

**ASSESSMENT OF THE BARRIERS TO THE UTILIZATION OF
ANTENATAL CARE SERVICES IN KAZUNGULA DISTRICT, ZAMBIA**

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A mini-thesis submitted in partial fulfilment of the requirements for the degree of Masters Degree in Public Health at the School of Public Health, University of the Western Cape

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Antenatal care, Barriers, Complications of pregnancy, Maternal mortality, Kazungula, Health seeking behaviour, Antenatal care Utilization, Community, qualitative research.

ACRONYMS & ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARV	Antiretroviral
CARMMA	Campaign for Accelerated Reduction of Maternal Mortality in Africa
CBO	Community Based Organization
CSO	Central Statistics Office
DSA	District Situation Analysis
DHMT	District Health Management Team
DHO	District Health Office
FBO	Faith Based Organization
FGD	Focus Group Discussion
FHI	Family Health International
HIV	Human Immunodeficiency Virus
MCH	Maternal Child Health
MDGs	Millennium Development Goals
MoH	Ministry of Health
NGO	Non Governmental Organization
TBA	Traditional Birth Attendant
UNFPA	United Nations Food and Population Agency
UNICEF	United Nations children Emergency Fund
UTH	University Teaching Hospital
USA	United States of America
WHO	World Health Organization
ZDHS	Zambia Demographic and Health Survey

DEFINITIONS OF TERMS

Terms used in this document were operationally defined as follows:

- *Safe motherhood*: Preventing maternal and infant death and disability through access to basic health care.
- *Complication of pregnancy*: Pathological processes occurring in pregnancy or puerperium requiring medical interventions.
- *Maternal mortality*: Death of a woman while pregnant, or 42 days after termination of pregnancy regardless of site and duration of pregnancy, from any cause related to or aggravated by pregnancy or its management (WHO, 1999)
- *Maternal mortality ratio*: Represents the risk associated with each pregnancy
- *Maternal mortality rate*: The measure of women's risk of dying from causes associated with pregnancy. In this document the mortality ratio and mortality rate are used interchangeably.
- *Lifetime risk of maternal death*: The probability of becoming pregnant and the probability of dying due to pregnancy over the reproductive years of a woman.
- *Early antenatal 'booking'*: Registering for first antenatal care services at 12 weeks gestation or earlier (Mathole, Lindamark, Majoko and Ahlberg, 2004; Overbosch, Nsowah-Nuamah, Van den Boom and Damngag, 2004).
- *Irregular antenatal attendance*: Refers to attending less than three antenatal appointments during the term of pregnancy.
- *Health seeking behaviour*: Refers to the sequence of remedial actions that individuals undertake to rectify perceived ill health
- *Professional delivery attendance*: The percentage of births that were attended to by a medically trained person, defined as a doctor, nurse or nurse-midwife.

- *Supervised deliveries/trained or skilled attendant at delivery:* The percentage of births that were attended to by a trained provider, defined as a doctor, nurse or nurse-midwife. The term "**skilled attendant**" refers exclusively to people with midwifery skills who have been trained to proficiency in the skills necessary to manage normal deliveries and to diagnose or refer complications to a higher level of care (WHO, 2003).
- *Traditional Birth Attendant;* A community based volunteer oriented in midwifery skills and is able to support antenatal care service and conduct deliveries.
- *Institutional Deliveries:* Facility-based when they occurred in a public medical facility (government hospital, government health centre, government maternity centre, other specific public sector facilities) or a private medical facility (mission hospital/clinic, other private hospital/clinic)
- *Scale.* Synonymous with attending antenatal care service.
- *Primegravidae:* Woman who has been pregnant for the first time.
- *Multigravidae:* Woman who has had two or more previous pregnancy.
- *Professional antenatal care:* The proportion of women that receive at least four antenatal care consultations during pregnancy from a medically trained person, defined as a doctor, nurse or nurse-midwife or clinical officer.
- *Professional Postnatal care:* The proportion of women seen at six weeks after delivery by a trained provider, defined as a doctor, nurse or nurse-midwife, clinical officer.
- *Perception:* Impressions or interpretation based on the understanding of something.
- *Experience:* Events regarded as affecting someone, the facts or processes of being affected.

ABSTRACT

Globally, 1600 women and over 5000 newborn babies die daily of preventable causes and over 90% of these deaths occur in developing world. An estimated 358000 maternal deaths occurred worldwide in 2008 with developing countries accounting for 99%. In Zambia, maternal mortality ratio has been estimated to be 591 deaths per 1 00,000 live births underscoring the great challenge posed by maternal and child health problems. At the same time, utilization of antenatal care services by pregnant women, supervision of deliveries by skilled person and postnatal care services is low in most regions of Zambia. Since professional attendance at delivery is assumed to reduce maternal and infant mortality, poor antenatal care (ANC) utilization may lead to increased infant and maternal mortality and morbidity.

This study sought to assess the barriers to utilization of antenatal care services in Kazungula district, Zambia. A qualitative exploratory study was used to uncover participants' experiences and perceptions on barriers to use of ANC.

Focus group discussions were used to gather information from primegravidae and multigravidae not attending or irregularly attending ANC services and from traditional birth attendants. In-depth interviews were conducted with key informants namely the health centre in-charge and leader of safe motherhood support group.

Data was analyzed through thematic content analysis. From the transcripts, patterns of experiences coming from direct quotes or through paraphrasing common ideas forming part of the themes were listed. Data from all the transcripts relating to the classified patterns were identified and placed under the relevant theme. Thereafter

related patterns were combined and listed into sub-themes. The analysis involved drawing together and comparing discussions of similar themes and examining how these relate to the variations between individuals and groups that assisted in understanding the phenomenon of interests.

The study revealed that utilization of ANC was impeded by multiple interrelated factors such as low socio economic and educational status of women, influence of the older generation, traditional and cultural practices. Previous negative experiences with health workers such as bad attitude of health workers and perceived poor quality of care were mentioned as factors that negatively affect utilization of ANC services. Other notable barriers were built in confidence resulting from previous safe deliveries, family size and competing priorities, fear of being tested for HJY and physical the accessibility.

The study recommends that the district and its partners address the barriers if efforts in safe motherhood will yield meaningful impact. DHMT in the long term plan needs to train and deploy skilled personnel to rural health centres. They should have a deliberate policy on rural incentives to motivate trained staff to remote areas. More health posts need to be built as a way of taking health care services as close to the family as possible. In addition, for the short term plan there is need to provide in-service training for staff on safe motherhood and circulate guidelines. Orient staff on focused antenatal care (FANC).DHMT should ensure continuum of, care by supporting adequate supplies, equipment, drugs and transport to the health facilities.

DECLARATION

I declare that this thesis "the Assessment of the barriers to the use of Antenatal care services in Kazungula district in southern province of Zambia" is my own work and that has not been submitted for any degree or examination in any other university and that all the sources I have quoted and used have been indicated and acknowledged by referencing.



Signed

Morgan Sakala

February 2011

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Table of Contents	Page no
Title page	I
Keywords	I
Abstract	v
Declaration	vii
Acknowledgements	vii
Table of contents	ix
Chapter One -Introduction	
1.1 Background	1
1.2 ANC services in Zambia	6
1.3 Problem statement	8
1.4 Rationale of the Study	10
1.5 Thesis outline	10
Chapter Two- Literature Review	
2.1 Introduction	12
2.2 Maternal mortality and access to ANC services	12
2.3 Benefits of ANC services	16
2.4 Determinants of health seeking behaviour	18
2.5 Barriers to ANC utilization	20
2.6 Summary of key issues/finding from literature review	24
Chapter Three- Methodology	
3.1 Introduction	25
3.2 Study setting	24
3.3 Aim of the study	26
3.4 Objectives	26
3.5 Study design	26
3.6 Study population	27
3.7 Sample size	27
3.8 Sampling procedure	28
3.9 Data collection	29
3.10 Data analysis	31

3.11 Validity and rigor	32
3.12 Study Limitations	33
3.13 Ethical statement	33

Chapter Four- Findings

4.1 Introduction	35
4.2 Background of the sample	35
4.3 Perceived benefits of using ANC	39
4.4 Influence of previous positive experiences	40
4.5 Competing priorities	41
4.6 Previous unfavourable experience with health workers	42
4.7 Ineffective health system	44
4.8 Physical barriers	45
4.9 Traditional beliefs and trust in indigenous knowledge	46
4.10 Perceptions on use of Trained Traditional Birth Attendants	48
4.11 Perceived mandatory HIV test	50
4.12 Timings in "Booking" for ANC	51
4.13 Attitude of male partners to their wives	52
4.14 Summary of the findings	53

Chapter Five: Discussion

5.1 Introduction	55
5.2 Perceived benefits of using ANC	55
5.3 Barriers to utilization of ANC services	56
5.4 Conclusion	61

Chapter Six: Conclusion and Recommendations

6.1 Introduction	63
6.2 Conclusion	63
6.3 Recommendations	64

<i>References</i>	67
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Aunex 1 Consent form	80
Aunex 2 Participant Information Sheet	82
Aunex 3 Interview Guide	86

CHAPTER ONE

INTRODUCTION

1.1 Background

Kazungula is a district in the Southern Province of Zambia. It shares international borders with Zimbabwe on the South-East, Botswana and Namibia on the South-West. The district stretches along the Zambezi River to share borders with Sesheke district to the west, Kaoma and ItezhiTezhi to the North West and Kalomo to the North. Kazungula is a rural district with a population of 120 351 on an area of 16,873sq kilometres (Kazungula Planning Office, 2006). The district is sparsely populated with a population density of 4.9 persons per square kilometer, and a population growth of 3.8%. The administrative centre of the district lies within Livingstone, the provincial capital. However, most of the government departments have started shifting to the border town site of Kazungula.

The study is based in two disadvantaged communities under Kauwe rural health centre catchment areas namely Nampuyani and Nazibula villages in Kazungula district. These are among the furthest outreach points for Kauwe rural health centre.

The purpose of the study was to explore the barriers to the utilization of antenatal care services. It was hoped that by conducting various interviews with participants, relevant barriers would be identified which would help District Health Management Team (DHMT) and other partners improve maternal and child health service delivery. Women would therefore not die due to childbirth because the majority of maternal deaths can be prevented or reduced if women have access to maternal and child health services during pregnancy, delivery and postpartum. This has been re-echoed by the

Ministry of Health during the launch of the Campaign for Accelerated Reduction of Maternal Mortality in Zambia (CARMMA) running with a slogan "Zambia cares: No woman should die while giving life" (MoH/UNICEF/AU, 2010).

African women within the reproductive age group (15 to 49 years) have the highest death risk from maternal causes than most women in the world. According to the African health monitor (WHO, 2004) the maternal mortality ratio in the African region is the highest in the world, estimated at 1000 pregnancy and childbirth related deaths per 100000 live births. Data indicates that the adult lifetime risk of maternal death in sub-Saharan African region is 1:31 compared to 1:4300 in developed countries (WHO/UNICEF/UNFPA/World Bank, 2010). Given the close link between maternal and infant health, perinatal and newborn mortality in the African region is very high estimated at 76 and 45 per 1000 live birth respectively (WHO, 2004). ANC is an important determinant of safe delivery and is one strategy for reducing maternal mortality (Nuraini & Parker, 2005). Although certain obstetric complications may not be predicted through ANC screening, women can be educated to recognize and act on danger signs that may lead to fatal conditions (WHO, 2004; WHO/UNICEF/UNFPA/World Bank, 2010). Progress to reduce maternal mortality in Africa has been very slow if not deteriorating in most African countries.

In Zambia, the lifetime risk of maternal death is 1 in 27; infant mortality is at 119 per 1000 live births while maternal mortality is at 1200 maternal deaths per 100,000 live births (UNICEF, 2008). Safe Motherhood indicators such as ANC coverage, institutional deliveries and postnatal coverage for Kazungula district have continued to fall since the year 2005. ANC coverage was 82% in 2005, 69% in 2006 and 67% in 2007 while supervised deliveries were 43% in 2005, 38% in 2006 and 38% in 2007.

