THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

A STUDY TO DETERMINE FACTORS CONTRIBUTING TO LOW UTILIZATION OF HEALTH INSTITUTIONS FOR DELIVERIES BY PREGNANT MOTHERS IN CHADIZA DISTRICT

BY

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Research study submitted in partial fulfillment of the requirements for the Degree of Bachelor of Science in Nursing to the University of Zambia

2006

ACKNOWLEDGEMENTS

I would like to acknowledge the following people for seeing me through to the last stage of my training:

- Dr. M. Maimbolwa the University lecturer who was the Course Coordinator.
- Mrs. C. Ngoma the University of Zambia lecturer who was my Supervisor for her patience, guidance and tolerance while supervising me in this study despite her busy schedules being the Head of Department for the Post Basic Nursing.
- My sponsor, African Development Bank (ADB) through MoH/CBoH for awarding me the scholarship and giving me the study leave to pursue my B.Sc. at the School of Medicine, University of Zambia.
- Dr. S. N. Kanyimba, (Assistant Dean, by then) for helping me register despite having reported late because of receiving the message late.
- To Chadiza DHMB for the support and encouragement throughout the training period.
- To Mrs. Esther Mwale, Mrs. Mary Chisamba, Mrs. Wendy M. Sikatali and many other Secretaries and others who took part in typing my school work.
- To the Master of Science in Nursing students who helped me to get through this research work (Mrs. Universe H. Mulenga, Ms. Florence Mukupo and Ms. Marjory Kabinga)
- To the Health Centre Committees for Nsadzu, Banukha and Miti rural health centre.
- To the respondents who with no reservations agreed to be interviewed and to participate in the Focus Group Discussion.
- Special thanks to my husband, Victor, my children, Tamara, Elizabeth, Kondwani and Geoffrey for their support and encouragement.
- To my relatives, many friends and departments who had a helping hand throughout my training in any way.

May God Bless you all!

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LIST OF ABBREVIATIONS

CBA	-	Community Based Agents
CBoH	-	Central Board of Health
CCZ	-	Christian Council of Zambia
DHMB	-	District Health Management Board
DHMT	-	District Health Management Team
DHO	-	District Health Office
EOC	-	Essential Obstetric Care
FGD	-	Focus Group Discussion
HCC	-	Health Centre Committee
HMIS	-	Health management Information Systems
HP	-	Health Provider
IBDS	-	Institutional Based Delivery Services
IBMS	-	Institutional Based Maternity Services
IEC	-	Information, Education and Communication
MOFNP	-	Ministry of Finance and National Planning
MoH	-	Ministry of Health
PBN	-	Post Basic Nursing
PRB	-	Population Reference Bureau
RCC	-	Roman Catholic Church
RCZ	-	Reformed Church in Zambia
RHC	-	Rural Health Centre
SMI	-	Safe Motherhood Initiative
TBA	-	Traditional Birth Attendant
tTBA	-	Trained Traditional Birth Attendant
UCZ	-	United Church of Zambia
UNDP	-	United Nations Development Programme
UNFP	-	United Nations Population Fund
UNICEF	-	United Nations International Children's Fund
USAID	-	United States Agency for International Development
WHO	-	World Health Organization
WRA	-	White Ribbon Alliance

ZDHS	-	Zambia Demographic Health Survey
ZWRASM	-	Zambia White Ribbon Alliance for Safe Motherhood

DECLARATION

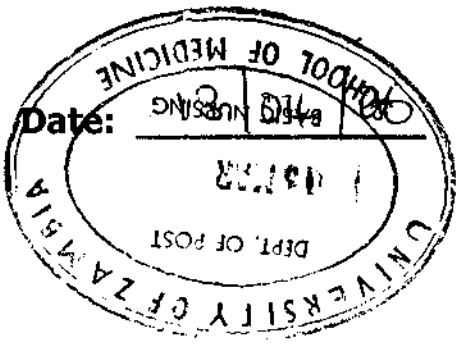
I hereby declare that the work presented in this study for the Bachelor of Science Degree in Nursing has not been presented either wholly or in part for any other degree

Signed: _____ **Date:** 13-04-06

(Candidate)

Approved: _____ **Date:** _____

(Supervising lecturer)



STATEMENT

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

Signed: _____ **Date:** 13-04-06

DEDICATION

I dedicate this study to my late father, brothers and sisters who without their encouragement and support I would not have reached this far.

I also would like to dedicate this research to my husband, Victor and my children Tamara, Elizabeth, Kondwani and Geoffrey who tirelessly encouraged and supported me throughout my training despite denying them the motherly love and company they needed to have from me, especially that they had to write their grade twelve and seven examinations without my close support.

ABSTRACT

Low utilization of health institutions for delivery by pregnant women in Chadiza District has become a major concern to Chadiza District Health Team (DHMT) despite efforts by the District Health Management Team with the support of collaborating partners to encourage women to deliver in health institutions. Institutional deliveries ranged between 8% to 19% from 2000 to 2004 below 40% which is the national target for rural districts. Statistics at national level indicate a decline in the proportion of deliveries at health facilities and an increase in home deliveries for instance home deliveries account for 55.7% of deliveries while health facility deliveries are 43%. Eastern Province in particular had 31.2% health facility deliveries and 67.6% home deliveries and Chadiza District inclusive (ZDHS, 2001-2002).

Home deliveries may predispose a women to a lot of complications or risks which may lead to loss of life of the mother or baby or maternal complications or disabilities like obstetric fistula, and such women are often abandoned or divorced by husbands and ostracized by their family and community and thus frequently live without support. Hence the study was aimed at determining the factors contributing to low utilization of health institutions for deliveries by pregnant women in Chadiza District.

Literature was reviewed globally, regionally, and nationally. It generally revealed that there are influencing factors on the topic under study. A descriptive study design with both quantitative and qualitative dimension was used. The target population under study were women of childbearing age who had their last delivery either at home or in a health facility in Chadiza District. A pilot study was done at Nsadzu rural health centre while the main study was done at Miti and Bwanukha rural health centres.

Data was collected during the months of August to September, 2005. A sample size of fifty two (52) respondents, 26 for each rural health centre and 13 of respondents had their deliveries in health facility while 13 had their last

deliveries outside the health facility (home, relative's place, tTBA's place). Two Focus Group Discussions were done; one in a community for both centres. The two FGDs comprised of 20 participants in total, 11 participants for Miti RHC while 9 participants were from Bwanukha RHC. The FGD participants did not participate in the interview schedule data collection which was used to collect data from the fifty respondents and had both open and closed ended questions. The data was checked for completeness coded, categorized and entered on data master sheet. The data collected was then analyzed manually using a scientific calculator. Findings were presented using frequency tables and cross tabulations tables.

The study revealed that most (39%) of the respondents were aged between 15 and 25 years and 29% were aged between 26 to 35 years.

The study also revealed that 46% of the respondents had low knowledge on categories of at risk expectant mothers who are supposed to deliver in a moderate health facility and dangers of home deliveries. Forty six percent (46%) of the respondents had attained primary education and only 17% had secondary education).

Most (38%) of the respondents who had institutional deliveries were not satisfied with care given by the nurses, midwives and other health workers. It was further revealed that 79% of the respondents did not have access to health services due to distance to the health institution, lack of transport, unaffordable fees, poor staff attitude. Majority (61%) of the respondents said that cultural practices, beliefs and taboos related to pregnancy and delivery were practiced in the community.

In view of the above findings, some of the recommendations made are as follows:

1. The Ministry of Health/Central Board of Health should source for funds to build more health institutions or health posts so as to reduce on the distance covered by expectant mothers.

2. The district should request for more staff from MoH/CBoH to work in the health facilities in order to alleviate staff shortage and also to encourage and recommend more nurses regardless of sex to go for midwifery training so that they can be equipped with necessary knowledge and skill.

3. The district should Intensify Information, Education and Communication on the dangers and complications of home deliveries to the communities.

4. Communities to write project proposals to construct maternity waiting homes so that mothers can await delivery from the centre. They should also construct maternity delivery units away from the main structures so as to provide adequate space and privacy.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Zambia is a developing country situated in the sub-Saharan Africa. It covers an area of 752,612 square kilometers, which is 2.5% of the total Africa. It shares international borders with eight countries which are the Democratic Republic of Congo (DRC) and Tanzania in the north, Malawi and Mozambique in the east, Zimbabwe and Botswana to the south, Angola to the west and Namibia to the southwest. It has nine provinces which include; Lusaka, Luapula, Copperbelt, Central, Northern, Eastern, Northwestern and Southern. The provinces are further divided into 72 districts, small administrative units called districts (Zambia Demographic Health Survey, 2001-2002).

Therefore, following political independence in 1964, the government was prompted to make available health services at provincial, district and community levels. The new government policy was to diversify the economy and improve on the coverage of health services (Ministry of Health, 2001).

In 1991, the government embarked on reforming the health sector so as to improve health care delivery and improve the quality of life of all Zambians. Since then, the health care systems has undergone changes which would enhance quality health care provision. However, the current poverty levels which are estimated to be at 73% (Ministry of Finance and National Planning, 2002) have had a negative impact on the reform process and the most affected are the vulnerable groups such as women and children.

Worldwide, the health status of women is generally poor although they are custodians of the health and well being of their families. Too little attention is paid to the women's problems. Maternal mortality and morbidity has tremendously increased due to various reasons most of which are preventable, for example complications related to pregnancy and childbirth.

The most recent global maternal mortality figures estimate that 515,000 women die annually due to maternal causes, some being direct and others indirect causes. It is estimated that deaths from direct causes such as haemorrhage can be prevented if women received skilled care at critical moments during pregnancy and childbirth (Ransom and Yinger, 2002).

It is further noted that about half of deliveries in less developed countries currently take place with a skilled attendant present. In Zambia, the maternal rate is estimated to be at 729 per 100,000 live births (ZDHS, 2001-2002).

In an effort to improve the status of women WHO in relation to the universal Declaration of Human Rights launched a Safe Motherhood Initiative (SMI) in 1987 which Zambia signed. In 1998, it was proclaimed the year of safe mother hood by the Safe Motherhood Inter-Agency Group. During the launch it was agreed that safe motherhood requires a readily available network of community health care providers, clinics as hospitals. The integrated services to be provided are community education of safe motherhood activities such as antenatal care, counselling, skilled assistance during childbirth, care for obstetric complications, post-partum and family planning.

Safe motherhood has been defined as "creating the circumstances within which a woman can choose to become pregnant and if she does, ensuring that she receives care for the prevention and treatment of pregnancy complications, have access to trained birth assistance, essential obstetric care and care after birth including information about family planning (Central Board of Health, 2002). The Safe Motherhood Initiative has also been adopted by Chadiza District In that it is equally implementing the safe motherhood activities.

In Chadiza, the District Health Management Team (DHMT) has been supportive to the staff in capacity building and staff development programmes to enrich the health providers with knowledge and skill to assist pregnant women during delivery. Four enrolled nurses have been trained in midwifery and two registered nurses are in midwifery school. The Non-Government Organizations (NGOs) working in the District like Plan International Zambia and Lutheran World Federation have also supported the 'district in training other staff in Essential Obstetric Care (EOC), and also one (1) female supportive staff for each Rural Health Centre (RHC) and health posts have been trained in EOC. The District has also embarked on training of Traditional Birth Attendants for all the health centres and posts help enhance obstetric care and health education in the communities to help promote women to deliver in health facilities or to be assisted by the tTBAs. However, the response to the health messages by community has not been adequate because mothers have continued to delivery in homes than using institutions and being assisted by tTBAs (ZDHS, 2001-2002).

The health posts were opened to help provide health care services as close to the families as possible, delivery services included. The DHMT has also employed retired health workers on contract with a view to fill up gaps in the health facilities which has no trained staff, and those with one staff.

Four health centres in the District have been renovated and extended with a view to create more space for health services. The collaborating partners have supplies equipment for the renovated centes with a view to provide quality delivery health services and other MCH activities.

1.2 STATEMENT OF THE PROBLEM

Despite efforts by the Chadiza District Management Team with the support of the collaborating partners to encourage pregnant women to deliver at the health institutions, some pregnant women still deliver in homes. Institutional

deliveries in Chadiza District ranged between 8% to 19% in 2000-2004 which is below the national target of 40% for rural districts (See Table 1).

Table 1: Institutional Deliveries in Chadiza District

(2000-2004)

year	population	expected deliveries (5.2%)	institutional deliveries	%
2000	91,275	4,746	460	10
2001	94,365	4,907	550	11
2002	96,976	5,043	387	8
2003	100,934	5,249	759	14
2004	104,437	5,431	1,030	19

Source: Chadiza DHO, 2005 HMIS Data Base

Statistics at national level indicate a decline in the proportion of deliveries at health facilities and an increase in home deliveries, for instance home deliveries are 55.7% while health facility are 43%. In Eastern Province, health facility deliveries account for 31.2% of all the deliveries while home deliveries account for 67.6% (ZDHS, 2001-2002).

It is estimated that over half of births in Zambia occur at home while 44% occur in health facilities, 35% occur in public sector and one in ten occur in private facilities (ZDHS, 2001-2002).

Home deliveries may predispose the women to a lot of complications or risks which may lead to loss of life of the mother or baby or maternal disabilities like obstetric fistula may occur. The World Health Organization estimates that at least 15% of all pregnant women require skilled obstetric care in the absence of which they will suffer serious and long term morbidities and disabilities. Not all of these women needed to be treated in hospital but some can be managed at the health centre level (WHO, 1996).

It is estimated that for every woman who dies during childbirth, approximately 15 to 30 women survive but experience chronic disabilities and the most severe of these is obstetric fistula (CBoH, isse 2, January, 2004). It is further reported that the baby in these situations usually does not survive and the woman is left incontinent of urine and or faeces. Women with fistula are often abandoned or divorced by husbands and ostracized by their family and community and thus frequently live without support.

The other consequences which may occur due to home deliveries are haemorrhage, infection, toxaemia, obstructed labour, rupture of uterus and unsafe abortion. Prolonged obstructed labour is more likely to occur especially in young women who may end up with fistula. Most maternal deaths could have occurred due to such complications. However, to prevent such complications the government with the help of collaborating partners at both international and national levels embarked on a programme of training Traditional Birth Attendants (TBAs) who were to attend to women in home setting. The training started in 1973 and was aimed at reducing maternal and child mortality (UNICEF/MoH, 1997).

A trained Traditional Birth Attendant (tTBA) or a family Traditional Birth Attendant (FTBA) is a person who has received a short course of six weeks training through the modern health care sector to up grade her skills (World Health Organisation, 1992). The trainee receives a certificate after completion of her course.

Though the tTBAs are present in the communities, they are not able to handle obstetric emergencies but are able to handle deliveries with no known risk factors and where complications are expected to facilitate referral of the woman to the health centre. It is estimated that 11.5% deliveries are assisted by the tTBAs (ZDHS, 2001-2002) and 11.2% to 15.8% from 2002 to 2003 (Annual Health Statistical Bulletin, 2003) at national level were also assisted by tTBAs. The District statistics for trained Traditional Birth Attendants indicate that not all mothers who do not go back to the health

centres for delivery are attended by TBAs but that probably they deliver on their own. The Table below shows the deliveries assisted by the tTBAs from 2000-2004. This move is quite risky because if complications occur both the mother and baby are likely to die.

Table 2: Trained Traditional Birth Attendants Deliveries in Chadiza District

Year	Population	Expected deliveries (5.2%)	tTBAs deliveries	%
2000	91,275	4,746	1,278	26.9
2001	94,365	4,907	1,404	28.6
2002	96,976	5,043	1,440	28.5
2003	100,934	5,249	1,547	29.4
2004	104,437	5,431	1,525	28

Source: Chadiza DHO, 2005 HMIS, 2005

Therefore, the researcher would like to undertake the study so as to establish the contributing factors to low utilization of institutions for delivery and come up with possible solutions in order to help mothers utilize health institutions for delivery in order to reduce the maternal and neonatal mortality and morbidity in Chadiza District.

