose his / her productive time (Ransom and Yinger, 2002). In Zanzibar women fear of the extra cost that they encounter in public health facility (Mwisongo and Njau, 2008). Financial barriers include transportation cost and opportunity cost (extra money for food, shelter and clothes) which are needed at the time to go to a remote health facility in southern Tanzania (Kowalewski et al. 2000). In Ethiopia,

women delay seeking health care due to cost even if the health facility is accessible and short nearby (Hamlin, 2004).

Riddell (2006) reported that in rural Cambodia, women and the family members take a day to decide to seek care at the appropriate health facility due to high cost of transportation. Another study done in Cambodia by Ith et al. (2012) noted that women are fear to go to public facility due to additional costs that have to paid which they perceived is twice higher than the supposed to pay.

3.1.5 Perceived quality of care

Perception of quality of care has strong influence on use of the health services by women during labour, delivery and postpartum period. Although there were no studies found about perception of women in Zanzibar. But from my own experience, I know that in Zanzibar women perceive having young health workers at the facility do not provides good quality care and some women refused to be given care by them.

A study done by Kruk et al*.* (2009) on women's preference for place of delivery in rural Tanzania noted that women prefer to go to distant health facilities for care and bypass the nearest one due to health care quality. They perceived the nearest health facility do not provide quality care. In the same study done by Kruk et al, showed that despite having to pay for services some women chose to go to private health facilities because they provide good services and have a car for referral when needed. A study done by Magoma et al*. (*2010) in rural district in Tanzania found that women felt TBAs and relatives provides better services like emotional support and continuity of care opposed to health facility. Women also appreciate the services they received from TBAs and relatives are advice, massage during labour and ability to choose the delivery position they want. In addition women perceived that the services at health facility not satisfied especially when service providers not use local language they understand. Moreover, the study indicated that the study communities' women also felt the local dispensary have not provided the care they want and they end up to be transfer to the district hospital. So the solution is to bypass and go direct to the district hospital. In other areas of rural Tanzania women appreciate the health facility services than TBAs (Mbaruku et al. 2009).

In Kenya women perceived quality of care has to ensure the availability of drugs, supplies and good attitude of health workers (Pearson and Shoo, 2005). Another study done by Ebuehi and Akintuijoye (2012) in Nigeria found that women appreciate the services from TBAs during pregnancy, child birth and postpartum period, although TBAs have not enough knowledge on maternal health. Thus, women suggested updated training to training for

TBAs in relation to pregnancy, delivery and postpartum care. So they can provide care within standard. In Rural Nepal women perceive young health workers at village health facilities do not provide good quality of care (Dhaka et al. 2011).

Women may able to make timely decisions to seek care and identifying the place to deliver but still may delay in reaching medical facilities due to various reasons including referral system that are indicated as second delay, which are discussed below.

3.2 Second delay

This occurs as an actual obstacle that prevents women from reaching a medical facility in time. In this stage the associated factors are actual accessibility affordability and availability of care as well as referral system at the facility. Road infrastructure, distribution and location of the facility and transportation cost are the main factors as well as the referral system from lower level to higher level of health facility can contribute to second delay. According to Thaddeus and Maine (1994), distance and cost are major problems facing women and families in reaching heath care.

3.2.1 Accessibility of services

In Zanzibar distance is not the challenge, that the MOH target of 95% of population living within five kilometer of primary health care unit has met (MOH, 2011). A study done by Mwisongo and Njau (2008) found in Zanzibar majority of people live between 15 to 30 minutes walking distance to the public health facility. Although majority having easy access to the health facility, but still few facing difficulty especially those lives in remote areas and small Islands. There are no reliable transport and safe boats for transport especially during rain seasons. Thus why still women facing difficult to access the health facility in Zanzibar. Another study done by Lund et al. (2008) noted that the distributions of health facility including EmONC services are insufficient in Zanzibar. In addition for those who provides BEmONC services are facing shortage of resources and delay distribution of supplies. EmONC can be basic emergency obstetric and newborn care (BEmONC) or comprehensive emergency obstetric and newborn care (CEmONC) [1].

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[1] BEmONC perform all seven signal functions: administer parental antibiotics, uterotonic drugs, parental anticonvulsants, manual removal of placenta, remove retained products, perform assisted vaginal delivery and basic neonatal resuscitation.
CEmONC perform all seven signal functions plus caesarean section and blood transfusion (WHO, UNFPA and UNICEF, 2009).

Moreover, other district in Unguja like North B and central do not have health facility providing obstetric services. Women in North B have to go to North A (about 15 miles) where there is a PHCC and women in central have to use a specialized or referral hospital. While in Pemba is more difficult because the services are not constants provided due to shortage of human and non-human resources (Lund et al. 2007). This may indicate that there is an association with the delay in reaching the health facility in time.

The Ministry of Health and Social Welfare (MoHSW) Tanzania Mainland reported the geographical accessibility to be at least 90% of population lives within five kilometer walking distance to the primary health facility (MoHSW, 2008). In Tanzania mainland people who live within five kilometer to the health facility are 72% and 90% within ten kilometer of health facility (Mpembeni et al. 2007). However, many areas of rural Tanzania facing the problem of bad road infrastructure and geographical accessibility to the health facility as evidenced in following studies.

