THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POST BASIC NURSING

A STUDY TO DETERMINE CONTRIBUTING FACTORS TO INCREASED NUMBER OF CAESAREAN SECTION DELIVERIES AT MBALA GENERAL HOSPITAL

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LIST OF ABBREVIATIONS

HIV.....Human Immune Deficiency Virus

AIDS.....Acquired Immune Deficiency Syndrome

CSO..... Central Statistics Office.

ZAF.....Zambia Air Force

CHWS.....Community Health Workers

TBA.....Traditional Birth Attendants.

WHO.....World Health Organisation

UNICEF.....United National International Children's Emergency Fund.

UNFP.....United Nations Food Programme

CPD.....Cephalo pelvic Disproportion.

CBW.....Community Based Workers

DECLARATION

I hereby declare that the work presented in this research for the Bachelor of Science Degree in Nursing has not been presented wholly or in part for any other Bachelor of Science Degree and is not being currently submitted for any other Degree

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STATEMENT

I herby certify that this is entirely the result of my own independent effort and investigation. The various persons and sources to which I am indebted are clearly indicated in this project.

SIGNED .....Ngonzi.....

DATE.....12/6/07.....

(CANDIDATE)

DEDICATION

To my husband Luke, Who has always been there for me. Your words have been an inspiration and strength to me.

To my sweet angles Neketela-Charles, Nana- Jr Luke and little mum.

You are always watching in silence.

I feel your presence all the time.

To my mother Elizabeth-Boniface and my late mother in law, Filimina Kafeka, very strong and hard working women. Your hard works inspire me.

CHAPTER 1

1.0. INTRODUCTION

1.1. BACKGROUND INFORMATION OF ZAMBIA

LOCATION OF ZAMBIA

Zambia is a landlocked country covering an area of 752,612 square kilometres and it consists 2.5% of the area of Africa. Zambia shares borders with the Democratic Republic of Congo and Tanzania in the North, Malawi and Mozambique in the East, Zimbabwe and Botswana in the South, Namibia in the Southwest and Angola in the West. Administratively, the country is divided into nine (9) provinces and seventy three (73) districts. Most of the urban areas are actually located along the line of rail.

Zambia lies between eight and eighteen degrees south latitude and between twenty and thirty five degrees east longitude. The country has a tropical climate and vegetation with the three distinct seasons, the cool dry winter from May to August, hot season during September and October, and warm wet season from November to April. Zambia has main river water sources from Zambezi, Kafue, Luangwa and Luapula.

The major lakes are Tanganyika, Kafue, Mweru and Bangweulu. It also has a man-made lake called Lake Kariba. The Northern part of the country receives the highest precipitation rainfall with an annual average ranging from 1.100mm to 1.400mm.

The Southern and Western parts of the country have less rainfall which often results into draught especially in the Southern province.

VEGETATION

The vegetation of Zambia is a mixture of trees, tall grass, herbs and other woodlands which are mainly of the deciduous type. The deciduous types of woodlands are mainly found on the main plateau of the country. The forests are found mainly in the North-western, Western and Northern parts of the country.

POPULATION

Zambia has a population of approximately 10.4 million people with population growth of 2.9% per annum and fertility rate being at 6.0%. Life expectancy rate for both men and women is 37 years (CSO, 2000).

1.2. MBALA DISTRICT PROFILE

Mbala District is one of the seventy three (73) districts in Zambia. It is the third (3^{rd}) largest district among the twelve districts in the Northern Province. Mbala district is located 167 kilometres from Kasama, the provincial headquarters of Northern Province.

It lies in the northern part of Zambia, sharing borders with the Republic of Tanzania in the North, Mpulungu district in the West, Kasama district in the East. Its topography is mostly mountainous.

Mbala District served the population of 187,812 for the year 2006 extrapolated at 3.2% growth rate (CSO, 2000).
The district lies on a plateau. There are numerous rivers and seasonal streams in the district. It has access to two lakes namely, Lake Chila within the township and Lake Tanganyika.
(Mbala District Action Plan, 2006).
The latter is of major economic value as it provides abundant fish.

COMMUNICATION

Communication to the District is mainly by road. The main road, from Mpulungu via Mbala to Copperbelt and Lusaka, is tarred. The roads within the District which link one health facility to the other are gravel and paths. These roads and bush paths become almost impassable in the rainy season except by use of a four wheel drive vehicle. The state of the roads during rainy season makes access to health and other services difficult. This affects the utilization of health facilities by pregnant women.

The District has air services which were opened to civilians in 1998 at Samora Machel Air Base. The air services are used to transport patients especially from hard to reach areas in rainy seasons. The transported patients include Obstetric Emergencies.

Mbala District has radio communication to fourteen (14) health facilities. The same radio network from the health centres is connected to Mbala hospital labour ward. The Health Centre staff request for ambulance services via Mbala labour ward whenever there is need to refer Obstetric Emergency cases to the hospital. The District has telephone facilities at the District Health Office, General Hospital, Urban clinic and Tulemane Clinic.

It is also externally interlinked to telephone, cell phone, fax and internet facilities. Effective radio communication between health centres and the hospital labour ward is dependent on constant supply of electricity.
The Radio communication is difficult in Mbala District because of the erratic electricity supply especially during rainy seasons. This delays effective communication and referral of pregnant women (Obstetric Emergencies) to the hospital labour ward from the health centres.

ECONOMIC STATUS OF MBALA

The development process in Mbala District has been quite slow especially after the closure of many companies in the event of liquidation. The trekking of traders to other towns especially Lusaka has disadvantaged Mbala District economically. This has been made worse with the advent of HIV/AIDS that has robbed off the able bodied men and women leaving the district economically poor. As a result of poverty, most young girls engage in early sexual relationships for financial gain. This has lead to increased early teenage pregnancies. Teenage pregnancy is marked with a lot of obstetric complications which require Caesarean Section delivery as a life saving intervention.

Poverty also reduces the chances of the pregnant women to afford and access the health services.

The economic activities undertaken in the district include commercial and subsistence farming, cattle ranching and fishing. The main cash crops grown include beans, maize, cassava, rice, finger millet, coffee and potatoes.

A few people work for Government institutions. The District is served by two banks namely New Capital Bank and Finance Bank.

SOCIAL STATUS OF MBALA

The Mambwe and Lungu speaking people predominantly occupy the District. Other languages spoken include Bemba and Namwanga. The district has few Fipa and Swahili speaking people along the Zambia-Tanzania border at the north and east of Mbala. The five gazetted chiefs govern these tribes. The stated tribes have different cultural and traditional beliefs and practices, which positively and negatively influence the delivery of health care services especially maternal and child health services. The chiefs, therefore, play a major role in influencing behavioural changes by promoting utilization of maternal and child health services.

DEMOGRAPHIC POPULATION DISTRIBUTION

The District has a projected population of 187,812 (CSO, 2000) projected at 3.2% district annual growth rate out of which 88% (165,274) of the population live in rural areas while 12% (105,374) of the population live in urban areas. 49.97% (938,497) are females while 50.03% (93,962) are males. The population density is 15 persons per square kilometre.

TOP TEN CAUSES OF ADMISSIONS IN MBALA

The top ten causes of admission among the under five children and above five years are indicated in table one below.

TABLE 1: TOP TEN CAUSES OF ADMISSIONS IN MBALA (2005)

DISEASE	LESS THAN 5 YEARS	ABOVE 5 YEARS	TOTAL
Malaria	690	252	942
Anaemia	264	19	283
Trauma	44	188	232
Complications of deliveries	0	75	75
Pregnancy complications	0	63	63
Respiratory Infections Non-Pneumonia	39	18	57
Other diseases	1	55	56
Skin conditions	17	34	51
Diarrhoea Non-blood	33	8	41

Source: Mbala District Action Plan 2006

Malaria is the highest cause of morbidity among the children less than 5 years and people above 5 years old.

In view of the above stated statistics of disease burden, Mbala District Health Management Team has put in place interventions to try and provide quality health care and conserve life .Such intervention include; close Monitoring of Maternal Child Health, information, education and communication, early detection of obstetric emergencies, improvement of referral and transport system between the hospital, health centres and the community.

OVERVIEW OF CAESAREAN SECTIONS DELIVERIES

Caesarean Section is the operation procedure for delivery of a child through cutting the wall of the abdomen and the uterus of the pregnant woman after 28 weeks of gestational age, (Myles 2005 p492). It is a major operation that is necessary when specific Medical and Obstetric indications are present in order to save the life of the mother and /or of the foetus. The common types of Caesarean Section are Lower Segment and Classical Caesarean Sections. Caesarean Sections are seen to be steadily increasing worldwide.

According to the World Health Organization report (WHO, 2005, p94), Caesarean section has been on an increase beyond all reasons worldwide from 1990s. Stanton (2000) outlined that evidence suggests that Caesarean Section rates are high and increasing in some developing countries. It is estimated that about 12% of the 90% of all births in developing countries account for Caesarean Sections. In the same vein the regional estimates for Caesarean Section is ranging between 3 to 26% in developing countries,
(Google's Cache of http://62.193 7831. Publications lemHj1060//05./htm)

The geographical increase in the rates of Caesarean Section includes Zambia. Within Zambia, some hospitals like Mbala General Hospital have been experiencing a steady increase in Caesarean Section rates since 2001. To address the increase in the rates of Caesarean Section performed globally, UNICEF, WHO and UNFP put up a threshold for Caesarean Section deliveries. Ontario Women's Health Council (OWHC) 2000 report revealed that, UNICEF and UNFPA guidelines recommend

that 5% of all deliveries may be through Caesarean Section operation in order to preserve the life and health of mothers and or infants.

Rates beyond 10% are indicative of inappropriate use of the procedure and need investigation hence the need for this study to be carried out. Despite the above measures, still Caesarean Sections are on an increase globally. (http://wwwils.nim.nih.gov/hm/d/pdf/caeserean.pdf.)

1.2. STATEMENT OF THE PROBLEM

UNICEF, WHO and UNFP guidelines recommended that 5% of deliveries can be by Caesarean Sections performed to preserve the life and health of the mother and / or that of the infant. Where Caesarean Sections exceed 10%, it is indicative of inappropriate use of the procedure (Google's' cache of http:// www. //162. 193.783/publications//htm.)
UNICEF, WHO and UNFP instituted the above guidelines as a control measure to increased rates of Caesarean Section globally. The incidences of increased rates of Caesarean Sections affect both developed and developing countries. Countries such as Australia and New Zealand are also affected. Stewart, (2001), states that increased twin pregnancies leads to increased numbers of Caesarean Section operations in Australia, (http://www.blackwellpublishing.com].)

Related studies in New Zealand also showed that increased numbers of prime gravida and elderly woman of more than 40 years of age also increase the chances of Caesarean Section operation.

Herieka and Dhar (2003) stated that Sudan in Africa faces the same problem of increased numbers of Caesarean Section deliveries. The responsible factors for this are, genitalia mutilation, low education status coupled with poor health seeking behaviour of mothers during the antenatal period. This means that, most of the women who under go Caesarean Section fail to experience normal vaginal delivery. As a result of that, most of these women do not enjoy the satisfaction of delivering their babies normally.

In normal situations, women become more satisfied and they feel more successful if they have a normal vaginal delivery. This is a very common phenomenon among African women, Mbala women inclusive. The current situation in Mbala District is different. Most of the pregnant women end up with Caesarean Section as the mode of delivery as per statistics given in the table below. The women who are affected are women in the reproductive age group.

TABLE 2: **NUMBER OF CAESAREAN SECTION DELIVERIES PERFORMED AT MBALA GENERAL HOSPITAL (2001–2005)**

YEAR	NUMBER OF DELIVERIES	TOTAL NUMBER OF CAESAREAN SECTIONS	PERCENTAGE (%)
2001	653	184	28%
2002	702	151	22%
2003	721	184	26%
2004	914	268	29%
2005	826	264	32%

Source: **Mbala General Hospital Records' Department**

Table two shows an increase in Caesarean section deliveries performed at Mbala General Hospital. Statistics show a 4% increase between 2001 and 2005. The rise continued to 10% magnitude between 2002 and 2005 in Mbala.This increase in Caesarean Section operations indicates Inappropriate use of the procedure, (WHO 2005).

Cases of Caesarean Section deliveries at Mbala General Hospital are mainly from Mbala, Mpulungu, Tanzania border and rarely from Kasama.

The high numbers of Caesarean Section deliveries predispose the mother and baby to contracting infections, which could eventually lead to death for both (maternal and infant mortality).

The mother can also develop haemorrhage from the incision site.

Man working hours for the client and the caretaker are also lost leading to poor economic performance.

There is also an increase in costs for the woman and her family as a result of being admitted to the hospital and longer recovery days spent as an in-patient.

The woman experiences more pain as a result of the procedure.

Besides that, bonding and breastfeeding are being delayed, because there is delayed contact between the mother and the baby especially in the critical first hours after birth.

Some women develop long-term psychological impact of avoiding becoming pregnant again for fear of another painful Caesarean Section delivery.

The high numbers of Caesarean Section deliveries has some consequences on the institution as well.

Some of the consequences are as follows: -

- It drains the meagre institutional resources in terms of time, money and material resources due to increased in patients' days.

- According to WHO Report (2002), Caesarean section leads to what are, often, called major catastrophic expenditures for the institutions.

At Mbala General Hospital, doctors carry out Caesarean Sections deliveries as life saving measures especially in Obstetric Emergencies such as: -

- Severe ante partum haemorrhage
- Severe pre-eclampsia
- Eclampsia.
- Obstructed labour.

- Foetal distress.
- Multiple pregnancies.
- HIV/AIDS

In response to the increase in numbers of Caesarean sections performed, the hospital management has put in place the following measures so that the numbers could reduce without compromising the quality of care:

Mbala Hospital management team holds quarterly tripartite meetings with Mbala District and Mpulungu District Management teams.

- During the tripartite meetings, they plan measures to intensify information and education to the community on the dangers of early pregnancies, taking herbs during pregnancy and late antenatal booking.
- The district health management team lobbied for an ambulance from the Irish government.
- The ambulance services are used by all health centres to transfer pregnant women with complications to the hospital.
- Clinical symposiums are held on maternal mortality with members of staff every month.
- Staff meetings are also held monthly to encourage senior staff to render supportive supervision to rural health centre staff. During supervisory visits, on spot training is offered to the needy rural health centre staff.