1.3 FACTORS CONTRIBUTING/INFLUENCING TO LOW UTILIZATION OF HEALTH INSTITUTIONS FOR DELIVERY BY MOTHERS IN CHADIZA DISTRICT

1.3.1 Socio-economic and Cultural Factors

(i) Educational Levels

Education is an asset to pregnant women as it offers them increased opportunities to understand their status. Pregnant women who are educated are able to understand easily any information given to them through many forms of information Education and Communication hence they are able to make decisions to deliver at the health centre. Those with low education status have a negative attitude on the utilization of delivery services thus pre-disposing themselves and their babies to a lot of complications related to childbirth.

(ii) Age

Young mothers are more likely to deliver at the health facility than older mothers with good history of home deliveries without any complications.

(iii) Knowledge on Risks of Home Delivery

Adequate knowledge on the risks of home deliveries is vital for prevention of maternal and neonatal mortality and morbidity. Once mothers know about such risks they will be able to go to deliver at the health institutions.

Knowledge of the expected date of deliveries is vital for mothers to be alert for onset of true labour and so be able to go to the health facility for delivery.

(iv) Poverty

The mothers living below the poverty datum life cannot adequately prepare for delivery in that they will not afford to buy baby layette, basic medical supplies like gloves, cord tie, or sanitary pads which are usually demanded from them on arrival at the centre because of health centre short supplies in medical supplies. With adequate health education they will appreciate the need to use even old clothes for older children to wrap in the baby. Health

centres may be requested to include in their action plans purchase of surgical gloves, cord ties or clumps and adequate sanitary pads. The centres may also be requested to discuss with the Neighbourhood Health Committees the problem of such shortages so that the user fees could be used to purchase supplementary supplies like surgical gloves.

(v) Social and economic support

The family and community have a key role to play in supporting the pregnant mothers for positive outcome pregnancy. Adequate support by providing the woman with requirement for delivery will help her to make a decision to use the health facility for delivery. Inadequate support may prevent a woman from using health facilities for delivery. In addition, the woman usually waits for family members to decide for her especially the husband's side thus delaying seeking maternity assistance at the health facility.

(vi) Cultural Beliefs and Practices

Adequate information, education and communication to mothers and the communities on the harmful culture practices and traditional beliefs will help the use of institutions for deliveries. For example, in some cultures mothers squat during delivery while in health institutions mothers are advised to be in lithotomy position. In this regard, pregnant mothers should be allowed to use a comfortable position when in labour as long as it will not pose any danger to both the mother and the baby.

Inability of women to make decisions about their own health makes them not to use health institution. This is because they have to consult husbands or mothers-in-laws.

(vii) Transport

Lack of transport can prevent some women to deliver at the health facility.

1.3.2 Service-Related Factors

(i) Staffing Levels

Shortage of staff in health facilities lead to long waiting hours by pregnant mothers and others deliver on their own though within the centres because staff on duty may be busy in another area.

Shortage of staff also leads to burn out of staff thus giving inadequate quality care. Adequate staff would promptly attend to the mother in labour and be able to monitor progress of labour throughout such that if there would be a problem, quick referral would be instituted.

(ii) Information, Education and Communication

Adequate IEC will equip the women with knowledge concerning their pregnancy, and childbirth and the risks of home deliveries. Inadequate IEC may lead to mothers fearing to disclose to the husbands or relatives of any problem that she could be experiencing for fear of being taken to the health facility where she would wait for a long time until delivery. Mothers would be equipped with adequate health messages concerning risk factors related to pregnancy and promptly seek care from the health facility.

(iii) Staff Attitude

Staff attitude may affect utilization of institutions in that if it is good, mothers will be encouraged to delivery at the health institutions but if it is not satisfactory, mothers will shun away from institutions thus delivery in homes. This contributes to the increased morbidity and mortality rates.

(iv) Staff Training

Inadequate staff competence in their obstetric practice may lead to inadequate quality care thus many mothers may not come to deliver from the health facilities after hearing from friends or relatives. But also adequate staff competence and skill in obstetric care can promote use of institutions for

delivery in that way preventing maternal and neonatal pregnancy and childbirth related complications.

(v) Health Worker Preference

Preference by pregnant women and communities of female health worker to assist in deliveries to male staff may be contributing to low utilization of institutions for deliveries. Some institutions for example have only one trained male staff who also at times is away from the health facility on official business and only CEs are left running the health services as a result mothers prefer delivery at home assisted either by relatives of tTBAs.

(vi) Equipment, Drug and Other Supplies

Inadequate medical equipment, drug and other medical supplies to the health centres eg surgical gloves may contribute to low utilization of institutions for deliveries because mothers may be expected to provide gloves, pads, cotton wool which they may not afford because of lack of money. The mothers may also decide to deliver in homes under unclean procedure and thus predisposing themselves, baby and those assisting to infections. The equipment being used may not be properly cleaned and sterilized because of inadequate or lack of sterilizing equipment to accommodate delivery packs. This may predispose the mother and the baby to a lot of infections and death may occur.

(vii) Delivery Space and Privacy

The delivery rooms in terms of space may have an influence on the utilization of institutions for deliveries for instance in some health facilities the delivery rooms may be used for antenatal sessions and may be situated near the outpatient department. This may discourage mothers to go back to the health centres for delivery for fear of everybody knowing that she is in labour. This fear may lead them to deliver in homes thus predisposing the baby and herself to yet a lot of infections which may cause death.

(viii) Distance to the Health Facility

Distance to the health centres may contribute to low utilization of institutions for deliveries for fear to deliver on the way to health centre for example, a distance where mothers walk for more than one hour to reach the health centre. A pregnant woman who is in labour cannot walk a long distance. When pregnant women live very far away from delivery centers and hence have a risk factor they are often referred to maternity waiting homes.

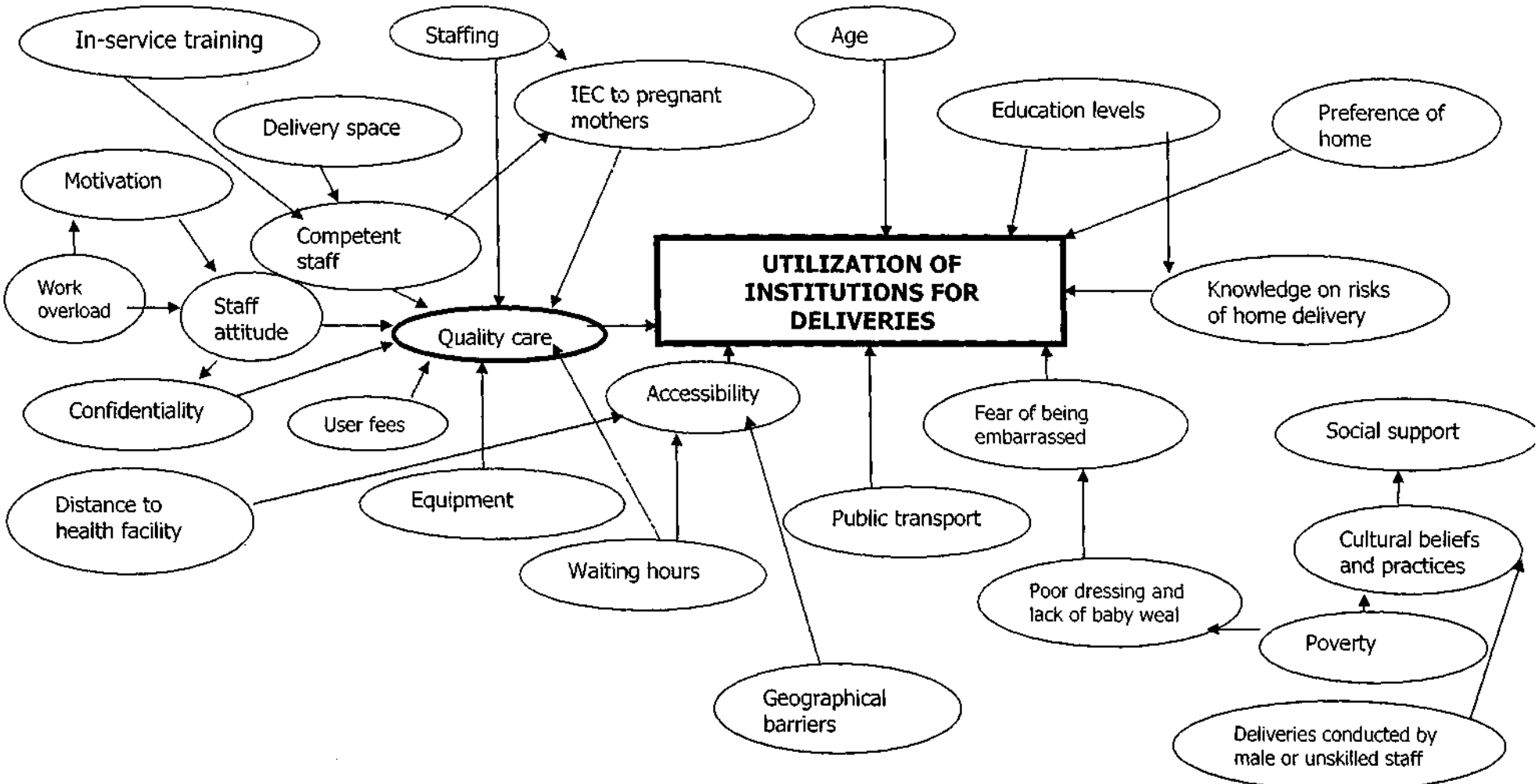
Sometimes, mothers who have risk factors may not accept to be referred to maternity waiting homes to await delivery due to family commitments.

(ix) User Fees

User fees may discourage women from using health facilities. This is because many women are poor and unemployed.

1.4 FIGURE 1: DIAGRAM OF PROBLEM ANALYSIS

SERVICE-RELATED FACTORS **SOCIAL ECONOMIC AND CULTURAL FACTORS**



1.5 JUSTIFICATION

It is envisaged that the finding of the study would save as an indicator for evaluating the impact of safe motherhood initiative in Chadiza District. The research findings would be useful at every level of service delivery, that is family, community health centres and district level. These findings would be used to educate the community members about risk factors of home deliveries in order to encourage mothers with obstetric risks to use health institutions for delivery.

The results would also be used to guide the staff during action planning process to budget for purchase of medical supplies. They will also be used to write project proposals to well wishers to help buy the needed maternity equipment, construct standardized delivery rooms or renovate the existing structures to provide minimum quality care and privacy. These will promote usage of health institutions for deliveries and thus decrease maternal and neonatal mortality and morbidity related to child birth as a result of home management of a woman in labour.

It is also hoped that the study would unveil the existing taboos that surround childbirth among the local population. In addition, the findings may be used as baseline data for further research in maternal health.

1.6 RESEARCH OBJECTIVES

1.6.1 General Objective

To determine factors contributing to low utilization of health institutions for deliveries by pregnant women in Chadiza District and propose interventions to overcome such barriers.

1.6.2 Specific Objectives

1. To establish whether there is low utilization of health institutions for delivery by pregnant women.
2. To identify barriers or factors contributing to low utilization of health institutions for deliveries.
3. To identify areas for further research.
4. To make recommendations to relevant authorities

1.7 HYPOTHESES OF THE STUDY

1.7.1 **Null:** there is no relationship between knowledge on risks of home delivery leading to low utilization of institutions for deliveries.

1.7.2 **Alternative:** Inadequate knowledge on risks of home deliveries lead to low utilization of institutions for deliveries.

1.8 OPERATIONAL DEFINITIONS

1.8.1 **Delivery:** A process of giving birth to a baby.

1.8.2 **Home Delivery:** The process of giving birth to a baby at home.

1.8.3 **Institutional Delivery:** Giving birth to a baby at a health facility under skilled care.

1.8.4 **Institutions:** A recognized setting where pregnant mothers can be assisted to deliver by skilled personnel.

1.8.5 **Skilled Attendant:** Refers exclusively to people with midwifery skills who have been trained to proficiency in the skill necessary to provide competent care during pregnancy and childbirth.

1.8.6 **Competence:** Necessary knowledge and skills needed to coach a woman through labour and delivery.

1.8.7 **Trained Traditional Birth Attendant:** A person who assists mothers during the pregnancy, labour and postnatal periods, after receiving some training for 6 weeks to upgrade her skills.

1.8.7.1 **Family TBA:** An individual who has been chosen by an extended family to assist mothers to deliver in their homes.

1.8.8 **TBA:** A person who assists mothers during labour. She often acquires her skills by delivering babies herself or by experience.

1.8.9 **Low Deliveries:** Deliveries below the required national target of 40% in rural areas.

1.8.10 **Knowledge**: All the information and factors. Ability of pregnant women knowing the risks of home deliveries.

1.8.11 **Accessibility:** The pregnant women being able to receive the health services at the right time, where and how?

1.8.12 **Quality:** Acceptable type of care being delivered to pregnant mothers coming to delivery at the health institutions.

1.8.13 **Risks of home delivery:** problems that may arise because of unsafe and unclean deliveries conducted by unskilled attendant or problems which may arise related to childbirth as a result of delivering at home under the care of unskilled attendants. Some risks include; haemorrhage, infections, sepsis, prolonged labour, obstructed labour (that may lead to rupture of uterus) retained products of conception, unsafe abortion, asphyxia, obstetric fistula, maternal and fetal death.

1.8.14 **Social Support:** Support received from family member, husband or friend to a pregnant woman from pregnancy through labour to postpartum period with a specific task to assist her.

1.8.15 **Privacy:** Wanting to delivery away from other people; A woman not wanting to be with other people when in labour.

1.8.16 **Cultural Practice:** The way problems or things are dealt with as expressed by the particular family or community in relation to pregnancy and delivery.

1.8.17 **Cultural beliefs:** These are presumptions which give meaning in the way women and family members understand it in relation to pregnancy and delivery.

TABLE 3

1.9 VARIABLES AND CUT OFF POINTS

VARIABLE	CUT OFF POINTS	INDICATORS	QUESTION NO.
Dependent variable Utilization of institutions for delivery	Last delivery at institution	Utilization	
	Last delivery at home or other places other than health institution	Non-utilization	
Independent Variable Knowledge	11-16 scores for correct responses to knowledge question on complications	High	Q9
	6-10 scores for correct responses to knowledge question on complication	Average	12
	0-5 scores for correct responses to knowledge questions on complications	Low	Q 11 Q 12
Quality care	7-12 scores for responses to quality care questions	Good	Q 16 Q 17 Q21
	0-6 correct responses for quality of care questions	Poor	Q22
Accessibility to health	7-12 scores to accessibility questions	Able to access health services	Q 23 Q 24
	0-6 scores to accessibility questions	Not easily accessible	Q 25 Q 26 Q 27

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

The Ministry of Health (MoH) and Central Board of health (CBoH) advocates for integration of health services so as to offer a full package of services to clients, which includes antenatal services, maternity delivery, family planning, child and outpatient. Integration of these services will enhance quality and cost effective of health services.

Literature review refers to the activities involved in identifying and searching for information on a topic and developing a comprehensive picture of the knowledge on that topic. (Polit and Hungler, 1995). The term is used to designate a summary of the state of the art on a research problem. Both the search and the write up are important in the research process. It is an examination of books, journal articles, dissentions, government reports, unpublished manuscripts, newspaper and others (Nkhata, L. 2003).

Literature review serve a number of important functions in the research process and some are as follows:

- Source for research ideas.
- Orientation to what is already known.
- Help the researcher to understand and clarify the research problem.
- Provides a conceptual context to help stimulate the researcher to develop new insight into reported research or to formulate new problems to be investigated.

In this write up, the literature review will be discussed under three perspectives and that is global, regional and national perspectives.