Institutional deliveries and postnatal coverage have also remained poor. Institutional deliveries were 26%, 20% and 21% in 2005, 2006 and 2007 respectively while postnatal coverage was 49% in 2005, 44% in 2006 and 41% in 2007 (Kazungula District Health Office, 2007). There is therefore a need to carry out an in-depth study to ascertain the factors contributing to poor utilization of ANC services in Kazungula District.

Complications of pregnancy and childbirth are the leading cause of death and disability among women of reproductive age in developing countries globally and account for over 600,000 female deaths annually and 95% of these deaths occur in Africa (AbouZahr, 2003; Ashford, 2004; Luthra, 2005; WHO, 2004). The overall burden of pregnancy-related problems is substantially higher than the mortality burden. The World Bank (2006) estimates 20 million women endure life long disabilities such as pelvic pain, incontinence, obstetric fistula, anemia and infertility mostly in developing countries. It is suggested that for every woman who dies, approximately 30 or more suffer injuries, infection and disabilities in pregnancy or childbirth (AbouZahr, 2003; Ashford, 2004; Luthra, 2005; WHO, 2004).

In many settings, particularly in rural areas, many pregnant women fail to come for ANC until the second or third trimester (Chapman, 2003; Larsen et al., 2004; Miaffo et al., 2004) or may attend early and then fail to return (Myer & Harrison, 2003). Even in settings where ANC services are available and women have knowledge about the benefits of early ANC 'booking', many women make their first visit late in pregnancy and many attend ANC only once during an entire pregnancy (Mathole et al., 2004). In Zambia, the Ministry of Health recommends that in a normal pregnancy

the first antenatal visit should be in the first trimester, second visit in the second trimester and two visits in the third trimester (MoH, 2009). Despite these recommendations many women fail to attend ANC. Qualitative studies exploring the reasons for delayed or poor ANC attendance revealed a variety of factors such as cost of transport, late recognition/denial of pregnancy, reliance on traditional/tribal (herbal, spiritual) pregnancy beliefs, lack of perceived benefits, influence of partner and a dissatisfaction with the attitude of staff at antenatal clinics (Abrahams, Jewkes & Mvo, 2001; Chapman, 2003; Miaffo et al., 2004; Larsen et al., 2004), little is known about how pregnant women consider the use of ANC.

Kazungula District is experiencing low utilization of safe motherhood services. The District has failed to reach the 80% antenatal coverage target set by the Ministry of Health. The magnitude of the problem in the district has been highlighted in a number of quantitative studies (CSO, 2002; Kazungula Planning Office, 2005; Kazungula Planning Office, 2006), but these have failed to explain the barriers to acceptance and utilization of safe motherhood services. This study therefore assessed the barriers to use of ANC services. The findings of the study will help in planning interventions to improve the use of antenatal care services in the District.

The Kauwe rural health centre staff speculated that traditional beliefs and reliance on traditional herbal/spiritual pregnancy beliefs, illiteracy coupled with the introduction of user fees and long distances to the health facility were strongly linked to the negative pregnancy-related health-seeking behaviour observed in the area contributing to high mortality and morbidity. UNICEF (2008b) asserts that poor utilization of ANC services maybe associated with poor pregnancy outcome which reduces the

effectiveness of health interventions and makes life riskier leading to increased maternal and infant mortality and morbidity.

According to the Confidential Enquiry into Maternal and Child Health (CEMACH) report (2004), 20% of maternal deaths in the United Kingdom for the period 2000-2003 included women who received infrequent or late ANC (Lewis & Drife, 2004). The authors further highlighted late booking or poor attendance as a risk factor for maternal death. Rowe and Garcia (2003a) reported barriers to ANC use, particularly among marginalized minorities, as being of research interest and suggested that this topic should be explored from a woman's viewpoint as well as a professional service perspective.

In addition, it has been shown that improving access to ANC and assisted delivery by skilled health personnel can reduce maternal mortality (World Bank, 2006; WHO, 2004). Lewis (2001) for example, showed that 20% of women who died from direct or indirect causes booked for ANC after 22 weeks of gestation or had missed four routine ANC visits. Furthermore, it is becoming increasingly clear that ensuring full access to professional care to all pregnant women during the short period of labour and delivery is logistically and operationally unachievable in most developing countries and as such improving pregnant women's access to ANC becomes a more realistic objective (AbouZahr, 2003; Carlough & McCall, 2005). Yet, there is paucity of information on why uptake of ANC services remains low in places where the services are available.

1.2 ANC services in Zambia

Since the launch of safe motherhood initiative in 1987, the importance of women's maternal and reproductive health has gained national attention. Since maternal mortality and morbidity affects women mainly during their most productive years, when their children are young and their families are dependent on them for care and economic support, appropriate services can have a direct lasting impact on national development as well as personal and community well being. However due to lack of leadership and clear direction, attempts to improve maternal health have tended to be lost within other pressing social, economic and health problems (WHOIUNICEFIUNFPA, 2004).

ANC as a component of safe motherhood initiative is implemented in all government health facilities by different categories of health workers namely general nurse, midwife, environmental health technologist or a clinical officer depending on the staffing levels at the health facility. In urban health facilities, ANC is the responsibility of a midwife unlike in the rural health centre where ANC is dependent on staffing levels, and the kind of services offered depends on the skills of the health worker and facilities available.

Depending on the level of skill of the health provider, ANC clinics are characterized by taking medical and obstetric history, discussions on the importance of early and continuous ANC attendance; advice on hygiene, good nutrition and realistic foods for pregnant women. In addition, information about prevention of tetanus, discussions on minor discomforts of pregnancy such as nausea, backache, constipation and advice on their management is shared. During these visits, review of social habits and advice

based on information shared and examination are the main activities. Other key activities performed include routine investigations such as blood for haemoglobin checks, grouping and cross match, syphilis screening, urinalysis, blood pressure measurements and weight checks (WHOIUNICEF/UNFPA, 2004).

The Ministry of Health in Zambia has introduced Focused Antenatal Care (FANC) which is about quality and not quantity. Currently the national ANC coverage is at 63% (CSO, 2008). FANC recommends four minimum antenatal visits in a normal pregnancy. One visit in each of the first and second trimesters and twice in the third trimester when there are no complications in the pregnancy. The four recommended visits are packed with interventions which can only be completed if a woman books for ANC early around the 16th week of gestation.

The first ANC visit is recommended before the 16th week of pregnancy. Activities conducted during the first visit include taking medical/obstetric history, screening for risk factors and medical conditions that can be dealt with in early pregnancy, initiate prophylaxis treatment if required such as for anaemia, malaria, tetanus and HIV. The first visit represents an opportunity to identify and treat coexisting conditions and complications (MoH, 2009).

The second ANC visit is scheduled around 24th to 28th week of gestation and the activities include examination, verify expected date of delivery, ask about danger signs, fetal movements, continue treatment initiated during first visit e.g. for malaria, anaemia, 2nd dose of tetanus toxoid immunization particularly for primigravidae. It is an opportunity for birth preparedness and complication readiness planning with the

family, counseling for breast feeding options, family planning and nutrition (MoH, 2009).

Third ANC visit is booked within 32nd to 34th week of gestation. The procedures conducted during this visit include screening for pre-eclampsia, multiple gestations, anaemia and others. This visit also provides information regarding a woman's stage of pregnancy, development of the baby, discomforts that might develop and how to manage them and review with client danger signs of pregnancy (MoH, 2009).

The fourth visit is scheduled around the 36th to 40th weeks of gestation basically to identify foetal lie and presentation, screen and treat illness.

At Kauwe rural health centre in Kazungula district, ANC clinics are held once per week in the mornings and once per month in the 10 health posts located within the catchment area. During outreach activities the environmental health technologist attend to both immunizations and bookings for ANC while at the health centre a retired midwife is responsible for conducting ANC services and deliveries.

1.3 Problem Statement

The Kazungula District Health Management Board is experiencing low ANC coverage. Pregnant women 'book' for ANC services late mostly during the second trimester or later and do not come for follow up ANC appointments (Stekelenburg, Kyanamina, Mukelabai, Wolffers and van Roosmalen, 2004). More pregnant women do not even register for ANC throughout the gestation. It has been observed also that many pregnant women only seek professional help when complications arise during

pregnancy or labour (Personal communication, Mrs. Nyambe, midwife Nyawa RHC: 7/02/08). The midwife further states that the low ANC coverage has made it difficult for the clinic to effectively implement programs such as Prevention of Mother to Child Transmission (PMTCT) of Human Immunodeficiency Virus (HIV) and Intermittent Preventive Treatment (IPT) which targets pregnant women. Kazungula District has 17 rural health centres and no hospital; therefore all the complicated cases are referred to the two referral hospitals in the nearby districts. It has been observed that most of the pregnancy related complications and maternal deaths recorded at the two referral hospitals come from Kazungula District. However, there are more pregnancy related deaths that occur in the remote parts of the district that are not reported due to poor accessibility.

In order to reduce the delay in deciding to seek medical assistance and delay in reaching the health institution, the Ministry of Health in Zambia in 2007 introduced the safe motherhood action groups in 24 of the 72 districts. Kazungula District is among the 24 selected districts. The main objective of the safe motherhood action groups is to sensitize households and communities to improve health seeking behaviour, improve community awareness on birth preparedness and importance of booking ANC in the first trimester (MoH, 2009). How these have improved ANC utilization in Kazungula has not yet been established. It is speculated that the low utilization of ANC services could be due to among other factors the perceived mandatory HIV testing at ANC booking. This study was therefore conducted in order to ascertain the factors contributing to poor utilization of ANC services in Kauwe and Nyawa areas of Kazungula District.

1.4 Rationale of the Study

Maternal and newborn health services can be a perpetual danger to women if not properly addressed. With a maternal mortality ratio of 591 deaths per 100000 live births, Zambia needs to rededicate and increase the efforts aimed at improving safe motherhood. This calls for multifaceted efforts from Government, NGOs, private sector, bilateral and multilateral partners, communities, women and men. Ensuring that women survive pregnancy, childbirth and postpartum complications are fundamentally about women's rights and creating a just and equitable society (WHO, 2004). It is in this context that this study endeavours to contribute to improving safe motherhood. No prior studies in the Kazungula District has assessed the barriers to utilization of ANC and very little data was found in the literature on exploring barrier to utilization of ANC in Zambia. Therefore as Zambia set to implement the adopted campaign for accelerated reduction of maternal mortality in Zambia (CARMMA), the information gathered in this study is important to designing appropriate interventions in rural settings.

1.5 Thesis Outline

Chapter one describes the background, the problem statement, and the rationale for the research topic. This chapter also explains the magnitude of maternal deaths in Africa especially Zambia and further describes the nature of ANC services in Zambia.

Chapter two focuses on the literature reVIews providing an overVView on safe motherhood and Antenatal care (ANC) in the region. It explores the context of the research problem more extensively through a critical review of past and recent studies

on maternal mortality and access to ANC services, benefits of ANC services, determinants of health-seeking behaviour and barriers to ANC utilization.

Chapter three describes the research aims and objectives, methodology and study design, sampling procedure, data collection methods and analysis as well as study limitations and ethical consideration.

Chapter four focuses on data analysis and interpretation of results.

Chapter five discusses study findings in relation to the literature.

Chapter six focuses on the conclusion and recommendations of the study.

In summary chapter one provides a background and description of ANC services in Zambia, problem statement and the rationale for study. The next chapter focuses on literature review.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on literature in Africa and other parts of the world where studies on antenatal care utilization have been done. The literature review is structured under sub-headings namely: maternal mortality and access to antenatal care services (ANC), benefits of ANC, determinants of health seeking behavior and barriers to ANC utilization.