- The three management teams have encouraged its members of staff to use partograph when nursing women in labour.

Despite putting up the above measures, the numbers of Caesarean Section deliveries keeps on increasing. Hence this study on Caesarean Section deliveries needs to be conducted.

1.4 FACTORS CONTRIBUTING / INFLUENCING PROBLEMS

It is against this steady increase in Caesarean Section deliveries' background that this study has been designed. The study assumes that there are several other factors that may influence the increase in the numbers of Caesarean Section deliveries at Mbala General Hospital. Some contributing factors include the following: -

SOCIO CULTURAL FACTORS

The society of Mbala, just like any other Zambian societies, has its' own beliefs and values which makes it unique. Some of the values, beliefs and practices impact either positively or negatively on their Health. Pregnancy and labour is not a natural phenomenon to them. Women drink some herbs called munsoka nsoka when they are in labour to facilitate the labour. This herb has a lot of adverse effects on both the mothers and their babies. Some of them are, severe uterine contractions, uterine inertia, foetal distress and at times death. Therefore, in order to save the life of the mothers and that of their babies, doctors perform Caesarean Section deliveries.

The people of Mbala value marriages of their daughters. They feel more successful if their daughters get married in a traditional way so that they have financial and material gain from their in-laws. With this view in mind, many parents marry off their daughters as early as thirteen years of age, just after menarche so that they can gain lobola, (bride price).

Early marriages expose the young girls to sexual act which results in early pregnancies. Early pregnancies on girls who are psychologically, physically and socially immature lead to high obstetric complications such as pre-eclampsia, eclampsia, ante partum haemorrhage and obstructed labour. Therefore, in order to save the life of the mothers and their babies, the doctors resort to performing Caesarean Sections deliveries.

Mambwes and Lungus, just like any other tribes in Zambia have strong beliefs on how to protect and preserve the pregnancies. They believe that a woman is not supposed to disclose her conception in the first and second part of the trimester to anybody until the pregnancy becomes visible. Disclosure may lead to mysterious disappearance of pregnancy. As a result of that, pregnant women seek antenatal care in very late stages. This makes it difficult to detect and treat risk factors which can lead to Caesarean Section.

In the same vein, women are not supposed to disclose to anybody when labour just starts for fear of witchcraft acts that can bring about obstructed labour. As a result of that, women in labour seek obstetric care at the health facility when they have complications. Therefore, the Doctors have no option but to do a Caesarean Section.

Short Stature

Some of the women who under go Caesarean Section are of short stature. Their height is less than 1.5 metres and their size of shoes is less than size 4. Short stature women have usually reduced pelvic diameters leading to cephalo-pelvic disproportion and obstructed labour. In such a case, the only way to save the life of both the mother and the baby is by Caesarean Section delivery.

Personal Preference to Caesarean Section

Some women especially those who are literate prefer to go for Caesarean Section to having spontaneous delivery even though there is no obstetrical or medical indication. Some women feel that there is less pain in Caesarean Section delivery than in spontaneous vaginal delivery. Other women believe that vaginal delivery loosens their vaginal muscles which would later interfere with sexual intercourse. This is very common among the women of high class. Women who are HIV positive also opt for Caesarean Section for fear of transmitting the virus to the baby during normal vaginal delivery ([http;//www.blackwe//publishingcomm).

Heredity and Environment /Childhood diseases

The development of a female pelvis is influenced by heredity and environment (nutrition, work load and disease). It is seen that in under developed countries like Zambia and especially in rural communities like Mbala, childhood disease involving the bones due to lack of vitamin D is common, for example, rickets which causes flattening of the pelvis in the anterior-posterior diameter. Such conditions predispose women to cephalo-pelvic disproportion and obstructed labour leading to Caesarean Section delivery.

Convenience

Convenience is also another factor for the increase in the rates of Caesarean Section deliveries. Doctors and nurses feel they do not have to spend endless hours in the delivery room. They would rather perform Caesarean Section which is quicker than waiting for longer hours for a normal vaginal delivery. (http;//www.llen.orglellen/1feb2003])

Physician Factor

Some doctors feel Caesarean Sections are more necessary than other doctors in order to prevent malpractice.

Foetal Monitoring

Stanton, (1990), noted that foetal monitoring is one of the most recent advances in medical technology.

Although the monitors are supposed to help the doctors, they often cause false alarm and lead to a number of unnecessary caesarean sections. (http://www.answer.com/main/websmastersJsp).

Lack of Skilled Manpower

Normally all the health facilities are supposed to be manned by qualified staff. This is not the case in Zambia especially in rural areas where non-midwives conduct deliveries in health institutions. They end up mismanaging the cases which end up into Caesarean Section deliveries (http: //www. maito: bulletinho.intunskilledmanpower].

Most health facilities lack equipment for conducting difficult vaginal deliveries. This leads to women having complicated labour and ending up with Caesarean Section.

In most learning institutions, Caesarean Sections are performed for training purposes, thus, to teach skills of Caesarean Sections to medical students during their obstetric experience.

1.4.1 ECONOMIC FACTORS

Poverty

The majority of people in Mbala are not in formal employment. This situation entails that the majority of the people are poor especially women. The pregnant women have no money to pay for laboratory investigations at the hospital so that risk factors or conditions could be identified and be treated early. In addition, women from very far places have no money to use for transport to enable them access and afford health services.

As a result of poverty many young girls are dropping out of school. In order to earn a "descent living," young girls end up exposing themselves to early sexual act which results in early pregnancy. Early pregnancy predisposes them to obstetric complications which are dealt with by Caesarean Section.

DISEASE RELATED FACTORS

Some diseases have no effect on the mode of delivery of the women, while others do. The conditions that have an effect on the mode of delivery of the women include obstetric emergencies such as eclampsia and ante partum haemorrhage (severe). Some conditions may need planned Caesarean Section interventions though they are not obstetric emergencies. These include some of the breech presentation and previous Caesarean Section deliveries, (Myles 2005 p456).

Of late, HIV /AIDS infected mothers are advised to opt for caesarean sections to prevent transmission of the virus to the babies during vaginal deliver, (WHO 2004 P15).

1.4.2 SERVICE RELATED FACTORS

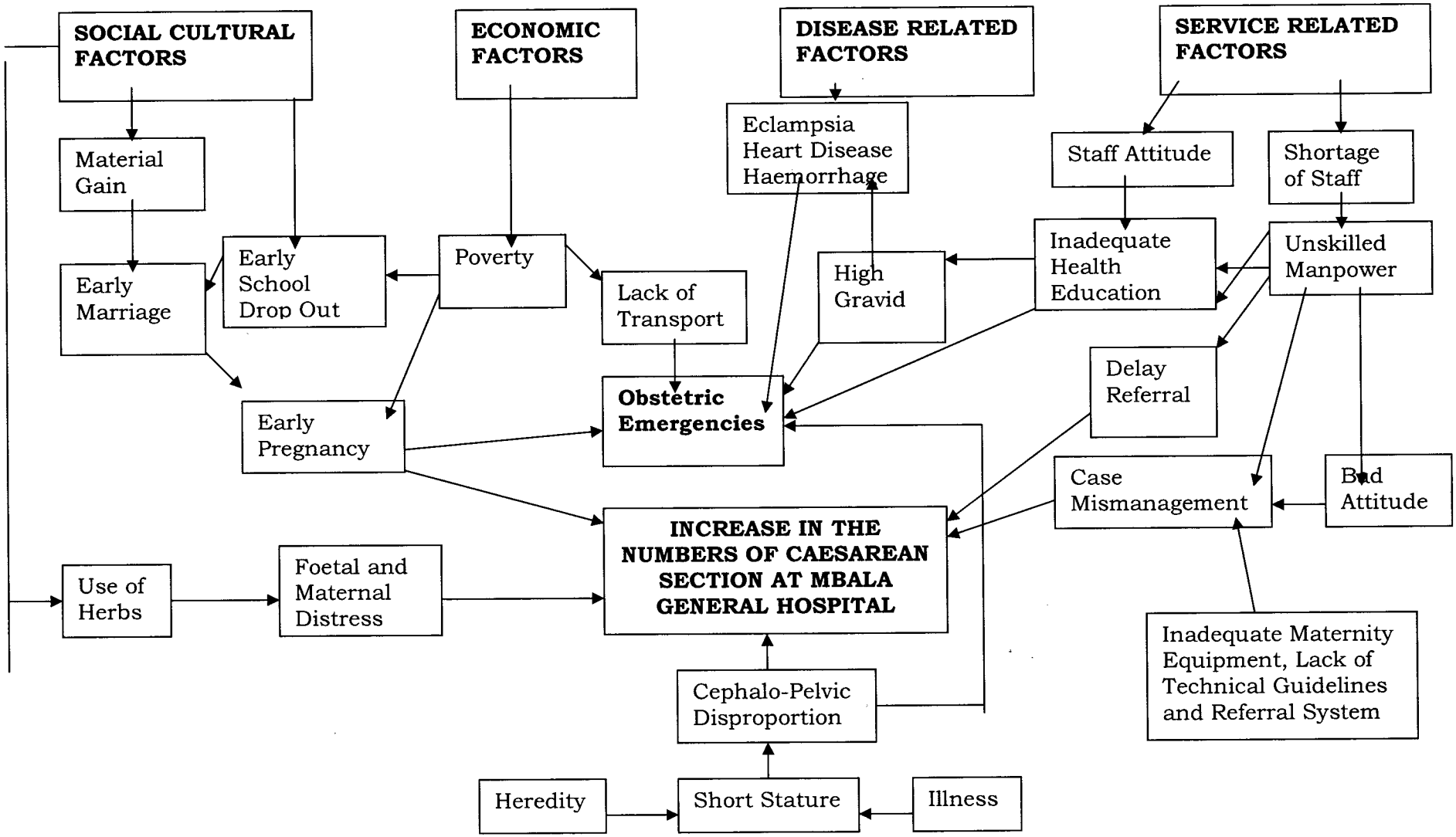
Late Referral

Pregnant women who need care are referred to the appropriate level of care late. This is due to inability for the carer or health care provider to recognize the danger sings of pregnancy. Sometimes, there could be no transport to transport the woman to the clinic. There could also be a delay in making a decision to refer the woman to the hospital. Poor staff attitude also contributes to late referral. All these worsen the situation or condition of the women leading to Caesarean Section.

Malpractice Suit and Insurance

Kolata, (2004), stated that, legal suite against malpractice and insurance has greatly influenced the high rate of Caesarean Section deliveries. In most developed countries, most obstetricians attempt to avoid infant mortality and malpractice suits. They opt for Caesarean Section at the first signs of foetal distress so that they could bring live babies in to the world, (http://www..answer.com/main/records).

TABLE 4: DIAGRAM OF PROBLEM ANALYSIS



1.5 JUSTIFICATION

Global literature review such as increased epidural anaesthesia (Lengng and Jean, 1998). Regionally, Staton (2002) cited female genital mutilalatins as a reason for increased Caesarean Section operations Stanton, (2001), stated that 45% of the deliveries in developing countries are by Caesarean Section deliveries.

Coming nearer home, in Zambia, no studies have been conducted in this area thus creating a gap in knowledge, which needs to be filled in.

Despite putting up measures by the three health management teams, there has not been any marked improvement in the reduction of numbers of Caesarean Sections at Mbala General Hospital. So far no one has done any research in the area to come up with the basis for reduction of Caesarean Sections at the place. Therefore, I feel it is very important for me to carry out a research in order to establish the real contributing factors to the increasing numbers of Caesarean Section deliveries at Mbala general hospital. This study will provide a body of knowledge that is currently lacking on the above phenomena.

The result of the research would be used by the Government and other stakeholders to reduce the numbers of Caesarean Section deliveries at the institution without compromising the quality health care being provided.

Objective

Something one works hard to achieve (Long man Active Study Dictionary, 2004).

1.5.1. General Objective

To identify factors that is associated with the high proportion of caesarean sections among childbearing aged women at Mbala General Hospital and to make recommendations to all the stakeholders for appropriate action.

1.5.2. **Specific Objectives**

i). To identify cultural practices that may be associated with high proportion of Caesarean Section deliveries.

ii). To assess how the attitude and knowledge levels of women concerning pregnancy, labour and delivery contribute to the increased numbers of Caesarean Section deliveries.

iii). To identify service factors that may contribute to increased numbers of Caesarean Sections.

v). To utilize the findings to develop recommendations to all the stakeholders for appropriate action.

1.5.3 HYPOTHESIS

Hypothesis is a prediction, usually a statement of predicted relationship between variables (Polit, and Beck, 2006, P.498).

In this study, the hypothesis is inadequate knowledge on causes of Caesarean Section deliveries and poor handling of Obstetric Emergencies increase the chances of Caesarean Sections deliveries performed at Mbala General Hospital.

1.6. STUDY VARIABLES

A Variable

Is a characteristic or attribute of a person or object that varies (i.e. takes on different values) within the population understudy e.g. body temperature, age, heart rate (Polit and Beck, 2006, P. 498).

Dependent Variable

Is the outcome variable of interest, the variable that is hypothesized to depend on or be caused by another variable (called the independent variable), sometimes referred to as the criterion variable (Polit and Beck, 2006 P. 498).

This is a variable used to describe or to measure a problem under study. In this study, increased number of Caesarean Sections at Mbala General Hospital is the dependant variable.

Independent Variable

Is the variable that is believed to cause or influence the dependent variable (Polit and Beck, 2006 P.501). These are variables used to describe or measure the factors that are assumed to cause or influence the problem under study.