2.2 GLOBAL PERSPECTIVE

The study by WHO on maternal and newborn health outlined the current global estimates of maternal care in the developing world at approximately 65% of pregnant women receiving at least one antenatal visit, 40% of deliveries take place in the health facilities and slightly more than half of all deliveries are assisted by skilled personnel, where as in developed countries every woman receives regular care during pregnancy, delivery and the postpartum. It is also estimated that near the end of 20th century, every year can estimate 45 million pregnant women still receive no antenatal care, more than 75 million births take place at home and 60 million women give birth with only a traditional Birth Attendants or a family member present and in many cases the mother is along.

(http://www.jsi.com.int/mothercare/website/homepage/mcmv6n4.2005)

WHO report on maternal mortality entitled "a neglected and socially unjustifiable tragedy during the Nairobi Safe Motherhood Conference in 1987", states that there are still discrepancies in coverage between developing and industrialized countries, between rural and urban areas, between poor and rich women and between educated and uneducated. In more developed regions of the world almost all pregnant women benefit from skilled assistance during childbirth, whereas the less developed regions only slightly more than half of pregnant women give birth with a skilled person in attendance.

(file://A:/MATERN-HTM, 2005)

According to Abouzahr, C. L. a report on lessons on safe motherhood (1998) monitoring of the utilization of maternal health care services and coverage remains inadequate in most developing countries. The report further states that efforts to train Traditional Birth Attendants to care for women during pregnancy and childbirth has no evidence that in itself makes any difference to mortality and morbidity. Without a functioning referral system and back up from professional, such training is ineffective in this rest.

(file://A:RH378L21.HTM,2005)

WHO in mother-baby package indicates that during the 1950s, most births in Sri Lanka took place at home with the assistance of untrained Birth Assistants, but by the end of 1980s over 85% of all births were attended by trained people. The increase may be attributed to the introduction of a system of health centres around the country accompanied by the expansion of midwifery skills (WHO, 1996).

Chandzarh Tribune, an online edition in India reported that the percentage of institutional deliveries had gone down from 91 to 86 percent as many expectant mothers were unable to get a bed in the city hospitals for their delivery
(http://www.tribunindia.com/2003/20030430/cth.3.htm.2005)

Abaouzhr further reports that the person caring for a woman during labour and childbirth has a greater influence than the place of delivery, whether at home or in a health centre or hospital. For instance, in Northeast Brazil and rural China most deliveries take place at home with the assistance of non-professional, Malaysia and the Netherlands home deliveries take place in hospitals with the assistance of specialist health care professionals. All approaches seek to work within attainable resources to ensure that the women have access and use a level of the health care system, which is acceptable to them and can link them to a higher level if complications arise.

It was also reported that institutional delivery carries some risks including that of increased rates of caesarean section and accompanying maternal complications (Abaozahr, (1998). As rates of institutional delivery have risen, increasing concern has been expressed about the quality of care.

According to Heichelhein and Loblinsky (1997), it is widely recognized that Bolivia has one of the highest maternal mortality in Latin America and Western Hemispheres with an estimated maternal ratio (MMR) cited at 390 per 100,000 live births and nearly 50% of births are delivered at home

without the presence of trained personnel and this percentage rises to 75% in rural areas.

Further the findings from the same research were as follows:

- The government developed a national strategy with the view to improve the quality of maternal and child care. It also implemented the law of popular participation thus facilitating the decentralization of governance to the community level.

- Mother care identifies gaps in service utilization and determined that change needed to happen both in the way health services are being provided as well as in the perceptions and practices of the communities using these services.

- One other significant finding was that some women place a great emphasis on "hot and cold" aspects of pregnancy and delivery whereas hospital delivery rooms traditionally are kept cool and ventilated. Some women desire warm environment for delivery because they believe it helps the infant to move downward fast.

- Complementing this effort to change behaviours health workers are receiving competency –based training not only in managing, obstetric, neonatal and postpartum complications but also interpersonal communications and counselling (IPC/C).

According to the research conducted in Akureyri and Reykjavik in Iceland by Hallodorsdottir and Karlsdottir on Empowerment or Discouragement: Women's experience of caring and uncaring encounters during childbirth, it is stated that competence from the woman's perspective for a health provider involves the necessary knowledge and skill needed to coach a woman through labour and delivery. Furthermore, it involves responsibility, alternatives, deliberations, sensitive to each woman's needs and communication skills. It is clear from the woman's accounts that nurse-midwife competence and

confidence are very important and create trust in the childbearing woman (Halldorsdottir and Karlsdottir, 1996).

Abourzhar (1998) in his report on lessons on safe motherhood indicates that WHO advise, that in a normal birth, the attitude of the health professional should be one of expectant watch-fullness with interventions limited to those needed to ensure health outcome.
(file://A:/RH378L21.HTM.,2005)

2.3 REGIONAL PERSPECTIVE

In Africa, the region has the low rates for institutional deliveries, for instance out of 36% deliveries conducted in health facilities, just over 40% are attended to by a skilled attendant (USAID, 1998).

A study conducted in sub-Saharan Africa, revealed that utilization of Catholic Mission Hospitals was attributed to adequate drug supplies, demand by nuns for antenatal attendance at the hospital if women were to be assisted at birth and that all newborns were offered clothes. In public hospitals, such conditions were not applicable and so they had low institutional deliveries (Bjorkhund, et al, 2001).

The researchers further reported that the culture and traditional practices has an influence on the mother's choice of place of delivery. The report further states that women prefer to delivery in homes because they are able to receive emotional sisterly support from relatives mother than in hospitals (Bjorkland, et al, 2001).

2.4 NATIONAL PERSPECTIVE

A study conducted by Mtonga et al (2004) in Kalabo District indicated that mothers preferred to delivery in homes because of long distance to the health facilities, lack of transport and long waiting hours at health facility before they are attended to. Another report by UNICEF on evaluation of the Essential Obstetric Care (EOC) project in Mpongwe, Masaiti and Lufwanyama Districts

states that low institutional deliveries in most health centres are attributed to lack of delivery rooms for storage of equipment, drugs and for delivery or counselling in confidence (UNICEF, 2000/2004). Furthermore, the Annual Health Statistical Bulletine report states that there has been a national general increase in supervised deliveries in 2003 (Institutional deliveries plus those conducted by tTBAs). Out of the national deliveries conducted, 16% were assisted by tTBAs and 39% by health providers at health institutions (Annual Health Statistical Bulletin Report, 2003).

In another development Kasoka, (1998) in his study conducted in Mufumbwe District on factors contributing to low utilization of institutional based maternity services established that incompetence among staff can influence utilization of institutions for deliveries while Imasiku's (1999) study revealed that pregnant women's inadequate knowledge on the expected date of delivery has a great influence on the utilization of institutions for deliveries. He further established that inadequate knowledge of spouses also on risk factors related to home deliveries contributed to low utilization of institutions for deliveries by pregnant mothers.

According to the study conducted by Mulenga (1991) on low utilization of maternity delivery service at Nampundwe Rural Health Centre in Lusaka it was established that low utilization of institutions for deliveries may be influenced by shortage of staff and poor staff attitude due to inadequate accommodation lack of in-service training and inadequate incentives.

Finally, in order to improve the health status of women, WHO in relation to the Universal Declaration of Human Rights launched a safe motherhood initiative in 1987 in which Zambia Ribbon Alliance (WRA) for safe mother hood in 2000, unites individuals, organizations and community who are working to increase public awareness about the need to prevent maternal and neonatal complications related to childbirth by promoting use of institutions for deliveries where obstetric emergencies can be handled.

2.5 CONCLUSION

From the many research studies reviewed, it has been shown that there is low utilization of institutions for deliveries by expecting mothers and this has contributed to increased maternal mortality and morbidity rates. This may be attributed to a lot of factors like distance, to health facilities, inadequate knowledge on risk factors related to pregnancy, childbirth and home deliveries.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

3.2 RESEARCH DESIGN

Research design refers to the overall plan for addressing a research question including the specifications for enhancing the integrity of the study. (Polit and Hungler, 1999).

A descriptive study design with both quantitative and qualitative dimensions was used. The purpose of descriptive study is to observe, describe and document aspects of situation as it naturally occurs and sometimes serve as a starting point for hypothesis generation or theory development (Dempsey and Dempsey, 2000). The design was chosen because the natural setting was not intended to be manipulated. The design also enabled the researcher to collect data systematically in order to give a picture on factors contributing to low institutional deliveries in Chadiza District.

The study is also quantitative in nature because the study variables were to be presented and defined by the investigator and the data was to be collected, translated in numbers and then statistically analysed, often with a view of establishing the cause and effect relationships among the variables. The subjects' responses were quantified and measured objectively.

It also has a qualitative dimension because they were requested to give their opinion on factors contributing to low utilization of health institution for deliveries.

3.3 RESEARCH SETTING

Research setting is the physical location and conditions in which data collection takes place in a study (Polit and Hungler, 1995). The study was

undertaken in Chadiza District which is one of the districts in the Eastern part of the country. Currently, it has a total population of 108,034 according to the 2000 census (Chadiza District Health Action Plan, 2005).

Chadiza District is one of the eight 98) Districts in Eastern Province about 72km south of Chipata and 64 km southeast of Katete Districts. The District also shares international boundaries with the Republic of Malawi and Mozambique. The District covers a total of 2,550 square kilometers and lies between latitude 13.75^0 and 14.30^0 south and longitude 32^0 and 33^0 east.

The District has a total road network of 700km of which only 10km is paved while the rest is gravel with non-engineered gravel and earth. Most of the roads become impassable especially in the rainY season due to being washed away by over running bridges and this may have an effect the use of institutions for deliveries and referral of complicated cases to hospitals in Chipata and Katete District since the District has no hospital.

Although the community of Chadiza has traditional and cultural beliefs, not all of them are useful. Some traditional practices are harmful and thus interfere with delivery of health services and in particular the use of institutions for maternity deliveries by pregnant women.

The District has eleven (11) health centres, one (1) mental rehabilitation centre and three (3) health posts. All the health facilities offer 24 hours health services. They offer promotive, preventive and outreach services, maternity services inclusive except for the mental rehabilitation which has no maternity space.

The study was undertaken at Bwankha and Miti rural health centres. Bwanukha health centre is situated northeast of Chadiza Boma and Miti health centre is on the eastern part of Chadiza Boma. The two health centres have different geographical features and the people in the catchment areas have different cultural and socioeconomic background. The institutional deliveries

for both centres were persistently low for the past five years understudy. The institution set up are almost similar to the other health facilities in the district.

3.4 STUDY POPULATION

The target population is the aggregate of cases about which the researcher would like to make generalization (Polit and Hungler, 1995). The target population for this study consisted of women of childbearing age (15-45 years) in Chadiza District. The study population was 52 women who had delivered before.

3.5 SAMPLE SELECTION

A sample is a smaller part of the population which is selected in such a way that individuals in the same represents as nearly as possible the characteristics of the entire population (Dempsey and Dempsey, 2000).

Random sampling was used to select the respondents and the health centres. This is the selection of study participants using the rotary technique or a table of random numbers before selecting the health centers, a sampling frame of all the clinics in the district was obtained from relevant authorities. Then the names of the eleven centres were written on pieces of paper and put in a box and shaken thoroughly. Then two papers were picked, one at a time and the two names of the health centes were sampled.

Similarly, simple random sampling was done when choosing the individual subjects at these two health centes, that is Bwanukha and Miti health centres. This method was convenient, less time consuming and more economical. The mothers who attended under five clinic had a chance of being included in the study. The women included in the study had at least one or more deliveries either at facility or outside the health facility.

3.6 SAMPLE SIZE

A sample size is the actual number of respondents to be included in the study. In this study, a total sample of 52 women of childbearing age who had delivered before was recruited. This comprised 26 women from each of the two health centres. Of these, 13 had delivered at the health centre and 13 who delivered at home for each centre during the period under study.

3.7 DATA COLLECTION TOOL

A data collection tool is an instrument that is used to measure variables and gather information on each concept of interest to the researcher. It is the formal written document used to collect and record information such as a questionnaire (Polit and Hungler, 1995).

An interview schedule was used to collect data (Appendix I). The interview schedule consisted of questions in which the wording of both the questions and in most cases response alternatives were pre-determined. The schedule contained questions on the variables under study. The schedule had the following sections; demographic data, knowledge measurement, the measure of quality care, accessibility to health services and socio-cultural measurements.

The interview was a quantitative method in which the questions and wording were fixed and identical for all respondents. The schedule contained a series of both open and closed ended questions. This method was used because of the following advantages/reasons:

- It has a high response rate than the questionnaire since most questions were to be asked.
- The questions allowed the interviewer to probe further
- The questions were presented in the same order andmanner for all the respondents.
- The schedule also allowed for collection of context related information.

- The schedule allowed collection of extra information through spontaneous remarks of respondents.

The interview schedule however has some disadvantages as follows:

- The presence of the interviewer may influence the subjects' response.
- The interview schedule was time consuming
- Some bias may occur especially when asked open ended questions and where the researcher needs to ask and write for the respondents.

The researcher also developed an Focus Group Discussion guide which was used during the Focus Group Discussion (Appendix II). The Focus Group Discussion also has advantages as follows:

- The Focus Group Discussion is efficient; the researcher obtains the view points of many individuals in a short time.
- It supplements data collected by interview schedule

The disadvantages are:

- Some people may be uncomfortable to express their views in front of a group.
- A few influential people in the group may end up shaping the consensus.

The researcher also held two focus group discussions, one at each health centre catchment area whose results was to supplement the interview schedule.

3.8 DATA COLLECTION TECHNIQUE

Data collection technique is the process of gathering information needed to address a research problem (Polit and Hungler, 1999). Data was collected by structured interviews over a period of three weeks from August to September, 2005. Interviews were conducted in the morning when mothers brought their children to under five clinic. Permission to conduct the exercise was obtained from relevant authorities and the research subjects. The interview was

conducted in a private room at the health centres and also at outreach sessions under a tree away from the main gathering for privacy. Each interview took about 30 minutes to 1 hour.

The FGDs were held in the two health centre catchment areas. The FGDs comprised of 8-12 women. These women did not participate in the actual interviews. During the FGDs, the researcher moderated the discussion and a note taker recorded the discussion.

3.9 PILOT STUDY

This is a mini study conducted before the major study in order to make revisions and find flaws in the methodology. It should include every step expected in the major study (Treece and Treece, 1986).

The pilot study is done in order to identify any shortfalls in the methodology and make necessary revisions. The information was obtained for improving the project or for assessing the feasibility of the study.

The pilot study was conducted at Nsadzu health centre. Ten (10) women were sampled for the pilot study. Analysis of data was done and some changes were made to the questionnaire to help capture the needed information. Some of the changes and additions made were as follows:

SECTION A

- Demographic Data

Level of education attained by respondents

Section B: Knowledge

Question 8: List of expecting mothers to delivery in a moderate health centre was put meant for ticking as answers.

Question 11: Mention the complications that may occur during delivery was removed and replaced by question 12-what are the risks of home deliveries that you know and some risks were listed for ticking.

Question 12-14

Question asking about availability of adequate medical/surgical supplies was removed. Question on time of reaching the health facility and waiting time at the health facility and question on taboos associated with pregnancy and was replaced by taboos, cultural practices and beliefs associated with pregnancy.

3.10 VALIDITY

This is the state in which a test has validity when it tests what it proposes to test (Treece and Treece, 1986).

In this study, validity will be measured by ensuring that the same questions were asked to each respondent in the same sequence. Questions were clearly constructed to avoid ambiguity.

3.11 RELIABILITY

Reliability refers to the stability and consistency of a measuring instrument over time its how well it will produce the same information each time it is used (Dempsey and Dempsey, 2000).

Instrument reliability will be ensured by standardizing the data collection instrument. The researcher also ensured that the tools were tested before the main study was conducted using a pilot study in a similar environment on people with similar characteristics. This ensured suitability of the tool.

3.12 ETHICAL AND CULTURAL CONSIDERATIONS

Ethical considerations refers to ethics which are a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligation to the study participants (Dempsey and Dempsey, 2000).

