FACTORS ASSOCIATED WITH HOME DELIVERY AMONG EXPECTANT MOTHERS IN MIKATA RURAL HEALTH CENTRE CATCHMENT AREA IN MPONGWE DISTRICT

BY

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THE UNIVERSITY OF ZAMBIA

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LIST OF ABBREVIATIONS /ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal Care
ART	-	Antiretroviral Therapy
BEmOC	-	Basic Emergency Obstetric Care
BSC	-	Bachelor of Science
CARMMA	-	Campaign for Accelerated Reduction of Maternal Mortality in Zambia
CDE	-	Classified Daily Employees
CEmOC	-	Comprehensive Emergency Obstetric Care
CSO	-	Central Statistical Office
DCT	-	Diagnostic Counselling and Testing
DHMT	-	District Health Management Team
DHO	-	District Health Office
DNS	-	Department of Nursing Sciences
EHT	-	Environmental Health Technologist
EN	-	Enrolled Nurse
ENM	-	Enrolled Nurse-Midwife
FP	-	Family Planning
GNCZ	-	General Nursing Council of Zambia
HBM	-	Health Belief Model
HIV	-	Human Immune-deficiency Virus
IEC	-	Information Education and Communication
MC	-	Male Circumcision

MDHMT	-	Mpongwe District Health Management Team
MOH	-	Ministry of Health
NHC	-	Neighbourhood Health Community
PMTCT	-	Prevention of Mother To Child Transmission
PNC	-	Postnatal Care
RHC	-	Rural Health Centre
RNM	-	Registered Nurse-Midwife
SHS	-	School Health Services
SMAGS	-	Safe Motherhood Action Groups
TB	-	Tuberculosis
TBA	-	Traditional Birth Attendant
TFR	-	Total Fertility Rate
UFS	-	Under Flying Service
UK	-	United Kingdom
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations International Children's Emergency Fund
USA	-	United States of America
USAID	-	United States Agency for International Development
VCT	-	Voluntary Counselling and Testing
WHO	-	World Health Organisation
ZDHS	-	Zambia Demographic and Health Survey
ZPCT	-	Zambia Prevention Care and Support

DECLARATION

I declare that **HOME-DELIVERY IN MIKATA RURAL HEALTH CENTRE CATCHMENT AREA OF MPONGWE DISTRICT** in this study for a Bachelor of Science Degree in Nursing has not been presented either wholly or in part, for any other degree and is not been currently submitted for any other degree at any other institution.

Signed:_____ **Date:** 28TH May 2012

(Candidate)

Approved by:_____ **Date:** 05/06/12

(Supervising Lecturer)

THE UNIVERSITY OF ZAMBIA
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-5 JUN 2012
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STATEMENT

I, ***Chityaka Francis,*** hereby certify that this study is entirely the result of my own independent investigations. The various sources to which I am highly indebted are clearly indicated in the text and references.

Signed:_____ **Date:** 28TH May 2012

DEDICATION

To my dear ones, Wife Matron M. Chityaka, our Son Pole Chityaka, Mum Filise Pole and Uncle Charles Pole who with patience painstakingly persevered and endured due to my immense academic commitments, for I was not readily available to them when they needed me most during their very trying moments.

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Lastly but definitely not least, to all Midwives past, present and future, who though poorly rewarded, continue with great art, knowledge, wisdom and love provide(d) quality (clean, caring, competent, compassionate and corrupt free) service, cure as well as comfort to mothers and their respective families, in low resource settings with meagre logistics amidst this era ravaging humanity with emerging diseases.

ABSTRACT

This study was aimed at exploring factors associated with home delivery among expectant mothers in Mikata Rural Health Centre catchment area in Mpongwe District. The research was necessitated by the fact that despite the Health Centre having skilled staff and a maternity wing, most expectant mothers living near and far from the Health Centre alike, the problem of home delivery is still common place.

Literature review showed that planned births, cultural reasons, quality of care, women's autonomy, distance to health facility and lack of skilled attendants were some of the factors associated with home deliveries.

An explorative quantitative non-interventional study design was used. A Pilot study was carried out at Kanyenda Rural Health Centre before conducting the actual study. A total sample of 50 respondents was selected using systematic sampling method. Data were collected using a semi-structured interview schedule.

Data for all the respondents were aggregated manually first using a Data Master Sheet soon after interviews, and was later electronically analysed using a Statistical Package for Social Scientists to come up with Frequency tables, Pie-Charts and Cross-Tabulations which were used to determine special relationships between variables.

The findings have shown that 54% of the respondents were youths who were married (76%) and 68% had 1-3 children. Sixty-six (66%) had attained primary education and all were Christians.

The results revealed that majority (92%) of the respondents preferred to deliver at the health Centre though most (60%) of the respondents delivered from home. The findings also revealed that all (100%) the respondents said that the attitude of skilled staff was positive, though majority (68%) preferred a female Nurse/Midwife as a delivery assistant at the Health Centre.

All (100%) the respondents agreed that health talks were given on every antenatal day and majority (52%) expressed high knowledge level of delivery complications, though they all (100%) exhibited a low knowledge level on topics given during health talks.

The study revealed an association between home delivery and income, distance, cost of health care. Majority of the respondents with low income; those living far from the clinic and those who cited high cost of health care delivered at home.

In view of the afore-outlined findings of the study, the following recommendations have been made:

- The Ministry of Health through the office of the Provincial Medical Officer must urgently and proactively build more health facilities in the area and improve the staffing levels of Nurses/Midwives and continue working towards attaining the World Health Organisation (WHO) recommendation of 1 Nurse per 700 people of catchment population so that Nurses/Midwives have reasonable workload, do not suffer work burnout and improve health service delivery.
- The General Nursing Council of Zambia (GNCZ) should give particular attention to the component of the curriculum that aims at professionally grooming and remodeling the attitudes of Nurses/Midwives so that they are more culturally sensitive and competent enough to give comprehensive health education to enhance the ability of expectant mothers to be able to value, acquire and understand health messages.
- The Nurse-manager together with other managers at Mpongwe District Health Office should facilitate optimal collaboration between the health Centre staff and the community leaders in Mikata area to construct a mother's shelter. They must also strengthen community sensitisations to promote acceptance of male Nurses and Midwives by expectant mothers coming to deliver at the Health facility. Funds should be allocated towards training of Safe-motherhood Action Groups to promote significant community referrals of expectant mothers for delivery at the Health Centre.
- There is need to intensify community sensitisations on benefits of institutional delivery in order to significantly reduce the levels of home deliveries. Emphasis should be placed on male involvement and birth preparedness, as well as providing options for timely arrival at the delivery Centre and ways of minimizing costs related to access of health care. There is need for health Centre staff to plan for training of Safe-motherhood Action Groups who will act as a link between the community and the health Centre for addressing safe-motherhood issues in Mikata area.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

A pregnant woman can choose to deliver at home or in a health institution. However, for women in developing countries the choice of their place of delivery is limited to health facilities where the delivery can be supervised by skilled attendants unlike a home delivery. A home delivery is a situation/process of giving birth at home or on the way to a health facility intentionally or not, planned or not, where access to a health facility is possible or otherwise (Boodman, 2007).

1.1.1 Evolution of Home Deliveries (Child-births)

For Millennia, mothers have delivered their babies at home, whether it be a cave, a tent or on the open Prairies (Foster, 2011). While medical advances are undeniably beneficial to both mother and child, many believe that medical intervention is not always required. Advocates of home birth believe that, while modern medicine is useful and often necessary, many mothers who have had a healthy, complication free pregnancy can safely deliver at home. Meanwhile, most major medical and physician organizations are firm in their stance that a hospital birth is safer due to the unpredictable nature of childbirth. In a hospital, there are skilled attendants such as midwives, obstetricians, anaesthesiologists, surgeons and paediatricians standing by in case a complication arises (Foster, 2011).

As a measure to reduce maternal mortality, delivering at a health facility is generally encouraged so that expectant mothers receive necessary appropriate care from skilled attendants. The idea of childbirth conjures up images of a sterilized hospital room, with the mother attended to by nurses and doctors, while friends and relatives pace the waiting room. So in our modern times, hospital birth seems like the only safe option expectant mothers have for delivery. However, proponents of home birth believe that delivering at home while being attended to by trained nurses and nurse-midwives, is just as safe, if not safer, and more emotionally satisfying than a hospital delivery (Foster, 2011).

1.1.2 Zambian Perspective of Childbirth

In spite of most Zambians living in rural areas, the country is one of the most urbanized nations in Africa with a total population of 13,046,508 million people. By residence, 61% of the population (7,978,264) live in rural areas, while 39% of the population (5,068,234) live in urban areas (CSO, 2010).

Urbanisation varies considerably among Provinces with 17% of people living in the urban areas of Copperbelt Province, while 19% of people live in the urban areas of Lusaka Province respectively. Women of reproductive age category (15 to 49 years) constitute approximately 44% of the total population (CSO, 2008). Zambia has a Total Fertility Rate (TFR) of 6.2 (USAID, 2011).

Worth noting is the fact that almost half (47%) of the births are assisted by a skilled health worker (Doctor, Clinical Officer, Nurse, or Midwife); 3% by a Doctor; 1% by a Clinical Officer; and 42% by a Nurse or Midwife. The percentage of deliveries assisted by a skilled health worker has increased from 43% in the 2001-2002 Zambia Demographic and Health Survey (ZDHS) to the current level of 47%. The ZDHS also reported that a relative is the next most common person assisting a delivery (25%), twenty- three (23%) of births are assisted by traditional birth attendants and 5% of births are assisted by no one. Births to younger women (54%) and first-order births (63%) are more likely to receive assistance during childbirth from a skilled provider than births to other women. Older women (35-49 years) are much more likely to deliver without any assistance (13%), compared with those younger than 20 (1%) (CSO, 2007).

Maternal and neonatal health are determined by a complex interaction between socio-economic factors, physical environment and behaviour (of the client and that of the care-giver), that is combined influence eventually influences the health status of both. Among major determinants of mother and neonatal health are: state of the economy; urbanization; water and sanitation; level of education; illnesses and infections during pregnancy; maternal and neonatal nutrition; birth intervals; and traditional beliefs, behaviours and values (MOH, 2008).

The main direct causes of maternal mortality in Zambia are excessive haemorrhage (34%), sepsis (13%), obstructed labour (8%), hypertensive disorders (5%) and unsafe abortions (4%). The risk of expectant mothers developing complications and infections that can cause

death or serious illness in either the mother and or foetus/neonate can be reduced through proper medical attention and hygienic conditions during delivery (MOH, 2010).

The Ministry of Health introduced a training programme for Traditional Birth Attendants (TBAs) in 1972 to promote and increase institutional deliveries at community level and to broaden the range of trained and or skilled service providers to assist expectant mothers during childbirth. A substantial number of TBAs has since been trained mainly through community initiatives though only a fraction of trained TBAs are utilized due to inadequate supplies, poor/lack of motivation and poor community involvement in the selection process. This has serious implications on women who develop complications at childbirth resulting in deaths occurring within the first 24 hours to one-week post-delivery. Contributing factors include delays in accessing health care at community and subsequently at health centre levels. Thus, the impact of training TBAs with regard to promoting institutional deliveries at community level is out rightly low. Consequently, an emphasis on large-scale TBA training efforts could also be counterproductive by holding back the training of necessary numbers of medium level providers; more especially Midwives (MOH, 2008).

Quite recently though, a cadre of community safe motherhood service providers similar to Traditional Birth Attendants (TBAs) with a modified name of Safe Motherhood Action Groups (SMAGS) was introduced. These service providers too may not contribute any better to improve numbers of expectant mothers seeking delivery services at local health facilities because they are not skilled (MOH, 2010).

The resources and services available in Zambia for the provision of care to an expectant mother are affected by many factors that may prompt a woman to give birth at home. These include non-availability of organized data on the population of Zambians for easy capturing of events of giving birth implication in health facilities as well as in communities; poor economic status and conditions; poor nutritional status of women; young maternal age at first pregnancy; lack of knowledge on danger signs and complications; unaffordable/unavailable transport to health facilities; harmful traditional practices during labour and delivery; non availability of a law to make maternal deaths notifiable; and inadequate family planning services and information (MOH, 2008).

Efforts have been made to encourage women to deliver in health facilities with the help of skilled attendants. For instance, the Ministry of Health introduced the training programme for Traditional Birth Attendants (TBAs) in 1972. It is now more than 15 years following the

launch of the Safe Motherhood Initiative (SMI), yet efforts deployed in this regard have not yielded the expected results because of numerous challenges hampering maternal and new-born health programmes. A cadre of community safe motherhood service providers similar to Traditional Birth Attendants (TBAs) with a modified name of Safe Motherhood Action Groups (SMAGs) has quite recently been introduced. Like TBAs, SMAGs too are not likely to make the desired impact because they are not skilled attendants to be alert enough for any critical eventualities, make sound decisions and be able to take appropriate action.

As a measure to respond to emergencies, the District Health Office (DHO) has allocated a specific vehicle for immediate referral of maternal related complicated cases from the health centres to the nearby Mpongwe mission hospital. Zambia Prevention Care and Treatment (ZPCT) as a partner of the Ministry of Health has supplemented transport efforts by providing "Ambulance-bicycles" stationed within distant neighbourhood areas to carry emergency cases from the community to the clinic, though feasibility of this initiative remains a challenge. Privacy and comfort has been improved by infrastructure development attained through construction of a spacious maternity wing by the government, which is underutilised as some mothers still deliver from their homes. These services are not adequately utilised because most mothers that need the services cite various reasons for not accessing the service.

The District Health Management Team (DHMT) has integrated cultural sensitivity in the health care programmes. This is because many women believe that being assisted by male health attendants during delivery as taboo. A female enrolled midwife was deployed to the health facility in addition to the female trained traditional birth attendant who has long been attached to the centre. Consistent quality community driven/oriented sensitisations with great emphasis on benefits of utilising maternal-neonatal and Child health services are religiously done during most static and outreach health services.

1.1.3 Mpongwe District Situation on Deliveries

Mpongwe is a rural district found on the Copperbelt Province of Zambia situated about 67 kilometres south of the mining town of Luanshya. According to CSO (2010); in cite CSO (2000), the population of Mpongwe as a district has grown from 79,850 to 84,476 in 2010 at a growth rate of 2.8%. Therefore, the district has a total of females all ages at 41,478

(49.1%); women of childbearing age (15-49) at 18,585 (22%); expected pregnancies at 4,562 (5.4%); expected deliveries at 4,393 (5.2%); and expected live births at 4,182 (4.95%). In 2009, the district attended to a total of 4,096 deliveries, of which 3,268 were assisted by skilled providers (Nurse, Midwife or Doctor) and 823 were assisted by trained traditional birth attendants, with 3,658 total institutional deliveries and 548 home deliveries (CSO, 2010).

1.2 STATEMENT OF THE PROBLEM

Home deliveries are common worldwide. It is estimated that 50 million women worldwide give birth at home without skilled attendants (WHO, 2008). However, home deliveries have far reaching consequences for women in developing countries where about 250,000 maternal deaths occur each year. A woman's life-time risk of dying during or following pregnancy is as high as 1 in 31 in developing countries compared to 1 in 4,300 in the developed world. Most maternal and new-born deaths in low income countries could be prevented if all women delivered under the supervision of skilled attendants.

In Zambia, about 53% of births occur at home and most of these occur among women in rural areas and are assisted by a relative or an untrained TBA or are not assisted by anyone at all. Furthermore, maternal mortality ratio is very high (591 per 100,000 live births). The situation is no different from Mpongwe district where 548 home deliveries were recorded in 2009 out of a total of 4,096 deliveries. Mikata Rural Health Centre alone recorded 43 home deliveries out of 141 deliveries. This indicates that home deliveries are common despite efforts to encourage women to deliver in health facilities where there is skilled assistance. Therefore, it is for this reason that the investigator would like to establish factors contributing to home deliveries so that appropriate recommendations are made to policy makers and stakeholders on strategies/interventions to address the problem.

1.3 FACTORS CONTRIBUTING TO HOME DELIVERIES

In developing countries, not only are causes of home deliveries different from those in developed countries, but also are factors leading to the causes. These contributing factors

may present as direct or indirect. They may be categorised as socio-economic and cultural factors as well as health service factors.

1.3.1 Socio-Economic and Cultural Factors

1.3.1.1 Poverty

The majority of women find it difficult to access maternal health services due to lack of money to facilitate their travelling to the often far-fetched nearest health facility for most rural dwellers, thus making them to opt delivering at home, Geloo (2003); in cite Sitali (1999)

1.3.1.2 Low education level

The level of education is known to have the strongest and most direct impact on women's health seeking behaviour as well as their ultimate good health. The more educated a woman is, the more likely she is to utilise the available delivery services satisfactorily. Education also has an impact on a woman's confidence, status and ability to participate in decision making (CSO, 2007).

1.3.1.3 Inadequate community sensitisation

Inadequacies in community sensitisations occur especially in remote or hard-to-reach catchments that require reliable/favourable means of transport including adequate management of other available resources which often pose challenges in case of shortfalls; such areas suffer the most as they may fall out of priority. This impedes consistent flow of essential health education messages on such topics as birth plan, signs of true labour and importance of facility delivery. The barrier to communication presents tremendous difficulties to health service providers and communicators. There is great need for appropriate, consistent and inoffensive Zambian language terminology to be used in sexual and reproductive health communication especially that most Information Education and Communication (IEC) materials are written in English language, thus demand high synonymous translation accuracy. This is often so as limitations in language command of the service providers to some ethnic groupings leads to deficiencies in information dissemination

because words and phrases used in Zambia to describe the human reproductive systems are often regarded as vulgar, disrespectful, uncultured and at times simply insulting (MOH, 2008).

1.3.1.4 Beliefs

Most expectant mothers have strongly held beliefs, for example a pregnant woman is sternly warned of death should she see her blood at delivery time if she has had sex with another man other than her husband. When such allegations are confirmed the expectant mother and/or her relatives would rather delivery takes place at home where their desired rituals can be conducted without suspicion/interference from "strangers" like health workers Geloo (2003); in cite United Nations Population Fund (UNFPA) (1998).

- **Myths**

It is also taboo in some communities to inform husbands about complications, especially when older women relate such myths about complications to excessive bleeding. The husband is informed only when the condition is far advanced — a delay that further impedes any decision to seek care. The process of an expectant mother delivering is considered a matter of concern and attention only to fellow women, and never to men. So to ensure total secrecy and confidentiality of delivery happenings from the sight and knowledge of any man, women prefer delivering especially in homes of elders, to a health facility Geloo (2003); in cite UNFPA (1998).