In this study the independent variables are indicated below: -

- Level of knowledge.
- Socio-economic factors.
- Cultural beliefs and practice.
- Disease factors.
- Attitude

TABLE 5: VARIABLES AND CUT OFF POINTS

RIABLE	INDICATOR	CUT OFF POINTS	NUMBERS
OW DGE	HIGH LEVEL	Respondents who are well informed about the availability of antenatal and obstetric services, can define, state when to attend and state what takes place at the antenatal clinic. Correct responses to 6 – 8 knowledge questions	13 - 20
	MEDIUM LEVEL	Respondents who are aware of the existence of the services but have little insight. Correct responses to 4 – 5 knowledge questions	13-20
	LOW LEVEL	Respondent who are ignorant about the services. Cannot say when one requires to go to the health centre for antenatal services and are not aware of what is done there. Correct responses to 1 – 3 questions on knowledge and below	13-20

ARIABLE	INDICATOR	CUT OFF POINTS	NUMBERS
TITUDE	VERY POSITIVE	Respondents who perceive the nurses' attitude as being very acceptable and feel very encouraged to continue utilizing antenatal and delivery services. 4 to 5 correct responses to attitudinal questions	21 – 25
	POSITIVE	Respondents who perceive nurses' attitude as barely acceptable and are willing to continue using antenatal and delivery services 2 – 3 correct responses to attitudinal questions.	21-25
	NEGATIVE	Respondents who perceive nurses' attitude as bad and feel it discourages women to come for antenatal and delivery services. 0 –1 correct responses to attitudinal questions	21-25

RIABLE	INDICATOR	CUT OFF POINTS	NUMBERS
RACTICE	GOOD	Respondents, who conceive at the right age, seek antenatal care early, seek medical care early, go to the hospital for delivery without delay and do not use any form of traditional herbs whilst pregnant. Correct response to 3 – 7 practice questions	26-34
	POOR	Respondents who do not book early for antenatal care, no regular ant natal visit (at least 4 times during the pregnancy that lead to caesarean section delivery).Poor health seeking behaviour and uses traditional herbs to facilitate labour. Correct Responses to 0-2 questions on practice	26-34

1.7 OPERATIONAL DEFINITIONS

Caesarean Section

It is the operation procedure for delivery of a child through cutting of the abdominal wall of a pregnant woman.

Distance

The amount of space between two places, of which in this study is between community and health facility.

Obstetric Emergency

Life threatening conditions in pregnant women that need urgent intervention to save life.

Herbs

Traditional medicine used by women in labour in order to facilitate labour.

Early Pregnancy

Pregnancy conceived by a woman below the age of 18 years.

Child Bearing Aged Women

Women between the age of 15 years and 45 years old.

Case Management

Managing cases not in line with laid down standard procedures or guidelines.

Unskilled Manpower

People who work in the Labour ward and who have not specialized in delivering women. They are not skilled or competent in the art of midwifery.

Negative Attitude

Unaccepted behaviour of the health care provider

Knowledge

Refers to information needed and acquired by pregnant women in relation to maternal child health activities or antenatal care.

CHAPTER 2

2.0. LITERATURE REVIEW

INTRODUCTION

Caesarean Section is the procedure for the delivery of a baby through cutting the abdominal wall of a pregnant woman. It is a major operation that is necessary when specific medical and obstetric indications are present in order to save the life of the mother and or that of the baby. The common types of Caesarean Section deliveries performed are lower segment and classical caesarean sections.

The most common indications for performing caesarean sections include obstructed labour, severe pre eclampsia, eclampsia, breech presentation, ante partum haemorrhage and previous Caesarean Sections. Caesarean Sections carry some risks which include, post Caesarean Section wound infection and other blood borne pathogens like Hepatitis B, C, HIV / AIDS. These lead to higher maternal morbidity and mortality rates.

The initial intentions for Caesarean Section were good but it was discovered that some people did it without the Obstetric or Medical indications. It then became a source of concern. This is in line with WHO report (2000), which recommended that 5% of all deliveries may be through Caesarean Sections. Where Caesarean Section deliveries exceed 10%, it is indicative of inappropriate use of the procedure which needs investigations.

Despite the above recommendation by WHO, there is still a steady increase in the numbers of Caesarean Sections performed worldwide inclusive of the developing countries in Africa (WHO Report, 2005.p.96). Mbala is one of the seventy three districts in Zambia and is found in Africa. The District has not been spared from the steady increase in the numbers of Caesarean Sections deliveries.

Statistics reflected in table 2 show the magnitude of Caesarean Sections performed at Mbala General Hospital.

TABLE 5: NUMBER OF CAESAREAN SECTIONS PERFORMED YEARLY AT MBALA GENERAL HOSPITAL (2001– 2005)

YEAR	NUMBER OF DELIVERIES	TOTAL NUMBER OF CAESAREAN SECTIONS	PERCENTAGE (%)
2001	653	184	28%
2002	702	151	22%
2003	721	184	26%
2004	914	268	29%
2005	826	264	32%

Source :(**Mbala General Hospital Health Information Management System 2001-2005)**

Table two shows an increase in Caesarean Section deliveries performed at Mbala General Hospital. Statistics show a 4% increase between 2001 and 2005. The rise continued to 10% magnitude between 2002 and 2005 in Mbala

2.1. GLOBAL PERSPECTIVE

There has been a systematic and constant knowledge update on the contributing factors to an increased rate of Caesarean Sections in Europe, America and Asia. Walker et al, (2002) study on the promotion of private sector on obstetric practice in Chile. The study revealed an increase in numbers of Caesarean Section delivery because obstetricians in private practice find it convenient on their part. Quick Caesarean Section deliveries are less likely to interfere with their work load or their leisure time than spending several hours in hospital awaiting a spontaneous vagina delivery.(http://www.blackwellpublishing .com/).

In another related study, Winners, (2002) discovered that doctors hold an authoritative position in the society which gives weight and power to their opinion. Doctors easily override the woman's opinion, desire and rights concerning their mode of delivery, (http://www.midwifreytoday.com/)

The two studies revealed the role obstetricians play to indirectly manipulate women on the mode of delivery in order to suite the doctor's work schedule. It also shows how much women are being intimidated over their own health.

Ontario Women's Health Council, (2002), survey showed an increase in number of caesarean sections in Canada is due to an increase in number of elderly women giving birth. There is also a growing reliance on the use of caesarean sections in obstetric care regardless of the condition of the mother and the baby. Caesarean Section delivery is opted for because it is used as a defensive practice resulting from fear of litigation on the part of the obstetrician. In reaction to increased rates of Caesarean Sections, WHO, (2000) conducted a global survey. The results of the survey suggested that high rates of Caesarean delivery does not necessarily indicate better prenatal care but is associated with harm.

The study further revealed that increased rates of Caesarean Section deliveries are associated with the following, improved surgical and anaesthetic techniques, increased number of women opting for Caesarean Section delivery, increased private obstetric hospitals which reflect complex social process, affected by status, family social pressure and legal systems.[http://www.jiradellen.org/ellen]

Another study was conducted in Athens by Villar, (2002). It revealed that women are told that Caesarean Section delivery is not harmful; it is painless and is convenient for both the mother and the obstetrician. Obstetricians opt for Caesarean Section delivery because the charges are high and it is profitable.

These study results show that women lack appropriate education concerning obstetric care hence increasingly opting for Caesarean Section delivery,
(http://www.udel.edu/anthro/krosenberg/davisfloydrituals.pdf.).

Leung and Jam (1998) did their studies in Hong Kong and Australia. They identified that increase in the rates of Caesarean Sections are due to the increase on the effects of the use of epidurals and labour inductions. Electronic foetal monitoring is also on an increase which is sometimes misinterpreted. It further revealed that the socio-economic, demographic and health indicators for the population contributes greatly to Caesarean Section delivery.
(http://www.blackwellpublishing.com).

In Australia, studies revealed that there is an increase in twin pregnancy which has risen from 21.1% to 47.5%. There is also an increase in very low birth weight babies. These two factors have contributed greatly to increased rates of caesarean section deliveries.
Stewart (2001), in her study in New Zealand revealed that the prime gravidae and the elderly women of above 40 years of age have also contributed to increased rates of Caesarean Section deliveries.

She further indicated that some hospitals and tertiary centres deal with obstetric and medical complications only. These cases inevitably end up in Caesarean Section deliveries.
The same study mentioned that there is a routine practice of once Caesarean Section delivery, always a Caesarean Section delivery for subsequent pregnancies by obstetricians. Women are not given trial of scar for the subsequent pregnancies,(http://www.blackwellpublishing.com)
Arnaldo (2006) carried out a study in Southern Brazil which indicated that the increase in the rates of Caesarean Sections was associated with social, economical and cultural factors.

Misuse of medical technology during labour and delivery was also noted as a contributing factor. Many rich women opt for elective caesarean sections because of the increase of media and society influence.

These play a major role in women's perception especially for those women who have not experienced any delivery. They are influenced by what they see and hear from friends, press and family members.

With such an encounter, most women opt for caesarean section even if there are no medical or obstetric indications, (http;//www.nibgov/icd/od/toig/indexhtm)

2.2. REGIONAL

Stanton et al (2002) revealed that Caesarean Section birth rates are high and are on an increase in developing countries. 45% of births in developing countries are by Caesarean Section. This show that majority of the developing countries are experiencing increasing number of caesarean section birth rates from 1990s,
(http: //62:1937831publicationslemHJ 1060//o5./htm).

WHO (2006) study on female genitalia mutilation was conducted in Mali and Burkina Faso by Heidi et al. The study revealed that women who have undergone female genitalia cutting especially type 2 and types 3 are exposed to serious obstetric complications during labour which call for inevitable Caesarean Section as a mode of delivery.

A similar study was conducted in Sudan by Heike et al (2000) on female genital mutilation which revealed that 91-94% of the mutilated women developed menstrual, sexual, fertility and labour complications leading to Caesarean Sections. The study also mentioned that WHO and the local governments in respective countries put a ban on female genitalia mutilation. Despite the above measures people have increasingly conducted the procedure in secrecy even away from their countries of origin. As a result of this culture, religious and social behaviour, the rates of Caesarean Section delivery have continued to rise in these countries.

2.3. NATIONAL PERSPECTIVE

Stanton, (2001), in her study mentioned that Caesarean Section birth rates are high and are on the increase in the developing countries. Data presented that 45% of births in developing world is by Caesarean Section. This shows that the majority of countries experience increase in Caesarean Section birth rates from 1990s,
(http//62:1937831publicationsjemh/060/105/htm).

Though, Zambia is not mentioned by name in this study, it is also affected because it is one of the developing countries in the world.
So far, no studies have been conducted in Zambia to determine the contributing factors to increased numbers of Caesarean Sections in health institutions.
The reasons could be due to lack of funds, or it could be due to poor record keeping by hospitals to show that there is an increase in Caesarean Section deliveries in some hospitals. As for Mbala General Hospital statistical records of between 2001 and 2005 show the increased numbers of caesarean section deliveries performed.

2.4. CONCLUSION

From the literature review studies, one is able to deduce that there is an increased number of Caesarean Section deliveries which are not justifiable worldwide. Caesarean Sections deliveries are a source of major concern.

According to the literature review, the contributing factors to increased numbers of Caesarean Section deliveries are as follows: -

- Caesarean Section procedure is convenient for obstetricians.
- Women especially of higher class prefer Caesarean Section deliveries to vaginal delivery.
- There is an increase in twin pregnancy.
- Caesarean Section offers an avenue of escape for women who do not want to experience labour pains.
- Low socio-economic status women stand a higher chance of Caesarean Section
- Elderly prime gravidae and women of above 40 years of age.
- Obstetricians manipulate women to opt for Caesarean Sections.
- Influence from media, friends and family members.
- Female genitalia mutilations (cultural practices).
- Very young women.
- Lack of support from household welfare.

Zambia like many other sub-Saharan African countries suffers from high rates of Caesarean Section deliveries. Literature review revealed that many studies have been done in Europe, America and Asia on the subject. So far little has been done in Africa and nothing has been done in Zambia. This has created a gap in Zambia which has necessitated the urgent need for this study.

CHAPTER 3

3.0. RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

Research design is the overall plan for collecting and analyzing data, including specifications for enhancing the internal and external validity of the study. The design provides answers to the research questions or for testing the research hypothesis. It spells out the basic strategies that the researcher adopts to develop information that is accurate and interpretable (Polit and Beck, 2006, p345). In this study, a descriptive cross sectional non-experimental design was used.

Polit and Beck (2006, P. 498) defines descriptive research as "research that has its main objective as the accurate portrayal of the characteristics of persons, situations or groups and/or the frequency with which certain phenomena occur". It was descriptive as it involved systematic collection and presentation of data to get a clear picture of the situation .The study was non experimental because it did not involve any manipulation of the subject. It was taken in a natural setting.

This design was appropriate because it was practical. The subjects were captured during one data collection period and attrition or loss of subjects was prevented or avoided. It was feasible to manage with limited time and financial resources.

3.2. RESEARCH SETTING

The study was conducted in Mbala District in four areas namely Mbala General Hospital (Labour ward and children's ward), Tulemane Clinic, Masamba Rural Health Post and Kalambo Health Post.

The study sites were selected on the ground of convenience and accessibility. The rural sites were preferred to urban sites because many times such rural settings are under served. Mbala is a rural district in the Northern province with a population of 187,812 (CSO, 2000), projected at 3.2% district annual growth rate. 49.97% (938,497) are females.

Currently the District is saved by 16 rural health centres, one general hospital (2^{nd} level hospital) which also serves as a first referral facility in the district. There are 13 government health centres, 1 mission rural health centre and two special clinics under defence force (i.e. ZAF and ZNS). There are 192 outreach health posts in far remote places where health teams go to provide outreach health services covering promotive, preventive and curative services.

The District has 125 actively practising community health workers (CHWs) and 143 trained Traditional Birth Attendants (TBAs). All these are involved in promoting and providing health care services to the community especially the pregnant women and their children.

The District has thirteen (16) health centre committees and two health boards. These are the Mbala Hospital Board and district Mbala District Health Board. The boards are involved in promoting primary health care services through dissemination of health information to the community.

Considering the District population in relation to health services, 60% of the population has access to either an outreach or static health services within twelve (12) to twenty nine (29) kilometre radiuses.

3.3. STUDY POPULATION

Polit and Beck (2006 P. 506), defines study population as "consisting of total group of people or objects meeting the designated set criteria of interest to the researcher."

"Target population is the entire population in which the researcher is interested in and to which she/he would like to generalize the result of the study (Polit and Beck, 2006 P. 511).

The study population consisted women who had undergone Caesarean Section delivery at Mbala General Hospital between the year 2001 and 2005. The population was targeted on the basis of availability.