In this regard the researcher obtained written permission through a written consent to conduct the pilot study and the actual study from the Head of Department at the Department of Post Basic Nursing (PBN), the District Director of Health for Chadiza DHMB from the RHC managers and health centre committees for the three centres, (Appendix III). Verbal permission was also sought from the respondents at the time of interviews. The purpose and nature of the study were explained to the respondents. Schedule guide and the respondents were interviewed individually away from others.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The purpose of the study was to determine factors contributing to low utilization of health institutions for delivery by pregnant mothers in Chadiza District. The study was conducted from 29th August to 17th September, 2005. After data collection, the data from closed-ended questions were entered on the data master sheet. Responses from open-ended questions were coded and categorized and entered on the data master sheet. Data was processed manually with the aid of a calculator. The findings were presented in frequency tables, pie charts, bar charts and cross tabulation tables to show the relationships among variables.

4.2 DATA ANALYSIS

Data analysis is the process of carefully scrutinizing data by placing it in categories calculating the mean, and applying statistical procedures (Treece and Treece, 1986). Data analysis is the systematic organization and synthesis of research data, and testing of research hypothesis using those data, (Polit and Hungler, 1995). The methods used in analysis of data were varied. The data master sheet was partitioned into three categories; the demographic data, knowledge, quality and care, accessibility and socio-cultural practices. The categories for knowledge and quality of care and accessibility were further graded to allow for categorization into low, average and high, good and poor and easily able to access and not easily accessible. The data from the two Focus Group Discussions (FGDs) were also analysed and categorized.

4.3 PRESENTATION OF FINDINGS

The results have been presented in frequency tables and were cross tabulated. Analysis of findings is indicated under each table. It was suitable to use tables because they summarize results to give a meaning to enable the reader to understand the author's intentions in the study. Cross tabulations

are helpful as they show the relationship among variables from which one can draw meaningful inferences.

Responses from open ended questions were categorized and suitable terms used to bring all related data together for better presentation.

TABLE 4: RESPONDENTS' AGE DISTRIBUTION

AGE	FREQUENCY	PERCENT
15 - 25 YEARS	20	39
26 - 35 years	15	29
36-45 years	8	15
Don't know	9	17
TOTAL	**52**	**100**

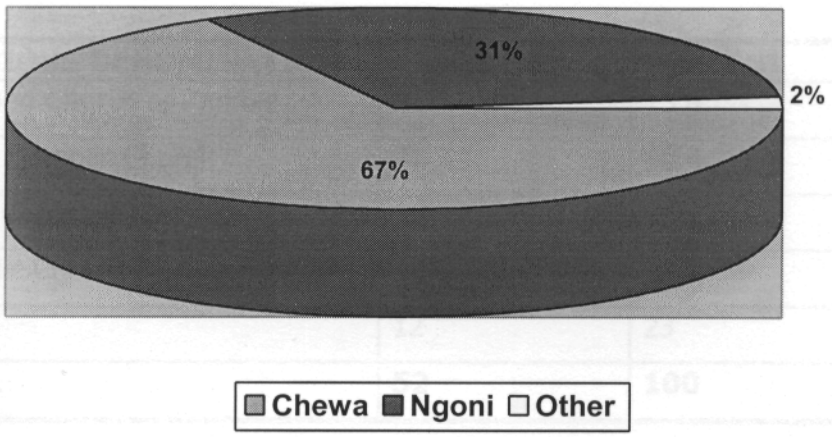
Most (39%) of the respondents were aged between 15-25 years, 29% were aged between 26-35 years, 15% were aged 36-45 years and 17% did not know their age.

TABLE 5: RESPONDENTS' MARITAL STATUS

MARITAL STATUS	FREQUENCY	PERCENT
Single	1	2
Married	47	90
Divorced	4	8
TOTAL	**52**	**100**

Majority of the respondents (90%) were married.

FIGURE 2: TRIBE OF RESPONDENTS



Most of the respondents, (67%) were Chewa by tribe, 31% were Ngoni by tribe.

Table 6: RESPONDENTS' OCCUPATION

OCCUPATION	FREQUENCY	PERCENT
Formal employment	1	2
Unemployed	41	79
Self-employed	2	4
Farming	8	15
TOTAL	**52**	**100**

Majority of the respondents, (70%) were not employed.

Table 7: RELIGIOUS DENOMINATIONS

RELIGIOUS DENOMINATION	FREQUENCY	PERCENT
Reformed Church of Zambia	8	15.4
Roman Catholic Church	21	40.4
United Church of Zambia	1	2
Apostolic Church	10	19.2
Others	12	23
TOTAL	**52**	**100**

Most (40.4%) of the respondents were Roman Catholic by denomination while 19.2% were going to Apostolic Church.

TABLE 8: HUSBAND'S OCCUPATION

HUSBAND'S OCCUPATION	FREQUENCY	PERCENT
Unemployed	4	7.7
Formal employment	4	7.7
Self employed	13	25
Farming	27	51.9
Not applicable	4	7.6
TOTAL	**52**	**100**

Majority of the respondent's husbands (51.9%) were engaged in farming and 25% were self-employed.

TABLE 9: NUMBER OF CHILDREN

NUMBER OF CHILDREN	FREQUENCY	PERCENT
1 -3	24	46
4 – 6	16	31
7 – 9	9	17
Above 9	3	6
TOTAL	**52**	**100**

Most respondents (46%) had 1-3 children and 31% had 4-6 children.

TABLE 10: EDUCATION LEVEL

EDUCATION LEVEL	FREQUENCY	PERCENT
Primary	24	46
Secondary	9	17
None	19	37
TOTAL	**52**	**100**

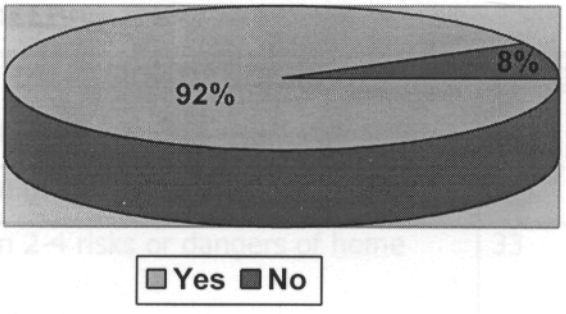
Most respondents (46%) had primary education while 37% had no education at all.

TABLE 11: KNOWLEDGE ON CATEGORIES OF AT RISK EXPECTANT MOTHERS TO DELIVER AT A MODERATE HEALTH FACILITY

KNOWLEDGE ON AT RISK EXPECTING MOTHERS TO DELIVERY AT A MODERATE HEALTH FACILITY	FREQUENCY	PERCENT
Able to mention 4	6	11
Able to mention 3	15	29
Able to mention 1	18	35
Not able to mention any	13	25
TOTAL	**52**	**100**

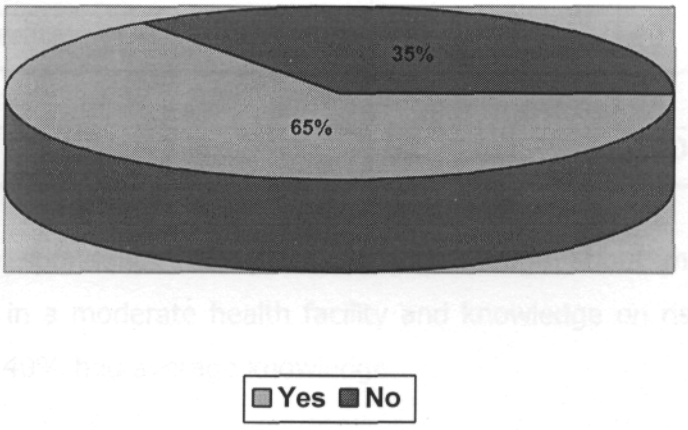
Most of the respondents (35%) were able to mention 1 at risk expecting mothers who should deliver at a moderate health facility while 29% were able to mention at least 3 and 25% were not able to mention any at risk expecting mothers.

FIGURE 3: ATTENDING HEALTH EDUCATION SESSIONS



Majority of respondents (92%) attended health education sessions during antenatal visits.

FIGURE 4: LEARNING ABOUT COMPLICATIONS/DANGERS OF HOME DELIVERIES DURING ANTENATAL VISITS



Most respondents (65%) said that they learnt about complications or dangers of home deliveries during antenatal visit while 35% said they did not learn about complications or dangers of home deliveries during antenatal visits.

TABLE 12: KNOWLEDGE ON RISKS/DANGERS OF HOME DELIVERIES

KNOWLEDGE ON RISKS/DANGERS OF HOME DELIVERIES	FREQUENCY	PERCENT
Able to mention more than 4 risks or dangers	7	13.5
Able to mention 2-4 risks or dangers of home deliveries	33	63.5
Able to mention 0-1	12	23
TOTAL	**52**	**100**

Most of the respondents (63.5%) were able to mention more than 2-4 risks or dangers of home deliveries, while 13.5% were able to mention more than 4 risks or dangers and 23% were able to mention 1 and others were not able to mention any.

TABLE 13: KNOWLEDGE LEVELS

ADEQUATE KNOWLEDGE LEVELS	FREQUENCY	PERCENT
High	7	14
Average (moderate)	21	40
Low	24	46
TOTAL	**52**	**100**

Most of the respondents (46%) had low knowledge about mothers who should deliver in a moderate health facility and knowledge on risks of home deliveries, but 40% had average knowledge.

TABLE 14: LAST PLACE OF DELIVERY

LAST PLACE OF DELIVERY	FREQUENCY	PERCENT
TTBA	2	4
Home	16	31
Relative's place	6	11
Health institution	26	50
Others	2	4
TOTAL	**52**	**100**

Half of the respondents (50%) had their deliveries in a health facility, (31%) at home and (11%) delivered at a relative's place.

TABLE 15: REASONS FOR PLACE OF DELIVERY

REASONS FOR PLACE OF DELIVERY	FREQUENCY	PERCENT
Distance to health centre	2	3.8
Advised by health centre staff	6	11.5
Referred by tTBA	3	5.8
Sudden onset of labour	6	11.5
Preference of health centre	12	23.0
Inadequate knowledge of true signs of labour	6	11.5
tTBAs are there to assist	6	11.5
Had no money	1	1.9
No transport	1	1.9
Was sick	2	3.8
No one to escort her	1	1.9
No response	2	3.8
TOTAL	**52**	**100**

23% of the respondents preferred to deliver from the health facility.

TABLE 16: PERSON WHO ASSISTED LAST DELIVERY

PERSONN WHO ASSITED LAST DELIVERY	FREQUENCY	PERCENT
Self	4	8
TTBA	20	38
Relative	9	17
Health staff	19	37
TOTAL	**52**	**100**

Most of the respondents (38%) said they were assisted by tTBAs to deliver and 37% were assisted by the health staff.

TABLE 17: AVAILABILITY OF SEPARATE ROOM FOR DELIVERY

AVAILABILITY OF SEPARATE FROOM FOR DELIVERY	FREQUENCY	PERCENT
Yes	32	61
No	18	35
Don't know	2	4
TOTAL	**52**	**100**

Most of the respondents (61%) said that there was a separate delivery room at the health facility, but 35% said there was no separate delivery room

TABLE 18: ADEQUATE HEALTH PERSONNEL AT HEALTH FACILITY

ADEQUATE PERSONNEL	FREQUENCY	PERCENT
Yes	4	8
No	46	88
Don't know	2	4
TOTAL	**52**	**100**

Majority of respondents (88%) said that there were no adequate health personnel at health facility, while 4% said that they did not know if there were adequate staff.

TABLE 19: RESPONSE TO BEING ASSISTED BY MALE STAFF

RESPONSE FOR BEING ASSISTED BY MALE STAFF	FREQUENCY	PERCENT
Yes	21	40
No	31	60
TOTAL	**52**	**100**

Majority of the respondents (60%) said that they did not want to be assisted by male staff during delivery

TABLE 20: REASONS FOR THE CHOICE OF PERSON TO ASSIST DURING DELIVERY

RESPONSE FOR CHOICE	FREQUENCY	PERCENT
Male staff also have knowledge and skill	21	40.4
Not free with men	9	17.3
Only female staff should assist	13	25.0
TOTAL	**52**	**100**

Most of the respondents (40.4%) stated the male staff also had knowledge an skill to assist during delivery, but (25%) said only female staff should assist delivery.

TABLE 21: RESPONSE ON CARE BY HEALTH STAFF

RESPONSE ON CARE BY HEALTH STAFF	FREQUENCY	PERCENT
Satisfactory	9	35
Not satisfactory	13	50
No response	4	15
TOTAL	**26**	**100**

Half of the respondents (50%) who had institutional delivery were not satisfied with the care given by health, staff, while 35% said that they were satisfied and 15% could not give any response.

TABLE 22: RESPONSE ON ADEQUATE DRUG SUPPLY TO THE HEALTH CENTRE

RESPONSE ON ADEQUATE DRUG SUPPLY	FREQUENCY	PERCENT
Yes	15	29
No	31	60
Don't know	6	11
TOTAL	**52**	**100**

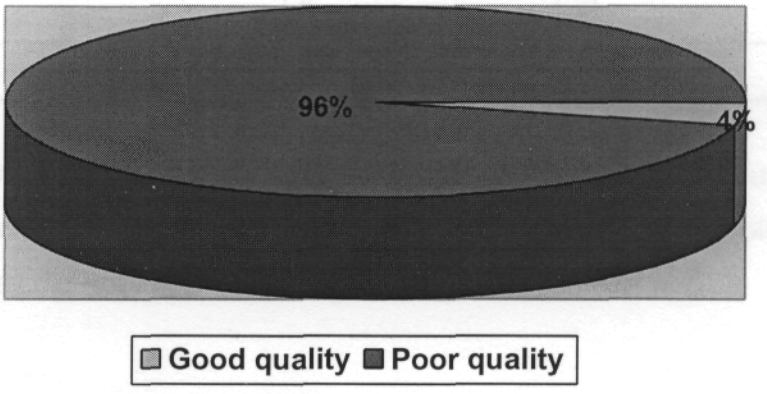
Most of the respondents (60%) said that there was no adequate drug supply at the health institution while (29%) said there was adequate drug supply at the health institution.

TABLE 23: AVAILABILITY OF MINIMAL DELIVERY EQUIPMENT

AVAILABILITY OF EQUIPMENT	FREQUENCY	PERCENT
Yes	14	27
No	17	33
Don't know	21	40
TOTAL	**52**	**100**

Majority of the respondents (40%) said that they did not know if minimal delivery equipment was available at the health facility, while (33%) said that there was no available minimal delivery equipment at the health facility.

FIGURE 5: QUALITY OF CARE



Majority of the respondents (96%) said that the care being given was poor while (4%) said that the care was good.

TABLE 24: USER-FEES BEING CHARGED AT HEALTH CENTRE

CHARGING OF USER FEES	FREQUENCY	PERCENT
Yes	13	25
No	21	40
Don't know	18	35
TOTAL	**52**	**100**

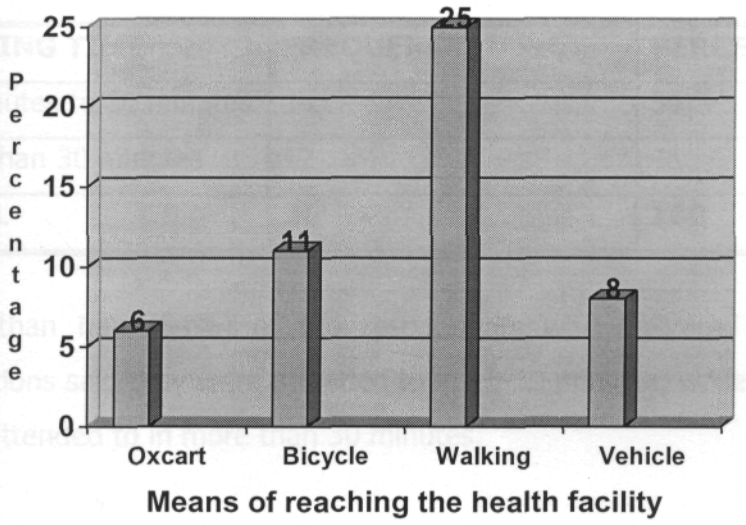
Most of the respondents (40%) said that user fees were not being charged at the centre, while (35%) said that they did not know.