2.2. Maternal mortality and access to ANC services

ANC services offer the medical staff a chance to educate women regarding the danger signs in pregnancy and measures to be taken. It also creates an opportunity to discuss sensitive issues such as unwanted pregnancy or violence in homes thereby averting maternal death associated with unsafe abortions. ANC services provide a platform for the health provider to promote the benefits of skilled attendance at birth and to encourage women to seek postpartum care. Women attending ANC at least four times during pregnancy are on average 3.3 times more likely than other women to give birth with a skilled provider (WHO/UNICEF, 2003). Over half a million women suffer complications annually due to pregnancy and childbirth and many die. However, WHO contend that the immediate cause of maternal death is absence, inadequacy or underutilization of maternal and child health services (WHO, 2004). In addition, the World Bank (2006) states that high maternal mortality rates in many countries result from poor reproductive health care, including not having access to skilled care during

pregnancy and childbirth and access to safe abortion even where it is legal, especially for the poorest women.

Maternal mortality in Zambia has been reported to be among the highest in the world and has been associated with poor safe motherhood services implementation and utilization (Stekelenburg et al., 2004). Though Zambia recorded a decrease in maternal mortality ratio from 729 deaths per 100,000 live births in 2000 to 591 deaths per 100,000 live births in 2007, the targeted decrease to 162 deaths per 100,000 live births by 2015 (UN, 2000) is not feasible if current efforts are not doubled. These figures are a clear indication that Zambia is far from achieving the vision of a healthier nation as stated in documents such as Vision 2030, fifth National Development Plan, the National Health Strategic Plan and Reproductive Health Policy.

Hospital data in Zambia does not give a true picture of the magnitude of maternal mortality because many women who died had neither access to skilled personnel at delivery nor sought medical advice from health institutions (Gelloo, 2003). Though direct causes of maternal mortality may be similar, AbouZahr and Wardlaw (2004) argue that maternal mortality causes differ from region to region and from different settings, however they assert that ANC utilization contributes to the reduction of maternal and infant mortality. Maternal mortality related to eclampsia, pre-eclampsia, malpresentation can be identified early enough during ANC (WHO/UNICEF, 2003). It has been noted that the leading causes of maternal mortality in developing countries are haemorrhage and hypertension accounting for half the deaths in expectant or new mothers (WHO/UNICEF/UNFPA/World Bank, 2010). In addition, it was observed

that other non-obstetric causes of maternal deaths which could be identified during antenatal such as HIV/AIDS accounted for 9% of all the maternal deaths in sub-Saharan Africa. The majority of these deaths are avoidable (WHOIUNICEFIUNFPA/World Bank, 2010). A qualitative survey conducted in Kalomo in Zambia identified poor accessibility, poor prenatal and postnatal service utilization and inability of hospitals to provide emergency obstetric care as prominent factors associated with high maternal and child mortality (Mwape, 2002). The above mentioned study has richly detailed obstetric and direct causes of maternal mortality but lacked the socio-economic, traditional and cultural perspectives. In Egypt, a national mortality study reported disparities in maternal deaths between the less developed areas of the southern parts and the more developed northern Egypt, which had 217/100,000 and 132/100,000 respectively (Campbell & Gipson, 2001). This trend suggests a strong link between socio-economic status and maternal mortality.

Many causes of maternal deaths are preventable and curable through improved access to ANC and other safe motherhood interventions. Perry and Gesler (2000) found that limited access to health care is a major obstacle to improved women's health. Access is multifaceted as it is influenced by numerous factors. Some researchers have defined access as the ability to use the service (Gulzar, 1999) while others have argued that access is shaped by factors influencing the use of service (Puentes-Markides, 1992; Wyss, 2003). In this document access was defined as the ability to use ANC particularly-the number of times a pregnant woman visited the health-facility during the term of pregnancy. Access can be determined or prevented by the availability, perception of quality, affordability and social factors (WHO/UNICEF, 2003). Limited access to ANC is a big challenge in rural areas where there are fewer health care

facilities and villages are physically isolated. The highest proportion of ANC service users are those located within a radius of five kilometres. In a study conducted in Zambia by Hjortsberg and Mwikisa (2002), 50% of rural households surveyed perceived distance as an obstacle to accessing ANC and only 17% women living 40 kilometres from the health facility attended ANC compared to 50% women living within 5 kilometres from the facility. Another barrier to accessing health care services in rural areas is longer travel time due to poor roads. In addition, climate is another barrier to access especially during rainy seasons when heavy rains and flooding create worse condition to travel. These longer travel times deter individuals from attending health care services (Magadi et al., 2000; Nielsen et al., 2001; Perry & Gesler, 2000).

Socio-cultural variables also affect access to health care services. The educational level of woman often affects her health care use (Bour, 2004; Erci, 2003; Matthews et al., 2001; Mumtaz & Salway, 2005). Educational level, employment, family income and marital status shape women's use of health care services. Wickrama and Lorenz (2002) contend that attending at least primary education contributes positively to the health of women by increasing employment opportunities, personal income thereby enabling women to afford health care services. Women with higher economic status are more likely to register for ANC early and attend regularly (Sharma, 2004). A study in Pakistan (Nisar & White, 2003) reported an increase in household income of 1.75 times more among women attending ANC than those who were not attending ANC. Similarly, a study investigating access to care for low income childbearing women reported poor health outcomes from the poor than the affluent families (Rowe and Garcia, 2003b). Poor health outcomes were attributed to poverty, which limits women's access to safe and reliable transport, reduced access to sources of advice and

support and limited access to healthy food. The authors further recommended a qualitative study to better understand why some women do not attend antenatal or postnatal appointments (Rowe & Garcia, 2003b). Generally many health agencies across the world acknowledge that under utilization of maternal and child health services are a major contributory factor in maternal and infant mortality in developing countries (Koblinsky et al., 2006; Lawn, Tinker, Munjanja and Cousens, 2006; Raghupathy, 1996).

2.3 Benefits of ANC services

Antenatal care is care provided to women from beginning of pregnancy to the onset of labour. It offers the opportunity for health care providers to encourage health behaviours, monitor the women's physical and emotional condition during pregnancy, provide tetanus immunization, prepare for childbirth, and warn women, their families and communities of possible complications and the prompt attention if and when they arise (WHO/UNICEF, 2003). Utilization of ANC services therefore increase the chances of women to detect pregnancy related problems and seek medical care thereby reducing maternal mortality (Campbell & Gipson, 2001). The UNICEF's report (2008a) on tracking progress in maternal, newborn and child survival recognized that antenatal service utilization contributes to reducing maternal and infant mortality. Coverage with broader approaches such as ANC services is feasible for universal implementation in poor countries (UNICEF, 2008a).

Benefits of ANC have been well documented and include, health education and counselling on pregnancy and emergency preparedness, nutrition support and prevention and treatment of anaemia, hygiene, birth plan, postpartum care, breast

feeding, sexually-transmitted infection prevention and family planning (WHO/UNICEF, 2003). ANC is a key entry point for a pregnant woman to receive a broad range of health promotion and preventive health services including antenatal examinations, intercurrent disease treatment, routine screening for syphilis, voluntary counselling and testing for *HN*, prevention of mother to child transmission of *HN*, periodic de-worming, nutrition supplementation and tetanus immunizations (MoH, 2009).

Another advantage of attending ANC is the benefit of free insecticide-treated nets (ITNs) given out in government health facilities. The government of Zambia introduced Intermittent Presumptive Treatment (IPT) of malaria with sulphadoxine-pyrimethamine for pregnant women (IPTp-SP) as a national policy. Malaria is the common cause of spontaneous abortion, foetal loss, maternal anaemia, low birth weight and intrauterine growth retardation (Marchesini & Crawley, 2004). Intermittent presumptive Treatment with Sulfadoxine-pyrimethamine for malaria in pregnancy (IPTp-SP) in areas of high or seasonal transmission has been shown to increase both maternal haemoglobin levels and the infants' birth weight (Marchesini & Crawley, 2004). The World Health Organization (WHO) recommends that all pregnant women in areas of stable malaria transmission should receive at least two doses of **IPT** after quickening (first noted movement of the foetus) during regularly/routinely scheduled antenatal clinic visits (Marchesini & Crawley, 2004).

In addition, WHO (2001) recommended that every pregnant woman should be given an opportunity to know their *HN* status to save the life of the mother and unborn child. However in most developing countries such as Zambia many factors hinder

voluntary counseling and testing uptake during pregnancy. Knowledge and lack of awareness on the care and support services available was cited as among the reasons for low VCT uptake (CSO, 2008). In a quantitative study investigating the accessibility of HIV testing and its barriers among mothers in maternity ward in Cambodia, found that partner permission, low knowledge on HIV prevention and treatment and place of ANC were barriers to HIV testing (Koum, Yori, Kuzuhiro, Vong, Yoshihisa, Moazzarn, Chushi & Kenji, 2009). Another study conducted in the south west of Nigeria on client's perspective towards ANC in HIV screening indicated an association between uptake and knowledge (Fasubaa, 2001). This study revealed that the high acceptance of VCT only came from pregnant women who were knowledgeable about HIV/AIDS, and ANC addresses this knowledge gap. Therefore, irrespective of whether the pregnancy has complications or not, all women need good quality safe motherhood interventions during ANC, delivery and postpartum.

2.4 Determinants of health seeking behavior

Most maternal deaths in Zambia occur at home and on the way to health facility indicating that community delay is the largest contributor of the 591 maternal deaths per 100,000 live births (CSO, 2008). This then calls for exploring determinants of health seeking behavior.

A qualitative study in rural settings in Gambia highlighted factors such as delay in seeking professional help, poor use of ANC to not recognizing the severity of the problem and perceptions (Overbosch et al., 2004; Hoesternann, Ogbaslassie, Wacker & Bastert, 1996). The authors indicated that just focusing on addressing the obstetric causes might not reduce disability and mortality rate substantially. Similarly,

studies established a dominance of factors namely situations associated with diminished or absent social support such as being single, divorced, widowed, polygamy and cohabitation, and the values and beliefs influence health seeking behaviour and increased maternal deaths especially in rural areas (Mathole et al., 2004; Phiri, Undated;). Ahmed (2005) in his qualitative survey that looked at the health seeking behavior of pregnant women found that socio-economic status of women was a significant determinant of health seeking behaviour. Age, gender, ethnicity and education were noted as predisposing factors to health seeking behaviour (Ahmed, 2005; Hausemann-Muela et al., 2003).

The World Bank (2006) reports that investments in health education and communication can increase demand for Maternal and Newborn health (MNH) care. Improvements in women's status through education and economic opportunity have a strong influence on demand for MNH services. Although these could be confounded by several other factors, their role in influencing health-seeking behaviour cannot be denied. Stephenson and Tsui (2002) in their study showed that increased educational attainment influences health service use in many ways. For example increased educational attainment increases women's decision-making in homes as work prospect and income increases, high educational attainment tend to make women more aware of the available health services and are more likely to utilize the services than those with little education (Stephenson & Tsui, 2002). Furthermore, UNICEF (2008b) asserts that quality of care can impede or enhance health service use. The authors advise that ensuring good quality of care has benefits for both individuals and the health system such as cost effectiveness and efficiency-as women use the service consistently more intensive and expensive care can be avoided saving funds for health

system. Also as staff work with adequate equipment and supplies, they manage health problems better thereby improving the health outcomes. Overbosch et al., (2004) observed that even in areas where ANC attendance is high, only about 60% attend a minimum of four ANC visits at 10th, 20th, 30th and 36th week of pregnancy as recommended by WHO (Overbosch et al., 2004). This could be due to combination of socio-cultural determinants including the quality of care.