A study in rural Tanzania done by Mrisho et al*.* (2007) noted that women experience barriers of geographical accessibility whereby the place where they live is far away from the main road and the health facility, making it difficult for them to reach the health facility in time. In addition people depend on public transport which is sometimes irregular or only one trip per day and the price is high. This makes it difficult for women to get transport during time of labour to go to health facility and therefore they decide to deliver at home. Another study in western Tanzania conducted by Mbaruku et al*.* (2009) found that women facing the transportation problem after labour began due to live far from health facility and bad road. They have to wait too long either for the public bus, lorry or they have to be transported by stretcher. Sometimes they faced a car breakdown on the way, which caused grave delay.

A study conducted by Cham *et al.* (2005) in rural Gambia noted that poor road infrastructure and unreliable means of transport are the key factors that delay in reaching the health facility in time. Women face difficulty reaching the health facility; even the decision to seek health care has been made, due to the lack of transport, distance and the poor referral system. They had to use other means like donkeys, horses or walking to reach at health facility. In three rural districts of Zambia, women's decision to seek care was influenced by distance to the health facility, which make in delay in reaching the medical facility (Alwar et al*.* 2000). In western rural Kenya 80% of women deliver at home and 22% deliver without any assistance because of the long walking distances to the health facilities (van Eijk et al*.* 2006).

A study in Rural Nepal done by Borghi et al. (2004) noted that 67% of women have to walk to go to the health facility, 18% use a stretcher, and 15% used a taxi or bus either for emergency obstetric care or normal pregnancy and child birth. This makes women develop complications on the way to health facility due to the position used during transportation when using a stretcher, or being carried on the back of a donkey or horse or being carried by people. It different in rural Vietnam where access to commune Health Centre (CHC) services that provides primary health care and maternity care is not an obstacle for women during childbirth. The CHC is located nearby to the community (Duong et al. 2004).

In low income countries the condition of women becomes serious and makes the necessary treatment complicated or even causes death before reaching the health facility. This is due to the time and distance required to reach the health facility (Molesworth, 2005). Babinard and Roberts (2006) identified the effect of poor quality of roads which makes it difficult for the cars to pass, increasing the time and price of travelling. Poor road infrastructure makes women to delay reaching the health facility.

3.2.2 Affordability of services

In Zanzibar half of people live below the basic needs poverty line and most of women are engage in agriculture and small business (MOH, 2011). This means women do not earn more due to poor productivity which make them dependent to their husbands. The average annual per capital in Zanzibar is USD 327 with the economic growth of 5-7% annual (MoF, 2010). A study on introducing cost sharing in Zanzibar confirmed that there is an informal payment for reproductive health at the health facilities with varied amount between facilities that women have to pay for services. Women paid at least 1 USD (500-1,000 TSH) for registration and between 10-20 USD (10,000-50,000 TSH) for caesarean section, drugs and other supplies. However, people are willing to pay when the quality of care improved. In addition, women have to pay for some drugs and other supplies at the facility or buy outside (private pharmacy) where the price is twice higher (Mwisongo and Njau, 2008).

In Tanzania, women are encouraged to deliver at health facilities and the services should be free of charge. However, women pay for some delivery commodities like gloves, razor blades, cotton wool, etc. This makes the women decide to deliver at home where the cost is lower (Mrisho et al. 2007). In rural Tanzania the cost for delivery at a health facility can be up to USD 4.00 (TSH 5,000) while a home delivery costs no more than USD 0.50 (TSH 600) for gloves and a razor blade only (Mrisho et al. 2007). Meanwhile TBAs can provide services free of charge or be given a small amount of money or present (personal experience). Magoma (2010) found

in the Ngorongoro district that women have to pay USD 2.50 (TSH 3000) to deliver at a health facility.

Women in Gambia have to pay the extra cost of buying drugs and other supplies beside the normal costs that are charged at health facility (Cham et al. 2005). A study done by Molesworth (2005) found in low income countries women facing the direct expense of transport to reach health facility. Another study on the health issue in transport and the implications for policy by Downing and Sethi (2001) noted that when the distance to access the health facility is long it necessitates the cost of transport to be high, thus women fail to pay and involving the delay in reaching the medical facility in time.

A study done by Story et al. (2012) found that in Bangladesh women facing the scarcity of public transport and / or the high cost that hinder them to reach the health facility in time. Women pay the cost of transportation and money to pay at health facilities as well as indirect opportunity costs such as the time spent attending at the health facility while being away from other responsibilities. Another study done Duong et al. (2004) noted that in rural Vietnam women have encounter direct and indirect payment which make them difficult to deliver at health facility.

3.2.3 Availability of services

The MOH Zanzibar has made an effort to make sure the availability of reproductive health services to the whole population. The aim is to improve the health of women and children. Reproductive health care includes antenatal care (ANC), delivery care, postpartum care (PNC), family planning (FP) services and post abortion care (PAC). One hundred fifty six health facilities provide reproductive and child health services with 92 (59%) in Unguja and 64 (41%) in Pemba (MOH, 2010).