- **Misconceptions**

Among other customs, some women are taught to insert their fists or other objects into the vagina to help it "expand" in readiness for birth. Older-generation women accuse maternal health service providers in attendance at delivery facilities that they promote laziness of an expectant mother when instrumental delivery is resorted to in case of a difficult delivery. Older women who are often the immediate support persons that are looked up to, especially in rural communities say that, endurance of a difficulty labour should be the pride of every woman, so the labouring woman must push-out the baby irrespective of circumstances surrounding the process of labour Geloo (2003); in cite UNFPA (1998).

- **Superstitions**

In cases where a woman has obstructed labour, elders, relatives and friends tend to accuse their pre-perceived witches/sorcerers to have caused arrest of labour. They would rather have delivery takes place at home than at a health facility to favour an opportunity for pressing a confession from the accused.

- **Parity and Age of mother**

Older and or high parity expectant mothers tend to have ill-perceived confidence in themselves from previous successful (complication free) deliveries. They feel they have enough experience to give birth unassisted, thereby making them see no need for assistance from health workers, Geloo (2003); in cite Sitali (1999).

1.3.1.5 Preference to deliver at home

Worse still, there are women especially the older ones who strongly think the process of labour being a natural one, there is no need to seek medical care. They take it for granted that complications are only a sign of misfortune, thus intentionally decide to deliver at home ignoring its unpredictable nature, Geloo (2003); in cite Central Board of Health (1999)

1.3.1.6 Practices

Majority of expectant mothers together with their support persons who are often fellow women want to conduct practices like use of herbal medicines to accelerate labour and other rituals perceived by them as cardinal. To maintain secrecy of such activities which they have come to understand as offensive to the health staff, women prefer to deliver at home than at a health facility Geloo (2003); in cite UNFPA (1998).

1.3.1.7 Single parenthood

The routine biographic information obtained by health service providers to fill in health records puts single women in awkward situations of being compelled to expose details of the man responsible for the pregnancy. In case of a prominent public figure or another woman's well-known husband, a single expectant mother fears being treated as a laughing-stalk from her local community members for being a concubine, or even the quarrels that might erupt sooner or later with the man's wife. Similarly, such a woman opts to deliver at home for fear of public ridicule because confidentiality of name when being addressed by health staff may not be guaranteed as women especially in rural areas are frequently addressed by their partners' names as a sign of respect, who may not necessarily be their legitimate husbands.

1.3.1.8 Male attendants

Some women say that the presence of male nurses in assisting with a delivery is taboo thus off-putting; therefore they tend to shy away from male attendants who may be the only assisting attendants at the nearest health facility causing them to shun delivering from such a facility (Gathigah, 2011).

1.3.2 Health Service Factors

1.3.2.1 Attitude of Health Personnel

Expectant mothers may fear to deliver at a health facility because they do not receive the attention of skilled health attendants owing to negative attitude of health workers, so delivering at home is their only option as alternative health facilities are far-fetched in rural areas, Geloo (2003); in cite UNFPA (1998).

1.3.2.2 Distance to Health Facility

Long distances to health centres might be one of the reasons why mothers prefer to deliver at home. If the health providers cannot reach those mothers in the remotest parts of respective catchments, then the end result is resorting to deliver at home with attendance from unskilled

assistants. This could also be due to fear of discomfort when travelling on bad roads, unavailable transport or unaffordable transport costs, Geloo (2003); in cite Sitali (1999).

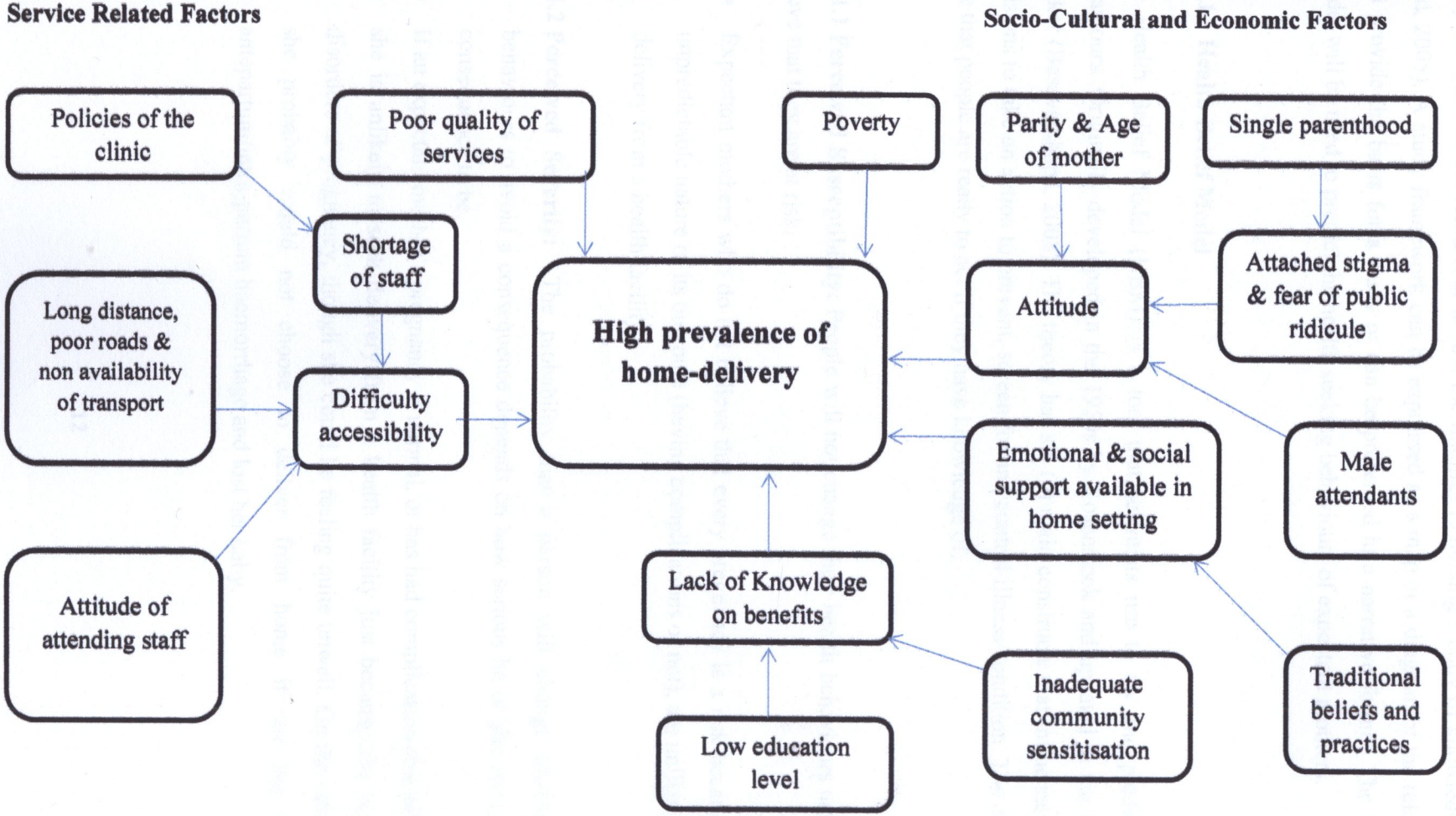
1.3.2.3 Staff Shortage

Rural health facilities are the worst hit with the problem of shortage of skilled health attendants. The few staff that might be available suffer work burn-out leading to divided attention and not being able to offer quality service, thus clients lose confidence (CSO, 2007).

1.3.2.4 Supervision of Staff

Poorly supervised nursing/midwifery staff, as is often the case especially in rural areas where health staff are scanty, leads to poor planning and organisation of safe motherhood services which become difficult to access. This causes clients to lose confidence in utilising the service (Mwape, 2002).

1.4 FIGURE 1: FACTORS ASSOCIATED WITH HOME DELIVERIES



1.5 CONCEPTUAL (THEORETICAL) FRAMEWORK

A Framework is an abstract, logical structure of meaning that guides the development of the study and enables the researcher to link the findings to nursing's body of knowledge (Burns et al, 2005). A study framework can be expressed as a map or a diagram of the relationships that provide the basis for a study or can be presented in a narrative format. The following model will be used to predict the health seeking behaviours of expectant mothers.

1.5.1 Health Belief Model

The Health Belief Model (HBM) is a tool that scientists use to try and predict health behaviours. Originally developed in the 1950s by Rosenstock and updated in the 1980s by Becker (Basavanthapa, 2008). The theory has six (6) main constructs that influence people's decisions to take an action to prevent, screen for and control illness/condition. The constructs state that people are ready to act if they have knowledge of:

1.5.1.1 Perceived Susceptibility: People will not change their health behaviours unless they believe that they are at risk.

- Expectant mothers who do not believe that every pregnancy is a risk because of the unpredictable nature of its outcome (having complications or not), are unlikely to seek delivery from a health facility.

1.5.1.2 Perceived Severity: The probability that a person will change his/her health behaviours to avoid a consequence depends on how serious he or she considers the consequence to be.

- If an expectant mother's pregnancy is normal, or has had complication-free deliveries, she is unlikely to seek delivery from a health facility just because she has minor disorders of pregnancy, though she could be feeling quite unwell. On the other hand, she probably would not choose to deliver from home if she has had an antepartum/intra-partum haemorrhage and lost her baby.

1.5.1.3 Perceived Benefits: It is difficult to convince people to change behaviour if there is not something in it for them.

- An expectant mother probably will prefer delivering from home if she does not think that doing so will increase the chances of her neonate's morbidity/mortality in some way.

1.5.1.4 Perceived Barriers: One of the major reasons people do not change their health behaviours is that they think that doing so is going to be hard. Sometimes it's not just a matter of physical difficulty, but social difficulty as well. Changing one's health behaviours can cost effort, money, and time.

- If most women from an expectant mothers' locality have had successful (complication-free) home deliveries, it may be very unlikely for her to seek an institutional delivery.

1.5.1.5 Cues to Action: are things that help move someone from wanting to make a health change to actually making the change.

- These are external events that prompt a desire to make a health change. They can be anything from essential knowledge gained from Information Education and Communication (IEC) during antenatal attendance on self-care during pregnancy, to seeing a primipara's reasonable confidence and skill in caring for her neonate, to having a relative's neonate die following home delivery.

1.5.1.6 Self-Efficacy: looks at a person's belief in his/her ability to make a health related change. It may seem trivial, but faith in one's ability to do something has an enormous impact on his/her actual ability to do it. Thinking that he/she will fail will almost make certain that he/she does.

- An expectant mother's belief that she can convince community-based birth-attendant(s) to escort her to a health facility for delivery, against their desire that they would prefer to assist her deliver at home.

1.5.1.7 Predicted relationship

When the knowledge of expectant mothers on the benefits of delivering from a health facility increases, their attitudes/practices will become positive.

1.6 JUSTIFICATION OF THE STUDY

1.6.1 Findings by Policy Makers

It is worth noting that institutional deliveries increased from 43% to 45% in 2007 and 2008, respectively. Subsequently, the following reasons are implicated to explain the afore-outlined variations:

- There was an emphasis on adequate utilization of more skilled health attendants and less traditional birth attendants (TBAs), leading to a reduction on the proportion of TBAs utilised.

- Safe Motherhood Action Groups (SMAGs) are believed to having contributed to the increase in institutional deliveries.

- Lack of training incentives have contributed to the drop-out rate for TBAs over the years (MOH, 2008).

1.6.2 Current Recommendations by Policy Makers

The following are important interventions on institutional deliveries that may need strengthening:

- There is need to improve staffing levels in health facilities country wide.

- Vigorous and sustained community sensitization for mothers to deliver in health facilities should be encouraged.

- The building of mothers' waiting shelters should be encouraged especially where mothers have to cover long distances of travelling to the nearest delivery centre (MOH, 2008).

1.6.3 Major Interest of the Investigator

Suffice to say that, to a large extent home deliveries could be the single most contributing factor to maternal, neonatal, perinatal and child morbidity and mortality. Though various other studies have been done in Mpongwe district, no study on home deliveries has been done whatsoever. My paramount inspiration to this study is drawn from our national overall message of the Campaign for Accelerated Reduction of Maternal Mortality in Zambia (CARMMZ) which states that **"Zambia Cares: No Woman Should Die While Giving Life"**. This message recognises and puts emphasis on every woman to deliver at a health facility; seeking assisted delivery by skilled health personnel; and above all, the importance of community members especially men to support women in accessing reproductive health services because every pregnancy faces a risk. Therefore, since each maternal life counts, this study stands to be of exemplary value to foster stringent yet implementable strategies to save every single maternal life at the final process of procreation which is delivery. In view of the afore-expounded trends, findings thereof will be necessary not only for Mikata catchment but also in various areas country wide.

The investigator seeks to find out reasons from expectant mothers why they opt to deliver at home, and inquire on their knowledge on associated risks. It is hoped that the findings will help to identify the gaps in maternal-neonatal and child health services that influence women to give birth at home, which is a highly risky practice in our setting.

1.7 RESEARCH OBJECTIVES

1.7.1 GENERAL OBJECTIVE

To explore factors associated with home delivery among expectant mothers in Mikata Rural Health Centre catchment area in Mpongwe District, with a view of coming up with appropriate recommendations to be made to policy makers and stakeholders on strategies/interventions to address the problem.

1.7.2 SPECIFIC OBJECTIVES

1.7.2.1 To determine whether women know the dangers of home delivery.

1.7.2.2 To investigate factors associated with home delivery.

1.7.2.3 To make recommendations to policy makers and stakeholders with a view of minimising home deliveries among rural women in Mpongwe District.

1.8 STUDY HYPOTHESES

These are considered to be intelligent hunches, guesses, or predictions that help researchers seek the solution or answer the research question (LoBiondo-Wood and Haber, 2006).

1.8.3.1 Health service factors have no association with home deliveries.

1.8.3.2 Giving sufficient attention to socio-economic, personal and cultural/traditional factors can reduce home deliveries.

1.9 CONCEPTUAL DEFINITION OF TERMS

1.9.1 Midwife is a person who, having been regularly admitted to a midwifery educational programme, duly recognised in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery (Medforth, et al 2006).

1.9.2 Community refers to a group of people who live in the same area, or the area in which they live (Encarta, 2009).

1.9.3 Nurse is a person who is educated in the scientific basis of nursing under defined standards of education and is concerned with the diagnosis and treatment of human responses to actual or potential health problems (Stedman's, 2000).

1.10 VARIABLES AND CUT-OFF POINTS

A Variable is a measurable or potentially measurable component of an object or event that may fluctuate in quality or quantity that may be different in quantity from one individual object or event to another individual object or event of the same general class (Basavantappa, 2008).

1.9.1 Dependent Variable

This is represented by **Y,** and is often referred to as the consequence or the presumed effect that varies with a change in the independent variable (LoBiondo-Wood and Haber, 2006). In this research, the dependent variable is home delivery.

1.9.2 Independent Variable

It is usually symbolised by **X,** and is the variable that has the presumed effect on the dependent variable (LoBiondo-Wood and Haber, 2006). In this research the independent variables include the following: Age, Formal education, Economic status, Distance, Knowledge, Attitude, Gender, and Traditional beliefs and practices.

Table 1: VARIABLES AND CUT-OFF POINTS

VARIABLES	INDICATOR	CUT-OFF POINTS	QUESTION NUMBER
Dependent Home deliveries	• High • Low	• 5 % and above • Below 5 %	15
Independent Age: child bearing (15-49 years)	• Below 18 years • Middle (18 to 35 years) • Above 35 years	• Too young • Favourable • Too old	1
Formal education	• High • Medium • Low	• College / University • Secondary level • Primary level • None	7
Economic status	• High • Medium • Low	• More than K500,000 monthly income / wage • K50,000 to K500,000 monthly income / wage • Less than K50,000 monthly income / wage	9
Distance to and from the nearest Health Centre (Accessibility of the Health Centre)	• Near • Far	• Within 5 km radius (1 hour or less walk) • More than 5 km radius (More than 2 hours walk)	11
Knowledge of expectant mothers on risks associated with home deliveries	• Low • High	• A score of 7 and below • Scores from 8 to 14 on knowledge questions	21 To 27b
Attitude of expectant mothers to skilled attendants (Midwives / Nurses) at Health facility	• Positive • Negative	• Expectant mothers willing to be attended to by midwives / nurses • Expectant mothers shunning assistance from midwives / nurses	28a
Attitude of Skilled staff (Midwives / Nurses) to clients	• Positive • Negative	• Accommodative to clients • Cruel to clients	29a
Gender of Skilled Staff assisting clients at delivery	• Accepting • Not accepting	• 50 % or more respondents • 49 % and below	32a
Traditional beliefs and practices	• Good • Bad	• Not adhering to beliefs / practices harmful to health. • Adhering to beliefs / practices harmful to health.	34a

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature Review also referred to as review of the literature refers to an organized critique of the important scholarly literature that supports a study, and a key step in the research process (Haber and LoBiondo-Wood, 2006).

The importance of carrying out literature review is that, it helps the researcher not to duplicate work or researches that have already been done. It also helps the researcher to refine the statement of the problem after checking on what others have done, learnt and reported on the problem. In addition it gives the researcher a theoretical basis or backing for carrying out the study. Moreover it helps the researcher to become familiar with the various types of methodologies used before that might be used in the current study.

Various researchers have carried out studies on this topic in different parts of the world. In this study, the researcher has reviewed available literature on factors contributing to home deliveries.

2.2 FACTORS CONTRIBUTING TO HOME DELIVERIES

2.2.1 Planned births

Hanson (2009) did a study in the United States of America entitled "When making the choice of where to give birth to a child: Home birth statistics can be used to evaluate the safety of giving birth at home," the number of hospitals and maternity centres, and the number of women who chose to give birth at home were increasing. When compared to the results of the study conducted in 2004, the percentage of women giving birth at home had risen by 20%. The study also revealed that the facilities of midwifery and nurses exclusively trained in aiding home births had not increased. However the study revealed that a large number of women thought that home births were safe. Another reason attributed to the increase in the number of homebirths in this study was the high

incidence of Caesarean sections in hospitals. At the end of this study, it was found that one in every 95 pregnant women chose to give birth at home. The researcher further found that the initiative by several private women bodies on encouraging women on home births seemed to have worked in favour of pregnant women. The study revealed a high prevalence of homebirths among white women and an increase of 28% of home deliveries among Hispanic women in the previous four years. The findings also showed that one in every 360 women preferred childbirth at home. Out of the 31 states in the United States, only four states showed a reduction in home birth while all the rest registered increase. Montana recorded the highest increase percentage with 2.18% while Vermont registered a sharp decline by 23%. The study concluded that historically, in all regions of the world, childbirth had been a source of great enthusiasm and is something that happened at home. Home birth statistics looking at the percentage of births that occurred at home showed differences in the evolution of home births around the world. In the United States, 50% of births took place at home in 1938; by 1955, fewer than 1% of babies were born at home. Statistics are similar in the United Kingdom (UK), Japan, Canada, and Australia. In some Western European countries, home births were more common; in the Netherlands, about 30% of babies were still born at home, especially with low-risk pregnancies. In both cases, a midwife assisted the labouring expectant mother.