2.5 Barriers to ANC utilization

Studies from developed countries have shown barriers to antenatal care utilization targeting ethnic minorities, marginalized groups and socially deprived populations (Delvaux, Buekens, Godin and Bouston, 2001). The authors contend that there are similar barriers to ANC among European countries. Findings in these studies suggest that cultural issues relating to language and staff insensitivity are critical and deter some women from accessing and utilizing ANC early and regularly (Shaffer, 2002; Tsianakas & Liamputtong, 2002). Conventional systems of ANC have not changed much over the years and tend to be more task-focused and culturally insensitive. Overlooking details, such as the gender of the consulting doctor or nurse, can make a big difference to women's perceptions of ANC services (Lavender, Downe, Finnlayson & Walsh, 2007). In a study that looked at barriers to use of ANC among Islamic women living in Australia Tsianakas & Liamputtong, (2002) found that the prospect of being given an ultrasound by a male doctor, rather than a female, caused them to cancel ANC appointments. Hispanic women living in the US failed to return for ANC appointments because they felt staff were too rushed or simply health workers unwilling to answer their questions (Tandon, Parillo & Keefer, 2005). These kinds of cultural oversights may be viewed as disrespectful by women from various

ethnic groups and generate feelings of frustration and further marginalisation (Gaff-Smith, 2000; Smith et al., 2006). Such factors may be exacerbated by more practical concerns relating to transportation costs, child care arrangements, location/availability of clinics. Rowe and Garcia (2003b) investigating the barriers to health service utilization showed that utilization is related to availability, quality and cost. However, cost has most often been identified as a barrier to health service use. Cost influences choice and source from which care is sought (Stephenson & Tsui, 2002). Unfortunately, women in most developing countries are restricted by traditions and customs to financial resources, inheritances or land ownership denying them free choice over their health. Luthra (2005) asserts that without money, women cannot make independent choices about their health or seek necessary health services. In Zambia the women's low economic status creates barrier to Maternal and Newborn health (MNH) care. Most maternal deaths affects the poor, disadvantaged and powerless more especially those in rural areas (MoHIUNICEF/AU, 2010). Although most of these studies were done in developed countries, it is probable that these findings may be transferable to developing countries such as Zambia.

Traditional practices reflect the values and beliefs held by a particular group of community members (Shaikh & Hatcher, 2005). Some of these might be beneficial but some of them are harmful to individuals. Pattaya et al. (2003) argue that traditional practices related to pregnancy and childbirth are still dominant and are perpetuated by close older female family relatives. The authors believe that health providers need to be aware of their client's culture and consider the extent to which professional care compliments the mother's traditional beliefs and provide strategies to help integrate their belief with modern care. By accommodating non-harmful

traditions, health providers can build a stronger foundation for greater trust and cooperation from mothers.

Among the cultural practices in Kazungula, the most common are early marriages, taboos and practices preventing use of contraceptives, nutritional taboos, male dominance in decision making and hiding early pregnancy (Phiri, undated). According to the UNDP supported study in Kalomo in Zambia, they found that many traditional beliefs and practices delayed patients' decision to seek health care. Women drank herbs to help them deliver quickly, also women were advised to insert objects into the vagina to help it "expand" in readiness for birth. In this community it was reported taboo to inform husbands about complications, especially when complications relate to excessive bleeding. Husbands were informed only when the condition was far advanced — a delay that further impedes any decision to seek care. Maternal mortality ratio for this area was 824 deaths per 100,000 live births, well above the national average of 649 deaths per 100,000 live births at the time of the study, which may be a reflection of the consequences of such traditions (UNDP, 2002).

In a similar setting in Pakistan, a qualitative study investigating the tradition practice and use of alternative and complementary medicine found that practices such as traditional practices, values and beliefs led to self care or home remedies in preference to modern medicine (Shaikh & Hatcher, 2005).

In a qualitative study on women's perspectives regarding antenatal care in rural area of Zimbabwe, authors observed that all participants did not comply with the recommended first ANC visit at 12 weeks gestation. Socio-economic factors such as lack of transport and finances to travel long distances to health facilities, challenges

in crossing big rivers during rainy season and shame associated with wearing tom or tight fitting clothing when visiting clinic and the shame of being pregnant in old age were cited as local beliefs limiting access to ANC (Mathole et al., 2004). The study also reported that beliefs in witchcraft, fears regarding blood screening, religion and spirituality were barriers to ANC utilization.

In addition, women face many other social-cultural barriers when deciding whether or not to seek safe motherhood interventions. The role men or partners play in decision-making and the men's financial power over women limits and women's urgency in health care seeking (Lubbock & Stephenson, 2008). Travel and waiting time are important barriers too. Distance may impede or enhance utilization of health service. The farther a client is away from the service, the less likely will service be utilized. Even those that may be closer to the service, bureaucracy of the process at service delivery point may discourage or encourage mothers to use the service (Kaufmann, 2002). Similarly Chakraborty, Ataharul, Chowdhury and Wasimul (2002), examined factors associated with the utilisation of healthcare services in Bangladesh and found that the mother's age at marriage and the husband's occupation positively affect healthcare utilization. Also noted was that the number of pregnancies and the desired pregnancies were significantly associated with the ANC utilization. Women with planned pregnancies attended regular ANC than those with unwanted pregnancies.

2.6 Summary of key issues/fndiug from literature review.

- Regular attending ANC increases the likelihood of woman receiving skilled care during labour and delivery (WHO/UNICEF, 2003)
- Underutilization, absence or inadequate maternal and child health services contribute to high maternal mortality rate in developing countries (WHO, 2004s; World Bank (2006).
- The majority of causes of maternal deaths can be avoided by improving safe motherhood initiatives such as improving access to ANC (WHO/UNICEFIUNFPA!WorldBank, 2010).
- Physical barriers such as distance and availability of health facilities limit access to ANC in rural areas than in urban centres (Hjortsberg & Mwikisa, 2002; Mathole et al., 2004).
- Women's education levels affect the utilization of health care services (Bour, 2004; Erci, 2003; Matthews et al., 2001; Mumtaz & Salway, 2005).

The next chapter (three) will be focusing on the methodology used in this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the methods used to collect and analyze data for this study. Outlined in this chapter are the aims and objectives, study design where the advantages and disadvantages of the selected methodology have been discussed. The sample, sampling procedure, data collection, analysis, validity, rigor, limitations and ethical statement will also be discussed.

3.2 Study setting

The study was conducted in Kauwe rural health centre catchment area in Kazungula District in Zambia. Kazungula district is one of the II districts of southern province in Zambia with an area of 15,878sq km². The district has a population of 78,351 with a population density of 4.9 persons per square kilometer, and a population growth of 3.8%. About 66 % of the population of the district lives on less than one dollar per day. These people struggle at the margin of the formal economy. They lack political influence; education, health care, adequate shelter, personal safety, regular income and enough to eat.

Kauwe rural health centre is approximately 140 kilometers from Livingstone town where the Kazungula District Health office is housed. The health centre serves a population of about 30,000 with a radius of 60 kilometers. The catchment area has safe motherhood support groups in all the ten health posts. These are agreed locations within the area which are used for other services and these include public places such as schools or semi -permanent structures, this was done in order to bring maternal

and child health services close to the people. On a monthly basis the health centre staff visit these health posts working with community volunteers such as TBAs, safe motherhood support group members and child health promoters to provide these services. However, health centre visit schedules are never followed due challenges such as staffing and transport.

3.3 Aim of the study

To assess barriers to utilization of antenatal care services in Kazungula district in southern part of Zambia.

3.4 Objectives

This study seeks:

- To identify barriers to the use of antenatal care services as reported by primigravidae and multigravidae not utilizing or irregularly utilizing the services
- To identify barriers to women's utilization of antenatal care services as perceived by clinic staff, trained traditional birth attendants and safe motherhood support groups in rural health centres in Kazungula

3.5 Study design

The study type was a qualitative research paradigm and used descriptive exploratory study design. A qualitative inquiry was most suitable for this research because the inquiry sought to provide insight and understanding on the barriers to the use of ANC services. The study involved exploring participants' views, opinions, experiences, cultural and traditional barriers and other variables, which are mostly complex, interwoven and difficult to measure quantitatively. Qualitative approach better described and explored phenomena in its natural environment through attempting to answer the 'why' question. Why are pregnant women not utilizing ANC services? The use of open-ended questions and probing gave the participants an opportunity to respond in their own words rather than forcing them to choose fixed responses as done in quantitative studies. The open ended questions enabled the researcher to get responses that were rich and explanatory in nature, unanticipated by the researcher or

meaningful and culturally salient to the participant (Mack, Woodsong, Macqueen, Kathleen, Guest & Marney, 200). The emphasis was on quality and depth, and not the amount or frequency of responses as emphasized in quantitative inquiry.

3.6 Study population

According to Brink (1999) study population should consist of complete groups, persons or entities that are of significance to the research. Therefore, the study population consisted of the following groups as the criteria for inclusion;

- Primegravidae who delivered in the last 12 months and never attended antenatal ANC service.
- Multigravidae who delivered in the last 12 months and never attended antenatal ANC service in their last pregnancy
- Multigravidae who delivered in the last 12 months and attended less than 3 antenatal appointments in their last pregnancy.
- Primegravidae who delivered in the last 12 months and attended less than 3 antenatal appointments.
- Environmental health technologist and the chair lady for safe motherhood working groups in the community. The midwife who was scheduled to be interviewed earlier could not be interviewed as her work contract was not renewed.
- Trained TBAs who have been active for at least 12 months and the chair ladies for safe motherhood working groups in the community.

3.7 Sample size

Since the goal in qualitative research is not to get a population representative sample but rather information rich sample, the study used a small sample to study the phenomenon in depth and detail (Patton, 2002). A total of six focus group discussions of about 6 to 11 participants per group were held in the community. Two FGD were held with trained TBAs and the women namely:

- Primegravidae who never attended ANC.
- Primegravidae who attended ANC irregularly.
- Multigravidae who never attended ANC in their last pregnancy and

- Multigravidae who irregularly attended ANC in their last pregnancy.

Irregularly attendance in this study was defined as attending less than three antenatal appointments during the term of pregnancy. In addition, two in-depth interviews with key informants were conducted. Fifty respondents participated in focus group discussions while two participated in in-depth interviews.

3.8 Sampling procedure

Purposive sampling was used, as it is a non-probability sampling method. Purposive sampling was preferred as it focuses on selecting participants with the best possible knowledge, experience or overview on the topic of study (Hoepfl, 1997). The study sought a homogenous sample purposively sampled with maximum variation. This means that the sample was selected on theoretical reasons for being information rich sample (e.g. focus discussion with primigravidae only and then another focus group discussion with multigravidae). The TBAs identified the women who met the selection criterion from their villages. The investigator verified the eligibility of the women by asking women when they last delivered and confirmed it by checking the under five card for those that had live births. Maximum variation means that the broadest range of individual experiences, views and opinion and perspectives on the topic from women of different age group, social-economic status and educational background was sought in the study. The purpose is to increase credibility and not to foster representativeness (Patton, 2002).

Preliminary meetings between the researcher and health center staff, safe motherhood working groups and TBAs were held in order to explain the aim of the research and

identify possible participants. Six focus group discussions (FGD) were conducted with 6-8 women meeting the set criteria. Maximum variation was ensured by not stratifying the groups by education standard and age-diversity maintained. The safe-motherhood working groups identified potential research participants that met the selection criteria around the villages where they live and scheduled initial appointments with the researcher for preliminary meetings, to assess suitability for the study.

Key informants were selected based on their experience on the topic of study. They were working or had been involved in safe motherhood initiatives for several years. Key informants were contacted individually and informed about the study, they were then asked to consent if they are interested to participate.