In Zanzibar almost 96% of pregnant women attending antenatal care at least once and 49% attended four or more visits (MOH, 2009 and NBS, 2011). Despite the high percentages of ANC coverage only few women make timely visit before 16 weeks of pregnancy and complete four ANC visits as recommended. In Zanzibar women who made their first visit were 3.6%, 51.3% attended 2nd and 3rd visits and 42.8% made 4th visit (NBS, 2011). [2]

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[2] ANC visits
1st visit: below 16 weeks
2nd visit: 20-24 weeks
3rd visit: 28-32 weeks
4th visit: 36-40 weeks

The various elements provided by ANC services are not being performed constantly throughout the health facilities in Zanzibar. Women who have been checked blood pressure were 93% (Unguja 97% and Pemba 80%) , urine analysis checked 89% (97% Unguja and 74% Pemba), blood sample 91% (Unguja 98% and Pemba 79), and 66% have informed of danger signs (Unguja 72% and Pemba 57%) (NBS, 2011).

In Zanzibar the health facilities that provide EmONC services facing difficulties in implementing the services due to lack of equipment, drugs and supplies and shortage of skilled staff. There is a single hospital (Mnazi Mmoja Hospital) in capital that provides 24 hours CEmONC services that is located at Unguja town (MOH, 2010).

The availability of postpartum care is also an underutilized in Zanzibar. The postpartum care given for both mother and newborn after delivery until 42 days post-delivery, to treat the complications that may arise and to inform the mother on how to take care herself and her baby (NBS, 2011). The first 48 hours is very important as many deaths occur during that period. In Zanzibar the proportion of women received postpartum within 48 hours is very low. Only 32.4% of women received postpartum care within 48 hours and 3.4% within three to 42 days. More than sixty per cent of women do not receive postpartum care with great variation between Unguja and Pemba of 56.5% and 76.3% respectively (NBS, 2011). This may be due to different in perception and social-cultural belief between Unguja and Pemba. From my point of view, Unguja is more mixing with different society like Tanzania mainland, Hindus, Arabic, Comorian and tourist from around the world. In rural Nepal women decision for home delivery influenced by lack of availability of the services at their nearby village health facility (Dhaka et al. 2011).

3.2.4 Referral system

A study done in Zanzibar on facility-based maternal mortality noted that women from rural areas and those from small islands die on the way or at the dispensary due the poor referral system (Lund et al. 2007). In many small islands, and especially in Pemba, there is no reliable boat for transportation. In Zanzibar women and family facing the cost of fuel for the ambulance or hire a car for referral. Many of the ambulance in health facilities Zanzibar are old and may not working as well as there is limited funds for maintenance and fuel (MOH, 2011). Another study done by Mwisongo and Njau (2008) in Zanzibar women facing high cost for referral, sometime they have to pay up to USD 20 (30,000 TSH) for ambulance or hire a care.

In rural Tanzania, women complain that they were not told of the importance of planning and arranging the means of transport before the labour began as well as the meaning of when to expect delivery. As a result those women who began early labour before the date face difficulty arranging for transport to the health facility (Magoma et al. 2010).

The cost of referral at the health facility is another factor that many women think off when complications occur. Pembe et al. (2008) noted that in rural Tanzania most health facility ambulance transport is unavailable due to lack of fuel, or because the ambulance is out of order or there is no communication from the health unit to the district hospital where the ambulance is stationed or because it may be being used for other activities .

A study done by Cham et al. (2005) in rural Gambia found referral system is inappropriate which requires them to go to a different health facility before reaching the appropriate one. A study in South Africa mentioned that lack of transport for transfer women between health facilities may increase maternal mortality. (Alwar et al. 2000). In Pakistan women lack ambulances for referral which makes delay in receiving appropriate care (Ali et al. 2005).

Thaddeus and Maine (1994) mentioned that poor road infrastructure and lack of reliable transport are the contributing factors in delay the distribution of resources at the facility. This may also delay the women to receive adequate and appropriate treatment, known as the third delay which is which discussed below.

3.3 Third delay

The delay that occurs at the health facility which is been associated with quality of care including shortage of competent staff, and the shortage of equipment, drugs and supplies. Health system factors are also contributed to this delay which including political factors and limited funds in RCH services. According to UNFPA (2011) the first step in assessing the situation of quality of care is to increase the access to quality midwifery to women during labour, delivery and postpartum period.

3.3.1 Quality of care

There are many health system factors which influence women's decision to seek care at the health facility. The most important factors are the quality of care including shortage of skilled personnel, health worker attitudes, availability of drugs, equipment and other supplies.

In Zanzibar the health facility that are supposed to provides 24 hour EmONC services but fail due lack of availability of competence skilled personnel, drugs, equipment and supplies including blood transfusion and caesarean section (3.4% which is below the recommended rate between 5 -15%) services (Lund et al. 2007 and MOH, 2009). In the study of Mwaisongo and Njau (2008) also mentioned poor quality of care in Zanzibar public health facility due to shortage of drugs and supplies which delay in providing care.

In rural Tanzania women expressed their concerns that there is no privacy at health facilities that make them to question on quality of care they received (Mrisho et al. 2007). However, in the same study Mrisho et al. women mentioned there is only one health facility in their area that provides good care with positive attitude of health workers. Another study in rural Tanzania done by Kruk et al. (2010) women reported they satisfied with quality of care provided in their nearest facility.