World Health Organisation (2008) reported that despite the increase in the number of hospitals and maternity centres in the United States, the number of women who chose to give birth at home was on a rise. It further reported that one in every 95 pregnant women chose to give birth at home. Noticing the trend, the World Health Organization (WHO) began a course on training midwives for performing home deliveries in the natural and safest manner as well as to handle minor emergencies that might occur during childbirth. It concluded that the United States had the largest number of home births taking place in Oregon. Meanwhile the initiative by several private women bodies on encouraging the trend of home births seemed to had worked in favour of pregnant women.

Goldstein (2005) carried out a study in the United States of America (USA) and Canada entitled "Home births: The safety debate." The study revealed that home births were

common in settings where midwives provided the bulk of prenatal care and assisted with delivery, whereas in the United States, home births were found to be controversial and about 99% of expectant mothers gave birth in a hospital. Those who promoted home births emphasized the social, cultural, and emotional benefits of the practice. Yet many medical providers expressed concern that the lack of immediate access to a hospital's services could endanger the lives of both mother and neonate. The study population was 5,000 expectant mothers who were planning to have home births attended by certified professional midwives in 2000. Several hundred midwives who attended to these births documented details about the course of caring for their clients/patients, including any complications they encountered. The same study also evaluated client/patient satisfaction and validated the outcomes that midwives reported. The study also compared mortality rates for the low-risk hospital births with homebirths. The researcher found similar mortality rates for low-risk hospital births and planned home births. The study also revealed that mothers who hoped to have a home birth were less likely to have medical interventions like caesarean sections or forceps delivery. About 12% of women intending to give birth at home needed to be transferred to the hospital for reasons such as a difficult labour or pain relief. More than 97% of such mothers were very pleased with their overall care. Thus it was deduced that in low-risk situations, home births attended by certified professional midwives could be just as safe as hospital births. The study concluded that a birth's risk depended on several factors: including the position of the baby; the due date; the mother's age; and her medical and pregnancy history; and advised that expectant parents should discuss the risks and benefits of a home birth with their medical provider. The findings showed that the demographics of those planning home births were quite different from those who opted for a hospital. Those who delivered at home tended to be older, more educated, of lower socioeconomic classes, and less likely to be African-American or Hispanic and were more likely to have given birth to a child before.

Foster (2011) conducted a study in the United States of America in the state of Vermont. The title of the study was "What is a Homebirth?" The findings of this study revealed that Non-Hispanic white women were more likely to give birth at home than women of other racial or ethnic groups and were more apt to hire midwives to attend to the births. In

addition the study found that most home births to Hispanic and non-Hispanic black women were delivered by physicians or other attendants, suggesting that a higher proportion of these births may be unplanned, emergency situations. The researcher looked at data on births from 1990 to 2006, when both the number and percentage of home births increased for non-Hispanic white women, but declined for all other race and ethnic groups. In 1990, there were 27,678 home births in the U.S.A, representing 0.67 percent of all births in that year. Both the number and percentage of births occurring at home declined gradually from 1990 to 2004. But in 2005, the percentage of home births increased to 0.59 percent, a growth that was sustained the following year. In 2006, non-Hispanic white women were three to four times more likely to give birth at home than women of other racial and ethnic groups. Home births were more likely than hospital births to occur among older, married women with several previous children.

In a research carried out by Kim and Garite (2010) in Europe and United States of America on "Home birth triples neonatal death risk," it was found that home birth could be best for a woman who were less likely to have had medical intervention; from painkilling drugs to forceps to a caesarean section, yet, the researchers found that it carried three times the risk that her baby would die especially in the neonatal period. Women, particularly low-risk parous individuals, who chose home birth, were in large part successful in achieving their goal of delivering with less morbidity and medical intervention than experienced during hospital-based childbirth. The researchers analysed data from studies conducted in the US and in Europe where they considered a total of 342,056 planned home births and 207,551 planned hospital births. The team found double the number of deaths overall among those born at home and triple the number when they removed those with congenital defects from the calculation. The main causes were breathing problems during birth and failed resuscitation after delivery. Yet women who chose a home birth appeared to be in good health and their babies were less often premature or of low birth-weight. The studies revealed that women planning home births were of similar, and often had lower obstetric risk than those planning hospital births. The findings supported the safety of planned home birth for the mother, but raised serious concerns about increased risks of home birth for the new-born infant.

Arulkumaran (2010) conducted a study in the United Kingdom and Scotland on "Safety of home births." The findings revealed that there was no clear picture of the relative safety of home births, because it was difficult to conduct randomised trials, where women could be allocated either to give birth at home or on the labour ward. The study showed that, in order to ascertain findings which could report that the consequences for the baby are more severe needed to be carefully considered by women, policymakers and care providers. This study again revealed that the move towards offering women a choice in their place of birth in the UK needed to be weighed against such evidence, whereas in Scotland the study revealed that difference in outcomes for babies disappeared if women considered at high risk of complications during pregnancy and delivery were taken out of the equation. The study demonstrated that screening for women at risk was important, including making arrangements to get women to hospital if something went wrong during a home birth. In the same study two midwives with good resuscitation skills were present at home birth - one for the woman and another for the baby. This research revealed that one in three attempting a home birth for the first child ended up being transferred to hospital and one in 10 with a subsequent child - not only because of complications but also for pain relief. The researcher put the above systems in place and provided women one-to-one midwifery care, and the study showed that planned home births for low-risk women were a viable option.

2.2.2 Cultural Reasons

Gathigah (2011) conducted a study in South Sudan. The title of the study was "More skilled attendants needed to reduce maternal mortality." The study revealed that many women attended antenatal clinic but most of them preferred to deliver at home for various cultural reasons. For example, in some settings of South Sudan, women said that the thought of being delivered by a male health attendant was taboo. But due to circumstances such as shortages and the need to be attended to by professional staff, they had the un-preferred gender of skilled birth attendants (Males) to be their only available option. The study further revealed that South Sudan had only 10 nurses for every 100,000 births and just 4 adequately qualified registered nurses for every million children born.

The researcher also found that South Sudan had 2,037 maternal deaths for every 100,000 births, with roughly 2,000 TBAs registered by South Sudan's Ministry of Health who formed the wafer-thin support for births in a population of 10 million. The TBAs were found with no formal qualifications, yet, they appeared to have had vast experience with deliveries acquired over years of practice. The study found that TBAs enjoyed the confidence of women in the community, and that there were efforts to integrate TBAs into the health system as a means of drawing more women to hospitals for delivery. The study revealed that there were barely more a thousand nurses and only 40 who held a diploma indicating basic knowledge of midwifery. The researcher found that the picture was not so different in Niger which had a staggering maternal mortality and morbidity rate particularly among the rural women and especially those with little or no education and consequently low or no income. During this study Niger ranked 163 in the Safe Motherhood Index, with 1,800 deaths per 100,000 births, and estimated that one in seven Nigerian women would die from a pregnancy-related complication.

2.2.3 Quality of Care

Izugbara (2008) carried out a study in Kenya. The study title was "The persistence and challenges of homebirths: perspectives of traditional birth attendants in urban Kenya." The study revealed that Kenya was poor, multi-ethnic, with a pluralistic health care, having a population of about 34 million, and a context of health-seeking reflecting a great diversity comprising western biomedicine, faith healing, patent medicine shops and traditional medicine co-exist, and care-seekers chose among these options to meet their health needs. Access to quality formal birthing services was quite low; a dynamic that correlated with country's high maternal mortality with approximately 414 maternal deaths that occurred per 100 000 live births. In some regions of the country, maternal mortality was as high as 1300 deaths per 100 000 live births. Also, annually over 3000 Kenyan women of reproductive age died of pregnancy-related complications, while a much larger number suffered short and long term maternal-related. The study revealed that 26% of Kenyan women gave birth in a public health facility while Private facilities hosted about 14% of annual births. However, a good number of these so-called private facilities were

illegal, ramshackle and dirty single or double-room structures, often run by persons who, although popularly referred to as 'doctor' or 'nurse' by their clientele, possessed little or no requisite formal clinical training. These 'doctors' and 'nurses' were sometimes former or serving hospital ward cleaners and attendants, auxiliary nurses and midwives, dispensers, laboratory attendants, patent drug vendors, drugstore keepers and clerks, and even morgue attendants. The bulk of births in Kenya (59%) occur at home assisted by a TBA.

Izugbara (2008) further revealed three key issues that dominated the TBAs' explanations regarding the persistence of homebirths: the wide-ranging nature of the TBAs' services; the high quality of their services; and the responsiveness of their services to the socio-cultural and economic sensitivities of women. TBAs spoke frequently of supporting and relating with women in the community long before, during and after their pregnancies, then provided women with advice and information on contraceptives, as well as antenatal and postnatal care. They helped secure birth certificates for children, mediated between women and their husbands, and organized merry-go-round schemes that women relied on to deal with health emergencies. Some reported helping women bring their uncaring and erring husbands to the attention of the community chiefs, treating minor childhood ailments, advising families on a range of issues including nutrition during pregnancy and preparation for childbirth. The TBAs offered counselling services to unmarried women in the community, organized prayer sessions for pregnant women, took babies they had helped deliver for vaccination, arranged money and other materials for indigent women, and sometimes visited women at home to help with their household chores during pregnancy and the periods surrounding it. The implication of this, the TBAs admitted, was that very early on, the women in the community developed trust and confidence in them. A particularly interesting aspect of the narratives on the multiplicity of TBA services being a key attraction was that the study participants recognized the specific and general needs of the women they serve.

The researcher further found that another frequently mentioned reason for the continued use of TBAs was that their services were not inferior to those provided in hospitals. Judging by their narratives, the TBAs believed that most hospital-based providers have

little or no respect for them and also often dissuade women from seeking TBA services. Some of the narratives dwelt on how more maternal and child deaths occurred in hospitals than in traditional birth homes, citing this as evidence that hospital-based providers were not superior to TBAs. During the study, women reported having continued to seek TBA services out of a realization that they (TBA) were not inferior to hospital-based providers. Indeed, while the TBAs generally recognized the potential of the hospital setting, they frequently spoke of it as a place that women resort to when they anticipate emergencies and problematic births.

2.2.4 Women's Autonomy

In another study done by Fotso (2009) in the slums of Nairobi, Kenya entitled "Maternal health in resource-poor urban settings: how does women's autonomy influence the utilization of obstetric care services?" A total of 1,927 women (out of 2,482) who had a pregnancy outcome in 2004–2005 were selected and interviewed. Seventeen variable items on autonomy were used to construct women's decision-making, freedom of movement, and overall autonomy. Further, all health facilities serving the study population were assessed with regard to the number, training and competency of obstetric staff; services offered; physical infrastructure; and availability, adequacy and functional status of supplies and other essential equipment for safe delivery, among others. A total of 25 facilities were surveyed. The study found that while household wealth, education and demographic and health covariates had strong relationships with place of delivery, the effects of women's overall autonomy, decision-making and freedom of movement were rather weak. Among middle to least poor households, all three measures of women's autonomy were associated with place of delivery, and in the expected direction; whereas among the poorest women, they were strong and counter-intuitive. However, the study did not show an association between autonomy, education and use of health services for delivery.

2.2.5 Distance to Health Facilities

The World Health Organisation (2008) reported that Sub-Saharan African countries had claimed nine of the ten bottom places in a ranking of maternal health around the world. Africa's health systems were inadequate to serve the needs of pregnant women, a majority of whom gave birth without a skilled health worker present. Across the continent, particularly in rural areas, a hospital or clinic with a trained midwife or doctor and facilities to deal with complications was often far away. The lack of good roads and transport – and the cost of transport - meant a pregnant woman in trouble was unlikely to reach help in time. Cost was also a factor for women and their families even at highly subsidised public hospitals, owing to the fact that the cost of giving birth could be beyond the reach of a woman living on a dollar or two a day. Many decided to give birth unaided at home, or with the help of an untrained attendant whose more modest fee could be paid in kind, with farm produce for example. Due to various factors such as poor infrastructure, most women delivered at home with no professional assistance and this led to fatalities in many instances, because in case of a complication such as excessive bleeding, the woman would die.

Geloo (2010) carried out a study in Zambia on "Diverse Factors Linked to Maternal Deaths in Zambia." The study revealed that half of all births occurred with a skilled attendant in a health facility – over 80% of births in urban areas but only about 30% in rural areas. Unattended home deliveries were found largely to be a rural problem in Zambia. The study used a geographic information system (GIS), which linked national household data from the Zambian Demographic and Health Survey 2007 with national facility data from the Zambian Health Facility Census 2005 and calculated straight-line distances. Health facilities were classified by whether they provided Comprehensive Emergency Obstetric Care (CEmOC), Basic Emergency Obstetric Care (BEmOC), or limited or substandard services. Multivariable multilevel logistic regression analyses were performed to investigate the influence of distance to care and level of care on place of delivery (facility or home) for 3,682 rural births, controlling for a wide range of confounders. Only a third of rural Zambian births occurred at a health facility, and half of all births were to mothers living more than 25 km from a facility of BEmOC standard or

better. As distance to the closest health facility doubled, the odds of facility delivery decreased by 29%. Independently, each step increase in level of care led to 26% higher odds of facility delivery. The population impact of poor geographic access to EmOC was at least of similar magnitude as that of low maternal education, household poverty, or lack of female autonomy.

Geloo (2003); in cite (CSO, 2002) alludes to surveys which reported that the vast majority of women who died from obstetric causes in Zambia were in the middle- to poor-income groups. For example, the ZDHS 2001/2002 reported that only 3% of maternal deaths occurred among women in high-income categories. Health care services varied because of the two-tier fee system in the government-run hospitals. In addition, Geloo (2003); in cite (UNICEF, 1999) reported that a woman in the low-cost section paid about K20, 000 (US$4) and would get the attention of a clinical officer, a nurse or midwife (rarely a doctor), and medication if it were available. At the higher end, a payment of about K1 million (US$100) entitled a woman to a single or double room, a doctor on call, and full medical attention. Moreover, most women in rural Zambia delivered their babies at home without skilled care because of the long distances involved in reaching emergency obstetric care, so it was crucial to address the geographic and quality barriers to health care use.

Gabrysch et al (2010) conducted a study in rural Zambia entitled "The Influence of Distance and Level of Care on Delivery Place in Rural Zambia: A Study of Linked National Data in a Geographic Information System." The study revealed that almost half of all mothers lived more than 25 km from a health facility that provided basic emergency obstetric care. As distance to the closest delivery facility doubled the odds of a woman giving birth in a health facility decreased by 29%. The level of care at a facility also had a strong influence, for instance, if the closest facility provided basic emergency obstetric care as opposed to substandard services, the odds of facility delivery were 1.5 times higher and if it provides comprehensive emergency obstetric care, they were 2.5 times higher.

Geloo (2003) conducted a study in Kalomo, Southern Province. The title of the study was "The Influence of Distance and Level of Care on Delivery Place in Rural Zambia: A

Study of Linked National Data in a Geographic Information System." The study revealed that the district had 129 trained staff, two district hospitals, and 21 health centres, and that these institutions were unable to provide emergency obstetric care, had no operating theatres or blood banks, as recommended by the Prevention of Maternal Mortality Programme (PMMP) which was launched in 2001 to provide technical assistance to district health management teams and non-governmental health organizations working to reduce maternal deaths.

2.2.6 Lack of skilled attendant at birth

The World Health Organization (2008) recommended that a skilled attendant be present at every birth, but in South Sudan there were only 10 nurses for every 100,000 births and just four adequately qualified registered nurses for every million children born. South Sudan's Ministry of Health reported 2,037 maternal deaths for every 100,000 births. The picture was not so different in Niger which had a staggering maternal mortality and morbidity rate particularly among the rural women and especially those with little or no education and consequently low or no income. Niger ranked 163 in the Safe Motherhood Index, with 1,800 deaths per 100,000 births. One in seven Nigerien women would die from a pregnancy-related complication.

In a study done by Vanderlaan (2011) in Rwanda and Burundi with the title "Birthing Naturally and Birth in Central Africa," it revealed that Rwanda had only 10% of mothers receiving adequate prenatal care and only 31% giving birth with a skilled attendant. Both Rwanda and Burundi had less than one midwife per 10,000 people. Only 61% of mothers in the Democratic Republic of Congo were attended during labour. The Democratic Republic of Congo had the 5th worst infant mortality rate in the world.

The World Health Organisation (2008) reported that various serious challenges in Africa included numerous man-made and natural disasters such as civil conflicts, disease outbreaks, droughts, and floods that rapidly destroy useful resources/amenities like domestic life stock, farm produce, and infrastructure, disrupt services, divert resources and erode former gains made in health. Therefore, if nothing is done to effectively

address the various challenges affecting the African Region, it is estimated that, over the next ten years, there will be at least: 2.5 million maternal deaths, and 49 million maternal disabilities; resulting in 7.5 million child deaths. Some 250,000 maternal deaths occur in Africa each year. There are several factors that make childbirth in Africa so dangerous. Millions of early marriages and teenage pregnancies mean riskier births to young women whose bodies have not developed to fully stand the rigors of childbirth.

2.3 CONCLUSION

The literature reviewed on factors contributing to home deliveries revealed that many studies have been conducted on the topic globally, regionally and at national level. Studies on home deliveries in developed countries show that they (home deliveries) are very prevalent and safer there due to readily available skilled attendants, material and financial resources, and an effective referral system, than the case is in developing countries. Nevertheless, the subject still remains controversial across the globe due to the unpredictable nature of the outcome of childbirth. Prominent factors associated with home deliveries in this literature review includes age and parity of a woman, traditional beliefs and practices, socio-economic status, level of education, distance to health facilities, and availability of trained and/or skilled attendants. However, the perception of expectant mothers on the value of institutional deliveries, suitability of delivery centres, and the impact of health education on benefits of institutional deliveries has not been addressed whatsoever.

In view of the above reasons, the investigator proposed to carry out a study on factors associated with home deliveries with a view of coming up with appropriate recommendations to policy makers on strategies/interventions to reduce preference for home delivery among rural women in Mikata RHC catchment area of Mpongwe District.