3.9 Data collection

Data was collected through focus group discussions and in-depth interviews using a semi-structured interview guide (see appendix). The focus group discussions and in-depth interviews were conducted in the local language and audio-taped. A research assistant took notes and translated English to Tonga. Prior to data collection, the research assistant was trained on how to take notes during FGDs and record data. The researcher was experienced in conducting explorative interviews and could clarify responses that seemed ambiguous. Both the researcher and assistant spoke the language of the participants. A back translation into English was done by a hired-tutor however the researcher and his assistant proof read it to ensure that the content and richness was not lost. Focus groups were chosen as a method of data collection, as they are valuable in enabling respondents to build on each other's comments.

Focus group discussions were organized and conducted in the villages. This was to enhance a natural setting—a place where participants felt comfortable to discuss their experiences and express opinion freely. The researcher used natural settings as sources of data and attempted to maintain what Patton calls empathic neutrality (Green & Thorogood, 2004; Patton, 1990). Potential participants were approached individually by the researcher and asked if they were willing to participate in this study after giving them all the necessary information regarding the study. Those willing to participate were asked to sign a consent form. During interviews participants were urged to ask questions when they were not sure of the questions and also give honest answers. Data was collected from the 9th to 14th July 2009 from Nazibula and Nampuyani villages in Kazungula district. One FGD was done on the first day and two interviews on the other days. The longest interview took two hours and the shortest key informant interview took 35 minutes.

Three key informants were targeted based on their experience and positions they hold at the health center and community, however only two were available for interviews. The in-depth interviews enabled respondents to give their views freely without feeling overwhelmed by group dynamics, as might have been the case the case with FGDs (Hoepfl, 1997; Strauss & Corbin, 1990). The targeted key respondents were the following people:

- The environmental health technician (the safe motherhood focal point person) from Kauwe health centre was interviewed. This is the person responsible for day-to-day running of safe motherhood initiatives both at community and health centre level. At the time of the interview, the

environmental health technologist was the acting centre in-charge. The retired sister in-charge who was working on contract did not have her contract renewed, thus the environmental health technologist was the only health staff at the centre.

- The chairlady for the safe motherhood working groups from Kauwe community was also interviewed. This is the community leader of the community support group implementing safe motherhood initiatives in the community.

3.10 Data analysis

Data analysis involved breaking up the data into manageable codes, categories and eventually establishing themes (Mouton, 2001). The initial step in the data analysis was to transcribe all audio-recording verbatim. This was to ensure that the richness of the text was not lost. The transcripts were then translated from the local Tonga language to English by a tutor fluent in both languages teaching at the Nursing school in Livingstone. The verbatim transcripts were then analyzed by means of thematic content analysis. Thematic content analysis is a process where the text is broken into themes and categorizes the pattern in the data (Terre Blanche & Durrheim, 2002; Strauss & Corbin, 1990). From the transcripts patterns of experiences were listed and these were coming from direct quotes or through paraphrasing common ideas of these patterns which formed part of the themes. Data from the transcripts relating to the already classified patterns was identified and placed under the relevant themes. Thereafter related patterns were combined and listed into sub-themes.

3.11 Validity and rigor

Validity refers to the degree to which an instrument measures what it is suppose to measure. Rigor was ensured through credibility, transferability, dependability and conformability. Credibility in this study was maintained through prolonged engagement, persistent observation, and triangulation of data sources (women, TBAs, midwife, chair ladies from safe motherhood working group & health center in-charge). Furthermore, the triangulation of methods by utilizing FGDs and individual in-depth interviews served to improve the validity. The researcher built trust by explaining to the participants the aim of the study, utilization and dissemination of information and its use.

Peer reviewing and external verification process to improve validity was employed. The supervisor read the transcripts independently and the themes that arose were compared with those obtained by the researchers. Where differences occurred in interpretations of data and transcripts, the supervisor gave feedback until consensus reached.

In addition, a personal diary of thoughts and impressions concerning the study was kept throughout the research for personal monitoring. Being a researcher who is known person in the district and working with Kauwe community where the research was conducted had its benefits and disadvantages. As someone who works and support reproductive health efforts in this community I could have brought in the research my own interpretation and therefore introducing an element of bias. I limited this bias through the measures noted above under validity. However, being known in this community had its benefits. Since I had interacted with the community for a long

time and understood their way of life, a cordial relationship already existed and trust with the community was easily built.

3.12 Study Limitations

Due to limited time and resources, barriers to family planning and postnatal care, which are also a component of safe motherhood, were not explored. In addition, confidentiality in focus group discussion cannot be guaranteed though; the confidence shared in groups was respected.

This was a small study with the intent of identifying barriers to the use of ANC services as reported by primigravidae and multigravidae not utilizing or irregularly utilizing the services and as perceived by key informants. Therefore findings of this study cannot be generalized to the wider population. It was also outside the scope of this study to explore the quality of safe motherhood package in the area. This implies that it was not the purpose of this study to conclude that utilization of the investigated ANC services alone can culminate into reduced maternal morbidity and mortality. Reduction of maternal mortality and morbidity may require a wider scope of interventions.

3.13 Ethical statement

Ethical clearance to conduct the study was obtained from the University of the Western Cape. Permission to conduct research was also sought from the participants before the start of each interview and focus group discussions. Furthermore all participants were informed about the purpose before data collection commenced.

Participants were requested to sign a consent form and they were informed that participation in this study was voluntary and they had a right to withdraw from the study anytime without giving reasons. They were assured that withdrawal from the study will not affect the ANC services they will receive at the clinic in any way. An information sheet translated from English into Tonga was given to all potential participants. The information sheet was read and explained to the participants who could not read. Although maintaining confidentiality in FGDs is a challenge, all participants were requested not to discuss issues raised during discussions beyond the FGD and all had to sign in agreement. Where the researcher could not ensure confidentiality, quotes or statements were attributed with the individual's permission. The research assistant was made aware of his ethical responsibility with regard to confidentiality. Permission to proceed with data collection was obtained from the Provincial health office and Kazuugula DHMT.

This study posed no known harm to the research participants. Even though a psychosocial counselor (a local caregiver trained as a lay counselor by DMHT) was made available in case there was a need for such services, the psychosocial counselor never had any clients throughout the interviews.

CHAPTER FOUR

FINDINGS

4.1 Introduction

In this chapter the findings are presented including the background information of the study sample. This section reviews several issues that arose during the interviews and focus group discussions. The findings of the study have been presented in themes and categories that emerged during the analysis and quotes have been used to illustrate the comments made by respondents. These themes included; perceived benefits of using ANC services influence of previous positive experiences, competing priorities, previous unfavourable experience with health workers, ineffective health system, physical barriers, traditional beliefs and trust in indigenous knowledge, perception on the use of TBAs, support from spouse and family member and perceived mandatory HIVtest.

4.2 Background of the sample

In the study, different groups of people were interviewed because of different perception they had on the research topic. Among those interviewed included; health centre in-charge (the Environmental Health Technologist), trained traditional birth attendants, chairpersons of safe motherhood support groups and women in the community. Belowtable shows some demographic data of respondents; . . .

Table 1: Socio-demographic information of all the study participants

CHARACTERISTIC	FREQUENCY (N)
Participants per area	
Nazibula Zone	24
Nampuyani Zone	26
Kauwe clinic area central zone	2
Age of Respondents in years	
15-24	12
25-34	24
>35	16
Marital status of Respondents	
Married	27
Never married	6
Separated/divorced/widowed	19
Number of pregnancies of respondents	
1-2	15
3-4	11
>5	26
Distance (as reported by respondents) from residence to Kauwe RHC	
0-10 Kilometres	5
11-20 Kilometres	25
21-30 Kilometres	22

Table 2: Socio-economic information of all the study participants

SOCIO-ECONOMIC DATA	
Level of Educational of respondents	
Never in school	19
Primary	27
Secondary	5
University/tertiary	1
Occupation	
In formal employment	1
Community based Volunteer	17
Peasant farmer	34
Husband's Occupation	
Informal employment	0
Community based Volunteer	9
Peasant farmer	18

A total of 50 women participated in focus group discussions while 2 participated in in-depth interviews. The youngest respondent was fifteen and oldest was forty eight years. Twenty seven respondents were married while others were either widow, separated, divorced or never got married.

Primegravidae: A total of 15 primegravidae participated in two FGDs from Nazibula village. The youngest prinegravida was 15years while the oldest was 26 years. Three of the participants had no schooling, 4 participants had primary education while 2 had secondary education. Only four of the participants had never been married. All participants lived more than 22 kilometres away from the health centre.

Multigravidae: A total of 23 multigravidae participated in two FGDs in Narnpuyani area. The youngest participant was 25 years and the oldest 48 years old. Twelve out 23 women had no schooling while the 11 had primary education. Nine women

engaged in community work as community volunteers. All participants were engaged in peasant farming as a means of survival. All the participants in this group lived more than 10 kilometres away from the health facility.

TBAs: A total of 12 TBAs participated in the study. All lived more than 10 kilometres away from the health centre. Five of the TBAs were married. All TBAs had primary education.

Key informants: The environmental health technologist and the safe motherhood support group chairperson were the ones interviewed.

4.3 Perceived benefits of using ANC

All respondents believed that regular antenatal care is necessary to establish confidence between the woman and the health care provider, and also allows women to receive individualized health promotion messages, and to identify and manage any maternal complications or risk factors.

There was a good understanding of the importance of using ANC services. All participants in the FGD indicated benefits of utilization of ANC as a multigravida who visited ANC twice in the last pregnancy was quoted as follows:

When I went for ANC they examined and gave me the assurance that the baby is growing well. I receive medicines against malaria, medicine for blood, bed net and general information on pregnancy. It's always good to get update on the state of your baby and yourself

At ANC they will weigh you to check how you are progressing with the pregnancy. (Primigravida who never used the services).

A participant from the TBA focus group further asserted and commented as follows: *Infections are detected early and treated. Also prevention of mother to child transmission of HIV and prevention of malaria are all activities that improve the health of the mother and unborn child.*

Some participants used ANC to avert risks due to age and parity. Though not all agreed with this view, those in support of the view expressed fear concerning the

difficulties that would arise if the baby grew too big in the wrong position or the mother develops high blood pressure as expressed below:

A-aa, regular ANC checks are good. I would follow all the ANC appointments the nurse gives me because the nurse can know in good time if there are any complications that may need hospital delivery. One woman died in our village because the baby was growing in a wrong position and could not give birth when labour started. She died on the way to the hospital (TBA).

At the 'scale' (In this document 'scale' is synonymous with ANC) they check how your baby is growing and give the mother pills for blood (Multigravida irregular attending ANC)

ANC services are seen as a source of information, education and communication as was re echoed in the FGD with the primigravidae though none attended the service in their last pregnancy. Information on infant feeding, promotion of maternal nutrition, birth preparedness and family planning options were anticipated benefits.

Maybe if I went for 'scale' I could have gotten a lot of information on childcare, nutrition and family planning. My child is now malnourished and sickly (Primegravida never attended ANC from Nazibula village).

4.4 Influence of previous positive experiences

Based on outcome of previous pregnancies and experience they had accumulated, most high parity women expressed confidence to manage pregnancies without having to visit the clinic or call for help. These women seemed to believe that pregnancy is a natural occurrence and not a disease that requires going to the hospital unless you

have problems. They reported that they too have handled pregnancies well, one of the multigravida never attending ANC commented as follows:

Pregnancy is not a sickness in itself, many of us handle it all by ourselves without help. I never had problems with any of my six pregnancies and I delivered all my babies well. The last two pregnancies I delivered all by myself in my house without any help (Multigravida from Nampiyani)

...did not have problems with the pregnancy or during labour. I delivered at home with assistance from my grandmother... have experience (A Multigravida irregular attending ANC).

With mothers never attending ANC they feel that after the 1st birth they are confident that they can tell when there is a problem as quoted below

The other pregnancies I attended scale were because it was my first and second pregnancy. Now I know how it feels and I can tell when things are not okay and to go to the clinic (Multigravida never attending ANC)

4.5 Competing priorities

Participants noted that as women grow older and have more children there are increased demands on them and these have a major influence in their health seeking behaviour. Priorities that benefit the entire family take precedence and therefore activities such as visiting the clinic become less important.