A study in Gambia mentioned lack of drugs, supplies including blood transfusion are the factors that delay in receiving care at the facility (Cham et al,. 2005). Another study done by Cham et al. (2009) in Gambia also mentioned shortage of important drugs for emergency obstetric care like magnesium sulphate affects the quality of care.

In another hand the skilled birth attendants in Cambodia are competent in providing care but facing the difficulties due to shortage of skilled personnel. Though they have long working experiences but they are not competence enough to manage some obstetric complications like eclampsia and newborn resuscitations. In addition lack of equipment, drugs and supplies affect their work too. This may leading to time consuming and workloads to finished the routinely care (Ith et al. 2012). In the same study of Ith et al, noted that uncondusive working conditions, low salary and lack of incentives and motivations are among the factors affecting the performance of health workers to perform better.

3.3.2 Shortage of skilled health workers

Human resource for health policy is in place in Zanzibar, with limited information of total number of health workers (MOH, 2011). As far as I know current the health worker data base is in process.

In Zanzibar the human resources who provide maternal health services are doctors, nurses, midwives, public health nurse ‘B’s (PHN B- certificate level), maternal and child health aides (MCHA) and traditional birth attendants (TBA).

According to the definition of skilled birth attendants, is only doctors, nurses, and midwives who have professional training and skills should manage normal pregnancies, childbirth, postpartum care, and the identification, management and or referral of obstetric complications of women and newborns (WHO, 2004).

In Zanzibar PHN 'B' cadre is a skilled birth attendants by MOH, however, excludes MCHAs and traditional birth attendants even if they received training (MOH, 2010). Inadequately skilled personnel hamper the provision of quality health services; this is may be due to low salary, lack of motivation, and incentives. The MOH intends to increase the number of competent skilled personnel in all levels of health care system (MOH, 2011).

Tanzania facing the problem of shortage of health workers in all levels. For nurse and midwife serve 4000 population and obstetrician and gynaecology serve 400,000 populations. The situation is much worse in dispensaries of 65% and health units of 76% shortage of skilled providers. This may affect the provision of quality care at all levels (MoHSW, 2006 and 2008).

Most of African women do not able to access the quality health care they need it even they be able to pay for the services. This is due to shortage of skilled birth attendants; there are 13.8 nurses and midwives per 10,000 people. In poorest African countries the ratio going down up to I per 100,000 people or less (WHO, 2004-2009).

3.3.3 Health worker attitudes

Study done by Mwaisongo and Njau (2008) in Zanzibar reported women complaints on abuse language from health workers, poor reception on arrivals and waiting too long for treatment. In Tanzania evidenced from Bowser and Hill (2010) showed that there are some skilled birth attendants are having good attitudes and some having abusive attitude. A study in rural Tanzania reported that women experienced abusive language, refusal to be given service or proper assistance and lacking of kindness during labour and delivery. In addition, most of the health workers are very young and there are male health workers which make the older women uncomfortable about receiving care (Mrisho et al. 2007). In the same study of Mrisho eta al, other women are satisfied with service and attitudes of health workers in their nearby health facility.

In Cambodia women mentioned negative attitudes of health works as the main obstacle for using public health facilities. They would rather go to private health facility as the health workers are friendly and polite to them compared to the unfriendly health workers at public health facilities. In addition women complaints of disparity between social-economic status.

Women with high socioeconomic status are treated nicely then with low socioeconomic status (Ith et al*.* 2012). Another study done by Some et al*.* (2011) in Bukina Faso women experienced unpleasant welcome and poor nurse patient relationship. Due to unfriendly services at health facility, they decided to deliver at home.

All three delays contribute to actual and perceived obstacles of accessibility, affordability, availability and quality of care provided to women during labour, delivery and the postpartum period.

3.4 Best practice to improve the utilization of health facility

In Zanzibar there is only one government and one private medical institution located in Unguja which produce very limited number of nurse/ midwives to occupy all health facilities in Unguja and Pemba. In addition, Zanzibar facing the brain drains and detention of health workers due to low salary and lack of incentives and motivations (personal experiences).

The MOH with the collaboration with NGOs help to provide on job training for existing health workers to increase their competences. The MOH Zanzibar with International Organization (Jhpiego) initiated the EmONC training in 2010 for existing health workers in nine health facilities in Unguja and Pemba. The aim is to improve the reproductive health services (personal experience).

The Ministry of Health and social Welfare of Tanzania mainland in collaboration with Family Care International (FCI) implemented the strategy of Skilled Care Initiative in one of its district. The aim was to evaluate the plan for increasing the use of skilled birth attendants during pregnancy, delivery and postpartum period. The strategy included to improve the quality of care with increased number of skilled personnel, equipment, drugs and supplies. Furthermore, it addressed to strengthen the infrastructure and training institutions. All of these are targeted to increase the utilization of health facility and availability of EmONC services (FCI/Tanzania, 2007).

Moreover, the Tanzania and Midwife Act of 2010 aimed to establishing the licensing for practitioners health worker and accreditation for health institutions. In addition, the implementation to improve quality of midwifery education is in process, however facing the challenge of limited number of institutions (UNFPA, 2011).