CHAPTER THREE

3.0 METHODOLOGY

Polit and Hungler (2001) states that research methodology is a method or technique used by the research scientist to collect data use statistical manipulation and arrives at a logical conclusion. This chapter elaborates on the research design, study setting, study population, sample selection, sample size, data collection tool, data collection technique, pilot study, validity, reliability, ethical and cultural considerations of the study.

3.1 DESIGN

A Research design outlines the plan, structure, and strategy of investigations to answer the research question. It is the overall plan or blue-print that researchers select to carry out their study that entails all the steps in the research process from the definition of variables and formulation of hypotheses through the decision on how the data will be analysed (Basavanthappa, 2008).

An explorative quantitative non-interventional study design was used in this study. The study was explorative and quantitative in nature because it involved identification and exploration of factors associated with home delivery among pregnant women in Mikata Rural Health Centre Catchment area in Mpongwe District. The researcher depended on quantitative variables which allowed for measurement by recording the amount of a variable possessed by each person/thing. It was also non interventional because no experiment was undertaken on the study participants.

This study design was thought to be appropriate because it aimed at bringing out factors that were contributing to home delivery in Mikata RHC Catchment area in Mpongwe district, especially that little was known about the problem in this area.

3.2 RESEARCH SETTING

Research study setting refers to the physical location and conditions in which data collection takes place in a study (Polit and Hungler, 2001).

Mpongwe is a rural district found on the Copperbelt province of Zambia. It lies about 67km to the south of the mining town of Luanshya. The area is found within the central plateau of Zambia lying between 1200 metres and 1500 metres above the sea level. It has generally a flat and undulating relief with low-lying hills. The District shares boundaries with Kapiri-Mposhi of Central Province to the south, and Lufwanyama District on the Northern part. Solwezi and Kasempa are on the North-western part of the district while, Masaiti District is on Eastern part of the district.

The road network comprises Luanshya–Mpongwe tar road that runs north–south which is in good condition. There is also the most recently tarred road (Mpongwe-Luansobe) that runs through Mikata, west-east to Ndola – Kapiri-Mposhi highway. This road almost cuts through the middle of the entire district up to Machiya on the Kafue River. Only in isolated areas have the upraised hills of resistance rocks such as Kanyenda ridge north of Mpongwe District. The flat relief of the area has resulted in the formation of dambos and short seasonal streams that drain into the rivers in the area. The Kafulafuta River in the north forms a natural boundary with Masaiti district, while the Kafue River forms the north-western and western boundaries and runs from the north to the south-western part of the district. The Lukanga River in the south also forms the southern boundary and the Mpongwe River, which runs through the middle of the district, drains into the Kafue River. Several streams and tributaries drain in the major rivers mentioned above (CSO, 2010).

Mpongwe District has two level-II hospitals and 15 health Centres which are all delivery centres. With a growth rate of 2.8%, the population of Mpongwe district has reached 84,476. According to CSO (2010); in cite CSO (2000), the population of Mpongwe as a district has grown from 79,850 to 84,476 in 2010 at a growth rate of 2.8%. Therefore, the district has a total of females all ages at 41,478 (49.1%); women of childbearing age (15-49) at 18,585 (22%); expected pregnancies at 4,562 (5.4%); expected deliveries at 4,393

(5.2%); and expected live births at 4,182 (4.95%). In 2009, the district attended to a total of 4,096 deliveries, of which 3,268 were assisted by skilled provider (Nurse, Midwife or doctor) and 823 were assisted by trained traditional birth attendants, with 3,658 total institutional deliveries and 548 home deliveries (CSO, 2010).

The study was conducted at Mikata Clinic which is one of the 17 delivery centres in the low density rural district of Mpongwe on the Copperbelt Province of Zambia. Mikata catchment was the earliest settled area in Mpongwe district initiated by the missionaries of the Scandinavian Baptist Association from Sweden between 1918 and 1932. Their main intention was preaching the Gospel of the Lord Jesus Christ, yet they provided health services in a make-shift shelter and a portable tent at first before making an established structure between 1932 and 1936 with Mrs Chimupeni as the only nurse a Zambian who was trained from South-Africa. However, the missionaries abandoned the place and went west-wards to settle and founded a new health centre now called Mpongwe Mission Hospital. The now existing Mikata Clinic was re-established by the Zambian government and resumed operation in 1971 (Mikata Action Plan, 2010).

Mikata Rural Health Centre is about 25 kilometres away from the nearest referral hospital which is Mpongwe Mission Hospital, and is one of the 17 health facilities in Mpongwe district. The clinic is located in the chiefdom of Chieftainess Lesa, right on the eastern border with the chiefdom of Chieftainess Malembeka, about 90 kilometres on the southern side of Luanshya, 25 kilometres to the east of Mpongwe district centre, and about midway along the Mpongwe-Luansobe road which joins the Ndola – Kapiri-Mposhi highway. Mikata catchment borders with Masaiti district on the north-eastern side and Kapiri-Mposhi district on the south-east. Mikata RHC catchment population is 9,917 with 141 total institutional deliveries and 43 home deliveries (CSO, 2010).

Mikata catchment community is divided into 19 NHCs, namely; Mikata Central, Fikonshi, Mipolombo, Mbonshi attended to as static, while Mipini, Kampelembe, Chintimfu, Chipya, Nachitalo, Kashiba-Mpondwa, Chibangu, Luankuni, Chishinga, Kantolo, Chitina, Chamatete, Muyambe, Chisapa and Chikundwe are outreach posts/stations where health activities are conducted. The health Centre depends on minimal Solar Power for lighting, while a deep unprotected well is the only source of

water, with no Radio Communication System and not covered by mobile phone wave-transmitter service providers. Members of staff at the clinic comprise; 1 Registered Nurse-Midwife (RNM), 1 Enrolled Nurse-Midwife (ENM), 1 Enrolled Nurse (EN), 1 Environmental Health Technologist (EHT), and 5 Classified Daily Employees (CDEs). The variety of services offered at the clinic include; General Nursing Care, Antenatal Care (ANC), Delivery Care (Labour), Prevention of Mother to Child Transmission of HIV/AIDS (PMTCT), Postnatal Care (PNC), Family planning (FP), Children's clinic, Out-Patient, Diagnostic Counselling and Testing (DCT), Voluntary Counselling and Testing (VCT), Male Circumcision (MC), Tuberculosis (TB) treatment, Antiretroviral therapy (ART), School Health Services (SHS), Static and Out-reach activities (Mikata Action Plan, 2010).

In this study, the participants were from specific areas of concern within the proximal localities of Mikata RHC catchment area within a radius of 5 kilometres. This included whole and/or part of Neighbourhood Health Communities (NHCs) such as Mikata Central, Mipolombo, Mbonshi, Chintimfu, Chipya, Kashiba-Mpondwa and Fikonshi. These places were chosen using non-probability purposive sampling based on close proximity to the delivery centre (Mikata Health Centre). The other reason was that it was convenient and logical for the researcher to collect data from participants who attended antenatal clinic directly from the delivery centre, unlike through outreach activities which take place from far-off places.

3.3 STUDY POPULATION

A Study Population refers to the entire set of individuals or objects having some common characteristics (Polit and Hungler, 2001). The study population consisted of the target population and accessible population.

The study population was all expectant mothers in Mikata catchment area of Mpongwe district. The study units were expectant mothers attending antenatal clinic at the time of the study.

3.3.1 Target Population

A Target Population is the entire population in which the researcher is interested and to which he/she would like to generalise the results of the study (Polit and Hungler, 2001). The target population for this study was pregnant women attending antenatal clinic at Mikata Rural Health Centre.

3.3.2 Accessible Population

The Accessible Population is the population of people available for a particular study, often a non-random subject of the total population (Polit and Hungler, 2001). For this study, the accessible population was expectant mothers attending antenatal clinic at Mikata RHC.

3.4 SAMPLE SELECTION

Sampling Method is a process of selecting a number of individuals from the determined target population in such a way that the individuals in the sample represent, as nearly as possible the characteristics of the entire target population (Dempsey and Dempsey, 2000). For this study, Systematic Sampling method was used to select study participants. This is a probability sampling strategy that involves the selection of participants randomly drawn from a population list at fixed intervals (LoBiondo-Wood and Haber, 2006). The researcher chose this method because the study participants were not many, and the number of pregnant women attending antenatal clinic varied on each antenatal day.

3.4.1 Inclusion Criteria

Expectant mothers attending antenatal clinic at Mikata RHC residing in the study area and gave consent to participate in the study were included in the study.

3.4.2 Exclusion Criteria

Expectant mothers who did not reside in the study area and those who did not consent were excluded from the study.

3.5 SAMPLE SIZE

A Sample Size is the total number of study participants to represent the population under study (Polit and Hungler, 2001). In this study, the sample size consisted of 50 participants who were expectant mothers attending antenatal clinic at Mikata clinic.

3.6 OPERATIONAL DEFINITIONS

1.6.1 Catchment Area is a geographical location (community) expected to be served with health services by a specific health facility.

1.6.2 Community is a group of people living in the same area (share the same locality).

1.6.3 Delivery is the whole process of giving birth.

1.6.4 Expectant Mother is a woman who knows or is known to be pregnant.

1.6.5 Health facility is an established and officially recognised place for accessing health services inclusive of delivery.

1.6.6 Home Delivery is a situation/process of giving birth at home or on the way to a health facility intentionally where access to a health facility is possible.

1.6.7 Maternal Complication is a condition that seriously compromises the normal process of labour as well as incapacitates the woman as a whole within 42 days (6 weeks) following delivery.

1.6.8 Maternal Mortality is the death of a woman during pregnancy or within 42 days (6 weeks) following delivery from pregnancy related factors.

1.6.9 Midwife is any person (man or woman) who underwent formal training to assist expectant mothers at the time of delivery.

1.6.10 Nurse is any person (man or woman) who underwent formal training to offer health care services (attend) to clients/patients.

1.6.11 Reproductive Age is any woman within the age of 15 to 49 years.

1.6.12 Rural Health Centre is an established and officially recognised health facility located in a primitive geographical area.

1.6.13 Traditional Birth Attendants (TBAs), means men and women who have been trained within their community of residence to assist mothers at their time of delivery.

1.6.14 Unassisted childbirth is a situation/process of giving birth at home or on the way to a health facility, intentionally or not, due to reasons of emergency, lack of access to a skilled (medical or professional) birth attendant, or other.

1.6.15 Utilisation is the ability of expectant mothers to access and make adequate use of the existing services at their nearest health facility.

3.7 DATA COLLECTION TOOL

Data Collection is gathering of information needed to address a research problem (Polit and Hungler, 2001) whereas a Data Collection Tool is an instrument/equipment used for collecting data, which could either be a questionnaire, an interview schedule, a projective device or some other type of utensil for eliciting information (Polit and Hungler, 2001).

In this study, a semi-structured interview schedule was used to collect data. The research instrument/tool comprised 7 sections of questions outlined in the following manner: Section A had the respondent's Demographic Data; Section B had questions finding out information on the respondent's (Distance) Transport System to health facility; Section C had questions eliciting information on Place of Delivery of the participant; Section D had questions about the respondent's Knowledge on delivery complications; questions in

Section E inquired on Attitude of Staff at the respondent's nearest health facility; Section F covered questions on participant's Practices and Beliefs; while section G covered questions on Cost of Health Care. The tool (semi-structured interview schedule) had a set of pre-determined questions with the same questioning technique using both open and closed ended questions. All the respondents were interviewed using the same tool.

The advantages of using a semi-structured interview schedule were:

- Respondents were able to describe things in their own words.
- Misunderstandings were corrected on the spot.
- Questions were paraphrased thus permitted flexibility in the manner, order and language while retaining the same meaning in questioning.
- Personal rapport was built.
- High response rate was obtained due to the presence of the researcher.
- Non-verbal behaviour was observed during the interview.

The disadvantages were:-

- It was time consuming.
- Participants could have falsified/distorted sensitive information in order to please the researcher.

There were no adjustments made to the research instrument as no changes were made to any questions.

3.7.1 Validity

Validity is the determination of whether a measurement instrument actually measures what it is purported to measure (LoBiondo-Wood and Haber, 2006). In this study, validity was measured by a pilot study that was conducted. A semi-structured interview schedule included questions pertaining factors that were identified as having an association on the problem of expectant mothers opting for home delivery rather than institutional delivery. The researcher also consulted current sources of literature on the

topic under study and experts on the topic were also consulted. Any questions that were not clear from the pilot study were changed.

3.7.2 Reliability

Reliability refers to the consistency and constancy of a measuring instrument (LoBiondo-Wood and Haber, 2006). The instrument used should be able to bring out the accurate information whereby when the same instrument is used after some time it should produce the same response/result. Reliability of the instrument was measured by conducting a pilot study. The results from the pilot study were used as base line data to test reliability. The researcher followed the instructions on the semi- structured interview schedule so that biases could be eliminated by administering the same instrument across the subjects. This also minimised errors.

3.8 DATA COLLECTION TECHNIQUE

Data Collection Technique is the gathering information needed to address a research problem (Polit and Hungler, 2001). An interview involves direct personal contact with the participant who is asked to answer questions. The questions were written in English but translated into Lamba, Bemba, Nyanja and Tonga during interviews for those participants who were not able to understand English. Instructions were read to the respondents, purpose of the study, use of findings and the assurance of privacy and confidentiality were explained. The interview was conducted at antenatal clinics from 6th to 30th November 2011. The interview lasted for approximately 30 minutes with each participant.

The interview was conducted in the following manner;

- The interviews were conducted in the counselling room at Mikata clinic.
- The researcher introduced himself to the participant in order to gain rapport and make the participant feel at ease.

- The purpose of the study was explained to the participant to enable the participant participate in a study that she was fully aware of.
- Confidentiality and anonymity was assured to enable the participant participate in the study without any fear.
- After obtaining informed consent, the researcher read out the questions to the participants.
- Questions were read clearly to avoid cross-examining the participant.
- Questions not understood were repeated in order to maintain the same meaning and without indicating the direction to the answer.
- The researcher then noted down in the interview schedule all the responses immediately as given by the participants to avoid missing out any information.
- At the end of the interview schedule, the researcher checked through the interview schedule to note for consistency in the answers given and for completeness of the interview schedule.
- The researcher asked the participants for any questions, comments or contributions regarding the study, and then thanked the participants for taking part in the study.

3.9 PILOT STUDY

A Pilot Study is a small preliminary investigation of the same general character as the major study, which is designed to acquaint the researcher with problems that can be corrected in preparation for the large research project (Basavanthappa, 2008). The purpose of the pilot study was to assess the feasibility of the study and make necessary adjustments to the interview schedule before the major study was carried out. The pilot study was conducted at Kanyenda RHC from 2nd to 3rd November 2011. The pilot study was conducted on 10% of the total sample (10% of 50 = 5), so the participants for pilot study were five (5).

3.10 ETHICAL AND CULTURAL CONSIDERATION

The development and implementation of research should be ethically and culturally acceptable. Ethics are a system of moral values that are concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants (Polit and Hungler, 2001). It is important to consider ethics in research in order to ensure the protection of human rights.

Written permission to carry out the study was sought from Mpongwe District Medical Officer, Health Centre In-charge, Their Royal Highnesses Chieftainess Lesa, and Chieftainess Malembeka, where the study was conducted. Verbal permission was sought from participants before conducting the interviews. Confidentiality and anonymity was assured to the respondents. Serial numbers were used to identify the participants. The purpose of the study was explained to all participants involved so that they could understand the nature of the study to which they were consenting, as well as enable them participate in the study willingly without any feelings of coercion or fear of future victimisation whatsoever. The questionnaires were kept in an enclosed big envelop and locked up for safety. Respondents were informed that they could withdraw from the study at any time if they so wished and this was not withheld from them.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

This chapter aims at presenting information on the manner the research data were analysed and what information was obtained. Data were collected from respondents using an interview schedule. Fifty (50) respondents participated in the study, and were drawn from specific areas of concern within the proximal localities of Mikata RHC catchment area within a radius of 5 kilometres. This included whole and/or part of 7 Zones/Neighbourhood Health Communities (NHCs) namely; Mikata Central, Mipolombo, Mbonshi, Chintimfu, Chipya, Kashiba-Mpondwa and Fikonshi. A pilot study was conducted at Kanyenda RHC, after which the main study was undertaken.

4.1 DATA ANALYSIS

Data analysis is the systematic organisation and synthesis of research data, and the testing of research hypothesis using those data (Polit and Hungler, 2001). After data collection, data was checked for completeness and inconsistencies.

The data were analysed manually using a data master sheet soon after interviews were conducted. Before entering data on the Data Master Sheet (DMS), it was sorted out; responses were verified, and coded. The data master sheet was partitioned into 7 categories namely; Demographic Data, Distance, Place of Delivery, Knowledge on Delivery Complications, Attitude of Staff, Practices and Beliefs, and Cost of Health Care.

The qualitative data, which were derived from open-ended questions, were analysed using content analysis (Polit and Hungler, 2001). Each response was transcribed, read and reread to get the concepts in the responses. The concepts were derived from the characteristics of the responses, and then developed into themes that were used to categorise the content into meaningful groupings. A Statistical Package for Social Scientists (SPSS) was used for data analysis.

4.2 PRESENTATION OF FINDINGS

Data has been presented using frequency tables, pie charts, and cross tabulations. Tables are suitable because they summarize the findings in a meaningful way, which is easy to understand. Cross tabulations are helpful in showing the relationships between variables from which meaningful inferences can be drawn. Pie charts and bar charts provide a variety of ways in which to present data and thus prevent the monotony of narrative presentation.

4.2.1 DEMOGRAPHIC DATA

Table 2: Respondents' Age Distribution (n=50)

AGE	Frequency	Percentage (%)
15-18	17	34
19-35	27	54
Above 35	6	12
Total	**50**	**100**

Majority 27 (54%) of the respondents were in the age group of 19-35 years, while the minority 6 (12%) were in the age group above 35 years.

Table 3: Respondents' Religious Denomination (n=50)

RELIGIOUS DENOMINATION	Frequency	Percentage (%)
Baptist church	12	24
Jehovah's witness	5	10
New Apostolic church	5	10
Roman Catholic Church	6	12
Seventh-Day Adventist Church	9	18
United Church of Zambia	3	6
Pentecostal Church	10	20
Total	**50**	**100**

Majority 12 (24%) of the respondents were Baptist whilst the least belonged to UCZ 3 (6%)

Table 4: Marital Status of the Respondents (n=50)

MARITAL STATUS	Frequency	Percentage (%)
Single	8	16
Married	38	76
Separated	1	2
Divorced	1	2
Widowed	2	4
Total	**50**	**100**

Most 38 (7668%) of the respondents were married whilst few 1 (2%) and 1 (2%) were separated and divorced respectively.