There seems to be a tendency among women as they grow older and with high parity, they adopt poor health seeking behaviour (do not attend ANC, deliver at home without any assistance, do not take children for under five clinic)

maybe because of increased responsibilities demanding her attention
(Observed a multigravida irregular attending ANC)

One has difficulties in attending 'scale' during the rainy season because your husband wouldn't allow you to abandon working in the field or escort you at the expense of working in the field (Multigravida never attending ANC).

Increased responsibilities that came with having more children and responsibilities seemed to deter some women from attending ANC

I used to attend most of the appointments especially in my first and second pregnancies. Possibly because I was young with a small family and had less responsibility.. (Multigravida never attended ANC).

..excuses of many household chores as families grow affects ANC attendance.
(Health centre in charge)

4.6 Previous unfavourable experience with health workers

Some participants interviewed had bad experiences with the clinic staff during their last pregnancy such as being scolded for coming late or embarrassed for failure to buy the prescribed items that were needed during delivery such as surgical gloves, cotton wool and baby clothing. The following quotes narrate some of their experiences:

During my last pregnancy when I went for ANC booking the nurse scolded me for not being able to remember my last monthly period and I felt embarrassed as the nurse was asking these questions in the presence of many mothers and other people.. (Complained a multigravida irregular attending ANC)

The service I received demoralized me to attend again. The nurse shouted at me for not coming on time ... (Primegravidia attending ANC service once).

Staff attitudes towards pregnant women were a strong barrier restricting use of ANC.

A primegravidia using attending ANC once had this to say:

...the nurse shouted at me for not coming on time. She said she had already seen the pregnant women now she was doing other things.

The clinic has bicycles. Let the nurse come here. The other nurse used to cycle this far but the one they brought we hear she refuses to use the bicycle

(Multigravidia never attending ANC)

The fear of being embarrassed by health care providers based on previous experiences; hear say or just gossip were also deterrence identified by the participants in one of the discussions. One woman commented:

What made me most uncomfortable was when the nurse wanted to inspect what material we had bought in preparation for delivery like, razor blade, cotton wool gloves baby wear. I had only two old napkins and it was embarrassing to display such items when most women come with new items (Complained a multigravidia never attended ANC).

The last time I attended I was heavily embarrassed when the nurse shouted at me for failing to remember my last menstrual period date. I could not remember the last one also and did not want to face the similar shouting. So I never went for scale (Woman with one child never attended ANC)

Gender or rather cultural dynamics were also identified as a hindrance to attending ANC. Participants highlighted the issue of age and gender. Examination by a male health worker discouraged many pregnant women from attending ANC. They did not attend ANC for fear of being examined by a male worker as young as their son. Respondents explained:

It is uncomfortable to have a man examine you, and besides, it is culturally taboo for a man who is not your husband to see anything above your knee (Primegravid a never using ANC service).

...it's difficult to undress and allow a young man fit to be your son to examine you especially when you are not sick (Multigravida irregular attending ANC).

4.7 Ineffective health system

The low staffing levels at the centre were seen to impede on the mothers' use of antenatal care services. Issues raised by client (women) and service providers include dissatisfaction regarding the quality of examination offered, long waiting times, poor dissemination of information on schedules and health system problems such as funding, staffing and lack of supervision or support of TBAs. The following quotes highlight some of the health system challenges raised .

...the nurse will want first to see all the sick before attending to the pregnant women. When she attends to you she will just touch your abdomen ,and its over (Complained a multigravida never attending ANC).

And it's difficult to leave home, prepare for the other children and to still reach the clinic in the morning. They do scale only in the mornings and when

you go late they will tell you to come the next day in the morning
(Multigravida irregular attending ANC)

Well, I think as the centre we have not done much awareness rising due to staffing and funding issues, our outreach program has also reduced and support to TBAs may not have been so vigorous (Centre in charge)

We need more information on the new ANC schedules- the reduced visits to four visits inpregnancy (TBA)

4.8 Physical barriers

Distance from the health services was mentioned in almost all FGDs as a barrier to use of ANC services. The problem of distance was further compounded by other issues such as long waiting times at the facility.

You spend a lot of time at the clinic. Walking to the clinic takes a lot of time (3hrs one way), also at the clinic you have to wait for long a time.... You arrive back home late in the evenings so tired (Multigravida attending ANC irregularly)

Mostly people don't go for 'scale' because of reasons like distance (Multigravida never attending ANC).

Long distance ... is the barriers deterring women attend ANC (Centre in-charge).

With me I attended once when they come here but since they stopped I also could not go thatfar to the clinic (Primegravida using ANC service once).

The distance from the facility made it difficult to access services, however knowing that delivery will not occur at a health facility, minimizes the worth of ANC as highlighted by a participant.

The clinic is far, going for 'scale' makes no much difference with those that don't attend because even those that go for scale at the clinic when its time to give birth they give births in their home because of long distances.

(Multigravida never attending ANC)

There were also other barriers mentioned such as concerns regarding safety when travelling to the clinic.

It is also dangerous to walk alone due to flooding rivers (Multigravida never attending ANC service)

Also in your village if you are the only one pregnant or you stay far apart it is difficult to travel alone (Multigravida never attending ANC)

4.9 Traditional beliefs and trust in indigenous knowledge

Influence of older close relatives, husbands and traditional norms were seen as barriers to utilization of ANC services as mentioned below.

It is believed that there are enough experienced grandmothers to handle pregnancy issues therefore they do not see going the clinic for scale as a matter of urgency or priority (Multigravida never attending ANC): ...".

The first pregnancy is believed to be very prone to attacks from witches and wizards hence you are advised to hide the pregnancy (Primegravidas who never attended ANC)

There are always people around you that have more experience than you, grandparents, mothers and other elders advised us and assisted us during delivery (Primegravidas irregularly attending ANC)

We always wait for instructions, advice, counseling and encouragement from the older ones who have much experience in life. So the grandmother, aunties and mothers influence greatly when or whether you will attend 'scale'. My mother-in-law used to escort me to the clinic for scale during my first pregnancy (A woman with two children who never attended ANC).

Those that are closer to you like mother, grandmother and the aunties influence your decision as it is based on the advice they give you

It's safer not to show up your pregnancy in public places until it's very visible to anyone. Your enemies may take away the pregnancy (A multigravida irregularly attending ANC)

They strongly believe in witchcraft they believe that a witch can make your pregnancy disappear especially in the early months and so they hide their pregnancy till the pregnancy shows itself (TBA).

Other participants mentioned the shame surrounding pregnancy out of wedlock, which limited a woman's movements as one cannot freely go to ANC or public places.

When you are pregnant outside wedlock you may choose not to be going in public places. It is shameful to be pregnant without a husband and will hide the pregnancy. The nurse at the clinic will be asking amidst other women like - who is your husband? You are seen as a woman snatching other people's husband. (Primegravidia never attending ANC)

Many young women do not go for scale because they fear to be in company of older women like their mothers. It's worse when the pregnancy is outside marriage or you dropped off school because of pregnancy (Primegravidia attending ANC irregularly)

*Women dress up their best when going for scale. **If** you don't have a new 'chitenge' (material women use to wrap themselves) and have torn old clothes you feel ashamed to go (Multigravidia irregular attending ANC)*

4.10 Perceptions on the use of Trained Traditional Birth Attendants

Though the services provided by traditional birth attendants such as conducting deliveries are appreciated, their role in conducting certain ANC services is not appreciated by pregnant women; Despite TBAs being able to do abdominal palpation, check oedema and auscultate, women are more confident in these services being conducted by trained health provider. Therefore ANC services that are entirely run by

traditional births attendants are not attended by many women. A high parity woman who never attended ANC explained:

You see, these health posts we have in our communities where the volunteers offer child health promotion and safe motherhood initiatives is a good idea and most welcome. But when it comes to antenatal care we need to be fully examined and be given accurate feedback which can be done by a health worker. So when health workers do not come to these sessions and it's all left to be done by traditional birth attendant, it discourages more women to attend.

Contrary to what the women mentioned TBAs saw their services as valued by the women; however lack of support from DHMT was seen a factor that could deter women from attending these health post. A TBA commented as follows:

Even if most of the women don't regularly utilize antenatal care, most of them consult us when they have problems and they are in labour. What discourages women to utilize ANC services is that TEAs are not supported adequately by the DHMT after training; they rarely visit us in the communities to see how we run ANC programs.

The TBAs were concerned about the government's new stand to phase out TBAs and instead encourage all pregnant women to be delivering in health facilities as a way of reducing maternal mortality. They said it is not feasible if utilization of ANC and postnatal care are still very low coupled with inadequate staffing levels in clinics.

Our fate is not well known now; there has been no support of any kind from the Ministry of Health. We used to receive delivery kits and other requisites and tools for work to enable us work better. All this support is gone. We are

told the focus of government is to have all pregnant women deliver under skilled manpower in hospitals and clinics (TBA).

4.11 Perceived mandatory HIV test

Compulsory blood samples collected at ANC booking for routine screening seem to be misunderstood. Women are scared to go for ANC for fear of being tested for HIV. Participants explained that health providers withdraw blood for HIV test from everyone who attends ANC. The women said that their husbands would never accept a positive HIV test result and such may lead to divorce or being abandoned. Also participants feared that health providers may not be trusted to keep results confidentially .

...moreover I did not want to be tested for HIV. We hear that at the clinic they collect blood every time you go for ANC to test for HIV.

There is a practical case in this village of a woman whose husband divorced after telling him that she tested HIV positive and that the nurse wanted to test him also (Multigravida never attending the ANC service)

In addition to what has been said on compulsory HIV test for pregnant women, many women have suffered rejection by their husbands and being beaten up and accused of bringing the diseases in the house, the shame that everyone in the village will know that they have AIDS. I think the HIV test should target men first:..Once men are well prepared to get tested the program will be well supported (Primegravida never attending ANC)

4.12 Timings in "Booking" for ANC

Timing for first ANC visit was influenced by how well the pregnancy is accepted or denied, this may also be exacerbated by distance to health facility, woman's economic status, traditions and cultural beliefs as well as support networks. More especially women booked for ANC for the first time when they felt evidence of life this was characterized by the movement of the baby.

One participant commented as follows:

It is taboo in our culture to announce a pregnancy; you just let it grow till every one can see it. The early periods of a pregnancy are very risky as witches can cause your pregnancy to disappear or miscarry. So people go for 'scale' when the pregnancy is established and visible to most people
(Primegravidia never attending ANC)

A primegravidia commented:

I only became sure that I was pregnant when I started feeling the baby movements and that was the time I booked for ANC.

*Missing your monthly periods for a **Jew** months does not mean you are pregnant. Until the baby starts making some movements you may not be sure of the pregnancy. When you go to the clinic very early the nurse will tell they can't feel anything. Until one is sure of the pregnancy, you cannot go to 'scale' (Multigravidia never attending ANC)*

A primegravidia testified that she did not know early enough that she was pregnant.

In my case I did not know early enough that I was pregnant. I was not expecting it either.

4.13 Attitude of male partners to their wives

The role of man in the home was crucial in influencing women's seeking ANC services; men's views on ANC were valued. A man in this setting is the final decision maker as expressed below;

...also women have to be submissive to their husbands. So your husband has a final say (Multigravida who never attended ANC)

A a... submission to your husband. When your husband says no don't go you cannot do anything. Most men do not take going to scale as priority so you get discouraged (Multigravida who never attended ANC).