The MoHSW Tanzania working to improve and intend to provide free access services to maternal and newborn. In addition the plan to implement the strategy of enhancing the number of competence skilled birth attendants, initiating motivation mechanisms to retain health worker who working in hard to reach areas (MOH, 2008).

In Ghana provide free care services to all pregnant women including childbirth in their public, private and mission hospitals through a comprehensive package in the National Health Insurance. In 2009 Ghana has increased the health worker and training. They trained 530 midwives and 105 medical assistants. In addition they extended the funding for existing free maternal services and midwife training (Republic of Ghana, 2009).

Rwanda government planned to construct 45 maternal centres, improve transportation system in rural areas mainly to provide services to pregnant women (Republic of Rwanda, 2010).

Mali government together with safe motherhood program established village committee and organized plan for transportation as well as training for TBAs to be able to recognize obstetric danger signs and transfer the women to the appropriate facility for care. In addition some health facility has been installed with telephone to easy communication during referral system (Grieco and Turner, 2005). In the same report of Grieco and Turner reported that, Mali government together with donors has established two ways of communicating through radio and a car for transportation between district hospital and local health centres.

The Ministry of Health in Ethiopia initiated the Health Extension Program (HEP) in 2003 to train community workers to be able to provide basic services and helping the progress of meeting the Millennium Development Goals (MDGs) (Benteyerga, 2011).

In Kenya government has increased its budgets for the purpose of improving maternal health services including road infrastructure and hire additional nurses (GHI, 2011).

Rural Nepal reported to reduce maternal mortality for about 5,000 per year in 2008. The main achievement was due to training, recruitment and deployment of 50,000 female community health workers as volunteers (Save the Children, 2010).

The Indonesian government established the village midwifery programme in 1998 to increase the number of skilled attendants to the poor living in rural areas. The purpose was to increase number of deliveries attended by skilled

birth attendants so as to reduce maternal mortality. The target was to have at least one skilled attendant in each village who can be specifically provide care during pregnancy, delivery and postpartum period (Hatt et al. 2006). In Afghanistan did the assessment for the existing skilled birth attendants to analyse their performance in order to improve quality and to increase EmONC services (Ansari et al. 2012).

Overall, from the above analysis of the results/findings presented, there are major gaps and deficits in all three phase of delays that influence the utilization of health facility during labour, delivery and postpartum period. The following chapter is discussion and conclusion of the analyses.

CHAPTER FOUR: DISCUSSION AND CONCLUSION

This section will combine issues derived from the analysis of the literature based on the three delay model in order to address the underlying factors of low utilization of health facility during labour, delivery and postpartum period. The conclusion for each factor will also be discussed here.

4.1 The first delay- psychosocial/cultural factors, knowledge and perception of women relating to pregnancy and childbirth and identifying the place of delivery

4.1.1 Discussion

The findings have shown that there are similarities in the factors associated with the first delay in decision to seek care used in each country. In Zanzibar socio-cultural norms do not influenced the women in decision making, which is different from other findings, but still I think it plays a major role in women's decision to seek care. In addition information on danger signs that is not being provided constantly through the health facilities in Zanzibar is differing from other findings.

Women's empowerment is the factor that goes together with social-cultural factors shown in the findings. It is noted that women with low socioeconomic status and binded with socio-cultural society are less empowered. The additional aspect shown in Zanzibar is that the majority of women decision made by husband. In addition, for those who are in polygamous marriages are not empowered enough in making decision to seek care. The findings identified that the decision making to seek care is made by husband, in-laws or even elderly in the community. Most of the time man are involved because of cultural norms or for finical assistance. Women that live in rural areas with low socioeconomic status have difficulty getting the money to reach medical care in time, because they have to wait for their husband to give them money. This influences them to deliver at home which is less expensive and easy to access. Zanzibar is in the same situation, although there is no study done but through my personal experiences men are less involved in reproductive health of their wife and themselves. Therefore a study from south-west Uganda mentioned male involvement has influenced in utilization of health facilities during childbirth.

Perceived accessibility and affordability of care are also noted in the findings, however there has been no study done in Zanzibar. The situation might be a little different for perceived accessibility as most of people live within five kilometres of a health facility. This also has been noted in rural Vietnam where CHCs are located near communities. An aspect of perceived affordability is almost the same in all studies and corresponds to Zanzibar.

Another similarity to Zanzibar is perceived quality of care. Findings show a strong influence on women on the decision to utilizing a health facility for childbirth is good quality of care. All findings show that women's decisions to seek care depend on the availability of drugs, supplies, skilled personnel and friendly services. Moreover, findings revealed the appreciation of women from the services they received from TBAs. Although, women satisfied with the services received from TBAs, but still think they have limited knowledge and skills. Therefore, Nigerian women suggested that TBAs needs to be train to improve their knowledge and skills, so as to provide more better services. One finding from rural Tanzania women satisfied with the services from health facilities rather than from TBAs. Although there is no study done in Zanzibar on perception of TBAs, but due to evidenced that more than fifty per cent of deliveries conducted by TBAs plus other factors that mentioned above may showed women satisfied with services provided by TBAs,.