3.4. SAMPLE SELECTION

"Sampling is the process of selecting a portion of the population to represent the entire population" (Polit and Beck, 2006 P.512). The study used simple random sampling, which is a probability sample method so that the subjects are more representative of the entire population without biases. This method also gave subjects an equal chance of being selected and included in the sample so that the results could be more generalized to the target population.

3.5. SAMPLE SIZE

"A sample size is a subset of a population to participate in a study" (Polit and Beck, 2006 P. 512).

The sample size for the study was composed of 50 clients who have had caesarean section delivery at Mbala General Hospital between the year

2001 and 2005. The sample size was selected on the basis of availability of finances and on the limited time in which to conduct the study.

3.6. DATA COLLECTION TOOL

"Data collection is the material used for information needed to answer a research question" (Polit and Beck, 2006 P. 498).

A structured interview schedule was used for the study to collect data from respondents. The tool consisted of predetermined responses in most cases. This tool facilitated the asking of standardized questions to all respondents in the same order and manner. It also facilitated comparability across the respondents and allowed for generalization of results to the targeted population. The interview schedule contained questions on all the variables understudy. The suitability of data collection tool chosen was based on its easy administration to both the literate and illiterate. Questions which respondents misunderstood were clarified.

3.7. DATA COLLECTION TECHNIQUE

"Data collection technique is the method that a researcher uses to collect accurate and relevant data" (Polit and Beck, 2006 P. 500). A structured interview schedule was used to collect data. Respondents were given explanation with regard to the purpose of the study. They were asked to volunteer to participate in the study. The interview schedule was translated in to local language, which is Mambwe to ensure good understanding and interpretation of the questions. Interviews were conducted in a closed room to ensure privacy.

`For confidentiality, serial numbers were used on the interview schedule instead of names. Five respondents were interviewed each day. Each interview session lasted for about 30 minutes.

3.8. PILOT STUDY

"A pilot study is a small scale version of the actual study conducted with the purpose of testing and potentially refining the research plan. Sometimes it is called an exploratory study" (Polit and Beck, 2006 P. 500).

The pilot study was carried out at Mpulungu District Hospital which has similar characteristics of the actual population. The pilot study sample was 10% of the actual sample. A total sample of 5 women with previous Caesarean Section delivery performed at Mbala General Hospital between 2001 and 2005 were selected for the pilot study.

The major reasons for conducting a pilot study were to get the general overview of the likely responses to the actual study. It saved as a means of testing the instrument (questionnaire). This enabled necessary adjustment to be made to the questionnaire that was used in the major study.

3.9. VALIDITY

"Validity refers to the degree to which an instrument measures what it is intended to measure" (Polit and Beck, 2006 P. 512). Validity for this study was ensured by covering all important variables understudy in the interview schedule. Questions were clearly constructed with clear instructions and explanations. Pilot study was conducted and amendments to the instrument were done as necessary. Same questions were asked to each respondent in the same sequence with same translation to vernacular language when necessary to ensure respondents understood the questions.

3.10. RELIABILITY

"Reliability is the consistence or accuracy with which an instrument measures the attribute it is designed to measure" (Polit and Beck, 2006 P. 508).

The pilot study was done which helped to measure reliability. A structured interview schedule was used and all questions were standardized. Standardization was applied to time and place as well.

3.11. ETHICAL AND CULTURAL CONSIDERATION

Ethics can be defined as a "system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and social obligations to the study participants" (Polit and Beck, 2006 P, 499).

The research proposal was submitted to relevant authorities to seek permission to carry out the study. The research proposal was cleared by the supervising lecturer at PBN and a written consent from Mbala District Health Services. The results were handled in a professional manner by explaining the nature and purpose of the study to the respondents before the study.

Respondents gave their consent to participate in the study and they were assured of the maintenance of anonymity and confidentiality. No name was entered on the questionnaire.

3.12 PLAN FOR DATA ANALYSIS

Data analysis is the process of categorizing, scrutinizing and cross-checking the research data, (Polit and beck 2006 p.5004).

After data collection, the interview schedule was sorted out according to different contributing factors to increased numbers of Caesarean Sections deliveries. Data was plotted down on the data master sheet to allow easier analysis. Sorting out data was done on daily basis. The data was analyzed manually with the help of a scientific calculator. This assisted a full understanding of the data collected and familiarization with a method that could be used anywhere. Frequency table, cross tabulations and numerical descriptions were prepared to show the relationships of the variables.

3.1.3 PLAN FOR DISSEMINATION OF FINDINGS

Dissemination of findings entails the measures that would be undertaken to make known to the relevant authorities and study subjects what the study has measured.

A research report will be submitted to the Department of Post Basic Nursing in the school of medicine to serve as reference to other researchers. A copy will be sent to the Ministry of Health so that the findings could be used to implement partnership programmes with the community. Another copy will be sent to Mbala and Mpulungu DHMB to enable the instruction work effectively with community in order to reduce the increased numbers of Caesarean Section deliveries. Another copy will also serve as reference for other interested parties such as NGOs working in partnership with the community.

The study findings will also be discussed with community leaders like headmen and the directors for Mbala and Mpulungu DHMT.

CHAPTER FOUR

4.0. DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1. DATA ANALYSIS

Data analysis is the systematic organization and synthesis of research data and the testing of research hypothesis using those data (Polite and Beck, 2005).

The findings from the study are presented according to the sequence of the questions and sections in the questionnaire. Many of them are grouped together to give an overall picture of the phenomena under study. The findings have been presented in tables and pie charts. This has been done to assist in examining the relationships between the data collected. Data has been analyzed manually.

SECTION A

The table in section A represents the demographic data of the sample.

SECTION B

The tables and figures in section B represent the respondents' knowledge about the antenatal services

SECTION C

The tables in section C represent the attitude of nurses in the antenatal clinic.

SECTION D

The tables in this section represent the respondents' practice during pregnancy and labour.

4.2. PRESENTATION OF FINDINGS

TABLE 6: DEMOGRAPHIC DATA OF THE SAMPLE (n=50)

DEMOGRAPHIC DATA OF THE SAMPLE	FREQUENCY	PERCENTAGE (%)
AGE		
Less than 15 years	0	0
15 – 20	09	18
21- 25	10	20
26 – 30	08	16
31 – 35	07	14
36 – 40	05	10
41 – 45	11	22
TOTAL	50	100

DEMOGRAPHIC DATA OF THE SAMPLE	FREQUENCY	PERCENTAGE (%)
EDUCATIONAL LEVEL		
None	23	46
Primary	14	28
Secondary	05	10
College	04	08
University	04	08
TOTAL	50	100
OCCUPATION		
Subsistence farmer	15	30
Marketeer	07	14
Housewife	13	26
Professional	08	16
Prostitute	01	2
Dependent / None	06	12
TOTAL	50	100

DEMOGRAPHIC DATA OF THE SAMPLE	FREQUENCY	PERCENTAGE (%)
MONEY EARNED		
Below K50, 000	05	10
Between K51, 000 – K100, 000	07	14
Between K101, 000 – K200, 000	04	8
K201, 000 and above	18	36
None	16	32
TOTAL	50	100
MARITAL STATUS		
Married	30	60
Single	03	6
Divorced	12	24
Widowed	05	10
TOTAL	50	100
RELIGION		
Christianity	42	84
Islam	08	16
TOTAL	50	100
DENOMINATION	**FREQUENCY**	**PERCENTAGE**
Roman Catholic Church	12	24

Islam	08	16
UCZ	11	22
Watchtower	1	2
SDA	6	12
Methodist	7	14
Assemblies of God	4	8
Morovian	1	2
TOTAL	50	100

DISTANCE FROM THE NEAREST HEALTH FACILITY

Less than 2Km	10	20
2 – 11Km	21	42
More than 12Km	19	38
TOTAL	50	100

TIME TAKEN TO WALK TO THE NEAREST HEALTH FACILITY

Less than 30 minutes	10	20
30 minutes – 1½ hrs	16	32
More than 2 hours	24	48
TOTAL	50	100

HOW WOMEN ENTERED INTO MARRIAGE (n=47)

Forced	17	36
Willingly	30	64
TOTAL	47	100

REASONS FOR FORCED MARRIAGE(n=17)

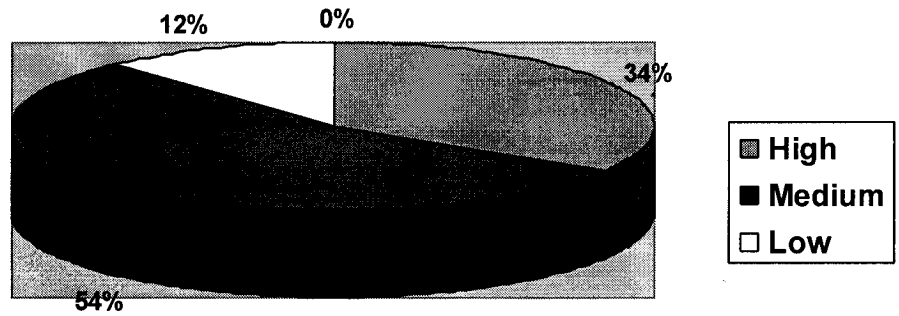
Economic factors	08	47.1
Socio-cultural factors	05	29.4

Religious factors	04	23.5
TOTAL	17	100
SIZE OF SHOES OF RESPONDENTS (n=50)		
Less than size 3	17	34
Between size 4 – 6	29	58
Above size 6	04	8
TOTAL	50	100
HEIGHT IN METRES	**FREQUENCY**	**PERCENTAGE**
Less than 1.5	31	62
More than 1.5	19	38
TOTAL	50	100

22% (11) of the respondents were aged between 41 and 45 while 18% (9) were aged between 21 – 25 years.

SECTION B

FIGURE1: RESPONDENTS' KNOWLEDGE ON ANTENATAL CARE, (n=50)



The general view is that 54 % (27) of the respondents had medium knowledge while 12 % (6) had low knowledge about antenatal care.

TABLE 7: RESPONDENTS' AWARENESS OF ANTENATAL CARE SERVICES (n=50)

AWARENESS OF ANC	FREQUENCY	PERCENTAGE (%)
Yes	41	82
No	09	18
TOTAL	50	100

The majority 82 % (41) of the respondents were aware of antenatal care services while18 % (9) were ignorant on the subject.

TABLE 7A: DEFINITION OF ANTENATAL CARE (n=50)

DEFINITION OF ANTENATAL CARE	FREQUENCY	PERCENTAGE (%)
Care given to pregnant women	37	74
Does not know	13	26
TOTAL	50	100

The table shows that the majority 74% (37) of the respondents were able to define antenatal care as care given to pregnant women while 26% (13) didn't know the definition.

TABLE 8: WHEN SHOULD A PREGNANT WOMAN BOOK FOR ANC (n=50)

WHEN SHOULD A WOMAN BOOK FOR ANC	FREQUENCY	PERCENTAGE (%)
Immediately one conceives	07	14
After 3/12 before 6/12	20	40
After 6/12 but before delivery	23	46
TOTAL	50	100

The table shows that the majority 46 % (23) of the respondents stated that booking for antenatal care can be done after 6/12 but before delivery while 40% (20) stated that booking can be done at 3/12 but before 6/12. 14% (7) stated that booking can be done immediately one conceives.

REASONS WHY MOTHERS ATTEND ANTENATAL CLINIC

TABLE 9: TO DETECT COMPLICATIONS (n=50)

TO DETECT COMPLICATIONS	FREQUENCY	PERCENTAGE (%)
Yes	07	14
No	43	86
TOTAL	50	100

Table 9 shows that 14% (7) of the respondents gave detection of complication as a reason for attending antenatal care while 86% (43) did not give it as a reason for attending antenatal care.

TABLE 9A: TO RECEIVE INFORMATION, EDUCATION AND COMMUNICATION (n=50)

TO RECEIVE IEC	FREQUENCY	PERCENTAGE (%)
Yes	24	48
No	26	52
TOTAL	50	100

48% (24) of the respondents stated that antenatal clinics are there for nurses to give IEC to pregnant women while 52% (26) did not know about that activity.

TABLE 9B: TO RECEIVE IMMUNIZATION (n=50)

TO RECEIVE IMMUNIZATION	FREQUENCY	PERCENTAGE (%)
Yes	15	30
No	35	70
TOTAL	50	100

30% (15) of the respondents stated that antenatal clinics are there for nurses to give immunizations to pregnant mothers while 70% (35) did not know about that activity.

TABLE 9C: WOMEN WHO KNEW AND THOSE WHO DIDN'T KNOW THE REASON FOR ATTENDING ANTENATAL CLINIC (n=50)

RESPONDENTS WHO DIDN'T KNOW WHY THEY ATTEND ANC	FREQUENCY	PERCENTAGE (%)
Don't know	04	8
know	46	92
TOTAL	50	100

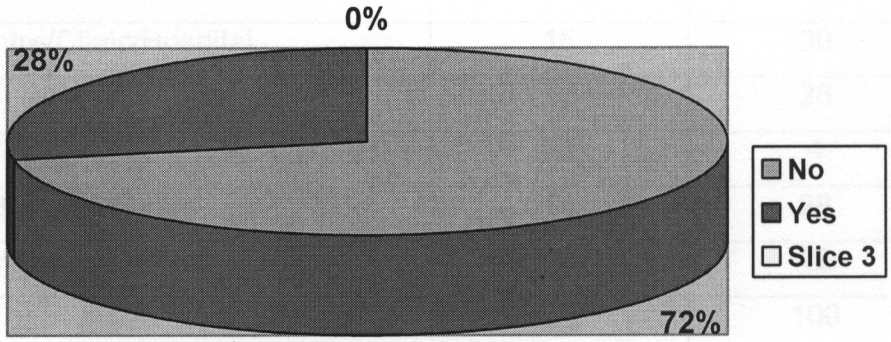
The table shows that 8% (4) of the respondents did not know the reasons for attending ANC while 92% (46) knew why they attended ANC.

TABLE 10 WHERE WOMEN CAN FIND ANTENATAL CARE (n=50)

WHERE TO FIND ANTENATAL CLINIC	FREQUENCY	PERCENTAGE (%)
Hospital	12	24
Health centre	15	30
Outreach sites	11	22
Traditional Birth Attendant's home	12	24
TOTAL	50	100

24% (12) of the respondents stated that ANC is found at the hospital and another 24% (12) stated that ANC is found at the TBA's home while 22% (11) of the respondents stated that ANC is found at outreach sites and 30% (15) stated that ANC is found at Health centre.