Male dominance and their attitudes towards their spouses were quoted as strong barriers to women attending ANC:

The Tonga tribe in this land marry many wives to enable them have cheap labour in their fields, so they do not give their wives a chance to go for ANC (TBA)

This is a male dominated society, whatever the man say you follow. A man has power over the wife (Another TBA)

Husbands are very influential in determining their wives health seekingbehaviour: Some do it out of jealousy while in others it's lack of understanding ...
(Clinic In-charge)

As with me I wanted to go but every time there was scale my husband had other commitments and could not go that far alone (Multigravida never attending ANC)

Our husbands are key and influential in our decision to attend scale, as explained on the issue of HIV testing. No one wants to create problems such as divorce just over the HIV test results even when you both look very healthy (multigravida attending ANC once)

The health centre In-charge concluded by saying;

We also need to target men as agents of change in promoting safe motherhood initiatives like ANC.

4.14 Summary of the findings

The study sought to explore the barriers to utilization of ANC in rural community of Kazungula in Zambia. Most respondents possibly being community based volunteers (such as being TBAs, Child Health Promoters, Malaria prevention promoters, Antiretroviral Treatment adherence promoters) involved in various developmental and health related works in the area were very enlightened on the perceived benefits of using ANC services. However, the participants brought out various interrelated barriers limiting the utilization of ANC. The notable barriers included: influence of previous positive experiences; competing priorities, previous unfavourable experiences with health workers, ineffective health system, physical barriers, traditional beliefs and trust in indigenous knowledge, perception on the use of TBAs, support from spouse and perceived mandatory HIV test. Maximum variation in this

study through diverse demographic characteristics of participants ensured that different perspectives regarding barriers to utilization of ANC services were explored.

The next chapter will be a discussion on findings.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter will look at the implications of the research findings and consider them in relation to the literature on ANC usage. This study set out to assess the barriers to utilization of antenatal care services in a rural setting of Zambia. In the study, utilization of ANC was shown to be impeded by multiple interrelated factors such as influence of previous positive experiences, competing priorities, previous unfavourable experience with health workers, ineffective health system, physical barriers, traditional beliefs and trust in indigenous knowledge, perception on the use of TBAs, support from spouse and family member and perceived mandatory HIV test

5.2 Perceived benefits of using ANC

Majority of study participants understood the benefits of utilizing ANC services but this did not translate into practice. These findings are similar to those of Mathole and colleagues (2004) which reported that women may have knowledge of benefits of early utilization of ANC yet many still book their first ANC late and may only attend one appointment. Myer & Hanison (2003) also confirmed that many women fail to return for follow up ANC appointment. Overbosch et al. (2004) also observed that, even in areas where first ANC attendance is high only 60% attend a minimum of four visits. The Zambia Demographic and Health survey of 2007 supports this assertion by showing ANC coverage of 93% for first ANC visits and only 63% coverage for women who had four ANC visits.

There is a clear gap between the knowledge people have and the application there of. It may be argued that better educated women are more aware of their health problems, know better about the availability of health services and are more likely able to use this information more effectively to improve and achieve a good health status. Better educated women are more likely to book for ANC early and attend ANC regularly (Bour, 2004; Erci, 2003; Matthews et al., 2001; Mumtaz & Salway, 2005). Fasubaa (2001) showed that high acceptance of VCT was from women more knowledgeable about HIV/AIDS. This may indicate the need for more investment in education and improving economic opportunities for women to ignite a sustained demand for maternal and newborn health services as observed by World Bank (2006). However a deeper insight into service availability, accessibility and acceptability may need to be looked into.

5.3 Barriers to utilization of ANC Services

The study has shown that the low ANC utilization is influenced by multiple factors namely socio economic, cultural and traditional barriers that are closely related and interlinked. Those that wanted to brave these barriers were met with geographical and physical barriers such as long distances and flooding rivers. This assertion agrees with Paredes et al. (2005) findings which reported more use of ANC in urban areas than in rural areas. Distance to the nearest health facility and associated costs are strong barriers to ANC use (Magadi et al., 2000; Mathole et al., 2004; Myer & Harrison, 2003; Nielsen et al., 2001).

Most respondents gave reference to their previous bad experience with the health worker as reason for not attending future ANC appointments. This affirms the health workers cultural and language insensitivity which Shaffer reported in his research (Shaffer, 2002). The bad attitude of health worker towards mothers was noted as a strong deterrent to ANC attendance. The unfavourable staff attitude could be as a result of work overload or embracing stereotyped task focused ANC which is insensitive to women's expectations. A study in Zimbabwe by Mathole et al. (2004) found that poor relationships between clients and the healthcare providers, rude and unfriendly attitudes of nurses were the main reasons why women refused to be referred to some hospitals. Also Lavender, Downe, Finnlayson & Walsh (2007) observed that being sensitive to issues such as the gender of a consulting nurse can change the women's perception of the ANC.

Furthermore participants expressed feelings that no sufficient examination were done on them. They reported health workers to be over delegating duties to TEAs. This was noted to deter women attending ANC. Though the participants appreciated and valued the role of the TEAs, they demanded that some tasks should be performed by qualified health workers. This may suggest that for women to use the service they must be satisfied with the quality of service and happy with the service provider as well. The safe motherhood 2002 records quality of care also highlighted this issue as one of the reasons why mothers seek health services late or not at all. In addition, the introduction of the four focused ANC visits and the replacement of traditional ANC seemed to have been implemented hastily without adequate community preparation and has ended up compromising the quality of care. Such changes have resulted in women being turned away at health facilities only to be given another appointment

date. The reduction of visits due to the introduction of FANC has been associated with inadequate examinations and feedback to mothers on the state of baby and mother. This hasty implementation of FANC has resulted in misinformation, misconception giving rise to further underutilization of ANC. There is a need therefore to embark on awareness campaigns on ANC service use. Already existing structures such as the safe motherhood support groups, and TBAs can be supported to undertake this task. This ineffective health care system has been compounded by low staffing levels making it difficult for the staff to keep outreach schedules and attend to the mothers on time.

In this study, the views of older women and their past experience or beliefs on ANC service use had an influence on women's use of ANC services. The community had great appreciation and trust on indigenous knowledge. The older generation especially close relatives were influential in determining utilization of ANC. This may support the argument by Pattaya et al. (2003) that traditional practices and beliefs relating to pregnancy are still dominant and needed to be integrated into modern pregnancy care and child birth. Traditional practices, values and beliefs on pregnancy and childbirth have been shown to influence self care and home remedies in preference to modern medical care (Shaikh & Hatcher, 2005). On the other hand because of development and improvement in educational opportunities for women, the younger women seemed to have more enhanced knowledge about safe motherhood and placed more value on modern medicine than traditions. Although this was not clearly ascertained, in this study, Mathole et al. (2004) in a qualitative study in Zimbabwe, reported women below 35 years old preferring frequent ANC visits than older women who did not face problem in their previous pregnancies. However other studies do not regard

age as a strong predictor of ANC utilization (Kabir et al., 2005; Nisar & White, 2003; Overbosch et al., 2004)

In all the two FGDs with multigravidae participants reported using their previous positive pregnancy outcomes as experience to handle subsequent pregnancies. This experience was noticed in women with parity of three upwards. Previous positive pregnancy outcome made them develop confidence and thus were less motivated to utilize ANC for subsequent pregnancies. They felt confident to deliver unaided because previous pregnancies have given them enough confidence to tell when a problem arises and seek help should there be a need. Due to perceived risks associated with the first pregnancy many women were more likely to attend ANC at least once compared to the follow up pregnancies. High parity women eventually do not take pregnancy as a serious issue in need of professional help (CBoH, 2001). In contrast Lubbock & Stephenson (2008) reported that past negative experience such as embarrassing physical examination or experiencing a complication after seeking care from TBA discouraged women from seeking future help.

Another important barrier to utilization of ANC is expansion of family size. As the family size grows, responsibilities of the woman also increase and with it competing time demands, therefore other responsibilities such as attending ANC become less important or pressing. Women from large families may underutilize various health care services because of too many demands on their time. Large families may also limit resources available and this may have a negative effect on the utilization of health care services. Similar results were noted by Ciceklioglu et al. (2005) in a study conducted in Turkey which reported that women married to unemployed men or

whose husband were labourers attended less ANC appointments than those whose husbands had better jobs.

Poor physical accessibility to facilities and long waiting times were noted as barriers to use of ANC. These were shown to be limiting factors especially for follow-up ANC appointments. Distance limits women's willingness and ability to seek health care especially in this setting where the most available transport is bicycles and oxcart. This agrees with what Mathole et al. (2004) reported that uncomfortable transport, poor road conditions and difficulties in crossing bid rivers were barriers to ANC use. Most of the respondents in this study lived over 20 km away from the health facility. This is in contrast with the government vision of providing equal access to quality, affordable and cost effective health care services as close to family as possible (CBoH,2001).

In this study, participants viewed routine HIV testing as a barrier to attending ANC services. There was a perception that blood was collected for HIV testing whenever they attend ANC for the first time in the pregnancy. This could be an illustration of the extent of stigma in this community and also the lack of education about the procedures that are performed during ANC. This poses a challenge on the issue of disclosure to spouses and once the results are presented. Many women were reported not returning for follow-up ANC appointments for fear of the perceived HIV test results. This has negatively affected programs such as PMTCT (MoH, 2009). In this study it was reported that disclosure of a HIV positive status has led to divorce or rejection, abandonment and even physical abuse. The situation was then exacerbated if a partner discovered that a woman went for HIV test. The fear of stigma coupled

with inadequate counseling results in women avoiding ANC services. There is therefore a need to explore men's perception on HIV test at ANC clinics.

In this study participants were aware of some negative consequences of not attending such as having missed information on care and nutrition, prevention of common diseases like malaria and anaemia. This confirms the assertion by Rowe and Garcia who associated poor utilization of ANC to fear of negative pregnancy outcomes (Rowe and Garcia, 2003b). It was expected therefore to find that most pregnant women will at least register for ANC once just in case complications arise and they need to go to hospital or clinic.

It was interesting to note that all the participants who never attended ANC in their last pregnancy have either never been to school or have attended school up to 3rd grade. This is in support with the assertion by Mumtaz and Salway (2005) that women's education is a key factor in determining ANC utilization. Rowe and Garcia also noted similar findings (Rowe and Garcia, 2003a)

5.4 Conclusion

In this chapter, issues around barriers to utilization of ANC in rural areas of Kazungula district in Zambia were discussed. Among the key barriers discussed were the influence of the older generation, traditional and cultural practices, previous

.... negative-experiences with health workers such as bad attitude of healthworkers and

poor quality of care. Other notable barriers were built in confidence resulting from previous safe deliveries, expansion of family size, fear of being tested for HIV and physical accessibility. Barriers to ANC utilization are well known and perhaps the

focus should be in implementing and evaluating the interventions that benefit the very poor especially those in remote areas.

Conclusion and recommendations will be presented in next chapter.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter draws conclusion and suggests recommendations that are based on the findings of this study.

6.2 Conclusions

It is evident from the findings of this study that there are various interconnected barriers to utilization of ANC services and these includes but not limited to the influence of previous positive experiences, competing priorities, previous unfavourable experience with health workers, ineffective health system, physical barriers, traditional beliefs and trust in indigenous knowledge, perception on the use ofTBAs, support from spouse and family member and perceived mandatory HIV test. Attending to these barrier and others that may not have been discussed here will improve utilization of ANC and consequently contribute to the reduction of maternal mortality.

6.3 Recommendations

Based on the study, the following were recommendations to the various partners working to improve ANC services in the area.

Recommendations to District Health Management Team

Short term

- Provide in-service training for staff working in safe motherhood initiative and also circulate guidelines. Orient staff on focused antenatal care (FANC).
- Ensure continuum of care by supporting adequate supplies, equipment, drugs and transport. Bicycle, ambulances or ordinary bicycles that can deliver services to far off areas can make a difference.

Long term

- Train and deploy skilled personnel to rural health centres. Have a deliberate policy on rural incentives to motivate trained staff to remote areas.
- Build more health posts as a way of taking health care services close to the communities. The health post should be manned by professional health workers to attract service users.