Table 5: Respondents' Number of Children (n=50)

NUMBER OF CHILDREN	Frequency	Percentage (%)
1-3	34	68
4-6	10	20
7-9	6	12
Total	**50**	**100**

Majority 34 (68%) of the respondents had children in the age range of 1-3 years whilst the minority 6 (12%) had children in the age range of 7-9 years.

Table 6: Respondents' Educational Attainment (n=50)

EDUCATIONAL ATTAINMENT	Frequency	Percentage (%)
None	1	2
Primary	33	66
Secondary	16	32
Total	**50**	**100**

Majority 33 (66%) of the respondents' educational attainment was primary level whilst 1 (2%) never went to school.

4.2.2 DISTANCE

Table 7: Respondents' responses on the distance covered to the Health Centre (n=50)

DISTANCE	Frequency	Percentage (%)
Within 5km radius (1 hour or less walk)	26	52
More than 5km radius (More than 2 hours walk)	24	48
Total	**50**	**100**

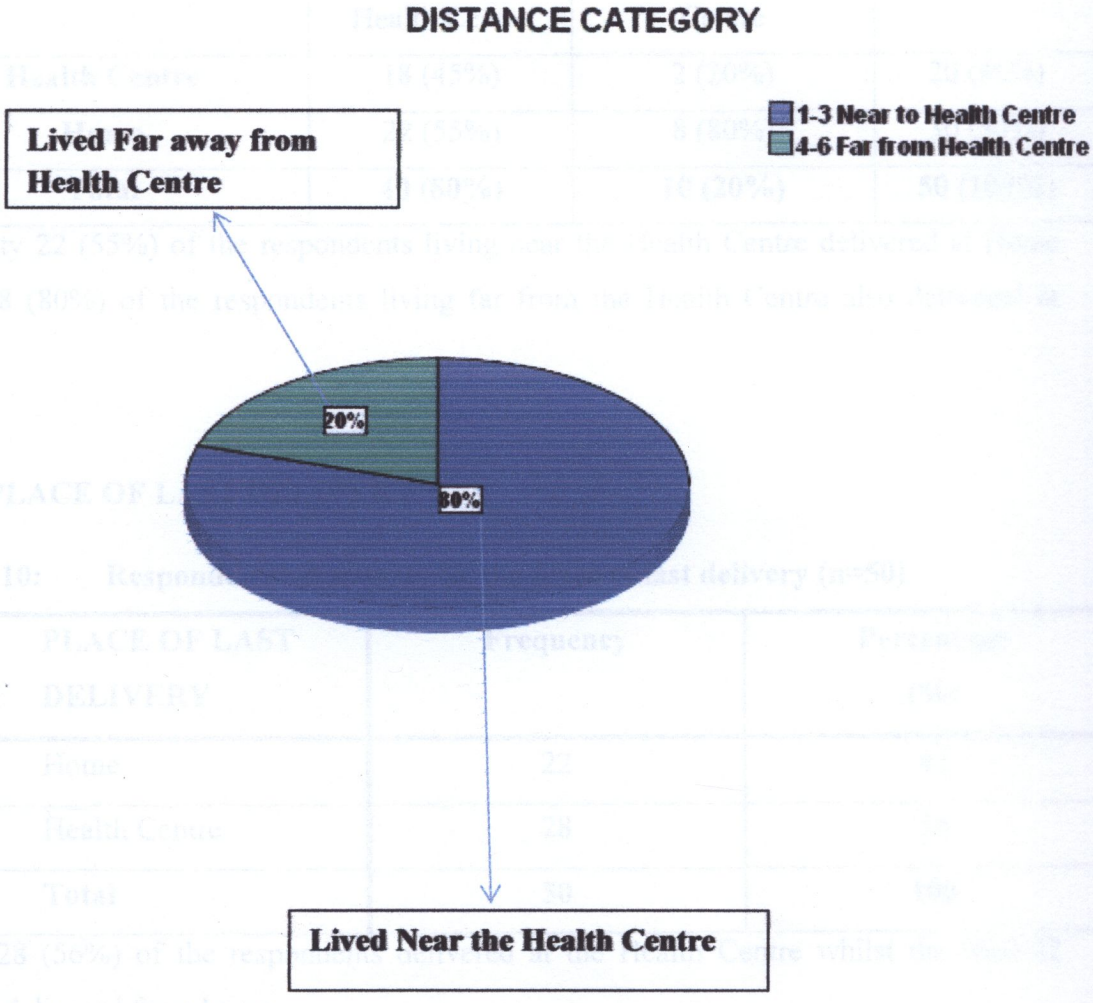
Most 26 (52%) of the respondents lived within 5 km radius from the Health Centre whilst the minority 24 (48%) lived more than 5 km radius.

Table 8: Respondents' responses on their mode of transport to the Health Centre (n=50)

MODE OF TRANSPORT	Frequency	Percentage (%)
Walking	30	60
Bicycle	18	36
Vehicle	2	4
Total	**50**	**100**

Majority 30 (60%) of the respondents' means of transport to and from the Health Centre was walking whilst the least 2 (4%) used a vehicle.

FIGURE 2: LEVEL OF DISTANCE



Majority 40 (80%) of the respondents lived near the health centre whilst 10 (20%) lived far away from the health centre.

Table 9: Place of Delivery in relation to Distance (n=50)

PLACE OF DELIVERY	DISTANCE		
	Near to the Health Centre	Far from the Health Centre	Total
Health Centre	18 (45%)	2 (20%)	20 (40%)
Home	22 (55%)	8 (80%)	30 (50%)
Total	**40 (80%)**	**10 (20%)**	**50 (100%)**

Majority 22 (55%) of the respondents living near the Health Centre delivered at Home while 8 (80%) of the respondents living far from the Health Centre also delivered at Home.

4.2.3 PLACE OF LAST DELIVERY

Table 10: Respondents' responses on the place of last delivery (n=50)

PLACE OF LAST DELIVERY	Frequency	Percentage (%)
Home	22	44
Health Centre	28	56
Total	**50**	**100**

Most 28 (56%) of the respondents delivered at the Health Centre whilst the least 22 (44%) delivered from home.

Table 11: Respondents' responses on the reasons for home delivery (n=50)

REASONS FOR HOME DELIVERY	Frequency	Percentage (%)
Long distance to clinic	14	28
Inadequate delivery preparation	8	16
Not Applicable	28	56
Total	**50**	**100**

Most 28 (56%) of the respondents did not fall under the provided responses whilst the least 8 (16%) had inadequate delivery preparation.

Table 12: Respondents' responses on delivery preference (n=50)

DELIVERY PREFERENCE	Frequency	Percentage (%)
Home	4	8
Clinic	46	92
Total	**50**	**100**

Majority 46 (92%) of the respondents preferred to deliver at the Health Centre whilst the least 4 (8%) preferred to deliver at home.

Table 13: Respondents' responses on the reasons for choosing their place of delivery (n=50)

REASONS FOR CHOOSING THEIR PLACE OF DELIVERY	Frequency	Percentage (%)
Fear of complications	24	48
It is policy / requirement	6	12
It was circumstantial	20	40
Total	**50**	**100**

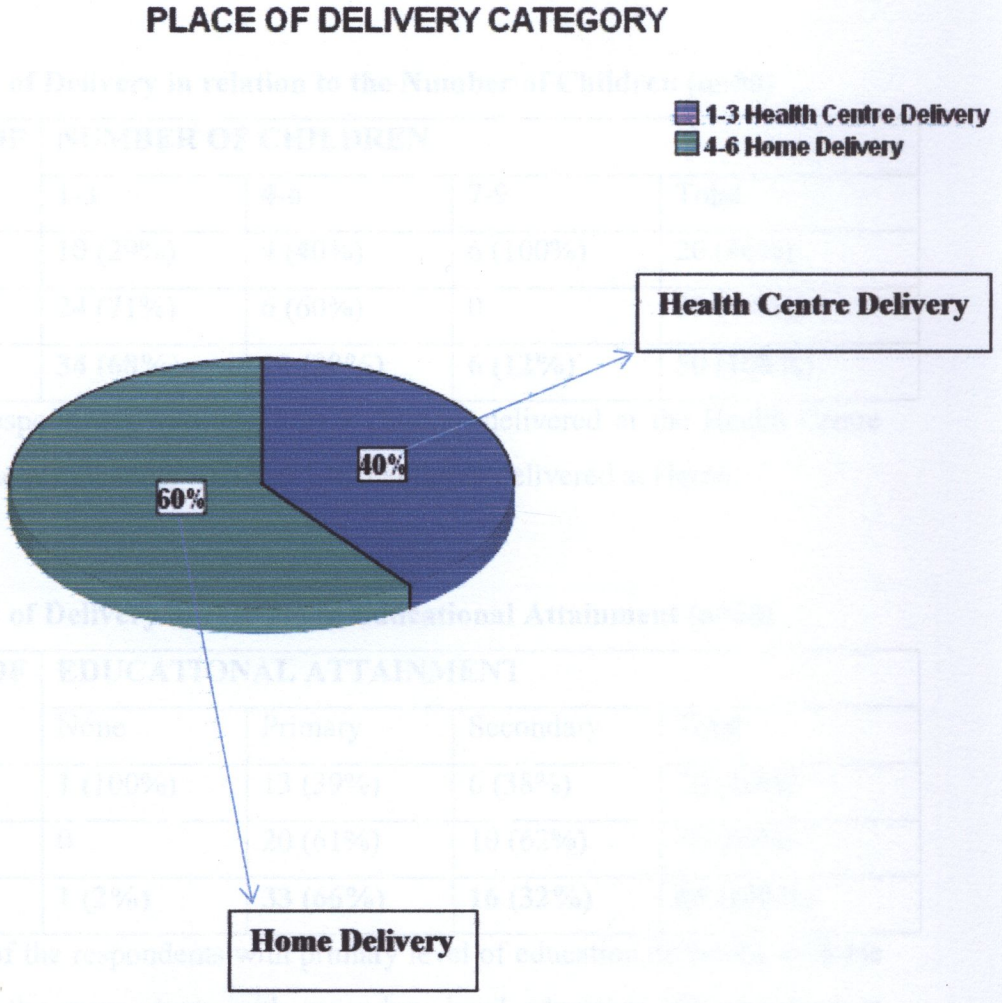
Most 24 (48%) of the respondents' responses were fear of complications whilst the least 6 (12%) responded that it is policy/requirement.

Table 14: Respondents' responses on who assisted them at the last delivery (n=50)

CATEGORY	Frequency	Percentage (%)
Midwife / Nurse	18	36
Trained TBA	8	16
Untrained TBA	8	16
Grandmother	8	16
Mother	2	4
Aunt	1	2
Neighbour	2	4
Passer-by	2	4
Unassisted	1	2
Total	**50**	**100**

Majority 18 (36%) of the respondents' responses were that they were assisted by Nurse/Midwife whilst the least 1 (2%) were assisted by either their Aunt or were unassisted respectively.

FIGURE 3: PLACE OF LASTDELIVERY



Majority 30 (60%) of the respondents had a home delivery whilst 20 (40%) had a health centre delivery.

Table 15: Place of Delivery in relation to Age (n=50)

PLACE OF DELIVERY	AGE			
	15-18	19-35	Above 35	Total
Health Centre	8 (47%)	6 (22%)	6 (100%)	20 (40%)
Home	9 (53%)	21 (78%)	0	30 (60%)
Total	**17 (34%)**	**27 (54%)**	**6 (12%)**	**50 (100%)**

All 6 (100%) respondents above 35 years of age delivered at the Health Centre while 9 (53%) of those aged 15 to 18 years delivered at Home.

Table 16: Place of Delivery in relation to the Number of Children (n=50)

PLACE OF DELIVERY	NUMBER OF CHILDREN			
	1-3	4-6	7-9	Total
Health Centre	10 (29%)	4 (40%)	6 (100%)	20 (40%)
Home	24 (71%)	6 (60%)	0	30 (60%)
Total	**34 (68%)**	**10 (20%)**	**6 (12%)**	**50 (100%)**

All 6 (100%) the respondents who had 7 to 9 children delivered at the Health Centre while 24 (71%) of the respondents who had 1 to 3 children delivered at Home.

Table 17: Place of Delivery in relation to Educational Attainment (n=50)

PLACE OF DELIVERY	EDUCATIONAL ATTAINMENT			
	None	Primary	Secondary	Total
Health Centre	1 (100%)	13 (39%)	6 (38%)	20 (40%)
Home	0	20 (61%)	10 (62%)	30 (60%)
Total	**1 (2%)**	**33 (66%)**	**16 (32%)**	**50 (100%)**

Majority 20 (61%) of the respondents with primary level of education delivered at Home while 10 (62%) of the respondents with secondary level education also delivered at Home.

Table 18: Place of Delivery in Relation to Monthly Income (n=50)

PLACE OF DELIVERY	MONTHLY INCOME				
	Less than K50,000	K50,000 - K500,000	More than K500,000	Not Applicable	Total
Health Centre	10 (36%)	9 (47%)	1 (100%)	0	20 (40%)
Home	18 (64%)	10 (53%)	0	2 (100%)	30 (60%)
Total	**28 (56%)**	**19 (38%)**	**1 (2%)**	**2 (4%)**	**50 (100%)**

Majority 18 (64%) of the respondents with a monthly income less than K50,000 delivered at Home while 1 (100%) respondent with a monthly income over K500,000 delivered at the Health Centre.

4.2.4 KNOWLEDGE ON DELIVERY COMPLICATIONS

Table 19: Respondents' responses on benefits of delivering at a Health Centre (n=50)

BENEFITS	Frequency	Percentage (%)
Skilled care	20	40
Complication management	26	52
Do not know	4	8
Total	**50**	**100**

Most 26 (52%) of the respondents' responses on benefits of delivering at a health Centre were complication management whilst the least 4 (8%) did not know.

Table 20: Respondents' responses on whether they were aware of any delivery complications (n=50)

AWARENESS OF DELIVERY COMPLICATIONS	Frequency	Percentage (%)
Yes	32	64
Not aware	18	36
Total	**50**	**100**

Majority 32 (64%) of the respondents were aware of delivery complications whilst the least 18 (36%) were not aware.

Table 21: Respondents' responses on knowledge of delivery complications (n=50)

KNOWLEDGE	Frequency	Percentage (%)
0-6 is Low	24	48
7-12 is High	26	52
Total	**50**	**100**

Majority 26 (52%) of the respondents' responses revealed high knowledge on delivery complications whilst the least 24 (48%) had low knowledge.

Table 22: Respondents' responses on whether they had ever experienced complications during delivery (n=50)

EVER EXPERIENCED DELIVERY COMPLICATIONS	Frequency	Percentage (%)
Yes	10	20
No	34	68
Do not know	6	12
Total	**50**	**100**

Majority 34 (68%) of the respondents had never experienced delivery complications whilst the least 6 (12%) had no idea.

Table 23: Respondents' responses on whether trained TBAs were available in their area (n=50)

AVAILABILITY OF TRAINED TBAS	Frequency	Percentage (%)
Yes	10	20
No	28	56
Do not know	12	24
Total	**50**	**100**

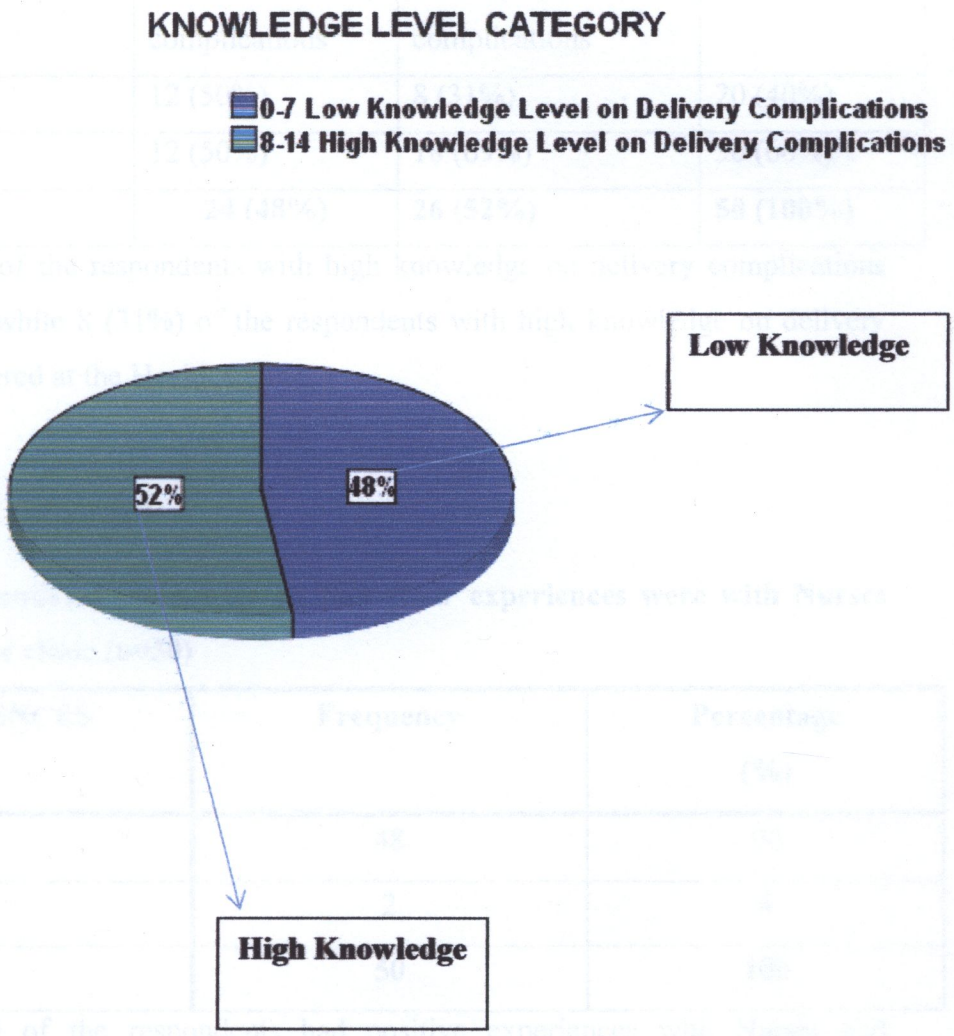
Most 28 (56%) of the respondents had no trained TBAs in their area whilst the least 10 (20%) said they had.

Table 24: Respondents' responses on the reasons for non-availability of TBAs in their areas (n=50)

REASONS FOR NON-AVAILABILITY OF TRAINED TBAS	Frequency	Percentage (%)
Moved out	2	4
Do not know	12	24
No trained TBA	26	52
Not Applicable	10	20
Total	**50**	**100**

Most 26 (52%) of the respondents said that there was no trained TBA in their area whilst the least 2 (4%) said they moved out.