FIGURE 2: WHETHER RESPONDENTS HAD HEARD ABOUT DANGER SIGNS OF PREGNANCY (n=50)



The majority 72% (36) of the respondents had never heard about the danger signs of pregnancy while 28% (14) had heard about it.

TABLE 11: MENTION ANY ONE DANGER SIGN IN PREGNANCY (n=50)

MENTION ANY ONE DANGER SIGN IN PREGNANCY	FREQUENCY	PERCENTAGE (%)
Vaginal bleeding	09	18
Fever	01	2
Does not know	40	80
TOTAL	50	100

Table 11 shows that the majority 80 % (40) of the respondents did not know any one (1) danger sign of pregnancy ,while 18% (9) mentioned vaginal bleeding and 2% (1) mentioned fever as one of the danger signs in pregnancy.

TABLE 12: RESPONDENTS' SOURCE OF HEALTH INFORMATION (n=50)

RESPONDENT'S SOURCE OF HEALTH INFORMATION	FREQUENCY	PERCENTAGE (%)
Health centre/Clinic/Hospital	15	30
Friends	13	26
Radio	02	4
Elders in the community	14	28
Community Based Health Workers	06	12
TOTAL	50	100

Table 12 indicates that 30% (15) of respondents received their health information from the health centre/clinic/hospital while 28% (14) received their health information from the elders of their community.

SECTION C

ATTITUDE OF NURSES IN ANC CLINIC (n=50)

TABLE 13: WHETHER RESPONDENTS WERE HAPPY WITH THE RECEPTION AT THE HEALTH FACILITY

WHETHER RESPONDENTS WERE HAPPY WITH THE RECEPTION AT THE HEALTH FACILITY	FREQUENCY	PERCENTAGE (%)
Yes	25	50
No	25	50
TOTAL	50	100

Table 13 shows that 50% (25) of respondents were happy with the reception at the health facility while 50 % (25) showed displeasure.

TABLE 14: NARRATION OF BAD ENCOUNTER RESPONDENTS HAD WHEN BEING ATTENDED TO AT THE HEALTH FACILITY (n=34)

NARRATION OF BAD ENCOUNTER RESPONDENTS HAD WHEN BEING ATTENDED TO AT THE HEALTH FACILITY	FREQUENCY	PERCENTAGE (%)
The nurses were rude to the mothers	16	47
Nurses shouted at mothers	11	32
Too slow to attend to mothers	07	20.5
TOTAL	34	100

Table 14 shows that 47% (16) of the respondents stated that nurses were rude, 32% (11) were shouted at and 21% stated that nurses were slow to attend to them

TABLE 15: EFFECTS OF RESPONDENTS' BAD EXPERIENCE TO THE UTILIZATION OF THE HEALTH SERVICE (n=34)

EFFECTS OF RESPONDENT'S EXPERIENCE ON THE UTILIZATION OF HEALTH SERVICES	FREQUENCY	PERCENTAGE (%)
Discouraged	23	67.6
Encouraged	11	32.4
TOTAL	34	100

The table shows that 67.6% (23) of the respondents who had bad encounter were discouraged from utilizing the health services, while 32.4% (11) were encouraged to utilise the health services.

TABLE 16: RESPONDENTS' PERCEPTION OF NURSES'S ATTITUDE TOWARDS MOTHERS ATTENDING ANTENATAL CLINIC (n=50)

RESPONDENT'S PERCEPTION OF NURSES'S ATTITUDE TOWARDS MOTHERS ATTENDING ANTENATAL CLINIC	FREQUENCY	PERCENTAGE (%)
Very good	06	12
Good	17	34
Fair	09	18
Bad	18	36
TOTAL	50	100

The majority 36% (18) of the respondents perceived the nurses' attitude as being bad while 12% (6) perceived the nurse's attitude as being very good.

SECTION D

TABLE 17: AGE AT WHICH RESPONDENTS FIRST CONCEIVED (n=50)

AGE AT WHICH RESPONDENTS FIRST CONCEIVED	FREQUENCY	PERCENTAGE (%)
Less than 15 years	25	50
15 – 20 years	15	30
21 – 25 years	04	8
26 – 30 years	05	10
31 – 35 years	01	2
36 – 40 years	-	-
41 – 45 years	-	-
TOTAL	50	100

The table shows that 50% (25) of the respondents conceived at the age less than 15 years while 30% (15) at between 15 and 20 years 2% (1) between the ages of 31 – 35.

TABLE 18: GESTATIONAL AGE AT WHICH RESPONDENTS BOOKED FOR ANETENATAL CARE (n=50)

GESTATIONAL AGE AT WHICH RESPONDENT BOOKED FOR ANTENATAL CARE	FREQUENCY	PERCENTAGE (%)
1 – 3/12	05	10
4 – 6/12	21	42
7 – 9/12	15	30
Not at all	09	18
TOTAL	50	100

The table shows that the majority 42 % (21) of the respondents booked for ANC between 4 to 6 months of gestation period while 30% (15) booked between seven to nine months of gestation period 10% (5) booked between one to three months of gestation period. 18% (9) never booked for antenatal care at all. 90% (45) failed to book early for ANC.

TABLE 19: THE NUMBER OF TIMES THE RESPONDENTS ATTENDED ANTENATAL CLINIC (n=41)

NUMBER OF TIMES RESPONDENTS ATTENDED ANTENATAL CARE	FREQUENCY	PERCENTAGE (%)
Once	07	17
Twice	10	24
Thrice	11	26.8
Four times	09	22
More than four times	04	9.8
I TOTAL	41	100

Majority 26.8 % (11) of the respondents attended antenatal care three times while 24 % (10) attended twice. 22 % (9) attended four times while 17 % (7) attended once and 9.8 % (4) attended more than four times.

TABLE 20: REASONS FOR FAILING TO BOOK ERLY FOR ANCAND SO REVEAL PREGNANCY. (n=45)

REASONS FOR FAILING TO BOOK FOR ANC EARLY BY RESPONDENTS FOR FEAR OF REVEAL OF PREGNANCY	FREQUENCY	PERCENTAGE (%)
Fear of witchcraft	27	60
Religion	04	9
No reasons for late booking	14	31
TOTAL	45	100

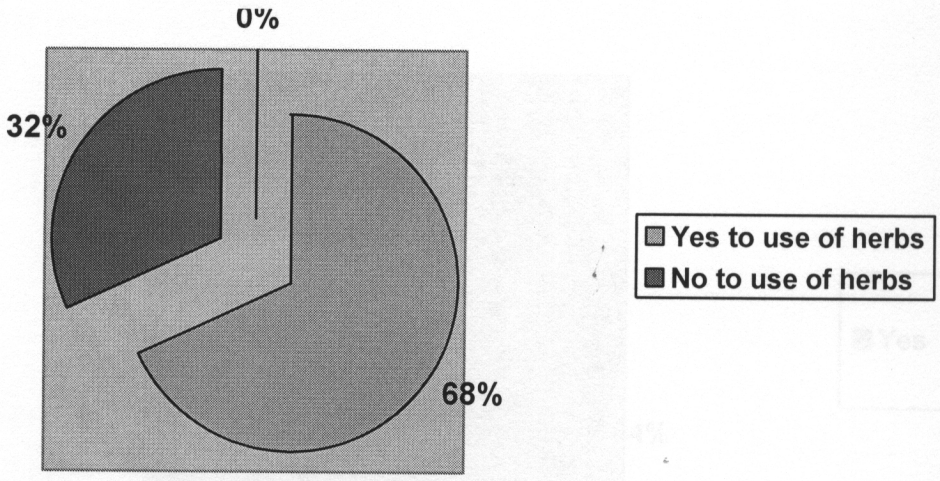
60% (27) of the respondents who failed to book early for ANC and so reveal their pregnancy early were afraid of witchcraft, while 9% (4) failed to reveal early due to their religion.31% (14) of the respondents did not have any reasons for not revealing their pregnancy early.

TABLE 21: THE PLACE WHERE RESPONDENTS FIRST SEEK HELP WHEN SICK (n=50)

WHERE THE RESPONDENTS FIRST SEEK HELP WHEN SICK	FREQUENCY	PERCENTAGE (%)
Health centre/hospital	12	24
TBA/CBW	05	10
Traditional healers	14	28
Self care	19	38
TOTAL	50	100

The table shows that the majority 38 % (19) of the respondents first seek self care when sick, 28% (14) seek help from tradition healers. 10 % (5) first seek help from TBA/CBW when they felt sick.

FIGURE 3: USE OF HERBS BY RESPONDENTS DURING PREGNANCY (n=50)



The general overview is that 68 % (34) of the respondents used herbs during pregnancy while 32% (16) of the respondents never used any herbs during pregnancy.

TABLE 22: REASONS WHY THE RESPONDENTS USED HERBS DURING PREGNANCY (n=34)

REASONS FOR USING HERBS BY RESPONDENTS DURING PREGNANCY	FREQUENCY	PERCENTAGE (%)
To prevent abortion	06	17.6
Prevent witchcraft	19	55.8
Facilitate labour	09	26.4
TOTAL	34	100

The table shows that the majority 55% (19) of the respondents used herbs to protect them from witchcraft, 26.4 % (9) used herbs to facilitate labour while17.6 %(6) used herbs in order to prevent abortion.

FIGUR 4: IF THE USE OF HERBS IS COMMON IN THE RESPONDENTS' COMMUNITY (n=50)

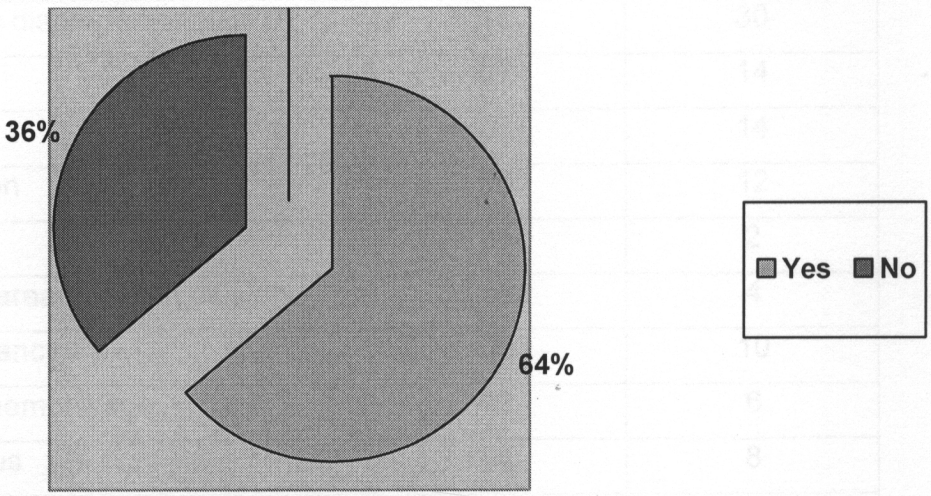


Figure 4 shows that the majority 64 % (32) of the respondents agreed that the use of herbs in their community was common, while 36 % (18) denied that the use of herbs was common in their community.

TABLE 23: THE RESPONDENTS' INDICATION FOR CAESAREAN SECTION DELIVERY (n=50)

INDICATION FOR CAESAREAN SECTION DELIVERY	FREQUENCY	PERCENTAGE (%)
Cephalo pelvic disproportion (CPD)	15	30
Eclampsia	07	14
Foetal distress	07	14
Malpresentation	06	12
HIV/AIDS	01	2
Previous caesarean section delivery	02	4
Multiple pregnancy	05	10
Antepartum haemorrhage	03	6
Ruptured uterus	04	8
TOTAL	50	100

Majority 30 % (15) of the respondents had CPD as an indication for caesarean section delivery. 14 % (7) was for eclampsia and another 14 % (7) was due to foetal distress. 12 % (6) was as a result of malpresentation while5 (10%) was due to previous caesarean section.

8% (4) was due to ruptured uterus and 6% (3) was due to ante partum haemorrhage. 4% (2) was due to previous caesarean section delivery while 2% (1) was due to HIV/AIDS.

TABLE 24: RELATIONSHIP BETWEEN KNOWLEDGE AND AGE (n=50)

LEVEL OF KNOWLEDGE	AGE							TOTAL
	LESS THAN 15 YEARS	15 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41- 45	
High	-	1 (11%)	5 (50%)	1 (12.5%)	4 (57%)	3 (60%)	3 (27%)	17 (34%)
Medium	-	5 (56%)	5 (50%)	5 (63%)	3 (43%)	2 (40%)	7 (64%)	27 (54%)
Low	-	3 (33%)	-	2 (25%)	-	-	1 (9%)	6 (12%)
TOTAL		9 (18%)	10 (20%)	8 (16%)	7 (14%)	5 (10%)	11 (22%)	50 (100%)

The table shows that the majority 64 % (7) respondents aged between 41 – 45 years had medium knowledge on antenatal care. Another 63 % (5) out of 8 of those aged between 26 – 30 years had also medium knowledge. 60 % (3) out of 5 were aged between 36 – 40 years had high knowledge of antenatal care.

Majority 33 % (3) out of 9 respondents between the age of 15 and 20years had low knowledge.

TABLE 25: RELATIONSHIP BETWEEN KNOWLEDGE LEVEL AND THE LEVEL OF EDUCATION (n=50)

LEVEL OF KNOWLEDGE	LEVEL OF EDUCATION					TOTAL
	NONE	PRIMARY	SECONDARY	COLLEGE	UNIVERSITY	
High	- 4 (17%)	4 (28.5%)	2 (40%)	3 (75%)	4 (100%)	17 (34%)
Medium	- 17 (74%)	6 (43%)	3 (60%)	1 (25%)	-	27 (54%)
Low	- 2 (9%)	4 (28.5%)	-	-	-	6 (12%)
TOTAL	23 (46%)	14 (26%)	5 (10%)	4 (8%)	4 (8%)	50 (100%)

Majority 100% (4) with University education and 75 % (3) with College education had high knowledge of antenatal care, while 74 % (17) with no education had medium knowledge. 9 % (2) of those with no education and 28.5 % (4) with Primary education had low knowledge of antenatal care.