Recommendations for Health centre management team

Short term

- . Create community awareness on FANC.
- Train more volunteers or safe motherhood support groups and mentor them through regular supportive visits and provision of appropriate IEC materials.

- Design deliberate programs to involve men and traditional leaders in safe motherhood initiatives e.g: not limiting women only in the safe motherhood support groups.
- Ensure that ANC services are provided at convenient times and integrate it with other programs instead of running them as stand alone activities.
- Ensure that the ANC service are sensitive to women's culture and traditional beliefs

Long term

- Demand from DHMT more staffing and transport such as motorbikes and bicycles to enable health centre staff meet regular outreach schedules.
- Link up women's support groups to literacy classes and livelihood programs such as income generating activities.

Recommendations for ANC service providers including the volunteers

- Break cultural and traditional barriers by identifying conflicting areas and adopt a listening attitude that accommodates a dialogue and incorporation of non harmful practices
- Understand the family decision-making dynamics and target decision makers such as husbands, grandparents, mother in laws, religious leaders with key messages and dialogue aimed at improving safe motherhood
- Create a supportive environment for women to express their fears, concerns and opinions and voice such to appropriate levels. This will enhance client satisfaction.
- Continued health education on risks associated with pregnancy, danger signs, family planning and women's rights. Such information may

empower women and thus enabling them to make informed decision regarding their own health.

- ANC providers to be abreast with current development in HIV/AIDS and information should be passed on to communities as a way of continued HIV/AIDS educational campaigns. Procedures and tests done at ANC should be well explained to mother attending ANC.

Antenatal care has been identified as one of the key strategies in the CARMMA. The study therefore will provide useful information on ANC utilization. Barriers to ANC utilization were explored and recommendations to enhance utilization made. The study adds to the body of knowledge on ANC use especially in the under researched and underserved rural communities.

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Annex 1

Participation Consent Form

I have been informed or I have read in the participants' information sheet about the purpose of the study and what my participation involves. I also understand that participation to the study is voluntary and I can withdraw from the study any time without having to give a reason. I also understand that confidentiality will be maintained and that the findings of the study will only be used for research purposes. I agree not to share anything heard in the focus group discussion with anybody outside the group.

had an opportunity to ask questions and they have been answered to my satisfaction.

I consent voluntarily to participate in this study and my signature says that I am willing to participate.

Signed by.....

(Print Names)

(Signature)

(Date)

Witness

(Print Names)

(Signature)

(Date)

Participation Consent Form translated in local language- Tonga

Icizuminano cikutola lubazu

Ndaambilwa na ndabala a kumvwa ncondelede kutola mumaiye aya akuzumina ikuti kutola ilubazu nkulisalila, aboobo ikuti ticandikomanina inga ndaleka ikutola lubazu kakunyina kupa bupanduluzi. Alimwi ndaambilwa akuzumina knti imubandi woonse ulaba maseseke akuti zyoonse zitibandikwe zyalwiiyo buyo. Ndazumina ikutaambila ibatali munkamu eyi zibandikwa

Ndalipedwe ciindi cakubuzya mibuzyo, aboobo yawwiilwa cakuzulila. Aboobo ndazumina kutola lubazu kwiinda mukusimba.

Izina lyasikwiingula

Busimbo

lbuzuba amwezi

Izina lyakamboni

Busimbo

lbuzuba amwezi

Annex2

Participant information sheet

Dear

I am Morgan Sakala studying for a Master of Public Health at the University of the Western Cape in South Africa. I am gathering information relating to barriers contributing to late or non use of antenatal care services in Nyawa and Kauwe communities of Kazungula district. I have sought permission from the District Director of Health to visit your area and conduct this research.

Why doing the study?

It has been observed that more pregnancy related complications and deaths recorded at the referral hospital are from Kazungula district. The district health office has also noted that the district has low utilization of safe motherhood initiatives such as early booking for antenatal care services and regular attendance of ANC appointments. The study will seek to identify barriers to the use and access to ANC in this area. The result of the study will help me give feedback to various partners on how antenatal care can be improved in your area as a way of enhancing safe motherhood.

Who are the participants?

Participants are women who never attended or attended antenatal care appointments irregularly in their last pregnancy. Will also interview trained birth attendants, clinic staff and local leaders.

What is expected from the participants in this study?

You will be asked some questions relating to your experiences about barriers to access and utilization of antenatal care. This will be done in small groups of 6 to 8 people. This will take approximately 30-60 minutes. Notes will be taken down and the interview may be tape-recorded. All the information will be treated confidentially and only used for the purpose of the research. No names and contact details of the participants will be taken. Interviews will be conducted in your community. Your participation is free and voluntary.

What can participants expect? Any adverse consequences?

No adverse consequences on respondents are anticipated. But should the participants experience emotional or psychological breakdown, a psychosocial counselor has been arranged at the health centre.

Can one withdraw from the study?

Certainly, you may withdraw from the study any time without giving any reason. You may also refuse to answer any question should you wish so. Your decision to participate or not will not affect the quality of service you will receive at the health center.

Any further questions?

You are free to ask for more clarifications if not clear. More information may be obtained from the researcher Morgan Sakala on cell phone number 097878101. He is accountable to his supervisor Ms Lungiswa Tsolekile from the University of the Western Cape, Telephone number 959 2809/2628.

If you are willing to participate in the study please read and sign the consent form attached.

Participants information sheet translated into local language-Tonga

Oyandwa

Ndime Morgan Sakata ndibala zya nseba kuya kuchikokolo cipati citegwa University of the Western Cape kuya ku cisi ca South Africa. Ndibwezelela twaambo tujatikizya makani aapa kusinkila bamatumbu aboobo kucelwa kulembya cipimo oku kwa Nyawa a nkauwe muno mu cilikiti ca Kazungula. Ibalupati pati balanganya makani a nseba mucilikiti ca Kazungula bakandizumizya kuti ndilanganye kaambo aka.

Ncinzi ncho twambawida makani a cipimo ca bamatumbu?

Kujanika kuti ibanji ba rna tumbu ibafwa na bajana buymnuymnu mukutumbuka bazwa mucilitiki ca kazungula. Alimwi, ibapati ba nseba bendelezya cilikiti eci bakajana kuti bamatumbu banji tababelesyi na tabafwambani kulembya cipimo. Twaambo tuti bwezelelwe tulasola kulanganya izikasya ba matumbu ikutalembya olo na kutainka kucipimo. Kumamanino aya makani ngeti bwezelele ayogwasilizya itubungabunga twindene iikuti tusumpule bumi bwabamatumbri.

Ino mbani batola lubazu?

Babuzigwa bamakaitu batakainka olo na batakazuzilikizya kwinka kucipimo nibakali amada. Tuyakubandika abalo batumbusya mumunzi, bama nasi, abasilisi kucibadela alimwi ba simabuku.

Ninzi cilangilwa kulibabo. batola lubazo?

Muyobuzigwa mibuzyo ijatikizyana a zintu ezyo izikasya bamatumbu kuti kaabatalembyi cipimo. Mibuzyo iyotola cindi icishoonto buyo. Kulacitwa mutubunga tusyonto syonto cindi citaindi oola lyomwe. Kuingula kwenu kuyolembya na antela

kujatwa mukalimba.Zyonse ziyakubandikwa maseseke alimwi ziya kubelesegwa biyo kulwiyo. Imazina na masena abasikwingula takalembwi pe. Basikwibuzya mibuzyo bano mujana mumunzi yenu alimwi ikwingula nkwakulipa.

Kuliziyoosya na mukwingula miblizyo?

Ncobeni, iziyoosya na buyumuyumu ku cibela ca basikwingula takwe pe. Pesi na basikwingula ba ba akunyongana mumizezo kwinda mumibuzyo bayojana lugwasyo a cipadela.

Na walembya ikwingula mibuzyo,sena inga wacileka?

Sikuingula inga wacileka kutumbwa ciindi kutakwe kupa lupanduluzi alimwi inga mwakaka kwingula imwi mibuzyo mwayanda. Ikulipa na kotalipa mukwingula mibuzyo tillkwe cibeela a lugwasyo ndo mwajana kucibadela.

Sena mull amibuzyo imbi na?

Mulimvwe kwangula kubuzya ba Morgan Sakala basikubuzya bapati nambala 097878101.abalo babendelezya bapati mumilimo mba mama Lungiswa Tsolekile abalo bazwa kucikolo cipati ciitwa University of the Western Cape, a nambala 959 2809/2628.

Na mwalipa ikutola cibeela mumaiye aya mubale a ku saina busimbo a cizuminano icitobela.

Annex 3 -Interview guide- FGD

Study topic: Study topic: Assessment of the barriers to the utilization of antenatal care services in Kazungula district

The researcher provided a general introduction and overview of the research. He also talked briefly on antenatal care use and asked the group to

1. Freely share the problems they face in utilization of antenatal care service
2. Share personal experiences as regards to barriers to the use of antenatal care service

1. Chilikiti (District)_____
2. Busena (Site)_____
3. Buzuba amwezi wakubuzya (Date of interview)_____
4. Izina lya ubuzya (Name of interviewer)_____
5. Iciindi ikubuzya nikwatalika (Time start interview)_____
6. Iciindi ikubuzya nikwakamana (Time end interview)_____
7. Iczibyo cakabunga (Group identification code)_____

No	Mibuzyo (Questions)
Q 1	Nchinzi ncomuzi amakani aachipimo ca bama tumbu mubusena omuno? What do you know about antenatal care use in this area?
Q 2	Nanga mwapandulula _____ ikulesya kuyolembya cipimo ku:Wambana na kutankila limwi? Describe the barriers preventing you from booking early or not presenting at all for antenatal care?
Q 3	Ino _____ nzi _____ lujatikizya bamakaintu bamuka na _____ limwi kucipimo? What are your experiences in not seeking antenatal care or late booking for the service?
Q 4	Zintu nzi nzyomusyoma kapati kumakani aku:Wambana kulembya na kutalembi chipimo ku:Wambana? What beliefs do you hold strongly on early booking for antenatal care?
Q 5	Ino basimukobonyoko abantu bamuzunguInkide bamugwasya buti mutusala ikwiinka kuchipimo ku:Wambaana na kuyopimwa alimwi cindi cilembedwe? How do the community and people around you influence your decision on seeking early antenatal care or go for ANC appointments?
Q 7	Ino cipimo ca _____ cigwasya _____ What could be the advantages of attending ANC?
Q 8	Ino makani _____ inga asumpulwa buti oomuno mubusena? How can we improve ANC in your community?

Interview guide- Key informant interviews

Study topic: Assessment of the barriers to the utilization of antenatal care services in Kazungula district

The researcher provided a general introduction and overview of the research. He also talked briefly on antenatal care use and asked the informant

1. Freely give insight into problems faced in providing /promoting antenatal care service
2. Share perceived barriers to the use of antenatal care service

1. Chilikiti (District)_____
2. Busena (Site)_____
3. Buzuba amwezi wakubuzya (Date of interview)._____
4. Izina lya ubuzya (Name of interviewer)_____
5. Iciindi ikubuzya nikwatalika (Time start interview)._____
6. Iciindi ikubuzya nikwakamana (Time end interview)_____
7. ,Icizibyho cakabunga (Key informant identification code)_____

No	Mibuzyo(Questions)
Q 1	What is your perception on antenatal care use in this area?
Q 2	What other _____ prevent pregnant women attending or utilizing antenatal care regularly?
Q 3	What are your experiences with women not seeking antenatal care or late booking for the service?
Q 4	What beliefs do _____ in this community hold strongly on early antenatal care use in your community?
Q 5	How do other people around the pregnant woman influence her decision on seeking early antenatal care or go for ANC appointments?
Q 6	What could be the advantages of attending ANC?
Q.7	How can we improve ANC in your community?