FIGURE4: LEVEL OF KNOWLEDGE



Most 26 (52%) of the respondents had a high knowledge level on delivery complications whilst 24 (48%) had low knowledge level.

Table 25: Place of Delivery in relation to Level of Knowledge (n=50)

PLACE OF DELIVERY	LEVEL OF KNOWLEDGE		
	Low knowledge on delivery complications	High knowledge on delivery complications	Total
Health Centre	12 (50%)	8 (31%)	20 (40%)
Home	12 (50%)	18 (69%)	30 (60%)
Total	**24 (48%)**	**26 (52%)**	**50 (100%)**

Majority 18 (69%) of the respondents with high knowledge on delivery complications delivered at Home while 8 (31%) of the respondents with high knowledge on delivery complications delivered at the Health Centre.

4.2.5 ATTITUDE OF STAFF

Table 26: Respondents' responses on how their experiences were with Nurses and Midwives at the clinic (n=50)

EXPERIENCES	Frequency	Percentage (%)
Positive	48	96
Negative	2	4
Total	**50**	**100**

Majority 48 (96%) of the respondents had positive experiences with Nurses and Midwives whilst the least 2 (4%) had negative experiences.

Table 27: Respondents' responses on whether Nurses and Midwives explained care/service during antenatal clinic (n=50)

EXPLAINED CARE/SERVICE	Frequency	Percentage (%)
Yes	46	92
No	4	8
Total	**50**	**100**

Majority 46 (92%) of the respondents agreed that Nurses and Midwives explained care/service during antenatal clinic whilst the least 4 (8%) refused.

Table 28: Respondents' responses on the preferred gender of delivery assistants at the Health Centre (n=50)

PREFERRED GENDER	Frequency	Percentage (%)
Male Nurse/Midwife	16	32
Female Nurse/Midwife	34	68
Total	**50**	**100**

Majority 34 (68%) of the respondents preferred female Nurses/Midwives as delivery assistants at the health Centre whilst 16 (32%) preferred male Nurses/Midwives.

Table 29: Respondents' responses on reasons for preferred gender of delivery assistants (n=50)

REASONS FOR PREFERRED GENDER	Frequency	Percentage (%)
Easier interaction	22	44
Acceptable assistants	12	24
More caring	16	32
Total	**50**	**100**

Most 22 (44%) of the respondents' responses were easier interaction with female Nurses/Midwives whilst the least 12 (24%) said that they are the only acceptable assistants.

Table 30: Place of Delivery in relation to Attitude of Staff (n=50)

PLACE OF DELIVERY	ATTITUDE OF STAFF	
	Positive attitude of staff	Total
Health Centre	20 (40%)	20 (40%)
Home	30 (60%)	30 (60%)
Total	**50 (100%)**	**50 (100%)**

Majority 30 (60%) of the respondents who said that staff attitude was positive delivered at Home while 20 (40%) delivered at the Health Centre.

4.2.6 PRACTICES AND BELIEFS

Table 31: Respondents' responses on who had the highest influence on their decision for a choice of a place of delivery (n=50)

HIGHEST INFLUENCE	Frequency	Percentage (%)
Yourself	10	20
Husband	8	16
TBAs	18	36
Grandmother	6	12
Mother	8	16
Total	**50**	**100**

Most 18 (36%) of the respondents' highest influence on their decision for a choice of a place of delivery was from TBAs whilst the least 6 (12%) had the highest influence from their grandmothers.

Table 32: Respondents' responses on whether there are types of practices in connection with delivery at the Health Centre which are in conflict with traditional beliefs/values (n=50)

PRACTICES	Frequency	Percentage (%)
Yes	2	4
No	48	96
Total	**50**	**100**

Majority 48 (96%) of the respondents said that there were no practices in connection with delivery at the Health Centre which were in conflict with traditional beliefs/values whilst the least 2 (4%) agreed.

Table 33: Respondents' responses on whether they engaged in any traditional practices (n=50)

ENGAGED IN TRADITIONAL PRACTICES	Frequency	Percentage (%)
Yes	42	84
No	8	16
Total	**50**	**100**

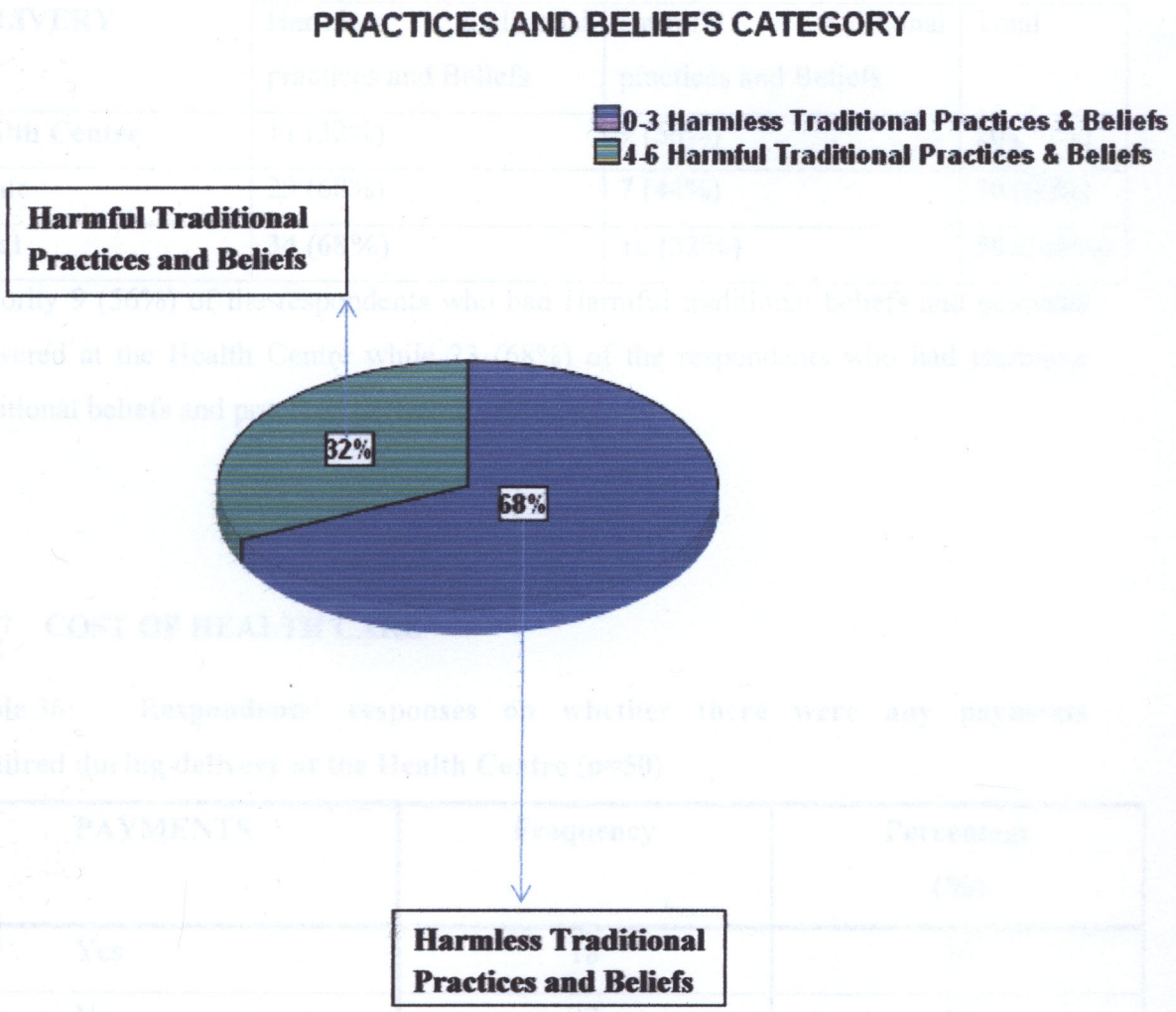
Majority 42 (84%) of the respondents said that they engaged in traditional practices whilst the least 8 (16%) refused.

Table 34: Respondents' responses on the reasons for engaging in traditional practices (n=50)

REASONS FOR ENGAGING IN TRADITIONAL PRACTICES	Frequency	Percentage (%)
Pelvic floor relaxation	22	44
PPH prevention	4	8
APH prevention	2	4
Labour acceleration	14	28
Not Applicable	8	16
Total	**50**	**100**

Most 22 (44%) of the respondents said that they engaged in traditional practices because they wanted pelvic floor relaxation whilst the least 2 (4%) wanted to prevent APH.

FIGURE5: LEVEL OF TRADITIONAL PRACTICES AND BELIEFS



Majority 34 (68%) of the respondents had harmless traditional beliefs and practices whilst 16 (32%) had harmful traditional beliefs and practices.

Table 35: Place of Delivery in relation to Traditional Practices and Beliefs (n=50)

PLACE OF DELIVERY	TRADITIONAL PRACTICES AND BELIEFS		
	Harmless traditional practices and Beliefs	Harmful traditional practices and Beliefs	Total
Health Centre	11 (32%)	9 (56%)	20 (40%)
Home	23 (68%)	7 (44%)	30 (60%)
Total	**34 (68%)**	**16 (32%)**	**50 (100%)**

Majority 9 (56%) of the respondents who had Harmful traditional beliefs and practices delivered at the Health Centre while 23 (68%) of the respondents who had Harmless traditional beliefs and practices delivered at Home.

4.2.7 COST OF HEALTH CARE

Table 36: Respondents' responses on whether there were any payments required during delivery at the Health Centre (n=50)

PAYMENTS	Frequency	Percentage (%)
Yes	18	36
No	32	64
Total	**50**	**100**

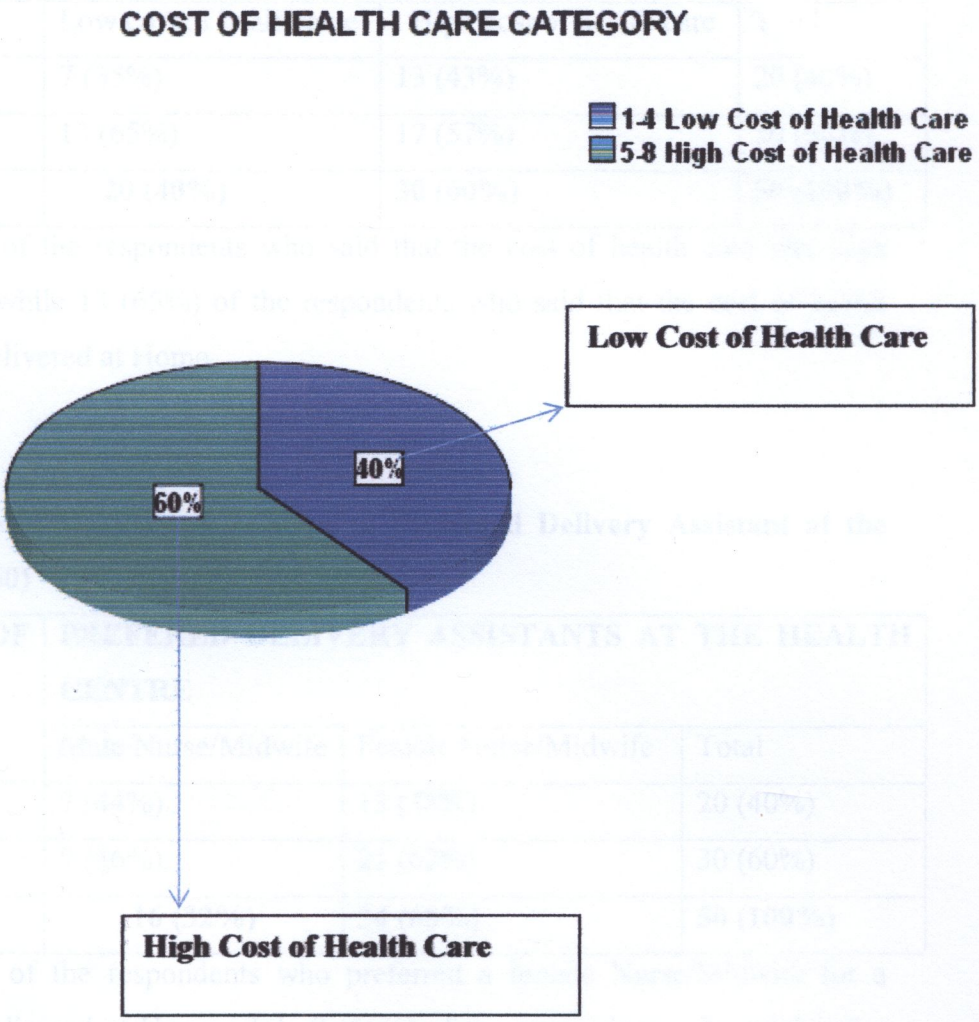
Majority 32 (64%) of respondents said that there were no payments required during delivery at the Health Centre whilst the least 18 (36%) agreed.

Table 37: Respondents' responses on whether they could afford delivery requirements needed at the Health Centre (n=50)

AFFORDABILITY	Frequency	Percentage (%)
Yes	42	84
No	8	16
Total	**50**	**100**

Majority 42 (84%) of respondents stated that they could afford delivery requirements needed at the Health Centre whilst the least 8 (16%) said they could not.

FIGURE 6: LEVEL OF COST OF HEALTH CARE



Majority 30 (60%) of the respondents cited high cost of health care whilst 20 (40%) said that the cost of health care was low.

Table 38: Place of Delivery in relation to Cost of Health Care (n=50)

PLACE OF DELIVERY	COST OF HEALTH CARE		
	Low cost of health care	High cost of health care	Total
Health Centre	7 (35%)	13 (43%)	20 (40%)
Home	13 (65%)	17 (57%)	30 (60%)
Total	**20 (40%)**	**30 (60%)**	**50 (100%)**

Majority 17 (57%) of the respondents who said that the cost of health care was high delivered at Home while 13 (65%) of the respondents who said that the cost of health care was low also delivered at Home.

Table 39: Place of Delivery in relation to Preferred Delivery Assistant at the Health Centre (n=50)

PLACE OF DELIVERY	PREFERED DELIVERY ASSISTANTS AT THE HEALTH CENTRE		
	Male Nurse/Midwife	Female Nurse/Midwife	Total
Health Centre	7 (44%)	13 (38%)	20 (40%)
Home	9 (56%)	21 (62%)	30 (60%)
Total	**16 (32%)**	**34 (68%)**	**50 (100%)**

Majority 21 (62%) of the respondents who preferred a female Nurse/Midwife for a delivery assistant delivered at Home while 9 (56%) of the respondents who preferred a male Nurse/Midwife for a delivery assistant also delivered at Home.

Table 40: Traditional Practices and Beliefs in Relation to Educational Attainment (n=50)

TRADITIONAL PRACTICES AND BELIEFS	EDUCATIONAL ATTAINMENT			
	None	Primary	Secondary	Total
Harmless traditional practices and Beliefs	0	22 (67%)	12 (75%)	34 (68%)
Harmful traditional practices and Beliefs	1 (100%)	11 (33%)	4 (25%)	16 (32%)
Total	**1 (2%)**	**33 (66%)**	**16 (32%)**	**50 (100%)**

Majority 12 (75%) of the respondents with secondary education had Harmless traditional beliefs and practices while 1 (100%) respondent with no educational attainment had Harmful traditional beliefs and practices.

Table 41: Distance in Relation to Cost of Health Care (n=50)

DISTANCE	COST OF HEALTH CARE		
	Low cost of health care	High cost of health care	Total
Near the Health Centre	16 (80%)	24 (80%)	40 (80%)
Far from the Health Centre	4 (20%)	6 (20%)	10 (20%)
Total	**20 (40%)**	**30 (60%)**	**50 (100%)**

Majority 24 (80%) of the respondents living near the Health Centre said that the cost of health care was high while 16 (80%) of the respondents living near the Health Centre said the cost of health care was low.

Table 42: Level of Knowledge in relation to Traditional Practices and Beliefs (n=50)

LEVEL OF KNOWLEDGE	TRADITIONAL PRACTICES AND BELIEFS		
	Harmless traditional practices and Beliefs	Harmful traditional practices and Beliefs	Total
Low knowledge on delivery complications	18 (53%)	6 (38%)	24 (48%)
High knowledge on delivery complications	16 (47%)	10 (62%)	26 (52%)
Total	**34 (68%)**	**16 (32%)**	**50 (100%)**

Majority 10 (62%) of the respondents with high knowledge level on delivery complications had Harmful traditional practices and beliefs while 18 (53%) of the respondents with low knowledge level on delivery complications had Harmless traditional practices and beliefs.

Table 43: Cost of Health Care in relation to Monthly Income (n=50)

COST OF HEALTH CARE	MONTHLY INCOME				
	Less than K50,000	K50,000 - K500,000	More than K500,000	Not Applicable	Total
Low cost of health care	8 (29%)	10 (53%)	0	2 (100%)	20 (40%)
High cost of health care	20 (71%)	9 (47%)	1 (100%)	0	30 (60%)
Total	**28 (56%)**	**19 (38%)**	**1 (2%)**	**2 (4%)**	**50 (100%)**

Majority 20 (71%) of the respondents with a monthly income less than K50,000 said that the cost of health care was high while 1 (100%) the respondent with a monthly income more than K500,000 also said that the cost of health care was high.

4.2.8 SUGGESTIONS

Table 44: Respondents' suggestions on how to improve safe-motherhood services (n=50)

	Frequency	Percentage (%)
Delivery logistics	32	64
Staff attitude	2	4
Infrastructure	14	28
Staffing	2	4
Total	**50**	**100**

Majority 32 (64%) of the respondents suggested provision of delivery logistics whilst the least 2 (4%) suggested improving staffing levels and staff attitude respectively.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

INTRODUCTION

This discussion of findings is based on data collected from a sample of fifty (50) respondents who were expectant mothers seeking antenatal care in the proximal localities of Mikata Rural Health Centre catchment area within a radius of 5 kilometres covering whole and/or part of 7 Zones/Neighbourhood Health Communities, in Mpongwe district. The general objective of the study was to explore factors associated with home delivery among expectant mothers in Mikata RHC catchment area in Mpongwe District.

5.1 CHARACTERISTICS OF THE SAMPLE

The expectant mothers' age range was from 15 to 49 years. The majority 54% (27) of the respondents were (19-35 years old) youth (Table 2, Page 43), 34% (17) were aged between 15-18 years (Table 2, Page 43), and 12% (6) were above 35 years of age (Table 2, Page 43). This shows that most of the expectant mothers were in their youth, sexually active and at the peak of their reproductive years. This could be attributed to the fact that most of the young girls drop out of school at an early age then get married and have children. Early child bearing leads to complications of labor due to the immaturity of the reproductive system and increased infant and child mortality as young mothers lack knowledge and experience on child care.