TABLE 25: AFFORDABILITY OF USER FEES

AFFORDABLE FEES	FREQUENCY	PERCENT
Yes	6	46
No	3	23
Don't know	4	31
TOTAL	**13**	**100**

Majority of the respondents (46%) of the respondents who had said user fees were being charged (Question 23) said that the fees were affordable, while 31% said they did not know whether they were affordable or not.

FIGURE 6: MEANS OF REACHING THE HEALTH FACILITY



Majority of the respondents (25%) who delivered at health institution walked to the health centre to deliver, while 11% used bicycles, (6%) used oxcarts and only (8%) used vehicles

TABLE 26: RESPONDENT'S TIME OF REACHING THE HEALTH FACILITY

TIME TAKEN TO REACH THE HEALTH FACILITY	FREQUENCY	PERCENT
30 minutes - 1 hour	6	23
More than 1 hour	20	77
TOTAL	**26**	**100**

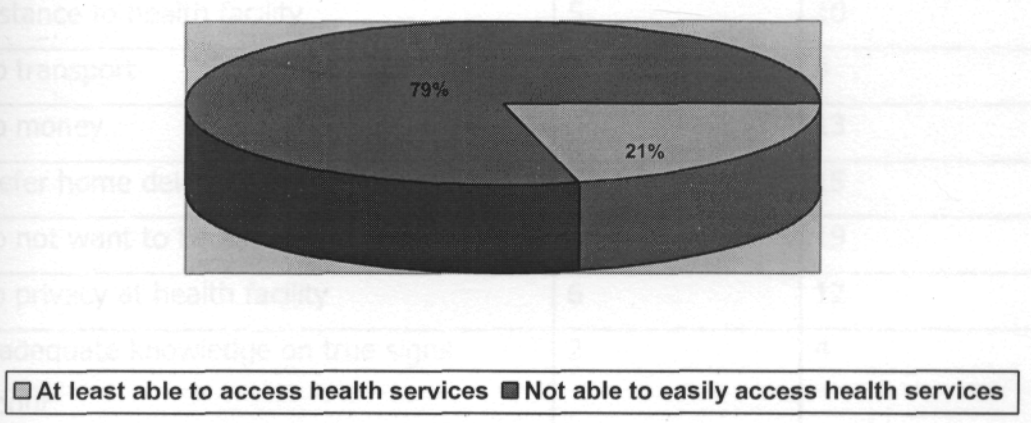
Majority of the respondents (77%) who used the health institution for delivery took more than 1 hour to reach the health facility while 23% took between 30 minutes 1 hour to reach the facility.

TABLE 27: WAITING TIME AT THE CENTRE BEFORE BEING ATTENDED TO

WAITING TIME	FREQUENCY	PERCENT
15 minutes to 30 minutes	14	54
More than 30 minutes	12	46
TOTAL	**26**	**100**

More than half (54%) of the respondents who delivered at the health institutions said they were attended to in 15-30 minutes, while 46% said they were attended to in more than 30 minutes.

FIGURE 7: ACCESSIBILITY OF HEALTH SERVICES



Majority of the respondents (79%) said that they were not able to easily access health services while only (21%) said were at least able to easily access health services.

TABLE 28: VIEWS ON DELIVERY AT HEALTH FACILTY NEXT PREGNANCY

DELIVERY AT HEALTH FACILITY NEXT PREGNANCY	FREQUENCY	PERCENT
Yes	13	25
No	31	60
No response	8	15
TOTAL	**52**	**100**

Majority of the respondents (60%) said that they were not in favour of going to deliver at health centres next pregnancy.

TABLE 29: VIEWS WHY SOME MOTHERS DELIVER AT HOME

VIEWS WHY SOME MOTHERS DELIVER AT HOME	FREQUENCY	PERCENT
Ignorance on dangers of home delivery	3	6
Distance to health facility	5	10
No transport	2	4
No money	7	13
Prefer home delivery	8	15
Do not want to be assisted by male staff	10	19
No privacy at health facility	6	12
Inadequate knowledge on true signs labour	2	4
Poor staff attitude	9	17
TOTAL	**52**	**100**

Most of the respondents (19%) said that they did not want to be delivered by male staff at the health facility.

TABLE 30: CULTURAL PRACTICES, BELIEFS, TABOOS REGARDING PREGNANCY AND DELIVERY

EXISTING CULTURES PRACTICES, BELEFS AND TABOOS	FREQUENCY	PERCENT
Yes	32	61
No	18	35
Don't know	2	4
TOTAL	**52**	**100**

Majority of the respondents (61%) said that there were existing cultural practices, beliefs had taboos regarding pregnancy and delivery.

TABLE 31: SOME EXISTING CULTURAL BARRIERS BEFLIEFS AND TABOOS BEING OBSERVED

	FREQUENCY	PERCENT
No sex in last stage of pregnancy	7	13
No extra marital sex for both the husband and wife.	8	15
Should be very active throughout pregnancy	5	10
No early antenatal visits	8	15
Not eating of certain types of food	9	17
Not to sit on the doorway	6	12
No response	3	6
TOTAL	**52**	**100**

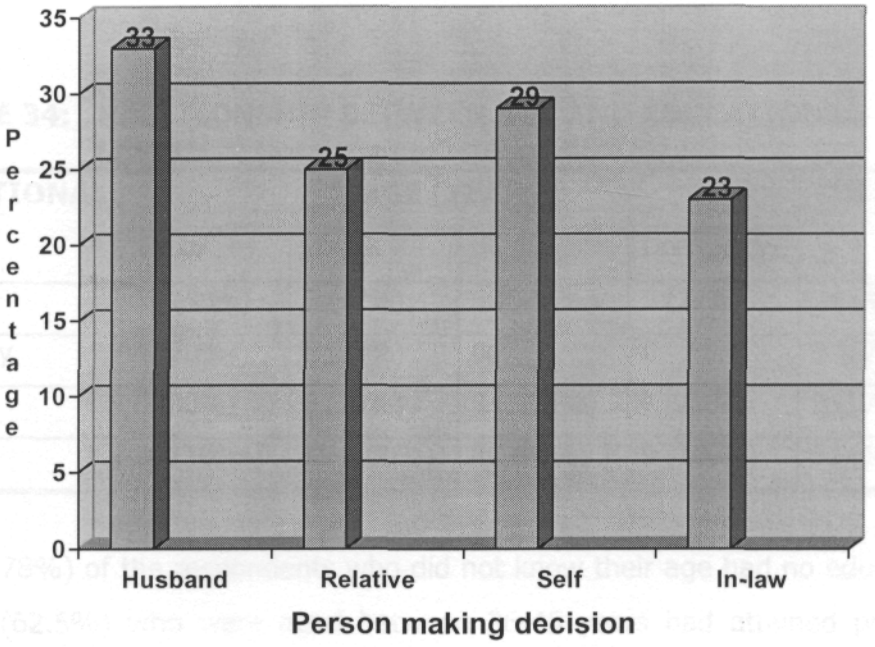
Majority of the respondents (17%) said that expectant mothers were not to eat certain types of good during pregnancy while (10%) said expectant mothers were expected to be very active in pregnancy.

TABLE 32: PERSON INFOMRED ABOUT LABOUR

PERSON INFORMED	FREQUENCY	PERCENT
Husband	28	54
Relative	13	25
None	7	13
In-law	4	8
TOTAL	**52**	**100**

Majority of the respondents (54%) said that they informed their husband and 25% informed their relatives.

FIGURE 8: DECISION REGARDING PLACE OF DELIVERY



Most of the respondents (33%) said that decision regarding place of delivery was made by their husbands and (29%) was made by themselves.

TABLE 33: RELATIONSHIP BETWEEN AGE AND NUMBER OF CHILDREN

NUMBER OF CHILDREN	AGE (YEARS)				TOTAL
	15-25	26-35	36-45	Don't know	
1 – 3	17 (85%)	3 (20%)	1 (12.5%)	3 (33.3%)	24 (46%)
4 – 6	3 (15%)	9 (60%)	2 (25%)	2 (22.2%)	16 (31%)
7 – 9	0	3 (20%)	3 (37.5%)	3 (33.3%)	9 (17%)
Above 9	0	0	2 (25.5%)	1 (11.1%)	3 (6%)
TOTAL	**20 (100%)**	**15 (100%)**	**8 (100%)**	**9 (100%)**	**52 (100%)**

Majority (85%) of respondents aged 15-25 years had 1-3 children, while (25.5%) of those aged between 36-45 years had more than 9 children.

TABLE 34: RELATIONSHIP BETWEEN AGE AND EDUCATIONAL LEVEL

EDUCATIONAL LEVEL	AGE (YEARS)				TOTAL
	15-25	26-35	36-45	Don't know	
Primary	10 (50%)	7 (47%)	5 (62.5%)	2 (22%)	24 (46%)
Secondary	4 (20%)	5 (33%)	0	0	9 (17%)
None	6 (30%)	3 (20%)	3 (37.5%)	7 (78%)	9 (17%)
TOTAL	20 (100%)	15 (100%)	8 (100%)	9 (100%)	52 (100%)

Most (78%) of the respondents who did not know their age had no education while (62.5%) who were aged between 36-45 years had attained primary education.

TABLE 35: RELATIONSHIP BETWEEN AGE AND LAST PLACE OF DELIVERY

LAST PLACE OF DELIVERY	AGE (YEARS)				TOTAL
	15-25	26-35	36-45	Don't know	
TTBA	0	0	0	2 (22.2%)	2 (4%)
Home	6 (30%)	3 (20%)	4 (50%)	3 (33.3%)	16 (31%)
Relative	1 (5%)	5 (33%)	3 (37.5%)	3 (33.3%)	9 (17%)
Institution	13 (65%)	7 (47%)	3 (37.5%)	3 (33.3%)	26 (50%)
Other	0	0	1 (12.5%)	1 (11.1%)	2 (4%)
TOTAL	**20 (100%)**	**15 (100%)**	**8 (100%)**	**9 (100%)**	**52 (100%)**

More than half (65%) of the respondents whose last place of delivery was the health institution were aged 15-25 years while (30%) of the same age group delivered at home, (33%) of those aged 26-35 were delivered by relatives.

TABLE 36: RELATIONHSIP BETWEEN AGE AND KNOWLEDGE LEVELS

KNOWLEDGE LEVELS	AGE (YEARS)				TOTQL
	15-25	26-35	36-45	Don't know	
High	2 (10%)	1 (73%)	3 (37.5%)	1 (11%)	7 (14%)
Average	6 (30%)	11 (7%)	2 (25%)	0	19 (36%)
Low	12 (60%)	3 (20%)	3 (37.5%)	8 (89%)	26 (50%)
TOTAL	20 (100%)	15 (100%)	8 (100%)	9 (100%)	52 (100%)

Majority of respondents (89%) with low levels of knowledge did not know their age, (37%) of those with moderate or average knowledge levels were aged 26-35 years, while (37.5%) of those with high knowledge levels were aged between 36-45 years.

TABLE 37: RELATIONSHIP BETWEEN AGE AND RESPONSE TO MALE STAFF ASSISTING DELIVERIES AT HEALTH FACILITY

RESPONSE TO MALE STAFF ASSISTANCE	AGE (YEARS)				TOTAL
	15-25	26-35	36-45	Don't know	
Yes	7 (35%)	9 (60%)	2 (25%)	3 (33%)	21 (46%)
No	13 (65%)	6 (40%)	6 (75%)	6 (67%)	31 (60%)
TOTAL	**20 (100%)**	**15 (100%)**	**8 (100%)**	**9 (100%)**	**52 (100%)**

Most of the respondents (75%) who did not favour male staff assistance were aged between 36-45 years, while (60%) of the respondents who favoured male staff assistance were aged 26-35 years of age.

TABLE 38: RELATIONSHIP BETWEEN MARITAL STATUS AND KNOWELDGE LEVELS

KNOWLEDGE LEVELS	MARITAL STATUS			TOTAL
	Single	Married	Divorced	
High	1 (100%)	5 (11%)	1 (25%)	7 (14%)
Average	0	20 (42%)	1 (25%)	21 (40%)
Low	0	22 (47%)	2 (50%)	24 (46%)
TOTAL	**1 (100%)**	**47 (100%)**	**4 (100%)**	**52 (100%)**

Majority of married respondents (47%) had low knowledge levels.

TABLE 39: RELATIONSHIP BETWEEN MARITAL STATUS AND RESPONSE TO MALE STAFF ASSISTANCE

RESPONSE TO MALE ASSISTANCE	MARITAL STATUS			TOTAL
	Single	Married	Divorced	
Yes	1 (100%)	16 (34%)	3 (75%)	20 (38%)
No	0	31 (66%)	1 (25%)	32 (62%)
TOTAL	**1 (100%)**	**47 (100%)**	**4 (100%)**	**52 (100%)**

Most of the married respondents (66%) were not in favour of being assisted by male staff during delivery, while (34%) were in a favour of male assistance

TABLE 40: RELATIONSHIP BETWEEN MARITAL STATUS AND DECISION OF PLACE OF DELIVERY

DECISION MAKING	MARITAL STATUS			TOTAL
	Single	**Married**	**Divorced**	
Husband	0	17 (36%)	0	17 (33%)
Relative	1 (100%)	10 (21%)	2 (50%)	13 (25%)
Self	0	13 (28%)	2 (50%)	15 (29%)
In-law	0	7 (15%)	0	7 (13%)
TOTAL	**1 (100%)**	**47 (100%)**	**4 (100%)**	**52 (100%)**

Most of the married respondents (36%) said that their husbands made decisions regarding the wife's place of delivery while (15%) was made by their in-laws.

TABLE 41: RELATIONSHIP BETWEEN TRIBE AND OBSERVATION OF EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS

EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS	TRIBE			TOTAL
	Chewa	Ngoni	Other	
Yes	22 (63%)	9 (56%)	1 (100%)	32 (61%)
No	13 (37%)	5 (31%)	0	18 (35%)
No response	0	2 (13%)	0	2 (4%)
TOTAL	**35 (100%)**	**16 (100%)**	**1 (100%)**	**52 (100%)**

Most of the respondents (63%) among Chewas said that they observed cultural practices, beliefs and taboos regarding pregnancies and delivery, while (31%) of respondents among Ngoni tribe did not.

TABLE 42: RELATIONSHIP BETWEEN TRIBE AND DECISION MAKING REGARDING PLACE OF DELIVERY

DECISION MAKING	TRIBE			TOTAL
	Chewa	**Ngoni**	**Other**	
Husband	10 (28%)	7 (44%)	0	17 (33%)
Relative	9 (26%)	4 (28%)	0	13 (25%)
Self	14 (40%)	0	1 (100%)	15 (29%)
In-law	2 (6%)	5 (31%)	0	7 (13%)
TOTAL	**35 (100%)**	**16 (100%)**	**1 (100%)**	**52 (100%)**

Most of the Ngoni respondents (44%) said that their husbands made decisions regarding their place of delivery, while 40% of the Chewas made their own decisions.

TABLE 43: RELATIONSHIP BETWEEN OCCUPATION AND ACCESSIBILITY OF HEALTH SERVICES

ACCESSIBILITY TO HEALTH FACILITY	OCCUPATION				TOTAL
	Formal employment	Unemployment	Self-employment	Farming	
Yes	0	10 (24%)	0	1 (14%)	11 (21%)
No	1 (100%)	32 (76%)	2 (100%)	6 (86%)	41 (79%)
TOTAL	**1 (100%)**	**42 (100%)**	**2 (100%)**	**7 (100%)**	**52 (100%)**

Most of the respondents among farmers (86%) and unemployed (76%) had no easy access to health services.