TABLE 26: RELATIONSHIP BETWEEN KNOWLEDGE LEVEL AND OCCUPATION (n=50)

LEVEL OF KNOWLEDGE	OCCUPATION						TOTAL
	SUBSISTENCE FARMER	MARKETEER	HOUSEWIFE	PROFESSIONAL	PROSTITUTE	DEPENDANT	
High	6 (40%)	2 (29%)	1 (8%)	7 (87.5%)	-	1 (17%)	17 (34%)
Medium	8 (53%)	4 (57%)	10 (77%)	1 (12.5%)	1 (100%)	3 (50%)	27 (54%)
Low	1 (7%)	1 (14%)	2 (15%)	-	-	2 (33%)	6 (12%)
TOTAL	15 (28%)	7 (14%)	13 (26%)	8 (16%)	1 (2%)	6 (12%)	50 (100%)

The only prostitute (Sex worker) in the study had medium knowledge on antenatal care while 87.5 % (7) of the professionals had high knowledge. 33 % (2) of the dependants and 15 % (2) house wives had low knowledge on antenatal care.

TABLE 27: RELATIONSHIP BETWEEN KNOWLEDGE LEVEL AND DISTANCE FROM THE NEAREST HEALTH FACILITY (n=50)

LEVEL OF KNOWLEDGE	DISTANCE FROM NEAREST HEALTH FACILITY			TOTAL
	LESS THAN 2KM	2 – 11KM	MORE THAN 12KM	
High	7 (70%)	7 (33%)	3 (16%)	17 (34%)
Medium	2 (20%)	12 (57%)	13 (68%)	27 (54%)
Low	1 (10%)	2 (10%)	3 (16%)	6 (12%)
TOTAL	10 (20%)	21 (42%)	19 (38%)	50 (100%)

The majority 70 % (7) of the respondents who lived less than 2Km from the health facility had high knowledge while 68 % (13) who lived more than 12 Km had medium knowledge.

Another 16 %(3) who lived beyond 12Km from the health facility had a low knowledge on antenatal care.

TABLE 29: RELATIONSHIP BETWEEN ATTITUDE OF NURSES AND THE EDUCATION LEVEL OF THE MOTHERS (n=50)

ATTITUDE OF NURSES	EDUCATIONAL LEVEL OF THE MOTHER					TOTAL
	NONE	PRIMARY	SECONDARY	COLLEGE	UNIVERSITY	
Very positive	11 (48%)	6 (43%)	2 (40%)	3 (75%)	2 (50%)	24 (48%)
Positive	10 (43%)	8 (57%)	3 (60%)	1 (25%)	2 (50%)	24 (48%)
Negative	2 (29%)	-	-	-	-	2 (4%)
TOTAL	23 (46%)	14 (28%)	5 (10%)	4 (8%)	4 (8%)	50 (100%)

The table shows that the majority75% (3) of those who perceived nurses' attitude as being very positive had college education while another majority 60% (3) with secondary education regarded nurse's attitude as being positive and 29% (2) with no education regarded nurses' attitude as being negative.

TABLE 28: RELATIONSHIP BETWEEN NURSES' ATTITUDE AND THE AGE OF THE RESPONDENTS (n=50)

ATTITUDE OF NURSES	AGE OF MOTHER							TOTAL
	LESS THAN 15 YEARS	15 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41- 45	
Very positive	-	5 (56%)	5 (50%)	3 (38%)	4 (57%)	2 (40%)	5 (45%)	24 (48%)
moderate	-	4 (40%)	4 (40%)	5 (63%)	2 (29%)	3 (60%)	6 (55%)	24 (48%)
Negative	-	-	1 (10%)	-	1 (14%)	-	-	2 (4%)
TOTAL	-	9 (18%)	10 (20%)	8 (16%)	7 (14%)	5 (10%)	11 (22%)	50 (100%)

The table shows that the majority 57 % (4) of the women aged between 31 – 35 and 56% (5) of those respondents between the ages of 15 – 20 years regarded nurse's attitude as being very positive. Women aged between 26 – 30 years who were 63% (5) were the majority that stated nurses' attitude as being moderate. About 10 % (1) of the respondents aged between 21 – 25 years and 14% (1) of those aged between 31 – 35 years regarded nurse's attitude as being negative.

TABLE 30: RELATIONSHIP BETWEEN ATTITUDE OF NURSES AND MARITAL STATUS OF THE RESPONDENT (n=50)

ATTITUDE OF NURSES	MARITAL STATUS OF THE WOMEN				TOTAL
	MARRIED	DIVORCED	SINGLE	WIDOWED	
Very positive	17 (57%)	1 (33%)	5 (42%)	1 (20%)	24 (48%)
Moderate	11 (37%)	2 (67%)	7 (58%)	4 (80%)	24 (48%)
Negative	2 (7%)	-	-	-	2 (4%)
TOTAL	30 (60%)	3 (6%)	12 (24%)	5 (10%)	50 (100%)

The majority 57 % (17) of the married respondents perceived nurse's attitude as being very positive. 80 % (4) of the Widows perceived nurses' attitude as being moderate while 7% (2) were married women who perceived nurse's attitude as being negative.

TABLE 31: RELATIONSHIP BETWEEN THE LEVEL OF THE HEALTH PRACTICE AND THE AGE OF THE MOTHERS (n=50)

LEVEL OF HEALTH PRACTICE	AGE OF MOTHER							TOTAL
	LESS THAN 15 YEARS	15 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41- 45	
Good	-	2 (22%)	3 (30%)	4 (50%)	4 (57%)	4 (80%)	1(9%)	18 (36%)
Bad	-	7 (78%)	7 (70%)	4 (50%)	3 (	1 (43%)	10 (91%)	32 (64%)
TOTAL	-	9 (18%)	10 (20%)	8 (16%)	7 (14%)	5 (10%)	11 (22%)	50 (100%)

Majority of the women 80% (4) aged between 36 – 40 years had good health practices while 91% (10) of the women aged between 41 – 45 years had bad health practice.

TABLE 32: RELATIONSHIP BETWEEN THE HEALTH PRACTICE AND THE EDUCATION LEVEL OF WOMEN (=50)

LEVEL OF HEALTH PRACTICE	EDUCATIONAL LEVEL OF THE MOTHER					TOTAL
	NONE	PRIMARY	SECONDARY	COLLEGE	UNIVERSITY	
Good	4 (17%)	4 (29%)	4 (80%)	3 (75%)	4 (100%)	19 (38%)
Bad	19 (83%)	10 (71%)	1 (20%)	1 (25%)	-	31 (62%)
TOTAL	23 (46%)	14 (28%)	5 (10%)	4 (8%)	4 (8%)	50 (100%)

The majority 100 %(4) of the university level women had good health practice while 83 %(19) women without any education had bad health practice.

CHAPTER FIVE

5.0. DISCUSSION OF THE FINDINGS AND IMPLICATIONS TO THE HEALTH CARE SYSTEM.

5.1. INTRODUCTION

The discussion of the findings is based on the analysis of the data collected from an interview of fifty (50) women who have had Caesarean Section deliveries at Mbala General Hospital between the years 2001 and 2005 in the Northern Province of Zambia.

The sample was collected from Mbala General Hospital, Tulemane clinic, Masamba Rural Health Post and Kalambo rural Health Post. The main aim of the study was to determine the contributing factors to increased numbers of Caesarean Section deliveries at Mbala General Hospital. The discussion has been presented under demographic information of respondents, based on the knowledge, attitude and practices of the women towards the associated factors to increased numbers of Caesarean Section deliveries at Mbala General Hospital.

5.2. DEMOGRAPHIC INFORMATION OF RESPONDENTS

The data was collected from fifty (50) women who have had Caesarean Section delivery at Mbala General Hospital between the years, 2001-2005. The majority 22% were aged between 41-45 years, 20% were aged between 21-25years, 14% were aged between 31 – 35 years and10% were aged between 36 – 40 years old. This shows that the majority 22% of the women in the age group between 41 – 45 years were the most affected as they were in the risk child bearing age group (above 35 years) of developing pregnancy related complications that needed Caesarean Section delivery in the years between 2001- 2005.These findings are in agreement with Myles (2003 p 583) which states that women above the age of 34 years are most likely to develop pregnancy related

complications that end in Caesarean Section delivery. This was followed by the 20% of the women aged between 21 – 25 and 18% of the women aged between the 15 – 20 years who were the most sexually active and highly reproductive.

Majority 60% of the respondents were married, 24% were single, 10% were widowed and 12% were divorced, (Table 6). This was because the data were collected in a traditional setting where the main role of women is to get married and bear children as per tradition and norms of our society. The high numbers of respondents who were married also entails that girls are married off early so that they have a longer reproductive life. These findings are similar to CSO, (2002 p. 95) which revealed that marriage occurs relatively early in Zambia where by almost half of the women are married before the age of 18 years and 70 % are married by the age of twenty (20). The same findings stated that the age at which a woman first marries is important because it affects the length of time a woman is exposed to the risk of pregnancy during her child bearing age. The findings of the study showed that 64% women entered marriage willingly while 36% were forced in to marriage for different reasons such as economic, socio-cultural and religious factors (Table 6).

Mbala District has two high schools and a number of basic schools. Despite the availability of the schools in the area, a larger number of the population is still illiterate. Majority 46% of the respondents did not go to school, 28% went only up to primary level of education. 10% went up to secondary level, while 8% went up to college level and another 8% went up to University level respectively (Table 6). This could be attributed to the fact that traditionally, girls and women are disadvantaged from the beginning where education is concerned. This could be as a result of early marriages as earlier stated and there is a high rate of school drops out for a girl child. These findings are in line with CSO, (2002) report which stated that the education attainment varies greatly with the type of the residence and socio-economic situations. The rural women have substantially lower educational attainments than their urban counterparts.

Table 6 shows that the majority 30% of the respondents were subsistence farmers who were engaged in informal sector. This is in line with CSO, (2002), which revealed that most women of about 54% work seasonally in agriculture. This could be due to the fact that the study sample was collected from the rural women who did not have adequate education to enable them find formal employment rather than farming.

The result of the, study shows that majority 84% of the respondents were Christians while 16 % were Moslems. This could be attributed to the fact that Zambia was declared as Christian nation in 2000 by then the head of state. The majority 24% belonged to Roman Catholic Church. The reason could be that the Catholic Church was the first denomination to be established in the area and, many people were influenced to join this denomination.

In an effort to improve the utilization of health services, the health sector is working towards its vision of providing equity of access to cost effective, quality health care as close to the family as possible(CBOH,2002). In this study, table 6 shows that, 38% of the respondents lived more than 12km from the nearest health centre, while 42% lived between 2km and 11km and 20% lived less than 2km from the nearest health facility, thus meeting the vision of health reforms of bringing quality health care as close to the family as possible(CBOH,2000). Distance affects the accessibility and utilization of the health facility since most women had to walk on foot to access health care from the health facility. Time taken to access the health services discouraged some women to use the health facilities. Table 6 shows that it took 2hours for 28% of the respondents to walk to the nearest health facility while, it took 30 minutes to 1 hour for 32% of the respondents and less than 30 minutes for 20% of the respondents to reach the nearest health facility. As a result of that, pregnant women did not utilise antenatal care services fully. This prevented risk conditions and complications that led to Caesarean Section delivery in pregnant women to be diagnosed and treated early.

Women only went to the health centres when they had obstetric emergencies that inevitably ended up in Caesarean Section delivery.

The study also revealed that majority 62% of the respondents measured less than 1.5 metres in height. 34% put on size 3 shoes and below of the shoes, (table 6). With such measurement and size of shoes. It is believed that the pelvic diameters of such women are reduced making them prone to Cephalo-pelvic disproportion which is one of the indications and leading cause for caesarean section delivery. These findings can be supported by Myles (2004 p 259), which states that short stature of the women is associated with some complications of pregnancy and child birth.

5.3. DISCUSSION OF FINDINGS

5.3.1. KNOWLEDGE DATA

Antenatal care is a service that is provided to pregnant women in order to ensure that they are healthy during pregnancy, labour and thereafter with a successful pregnancy outcome. The successful outcome of pregnancy is a normal vaginal delivery to a mature and health baby. The period of antenatal and its care offer an opportunity for health workers and the pregnant women themselves to work together in order to ensure that the pregnancies are protected through thorough examination, screening and treatment of possible related dangers of pregnancy CSO, (2001 – 2002).

The findings of this study on knowledge show that the majority of the respondents 54% had medium knowledge while 34% had high knowledge and 12% had low knowledge (Figure1).

The majority 74% were able to define antenatal care as care given to pregnant woman before delivery while 12% were not able to define antenatal care services (Table 7A).

The study revealed that 8% of the respondents were not even able to mention anyone of the services (activities done) conducted at antenatal clinic, (9C). This could be attributed to lack of experience especially by the primigravidae. There could also be lack of health information given to the women. These findings support the hypothesis statement which states that inadequate knowledge on causes of Caesarean Section deliveries and poor handling of Obstetric Emergencies lead to increased number of Caesarean Section deliveries at Mbala General Hospital.

The study also revealed that 72% of the respondents denied having heard about the danger signs of pregnancy ;(Figure3)

About 80% of the respondents could not mention any one danger sign of pregnancy, (table11).

These results show the lack of emphasis on IEC by the health care providers. Sensitization of women on the danger signs of pregnancy is very important so that the risk conditions are diagnosed, and treated early in order to prevent complications that cause caesarean section delivery.

5.3.2. ATITUDE DATA

It is assumed that women who are educated or at least have gone higher in their education assimilate information better than those who are not educated at all or those who did not progress to higher level of education (CSO, 2002). It may well be assumed that the educated women have knowledge or better understanding of issues related to their pregnancy and that of their unborn babies. They will, as well, have good attitudes and practices that relate to any threat in their pregnancies or labour. By so doing certain factors associated with attitude that complicates pregnancy and labour can be prevented in order to minimize the chances of Caesarean Section deliveries.