All the respondents (100%) were Christians with the majority 24% (12) belonging to the Baptist Church (Table 3, Page 44). This is because Zambia became a Christian Nation following a declaration in the Second Republic by the then President of Zambia, Dr. F. T. J. Chiluba in 1991 (CCA, 2005). Moreover, Mikata area consists of mainly Baptists

because these were the early missionaries who settled in this area (Mikata, Strategic Action Plan, 2011).

About three-quarters 76% (38) of the respondents were married while 16% (8) were single (Table 4 Page 44). Marriage is culturally acceptable in Zambia. Every young woman is expected to marry and have children.

Regarding the number of children, about two-thirds 68% (34) of the respondents had 1-3 children while 12% (6) had 7-9 (Table 5, Page 45). This could be attributed to early marriages with subsequent teenage pregnancies, a common trend among young rural women due to lack of recreation activities. These results are in line with the United States Agency for International Development Population Reference Bureau (2011) which states that most of the young women give-birth to their first child between 14 and 20 years.

About three-quarters 66% (33) of the respondents in this study had attained primary education while 32% attained secondary education (Table 6, Page 45). This could be due to the fact that there are only primary schools (10) in Mikata area with no secondary schools or colleges hence many children end up with primary education. This finding correlates with the United States Agency for International Development Population Reference Bureau (2011) which found that the completion rate of primary school among girls was higher than secondary school completion rate.

5.2 DISCUSSION OF EACH VARIABLE

5.2.1 Distance

This study revealed that majority 80% (40) of the respondents lived near the Health Centre whilst 20% lived far away from the Health Centre (Figure 2, Page 47). This could be attributed to the fact that most expectant mothers lived within reach of the health Centre. The other reason for this is that the target populations for this study were pregnant women attending antenatal clinic at Mikata Rural Health Centre from within the radius of 5 kilometres. Nevertheless, the respondents' location of the residence as well as the expression of near or far could have varied from individual to individual depending

on their perception of respective distances covered. Previous studies have shown that distance to the health facilities was a major factor contributing to home deliveries contrary to this study (Geloo, 2004; Gabrysch, et al 2010).

5.2.2 Place of Delivery

The findings of this study revealed that majority 60% (30) of the respondents delivered at home whilst 40% (20) of the respondents delivered at the Health Centre (Figure 3, Page 51). These findings could be attributed to higher costs associated with Health Centre delivery as opposed to home delivery which discourages them from seeking Health Centre delivery. Moreover, these findings could also be attributed to high levels of illiteracy in Mikata area, which makes it difficult for most expectant mothers to have an adequate understanding and valuing of health messages emphasising on the importance of institutional delivery, so that their health seeking behaviours could improve. This study confirms the Geloo (2003) and Gabrysch et al (2010) research findings which showed similar findings. The study has also revealed that 53% (9) of the respondents aged 15 to 18 years delivered at home (Table 15, Page 52) and those who had children ranging from 1-3 delivered at home (Table 16, Page 52). Both the respondents who had attained primary level of education 61% (20) and secondary level 62% (10) delivered at home (Table 17, Page 52). Therefore, there was no association found between place of delivery and education level. The majority 64% (18) of the respondents with a monthly income of less than K50,000 delivered at home (Table 18, Page 53). Majority 69% (18) of the respondents with high knowledge on delivery complications delivered at home (Table 25, Page 58) and 60% (30) of those who said staff attitude was positive delivered at home (Table 30, Page 60). The majority 56% (9) of the respondents who had harmful traditional beliefs and practices delivered at the health Centre (Table 35, Page 64). Therefore, the level of knowledge on delivery complications, staff attitude as well as traditional beliefs and practices are not factors contributing to home delivery.

5.2.3 Knowledge on Delivery Complications

This study revealed that most 52% (26) of the respondents had a high knowledge level on delivery complications whilst 48% (24) had a low knowledge level (Figure 4, Page 57).

These findings could be attributed to the fact that health staffs at Mikata health Centre are providing information to clients regularly at the antenatal Clinic.

5.2.4 Attitude of Skilled Staff

This study has revealed that all (100%) the respondents reported that the staff at the health facility had a positive attitude towards the clients, and they all (100%) reported that health talks were given on every antenatal day though they all (100%) expressed low knowledge level on topics given. This could be attributed to the fact that staffs at the Health Centre are sociable, accommodative and courteous to expectant mothers and the entire community of Mikata area at large, which makes it easier for them to interact freely with minimal reservations if any.This disagrees with the study done by Izugbara (2008) that revealed three key issues that dominated the TBAs' explanations regarding the persistence of homebirths: the wide-ranging nature of the TBAs' services; the high quality of their services; and the responsiveness of their services to the socio-cultural and economic sensitivities of women. The study explains that, Judging by their narratives, the TBAs believed that most hospital-based providers have little or no respect for them and also often dissuade women from seeking TBA services.

Another study notes that expectant mothers may fear to deliver at a health facility because they do not receive the attention of skilled health attendants owing to negative attitude of health workers, so delivering at home is their only option as alternative health facilities are far-fetched in rural areas, Geloo (2003); in cite UNFPA (1998).

5.2.5 Traditional Beliefs and Practices

The study revealed that majority 68% (34) of the respondents were practising harmless traditional beliefs and practices whilst 32% (16) were practising harmful traditional beliefs and practices (Figure 5, Page 63). This could be attributed to the success of health messages targeted at discouraging expectant mothers from engaging in harmful traditional/cultural practices and beliefs.

In most communities, there are particular beliefs and practices pregnant women follow. For instance, a pregnant woman should not eat nutritious foods such as eggs etc. Some of the traditional beliefs and practices are related to a person's conduct. For example, a

pregnant woman should not engage in hard work such as carrying heavy items or fetching water from a far-off well or river because she may have a still-birth or deliver a very weak baby (Nsemukila et al 1998). The findings revealed that majority 75% (12) of the respondents who attained secondary school education level were practising harmless traditional practices (Table 40, Page 68).

5.2.6 Cost of Health Care

This study revealed that majority 60% (30) of the respondents cited high cost of health care whilst 40% (20) said that the cost of health care was low (Figure 6, Page 66). This could be attributed to the fact that the commonest and major source of income for most expectant mothers is farming which is done annually. In addition, this income is too meagre to enable them afford their basic needs of living let alone sustain them throughout the year. This study confirms the WHO (2008) report which cited cost of giving birth as a hindrance for pregnant women to access health care.

5.2.7 Age

The study revealed that all 100% (6) the respondents above the age of 35 years had delivered at the Health Centre during the previous pregnancy, while the majority youth 78% (21) aged 19 to 35 years, and the young adolescents 53% (9) aged 15 to 18 delivered at home (Table 15, Page 52). However, this result is contrary to Goldstein (2005) study which was carried out in the United States of America (USA) and Canada which revealed that those who delivered at home tended to be older.

Furthermore, Foster (2011) revealed that home births were more likely than hospital births to occur among older, married women with several previous children. This could be due to the fact that older women with probable higher parity have had an opportunity to repeated exposure to health messages during antenatal care on benefits of institutional delivery in their previous pregnancies. With older age related to higher parity, they could have realised the importance of institutional delivery after receiving satisfactory care following an experience of complications at some point. Because wisdom is said to increase with age, therefore the older the woman the wiser she is in making appropriate

decisions as well as choices, and this could apply to the choice of institutional delivery by older women and vice-versa with younger women.

5.2.8 Formal Education

According to the Central Statistical Office (2007) report, the level of education is known to have the strongest and most direct impact on women's health seeking behaviour as well as their ultimate good health. The report further states that the more educated a woman is, the more likely she is to utilise the available delivery services satisfactorily. Moreover the report outlines that education also has an impact on a woman's confidence, status and ability to participate in decision making.

In this study, it has been established that majority 61% (20) of the respondents with primary level of education delivered at home as well as 62% (10) of the respondents with secondary level education also delivered at home (Table 17, Page 52). Therefore education level is not a factor contributing to home delivery. This finding is in contrast to Gathigah (2011) who found that rural women with little or no education delivered at home under the supervision of unskilled attendants.

5.2.9 Economic Status

The study revealed that majority 64% (18) of the respondents with a monthly income less than K50, 000 delivered at home while the respondent (100%) with a monthly income over K500, 000 delivered at the Health Centre (Table 18, Page 53). This could be attributed to the fact that the respondents delivered at home because they could not afford to pay for transport to take them to the health facility or they could not afford to buy the baby layette. In addition, during the period of confinement to the Health Centre there are projected and/or eminent added costs for food, toiletries/groceries, visiting empathisers, and possible referral to the next level of care should complications arise, these could be recognised as significant added costs which are not provided in delivery Centres, thus act as a deterrent to institutional delivery. This finding confirms the Gathigah (2011)'s finding which showed that home deliveries were common among rural women with little

or no income. Similarly, WHO (2008) also reported that the cost of giving birth contributes to home deliveries among the poor.

5.2.10 Preferred Gender of a Delivery Assistant

Table 39, Page 67 shows that majority 68% (34) of the respondents preferred female Nurses/Midwives as delivery assistants whilst 32% (16) did not. This is because traditionally Midwifery is a woman's affair. This finding correlates with Izugbara (2008)'s study that revealed that TBAs have been conducting deliveries in the communities from time in memorial.

During the study 32% (16) of the respondents reported having continued to seek TBA services (Table 14, Page 50). This is because TBAs are still held in high esteem by the communities where they serve.

5.2.11 Suggestions on how to improve safe-motherhood services

When asked to give suggestions on how Safe-motherhood services could be improved, most 64% (32) of the respondents said that the government should provide delivery logistics to the health Centre (Table 44, Page 70). This could be attributed to the fact that most of the people in the rural areas are poor and are not able to pay for the cost of health care. Poverty levels in Zambia, especially among the rural communities are estimated at 69% (CSO, 2002).

5.3 SIGNIFICANCE OF THE STUDY FINDINGS TO THE FOUR MAJOR FACULTIES OF NURSING

The implications of the study have been discussed under four (4) main domains of Nursing which are related to the topic under the headings Nursing Practice, Nursing Education, Nursing Administration, and Nursing Research.

5.3.1 SIGNIFICANCE TO NURSING PRACTICE

The study revealed that majority 60% (30) of the respondents delivered at home (Figure 3, Page 51), and 52% (26) had high knowledge level on delivery complications (Figure 4, Page 57). This indicates the need for health workers to strengthen health education at the antenatal clinics to inform pregnant women of the dangers of home deliveries and to encourage them to deliver at the health facilities. Nurses and midwives are the majority of health workers in the health care system in Zambia because they may practice in hospitals, clinics, health units, domiciliary conditions, or in any other service. Their role is very diverse as they do more than just assist in deliveries but must be present at every birth and is in a position to touch everyone's life. A midwife is often the first and main contact for the expectant mother during her pregnancy, and throughout labour and the postnatal period. They help mothers make informed choices about the services and options available to them by providing as much information as possible. There is need to strengthen the component of outreach services so that health education can be given individually or in groups. Traditional Birth Attendants in the areas where they are still need to be trained and supervised regularly by Midwives.

5.3.2 SIGNIFICANCE TO NURSING ADMINISTRATION

This study showed that majority 60% (30) of the expectant women delivered at home (Figure 3, Page 51). Nurse Managers should ensure that women are encouraged to deliver at health facilities by advocating for the establishment of mothers' shelters at the health facilities where they can stay during their last weeks of pregnancy to wait for the delivery. Nurse Managers should supervise nurses in the health facilities to ensure that they provide necessary health education to pregnant women. There is need for Nurse-managers to train rural health Centres In-charge through seminars on public relations and lobbying skills, including how to plan for infrastructure development in the respective Centres in accordance with their unique needs. It is also imperative that the Nurse-manager together with other managers at Mpongwe District Health Office facilitate optimal collaboration between the health Centre staff and the community in Mikata area

to construct a mother's shelter, as well as encourage acceptance of male Nurses and Midwives by expectant mothers coming to deliver.

5.3.3 SIGNIFICANCE TO NURSING EDUCATION

The study revealed that majority 52% (26) of the respondents had high knowledge level on the delivery complications (Figure 4, Page 57). There is need for Nurse Educators to ensure that Nurse-Midwives are given adequate knowledge on antenatal and labour to enable them provide adequate health education to pregnant women. More emphasis should be placed on this aspect during training. As the majority of women in this study delivered at home, Nurse Educators have a responsibility to ensure that Nurses in training schools learn about the dangers of home deliveries so that they are able to advise women accordingly.

5.3.4 SIGNIFICANCE TO NURSING RESEARCH

Home delivery which is closely linked to high maternal mortality in developing countries is a major public health concern not only at national level but also at global level which needs evidence based policies, practices and interventions to halt it. Promotion of institutional delivery is crucial to the reduction of maternal/neonatal morbidity and mortality. Nurse researchers should actively participate in coming up with innovative approaches to encourage clients appreciate institutional delivery. This can help further explore the subject and thus develop new strategies on how to promote institutional delivery. In this study, 50 respondents from Mikata Rural Health Centre Catchment area were sampled to represent the Health Centre clientele population and allowed an exploration of factors associated with home delivery among expectant mothers. The results of this study should be generalized with caution. Nonetheless, the results obtained gave a crew on factors associated with home delivery among expectant mothers in the area. Therefore, there is need to conduct another study preferably with big sample sizes to enable generalization of findings.

5.4 CONCLUSION

The purpose of the study was to explore factors associated with home delivery among expectant mothers in Mikata Rural Health Centre Catchment area. An explorative quantitative non-interventional study design was used in this study. Data were collected using a semi-structured interview schedule on 50 systematically selected participants.

The study revealed pertinent information regarding levels of home delivery and most common factors associated with home delivery.

With regard to demographic characteristics, the expectant mothers' age range was 15 to 49 years, of which the majority of the respondents 54% (27) were youth (19-35 years old). About three-quarters 76% (38) of the respondents were married and two-thirds 68% (34) of the respondents had 1-3 children. Sixty-six 66% (33) of the respondents had attained primary education and all 100% (50) the respondents were Christians with the majority 24% (12) belonging to the Baptist Church.

The results revealed that majority 92% (46) of the respondents preferred to deliver at the clinic though most 60% (30) of the respondents delivered from home. It also revealed that all (100%) the respondents said that the attitude of skilled staff was positive, though majority 68% (34) preferred a female Nurse/Midwife as a delivery assistant.

All (100%) the respondents agreed that health talks were given on every antenatal day, and majority 52% (26) expressed high knowledge level of delivery complications, though they all (100%) exhibited low knowledge on topics given during health talks.

Furthermore, the study revealed associations between home delivery and income, distance and cost of health care. Associations were also found between low income and distance to the health facility and cost of health care.

5.5 RECOMMENDATIONS

Based on the findings of this study, the under-listed recommendations have been made to appropriate institutions/stakeholders:

5.5.1 MINISTRY OF HEALTH

The Ministry of Health through the office of the Provincial Medical Officer must urgently and proactively build more health facilities as close to the population as possible, and improve the staffing levels of Nurses/Midwives and continue working towards attaining the WHO recommendation of 1 Nurse per 700 people of catchment population. This will allow women to have access to skilled attendant during delivery.

5.5.2 GENERAL NURSING COUNCIL OF ZAMBIA

The General Nursing Council of Zambia should integrate the component of cultural sensitivity in the Nurses/Midwives. This will assist them to be more culturally sensitive and competent enough to give comprehensive health education to enhance the ability of expectant mothers to able to value, acquire and understand health messages.

5.5.3 MPONGWE DISTRICT HEALTH OFFICE

The District Health Office Management through the office of the Maternal-neonatal and Child health Coordinator should intensify regular visits to the health Centre for supervision and technical support. They should also discourage Nurses/Midwives from engaging in polyvalent work which is not only unprofessional but also wastage of precious time to expectant mothers. This will help in early identification of challenges resulting from deficits in service delivery so that human (skilled staff) and material resource planning, lobbying. Distribution and utilisation are done appropriately. The Nurse-manager together with other managers at Mpongwe District Health Office should

facilitate optimal collaboration between the health Centre staff and the community leaders in Mikata area to construct a mother's shelter. They must also strengthen community sensitisations to promote acceptance of male Nurses and Midwives by expectant mothers coming to deliver at the Health facility. Funds should be allocated towards training of Safe-motherhood Action Groups to promote significant community referrals of expectant mothers for delivery at Health Centre.

5.5.4 MIKATA HEALTH CENTRE

There is need to intensify community sensitisations on benefits of institutional delivery in order to significantly reduce the levels of home deliveries. Emphasis should be placed on male involvement and birth preparedness, as well as providing options for timely arrival at the delivery Centre and ways of minimizing costs related to access of health care. There is need for health Centre staff to plan for training of Safe-motherhood Action Groups who will act as a link between the community and the health Centre for addressing safe-motherhood issues in Mikata area. Self-evaluation of male Nurses/Midwives with regard to their interaction with expectant mothers should be done at every point of service delivery and contact. Nurses and Midwives should always strive to give Focused Antenatal Care and address issues that make pregnant women opt to deliver at home.

5.6 DISSEMINATION OF FINDINGS

Dissemination of findings entails the measures that would be undertaken to communicate the findings from the study to others (Polit and Hungler, 2001).

The researcher intends to disseminate the findings by making executive summaries of the study document and send to Ministry of Health, Province Health Office-Ndola, Mpongwe District Health Office, Kanyenda RHC (site of pilot study) and Mikata RHC for reference by programme and policy decision makers for implementation. Copies of the research project will be distributed to the Department of Nursing Sciences, University of Zambia

Medical Library and to use as reference material by students and health care professionals. More copies of written reports will be distributed to Mikata community leaders (Royal Highnesses, traditional councillors, area councillor, church leaders, NHC leaders, Community Health Volunteers). To disseminate information to the respondents and the rest of the community at large, the researcher will take advantage of opportunities for giving repeated, consistent and intensive IEC and drama presentations as seen appropriate during workshops, seminars, outreach activities, community meetings and other informal gatherings.

5.7 LIMITATIONS OF THE STUDY

The major limitations for this study were:

- Funding for the study was inadequate and time was very limited, thus the study could not be conducted on large scale.
- A sample size of 50 respondents was too small therefore generalization of findings should be done with caution.
- The study used self-reports to collect data. Participants could have falsified or distorted sensitive information in order to please the researcher.