TABLE 44: RELATIONSHIP BETWEEN RELIGIOUS DENOMINATION AND EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS

EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS	RELIGIOUS DENOMINATION					TOTAL
	RCZ	RCC	UCZ	Apostolic	Other	
Yes	4 (50%)	18 (86%)	2 (67%)	5 (63%)	6 (50%)	35 (67%)
No	4 (50%)	3 (14%)	1 (33%)	2 (25%)	5 (42%)	15 (29%)
No Response	0	0	0	1 (12%)	1 (8%)	2 (4%)
TOTAL	**8 (100%)**	**21 (100%)**	**3 (100%)**	**8 (100%)**	**12 (100%)**	**52 (100%)**

Majority of the respondents (86%) from Roman Catholic Church and (67%) from UCZ said that they observed existing practices, beliefs and tattoos regarding pregnancy and delivery.

TABLE 45: RELATIONSHIP BETWEEN NUMBER OF CHILDREN AND LAST PLACE OF DELIVERY

LAST PLACE OF DELIVERY	NUMBER OF CHILDREN				TOTAL
	1-3	4-6	7-9	Above	
TTBA	0	0	1 (11%)	1 (33.3%)	2 ((4%)
Home	6 (25%)	5 (31%)	4 (44%)	1 (33.3%)	16 (31%)
Relative	3 (12.5%)	3 (19%)	0	0	6 (11%)
Health institution	15 (62.5%)	7 (44%)	3 (33%)	1 (33.3%)	26 (50%)
Other	-	1 (6%)	1 (11%)	0	2 (4%)
TOTAL	**24 (100%)**	**16 (100%)**	**9 (100%)**	**3 (100%)**	**52 (100%)**

Most of the respondents (62.5%), with 1-3 children delivered in health institutions while 44% of respondents with 7-9 children had their last delivery at home.

TABLE 46: RELATIONSHIP BETWEEN NUMBER OF CHILDREN AND EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS

EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS	NUMBER OF CHILDREN				TOTAL
	1-3	4-6	7-9	Above	
Yes	12 (50%)	12 (75%)	7 (78%)	3 (100%)	34 (65%)
No	10 (42%)	4 (25%)	2 (22%)	0	16 (31%)
No response	2 (8%)	0	0	0	2 (4%)
TOTAL	**24 (100%)**	**16 (100%)**	**9 (100%)**	**3 (100%)**	**52 (100%)**

All respondents (100%) who had more than 9 children and (78%) respondents who had 7-9 children said that they observed existing cultural practices, beliefs and taboos, while (42%) who had 1-3 children said they did not observe any existing cultural practices, beliefs and taboos.

TABLE 47: RELATIONSHIP BETWEEN KNOWLEDGE LEVELS AND PLACE OF DELIVERY

KNOWLEDGE LEVELS	PLACE OF DELIVERY					TOTAL
	tTBA	Home	Relative	Health institution	Other	
High	0	9 (56%)	0	5 (19%)	0	14 (27%)
Average	0	5 (31%)	5 (83%)	11 (42%)	0	21 (40%)
Low	2 (100%)	2 (13%)	1 (17%)	10 (39%)	2 (100%)	17 (33%)
TOTAL	2 (100%)	16 (100%)	6 (100%)	26 (100%)	2	52 (100%)

All respondents (100%) who delivered at the tTBAs place and other (street) had low levels of knowledge, (83%) who delivered at the relatives' place had average knowledge and (56%) of those who delivered at home had high knowledge.

TABLE 48: RELATIONSHIP BETWEEN EDUCATION LEVEL AND EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS

EXISTING CULTURAL PRACTICES, BELIEFS AND TABOOS	EDUCATIONAL LEVEL			TOTAL
	Primary	Secondary	None	
Yes	12 (50%)	7 (78%)	14 (74%)	33 (63%)
No	12 (50%)	2 (22%)	4 (21%)	18 (35%)
No response	0	0	1 (5%)	1 (2%)
TOTAL	**24 (100%)**	**9 (100%)**	**19 (100%)**	**52 (100%)**

Most (78%) of the respondents who had secondary education said that they observed existing cultural practices, beliefs and taboos regarding pregnancy and delivery.

TABLE 49: RELATIONSHIP BETWEEN EDUCATION LEVELS AND RESPONSE TO MALE STAFF ASSISTANCE

MALE STAFF ASSISTANCE	EDUCATION LEVEL			TOTAL
	Primary	**Secondary**	**None**	
Yes	11 (46%)	5 (56%)	6 (32%)	22 (42%)
No	13 (54%)	4 (44%)	13 (68%)	30 (50%)
TOTAL	**24 (100%)**	**9 (100%)**	**19 (100%)**	**52 (100%)**

More than half (68%) of the respondents with no education were not in favour with male staff assisting in delivery.

TABLE 50: RELATIONSHIP BETWEEN EDUCATION LEVEL AND LAST PLACE OF DELIVERY

LAST PLACE OF DELIVERY	EDUCATION LEVEL			TOTAL
	Primary	Secondary	None	
tTBA	0	0	2 (11%)	2 (4%)
Home	9 (38%)	1 (11%)	6 (32%)	16 (31.5%)
Relative	1 (4%)	2 (22%)	3 (16%)	6 (11.5%)
Health institution	13 (54%)	0	(5%)	2 (4%)
TOTAL	**24 (100%)**	**9 (100%)**	**19 (100%)**	**52 (100%)**

Most (67%) of the respondents with secondary education had their last delivery in the health institution while (32%) of those with no education delivered their last child at home.

TABLE 51: RELATIONSHIP BETWEEN LAST PLACE OF DELIVERY (HEALTH FACILITY) AND MEANS OF REACHING THERE

MEANS OF REACHING HEALTH FACILITY	LAST PLACE OF DELIVERY					TOTAL
	tTBA	Home	Relative	Health institution	Other	
Oxcart	0	0	0	3 (12%)	0	3 (12%)
Bicycle	0	0	0	7 (14%)	0	7 (14%)
Walking	0	0	0	12 (46%)	0	12 (46%)
Vehicle	0	0	0	4 (15%)	0	4 (15%)
TOTAL	2 (100%)	16 (100%)	6 (100%)	26 (100%)	2	52 (100%)

Most of the respondents (46%) who had their last delivery at health institution walked to the health facility, while (12%) used oxcarts.

TABLE 52: RELATIONSHIP BETWEEN LAST PLACE OF DELIVERY AND TIME TAKEN TO REACH

TIME TAKEN TO REACH HEALTH INSTITUTION	LAST PLACE OF DELIVERY					TOTAL
	tTBA	Home	Relative	Health institution	Other	
30 minutes - 1 hour	0	0	0	6 (23%)	0	6 (23%)
More than 1 hour	0	0	0	20 (77%)	0	20 (77%)
TOTAL	2 (100%)	16 (100%)	6 (100%)	26 (100%)	2	52 (100%)

Majority (77%) of the respondents who delivered their last child at health institution took more than 1 hour to reach the health facility.

TABLE 53: RELATIONSHIP BETWEEN LAST PLACE OF DELIVERY AND WAITING TIME TO BE ATTENDED TO

WAITING TIME AT HEALTH INSTITUTIONS	LAST PLACE OF DELIVERY					TOTAL
	TTBA	Home	Relative	Health institution	Other	
15- 30 minutes	0	0	0	14 (54%)	0	14 (54%)
More than 30 minutes	0	0	0	12 (46%)	0	12 (46%)
TOTAL	2 (100%)	16 (100%)	6 (100%)	26 (100%)	2	52 (100%)

Slightly more than half (54%) of the respondents who had their last delivery at the health institution waited for 15-30 minutes before being attended to.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 INTRODUCTION

The primary objective of this study was to identify factors contributing to low utilization of the health institutions for delivery by pregnant mothers in Chadiza. The variables examined included knowledge levels, quality of care, accessibility to health services and observation of existing cultures, practices, beliefs and taboos. Therefore, the discussion is based on the above mentioned variables.

5.2 CHARACTERISTICS OF THE SAMPLE

5.2.1 DEMOGRAPHIC DATA

The study respondents were women of childbearing aged between 15 and 45 years. Most of the respondents (39%) were aged between 15 and 25 years and 29% were aged between 26 and 35 years (Table 4, page 34). This finding is in line with CSO (2002) census results which showed that about 75% of the population in Zambia comprise of young people who probably could be within the reproductive age. It could also mean that young women were utilizing delivery services compared to older women even as shown in Table 38 which shows that 65% of the respondents had their last delivery at the health institution and were aged between 15 and 25 years while 30% of the same age group had home deliveries and 50% of the respondents aged between 36 and 45 years had home deliveries.

Majority of the respondents (90%) were married while 2% were single (Table 5, page 34.). This is because the respondents were within the sexually reproductive age group (CSO, 2002). The findings could also mean that marriage is considered a universally acceptable norm and women view marriage as s social and economic security venture due to their social vulnerability, even as it is shown in Table 6, page 35, which shows that 79% of the respondents were unemployed and only 2 were in formal employment

Majority of the respondents (67%) were Chewa by tribe and 31% were Ngoni by tribe (Figure 2, page 35). Predominantly these are the two tribes found in Chadiza District.

Majority of the respondents (79%) were unemployed while 21% of the respondents were in formal and self employment and also subsistence farming (Table 6, page 35). This finding could be due to the fact that the respondents were not highly educated and therefore could not get formal employment due to low levels of education attainment (Table 10, page 37). This is in line with ZDHS (2001-2002) which reported that there is a high unemployment rate among women. The other reason could be because the respondents were from a rural setting where there are few schools and most of them are far from most villages. The other reason could probably be related to early or teenage marriages taking place in the villages.

In this study, respondents were Christians who belonged to various religious groups. About 40% belonged to Roman Catholic Church while 19.2% were from the Apostolic Church (Table 7, page 36). This is due to the fact that Zambia is predominantly a Christian nation as declared by the former President of the Republic of Zambia, Dr. Frederick Chiluba in 1991 (Churches Council of Zambia, 2005). Religious grouping generally do advocate for good values, morals and are involved in the delivery of health messages to their members.

The study reveals that the occupation of most respondents' husbands was farming (62%) and 25% of the respondents' husbands were self employed (Table 8, page 36). This could probably be due to low levels of education of the community and thus could not get into formal employment. This may probably have an effect on the economic support of the respondents and thus the mothers not able to use the health facilities for delivery. For instance, findings from the FGDs showed that mothers are not able to use the health facilities for deliveries because they have no money to pay for fees, no

transport and buy baby clothes and also for herself, and materials like gloves and cord cramps as demanded by health centre staff.

About 46% of the respondents had 1-3 children, while 31% had 4-6 children, (Table 9, page 37). This could be because in Zambia more children are regarded as a sign of wealth in order to be loved by their husbands and to keep their marriages. This can also be attributed to inadequate knowledge on dangers of frequent pregnancies.

About 46% of the respondents attained primary school education, 37% had never been to school, while 17% had secondary education, (Table 10, page 37). This could be attributed to the fact that rural communities do not value education. It could also mean that schools are very few in rural areas hence girls do not have the opportunity to advance in education. The other reason could probably be due to early or teenage marriages or pregnancy. This finding could be supported by results from ZDHS (2001-2002) report which showed that teenage pregnancy is still high with 32% teenage women aged between 15 and 19 years pregnant or could have already given birth to their first child.

5.2.2 UTILIZATION

The study revealed that 65% of the respondents who had their delivery at the facility were aged between 15 and 25 years and had 1-3 children and 33% of those aged 26 to 35 years who had 4-6 children had delivered from their relative's place (Table 35, page 56). This could probably be due to the fact that young women were better informed about the dangers of home deliveries than older women. It could also mean that older women were not in favour of being assisted by male staff (Table 37, page 54). This fact state that delivery by sex preference was a contributing factor to low utilization of health facilities/institutions for delivery.

The findings were also supported by results from the Focus Group Discussion where participants said that they would want a female health staff to assist them during delivery because they said, "it was unethical to be delivered by a male who is not your husband".

The other reason could be that older women (50%) have always delivered at home probably with no complications (Table 35, page 56), and so did not see the need of delivering at the health institution.

Low utilization of health facilities or institutions by married women could be affected by husbands and in-laws who make decisions for place of delivery. This is because quite often when mothers go in labour support persons or the husband and the in-law may not be available to given them help or take them to the health facility because they have no transport or money. In this study, 36% of respondents' spouses made decisions regarding their wives place of delivery and 15% of the respondents' in-laws made the decision (Table 40, page 55). This could be attributed to the fact that the Zambian tradition allows the women's husbands and in-laws to make decisions in the home. Traditionally, the woman is expected to be submissive to their husband and the in-laws in order to maintain harmony in their marriage.

During FGDs the participants were asked to give reasons why expectant mothers did not want to use health institutions for deliveries and the following are some of the reasons which were given:

- Distance to the health centre
- No availability of transport
- Expensive hire of available mode of transport (vehicle, oxcart, bicycle)
- Small delivery rooms and lack of privacy
- Cultural practices, beliefs and taboos for instance a pregnant mother delivering from a health facility is considered to be lazy or that she fears to reveal that she had extra marital affairs while pregnant since the health providers will not question her.

- Not in favour of male health provider
- Lack of support during labour or delivery for instance, during second stage of labour at home women present make her lean against another woman's back while others hold her legs.
- Poor staff attitude, for instance use of abusive language
- Sudden onset of labour
- tTBAs assist deliveries

5.2.3 KNOWLEDGE LEVELS

With regards to knowledge levels, the study revealed that 46% of the respondents had low knowledge on categories of at risk expectant mothers who are supposed to deliver in a moderate health facility and dangers of home deliveries, 40% had average knowledge and only 14% had high levels of knowledge (Table 13, page 40). The study also revealed that 92% of the respondents attended health education sessions during antenatal and only 8% never attended (Figure 3, page 38). About 65% of the respondents said that they had learnt about dangers or complications of home deliveries during antenatal.

This means that nurses/midwives or other trained health providers had to double up their efforts to provide information and education to expectant mothers. When asked to mention five categories of at risk expectant mothers who were supposed to deliver at moderate health institution, only 8% were able to mention four risks, for instance prime gravida, grand multipara, mothers with history of previous pregnancy or delivery problems, expectant mothers who are sick, mothers with raised blood pressure (Table 11, page 38). The respondents were also asked to mention risks or danger signs of home deliveries, 13.5% of the respondents were able to mention more than 5 risk categories, 63.5% were able to mention 2-4 categories and 23% were able to mention one while others were unable to mention any (Table 12, page 39).

The study also revealed that the nurse/midwives was the most important source of information for expectant mothers hence the need for them to use clear simple language during IEC sessions.

Mcintyres (1982) in her study interviewed postnatal in-patients who reported some difficulty in getting the right information while they were in hospital for instance this example was cited "I was told to stay in bed by a doctor and when they (nurses) changed shifts, this nurse says to me, "Right out of bed" so I said, "well, I am not supposed to be out of bed, "but I later got out of bed and when another nurse came along that had told me to be in bed, she asked, "what are you doing out of bed?"

This probably may mean that poor communication between attendants can lead to conflicting information being given to patients and thus could be attributed to inadequate health education messages being given to patients and thus poor application or use by the receivers (expectant mothers).

Table 47, page 59 shows that 83% of the respondents who were delivered by relatives had average knowledge and all (100%) of the respondents who had delivered at tTBA's place had low knowledge levels. Therefore, this could mean that these women were not aware of the dangers or risks of home deliveries.

5.2.4 QUALITY OF CARE

The study revealed that 50% of the respondents who had institutional delivers were not satisfied with the care given by health staff, 35% were satisfied and 15% did not respond to the question (Table 21 page 44).

This study revealed several factors that may affect quality of care by health providers in health institutions such as shortage of staff, non-availability of minimum delivery equipment, inadequate drug and medical supplies, inadequate delivery space and privacy,

Mulenga, (1991) in a study entitled "Low utilization of maternal delivery services at Nampundwe rural health centre in Lusaka" found that critical shortage of health staff contributed to low utilization of maternal delivery services at the mentioned centre.