The findings of the study revealed that 12% of the respondents rated nurse's attitude as being very good, 34% good, 18% fair and 36% bad; (Table 15). 56% of the 9 women aged between 15 and 20 rated nurses'

attitude as very positive while 14% out of 7 women between the ages of 31-35 rated the nurses's attitude as being negative; (table28). This could be attributed to the fact that most nurses are below the age of 35 years. Therefore, the women of this age range feel disrespected to be attended to by the young nurses. The findings are similar to that of Arnaldo, (2006) Which revealed that increase in Caesarean Section deliveries is associated with social, economic and cultural factors in Southern Brazil? (http://www.nibgov/icd/toig/indexhtm)

Table 14 shows that 32% of the respondents complained that nurses were rude to them, while 22% gave a complaint that nurses shouted at them and 14% indicated that nurses were too slow to attend to the mothers. With such a rating of nurse's attitude and the mother's experience, 67.6% of the women felt discouraged to utilize the health services again (Table 16).

These findings are similar to WHO, (1998) report on Safe Motherhood which revealed that women in many cultures are reluctant to use health services because they perceive health providers to be rude, patronising and insensitive. Therefore interaction with them can be threatening and humiliating.

Where women are discouraged to utilize health services, pregnancy related conditions are missed out in their early stages of their occurrence. These conditions, later on, become Obstetric Emergencies that lead to Caesarean Section deliveries. As long as there is a barrier between the nurses and the pregnant women, Caesarean Section deliveries will continue as a way of saving the endangered life of the women and the unborn foetus.

The negative attitude of nurses may be due to the shortage of the nurses and midwives in the health facilities. The shortage of nurses could have occurred because of exodus of nurses to other countries for greener pasture, deaths, voluntary separation exercise of 1998 and long sick leave. The few nurses that have remained fail to cope with the increased workload and they tend to project their anger towards their clients.

This study further established that majority 29% of the women who did not have education rated nurse's attitude as being negative. These findings are similar to the CSO (2002 p.142) which stated that women with no education are more likely to experience problems in accessing health care as compared to their counterparts with higher education.

5.3.3. PRACTICE DATA

The study revealed that 18% of the women did not attend antenatal care while 82% had made, at least, one visit (Table18). The role of antenatal care in reducing pregnancy complication is well known. These results are in line with WHO findings (1998) which reported that distance, lack of transport, costs and cultural factors make it extremely difficult for remote rural women to access antenatal care services.

It is emphasized that the quality of antenatal care is probably more important than its frequency. In a low socio-economic population, health providers must focus their attention on early detection of complications, efficient and effective treatment along with improving antenatal care attendance.

The success of antenatal programmes depends on the cooperation of women. One of the aims of increased satisfaction with antenatal care is to achieve better compliance with antenatal advice given to the mothers. Doing so helps to prevent some of the complications that lead to Caesarean Section deliveries.

In accordance with this study, only 10% women booked for antenatal care within twelve (12) weeks of gestation period (first trimester). The majority 42% booked between 16 to 24 weeks (second trimester) while 30% women booked within 28 to 36 weeks of gestation (third trimester) and 18% never booked at all, as illustrated in Table 18.

It would then appear that women of Mbala district come for their antenatal booking in the second and third trimester period, while on the other hand, women do not even attend antenatal care at all.

Many factors may influence the timing for the first visit to antenatal clinic in Zambia (Mbala). In some tribes in Mbala, pregnancy is kept a secret in the early months until when it becomes visible. This is done to prevent mysterious loss of pregnancy through witchcraft as stated by 60% of the respondents. 9% kept pregnancy a secret in the early months as part of their church doctrine of the religion (Islam); as illustrated in Table 19.This belief has contributed greatly to late booking for ANC by the women
Similar findings were reported in Harare, in which the median booking gestation was 29 weeks and a preliminary survey done to prepare for a clinical trial in antenatal care had indicated that dissatisfaction with service was one of the reasons for this late booking (Nylande and Adenkulnle2001 4:169-179)
Long distance and inadequate information on the importance of early antenatal booking has contributed greatly to late antenatal booking.

According to this study, the risk factors and complications associated with pregnancy which lead to caesarean section delivery are as per Table 23.
Cephalo – pelvic disproportion (CPD) rates the majority 30% followed by Eclampsia- 14%, then Foetal distress14% and Malpresentation 12%.
CPD was the leading cause for caesarean section delivery in this study probably because 80% of the respondents first conceived before 20 years of age as illustrated in table 17.These findings tally with WHO (1998) which state that physical immaturity increases the risk of obstructed labour.

The study results also show that 83% of the women did not have any education and they had bad health practices while majority 100% educated women with university education level had good health practices, (table 32).

This is similar to the findings of CSO, (2002 P.152) which stated that women's education is strongly associated with antenatal attendance and health practice.

The poor practices of the women during pregnancy and labour increase the chances of complications and lead to Caesarean Section delivery. Mbala, being in rural area, has some traditions, norms and customs just like any other districts in Zambia. Women in this area don't take pregnancy and labour to be a normal phenomenon. They engage in different unhealthy practices whenever they are pregnant and when they are in labour.

This study (Table 20) shows that the majority 38% of the respondents first seek self care when they fell sick. They prescribed self medication which is either over counter or traditional medicine. The self prescribed drugs were done without considering their side effects on the foetus or the mother. 28% of the women first seek care from the traditional healer, while 10% from TBA/CBW and 24% from the health facility. The study further showed that 68% of the respondents indicated that the use of herbs was common in their community. Figure3 shows that 68% of the women used herbs while pregnant and during labour and 32% never used herbs at all.

The women gave various reasons for the use of herbs whilst pregnant and during labour, see Table 22. The reasons being that 17.6% took herbs to prevent abortions, 55.8% was to prevent the disappearance of pregnancy through witchcraft and 26.4% was to facilitate labour.

Similar findings were reported by Maimbolwa (2004 p 12) in her study on Maternity Care in Zambia (Southern province). It revealed that pregnant women and the foetus were believed to be in a physically and spiritually weak state and thus more susceptible to illness, sickness witches and evil forces in the environment.

Therefore, Local traditional medicine is administered to the pregnant woman in order to protect the pregnant women and the foetuses. At times traditional medicine is administered to the pregnant women in order to prepare, widen the birth canal and to prevent prolonged or obstructed labour.

One of the factors that determine fertility in a population is the average age of the women at first birth. Women who marry early are typically exposed to the risk of pregnancy for a longer period which leads to Caesarean Section delivery. Early child bearing is also associated with increased health risk for both mother and child. This is in line with the CSO, (2002 p.25) report which revealed that marriage occurs relatively early in Zambia. Almost half of the women are married before the age of 18 .70% are married at the age of 20 though median age at first marriage is 18.1 years.

This study showed similar findings where majority 50% of the respondents conceived when they were less than 15 years old (Table 17). These early marriages predisposed them to obstetric complications which inevitably lead to Caesarean Section deliveries.

5.4 IMPLICATIONS TO HEALTH CARE SYSTEM

The study found out that 54% of the study respondents had medium level of knowledge in terms of the importance of attending ANC and danger signs of pregnancy, thus meeting objective number ii.

The study also discovered that 62% of the respondents had bad health practices .This conclusion was arrived at as some respondents did not attend ANC while others booked late.

This shows that the mothers were not practicing what they know. This finding meets objective i.

The study further revealed that 36% of the respondents rated the nurse's attitude as being bad. This finding meets objective number iii.

The above findings also are in line with the study hypothesis. As a result of that, the study hypothesis has been accepted.

These results show that poor practice and negative rating of the nurse's attitude of the respondents are due to long distance from health facility. This could have contributed to increased numbers of Caesarean Section deliveries at Mbala General Hospital.

These findings pose serious implications to nursing aspects and these areas are:

- Practice
- Research
- Education
- Administration

PRACTICE

The study revealed that 62% had bad health practices. They booked for antenatal care late and some never booked at all. This has been attributed partly to the poor attitude of the health care provider and inadequate knowledge on the part of the women.

The study further revealed that 68% of the women took herbs whilst pregnant and during labour which could have some side effect on Section deliveries. This implies that health care providers (nurses) should change their attitude for the better so that women could access the health services effectively without any barrier. Positive attitude influence good health practice among pregnant women. Nurses and Midwives should be aware of the cultural practices and beliefs that hinder expectant mothers from utilizing health services and these should be discouraged. The study further revealed that 68% of the respondents live beyond 12km from the nearest health facility. This implies that the health providers (nurses) should intensify out reach activities in order to deliver health care to those living beyond 12km.

The health care system should also develop a proper referral system which can enhance women to seek antenatal care early especially in rural community of Mbala

Health education should be given to the community in order to encourage traditional practices that promote the good health of the pregnant mother and discourage the harmful traditional practices such as early marrying off of a girl child, conceiving at an early age in life, late antenatal booking, and taking of herbs whilst pregnant and whilst in labour.

RESEARCH

The literature showed that many researches have been conducted globally, little has been done in Africa and no research has been conducted here in Zambia. There are various factors that contribute to increased number of Caesarean Section deliveries. This should act as stimulation to the researchers, practitioners and students in the health and other various fields to engage in research on the above subject.

EDUCATION

The study findings revealed that 12% of the respondents had low knowledge and 54% had medium knowledge on the risk factors associated with Caesarean Section delivery.

Knowledge on antenatal care on the part of the mothers is very important if the increased numbers of Caesarean Section deliveries have to reduce at Mbala General Hospital.

It has been realised that the higher the education level of the mother, the more likely they are to utilize the health services. This shows that the nurses are not doing much in terms of educating women on factors that lead to Caesarean Section delivery. This implies that nurses should take a leading role in educating pregnant women particularly those between the ages of 15 and 20 years who lack birthing experience and who can easily be misled about factors that lead to Caesarean Section delivery. Health care provider should also ensure that accurate information is transmitted to them. This will enable pregnant women to understand the importance of: -

- Booking for antenatal care early.
- Regular antenatal visits
- Seeking professional advice early.
- Avoid using unprescribed medicines.

This, therefore, means that health care providers should not only target pregnant women, but also all members of the community so that they collect important information and circulate it in order to promote good maternal and child health.

The nurses should advocate for adult literacy programmes where women should be taught how to read and write since the study has established that 46% never went to school while 28% went up to primary education level only . This will enable women to get first hand health information from the sources which will improve their knowledge and practice on their health.

ADMINISTRATION

The study has revealed that 67.7% were discouraged to utilize the health services again while32.4% were encouraged to utilize the health services again. This therefore, implies that Mbala General Hospital Administration, Mbala District Health Management Team and Mpulungu District Health Management Team should consider training their nurses in public relations so that their attitudes towards their clients change for the better. Good health provider's attitude encourages clients to seek health care.

5.5. CONCLUSION AND RECOMMENDATIONS

5.5.1. CONCLUSION

There are some intended changes which need to be made based on the findings of this study .Key people have been identified who have the necessary power to make these changes and these are:

- District Management Team.
- Health Centres
- Ministry of Health.

The study sought to determine the contributing factors to increased numbers of Caesarean Section deliveries at Mbala General Hospital.

It was established that there are many factors which contributed to increased numbers of Caesarean Section deliveries and these include the general practice of under utilisation of the health services, the level of education, the level of knowledge on antenatal care services available, lack of knowledge on danger signs of pregnancy, the nurse's negative attitude towards clients religion and bad health practice by the pregnant women.

The factors identified as poor health practices by pregnant women were: -

- Conceiving at an early age in life.
- Late antenatal booking
- Attending antenatal care less than 4 times.
- Taking herbs whilst pregnant and during labour.
- Self-medication.
- First consulting traditional herbalists when sick.

However, the findings of the study can not be generalised on to the general population because the sample size was small. This study was done as an academic exercise as a requirement to obtain a Bachelor of Science in Nursing Degree at the University of Zambia.

5.6.1 RECOMMENDATIONS TO THE HEALTH CENTRE STAFF

1 The nurses should ensure that IEC is given on the following subjects;

- Importance of early antenatal booking and follow up visits as per appointment.
- Danger signs of pregnancy
- Effects of self medication
- Effects of herbs in pregnancy
- Effects of teenage pregnancy
- Encourage the community to take back young girls to school in order to delay teenage pregnancies.
- Income generating activities to raise money to use for transport in cases of an emergency.

- . The presentation of information to clients should be modified by taking into consideration their background such as age and education level. They should also involve community-based caregivers such as Community Health Workers (CHWs) and Traditional Birth Attendants (TBAs), members of various Neighbourhood Health Committees (NHCs) and other Influential Community leaders such as chiefs, headmen and religious leaders to educate community members on the above subjects.

- Simple but meaningful audio-visual aids should be used together with sketches in form of drama to make the IEC understandable, interesting and memorable to the pregnant women and the community in general

- Nurses should improve on their attitude so that women can access care without attitudinal barrier from the nurses.

- Health centre staff should intensify and strengthen their outreach activities to reach the majority living more than 12km from the nearest health centre.

RECOMMENDATIONS TO THE DISTRICT

1). The communication and the referral systems should be improved and be strengthened in the district by ensuring that all rural health centres are connected to the radiophones. There is need for the District to have two ambulances to help with efficient transportation of Obstetric Emergencies. The road network should be improved to ease the movement of pregnant women who live beyond 12km when referral has been recommended to another level for further investigations and management.

2). The DHMT should work with other government departments especially the Ministry of Education to carry out massive health education campaigns in schools and higher learning institutions on family planning and on the effects of early marriage for the girl child. This will prevent early marriages and early pregnancies.

3). All health providers are to be trained in public relations so that the women could access health care without any barriers.

4) Extensive studies should be carried out further to assess the quality of antenatal care given in Mbala District.

5) Women should be encouraged to participate in the on going literacy Programmes in the district

5.6.2. RECOMMENDATIONS TO THE GOVERNMENT

1). The Ministry of Health should formulate deliberate Reproductive health Policy of training more midwives, gynaecologists and obstetricians. The government should improve the funding to training schools and the level of enrolment should be increased. Adequate midwives in the health Centres will facilitate the dissemination of IEC and will improve the quality of care given to pregnant women.

2). Formulation of legislation to increase the minimum age at first marriage.

3) The Government should work with other stakeholders to strengthen the promotion of girl child education and literacy training for rural women

4). The Government should consider providing another ambulance to Mbala District Health Management Board. This will help and make it easier for the transportation of pregnant women to the hospital without delay.

5). The government should consider expanding the mother's shelter so as to accommodate a lot of at risk women who are referred to Mbala General Hospital to await delivery.