4.1.2 Conclusion

In this situation socio-cultural belief, lack of knowledge to the illness, and recognition of danger signs influenced women either to use traditional healers, untrained traditional birth attendants, or to ignore the problem. When women, families and communities depend on previous pregnancy experienced without realizing the seriousness of illness during pregnancy they increase the risk of obstetric complications.

Lack of empowerment makes women unable to analyse the importance of making a timely decision to use a health facility. This leads to delays in seeking care and influences self-treatment as the result of complications during childbirth. Basic knowledge of birth preparedness and complication readiness is very important for women, families and communities to understand in order to be able to make proper and timely decisions. Male involvement is very important, that influence the utilization of health facilities. Man needed to be involved in all matters concerning reproductive health and not only during the late hours of obstetric complication, which makes it difficult to make proper and timely decision to seek care.

Women's perception on accessibility and affordability is very important in making the decision to seek care. The majority of rural women need to resume their daily activities as soon as possible after delivery. So they prefer to deliver at home because they will able to do their household activities with less interruption. In addition women perceived costs of transport and other expenses at health facilities and the opportunity costs are barriers for them to go to health facility.

Perceived quality has a strong influence on utilization of health facility during childbirth. Women feels young skilled birth attendants do not provide good quality of care. In addition, women prefer to go farther for private health facilities due to quality care and bypass the nearest one. In addition, women appreciate the services from TBAs even with limited knowledge they have. However, women also satisfied with the services provided from health facilities.

4.2 The second delay- accessibility, availability and affordability of care and referral system

4.2.1 Discussion

The findings showed similarities and differences in physical accessibility to the care. There are similarities between Zanzibar and Vietnam as the primary health care services are within reach of where people live. However, other studies mentioned difficulties of accessing health facilities. In the Tanzanian mainland although the government intended to have primary health care service within the community for ninety per cent, but still women face difficulties in reaching health care in many rural areas. This is also mentioned in other countries. For Zanzibar another difference is that few women have to use boats as means of transportation.

Affordability of care is seen in all studies to be an obstacle for women to reach medical care. This has no different to Zanzibar where women have to pay for direct and indirect costs including the opportunity costs. In addition most of the findings showed these costs in health facilities are informal. Women and family have to pay the services they received and / or buy drugs and other supplies needed at the facility or outside the health facility, in private pharmacy where the price is very high. Those women have poor socioeconomic status is difficult for them to afford the payment. The only different noted to Zanzibar is there no consistent of payment between facilities.

Findings reported on costs for referral from one health facility to another. All findings showed the same problem as Zanzibar where nearby health facilities do not provide obstetric care and referral system is not proper. Women and family have to contribute to buy fuel for an ambulance or find transport for Affordability of care is seen in all studies to be an obstacle for women to reach medical care.

Findings also mentioned the same results on availability of care. The situation is the same as Zanzibar in that the few health facility that provides

obstetric care and there is no equal distribution of the BEmONC and CEmONC services. Whereby, women have to be referral to the district hospital. Thus women decide to deliver at home and bypass the nearest health facility and to the private facility where they can get transport in case it needed.

4.2.2 Conclusion

Access to the health facility is the main factor that hinders women to reach at health facility in time. The major factors are distance and poor road infrastructure, although in Zanzibar this is was not an obstacle, but for those who need boat for transport it is a huge problem. Socioeconomic constraints contribute to the second delay in reaching medical care. Women with poor socioeconomic status are the one who facing the problem of payments at health facilities. Direct and indirect costs including opportunity costs create unique obstacles for women and families in reaching medical care. Women have to pay for formal and informal costs at the health facility. In addition, the referral cost is also a problem for the women and family. This is due to lack of ambulances, fuel or unavailability at the time when it needed at lower level of health facility that need to transfer the patient to higher level. Thus may contribute the decision for home delivery.

4.3 The third delay- quality of health care

4.3.1 Discussion

The findings showed the similarity on quality of care provided during labour, delivery and postpartum care. Shortage of equipment, drugs and supplies are affect the quality of care. The findings are not much different to Zanzibar where provision of CEmONC and BEmONC services are inadequate, and for the facilities that provide the services are facing with insufficient resources. However, in some rural parts of Tanzania women appreciated the services they received. Only one study in Cambodia mentioned poor working conditions and that lack of motivation, incentives, heavy workloads and low salary are the factors of incompetence and poor quality of care. Although it is not mentioned, Zanzibar probably faces the same problems as well (personal experience).

Shortages of skilled birth attendants are similar in all findings. Zanzibar is also facing the problem of shortage of skilled personnel as are many African countries. Findings also mentioned abusive attitudes of health workers to be the same in many parts with few different experiences during care. This has been similar in Zanzibar which affects the utilization of health facilities during labour, delivery and postpartum care.

4.3.2 Conclusion

Health resources are very important to ensure availability of the quality services: this includes funds, competent health workers, drugs, equipment and supplies. Funds are the key element to ensure training for pre-services and in-services, purchasing of drugs, equipment and supplies. Due to the shortage of health resources women have to buy some of resources outside or within the health facility. This creates a negative perception to women that there is always a shortage of resources at the health facility which leads to poor quality of care that prevents women from receiving appropriate and adequate care. Quality of care has a wide understanding including the attitude of health workers, the time at which adequate and appropriate treatment is provided. The quality of care focuses on the application of skills and competences to ensure the patient gets better services.