The study results are in line with the evaluation study carried out in Lundazi, Katete and Chadiza Districts by UNICEF (file://A://UNICEF.Evaluationdatabase-htm,2001) which showed that 33% of health centres in the 3 districts were run by one qualified staff in most cases supported by one or two casual workers and trained TBAs. This therefore mean that most of the safe motherhood activities were carried out by tTBAs or female casual workers. The study found that there was lack of basic delivery equipment in the health institutions such as delivery sets, cord clumps and plastic sheet for the delivery bed.

Quality of care in relation to utilization of health institutions by pregnant mothers during FGDs found that more than half of the participants said that the quality of care was not good because some of the health providers used abusive language during service provision, most deliveries were conducted by tTBAs who are not capable of handling obstetric emergencies, inadequate delivery space and lack of privacy, inadequate medical supplies and drugs, shortage of trained staff and inadequate lighting. One participant indicated that she was shouted at by a nurse when she called her because of the terrible labour pains but the nurse said "it is too much of you, yet you are not pregnant for the first time, I was not there when you were being impregnated, you are old, so you should leave bearing of children to young ones". The woman looked saddened even as she talked because she went on to say, "none of us have ever been witnessed when having sex to get pregnant not even the nurse herself." Since then the woman said that she has had no thought of delivering at the health facility unless she develops a problem that she can only be taken there on an oxcart. Others also said that though they had safe deliveries most of them were examined only once when

they reported to the health facilities and were only closely attended to when they were about to deliver but little care was given when labour was progressing.

This therefore may indicate that there is a relationship between quality of care given to mothers in labour and staff attitude, availability of delivery equipment, availability of separate room for delivery and adequate trained personnel in health facilities in institutions to ensure utilization of the health facilities. These findings could be in line with the publication by UNICEF of June-October, 1995 which equally states that safe motherhood could be ensured if only health facilities were fully equipped and health providers are well trained and capable of managing maternal problems.

5.2.5 ACCESSIBILITY OF HEALTH SERVICES

The study revealed that majority of the respondents (79%) did not have access to health services (Figure 7, page 48). This is because most of the respondents walked long distance to the health facility and took more than one hour to reach the health facility. The other reason expectant mothers did not have easy access to health services (21%) could be that the user fees charged were not affordable. Similar result was obtained from the women in the Focus Group Discussion where most women indicated that although they were able to attend antenatal services, it was difficult for them to access timely maternity delivery care at the health institutions due to some of the following reasons:

- Long distance to health facilities
- Inability to meet health facility requirements including medical fees, baby clothes, gloves, poor dressing (herself).
- Shy to be attended to by male staff. "It is usually not acceptable in the village" they said.
- Poor reception by health staff
- Inadequate knowledge on the signs and symptoms of the true labour

- Lack of privacy, they strongly complained on the location or position of the delivery rooms which were too close to either the dispensary room or outpatient department. "it is embarrassing to deliver from the health centre because everybody at the health centre will hear you screaming with labour pain and then you will become the talk of the day and you can even be divorced", one participant said.
- Lack of transport to reach the health facility.
- Inadequate space in the delivery room.

The FGD results are in line with results from a study by Sikazwe (2000) entitled, "A study to determine factors contributing to low number of supervised deliveries conducted by health workers in Chiengi District" which revealed that poor treatment by staff deterred most women from accessing maternal health services.

This result is also supported by UNICEF (2001) report which showed that some of the causes of inaccessibility of health services for deliveries were distance from health facility, lack of transport, high cost of available transport (oxcart, bicycles) which many rural mothers are unable to afford (file:A://UNICEF-Evaluationdatabase-htm,2001).

5.2.6 SOCIO-CULTURAL PRACTICES, BELIEFS AND TABOOS

Generally, 61% of the respondents agreed that cultural practices, beliefs, and taboos exist in the community (Table 30 page 50). Table 41 shows that 63% of the Chewas admitted to be practicing cultural practices, beliefs and taboos related to pregnancy and delivery. This result is in line with results from the study by Goma (1999) in a study entitled, "Low utilization of institutional maternal delivery services in health centers," who reported that traditional beliefs made most mothers to deliver at home. This report further states that many women delivered in their homes assisted by relatives and that in many cultures women are reluctant to go to a male for delivery.

This finding is supported by Heichlhein and Koblinsky (1997) report which states that there were unique practices and beliefs prevalent in the communities which affect utilization of health delivery services. In most cases women are left alone in the delivery rooms without support as nurses/midwives are overwhelmed with workload. In addition nurses/midwives tend to be rude and this makes them shun the health institutions.

The study further revealed that all the respondents (100%) who had more than 9 children and 78% of the respondents who had 7-9 children said that they observed existing cultural practices, beliefs and taboos related to pregnancy and delivery, (Table 47, page 59). This could mean that older women are not in favour of using health facilities for delivery may because they feel they are quite experienced especially if they have not experienced any problems. This could probably be attributed to low levels of knowledge on the dangers or risks of home delivers and other problems related to pregnancy and delivery especially in women who have had a lot of deliveries. The other reason could probably be that older women and those who are also married do not favour being assisted by male staff.

Finally, respondents were asked to give suggestions on how utilization of the health institutions for deliveries by pregnant mothers could be improved, 25% said that female staff should be sent to the health facilities. About 32% of the respondents suggested that the nurses/midwives should intensify information, education and communication, on the importance of institutional deliveries to the communities including headmen, 11% of the respondents said the health staff should change their attitude towards mothers coming to deliver, 8% of the respondents said trained staff should be sent to the health facilities, 6% said that the health facilities should give gifts to babies from at the health facilities as this will encourage even those who feel they have no baby clothes to come and deliver from the health post. 4% of respondents said an extra room for delivery should be built away from then main structure

so that privacy can be attained, 4% also said that funds should be sought for construction of health posts to cut down on distance and 5% said that the TBAs should not be allowed to conduct deliveries at the health institutions and they should also be reminded of the type of expectant mothers they should handle.

Two focus Group Discussions (FGDs) were held in two health centre catchment areas on separate days. They were held in communities targeting participants of childbearing age. The participants for the FGDs did not take part in the interview schedule data collection. The number of participants in the FGDs were between 8-12. Participants comprised of those who had delivered at home and those that had delivered in health institutions. The FGDs were conducted to supplement results from the interviews conducted.

The FGD was conducted with the help of one recorder who was trained by the researcher. The discussion was introduced by the researcher after doing the introductions and the findings were as follows:

Participants were asked to identify problems experienced by women in pregnancy and childbirth, and the identified conditions were raised blood pressure, mal-presentations like breech presentation, convulsions during pregnancy, in labour or after delivery, vaginal bleeding and stillbirths.

They further said some women had retained placenta and membrane and were being referred to hospitals. They also said some women suffer from malaria while others had anaemia.

When asked on which categories of expectant mothers should deliver in a hospitals, the mothers said that women with problems, those who fail to deliver at home, those who had less blood, those pregnant for the first time, those who are sick and those advised by health staff during antenatal were all supposed to deliver in hospital.

Participants were also asked to give reasons why women delivered at home, they said that women delivered at home because of distance to the health centre, no availability of transport and expensive hire costs of available transport. They also said that many women attempted to walk to the health facility but ended up delivering on the way. They stated that women complained that the delivery rooms were too small and lacked privacy because they were too close to the outpatient department and the dispensary room. The doors opened directly to outside such that if slightly left open, anyone was to see the mother in labour and then you would be the talk of the day, stated one participant.

They further stated that cultural practices made women deliver from home, for example mothers considered their daughters in-law to be lazy by delivering at a health facility. Others believed in taking of herbs to speed up labour and also cleanse the mother in case of extramarital sex for either the husband or herself because at a health facility they were not allowed to take any herbs.

Some women said that they did not want to be assisted by male staff which was against culture for fear of loosing their marriages because the husbands were against such. They further stated that women in labour at home were well supported by elderly women who stay with her until she delivers. The women even sit behind the mother in labour making her lean against their back while others support her legs when she is bearing down while at the centre the woman is asked to hold the legs herself while lying on the bed. At times the staff leave women alone in the delivery room and some have ended up delivering on their own.

The women were also not happy with the bad language used by staff, e.g shouting at the mothers and at times beating them especially when it was time to push. One woman narrated with a sad voice how she was shouted at when she called the staff for help since pain had become server. "Imwe!

You are making noise, you should leave bearing of children to young ones, I was not there", the staff meant being there when I was having sex so as to be pregnant. Surely, do you need to be in every home when people have sex for you to help them during labour?" The woman asked.

The participants also said that tTBAs assisting them to deliver charged fees at the health centre and so they preferred to call them in their homes where they did not pay any money, but paid in kind. One participant asked, "why should I trouble myself walking long distances to the health facility only to be assisted by the TBA I can call to help me at home?"

The women also said that some women did not known the signs of true labour and that at times labour started suddenly, and it becomes late for them to go to the health centre.

The women also said that at home elderly women were supportive unlike the health centre where they were asked to stay outside the staff do not even hold legs. At home, the woman in labour is not supposed to eat for fear of passing a lot of feaces but at the health facility, they allowed them to eat. The participants also said that it was unethical to be delivered by a male who was not your husband.

The participants were asked to give suggestions on how to increase institutional deliveries. They were of the view that the health staff should intensify health education which should target the whole community including headmen and men on the dangers of home deliveries. They also suggested that female staff should be sent to the health centers and should be told to understand a woman in labour instead of shouting and insulting her.

The women also suggested that delivery rooms should be built away from the main structures to provide privacy for mothers in labour. They also suggested that health facilities should give gifts to children born from health

facilities so as to attract others to use the facilities, and those delivering from home should be charged penalty fees when they come for under five clinic.

The participants also suggested that tTBAs should stop conducting deliveries at health facilities and that they should also be reminded of the type of women they are supposed to assist in the community and leave out those who should deliver at health facilities but they should remind them also, for example short women those who are sick and those with man children.

The participants also suggested that those women identified with problems should be told to await delivery at the health facility especially during their last days of pregnancy.

5.3 IMPLICATIONS TO THE HEALTH SYSTEM

The study revealed that 65% of the respondents who had their last delivery at the health facility were aged between 15 and 25 years and had 1-3 children and this could mean that older women were not in favour of being assisted by male staff and also from the Focus Group Discussion (FGD) older women said they were used to delivering at home and did not experience any complications and so did not see the need of delivering at the health institution. The study further revealed that 36% of the respondents' spouses and 15% of the respondents' in-laws made decisions regarding place of delivery which could be attributed to the fact that Zambian tradition allows women's husbands and in-laws to make decisions in a family. It therefore means that IEC should emphasize on importance of institutional delivery and dangers or risks of home deliveries at the community level. Traditional rulers and influential leaders should also be included in the IEC programmes so that they can help to modify the role of decision makers on health matters.

The findings further revealed that 46% of the respondents had low knowledge on categories of expectant mothers who should deliver at a health facility and dangers of home deliveries, while 92% of the respondents said

they had attained health education sessions during antenatal period. This implies that nurses and midwives and other trained staff have to double their efforts to information, education and communication to expectant mothers on the dangers of home deliveries especially at the community level. The health messages should be put across in a simple and straightforward way so that expectant mothers and indeed the community as a whole can get the meaning and be able to make use of it. Drama group performances and posters can also help to simplify the messages on safe motherhood.

Safe motherhood committees should also be formed in the communities to help complement the efforts of health providers to the communities by making follow ups of at risk mothers and working out modalities to ensure that women get the required help in times of problems or complications related to pregnancy and delivery. For instance, finding means of transporting an expectant mother from community to the health centre.

The study further revealed that 50% of the respondents who had institutional deliveries were not satisfied with the care given by health staff and this was related to poor staff attitude, shortage of health personnel, inadequate delivery space, privacy and minimum delivery equipment, medical and surgical supplies. This implies that the District Health Management Team, health providers collaborating partners and the community need to put all their efforts together to ensure adequate staffing in the district, extension of existing infrastructure to provide maternity units and purchase of minimum delivery equipment. The health providers need to sensitize the community to participate in developmental projects and write project proposals to well-wishers for construction of health posts.

Nurses and midwives should realize that the treatment a pregnant woman receives at a health unit either antenatally or during delivery can either encourage or discourage her from using the facility during future deliveries. Therefore, every nurse/midwife must strive to provide good quality care.

They should treat mothers with dignity and respect they deserve. In so doing, mothers will be motivated to return to the health facility.

The study also revealed that 79% of the respondents did not have access to health services probably due to distance to health facility, fees being charged, no money to meet health facility requirements (baby clothes, gloves, etc). Inadequate knowledge on signs and symptoms of true labour, lack of transport and poor reception by health providers. This therefore means that the MoH/CBoH need to source for funds to build health posts in order to cut on distance, health facilities should adhere to national health policy of not charging pregnant women any fees. The health facilities should also budget for medical and surgical supplies. The nurses/midwives and other health staff should sensitize the community to use baby clothes for older children and not only new baby clothes. The nurse/midwives should make a clear explanation or rationale to expectant mothers why the emphasis of preparing baby clothes in advance such as to prevent the newly born baby from hypothermia and other chest complications which may arise due to exposure to cold is important.

The nurses/midwives and other staff should also encourage pregnant mothers to save money during pregnancy in order to have sufficient funds to cater for basic hospitalization costs during and afterbirth.

The findings of the study further revealed that 61% of the respondents agreed that existing cultural practices, beliefs and taboos were being observed or instance taking of traditional medicines to speed up labour or delivery, only female staff should assist delivery, no extra martial affairs during pregnancy because this may lead to prolonged labour, a pregnant woman should do a lot of domestic work because this may lead to prolonged labour, a pregnant woman should do a lot of domestic work because this helps to speed up delivery. Nurses and midwives must be aware of cultural

beliefs and practices that hinder expectant mothers from utilizing modern health facilities and these should be discouraged.

The nurses, midwives, other health staff and traditional leaders therefore have to put in a lot of efforts to educate the communities on the dangers of using traditional medicines in labour or pregnancy because they may be toxic to the fetus or may cause uncoordinated contractions which may cause rupture of the uterus. Intensification of IEC will be required on the importance of rest for an expectant mother and after delivery.

The nurses/midwives and other health providers together with the community should include in the community action plan the programme to hold refresher training for the tTBAs where they will be reminded on their roles as tTBAs and much more on the type of cases they are supposed to handle. There will also be need to remind them why they need not to assist deliveries at the health centre but only in the community and they are required to refer the expectant mothers to the health centre.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The aim of the study was to identify or determine factors contributing to low utilization of health institutions by pregnant mothers for delivery in Chadiza District. The study revealed that thirty-nine percent of the respondents were aged between 15 to 25 years and twenty nine percent were aged between 26 and 35 years. Majority (90%) of the respondents were married and this had a bearing on the utilization of health institutions because their culture did not favour male staff to assist the expectant mothers during delivery.

Majority (79%) of the respondents were not employed and this meant that they entirely depended on the financial support from their spouses and this therefore had a bearing on decision making for the place of delivery and means of transport to reach the health facility. About 46% of the respondents attained primary school education and this had a bearing on knowledge levels of the respondents on the dangers of home deliveries and at risk expectant mothers who are to delivery at a moderate health institution. However, the study further revealed that probably poor communication between attendants can lead to conflicting information being given to the mothers.

Thirty eight percent of the respondents who had institutional deliveries were satisfied with the care given by health providers in health institutions. Inadequate health personnel, delivery space, privacy, minimal delivery equipment were also found to be contributing factors to poor quality of care hence low utilization of health institutions for deliveries.

Majority of the respondents (79%) did not have easy access to healt delivery services due to the following reasons:

- Distance to the health facility

- Lack of transport
- No money to pay fees and buy baby clothes

When asked about observing existing cultural practices, beliefs and taboos, 61% of the respondents agreed that they did observe the existing cultural practices which could have a bearing on the utilization of the health facilities for delivery.