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ANNEXES

SEMI-STRUCTURED INTERVIEW SCHEDULE

THE UNIVERSITY OF ZAMMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF NURSING SCIENCES

SEMI-STRUCTURED INTERVIEW SCHEDULE ON FACTORS ASSOCIATED WITH HOME DELIVERY AMONG PREGNANT WOMEN IN MIKATA RURAL HEALTH CENTRE CATCHMENT AREA IN MPONGWE DISTRICT.

Serial Number.....

Place of interview.....

Name of investigator.....

Date of interview.....

Time start.....

Time stop.....

Health institution.....

INSTRUCTIONS FOR THE INTERVIEWERS

1. Introduce yourself to the participant and explain the purpose of the interview.
2. Do not write the names of the participants on the questionnaire.
3. For questions without provided options of responses, write the responses clearly on the spaces provided

4. For questions with provided options of responses, tick in the adjacent box provided for the most appropriate response

5. All information provided by the participants must be held in strict confidence.

6. The participants should be free to ask questions during the course of the interview.

7. Thank the participant at the end of the interview.

SECTION A: DEMOGRAPHIC DATA

For official use

1. How old were you on your last birthday?
   (a) Below 15 years [ ]
   (b) 15 to 18 years [ ]
   (c) 18 to 35 years [ ]
   (d) Above 35 years [ ]

2. Where do you live?
   (a) High-density area [ ]
   (b) Medium density area [ ]
   (c) Low density area [ ]

3. What is your religious denomination?
   (a) Baptist Church [ ]
   (b) Kingdom Hall of Jehovah's Witnesses [ ]
   (c) New Apostolic Church [ ]
   (d) Roman Catholic Church [ ]
   (e) Seventh-Day Adventist Church [ ]
   (f) United Church of Zambia [ ]
   (g) Any other, specify_____ [ ]

4. What is your marital status?
   (a) Single [ ]
   (b) Married [ ]
   (c) Separated [ ]
   (d) Divorced [ ]
   (e) Widowed [ ]
   (f) Cohabitating [ ]

5. How many children do you have?

(a) 1 to 3 [ ]

(b) 4 to 6 [ ]

(c) 7 to 9 [ ]

(d) 10 and above [ ]

6. How old is your youngest child? (Specify)

_____ [ ]

7. What is your highest level of education?

(a) Primary [ ]

(b) Secondary [ ]

(c) College / University [ ]

(d) None [ ]

8. What do you do to earn a living? (Specify)

(a) Employed [ ]

(b) Unemployed [ ]

(c) Self-employed [ ]

9. What is your monthly income?

(a) Less than K50,000 [ ]

(b) K50,000 to K500,000 [ ]

(c) More than K500,000 [ ]

(d) Not applicable [ ]

10. What does your husband do to earn a living? (Specify)

_____ [ ]

SECTION B: DISTANCE

11. How long does it take you to reach your nearest Health Centre from your home?

(a) Less than 1 hour [ ]

(b) 1 hour to 2 hours [ ]

(c) More than 2 hours [ ]

12. What is your mode of transport to your nearest Health Centre?

(a) Walking [ ]

(b) Bicycle [ ]

(c) Ox-cart [ ]

(d) Vehicle [ ]

13. Is the road between your home and your nearest Health Centre passable throughout the year?

(a) Yes [ ]

(b) No [ ]

(c) If no, explain_____ [ ]

How much do you pay for your transport from the Health Centre to the Hospital?

_____ [ ]

SECTION C: PLACE OF DELIVERY

14. Where did you have your last delivery?

(a) Home [ ]

(b) Health facility [ ]

15. Why did you deliver at home?

_____ [ ]

_____

16. Where would you prefer to deliver?

(a) Home [ ]

(b) Health facility [ ]

17. Why did you choose this place?

_____ [ ]

_____

19 Who assisted you during the last delivery?

(a) Midwife / Nurse [ ]

(b) Mother [ ]

(c) Grand-mother [ ]

(d) Aunt [ ]

(e) Trained TBA [ ]

(f) Untrained TBA [ ]

(g) Neighbour [ ]

(h) Passer-by [ ]

(i) Unassisted [ ]

(j) Others specify_____ [ ]

20. Was the delivery normal?

(a) Yes [ ]

(b) No [ ]

(c) Do not know [ ]

(d) If no, give reasons for your answer

_____ [ ]

SECTION D: KNOWLEDGE ON

DELIVERY COMPLICATIONS

21. In your opinion, do you think it is good for a pregnant woman to deliver at health facility?

(a) Yes [ ]

(b) No [ ]

(c) Do not know [ ]

22. If yes, what are the benefits of delivering at a health facility?

_____ [ ]

_____

23. Are you aware of any delivery complications?

(a) Yes [ ]

(b) No [ ]

(c) Do not know [ ]

24. If yes, which complications do you know?

(a) Heavy bleeding just before / during / after delivery [ ]

(b) Taking many hours to deliver [ ]

(c) Inability to deliver through birth-canal [ ]

(d) Convulsions

(e) Maternal reproductive tract injuries [ ]

(f) Sepsis [ ]

(g) Retained placenta [ ]

(h) Maternal exhaustion [ ]

(i) Foetal distress [ ]

(j) Neonatal injuries [ ]

(k) Foetal malposition/malpresentation [ ]

(l) Others (Specify) [ ]

25a. Have you ever experienced any complications during delivery?

(a) Yes [ ]

(b) No [ ]

(c) Do not know [ ]

25b. If yes, what were these complications?

_____ [ ]

_____

25c. If no, give reasons for your answer

_____ [ ]

_____

26a. Are there any trained TBAs in your area?

(a) Yes [ ]
(b) No [ ]
(c) Do not know [ ]

26b. If no, explain_____ [ ]

_____

27a. Have you ever attended antenatal clinic during this pregnancy?

(a) Yes [ ]
(b) No [ ]

27b. If yes, how many times have you attended?

_____ [ ]

SECTION E: ATTITUDE OF STAFF

28a. How were your previous experiences with Midwives / Nurses at the Health facility?

(a) Good [ ]

(b) Bad [ ]

(c) Do not know [ ]

28b. If bad, explain_____ [ ]

_____

29a. When you went for antenatal care, did members of staff explain or not, what they were doing to you?

(a) Yes [ ]

(b) No [ ]

29b. If no, explain_____ [ ]

_____

30a. Are health talks given to expectant mothers on every antenatal day?

(a) Yes [ ]

(b) No [ ]

(c) Do not know [ ]

30b. If yes, what do they educate you on?

(a) Danger signs of pregnancy [ ]

(b) Danger signs during delivery [ ]

(c) Danger signs after delivery [ ]

(d) Safe place of delivery [ ]

(e) Dangers of home delivery care [ ]

(f) People to assist you during delivery [ ]

(g) Birth preparedness [ ]

(h) Baby care [ ]

(i) I have forgotten [ ]

(j) Others (Specify)_____ [ ]

31. How long do the talks last?

(a) Less than 30 minutes [ ]

(b) 30 minutes to 1 hour [ ]

(c) More than 1 hour [ ]

32a. Which gender of staff would you prefer to assist you during delivery at the Health Centre?

(a) Male Midwife / Nurse [ ]

(b) Female Midwife / Nurse [ ]

32b. What is the reason for your preference?

_____ [ ]

33a. Do you think the Health Centre staff are qualified enough to assist women during delivery?

(a) Yes [ ]

(b) No [ ]

33b. If no, why do you think so?_____ [ ]

_____

SECTION F: PRACTICES AND BELIEFS

34. Who has higher influence in deciding your place of delivery?

(a) Husband [ ]

(b) Yourself [ ]

(c) Mother [ ]

(d) Grandmother [ ]

(e) Aunties [ ]

(f) TBAs [ ]

(g) Others (Specify) [ ]

35a. Are there any practices in connection with delivery at the Health facility, which may be considered to be in conflict with traditional / cultural beliefs and or values?

(a) Yes [ ]

(b) No [ ]

35b. If yes, mention them_____ [ ]

_____

36a. Do you engage in any traditional practices?

(a) Yes [ ]

(b) No [ ]

36b. If yes, mention them_____ [ ]

_____

SECTION G: COST OF HEALTH CARE

37a. Are there any costs involved in delivering

at the Health Centre?

(a) Yes [ ]

(b) No [ ]

37b. If yes, how much?

_____ [ ]

38. Do you afford to meet the costs required / associated with delivery at the Health Centre?

(a) Yes [ ]

(b) No [ ]

39. What is the mode of payment?

(a) Cash [ ]

(b) In kind [ ]

40. How is the referral system to the Health Centre?

(a) Adequate [ ]

(b) Not adequate [ ]

41. Do you afford to buy the requirements needed for delivery at the Health Centre such as gloves, Jik, baby-layette?

(a) Yes [ ]

(b) No [ ]

42. Which areas of service delivery regarding safe-motherhood services do you

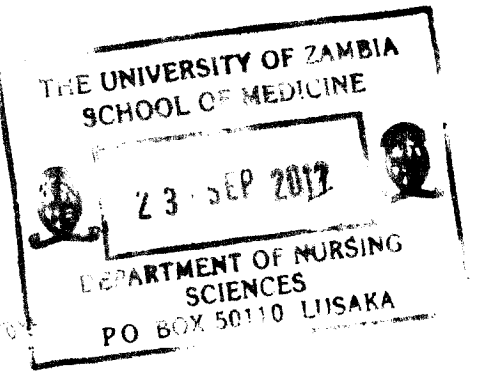
think need improvement? Explain_____ [ ]

_____

THANK YOU FOR YOUR PARTICIPATION.

I WISH YOU GOD'S BLESSINGS.

The University of Zambia Ridgeway Campus,
School of Medicine,
Department of Nursing Sciences,
P. O. Box 50110,
Ridgeway,
LUSAKA.



23rd September, 2011.

The District Medical Officer,
Mpongwe District Health Management Team,
P. O. Box 55,
MPONGWE.

U.F.S. The Head of Department,
Department of Nursing Sciences,
P. O. Box 50110,
LUSAKA.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A RESEARCH STUDY IN MPONGWE DISTRICT

I am a 4th year finalist student at the University of Zambia Ridgeway Campus in the School of Medicine Department of Nursing Sciences, pursuing a Bachelor of Science Degree in Nursing programme.

In partial fulfilment for the award of the Bachelor of Science Degree in Nursing, I am required to undertake a research study during my final year of training in my area of interest. My research title is **"A study to explore factors associated with home delivery (home-birth) care among expectant mothers in Mikata Rural Health Centre Catchment area in Mpongwe District."** I wish to conduct a pilot study at Kanyenda RHC and the main study at Mikata RHC. The target population will be all expectant mothers of reproductive age group (15 to 49 years). I intend to collect data for the main study from 6th to 30th November 2011.

Therefore, I am requesting for permission to interview some mothers who will be attending antenatal clinic at Mikata Rural Health Centre.

I would be very grateful if my request to undertake this study is granted.

Thanking you in anticipation.

Yours faithfully,

Chityaka Francis
4th Year BSC Nursing student.

Republic of Zambia
MINISTRY of HEALTH
MPONGWE DISTRICT HEALTH OFFICE
P.O. BOX 55, MPONGWE, MACHIYA ROAD, MPONGWE
Tel: (260) 1 482039 Fax: (260) 1 482072

23rd February, 2012

Mr. Francis Chityaka
University of Zambia
School of Medicine
Department of Nursing Sciences
P.O Box 50110
LUSAKA

Dear Mr. Chityaka,

PERMISSION TO CONDUCT A RESEARCH STUDY IN MPONGWE DISTRICT

Reference is made to your letter dated 23rd September, 2011 in which you requested for permission to conduct a research study in Mpongwe District.

I am glad to inform you that permission has been granted to conduct a study titled "A study to explore factors associated with home delivery (home birth) care among expectant mothers in Mikata Rural Health Centre catchment area in Mpongwe District."

After your research study, we shall be grateful if you would share your findings with us.

Yours faithfully
MINISTRY OF HEALTH – MPONGWE

Dr. Isaac Banda
A/DISTRICT MEDICAL OFFICER

WORK SCHEDULE /PLAN

ACTIVITY	TIME FRAME		RESPONSIBLE PERSON
	DATES	DURATION	
Development of Research Proposal	06/06/2011 to 06/11/2011	154 days	Researcher & Supervisor
Data collection tool preparation	25/09/2011 to 01/10/2011	7 days	Researcher
Finalise Research Proposal	02/10/2011 to 22/10/2011	21 days	Researcher
Clearance From Authority-MDHMT	23/10/2011 to 01/11/2011	10 days	Researcher
Pilot study	02/11/2011 to 03/11/2011	2 days	Researcher
Data Collection Tool Amendments	04/11/2011 to 05/11/2011	2 days	Researcher
Data Collection (main study)	06/11/2011 to 30/11/2011	25 days	Researcher
Data Analysis	01/12/2011 to 31/12/2011	31 days	Researcher
Report Writing	01/01/2012 to 31/01/2012	31 days	Researcher
Draft Report To DNS Supervisor	01/02/2012 to 25/03/2012	53 days	Researcher
Finalise Report	26/03/2012 to 29/04/2012	34 days	Researcher
Publication of Results	30/04/2012 to 07/05/2012	7 days	Researcher

BUDGET

Item	Unit Cost	Quantity	Total Cost
STATIONARY			
Note Books	5000	4	20,000
Reams of Paper	34000	2	68,000
Pens	1000	10	10,000
Erasers	4000	4	12000
Tip-Ex	12000	2	24,000
Stapler	15,000	1	15,000
Perforator	50,000	1	50,000
Manila Paper	2,000	6	12,000
Diary	20,000	1	20,000
Paper Pins	500	50	25,000
Scientific Calculator	80,000	1	80,000
Flip Charts	20,000	3	60,000
Markers	12,000	2	24,000
Paper Staples	30,000	1 box	30,000
Box File	30,000	1	30,000
Folder Clips	1,500	10	15,000
Small Folder	2,000	10	20,000
Field Bag	150,000	1	150,000
Memory Sticks	80,000	2	160,000
SUBTOTAL			**K825,000**
SECRETARIAL MATERIAL			

Questionnaire typing	2,000	15pages	30,000
Research Proposal typing, printing and binding	3,000	75pages	225,000
Questionnaire printing	1,000x15pages	55copies	825,000
Research Report writing	3,000x150pages	1	450,000
Photocopying of Final Research Documents	200 x 150pages	7	30,000
Binding of Final Research Documents	100,000	7	700,000
SUBTOTAL			**K2,260,000**
HUMAN RESOURCE EXPENSES			
Transport during Pilot Study	30,000	x 2 days	60,000
Lunch Allowance during Pilot Study	50,000	x2 days	100,000
Transport during Main Study	5,000	x30 days	150,000
Lunch Allowance for researcher	50,000	x30 days	1,500,000
Refreshments for respondents	15,000	55	825,000
SUBTOTAL			**K2,635,000**
INFORMATION DESSEMINATION			
Refreshments for community leaders	450,000	1 day	200,000
Drama group hire	100,000	4 days	400,000
Homage to Royal Highnesses	50,000	3	150,000
SUBTOTAL			**K750,000**
TOTAL			**K6,470,000**
CONTINGENCY 10%			**K647,000**
GRAND TOTAL			**K7,117,000**

BUDGET JUSTIFICATION

This research proposal budget has taken into consideration the aspects of stationary, human resource expenses, secretarial services and contingency.

Stationary

Stationary will be very much needed for me to be able to carry out this research successfully. For instance, I will need reams of paper for the formulation, amendments and production of pilot study questionnaires which are not included under the costs for the final questionnaires. Memory sticks will be needed for storage of vital information and documents such as questionnaires while the other one will be used as back up. To ensure confidentiality and safety of information collected, a bag will be needed with a zipper which can be secured.

Secretarial Material

As a researcher to successfully carry out the research, I will need material to be procured such as reams of paper, as well as to have the research findings typed, photocopied and bound at the prevailing rates in the area as captioned in the budget.

Human Resource Expenses

In order to enable the researcher move from point of residence to points where data will be collected during pilot study and final collection of data, expenses for public transport will be incurred to reach those areas. The researcher will also need to have money for his lunch-break at the current government rate of missing lunch, and refreshments for respondents to maintain uniformity in the research process.

Information Dissemination

At the end of the research, the findings will need to be presented to stakeholders that include the DHO, the health Centre staff, traditional rulers, and other relevant community leaders existing in the same area.

Contingency Fund

This is 10 percent of the total budget which has been added to cover for unforeseen extra costs and to cushion inflation that might occur in the due course of the exercise.

INFORMED CONSENT

Dear participant,

My name is Chityaka Francis. I am a student enrolled in the Bachelor of Science Degree in Nursing programme, in the Department of Nursing Sciences of the School of Medicine, at the University of Zambia Ridgeway Campus.

In partial fulfillment of the Bachelor of Science Degree in Nursing, I am required to undertake a research project. My research title is: **A study to explore factors associated with home delivery.**

The main objective of the study is to explore factors associated with home delivery care among expectant mothers in Mikata Rural Health Centre Catchment area in Mpongwe District.

You have been selected to participate in the study, and I wish to inform you that participation in the study is voluntary, and you are free to withdraw at any stage of the study if you wish to do so. I have a questionnaire which I will be filling in as you give responses during the interview. It is expected that this questionnaire will take about 30 minutes to be completed during the interview to avoid keeping you too long to return home. All information given to me for the purpose of this study will be kept confidential.

You will receive no direct benefit from the study or any monetary gain. The information you will give will help develop a better understanding of the problem of **home delivery** and will be used by health planners and various stakeholders that recognize **home delivery** as a problem under their agenda.

If you have queries you may ask now or contact me later on 0979980464 or 0966571351 or 0950935364, or the Head, in the Department of Nursing Sciences, P. O. Box 50110, Ridgeway, Lusaka.

I..... hereby called participant understand the guidelines of the study and I am willing to participate in the study.

Day....., date.....month.....year.....

Signed.....

Researcher's signature.....

GANNT CHART

MONTH AND YEAR		JUN 2011	JUL 2011	AUG 2011	SEP 2011	OCT 2011	NOV 2011	DEC 2011	JAN 2012	FEB 2012	MAR 2012	APR 2012
ACTIVITY	**RESPONSIBLE PERSON**											
Development of Research Proposal	Researcher and Supervisor											
Data Collection Tool Preparation	Researcher											
Finalise Research Proposal	Researcher											
Clearance From Authority-MDHMT	Researcher											
Pilot Study	Researcher											
Data Collection Tool Amendments	Researcher											
Data Collection (main study)	Researcher											
Data Analysis	Researcher											
Report Writing	Researcher											
Draft Report to DNS Supervisor	Researcher											
Finalize Report	Researcher											
Publication of Results	Researcher											

Mpongwe District/ Copperbelt Province