Attitudes of health workers including abusive language, unfriendly services and poor communication between client and health workers are the main factors that make women chose the place of delivery. Most women chose TBAs, private facilities or even distant facilities and bypass the nearest one.

4.4 Best practice to improve the utilization of health facility

4.4.1 Discussion

In order to increase the utilization of health facility delivery so as to meet MDG 4 and 5 of reducing child mortality and improving maternal health by 2015, the findings showed several different strategies to ensure accessibility, availability and quality reproductive health care. All finding have the target of provides free maternal services by using increase the budget expenditure form government. Zanzibar also faces the problem of having low budget expenditure of 9% from government. However, the strategy of increasing budget for maternal health will take time and will need political intrest. In addition the findings noted that some countries like Ghana provide free services through National Health Insurance. This will be difficult for Zanzibar as there is no health insurance.

Moreover, findings showed the strategy of increasing the skilled personnel by training health workers and improvement of training institutions. Some countries used community health workers and trained them to provide only maternal and child health care including pregnancy, deliveries and postpartum care. Zanzibar can also improve its single government institution. In addition, it can train the community health workers to help provide services at rural areas. Due to uncondusive working conditions in

rural areas, many qualified and competent health workers do not want to work there. Findings also mentioned the employment of retired staff so as to improve the services.

Zanzibar can adapt the Tanzania mainland strategy as they have similar factors, sociocultural and socioeconomic characteristics. Zanzibar also provides BEmONC training for existing health workers but did not do an evaluation to assess the performance like Afghanistan what they have just did in this year.

4.4.2 Conclusion

It is very important for Zanzibar to use the strategies to address the improvement of maternal and child health services as other countries did. Increasing the MOH budget will ensure the availability of human and non-human resources. Improve the training institution will increasing the number of health workers. In addition the MOH can train the community health workers specifically for providing maternal and child health services. The MOH has to improve the working conditions including salary, incentives and especially motivation for hard to reach areas. To improve the training institution is very important for the purpose of increasing the number of skilled personnel. But also employing the retired skilled personnel can reduce the burden for a short time. National Health Insurance that covers the free services for maternal and child health is also a strategy to improve reproductive health services to the population.

CHAPTER FIVE: RECOMMENDATIONS

The recommendations are based on the priority areas for the purpose of increasing the utilization of health facility during labour, delivery and the postpartum period in order to reduce maternal and newborn morbidity and mortality in Zanzibar and so as to reach the target of MDGs 4 for reducing child mortality and 5 for improve maternal health by 2015.

- The MOH, Legal Affairs, politicians and other stakeholders should review the reproductive health policy for better implementations so as to improve the services. This includes the review of cost sharing policy and development of National Health Insurance.
- The Government through the MOH must improve the availability of resources (equipment, drugs and supplies) in existing health facilities. Increased access to EmONC services that will provide quality care, with good flowing lines of communication and referral system. For example having boat ambulance for referral people who live in small islands.
- Government through the MOH should improve working conditions (increase salary, incentives and motivations) and initiate special incentives for hard to reach areas, by increasing its current budget expenditure in health from 9% to 15% according to the Abuja Declaration. This will ensure retention and increase morale and performance of work.
- The MOH collaboration with donors has to conduct studies on reproductive health in order to identify factors on perceptions, values, norms and belief of women, family and community as well as male involvement relating to utilization of reproductive health services. Another study to exploring why in Pemba there is more underutilization of reproductive services than Unguja.
- Government through the MOH must increase the number of skilled personnel by promoting financially the existing training institution and build another in Pemba. Moreover, train community health workers, and employ the retired skilled personnel by giving them short contract.
- The MOH and NGOs must train and work together with TBAs by maintains flow of communication between them and health facilities. Use of telephone for easy communication especially during emergency obstetric care. In addition, to use TBAs in sensitize women, family and community in birth preparedness and complication readiness as well as

the importance of health facility utilization during labour, delivery and postpartum period.

- The MOH and International Organization (Jhpiego and UNFPA) must conduct an evaluation assessment for existing staff to monitor the performance of the services including BEmONC services in order to measure the performance and effectiveness of the training.