6.2 RECOMMENDATIONS

6.2.1 To Central Board of Health/Ministry of Health:

- To source for funds to build more health centers and health posts so as to reduce on the distance covered by expectant mothers to reach the current existing health facilities.
- To open more midwifery schools so as to train more midwives who will be equipped with knowledge and skill to manage an expectant mother in labour.

6.2.2 To District Health Management Team:

- To recommend more nurses regardless of sex to go for midwifery training so that they can be equipped with adequate knowledge and skill to manage expectant mothers both at health centre and health post level.
- To conduct refresher courses for the Traditional Birth Attendants (TBAs) to remind them of the at risk expectant mothers they are supposed and not supposed to handle at community level.
- To request for more staff from CBoH/MoH to work in the health facilities in order to alleviate staff shortage.
- To put in place measures to motivate staff who are posted to most remote health facilities so that they can be retained and so alleviate staff shortage.
- The DHMT should lobby for financial support for construction of separate delivery units at existing structures in order to provide adequate space and privacy.

- To sensitize the health facility staff to sensitize their communities to participate in developmental projects and writing of project proposals to non-Governmental Organizations or well wishers for construction of health posts.
- The DHMT to sensitize staff on the need to implement government policies on exemption of user fees of expecting mothers.
- The DHMT to lobby for funds also to purchase basic delivery equipment and medical supplies.
- To hold quarterly intra-district meetings for RHC staff so that they can share their working experiences and help one another to find solutions to their problems.
- A similar research should be done which should include health workers and trained Traditional Birth Attendants.

6.2.3 Rural Health Centre Level

The health centre level should:

- Strengthen village health committees to promote dissemination of health messages on safe motherhood.
- Intensify IEC to the communities on the dangers or complications of home deliveries
- Sensitize communities to write project proposals to NGOs and well wishers on extension of existing structures to create units for maternity deliveries.
- Include in the action plan purchase of basic delivery equipment and medical and surgical supplies.
- Hold sensitization meeting with community based organizations, traditional healers, traditional leaders, political and other influential leaders on importance of institutional deliveries, dangers of home deliveries and need to have adequate maternity delivery space at health institutions.
- Work with communities to increase acceptance of and demand for institutional health deliveries.
- To strengthen referral system from community to hsoptal levels of maternal cases.

6.2.4 Community Level:

The communities or Neighbourhood Health Committees should:

- Form safe motherhood committees to help attend to safe motherhood problems.
- Participate in IEC programmes on importance or benefits of institutional maternity deliveries because they are part of the communities and hence they can know how to best deliver the health messages.
- Budget for refresher courses under the community budget for tTBAs to equip them with new knowledge on safe motherhood especially on the at risk expectant mothers they are not supposed to assist but to refer them to the RHC.
- Entrance links with RHCs or health care providers so that they can be able to advise them or inform health providers' needs of the communities and in turn be able to get information from the health facilities to the communities.
- Communities to develop transportation plans of pregnant women to health facilities according to the economic status of the communities, access of roads and previous experience working together as development activities.
- Communities to establish maternity waiting homes at health institutions so that the pregnant women can await delivery from these homes and hence be able to use the health facilities for deliveries.

6.3 DISSEMINATION OF FINDINGS

The study results will be disseminated to concerned parties. Copies of research findings will be given to Post Basic Nursing Department, sponsor (MoH/CboH/ADB), medical library to be used as references by other researchers. Executive summary of the study will given to Chadiza District Health Office, Bwanukha and Miti rural health centers.

6.4 LIMITATIONS OF THE STUDY

1. It was not possible to conduct the study on a large scale with a larger sample size due to limited time in which the study was to be completed

and submitted to the University of Zambia. Therefore, these findings cannot be generalized to the whole or large population.

2. The literature reviewed was from the researches done within Zambia and outside Zambia and some of the literature was related to maternal deaths.

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APPENDIX I

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

INTERVIEW SCHEDULE

TOPIC

To determine factors contributing to low utilization of institutions for deliveries in Chadiza District

Date of Interview: _____

Place of Interview: _____

INSTRUCTIONS TO THE INTERVIEWER

1. *Introduce yourself to the respondent*
2. Explain the purpose of the interview
3. Get verbal consent from the respondent before the interview
4. Assure respondent of confidentiality and anonymity.
5. Tick [√] in the box responding to the correct answer or write responses in the spaces provided.
6. Do not write the name of the respondent on the interview schedule

SECTION A: DEMOGRAPHIC DATA

FOR OFFICIAL USE ONLY

1. What was the age of your last birthday?
   - (a) 15 – 25 years
   - (b) 25 – 35 years
   - (c) 35 – 45 years
   - (d) Don't know

2. What is your marital status?
   - (a) Single
   - (b) Married
   - (c) Divorced
   - (d) Separated
   - (e) Widow

3. What is your tribe?
   - (a) Chewa
   - (b) Ngoni
   - (c) Other, specify_____

4. What do you do for your living?
   - (a) Housewife
   - (b) Business
   - (c) Unemployed
   - (d) Farming
   - (e) Other, specify_____

5. Which church do you go to?
   - (a) Reformed church
   - (b) Seventh Day
   - (c) Roman Catholic
   - (d) United Church
   - (e) Apostolic
   - (f) Others, specify_____

6. What does your husband do a living?

(a) Unemployed
(b) Formally employed
(c) Business
(d) Farmer
(e) Other, specify_____

FOR OFFICIAL USE ONLY

7. How many children do you have?

(a) 1 -3
(b) 4-6
(c) 7-9
(d) Above 9

8. What is your highest level of education?

(a) Primary
(b) Secondary
(c) College
(d) None

BARRIERS/FACTORS CONTRIBUTING TO LOW UTILIZATION OF HEALTH INSTITUTION OF HEALTH INSTITUTIONS FOR DELIVERIES

SECTION B: KNOWLEDGE

9. Which expecting mothers should deliver in moderate health facilities? (Tick the correct answer)

(a) Prime gravida
(b) Grand multiparus
(c) Unwell mother
(d) Mal-presentations
(e) Previous complicated delivery

10. Did you ever attend health education sessions during antenatal?

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(a) Yes
(b) No

11. If Yes, did you learn about complications of delivery during antenatal?

(a) Yes
(b) No

12. What are the risks of home deliveries that you know?

(Tick all correct answers)

(a) Excessive vaginal bleeding
(b) Failure to deliver
(c) Retained placenta/membranes
(d) Hand/foot prolapse
(e) Weakness of mother
(f) Stoppage of abdomen pains
(g) Baby stop kicking
(h) Mother starts convulsing/fitting
(i) Mother become restless

SECTION C: QUALITY CARE

13. Where did you deliver your last child?

(a) tTBA
(b) Home
(c) Relative place
(d) Health institution
(e) Other, specify

14. Why did you deliver at the place mentioned?

_____

_____

_____

15. Who assisted you in the last delivery?

(a) Self
(b) tTBA
(c) Relative
(d) Health staff

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16. Does your health facility have a separate delivery room for other services like antenatal palpations, family planning, general admissions, etc?

(a) Yes
(b) No
(c) Don't know

17. Does your health centre have adequate health personnel?

(a) Yes
(b) No
(c) Don't know

18. Would you mind to be delivered by a male staff?

(a) Yes
(b) No

19. Give reasons_____

_____

_____

20. Overall, how would you rate the care given by staff in labour ward?

(a) Satisfactory
(b) Not satisfactory
(c) No response

21. Does you centre have adequate drug supplies?

(a) Yes
(b) No
(c) Don't know

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21. Does your centre have adequate minimal delivery equipment?

(a) Yes
(b) No

23. Does your health centre charge user fees for deliveries?

(a) Yes
(b) No
(c) Don't know

24. If Yes, are the user fees affordable?

(a) Yes
(b) No

SECTION D: ACCESSIBILITY OF SERVICES

25. How did you get to the health centre?

(a) Oxcart
(b) Bicycle
(c) Walking
(d) Vehicle

26. How long did it take you to reach the nearest health facility?

(a) 30 minutes to 1 hour
(b) More than 1 hour

27. How long did it take you to be attended to at the health facility?

(a) 15-30 minutes
(b) More than 30 minutes

28. If you were pregnant, would you like to deliver from the health facility?

(a) Yes
(b) No
(c) Don't know

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29. Why do you think some mothers deliver in homes?

_____

_____

_____

SECTION E: SOCIO-CULTURAL PRACTICES, BELIEFS AND TABOOS

30. Do you observe any cultural beliefs or taboos regarding pregnancy?

(a) Yes
(b) No
(c) Don't know

31. If Yes, what are some of these practices, beliefs and taboos?

_____

_____

_____

32. When you were in labour or during pregnancy, whom did you inform?

(a) Husband
(b) Relative
(c) None
(d) In-law

33. Who made the decision for you to go to the place of delivery? **For official Use only**

(a) Husband

(b) Relative

(c) None

(d) In-law

(e) Family member ☐ ☐

34. What do you think should be done to encourage pregnant mothers to deliver at the health facility/institution?

_____

_____

_____

THANK YOU FOR YOU PARTICIPATION

APPENDIX 2

FOCUS GROUP DISCUSSION GUIDE

TOPIC: To determine factors contributing to low utilization of institutions for deliveries in Chadiza District

Date: _____

Number of Participants: _____

Location: _____

Duration: _____

1. What problems do women experience in pregnancy and childbirth?

2. Which mothers do you think should deliver at the hospital?

3. Why do mothers choose to deliver at home?

4. Are there any cultural beliefs, practices and taboos that hinder health facility delivery and what are some of them?

5. What are the suggestions to improve health institutional deliveries?

The University of Zambia
School of Medicine
Department of Post Basic
Nursing
P. O. Box 50110
LUSAKA

4th August, 2005

The District Director of Health
Chadiza District Health Management Team
P. O. Box 520332
CHADIZA

UFS: The Head of Department
Department of Post Basic Nursing
P. O. Box 50110
LUSAKA

Dear Sir,

Re: PERMISSION TO CONDUCT A RESEARCH STUDY

I am a fourth year study at the above mentioned learning institution currently pursuing a Bachelor of Science in Nursing (B.Sc. Degree in Nursing).

In partial fulfillment for the degree programme, I am required to carry out a research study in order to graduate. My topic is "A study to determine factors contributing to low utilization of health institutions by pregnant mothers in Chadiza District."

I am therefore requesting for permission to carry out the pilot study and the actual study by collecting data from women in the childbearing age who have delivered before from your health centres from end of August to month of September, 2005.

Consideration of my request will be highly appreciated.

Yours faithfully,

Mbukwa

Ruth T. Mbukwa
PBN STUDENT

c.c. In-Charges-Zemba RHC, Chadiza
Bwankha RHC, Chadiza
Miti RHC, Chadiza

REPUBLIC OF ZAMBIA

CENTRAL BOARD OF HEALTH

CHADIZA DISTRICT HEALTH MANAGEMENT BOARD, EASTERN PROVINCE
Office of the Director
P.O. Box 520031, Chadiza, Zambia.
Tel: 06 - 251189 Fax 06 - 251179

22nd August 2005

Ruth Mbukwa Mwafulirwa (Mrs.)
Department of Post Basic Nursing,
UNZA School of Medicine,
P.O. Box 50110,
LUSAKA.

Dear Madam,

RE: **REQUEST TO COLLECT DATA FOR THE RESEARCH STUDY**

The above subject refers.

I am pleased to inform you that your request to collect data from community members to facilitate the above research study has been granted. Management is optimistic that the findings and recommendations of the study will help to overcome factors that contribute to low utilization of Health facilities in Chadiza District.

Please do not hesitate to call upon the District Health Office for any assistance you may require on the same.

Yours faithfully,

Lackson Daka
DISTRICT DIRECTOR OF HEALTH

APPENDIX 4: WORK PLAN SCHEDULE

TASK TO BE PERFORMED	DATES	PERSONNEL ASSIGNED TASK	DAYS REQUIRED
Literature review	Continuous	Investigator	Continuous
Formulation of research proposal and data collection	11th April to 1st August, 2005	Investigator	
Clearing from national and funding authority	2nd August to 9th August, 2005	Investigator	7 days
Conducting pilot study	1st September to 3rd September, 2005	Investigator	3 days
Data collection	5th September to 5th October, 2005	Investigator Research Assistant	30 days
Data analysis	6th October to 6th November, 2005	Investigator	30 days
Report writing	7th November to 7th December, 2005	Investigator	30 days
Draft report to PBN	8th December to 22nd December, 2005	Investigator	14 days
Finalizing of report	23rd December to 23rd January, 2006	Investigator	30 days
Monitoring and evaluation	Continuous	Investigator	Continuous

APPENDIX V: GANTT CHART

ACTIVITITY	RESPONSIBLE PERSON	APRIL	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR
Developing of research proposal	Researcher	←										→	
Literature review	Researcher	←				→							
Data collection	Researcher												
Finalizing research proposal	Research				←	→							
Clearance	Researcher												
Pilot study data collection	Researcher Research Assistant					←	→						
Data collection	Researcher Research Assistant						←	→					
Data analysis	Researcher						←	→					
Report writing	Researcher							←	→				
Draft report to PBN	Researcher									←	→		
Finalizing of report	Researcher									←	→		
Dissemination, monitoring and evaluation	Researcher DHMT	←											→

APPENDIX 6

BUDGET FOR A RESEARCH STUDY

ITEM	QUANTITY	UNIT COST (K)	TOTAL COST (K)
Stationery			
Ream of paper	3	25,000	75,000
Pencils	4	300	1,200
Pens	4	1,000	4,000
Notebook	2	5,000	10,000
Diskettes	2	3,000	6,000
Stapler	1	15,000	15,000
Staples	1	5,000	5,000
Tippex	1	7,500	7,500
Calculator	1	30,000	30,000
Flip chart	1	40,000	40,000
Rubbers	2	1,000	2,000
Ruler	1	1,000	1,000
Box file	1	12,000	12,000
Folders	2	2,000	4,000
Researcher's bags	2	15,000	30,000
Subtotal			**242,700**
Secretarial Services			
Typing research proposal	50 pages	2,000	100,000
Typing research questionnaire	12 pages	2,000	24,000
Photocopying questionnaire	52x12 pgs	200	124,800
Typing research report	100 pages	2,000	250,000
Photocopying research report	100x4	200	800,000
Subtotal			**1,422,800**

ITEM	QUANTITY	UNIT COST (K)	TOTAL COST (K)
Binding Services			
Research proposal	2	10,000	20,000
Research report	4	30,000	120,00
Subtotal			**140,000**
Field expenses			
Transport	2	125,000	250,000
Meal allowances			
Researcher	1x21 days	50,000	1,050,000
Research Assistant	1x21 days	30,000	630,000
Workshop –dissemination of research results	1 day		500,000
Subtotal			**2,180,000**
Subtotal			**3,985,500**
Contingency 10% of subtotal			398,550
Grand total			**4,384,050**

BUDGET JUSTIFICATION

Stationery

The researcher needed stationery to prepare the study material. The reams of paper were used for preparation of the research proposal, photocopying of research questionnaires and for the writing of research reports. The flip chart was used for data analysis starting with the pilot study through to the end of research writing. The calculator was used for quantitative data analysis. The two researcher's bags were to be used by the researcher and the research assistance in the field during data collection, but were not purchased

Secretarial Services

The researcher engaged a secretary to type the proposal, questionnaires and bound the research report, both the draft and the final copy. The interview

schedule questionnaire and the reports needed to be photocopied after being typed.

Binding Services

The research proposal and the research reports were bound after completion.

Field Expenses

This was the money for transport expenses and meals for the researcher to the two health centres for data collection, and back to school.

10% Contingency Fund

This money was to help meet the shortfalls in the budget by the researcher

Personnel

The researcher and research assistant needed lunch, subsistence allowances and transport to enable them finish their work as the data was collected from 08:00 hours to 16:00 hours. The researcher needed assistance of statistician to analyse the data.