7). The government should support and fund rural based research projects focussing on Maternal and Child Health (MCH). This will assist the government in formulation of national health policies and reduction of the high maternal and infant mortality.

8). Provision of improved, more accessible and available health services for women.

9). More health centres should to be built in the remotest areas.

5.7. PLAN FOR DISSEMINATION OF FINDINGS

Dissemination of research findings is a process by which scientific investigation results are carried across to ensure that utilization can occur. The finding from this research study will be disseminated as follows: -

- Copies of the research report will be given to the Ministry of Health, Post Basic Nursing Department, the UNZA Medical Library, Mbala General Hospital and Mbala District Health Management Board.

- A symposium will be held at a tripartite meeting (Mbala General Hospital, Mbala District Health Management Board and Mpulungu District Health Management Board).

The findings of the research project shall be presented and discussed in details with other health workers. This will assist in coming up with better ways of improving the knowledge, attitudes and practices of pregnant women towards factors that causes Caesarean Section deliveries. The improvement in the knowledge, attitude and practices of pregnant women will reduce on the Caesarean Section deliveries at Mbala General Hospital.

The researcher and MCH coordinator shall hold meetings with the trained Traditional Birth Attendants (TBAs), Community Health Workers (CHWs), Neighbourhood Health Committees (NHC) members, and other volunteer workers in the communities to discuss the research findings from this research study. This will assist to come up with interventions to be followed, which will reduce Caesarean Section deliveries.

5.8 LIMITATIONS OF THE STUDY

There were three major limitations which were encountered by the researcher in the research process.

1). The study was done within the busy school calendar.
This made it difficult to concentrate on the study at the expense of the courses.

2). Funds allocated for the project fell far below what was budgeted for to carry out and complete the project as required.

3). The study lacked adequate literature on the topic as no research has been done before focussing on the contributing factors to increased levels of caesarean section deliveries here in Zambia.

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6.0. APPENDIX 1

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

STRUCTURED INTERVIEW QUESTIONNAIRE

TITLE OF STUDY

A study to determine the contributing factors to increased numbers of Caesarean Sections at Mbala General Hospital

QUESTIONNAIRE NUMBER: _____

PLACE/LOCATION: _____

DATE OF INTERVIEW: _____

NAME OF INTERVIEWER: _____

INSTRUCTIONS

1. No name should appear on this Questionnaire.
2. For questions with no response write answers clearly.
3. Answer all questions
4. Put the letter "X" in the box next to your choice.
5. Respondents should be free to ask questions during the course of the interview.
6. Use a pen/pencil in the questionnaire.
7. All information provided will be held in strict confidence.

SECTION A DEMOGRAPHIC DATA

1. How old are you?
   a) Less than 15 years
   b) 15 – 20 years
   c) 21 – 25 years
   d) 26 – 30 years
   e) 31 – 35 years
   f). 36 – 40 years
   g) 41 – 45 years
   h) 46 – 50 years

2. How far did you go in your education?
   a) None
   b) Primary
   c) Secondary
   d) College
   f) University

3. What is your occupation?
   a) Subsistence farmer
   b) Marketeer
   c) House wife
   d) Professional
   e) Prostitute
   f) Dependent
   g) Others (Specify).....

4. How much money do you earn or make per month?
   a) Below K50 000.00
   b) K51 000.00 – K100 000.00
   c) K101 000.00 – K200 000.00
   d) K201 000.00 and above
   e) None

5. What is your marital status?

a) Married
b) Divorced
c) Single
d) Widowed

6. What is your religion? _____

7. What is your denomination? _____

8. How far is your home from the nearest health facility?

a) Less than 2 kilometres
b) 2 – 11 kilometres
c) More than 12 kilometres

9. How long does it take you to walk to the nearest health centre?

a) Less than 30 minutes
b) 30 minutes to $1^1/_2$ hours
c) More than 2 hours

10. How did you enter into marriage?

a) Willingly
b) Forced

If forced specify_____

_____

11. What size of shoes do you put on?

a) Size 3 and bellow

b) Size 4 -6

c) Size 6- above

12. What is your height?

(Researcher to measure the height of the woman).

a) 1.5metres and below

b) Above 1.5metres

SECTION B

KNOWLEDGE

13. Have you ever heard about ante natal services?

    a) Yes
    b) No

14. What is ante natal care?

    _____

    _____

    _____

15. When can a pregnant woman start attending antenatal care?

    a). Immediately a woman realises she has conceived
    b). Before three months
    c). After three months but before six months
    d). After six months but before delivery

16. Indicate why mothers should attend antenatal care.

    a). To detect complications in both mother and unborn baby.
    b). To receive health education on preparation for labour.
    c). To receive immunizations
    d). All of the above
    e). Does not know
    f). Any other reasons (specify)_____

17. Where can you find antenatal care?

a). Hospital
b). Clinic
c). Health centre
d). outreach activities' site
e). At the T.B.A's home
f). Others specify_____

18. Have you ever heard about danger signs of pregnancy?

a). Yes
b). No

19. Mention four danger signs of pregnancy.

_____

_____

_____

20. What is your source of health information?

a). Clinic
b). Friends
c). Radio
d). Your elders in the community
e). CBHW
f). Others (specify)_____

SECTION C

ATTITUDE

21. Are you happy with the reception of the nurses at the health centre?

a). Yes

b). No

22. How would you rate nurses' attitude to pregnant women seeking antenatal and obstetric care?

a). Very good

b). Good

c). Fair

d). Bad

23. State what you did not like about the way you were received at the clinic/hospital when you came to have a baby

_____

_____

_____

24. What did you like best about how you were treated?

_____

_____

_____

25. Describe in your own words, the effect that experience had on you in relation to utilizing the health services.

_____

_____

_____

SECTION D

PRACTICE OF WOMEN

26. At what age did you first conceive?

a) Less than 15 years
b) Between 15 – 20 years
c) 21 – 25 years
d) 26 – 30 years
e) 31 – 35 years
f) 36 – 40 years
g) 41 – 45 years
h) 46 – 50 years

27. At what gestational age did you first seek antenatal Care?

a) 1—3 months
b) 4---6months
c) 7----9months

28. Are there any traditions or beliefs attached to revealing of conception

a). Yes
b) No

If yes specify_____

29. Where do you first seek health care when you become sick?

a). Health centre/clinic/hospital
b). Traditional birth attendant
c). Traditional healers
d). Self care

30. How many times did you attend antenatal care during the pregnancy, before you had a caesarean delivery?

a) Once
b) Twice
c) Thrice
d) At least four times
e) More than four times
f) Not at all

31. Did you use any herbal medicines whilst pregnant or during labour?

a) Yes
b) No

32. If yes, give reasons why you used them.

_____

_____

33. Is the use of herbal medicine during pregnancy and during labour common in your community?

a). Yes
b). No

34. What was the indication for caesarean section?

_____

_____

6.2 APPENDIX II

WORK SCHEDULE

ACTIVITY	MONTH: 2006 - 2007											
	APR	MAY	JUNE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Literature Review												
Finalizing research proposal												
Clearance from the facilitator (PBN)												
Pilot study												
Data collection and tool amendment												
Data collection												
Data analysis												
Report writing												
Submission of the draft report												
Finalizing report												
Submission of the final research report												
Dissemination of final results												
Monitoring and evaluation												

6.3 GANT CHART

TASK	KEY PERSON	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Literature Review	Researcher	←	—	—	—	—	—	—	—	—	—	—	→
Finalizing Research Proposal	Researcher	←	—	—	—	→							
Clearance from the facilitator (PBN)	Researcher					↔							
Pilot Study	Researcher					↔							
Data Collection and tool amendment	Researcher					↔							
Data Collection	Researcher						↔						
Data Analysis	Researcher							↔	—	→			
Report Writing	Researcher									↔			
Submission of draft report to (PBN)	Researcher										↔		
Finalizing Report	Researcher										↔	—	→
Submission of final research report	Researcher Facilitator/ Supervisor											↔	
Dissemination of Results	Researcher												↔
Monitoring and Evaluation	Supervisor/Researcher	←	—	—	—	—	—	—	—	—	—	—	→

6.4 PPENDIX IV BUDGET FOR RESEARCH

ITEM/DESCRIPTION	UNITY COST K	QUANTITY	TOTAL COST K
a. Stationary			
Bond typing paper	30,000.00	3 reams	90,000.00
Note Books	10,000.00	2	20,000.00
Flip charts	35,000.00	1	35,000.00
Files	3,500.00	3	10,500.00
Pens	1,000.00	5	5,000.00
Pencils	400.00	2	800.00
Tippex	15,000.00	1 set	15,000.00
Stapler	25,000.00	1 set	25,000.00
Staples	5,000.00	1 box	5,000.00
Spiral binder	5,000.00	5	25,000.00
Perforator	25,000.00	1	25,000.00
Scientific calculator	75,000.00	1	75,000.00
Sub Total			331300.00
b. Typing Services			
Typing questionnaire	3,000.00	7 pages	21,000.00
Photocopying questionnaire	250.00	7 x 50 pages	87,500.00
Typing research proposal	3,000.00	40 pages	120,000.00
Photocopying research proposal	250.00	40 pages	10,000.00
Binding research proposal	8,000.00	3 copies	24,000.00
Typing research report	3,000.00	70 pages	210,000.00
Photocopying research report	250.00	70x 4 copies	70,000.00
Binding research report	30,000.00	5	150,000.00
Sub Total			**692,500.00**

c. Personnel	30,000.00	2 x 14 days	840,000.00
Lunch allowance (2 persons)	10,000.00	2 x 14 days	280,000.00
Research assistants			1,120,000.00
Sub total			
d. Miscellaneous	5,000.00	3	15,000.00
Diskettes	75,000.00	1	75,000.00
Bag for questionnaires	10,000.00	50	500,000.00
A token of appreciation to respondents			590,000.00
Sub total			
Contingency 10% of grand total			27 338. 00
Grand total			**2,733: 800**

BUDGET JUSTIFICATION

STATIONARY

Paper, notebook, pens and pencils are needed to document the necessary data starting from the project proposal, drafts, up to final copy, data collection and analysis. Correcting ink/tippex is important for correction of mistakes. The stapler, staples and files are needed to put the data that is written and collected together in an orderly manner. For example, the pages of a questionnaire are supposed to be stapled and secured in a file. A calculator is also needed during data analysis. And a strong bag will be used to carry the questionnaires during the study.

SECRETARIAL SERVICES

Funds are required for typing services. These services consist of photocopying, printing research proposal, questionnaires and the final research report.

CONTINGENCY FUND

The 10% of the total amount for the budget is added to the budget to cover unforeseen expenses being required during the research study.

MISCELLANEOUS

These include the diskettes, and a padlock which is to be used to store confidential information. All information from the respondents will be strictly confidential and will be kept under lock and key, hence the need for a padlock.

PERSONNEL

A research assistant needed for data collection.

Lunch allowance is needed because data collection takes 8-9 hours to collect. The homes are also far from the places where data would be collected which would make it difficult for one to go for lunch.

UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POST BASIS NURSING

TELEPHONE: 252453
TELEGRAMS: UNZA, LUSAKA
UNZALUZA 44370
FAX: +260-1-250753

P.O. BOX 50110
LUSAKA

18th August 2006

THE DISTRICT DIRECTOR 0F HEALTH
MBALA DHMT
MBALA.

U.F.S. THE DISTRICT DIRECTOR OF HEALTH
MPULUNGU D.H.M.T
MPULUNGU.

U.F.S. THE HEAD
DEPARTMENT OF POST BASIC NURSING
BOX 50110
LUSAKA.

Dear Sir/Madam,

RE: RESEARCH STUDY REQUEST TO COLLECT DATA

I am a fourth year student at the University Of Zambia, School of Medicine, and Department of Post Basic Nursing.

I am required to carry out a research study as a partial fulfilment for the award of Bachelor of Science in Nursing. My topic of study is "To determine contributing factors to increased rates of caesarean section at Mbala General Hospital."

I am hereby requesting for permission to collect data from women in the community who had caesarean section delivery at the above mentioned hospital between the year 2001 and 2005. Data collection starts from 28th August 2006 to 29th September 2006.

Thanking you in advance.

Yours Faithfully

Ngoma

NGOMA MISOZI ALUTULI

All correspondences to be addressed to the Director

In reply please quote
Ref. No. MDHB/_____

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
P. O. BOX 420075
MBALA
TEL: 450009 **FAX:** 450058
E-mail – mbaladhmt@zamtel.zm

17/08/06

MISOZI NGOMA ALUTULI
C/O MR. L. ALUTULI
MBALA GENERAL HOSPITAL
P.O. BOX 420059
MBALA

RE: DATA COLLECTION ON CAESAREAN SECTION IN MBALA DISTRICT

In reference to the above topic, I write to inform you that the District Management welcomes you to conduct data collection exercise on the said subject.

The topic of your choice ***"Study of factors contributing to high number of caesarean section deliveries"*** will greatly assist the District in the improvement of maternal health services delivery system.

Management wishes you all the best in your study and pledges to support were possible.

Yours faithfully,

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
MBALA DISTRICT HEALTH SERVICES
17 AUG 2006
DISTRICT DIRECTOR OF HEALTH
P.O. BOX 420075
MBALA

N. D. CHIBOLYO
MANAGER HUMAN RESOURCE & ADMINISTRATION
/FOR DISTRICT DIRECTOR OF HEALTH

All correspondences to be addressed to
The District Director of Health
.....

REPUBLIC OF ZAMBIA

MINISTRY OF HEALTH

MPULUNGU DISTRICT HEALTH SERVICES
P. O. BOX 420113
MPULUNGU
Tel: (260) 04 - 455104

27/08/06

MRS. NGOMA MISOZI ALUTULI,
UNIVESITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POST BASIC NURSING
P.O BOX 50110
LUSAKA

Dear Madam,

Re: **PERMISSION TO COLLECT DATA FROM WOMEN IN MPULUNGU DISTRICT**

Reference is made to your letter dated 18/08/06 concerning the above stated matter.

The District Health Office has no objection to grant you permission to go ahead.

Wishing you all the best in your study.

Yours faithfully,

Banda Mackson
MANAGER PLANNING & DEVELOPMENT (Ag)
For/THE DISTRICT DIRECTOR OF HEALTH

Item ID

~~DNS~~ 0001