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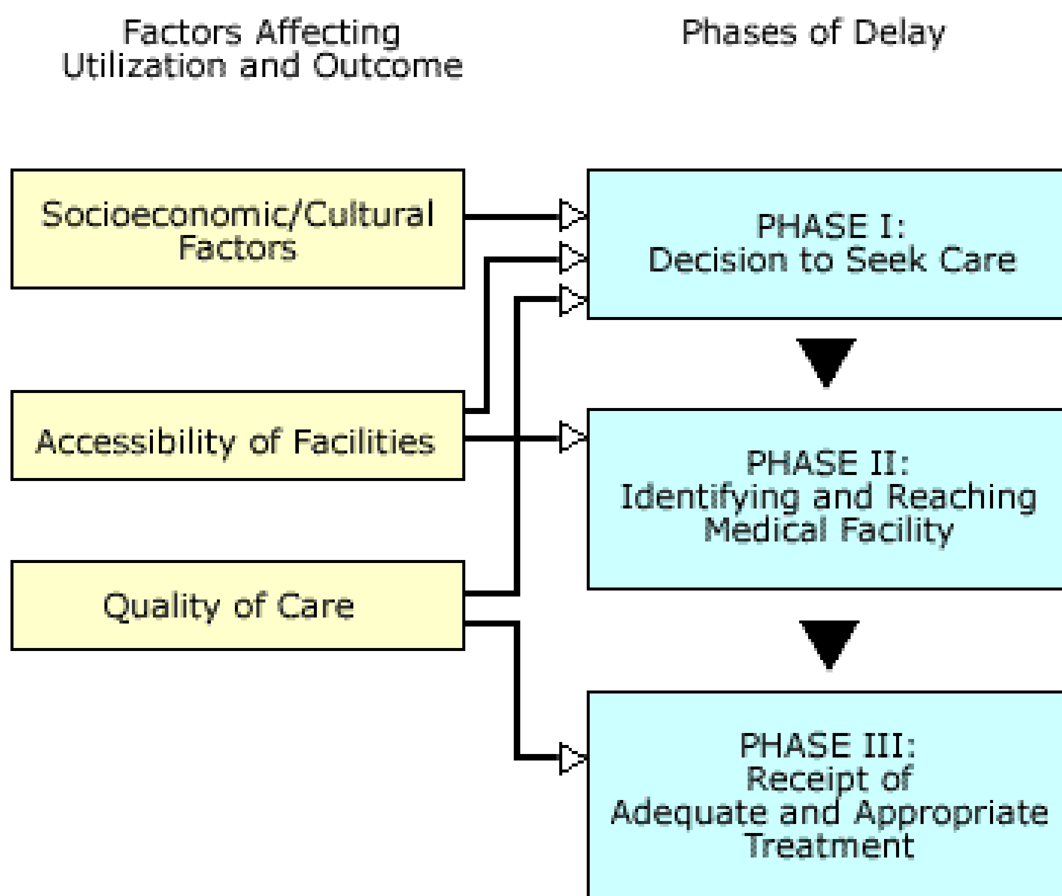
ANNEXES

Annex 1: Map of URT

Annex 2: Map of Zanzibar

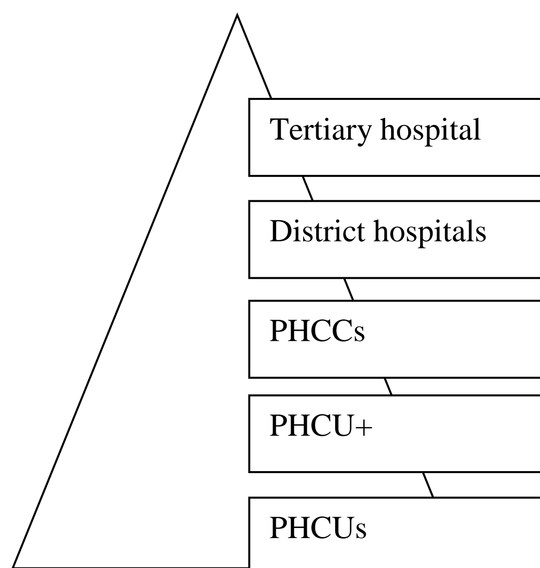
Source: MAGELAN DEOGRAPHIC, 1997 (www.maps.com)

Annex 3: Original Three delays model by Thaddeus and Maine (1994)



Source: (Thaddeus and Maine 1994)

Annex 4: Hierarchy of health services



Source, Bulletin, 2010

Annex 5: (a) Education attainment of women and (b) Education attainment of men in Unguja and Pemba

a). Education Attainment: Women					
	No Education	Some Primary	Complete Primary	Secondary +	Total
Zanzibar	15.7	15.1	12.6	56.7	100.0
Unguja	10.1	13.7	14.3	61.9	100.0
Pemba	25.9	17.6	9.3	47.1	100.0
b). Education Attainment: Men					
	No Education	Some Primary	Complete Primary	Secondary +	Total

Zanzibar	5.4	17.6	11.8	65.1	100.0
Unguja	3.0	17.1	12.4	67.8	100.0
Pemba	11.3	18.8	11.1	58.9	100.0
Source: TDHS, 2010					

Annex 6: Level of operation of staff provide maternity services

Cadre	Level of health facility	Services provided
Maternal and Child Health Aide (MCHA)	PHCU	ANC, PNC, FP
Public Health Nurse 'B' (PHN B)	PHCU	ANC, PNC, FP
Public Health Nurse 'A' (PHN A)	PHCU+ and PHCC	ANC, PNC, FP, DELIVERY,PAC
Community Health Nurse (CHN)	PHCU+ and PHCC	ANC. PNC, FP, DELIVERY,PAC
Clinical officer (CO)	PHCU+ and PHCC	ANC. PNC, FP, DELIVERY,PAC
Midwife	All levels	ANC. PNC, FP, DELIVERY,PAC
Assistant Medical officer (AMO)	PHCC and District hospital	ANC. PNC, FP, DELIVERY,PAC
Medical officer (MO)	District and tertiary hospital	ANC. PNC, FP, DELIVERY,PAC
Obstetrician	Tertiary hospital	ANC. PNC, FP, DELIVERY,PAC
Source: MOH, 2009 and 2010		